



## BUGLE



Published by  
RIPPLE ROCK GEM & MINERAL CLUB  
Box 6, Campbell River, BC V9W 4Z

Editor: Steve Cooley

February 2019  
Regular monthly meeting  
2<sup>nd</sup> Friday each month at 7:30 pm  
(except July & August)  
Craft Room, Campbell River Community Hall  
401-11th Ave  
Campbell River, BC



# RIPPLE ROCK GEM & MINERAL CLUB

RIPPLE ROCK EXECUTIVE 2019

President	Linda Henderson	250-286-1718
Vice-President		
Past President	Kathy Young	250-285-3343
Secretary	Steve Cooley	250-287-4388
Treasurer	Dennis Cambrey	250-337-8949
Wagonmaster	Shane Mawhinney	250-285-3465
Assistant Wagonmaster(s)	Ron McBurnie Linda Henderson	250-285-2377 250 286-1718
Show Chair	Pat Doyle	250-285-2377
Shop Coordinator	Molly Milroy, Doug Screeton	250-830-7643
Entertainment	Rotate amongst club members	
Publicity	Diane Cooper, Beba Adams	250-830-0889
Bugle Editor	Steve Cooley	250-287-4388
<b>Non-Executive Positions</b>		
Showcases		
Slab Draw/Collection		
Coffee Break		
Webmaster	Melissa Ticknor, Linda Henderson	

### Delegates to Vancouver Island Zone Meetings

Senior	Melissa Ticknor
Intermediate	Sunday Cousins
Junior	

### WORKSHOP

Shop located at 246 Dahl Rd. (the better address is 247 Dahl Rd.)

For general shop info contact  
Molly Milroy 250-830-7643

### MEMBERSHIPS

A single membership is \$15.00 and a family is \$25.00. Memberships may be paid at the General meetings, or by mail to the address on the Bugle cover.

## Ripple Rock Regular Meeting – January 11, 2019

17 members present, 1 guest (Geneva Janzen) and 2 enquired about membership (Ben and Lily).

Treasurer – distributed 2018 revenue and expenses reports for the regular club activities and revenue and expenses reports for the 2018 Roc Show. We have a healthy bank balance.

Secretary – brought a course being offered by the Elders College called A Pebble in Geology to the attention of the club. The Cowichan Valley Rockhounds sent us their 2019 field trip plans.

Feb 23<sup>rd</sup>, 2019 – Geology Trip – Neil Bonner – nbonner@telus.net

Mar 26<sup>th</sup>(Tue) – Paleontology Trip – 2 museums and Rock shop – this will be a full long day – Fran Benton – fran.benton@viu.ca

Apr 20<sup>th</sup> – Hill 60 – Rhodonite – John Sametz – jwsametz@gmail.com

May 25<sup>th</sup> – Port Alberni Summit/ Kamit Lake – Jaspers and Banded Cherts – Grant Bailey – patrickgbailey@shaw.ca

June 22<sup>nd</sup> – Shaw Creek – lots of different rocks – Lynn Menzies -lynnm@shaw.ca

July 3<sup>rd</sup>(wed) – Piper's Cove – agate and ? - Gary Veitch – veitchg@shaw.ca

Aug – Qualicum River – Dallasite

Sept – possible fossil trip

Wagonmaster – On the 3<sup>rd</sup> weekend in March, it is planned to search for that basketball sized gold nugget on the Fraser River Bars. Plans are being made for a multiday field trip to Texada Island before or during the summer. (Amanda Martinson has written a field guide to Texada Island, but it is sold out. She is taking orders for another printing according to her web site)

Gemboree – July 19 to 21. Host club – Courtenay.

Slab draw was held

Identify rock quiz was held. Brian won the gift card.

Geneva told us about gypsum and illustrated her lecture with various samples. Most of us have been exposed to it in the form of gyprock and plaster of Paris.

## Tons of Giant Nephrite Jade Discovered in Canada



The Polar Pride boulder-called "the find of the millennium" by trade experts-was discovered in Canada. The 18-ton boulder was split in half for carving. Courtesy of Jade West Group.

**Jade** is a commercial term encompassing green, white, black or yellow-brown material that consists either of Na-rich pyroxene (jadeite) or prismatic to acicular amphiboles of the tremolite-actinolite series that form bundles that are randomly oriented and interlocked (nephrite).

Nephrite is tougher (harder to break) than jadeite material. Its fracture strength is about 200 MN/m<sup>2</sup> whereas that of jadeite is about 100 MN/m<sup>2</sup>. On the other hand, jadeite material is harder (7 compared to 6.5 on [the Mohs scale](#)).



Jade was first identified in Canada by Chinese settlers in 1886 in British Columbia. At this time jade was considered worthless as they were searching for gold. Jade was not commercialized in Canada until the 1970s. The mining business Loex James Ltd., which was started by two Californians, began commercial mining of Canadian jade in 1972. There are over fifty known nephrite occurrences in British Columbia. These are located in the Cassiar, Cry and Dease Lake, and Mount Ogden areas, as well as in Southern British Columbia. These occurrences consist of individual blocks, boulder fields, talus blocks, and in situ occurrences. Most of the in situ occurrences are lens or cigar shaped.

They occur at or near the contacts of [ultramafic/mafic](#) rocks (mainly serpentinites) with cherts, and other metasedimentary or igneous felsic rocks of oceanic terranes such as the Cache Creek (Mississippian to Jurassic) and Slide Mountain (Devonian to Permian) terranes. These contacts are commonly interpreted as shear/fault related. In general, it is believed that the British Columbia nephrite formed by metasomatic exchange between ultramafic and silicabearing rocks. Impurities in the nephrite are spinel group minerals (chromite, magnetite, picolite), diopside, uvarovite, titanite, chlorite and talc.

Until the 1960s, almost all of the nephrite produced in British Columbia came from secondary deposits. With the rapid expansion of amateur lapidary activity after World War II, production in British Columbia's jade fields picked up and they became the most important suppliers. About the same time, markets opened up in Germany and the Orient. Mining activity gradually depleted the secondary deposits, but increasing values led to further exploration. These efforts uncovered primary deposits adjacent to the Fraser River area in southern British Columbia, the Mount Ogden area in central British Columbia, and the Cassiar jade fields in the far north.

Today, British Columbia is the main supplier for the China market.



Nephrite in British Columbia. Photo Credit: e-Network.Associates. com

Jade West Group, founded in 1981, is the biggest player in green nephrite mining and trading in British Columbia. Kirk Makepeace, the company's founder, is an avid promoter of the stone. He started with a summer job as a jade driller.

Nephrite mining in British Columbia is very challenging. Winters are long and harshly cold, and deposits are remote, so mining can only happen during the short summer season, about 60 days a year. Almost all of the secondary deposits are exhausted, so current mining is almost all from primary deposits. Transporting the heavy equipment to the mining sites is backbreaking work.



Nephrite Mined In British Columbia Canada

Jade West uses diamond-coated circular and wire saws and modern high-pressure hydraulic splitters to remove the nephrite from the mountain and saw it into pieces of a manageable size. Nephrite's excellent toughness makes it extremely difficult to break out of the rock. While blasting had been used in the past, Jade West no longer uses explosives.

Nephrite deposits range from 12 inches to 12 feet wide. The wider deposits are very challenging to quarry. Nephrite boulders on the surface sometimes reach weights of 200 tons and are rarely under 100 pounds, but Jade West tries to limit the weight of its boulders to five tons, which is a reasonable size for them to mine, handle, and transport on trucks to the nearest town, about 100 miles away. The average weight is two tons, a size that satisfies most of the carving factories in China.

[Http://www.geologyin.com/2016/12/the-giant-nephrite-jade-road-in-canada.html](http://www.geologyin.com/2016/12/the-giant-nephrite-jade-road-in-canada.html)

## Shop Schedule

# February 2019

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 <b>11 – 2</b> <b>Beba</b>	2
3	4	5	6	7	8 <b>11 – 2</b> <b>Harry</b>	9
10	11	12 <b>10 – 12</b> <b>Elder College</b>	13	14 <b>10 – 12</b> <b>Elder College</b>	15 <b>11 – 2</b> <b>Bonnie</b>	16
17	18	19 <b>10 – 12</b> <b>Elder College</b>	20	21 <b>10 – 12</b> <b>Elder College</b>	22 <b>11 – 2</b> <b>Bonnie</b>	23
24	25	26	27	28		