

# THE ROCKET

November 2022

deadline for next issue  
January 13, 2023

Club email: [secretary.hrc@gmail.com](mailto:secretary.hrc@gmail.com)  
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Roz MacLean – editor

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

**Next Meeting:** Friday – November 25 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.

## Next Meeting Program:

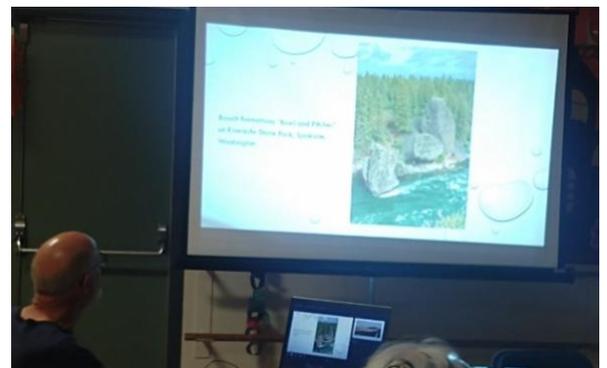
**Our next meeting is the Annual General Meeting.**

- We will elect a new Executive: Please consider, what do you do to keep this club going?  
Renew memberships all memberships are by calendar year and due by January 2023  
**Wine and Snacks Social:** Bring a snack to share- finger food only- and own mug  
But No Wine - The Club will supply as per license  
And a **Mystery Box Draw:** Bring your \$ for tickets and guess what is inside these boxes

*Come out and support your club.*

## Program from last Meeting:

Paul Pinsker gave a presentation on "**Megafloods and Erratic Behaviour**" covering the dramatic landscapes of the Channeled Scablands of Eastern Washington. He explained how Megafloods after the last Ice Age affected the topography of the area from Montana to Washington State. Paul and his wife recently travelled there and had many interesting pictures.



Scablands came from the early farmers and ranchers referring to the land as broken up – scarred and scabby. “Piecing together what really happened was one of the great scientific puzzles of the last 150 years. Many mysteries remain still.” Paul also introduced us to the work of T C Chamberlain, Joseph Pardee and J Harlen Bretz, some of the most

controversial geologists in history. Putting together the story of the scablands with pictures and examples, Paul literally ran out of time to show us everything. Paul has a list of books on the topic that we’ve included here. His wife Joyce Pinsker has posted the pictures of their trip online. Talk with Paul (our club member and rep. to

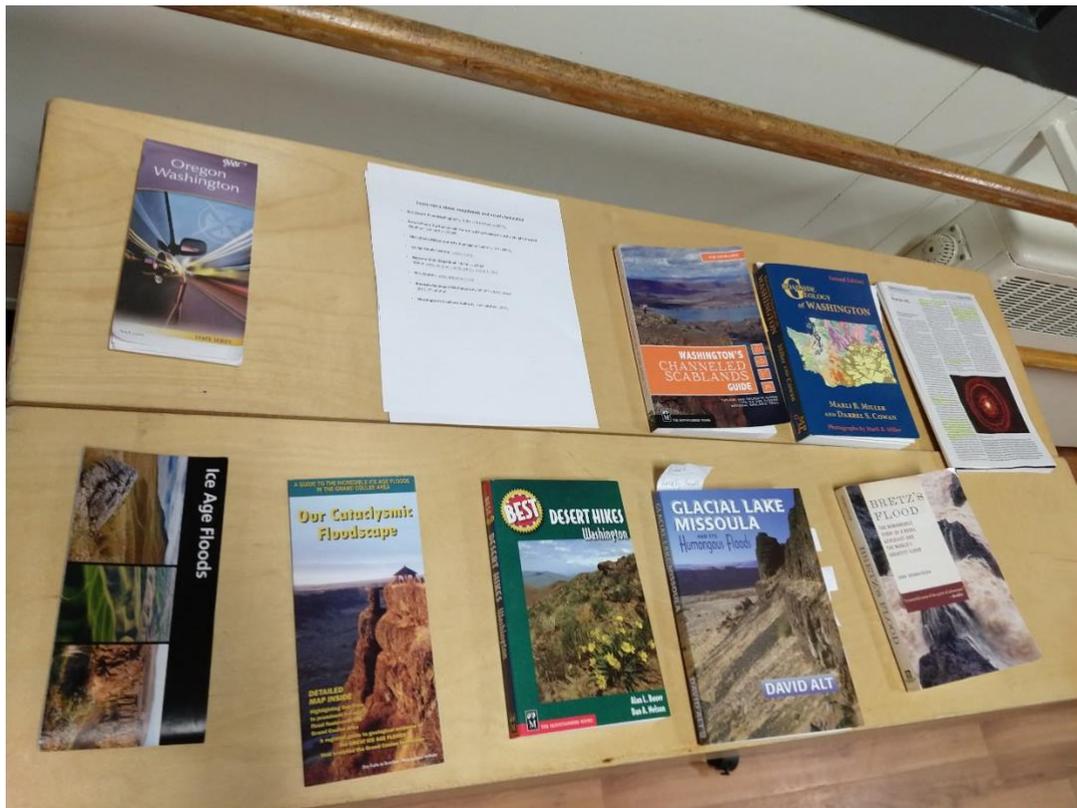
the BC Lapidary Society) to get more information.

Thanks Paul. Your talk and pictures have also given insight to interpreting the effects of megafloods right here in BC. Your talk has been very interesting, informative and applicable for all of us.

## Learn More about Megafloods and Erratic Behaviour

Paul Pinsker

- **Best Desert Hikes Washington** by ALBauer & DA Nelson (2004)
- **Bretz's Flood: The Remarkable Story of a Rebel Geologist and the World's Greatest Flood** by J Soennichsen (2009)
- **Glacial Lake Missoula and its Humongous Floods** by D Alt (2001)
- **Ice Age Floods Institute**, [www.iafi.org](http://www.iafi.org)
- **Mystery of the Megaflood**, PBS Nova (2005)  
watch: [www.youtube.com/watch?v=HWXHHjWsY](http://www.youtube.com/watch?v=HWXHHjWsY)
- **Nick Zentner**, [www.nickzentner.com](http://www.nickzentner.com)
- **Roadside Geology of Washington** by MB Miller & DS Cowan (2017, 2<sup>nd</sup> edition)
- **Washington's Scablands Guide** by J Soennichsen (2012)



# 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,

<b>Lapidary:</b>	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
<b>Silversmithing</b>	Wednesday	9:00am - 12:00 noon	Bob
	Saturday	9:00am - 12:00 noon	Robert & Crystal

Bob will be holding extra workshops on Friday for members who would like to complete any remaining projects for Christmas. These would be open workshops with no instructions (if you are still in training for your first project in lapidary/silversmith these may not be sessions for you).

Sessions start next Friday November 18 - Friday December 23, 2022.

Silversmith: 9am - 12pm

Lapidary: 1pm - 4pm

## Workshop Repairs

At our last meeting there was talk about a very noisy grinder. It has been fixed. It took about 3 hours! Thank you, Joe and Bob for great work. Thanks to Richard Kotecki for the photos.



## Preparation for November meeting: Please support your club

**According to our constitution:** A Nominating Committee shall be selected at the September regular meeting in the following manner: the President shall appoint one, the Executive Committee shall appoint one, and the club shall select one. It shall be the duty of the Nominating Committee to select suitable candidates for each of the four (4) Executive Officer positions (President, Vice-President, Secretary and Treasurer), chairpersons of the Standing Committees of the club, and/or Special Directors for the coming year, and to provide a list of the candidates selected for publication in the notice of the Annual General Meeting and ensure that each member is informed of the duties of each elected position prior to nomination.

1. The Executive Committee of the club shall consist of those members holding the following positions:
  - Four (4) Executive Officers –President, Vice-President, Secretary and Treasurer
  - Senior Delegate to the Lapidary, Rock and Mineral Society of BC
  - One chairperson convener of each of the following Standing Committees:
    - Field Trips
    - Library
    - Membership
    - Program
    - Publications
    - Publicity
    - Show
    - Social
    - Ways & Means
    - Workshop
  - The following special directors:
    - Delegate to Hastings Centre Board of Directors
    - Director-at Large
    - Historian
    - Sunshine

### DUTIES OF OFFICERS, COMMITTEES, DIRECTORS AND DELEGATES

30. The President shall preside over General meetings of the club and over Executive Committee meetings, and shall be ex-officio member of all club committees with exception to Special Complaints Resolution Committee. The President shall be a signing Officer.
31. The Vice-President shall, in the absence of the President, preside as chairperson of General meetings and at meetings of the Executive Committee, and otherwise assist the President and other Officers in the exercise of their respective duties as may be required. The Vice-President will also be the club's Delegate to the Hastings Community Association's Program Committee. The Vice-President may also serve as a signing Officer in the absence of the President.
32. The Treasurer shall be the custodian of all club funds and shall sign all cheques for the withdrawal of such funds as are required from time to time, along with any one of following; the President, the Secretary or in the absence of the president, the Vice President. In the event the treasurer is unable to sign cheques, the president shall be one of the signers. The Treasurer shall keep accurate records of the receipts and expenditures of club funds and shall report the financial position at each meeting of the club. The Treasurer shall also submit all records to an auditor at the request of a General meeting. The Treasurer shall be a signing Officer.
33. The Secretary or alternate shall attend all meetings of the club and of the Executive Committee and record accurately all minutes and proceedings of every such meeting in a minute book to be provided by the club, shall receive and file all reports, keep or cause to be kept proper books and records in all respects of the business and affairs of the club, and conduct all correspondence of the club, also see clause 10, as directed by the Executive Committee in a prompt and efficient manner. The Secretary shall be signing Officer.
34. The Field Trips Committee shall arrange and supervise field trips for the club, and ensure that first aid

equipment is available and, if possible, have present a member who is qualified in level 1 first aid. He/she shall also ensure that all participants on the field trip are members in good standing.

35. The Library Committee shall purchase and catalogue books and periodicals and care for them; shall acquaint members with titles of such books as are available, supervise the loan and return of books and magazines and collect fines for each overdue month.
36. The Membership Committee Chair shall receive all applications for membership, collect club dues, see that membership cards are issued; maintain attendance records at all meetings, ensure that guests sign the guest book and that they are introduced to those assembled at the meeting; issue copies of the Constitution and Bylaws, Workshop Rules and Regulations of the Hastings Centre Rockhounds, Rockhound's Code of Ethics, Vancouver City Code of Conduct, Respect Policy and Complaint Resolution Procedures, Respect in our Club Orientation Pamphlet and the British Columbia Lapidary Society By-Laws to all members; issue annually a list of the names and addresses of all willing members to each member and to the Lapidary Society; keep the Records of Orientation Completion; keep the club advised of the number of members to date, and report to the Hastings Community Centre on attendance at each General or Special meeting held at the centre.
37. The Program Committee shall arrange for programs for the General meetings, and keep the Executive Committee advised of future program plans.
38. The Publications Committee shall prepare and issue the club's publication, "The Rocket", and such other publications as the Executive Committee may from time to time request. "The Rocket" shall be distributed electronically or pick-up to all interested members of the club, and to certain other clubs and individuals upon request. A copy will be posted in the workshop.
39. The Publicity Committee shall arrange for publicity for the club and the club's Annual Show; shall send news items to appropriate magazines and to affiliated associations; and attend to other special notices. As part of the Publicity Committee a Webmaster shall maintain the Club's website.
40. The Show Committee shall organize and co-ordinate the club's Annual Show, its participation in the Annual BC Gem Show of the Lapidary Society, and any other displays and shows in which the club may decide to participate.
41. The Social Committee shall be responsible for purchasing and serving refreshments for General meetings and for the Annual Club Show and other special functions as requested, as well as for arranging for the club's annual dinner.
42. The Ways & Means Committee shall be responsible for the raffle held at General meetings, including the purchase or receipt of donations of prizes, conduct of the raffle and recording of receipts and expenses, and shall propose special projects to raise money for the club if required from time to time.
43. The Workshop Committee shall be responsible for ensuring that all equipment in the club's workshop is kept in working order; shall purchase new supplies and equipment; shall keep a record of all receipts and expenditures connected with the workshop and report thereon to each General meeting; shall coordinate the arrangement of classes and, together with class instructors, ensure that the rules and regulations governing the use of the workshop are up to date and adhered to.
44. The Director-at-Large shall substitute for any officer of the club unable to attend any meeting (except that in the absence of the President, the Vice-President shall substitute). Any officer of the club unable to attend a General meeting or a meeting of the Executive Committee should advise the Director-at-Large in advance of the meeting in question, and submit any report to be made through the Director-at-Large.
45. The Historian shall keep a journal of club activities; collect pictures, hard copy or soft copy, from members for scrapbooks and a slide collection of slides submitted by members as well as any other material pertaining to the history of the club.
46. The Sunshine Director shall be notified by members of the club of any special circumstances that might require sending "get well" cards, condolences or congratulations to members.
47. The Delegate to The Hastings Community Association's Board of Directors shall attend monthly meetings of that Board to report to it on the activities of the club and to keep the club informed of the activities of the Association.

48. The Delegates to The Lapidary, Rock and Mineral Society of British Columbia, as per BCLS rules, shall act as representatives of the club at meetings of the Lapidary Society, reporting to it the views of our club and reporting to the club on the activities of the Society. In particular, participation by one or more delegates or designate at the Annual General Meeting at Rendezvous is required.

## Some club fun – Filling Grab Bags for Our Show

In preparation for our show next year (2023!) Club volunteers gathered on Nov 15th to sort and wrap grab bag filler. There will be more opportunities for this activity. Come join us next time. There will be at least 2 more sessions before we take a Christmas break. (Thanks Richard Kotecki for photos.)



## Making Grab Bags for Our Show

Since we sold all the grab bags we had in storage for the show, we will need to make more for next year. We need to start the process. It is now that we need to begin to make the bags and put a call out for donations of stones for the bags.

Please sort through your collections and see what would be wonderful to receive and find in the grab bags that will be for sale at the show. This fund raiser is such a popular part of our annual show that teachers and people just waiting to attend to get 'their fill'.

The finished bags should be 16 x 20 cm (6 1/4inch x 7 3/4inch) and folded over at the top to put a draw string through. I will bring samples at the meeting for those wanting one.

The type of materials needed for the bags is up to you- but the kids like bright colours and texture if possible- fuzzy always goes first!

The rocks and pebbles need to be big enough not to be swallowed, but at the same time not too big as to fit into the bag, fist size is maximum (5cm square is perfect-2 inch x 2 inch).

Of course, no toxic rocks - lead sulfate (galena), bumblebee jasper (arsenic), and the like. We never put obsidian in the bags since it can become chipped and then can cut like a knife to anyone trying to clean up the shards (known to be the first surgeon's tools in history).

Members can bring the items for grab bag donations to either the workshop marked for the purpose, or at the meetings. Linda can pick them up if you give her a call.

# The Vancouver Gem and Mineral Show at the PNE Forum

December 2, 3, and 4

It is an opportunity to be visible in the community and let interested people know we are here. We need club members to volunteer to be at our table to explain our hobby and/or demonstrate. People need to volunteer for 3 hours and will then get admission to the show. Please contact Crystal if you are available.

## BC Lapidary Society News

**2023 Calendars** are available for purchase (\$10). A photo taken by our club member Nick Tsougrianis is featured one month.

**New BCLS Email Address:** The new BCLS email address is [bclapidarysociety@gmail.com](mailto:bclapidarysociety@gmail.com). A test done last month showed a 15% failure rate on the old hotmail address. Please use this new email address for future communications.

**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.

**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, and our annual general meeting. Organized by the Quesnel Tumbling Rivers Rock Club with the assistance of the British Columbia Lapidary Society, it will be held at Barlow Creek Hall and Campground.

## Upcoming Events of Interest: Shows

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

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

November 18, 19 & 20, 2022, **Abbotsford Rock & Gem Show** Matsqui Community Hall  
November 19 & 20, 2022 **Parksville & District Rock & Gem Club** Qualicum Beach Civic Centre  
February 27 & 28, 2023, **Maple Ridge Lapidary Club** Albion Community Centre  
March 11 & 12, 2023, **Alberni Valley Rock & Gem Club** Alberni Athletic Hall  
March 17, 18 & 19, **Victoria Lapidary & Mineral Society** Leonardo de Vinci Centre  
April 14, 15 & 16, 2023, **Courtenay Gem & Mineral Club** Legion Hall (Upstairs)  
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

The following is mostly an article written for the June 2018 newsletter. I have "tweaked" the article a bit to fit with this year's theme of lapidary suitable rocks. Besides, it feels like everyone is rushing into the season this year and I felt like doing a red rock.

## Ruby is the "rock" for this month.

Roz MacLean



Natural ruby crystals from Winza, Tanzania <https://en.wikipedia.org>



The DeLong star ruby has one of the most precise 6-ray stars in a 100 plus carat ruby. <https://thenaturalrubycompany.com/education/ruby-history/famous-rubies/#DeLong>



ruby rough <https://www.gemsociety.org/wp-content/uploads/2013/09/rubies.png>

Traditionally Ruby is the birthstone for July in Western culture, but some Hindu sources say August. It is also the birthstone for those born on Tuesday (shared with emerald) and for Capricorn (22 December – 21 January). So, perhaps it is suitable for this newsletter. People celebrating a 15<sup>th</sup> or 40<sup>th</sup> anniversary are suggested to celebrate with Ruby. Star Ruby is sometimes suggested as an alternate for a 60<sup>th</sup> anniversary. An 80<sup>th</sup> anniversary is sometimes called a Ruby Jubilee.



Historically, blood-red **cabochons** were called "carbuncles" and encompassed gems gemologists would now distinguish as rubies, **garnets**, **spinels**, etc. Now, these gems broadly share carbuncle folklore. This 14kt gold ring features a ruby "carbuncle." Photo courtesy of [liveauctioneers.com](http://liveauctioneers.com) and Quinn's Auction Galleries. <https://www.gemsociety.org/article/history-legend-rubies-gems-yore/>

Because of the dark red color Ruby has long been associated with blood and passion. Ancient warriors from Burma (now Myanmar) believed rubies that were part of their bodies made them invincible so they embedded rubies under their skin. People from that area also believed that rubies came like fruit and as they matured, they became a darker red. Some ancients believed rubies held the power of life. They could attract and maintain love, and inspire passion. They were also believed to cure diseases of the blood and bleeding. In the Orient, "a drop of the heart's blood of Mother Earth" is a ruby.

We traditionally think of ruby as a faceted stone, and the clearest, darkest examples are usually faceted. Star rubies, like the example above are always cut en cabochon and lesser quality rubies with internal fracturing and/or inclusions are also cut as cabochons. Faceting only began developing in the 15<sup>th</sup> century and rubies have been known long before that, so there are many ancient and modern examples for us lapidaries to be inspired by.



A pair of antique pearl and ruby earrings set in gold. [thenaturalrubycompany.com/education/ruby-history/rubies-in-antiquity/](http://thenaturalrubycompany.com/education/ruby-history/rubies-in-antiquity/)



The Ruby Eye Amulet from Mesopotamia, Adilnor Collection, Sweden. Wikipedia

A gold, ruby, and diamond mosell necklace from circa 1600



In Sanskrit ruby is called ratnaraj or “king of precious stones.” One reference claimed that in China a Mandarin’s rank was indicated by the color of the stone in his ruby ring. In some ancient cultures rubies were laid beneath the foundation of building to secure the buildings good fortune. In the Middle Ages, rubies were viewed as a stone of prophecy. It was thought the stone darkened when danger was near. Ruby is also known as the stone of courage, and legend tells us that a person possessing a ruby can walk through life without fear of evil or misfortune. In the Bible, in Job and Proverbs, wisdom is more valuable than rubies and a wife of noble character is worth more than rubies. Literature about the North Silk Road of China records that rubies were transported and traded westward as early as 200BC.

Even in the first century AD, Pliny the Elder in his book *Natural History* commented on the hardness and density of rubies. Today we say “Ruby has a Mohs hardness of 9.” The name Ruby comes from the Latin *ruber* meaning *red*. Rubies are the red coloration of the mineral corundum: Aluminium oxide with Chromium.(Al<sub>2</sub>O<sub>3</sub>:Cr ). Chromium is what causes the red colour. Every other coloration of corundum is called Sapphire. The colour is the most important consideration in pricing a ruby and can range from pinkish, purplish, orangey, brownish, to dark red. The finest gems are a pure, vibrant red to slightly purplish red. There is some controversy in the gem world over calling light pinkish (Al<sub>2</sub>O<sub>3</sub>:Cr ) Pink Sapphires. Many believe they should be called rubies. The redder and translucent stones have a higher price. It is rare to find a good quality ruby over 1 carat in size. According to some appraisers, a 3-carat ruby, with excellent color and clarity, can fetch more than a diamond of the same size and clarity.

Star rubies display a 6-pointed star (some show a 3-pointed star). They are the result of rutile inclusions and are an unusual example where inclusions increase the value of a gemstone.

Rubies are hard and durable and therefore easy to care for, but don’t wear them for rough work or when using harsh chemicals. Rubies should also be stored away from other pieces because they are usually harder and could scratch a softer gemstone.

Rubies were the first gemstone to be synthesized. In 1837, Marc A Gaudin made the first synthetic rubies. By 1903, Auguste Verneuil announced he could produce synthetic rubies on a commercial scale and by 1907 production reached 1,000 kilograms. In 1961 the first optical laser was built using a synthetic ruby rod. Today synthetic rubies are used in some industrial applications where a wear resistant fine point is needed.

At the beginning of this article are two pictures of ruby rough (un-processed). They show the two main ways rough ruby is found: in marble, distributed irregularly in layers, or in basalt rocks. Marble hosted rubies lack iron and have an intense red colour. Typically, they fluoresce red under ultraviolet light –even the ultraviolet light in sunlight. Fluorescence can make the ruby colour more intense.

Rubies coming from locations where they are found in basalt rocks can have a higher iron content making the rubies darker and a less intense colour.

The finest rubies come from the Mogok region in Burma (Myanmar), but according to the New York Times, “political conflict and trade embargoes have made rubies from Myanmar highly controversial for more than a decade...” Many gem collectors require that the source be anywhere but Myanmar. Now many gems come from neighbouring countries such as Thailand, or Mozambique. Rubies also come from the Himalayas, North Vietnam, India, Tanzania, Madagascar, Russia, Cambodia, Kenya, Mexico, Afghanistan, and North Carolina and Pakistan. Sri Lanka (once called Ceylon) has been famous for rubies since before Marco Polo.

In Canada, Alpine Gems, an online retailer of Canadian gemstones, says there is purplish red, pink, opaque corundum found in Nova Scotia. According to Rick Hudson in *A Field Guide to Gold, Gemstone & Mineral Sites of British Columbia* “tiny granular rubies have been found in some of the tributary creeks of the Tulameen River.” He also says in his entry for Corundum that “Discoveries in the Slokan area suggest the province may yet produce world-class stones.” Perhaps some rockhound will soon discover something.



The Liberty Bell Ruby is the largest mined ruby in the world. It was found in east Africa in the 1950's, sculpted in 1976, stolen in November of 2011 and hasn't been seen since even though 4 men were arrested. The Liberty Bell Ruby weighs four pounds (8.5 thousand carats) and is in the shape of the Liberty Bell with fifty diamonds set in it. The Sunrise Ruby is the world's most expensive coloured gemstone but it is faceted and is considered one of the rarest of all gemstones.

This time, as we look at Ruby, we are looking at unfaceted gems. Some may come across the “Black Prince's Ruby” in The Imperial State Crown of Britain, but it is really a spinel. One of many famous “rubies” revealed to be spinel by modern minerology.



It is believed that the largest star gemstone is the Neelanjali Star Ruby. It weighs 1,370 carats and features unusual 12-point double-star asterism.

<https://thenaturalrubycompany.com>

[education/ruby-history/famous-rubies/#DeLong](https://www.education/ruby-history/famous-rubies/#DeLong)

In history, there are many beautiful examples of rubies that are not faceted. Online there are many retailers selling cabochon rubies. It is a stone we can consider working on in our workshop, if we come across it.

In Indian archery, archers wore rings to protect their thumbs. However, this archer's ring, made from jade with inlays of gold, **rubies**, and emeralds, may have functioned more as a costume accessory or status symbol. India, 17th-18th century, 4.4 x 3.2 cm, 28.3 g. Bequest of George C. Stone, 1935. Metropolitan Museum of Art, New York. Public Domain.  
<https://www.gemsociety.org/article/history-legend-rubies-gems-yore/>

