

B.C.
Rockhounder

Vol. 11

Summer 2008

Flintknapping
The Art of Making
Stone Tools

**A Series of Five
Field Trips**
The Quartzsite Area

From Ship To Shore
And A Whole Lot More

Miners At Work:
A History of BC's
Gold Rushes

**Earth's Most
Ancient Places**

Minerals
Of The Earth's Surface

B.C. Rockhounder

Vol. 11 Summer 2008

Contents

Earth's Most Ancient Places	4
Miners At Work: A History of BC Gold Rushes	6
Mother's Day at the Beryl Pit	15
Minerals of the Earth's Surface	16
Local Artists Ready to Represent Ottawa	17
Soda in the Field	17
From Ship To Shore...and a Whole Lot More	18
Bancroft Gemboree 2008	20
Ode to a Trilobite	22
Flintknapping: The Art of Making Stone Tools	23
Summer Camp '09	24
Rendezvous '09	25
Around The Clubs	26
Club Shows & Sales: Fall 2008	39
A Series of Five Field Trips: The Quartzsite Area	40

Cover Photo:

Warren Bobiak's Disidaro Agate. Photo By Quinn Gregory

Published Quarterly By the British Columbia Lapidary Society

20739 39th Avenue,
Langley, BC
V3A 2V7
Tel: (604) 532-0582
E-mail: bcls@cia.com
www.lapidary.bc.ca

Editor:
Win Robertson
winrob@shaw.ca
(250) 376-4878
#62401 Ord Rd.
Kamloops, BC V2B 7V8

Design & Layout:
Hayley Roy
hayley_689@hotmail.com
(250) 828-0965
Kamloops, BC
V2E 2J1

Printing:
**Sure Kamloops
Print & Copy Centre**
(250) 554-1322
552 Tranquille Rd.
Kamloops, BC

Tierney Crystals & Crafts

◦ Petrified Wood
◦ Mineral Specimens

◦ Quartz Crystals
◦ Amethyst

◦ Tumbled Stones
◦ Brazilian Agate



Frank & Betty Tierney

Tel: (604) 435-6777

Suite 101-3351 Kingsway
Vancouver, BC
V5R 5K6

Shows and By Appointment

President's Message

Hello Rockhounds,
As summer draws down I hope everyone has had a great summer adventure of exploration. For me, it was Summer Camp in Fort St James. A week of wonderful weather, good friends and miles of dusty logging roads followed by hours of sweating over a rock hammer, shovel, and finally success in wrapping up a treasure or two. Thanks to Win and Stu for organizing a great time and to all the others who contributed to making the event a success.

The fall show season is about to start, please get out and visit a neighbouring club's show. Take the time to make some new friends, learn a new skill, pass on some skill that you have. Remember that people who are new to the group need some encouragement just as you received when you were new.

Consider running for office in your club, your zone and your society. All can benefit from your experience and your enthusiasm.

Fall field trips are happening in many areas, I hope you can get out and enjoy the natural riches of this province. You should be able to create some interesting jewelry with your treasures. Hope to see your results at the BC Gem Show in April. That's all for now. Happy rockhounding.

Walt Pinder

Lapis Gems Lapidary

Precious, Semi-Precious Stones & Minerals

Mohammad Yarzadeh
M. Homayon

27 Roy's Square
(Yonge & Bloor)
Toronto, ON M4Y 2W4

Tel: (416) 944-3123
Fax: (416) 944-3309



hayley roy
graphic designer

logo design
publication layout
art & illustration

250.828.0965

hayley_689@hotmail.com

Dorothy Bebee ~ 1926—2008

With regrets we report that Dorothy Bebee passed away March 14th 2008 at Westbank B.C.

Dorothy was born and raised in Dornee Alberta, and married Ross in 1945. The married couple moved to homestead land in Northern B.C., however after 2 years of crop failures, they figured that if they were going to starve to death it may as well be in a warmer climate.

So they moved to Little Fort B.C. where they ran a Fish Camp at Thula Lake, and ran the Overlander campground and Rock Shop North of Kamloops.

In 1977 they sold both these ventures and retired to Parksville. In 1984 they moved to Oyama B.C., then in 1997 they stayed in the Okanagan and moved into an Adult Community in Westbank.

Dorothy belonged to Rock Clubs on Vancouver Island, and in the Interior of B.C. She was known by Rock Club members and many Rockhounds who stopped in at the Overlander Rock Shop.

Besides rockhounding, her passion was singing with the local choir. Dorothy will be missed by all who knew her.

Submitted by Ken Dewerson



Ancient Places

By Andrew Alden

One of the fascinations of looking at the landscape of the Moon and Mars is how old everything is. These are places that have not been greatly disturbed for billions of years. By contrast, Earth has a way of rearranging its surface, wearing down mountains and distributing their material on top of other places. The landscapes of today are always changing over geologic time. But here are a few places where nothing, or almost nothing, has happened for millions of years. They are truly places of stasis.

Antarctica's Dry Valleys

Antarctica has been in a deep freeze that started some 40 million years ago, and the continent was smothered in thick glaciers by Pliocene time, about 6 million years ago. But a few valleys near McMurdo Sound avoided the ice and have been sitting there, bare dirt open to the cold wind and sky, ever since. The little snow that falls there returns to water vapor by sublimation. Only the wind can erode the rocks, and over the years they have been gently sculpted into forms called ventifacts. The soil conditions are so strange—full of salts and nearly sterile—that the Dry Valleys are the first thing scientists thought of after learning the chemistry of the dust of Mars.

Chile's Atacama Desert

The hyper-arid Atacama in northern Chile is the world's driest place, incredibly dry. There

are parts of it that have never recorded rain since the Spanish came in 1590, and the rest never gets more than a rare sprinkle at a time. It is perfectly suited for keeping rain away, with the high wall of the southern Andes mountains on the east, holding back moist Atlantic air, and a coastal range on the west barring even the fog from the ice-cold Pacific. Recently, scientists have collected pieces of quartz lying on the ground there and determined that they hadn't moved since 25 million years ago. This work, they said, shows that this part of the Atacama "is by far the oldest continuously exposed geomorphologic surface on Earth."

The Atacama is so dry and still that it preserves rare compounds sifting down from the air itself. These nitrate, perchlorate and iodine compounds fall from the stratosphere in an infinitesimal rain, but nearly everywhere else on Earth they are quickly dissolved and carried away. In the Atacama, the nitrates have built up into deposits of natural saltpeter that were vigorously mined in the 1800s. (Today nitrate is made industrially.)

The Namib Desert of southern Africa is similar geographically. Its land surface is extremely old, but at about 5 million years it takes a far second place next to the Atacama.

Australia's Peneplain

Australia is the world's driest continent and has large areas

of flat-lying terrain. When we go from the hyper-arid deserts to places like Australia, we stop looking for actual land surfaces and soils that have been undisturbed for millions of years. But still, the flat country of inner Australia has avoided wholesale erosion for a very long time indeed.

Weathering of the land surface is one crude indication of age. Australia gets some moisture despite its chronic drought and weathering there, while slow, does occur. In most places, even wet ones, weathered soils are noteworthy that are 10 meters deep, but parts of the Outback have weathered soil profiles 100 meters deep and more. These are not easy to date (see this paper for a survey), but large areas seem to have been sitting there for most of Tertiary time, which began 65 million years ago. Even older soils, going back almost 300 million years to the Permian, have been found under younger rocks.

Mongolia's Plateaus

In 2007, a team of French researchers reported that a scattered set of high, flat mountaintops in Mongolia and nearby Siberia were the remnants of an ancient plain much like Australia's. As part of the rise of the Tibetan Plateau, the old surfaces were gently lifted by intersecting thrust faults without being tilted, the way you would slip both hands under a sleeping baby. By remaining flat, the plateaus

were not subjected to stream erosion even at their present elevation of 4000 meters.

Dating by means of the fission-track method suggests that the plateaus first formed around 180 million years ago, during the Jurassic Period. Like the Australian plains, these table mountains underwent weathering and very slow erosion so the surfaces are not pristine, but their preservation is still impressive.

The South Pacific Bare Zone

A 2005 research cruise in the central South Pacific, about 4000 kilometers east of New Zealand, surveyed a very large region where the seafloor consists of bare rock without any of the usual deep-sea sediment. The rock itself was basalt lava that was 34 to 85 million years old, naked to the cold seawater for all that time. It was kept free of cover by fortuitous currents, just like the winds of the Dry Valleys, and a position that was always far away from continental sediment sources. On the face of it, this finding blows away everything on land and is the oldest original surface on Earth.

THE GEODE MAN

17315 29th Avenue
Surrey, BC V3S 0E8

specializing in

- Faceted Montana Saphires
- Cut Geodes
- Brazilian Agate
- Thundereggs
- Rough & Polished Slabs

Ian & Wendy Leversage

604-535-9005

Please phone for an appointment

thegeodeman@shaw.ca



Mountain Gems Ltd. Lapidary & Jewellery Supplies

New & Used Equipment

Sterling Silver/Gold Filled Metals Classes in Silversmithing & Wireworks

Crystals Books Cut Stones Minerals

4611 Hastings Street
Burnaby, BC
V5K 2K6

Phone: 604-298-5883
Fax: 604-298-2669
Toll Free: 1-888-593-1888

Tues—Fri: 10am—6pm
Sat & Sun: 11am—5pm
Closed Mondays and Holidays

info@mountaingems.com

www.mountaingems.com

MINERS AT WORK:

A History of British Columbia's Gold Rushes

B. Griffin - Royal British Columbia
Museum, Victoria, B.C.



The search for gold is the single most dramatic event of British Columbia's early history. Although European settlement originally was founded on furs, it was the gold rushes of 1858 through the 1860s that changed the direction of development in this province for considerable time. These gold rushes not only brought a sharp increase in population and wealth but also initiated development of an early infrastructure of roads and services and directly influenced the shape of British Columbia's politics. It has been estimated that between 1860 and 1880 about \$35 000 000 worth of gold was extracted from the 130 square kilometres (50 square miles) surrounding Barkerville. Although the later gold rushes were smaller, they also played an important role in our history.

The rush to British Columbia was only one of a series of sudden shifts in population and wealth that resulted from the search for placer gold. California and Australia both attracted hordes of miners in search of riches. This paper places the British Columbia gold rush in a world context; it drew less world attention and was smaller than either the Californian or Australian rushes. The discussion then follows, in some detail, the progress of the early miners up the Fraser River in 1858, past Hill's Bar,

reputedly the richest bar in North America, and on into the Cariboo and Barkerville in the 1860s. Particular attention will be paid to the interaction of the government and the miners, especially as highlighted by the Ned McGowan incident of 1859 and the Grouse Creek war of 1867. An examination will also be made of the life of the miners and the conditions under which they worked, as well as the wealth they extracted. A brief look at some highlights of other British Columbia gold rushes, starting with Rock Creek in 1860 and ending with Atlin in 1898, will also be presented.

INTRODUCTION

One of the most exciting historical events in British Columbia was the gold rush up the Fraser River into the Cariboo to Barkerville. This portion of our history has aroused more interest than almost any other episode and much has been written about it. These events certainly had a greater impact on post-contact British Columbia, than any other event that took place in such a short period of time. The Fraser River and Cariboo gold rushes, however, are only part of the full picture of the search for placer gold in the province and while this paper mainly focuses on them it also touches on other gold rushes.

19th CENTURY GOLD RUSHES

Miners have been preoccupied with gold for centuries. The 19th century introduced new elements into this quest. Several gold discoveries early in the century, especially in Brazil and Siberia, focused attention on the availability of placer gold. No stampede developed to Brazil or Siberia, such as happened with the discovery of gold in California, since both of these discoveries were too distant and under strict government control. A great deal of the work in Brazil, for instance, was carried out by slave labour. As well, world communication and transportation networks had not quite reached the necessary plateau for such a mass movement of people. These factors came together in 1848 and 1849 to spark the greatest gold rush the world has seen, the one to California. Over 100 000 people are estimated to have been in the gold fields by 1852 (British Columbia at its peak probably had no more than 20 000 miners). In California between 1848 and 1860, an estimated \$639 billion in gold was discovered while in British Columbia between 1858 and 1949 an estimated \$93 million worth of gold was recovered. In

1859 the California goldfields produced over \$44 million in gold, while British Columbia production in 1860 amounted to over \$2 million. Even though the accuracy of both figures is somewhat suspect, the difference is so great that any errors are not significant. Nor does this detract from the importance of the gold rush to British Columbia and its impact on this territory, but rather illustrates the difference between the two areas and why many prospectors saw and portrayed the British Columbia goldfields as a humbug and false trail.

It was also in California that the techniques of gold mining were refined. Most of those eager prospectors who flocked to California had no idea of how to look for gold and the Sierra Nevada was their training ground. Miners, or those who had learned from the Californians, seemed to be always available thereafter to set newcomers straight. Most of the techniques had originated centuries before, but knowledge of them was not widespread; from gold panning to rockers to sluices, all were learned and relearned during the California Rush.

In the 1850s another substantial rush developed, this time to Australia. In 1851, it is reported that about half the male population of South Australia had departed for the goldfields. Although numerous 49er's (participants in the early California rush) went to Australia, even more prospectors arrived from England. It is worth noting as well that the Australian discoveries were made by an Australian who had gone to

California in the search for gold. He remembered seeing similar areas in Australia and returned home to make the first Australian discovery.

FRASER RIVER GOLD RUSH

Gold was still being found in California at the time of the gold rush to British Columbia, but much of the easy digging was gone and many miners were seeking new sources of wealth. Gold had been reported earlier in British Columbia, around Fort Kamloops in the early 1850s, for instance. Rumors of gold found on the Thompson River by natives aroused interest in California and when the S.S. Otter arrived in San Francisco in February of 1858 carrying some of this gold, the rush was on. James Moore, one of the first miners to reach the Fraser River, was attending a fire department meeting in San Francisco when he first heard the news. He and others were dispatched to British Columbia to report on the situation. Miners soon flocked to Victoria on their way to the Fraser River.

Moore's group, the first miners on the Fraser River, bypassed Victoria and went through Whatcom and Point Roberts to reach the Fraser in March of 1858. His company had camped for the night at Fort Hope and then moved on in the morning, stopping for a midday meal on a bar about 2.5 kilometres below Yale (about 21 kilometres from Hope). T.H. Hill thought he noticed colours and washed a pan of gravel discovering one of the richest river bars in the world. During Hill's Bar's peak production,

each miner averaged about 50 cents a pan day; over \$2 million in gold was recovered. (Values of gold are somewhat difficult to determine and convert but are given in this paper in the value of the day; the \$2 million from Hill's bar, at about \$20 per ounce (31.1 grams), would equal about \$35 million, at \$350 per ounce today). Hill's Bar was also the site of another incident which will be referred to later. A few bars below Hope were also mined in early 1858. Gold in paying quantities was found at Fargo's Bar about 5 kilometres above Sumas and before the end of 1858 miners had worked their way a considerable distance up river. At least seven bars below Hope were mined, between Hope and Yale there were at least 26 bars and between Yale and Lytton another 40. The gold-bearing sand and gravel in these bars varied considerably but at Hill's Bar it was said to be 2 metres deep, 60 metres wide and cover the whole bar, a distance of about 0.8 kilometre. Mr Winston, so it is recorded, took about 23 kilograms of gold from the bar between December 1858 and April 1859; at times they reportedly obtained about 1.5 kilograms (50 ounces) a day and when running the sluices day and night, up to 2.5 kilograms (70 or 80 ounces). It was quite a sight. Alfred Waddington reported seeing 800 rockers at work between Hope and Yale, while Governor James Douglas, in November 1858, thought there were about 10 000 miners at work above Murderer's Bar which was located just below Hope (*Howay, 1914, p. 41*).

CARIBOO GOLD RUSH

These miners were often footloose and early in 1858, at least one adventurer, Aaron Post, had worked his way as far as the Chilcotin River, testing and trying every bar and reportedly finding gold in most of them. The gold hunters were moving into the upper Fraser by early in 1859. After reaching the mouth of the Quesnel River in May of 1859, prospectors continued up both the



Figure 1. Miners, ground sluicing on the "Ne'er do well" claim, Grouse Creek, 1867 or 1868. (British Columbia Archives and Records Service, HP765).

Quesnel and the Fraser, finding rich diggings. The advances away from the Fraser found the richer strikes to lure the miners ever on. On the Horsefly River for instance, five men with two rockers, took out about 3.1 kilograms (101 ounces) in one week, some areas reported earnings of \$200 per day per man. Incentives such as this spurred prospectors onward and soon they were trying the most inhospitable of places. In 1860 Doc Keithley, George Weaver and their companions found Keithley Creek and adjoining streams, and finally in 1861 William Deitz and his partners crossed over Agnes Mountain and discovered Williams Creek, the richest of the rich Cariboo streams.

At first Williams Creek gave no sign of its great wealth, and was called for a time Humbug Creek, but late in 1861 Mr. Abbott decided to penetrate the hard blue clay over which they had been mining [at a depth between 8 and 12 feet (2.4 - 3.7 m)]. Under this clay was the real wealth of Williams Creek. Working alone (his partner had gone for supplies) Abbott

retrieved about 1.5 kilograms (50 ounces) in 48 hours. The claim, with three men, produced at least 3.5 kilograms (120 ounces) per day and probably more, with an estimated total production of \$150 000, though this is certainly low. Many of the miners were very reluctant to reveal how much gold was recovered by their efforts and so estimates are very inaccurate.

These were difficult workings, hard to get to and difficult to work (Figure 1). Some went to a depth of over 24 metres (80 feet) and had to be continually pumped to reduce the water (Figure 2). Supplies were expensive and winters harsh. When compared to the diggings in California it was misery. Nor did the large tract of ground exist as in California, the Cariboo goldfields covering a comparatively small area.

One of the worst problems was travelling to and from the goldfields. The early trek through the Fraser Canyon was formidable. On one occasion when Governor James Douglas queried Gold Commissioner George Cox as to why he had not collected licence fees on his journey, Cox replied:

"With perpendicular ascents and dangerous descents my eyes and thoughts were wholly engrossed with the safety of my life, more especially when crawling along the edge, paths ... are only a few inches in width and ... form the trail along the sides of this lofty mountain and overhangs the river."

(George Cox to James Douglas, 6 April 1859, see Howay, 1926, p. 101)

Even after conditions had somewhat improved, the trek remained arduous. In 1862, W. Champness ventured up to the Cariboo to try his hand at mining. He did not have great success but he did leave us an interesting account of his adventure. After what he felt was a trying journey to Williams Lake, after well over one half the trip, he recorded:

"Miners returning from the Cariboo diggings...after hearing the complaints of our travelling difficulties thus far, only laughed at us saying, "You've not even reached the bad tracks yet." And we soon had reason to believe them: Our horses were often plunged up to the belly in swamps and mud. British Columbia is truly a horse-killing country. At times we dragged our burdens heavily up steep and forested mountains. Then, again, we frequently met with rapid and steep streams,

where in the absence of bridges, we had to wade or otherwise attempt—often at the risk of life and limb." (Champness, 1972, p. 61).

Upon the completion of the Cariboo Road in 1863,

the trip became easier and faster than in previous years



Figure 2. Sheepshhead claim on Williams Creek in 1867 or 1868. (British Columbia Archives and Records Service, HP 5189).

and included way-side houses (Figure 3). The journey, however, remained strenuous and it was not until 1865 that a wagon road finally reached Barkerville. Even with its final completion, the average stage time from Yale to Barkerville was still four days (Howay, 1914, p. 131).

Travel was not only very difficult but conditions on reaching the mines were often not much better:

"Hundreds, after working like slaves, and expending all their little capital, have had to retrace their weary way down to the coast, with scarcely rags enough to cover them, obliged to tie bits of sacking around their bleeding feet, and to sell their blankets for a very little bread. Truly, the numbers of these poor broken-down fellows, with their pale, pinched faces and tattered rags, eloquent of hunger and poverty, were enough to dishearten all of us together; for hundreds of such passed us during our journey, in parties of from two to a score." (Champness, 1972, pp. 61-62).

Nor did this situation improve with the better access by road. Alexander Allan found conditions equally as bad in 1868 as Champness had found in 1862.

"I know that in gold country such as this people generally suppose that a man cannot help but make money and have plenty of it always at command but a more mistaken idea was never entertained. There are it is true many who have made and are now making their fortunes, but it is also true that the far greater number rank as



Figure 3. "A way-side house", 1862, from Cheadle (1971). (British Columbia Archives and Records Service, HP 74431).

unfortunates, those whose lot it may not be believed but it is only too true is worse than the most miserable and poverty stricken person in the old country." (Bescoby, 1932, p. 48).

Along Williams Creek, the richest of the gold areas, four small communities grew. Richfield was the earliest, and it became the government centre, but was soon eclipsed in size and importance by Barkerville (Figure 4). Further down the creek from Barkerville was Camerontown, and Marysville below it. None of these towns were far apart.

William Cheadle visited Williams Creek in 1863 prior to the establishment of Marysville:

"At dusk we arrived at Richfield, the first part where gold was struck on this creek, & it was quite dark before we reached Cameron Town below, passing thro' Barkerville or Middle Town. The whole 3 towns extending almost continuously down the creek for a mile & containing about 60 or 70 houses a piece. This spring there were only 3 or 4 houses at Cameron Town! Our path was a difficult one over endless sluices, flumes & ditches, across icy planks & logs, all getting tumbles, gumboots being very treacherous." (Cheadle, 1971, p. 249).

Despite the hardship and the many who were unsuccessful, these were rich claims. In 1862 Thomas Elwyn, Gold Commissioner at Richfield

wrote to Governor Douglas: "The yield of gold on this creek [Williams] is something almost incredible...Cunningham & Company have been working their claims for the past six weeks, and for the last thirty days have been taking out gold at the rate of three thousand dollars every twenty four hours...Steel & Co have been engaged for the last ten days in making a flume but during the previous three weeks their claims yielded two hundred ounces [~100 kgs] a day. These figures are so startling that I would be afraid to put them on paper, in a report for His Excellency's information were I not on the spot and know them to be the exact truth." (Akrigg and Akrigg, 1977, p. 240).

Such views are as typical as those expressed by the many disheartened miners. There is no doubt that many returned poorer than they arrived with only a few finding great wealth, but there is also no doubt that some did find such wealth. As the Reverend Edward White wrote in 1861: "The bags of [gold] dust which are now coming down, confound and strike dum[b]"

every person who has dared call Fraser River gold mines a humbug. If I had time and space I would fill sheets with the reports of lucky ones. I could give you a long list of those who went up last spring with hardly enough to pay their expenses to Cariboo, and are now returning with \$5 000 to \$20 000 each." (Christian Guardian, 4 Dec. 1861, p. 192, cited by Akrigg and Akrigg, 1977, p. 235). continued



Figure 4. Barkerville in 1865. (British Columbia Archives and Record Service, HP 93780).

The early hustle and bustle had slowed considerably by 1865, even though a lot of gold was still being taken from the ground at numerous mines (Figure 5). Few new discoveries were made and the gold was getting harder and harder to get. As hydraulic operations started, water wheels, pumps and other devices became needed accessories to gold mining. It was no longer a game for the individual miner.

Barkerville in 1862 was a city of tents but by 1863 wooden houses began appearing. A continuous complaint was that the roadway was always dirty and never repaired.

In the fire of September 16th, 1868 about 116 buildings were destroyed, but the town was reportedly built larger and better and included three gas lights, one each in front of the two banks and the Hudson's Bay Company store. Prior to the fire (Figure 6), Barkerville had a variety of merchants and other enterprises with most of the buildings being businesses and included 20 general stores, 18 saloons, 8 boarding houses, with only 2 private residences listed as destroyed by the fire.

Even though the peak of the gold rush had passed, rebuilding Barkerville proceeded quickly; 41 merchants reestablished themselves in 1868, by 1869 there were 76 and 98 in 1871 (Bescoby, 1932, p. 2).



Figure 5. Williams Creek from Black Jack Canyon, 1868. (British Columbia Archives and Records Service, HP 13188).



Figure 6. Barkerville prior to the fire of 1868. (British Columbia Archives and Records Service, HP 10111)

"There were only two recorded instances of individuals who could be considered habitual criminals. One was Jesse Pierce..."

Camerontown and Marysville, each about 1.5 kilometres apart, were located between Barkerville and what is now Wells. Marysville was largely residential but

some businesses and other facilities were set up in Camerontown, such as the hospital in 1864. Other communities grew up on some of the surrounding streams and in the gulches. Some of these earlier

small communities were Grouse Creek, Keithley and Van Winkle, initially considered as the main centre for the area. Some of the others included Antler in 1863 which had seven merchants. Centreville was established in 1867 and by May 1868 had 100 dwellings. Felixville sprang up

at the head of Conklin Gulch in 1869 and Gladstoneville at the mouth of Chisholm Creek in 1870. The buildings were often rough, though lumber was available from several small sawmills. The cabins the

miners lived in were generally one room affairs, made of log with a single window and single door, a stone fireplace and a mud floor; some of the larger companies built bigger buildings (Bescoby, 1932, p. 4).

LAW AND ORDER

There was general agreement among the pioneers that lawlessness played little part in the mining community, in general it was a pretty safe place. Thomas Hammett commented that Respect for Law and order was always a marked feature of life in Cariboo.... The strict enforcement of the laws scared away the 'bad men' who used to give a bad name to mining camps on the other side of the line... (Bescoby, 1932, p. 31). James Douglas wrote to Newcastle at the Colonial Office in 1863 that unanimity and good feeling prevail among the miners on Williams Creek and both the Upper and Lower Towns have been perfectly quiet, and free from disturbance. (Bescoby, 1932, p. 32). The local paper, the Sentinel, reported only a few crimes: a burglary Aug 26, 1865 of a merchant, for instance, or the bar-room fight in 1866 which was reported as generally friendly in nature. Between 1866-71 only 135 criminal cases were heard and of the 25 in 1868, two were felonies, six thefts and the rest drunkenness.

There were only two recorded instances of individuals who could be considered habitual criminals. One was Jesse Pierce. He is first noted in 1864 when he was in court over a mining dispute. In 1865 he was charged with supplying liquor illegally to native women in Loring's saloon in Camerontown and in 1868 he squabbled with James Knight at Mosquito

Creek. He was wounded, but his adversary Knight was let off as the wounding was considered accidental. In September 1868 Pierce was in a fight in the Arcade saloon in Barkerville, and in March 1869 he assaulted William Phillips at Mosquito Creek, who died as a result. Pierce was imprisoned but escaped and in September 1869 was declared an outlaw. As far as I am aware he was not recaptured. Another individual, William Williams, also had a long list of offenses but these two men are the only two so recorded (Bescoby, 1932, p. 37).

Two incidents especially stand out in the story of law and order during the gold rush. The first occurred in 1858 at Hill's Bar. When the miners flocked to British Columbia in 1858, James Douglas acted speedily toward taking control of the situation and protecting the realm for the British Government. He adapted procedures used in the Australian rushes and appointed Gold Commissioners who would act as general government representatives, though their main concern was to enforce the mining regulations. Douglas proclaimed that The Gold Commissioner alone without a jury shall be the sole judge of law and fact. (Bescoby, 1932, p. 9). Unfortunately some of his first choices of employees were not the best.

On Christmas day in 1858, a Hill's Bar miner committed assault in Yale. Captain Whannell, the Gold Commissioner at Yale, sent out a constable with a warrant to Hill's Bar where the criminal was residing. George Perrier, the Hill's Bar Gold Commissioner refused to recognize the warrant and even issued a warrant for the arrest of the victim in Yale. Whannell then arrested Perrier's constable when

he arrived in Yale to serve the warrant. A posse was organized under Ned McGowan, who had a notorious reputation. They proceeded to Yale, released the constable and arrested Whannell, who Perrier then arraigned and fined for contempt of court. Accusations flew to Victoria and Douglas immediately dispatched Colonel Moody with Judge Begbie and marines to the scene. McGowan was fined for his part and Perrier and his constable dismissed. (This is a much abbreviated version of the story, for more information, see Akrigg and Akrigg, 1977, pp. 146-154). These first government representatives seem to have been an unsatisfactory group, especially Perrier, Whannell and Richard Hicks. Hicks was deficient in nerve for the position he holds, so Begbie wrote to Douglas in early 1859, I cannot get anyone to speak up for him. Even Mr. Edward McGowan who does him the honour of preferring him to Capt. Whannell alleges his reason to be because he prefers dealing with a knave rather than a fool. (Matthew Baillie Begbie to James Douglas, 1 Feb. 1859, 14 Jan. 1859, Colonial Correspondence, F142a, Provincial Archives and Records Service).

By the end of 1859, they were largely replaced with a new group of more competent men, many of whom had served in organizations such as the Irish Constabulary; Peter O'Reilly, being one example. Not that they were all without blemish. Andrew Elliott was temporarily removed while Douglas had his books and transactions audited. All was found in order, merely in great disarray and after a reprimand, Elliott was reinstated. (C.S. Young to Andrew C. Elliott, 6 June 1862, Colonial Correspondence, Provincial Archives and Records Service).

The second incident is the Grouse Creek war of 1867. In 1864 the Gold Commissioner Peter O'Reilly granted the rights to a certain portion of land on Grouse Creek to the Grouse Creek Bedrock Flume Company of Victoria, for ten years, provided it fulfilled all conditions of the Gold Fields Act. The Grouse Creek Company ran out of money and left the site apparently abandoned in 1866. The local Canadian Company applied for rights over the supposed abandoned claim and these were granted by the Gold Commissioner, Warner Spalding. Some months later the Grouse Creek Company renegotiated with the Crown, through Spalding, for its rights to the claim and they were reinstated. The Canadian Company of course objected and the case returned to Miners Court under Spalding who, not unsurprisingly, found for the Grouse Creek Company. The Canadians refused to move. After further exchanges, the district magistrate finally requested the marines. Instead, Governor Seymour arrived and persuaded the Canadian Company to leave the ground, evidently with the promise of a new trial. A few of the company were arrested but spent an agreeable time in jail as, their sympathizers supplied them with bountiful grog; [and] what with games and songs, interspersed occasionally with a derisive hoot at the officials, they were the jolliest convicts ever seen. (British Colonist, September 9, 1867, cited by Tina Lo, A Delicate Game: The Meaning of Law on Grouse Creek, paper presented at British Columbia Studies, 1990). Joseph Needham (Figure 7), Vancouver Island's Chief Justice, decided in favour of the Grouse Creek Company

and this was finally accepted by the Canadian Company. Both of these, so-called wars, were tests of the local justice system and little violence accompanied the incidents. What they did do was bring to a crisis point certain problems which needed resolution; the replacement of incompetent Gold Commissioners and some changes and clarifications to the method of dispute resolution, as well as clarification of the limits of government authority and the extent to which the government was prepared to go to protect its authority.

OTHER BRITISH COLUMBIA GOLD RUSHES

Although the Fraser River and the Cariboo gold rushes are the most dramatic of the gold rushes they were not the only such episodes. Even in 1859 many of the miners were leaving the dwindling bars of the lower Fraser and some headed for a new strike in the Boundary Country at Rock Creek. Charles Wilson, an officer on the boundary survey described this community in 1860:

“The Town or rather, I beg its pardon, city has sprung up like a mushroom, there are about 350 inhabitants, miners, gamblers, sharpers,... Pikes, Yankees, Loafers... There are a good many substantial log buildings, stores, gambling houses, grog shops, butcher shops, etc...”

(Wilson, 1970, p. 126).

This was one of the wilder communities and reportedly needed to be straightened out by Gold Commissioner, Judge Cox, though according

to Wilson, “the miners have behaved very well.” (Wilson, 1970, p. 126). Mining lasted at Rock Creek for about three years with an estimated \$250 000 worth of gold recovered.

In 1863 a small flood of miners occupied the Wild Horse Creek area in the Kootenays, so named when the first miners to the area saw a wild horse near the mouth and followed it up the creek. This was a rough and ready camp, which was portrayed as, a horde of outlaw gamblers, murderers and out of a job desperados. The miners, however, immediately established a miners’ court system and elected a sheriff while awaiting the arrival of a Gold Commissioner to handle legal matters (Christian, 1967, p. 29).

The main feud seems to have been between the early and late arrivals over accessibility to the better claims. When a brawl erupted, one Tommy Walker shot off Yeast Powder Bill Burmeister’s thumb. Bill, not taking this lightly, shot Walker dead. A miners’ jury acquitted Bill. Gold Commissioner Haynes arrived one week later, investigated and gave the same verdict. The main town was Fisherville which was described in

1864 as a queer place and thoroughly a “mining camp”... all sorts of log huts, shake houses, split timber huts, bark huts ... men lounging



Figure 7. Judge Needham and party at Dr. Carrall’s, 1867. (British Columbia Archives and Records Service, HP 4359).

about—others playing cards—others drunk—miners rocking and sluicing—pack trains commencing—altogether a motley vagabond crew in the midst of a lively and exciting scene (Birch Diary, 1864, British Columbia Archives).

When Gold Commissioner Peter O’Reilly arrived in 1865 he found Wild Horse very similar to other mining areas he had served at:

“Glad to see many old faces from the Cariboo who gave me a hearty welcome. The town is like all the mining villages I have yet seen, therefore nothing very attractive, the mines of course I don’t as yet know anything about but the country if I may judge by the little I saw of it on the my way in is a vast improvement on Cariboo as is the climate from all I have heard.” (Peter O’Reilly to Caroline, May 18th, 1865, O’Reilly Collection, British Columbia Archives).

In 1864 about 2300 were mining in the area but this boom quickly died with about 450 remaining in 1866.

There were small rushes to many different streams such as to Leech River near Victoria in 1864 and to many areas of southern British Columbia, but in the late 1860s most of the excitement moved north, to Omineca in 1869, Cassiar in 1873 and finally Atlin in 1898. The trek of miners to the north was smaller than the rush to the Cariboo. In the Omineca, Germansen Creek became the focus of the search with the rush peaking in 1871. In 1872 only two creeks, Germansen and Manson were being worked and in 1874 the rush had dwindled to about 60 claims being worked by some 80 miners. The Cassiar rush peaked in 1876 with about 2000 miners working the area.

Some were rich creeks, the Dease River, for instance, yielded nearly \$1.5 million in gold, but neither the Omineca nor the Cassiar possessed the wealth of either the Cariboo or of the later strikes around Atlin (Howay, 1914, pp. 266-272).

The Atlin gold rush occurred at the same time as the much more spectacular rush to the Klondike and so has been somewhat overshadowed, but it was a substantial gold find. Miners were able to trek down from the Yukon to the newly formed community of Atlin (Figure 8) or stop on their way north. In late 1898, over 3000 miners were working the streams around Atlin. Production in 1898 was estimated at over 100 kilograms (3750 ounces) of gold, valued at \$75,000. By 1899 about 12 440 kilograms (400 000 ounces) of gold, with a value of \$8,000,000, had been produced. Between 1898 and 1949 over \$22.5 million in gold was recovered from these creeks.

The search for placer gold did not end with the spectacular and often shortlived rushes. In 1889 the Gold Commissioner John Bowron recorded that Williams Creek with its tributaries, worked for nearly thirty years still yields more gold than any other creek in the Province. (British Columbia Department of Mines, Annual Report, 1889, p. 273). All these areas, plus many others, continued to be worked once the main rush had passed them by and miners still continue to find gold in most of the early gold areas as well as making new discoveries. One of the largest nuggets found in British Columbia, weighing about 1617 grams (52 ounces), was discovered in 1937 on Alice Shea Creek. Gold was only found in that area, for the first time in 1932.

PLACER MINING IN THE EARLY 1900s

A brief look at some of the major placer mining operations just after the turn of the century shows that although many small operations continued into the 1900s, the industry underwent a transformation which included an increasing dependence on hydraulic mining methods. The hydraulic operation was first introduced in 1860s. A monitor directs a high pressure stream of water to wash the gravel down to the sluice box for the recovery of gold (Figure 9). Tremendous amounts of gravel and earth could be moved by this means. The largest of these developments were in the Cariboo and the Atlin areas with some renewed interest in Cassiar and Omineca.

The largest of the these operations was in the Cariboo. Miners had realized by 1900 that much of the wealth of Cariboo gold remained locked in the deep gravels of the streams and gulches. Cutting below the old surface workings on the South Fork of the Quesnel River, near Quesnel Forks, the Consolidated Cariboo Hydraulic Mining Company produced a gigantic pit at Bullion. In 1900, for instance, the company moved nearly 2 million cubic yards (over 1.5 million cubic metres) of gravel and recovered 20 470.91 troy ounces (636.7 kilograms) of gold (Anonymous, 1901a). Even

though it was by far the largest, Consolidated Cariboo was not the only player. Many of the longer worked creeks continued to be mined using both older and slower techniques as well as hydraulic methods. The Forest Rose property on Williams Creek, for instance, was first developed in the 1860s with the owners first using hydraulic methods in 1876. It remained in continuous operation until 1900. On Grouse Creek, the Waverly Hydraulic



Figure 8. Atlin in 1899.

Company started work in 1880 and remained in operation for some years after 1900. Discoveries in the Horsefly area in 1901 were thought to be the precursor of developments that would bring the Cariboo to world attention as had events in 1862 (Anonymous, 1901b). Certainly some new excitement was gener-



Figure 9. Consolidated Cariboo Hydraulic Mining Company’s 15-centimetre (6 inch) monitor in 1896. (British Columbia Archives and Records Service, HP 99924).

ated, but the deep gravels of the Cariboo required capital and laborious effort to bring them into production.

Consolidated Cariboo’s Bullion mine, on which development had started in 1894, was to remain the largest of the producing mines. The company operations in 1903 included 34 placer mining leases covering about 25 000 acres. They employed about 120 men and had 53 kilometres of canals, three

main reservoirs, two secondary reservoirs and a main sluice at the Number 1 pit 365 metres (1200 feet) long. Despite recovering slightly over \$1 million between 1894 and 1902 the company still had not made a profit. During that period it was estimated that about 4.5 million cubic metres (6 million cubic yards) of gravel had been washed and that about another 380 million cubic metres (500 million cubic yards) remained (Watson, 1903). Over 9 million cubic metres (12 million cubic yards) had been worked by 1905 and the company claimed to be making 19 cents to the cubic metre (25 cents to the yard) but later estimates were about 7.5 cents to the cubic metre (10 cents per yard). Consolidated Cariboo lost money and the pit, 0.8 kilometre in length, was closed. Reopened in later years, Bullion Placers Limited finally closed the pit in 1942 (Lay, 1935).

In the Atlin, Cassiar and Omineca areas hydraulic mining emerged about the same time. Five hydraulic operations were working creeks near Atlin in 1900, while several large companies were also operating in the Omineca. The Cassiar, in 1894, was slumbering after the great excitement of 1872. In 1900, a hydraulic operation commenced on Thibert Creek and although it remained the only operation until 1904 when the Berry Creek Company started, gold production grew in importance over the next decades. Hydraulic mining, in this fashion, is no longer legal in British Columbia.

CONCLUSION

The story of placer mining in British Columbia is far from finished. New discoveries are made every year and considerable quantities of gold are still found. The placer gold mining industry has changed from its early origins. Although some methods have been discarded and others introduced, the gold pan is still commonly used for testing small gold finds and the sluice box remains the primary means of separating gold from its associated gravel. The attraction of wealth is only part of the incentive to the gold miner, for the romance of the search for gold has cast its lure widely.

REFERENCES

Akrigg, G.P.V. and Akrigg, H.B. (1977): *British Columbia Chronicle, 1847-1871, Gold and Colonists*; Discovery Press, Vancouver, 439 pages.

Anonymous. (1901a): *Consolidated Cariboo Hydraulic Mining Company*; *The Mining Record*, Volume 8, Number 3, pages 82 - 83.

Anonymous. (1901b): *The Mining Record*, Volume 8, Number 12, page 402.

Bescoby, I.M. (1932): *Some Aspects of Society in Cariboo from its Discovery until 1871*; The University of British Columbia, unpublished M.A. thesis, 184 pages.

Champness, W. (1972): *To Cariboo and Back in 1862*; Ye Galleon Press, Fairfield, Washington, 106 pages.

Cheadle, W.B. (1971): *Cheadle's Journal of a Trip Across Canada 1862-3*; M.G. Hurtig Publishers, Edmonton, 311 pages.

Christian, J.W. (1967): *Kootenay Gold Rush, the Placer Decade, 1863-72*; Washington State University, unpublished Ph.D. thesis, 193 pages.

Howay, F.W. (1914): *British Columbia: From the Earliest Times to the Present*, Volume 2; The S.J. Clarke Publishing Company, Vancouver, 727 pages.

Howay, F.W. (Editor) (1926): *The Early History of the Fraser River Mines*; Archives of British Columbia, Memoir Number 6, King's Printer, Victoria, 126 pages.

Lay, D. (1935): *Northeastern Mineral Survey District*; British Columbia Department of Mines, Annual Report, pages C1 - C 40.

Watson, R. (1903): *A Trip Through Cariboo - Number 2*, *The Mining Record*, Volume 10, Number 2, pages 847 - 854.

Wilson, C. (1970): *Mapping the Frontier*; MacMillan, Toronto, 182 pages.

“The story of placer mining in British Columbia is far from finished. New discoveries are made every year and considerable quantities of gold are still found.”



With good weather in the forecast and all the snow melted (finally) it was time for our first field trip since moving to the Ottawa area. We chose one of the more well-known localities in the area: the Beryl Pit located around two hours drive from Ottawa near the town of Quadeville, Ontario. This is a fee for collecting site: you pay your six dollar per person fee at the general store in Quadeville, which is just down the road from the site. Surprisingly, we were the first people to sign up to visit the site this year, so it would appear that Ontario rockhounds are a bit slow to get moving; a few weeks have already passed since the snow has gone!

Although the site is now owned by Aqua Rose Gem and Minerals, the area was previously mined commercially on a small scale for beryllium beginning in the 1920's for approximately thirty years on and off. This is a pegmatite dyke that contains over twenty five different minerals including amazonite, tourmaline, beryl, feldspar, garnet, quartz and fluorite. The site includes a pit and three piles of rock that have been removed from the pit. Although you could try and do some hard-rock mining in the pit, this is unnecessary as there is so much rock in the dumps including many large chunks that could be broken up. One of the good things about this

site is that there is a sign under plexiglass at the entrance, which provides samples of many of the different minerals to be found there.

We mainly collected small pieces of a variety of the different minerals to be found here. There is lots of tourmaline but it is all black and not very hard. Given some of the pieces of tourmaline that were found here, some of these crystals must be quite large. I kept one sample including some small well-defined tourmaline crystals. I also kept some small pieces of green amazonite. There is lots of amazonite here but the colour is washed out of much of the surface material.

We did find some small pieces that had a darker green colour. There is a variety of feldspar found here which glitters in the sun, and looks a bit like labradorite. It is called peristerite. In the pit, it is interesting to see a large vein of this material glittering in the sun. There are plenty of small pieces in the waste dumps as well. The quartz tends to be massive rather than crystals, although there may well be the odd crystal here given the large amount of quartz that is present. Much of the quartz has a smoky colour to it. We also found a few pieces of rose quartz. There is also lots of

cleavelandite, which has white plates that are quite distinctive. There is also plenty of mica specimens, and pink feldspar. I did not see much evidence of garnet or fluorite although both are supposed to be here.

As Diane was looking for some rocks to put around the garden, we were able to find some nice looking pieces for that purpose. It does not take long to acquire specimens of many different minerals here. We had thought that we would be at the site early enough to avoid bugs. We were mistaken. There were lots of little flies present which we didn't think were biting at the time, but after we got home we both had plenty of bites to show for our trip. Make sure to bring some good bug repellent if you go here, as it will be even worse in the summer months.

This is an interesting site that any mineral collector should visit. Most of the materials do not appear to be good for lapidary purposes, so this is more of a location for specimen collectors—this is the case for many of the rockhounding localities in Ontario. Now we are off to the Gaspé area for a week, on a trip that will include some rock and mineral-related activities. Stay tuned for further reports.



Minerals

By Andrew Alden

of the Earth's surface

Igneous Rocks

Geologists know about thousands of minerals locked in rocks, but when rocks are exposed at the surface and weather away, less than 10 minerals remain; they are the ingredients of sediment, which in turn become sedimentary rock.

When the mountains crumble to the sea, all of their rocks, whether igneous, sedimentary or metamorphic, break down. Physical or mechanical weathering reduces the rocks to small particles. These break down further by chemical weathering in water and oxygen. A very small number of minerals can resist indefinitely: zircon is one and native gold is another. Quartz resists for a very long time, which is why sand, being nearly pure quartz, is so persistent, but given enough time even quartz dissolves into silicic acid, H_4SiO_4 . But most of the silicate minerals produce solid residues after chemical weathering. Silicate residues are what make up the minerals of the Earth's land surface.

The olivine, pyroxenes and amphiboles of igneous or metamorphic rocks react with water and leave behind rusty iron hydroxides. These are an important ingredient in soils but uncommon as solid minerals. They also add brown and red colors to sedimentary rocks.

Feldspar, the most common silicate mineral group and the main home of aluminum in minerals, reacts with water too. Water pulls out silicon and other major cations (positive ions) except for aluminum. The feldspar minerals thus turn into hydrated aluminosilicates—that is, clays.

Amazing Clays

Clay minerals are not much to look at, but life on Earth depends on them. At the microscopic level, clays are tiny flakes, like mica but infinitely smaller. At the molecular level, clay is a sandwich made of sheets of silica (SiO_4) tetrahedra and sheets of magnesium or aluminum hydroxide ($Mg(OH)_2$ and $Al(OH)_3$). Some clays are a proper three-layer sandwich, a Mg/Al layer between two silica layers, while others are open-face sandwiches of two layers.

What makes clays so valuable for life is that with their tiny particle size and open-faced construction, they have very large surface areas and can readily accept many substitute cations for their Si, Al and Mg atoms. Oxygen and hydrogen are available in abundance. From the viewpoint of microbes, clay minerals are like machine shops full of tools and power hookups. Indeed, even the building blocks of life—amino acids and other organic molecules—are enlivened by the energetic, catalytic environment of clays.

The Makings of Clastic Rocks

But back to sediments. With quartz and clay, the overwhelming majority of surface minerals, we have the ingredients of mud. Mud is what geologists call a sediment that is a mixture of particle sizes ranging from sand (visible) to clay (invisible), and the world's rivers steadily deliver mud to the sea and to large lakes and inland basins. That is where the

clastic sedimentary rocks are born, sandstone and mudstone and shale in all their variety. (See Sedimentary Rocks in a Nutshell.)

The Chemical Precipitates

When the mountains were crumbling, much of their mineral content dissolved. This material reenters the rock cycle in other ways than clay, precipitating out of solution to form other surface minerals.

Calcium is an important cation in igneous rock minerals, but it plays little part in the clay cycle. Instead calcium remains in water, where it affiliates with carbonate ion (CO_3). When it becomes concentrated enough in seawater, calcium carbonate comes out of solution as calcite. Living organisms can extract it to build their calcite shells, which also become sediment.

Where sulfur is abundant, calcium combines with it as the mineral gypsum. In other settings, sulfur captures dissolved iron and precipitates as pyrite.

There is also sodium left over from the breakdown of the silicate minerals. That lingers in the sea until circumstances dry up the brine to a high concentration, when sodium joins chloride to yield solid salt, or halite.

And what of the dissolved silicic acid? That precipitates underground, from deeply buried fluids, as the silica mineral chalcedony. Thus, every part of the mountains finds a new place in the Earth.

Local Artists Ready to Represent City in Ottawa

Hannah Sutherland, Peace Arch News.
June 21, 2008

Peninsula residents Simon and Norah Cantin have been selected by the Arts Council of Surrey to represent the city during Canada Day celebrations in Ottawa.

The couple will be flying east June 29 for the event at Jacques-Cartier Park, where they will display and demonstrate their handmade crafts. There are just a handful of West Coast artists nominated to participate in the celebration; local artists Deborah Putman and Murray Sanders will also be attending.

Simon will show his stone carvings, and Norah will exhibit her handmade jewelry, also made from stone.

The two have been members

of the Surrey Rockhound Club for about 10 years, and have travelled around the province collecting various types of rock for their art.

Simon is known in the community for demonstrating his carving on White Rock Beach beside the museum.

Norah is an experienced jeweler, having created jewelry for the last 20 years, and opened up her own business, Cantin's Canadian Crafts, six years ago.

She also makes cards of clay and wax, and creates paintings with oil, acrylic and watercolour.

"It's very, very exciting," Norah said of the opportunity. "We consider it quite an honour to be chosen."



For more information about the Cantins' art, visit: www.cantinscanadiancrafts.com

Soda in the Field

From The Agatizer, Golden Spike News & SCFMS Newsletter

Here are a few good reasons you will be glad you took that box of Baking Soda along on your field trip. In fact, maybe you should take two boxes!

- 1. Insect bites, minor burns and poison oak** - add water to make a paste and apply to affected area.
- 2. Sunburn, wind burn and prickly heat** - add ¼ cup to a basin of water and bathe or sponge on.
- 3. Acid indigestion** - add ¼ teaspoon to ½ glass of water and drink slowly.
- 4. Tired feet** - 3 tablespoons to a basin of warm water and soak
- 5. Tooth Cleanser and breath freshener** - use as much as needed on moist toothbrush.
- 6. Hand & fingernail cleaner** - rub dry on moist hand to remove pine pitch & odors.
- 7. Fire extinguisher** - for grease fire, throw a box full at the base of the fire.
- 8. Freshening camp coolers and jugs** - add 2 teaspoons, partly fill with water. Shake and rinse.
- 9. Deodorant** - sprinkle inside boots and shoes.
- 10. Natural cleaner for camp dishes and pans** - add 3 tbsp. to a pan of warm water and soak.
- 11. Cleaning a dirty bug splattered windshields, chrome and camper frames** - rub damp sponge sprinkled with soda on area.
- 12. Freshening RV water tanks** - lush with a solution of ¼ cup soda and 1 gallon of water. Rinse with clear water.

From Ship to Shore

Rendezvous 2008
Chase, B.C.

And a Whole Lot More

By De Morgan



We left the luxurious cruise ship, Amsterdam, and came home to prepare all the items needed to leave early the next day for our annual trek to the Rockhound's Rendezvous. The travel trailer was packed and hauled well, chugging up the Coquihalla's long hills.

We arrived in time to wheel into a good camping spot in front of the hall, then sign up for the weekend's fieldtrips. A potluck supper was planned, which turned out to be a really varied and delicious feast.

The Saturday trip was to Barnhartvale Road area, where we were hoping to find agate, a paler version of the Laguna agate found in Mexico. We

were inspired by the sample in the case at Chase hall that showed striking hues of fortified agate, with blue, red, purple and yellow. Lorne Morris, who led the trip, wisely advised

us to double up in the 4x4's, as the last bit of road was a bit steep and rough. Some chose to walk, and some rode up to the claim.



Tree fell across the road on the way to Squilax. Roy and others saw to get us up the road

There were two main areas, claim 2 and claim 3. We first stopped at claim 2, which had been dug from the road cut. There were a couple of trees with dangerously compromised root systems, after someone had tunneled well underneath them. The claim owner, Warren Bobyck, asked us not to dig any further under these precarious, tall pines, as they appeared near to falling over.

There were large boulders of material on the roadway, certainly lots to look through

without pulling out more. Within a few minutes, my husband, Bob, had found a colourful sample of the agate, about 5/8 inch wide, blue with a definite red streak through it. Feeling well satisfied that the material was there,

we continued to break open more of the boulders in search of bigger and better specimens. I found a purple seam, about 1 centimetre wide, and that was

my best find. When I polished it at the Surrey workshop, there was an area of calcite on the cabochon that I believe goes all the way through, so I don't expect to get the usual high polish one would see on a piece of agate.

Claim 3 required digging, and many were shoveling holes and said they were finding some material.

Incidentally, when we left the site, the large

boulders had been reduced to rubble by the hard hammering rockhounds!

The rock auction was held in the evening, at which I bought an attractive Botswana agate, a 2 inch oval in size. With it came a drab, dirty looking piece of agatized wood and a polished but colourless heel of tube agate. When I soaked the wood in vinegar, the calcite coating loosened, and then I power washed it. Underneath was a core of pink, with clear wood lines—a valuable and collectible piece. I felt so very pleased with my pink, agatized, limbcast from Oregon.

The next morning we left on the trip to Squilax Mountain, with Roy Proctor leading us.

As we parked, I could see from the car window that there were seams of agate everywhere. What a rock-hounder's heaven! We wandered the road, filling our packs with interesting seam agate, partial thundereggs with green common opal, agate, or crystals, as we went. After lunch we drove to the "Potato patch."



Alan Brook's find on Mt. Squilax.

Most of the area had been covered in by the rockhounds from yesterday's dig. However, there was massive calcite, and I found one potato, which I have not yet cut. It's about 2 1/2 inches in diameter, and really looks like a potato.

As we were preparing to leave, a young man drove down the hill with a delighted sparkle in his eyes. He had a beautiful 4 inch nodule of emerald green common opal, and 2 other

nodules as well, that he had found further up the road. They were a spectacular find.

Once we were back in Chase, we enjoyed a delicious roast beef dinner, complete with fried bannock. Following our dinner, we held our annual meeting, efficiently run by Walt Pinder, our president.

While most were leaving, we felt inspired to go back up to Squilax to seek the beautiful common opal, with precise directions from our friend, Ben Beutler. We drove up to the area described, but failed to find an area of nodules. Then along came Ben, who guided us to the spot. There embedded in the rock on the road cut, were nodules of common opal in green to varied cream and golden colours. Bob spotted a beautiful piece

immediately, and so did Ben. After Bob had found a nice piece, he offered the spot to me, and I carefully chiseled around the glassy, verdant 2 inch nodule until it "popped" out in my hand. I will polish a window in it and put it in my collection as is. Ben wandered around the site and found another piece, larger than mine, but with more creamy tones and green on the edges. He generously gave it to me, and I plan to make cabochons from that one.

We left the next morning, homeward bound.

I would like to thank Warren Bobyck for allowing us on his claim, Pat Boden and his many organizers, field trip leaders, Lorne Morris, Roy Proctor, Ben Beutler, and all the others, for providing an exciting weekend to the rockhounds who arrived on your doorstep in Chase and were shown a wonderful time.

B.C. Rockhoulder

Advertising by dealers enables us to provide this publication at a reasonable price. Please support them! Tell them you saw their ad in BC Rockhoulder.

Name: _____ Date: _____/2008

E-Mail: _____ Phone: _____

Mailing Address: _____

City: _____ Province: _____ Postal Code: _____

Billing Address: _____

City: _____ Province: _____ Postal Code: _____

A Gift Subscription? _____

Enclosed is \$_____ for _____ year(s) subscription. (\$14.00 + \$8.00 postage CDN/year)
(For US mailing postage is \$12.00 CDN/year)

Mail to:
The British Columbia Rockhoulder
2752 McCurdy Place
Abbotsford, BC
V2T 5L2

Please make cheque/money order payable to:
British Columbia Lapidary Society

2008 Order Form

Bancroft Gemboree 2008

Submitted by John Bowman,
Eastern Correspondent.

The first weekend in August is a significant one for rockhounds in Ontario because that is the time where the largest rock event in Ontario takes place in Bancroft. It is no accident that the event takes place in Bancroft, as this part of the province is rich in mining history, and has a large number of places in the surrounding area where rockhounds can look for specimens. There are many abandoned mines and exploration sites nearby. The Bancroft Chamber of Commerce is very helpful to rockhounds. It employs a geologist who leads field trips three times a week during July and August. They also publish two field trip guides that tell you how to get to various sites in the Bancroft and Wilberforce areas. The geologist, Dan, also leads the daily trips during Gemboree.

This is a very large show featuring over 70 dealers in two buildings plus an outdoor area

with another or so dealers. The dealers are mainly from Ontario and Quebec. We recognized a few including the guys from LapisGems (who come to our Abbotsford show), Ron Shannon, who used to be a dealer in Alberta, but now operates out of Prescott, Ontario, and Capilano Gems from B.C. It was a good opportunity to see specimens from Ontario and Quebec and add a few to our collection.

I was on the lookout for some fluorite specimens to add to my collection and found one dealer, the Gneiss Guy, who had very good prices. I purchased a nice Mexican fluorite specimen for fifteen dollars from him. He had an incredible Chinese stibnite specimen for sale for \$500, which I would have loved to purchase, but the fluorite was more in my price range. Many of the dealers were selling specimens, but there was also a few carvers selling

their work, as well as many jewellery dealers. There was some large chunks of rough to be had including amazonite from Quebec at \$4.50/lb and Spectrolite from Quebec.

Both the Geological Survey people and the Ontario government had displays at the show and were giving away various maps and brochures. One item that we kept for future reference was a geological survey of the road between Madoc and Bancroft, so you could conduct your own guided tour of the geology over the 70 kms of that highway. We will plan on doing that in a future trip.

One thing that was noticeable was how expensive the sodalite was as compared to ten or fifteen years ago. Sodalite is a mineral that Bancroft is known for. When I first started visiting Bancroft around 10–12 years ago, you could get a nice piece of quality sodalite for \$10. Now it is hard to even find good

quality sodalite, and when you do, it is very expensive. I saw a few large chunks of good material (estimated weight 15–20 lbs) for \$270.00. Many of the pieces for sale now contain only a small layer of nice sodalite which is surrounded by quartz or other minerals.

We visited the rock shop at the Princess Sodalite Mine. Behind the shop, they have a “rock farm” where you can fill up a small bucket with rock for around ten or twelve dollars. We recognized much of the rock there from our previous trip to the Beryl Pit near Quadeville, Ontario. There was some sodalite but very low quality material. There was some nice rose quartz there, that was quite gemmy in spots, and we collected half a bucket of that, which will mainly be used for a border in our garden.

There are not very many showcases at this show; five in total. Two contained various specimens from the Bancroft area, one had specimens from the Marmoraton Mine, in Marmora, Ontario, and there were also displays of corundum specimens and quartz crystals. The focus of this event is clearly on sales, not on getting people involved in the lapidary clubs. I saw very little information on lapidary clubs in Ontario.

The adult admission was \$7 per day with discounts for children and families. Multiple day passes were available as well. We bought two day passes for \$12 and found that this was enough time to get a good look at the show. We particularly enjoyed some of the dealers that were selling in the outdoor sales area. Some Ontario rockhounds had a good variety of specimens for sale that they had collected personally in Ontario

and Quebec. We bought a few including Vesuvianite from the Jeffery Asbestos Mine in Quebec, Pyrite cubes in matrix from Sherbrooke, Quebec, Eudialyte from Kippawa, Quebec, and Apatite and Fluorite in Calcite from the Yates Mine near Otter Lake, Quebec.

One dealer in the outdoor area had a good collection of fluorite specimens at reasonable prices from the Cave-in Rock area of Illinois. I bought a couple of nice specimens for twenty five dollars including a nice one with excellent zoning from the now-closed Denton Mine. There was also a dealer there who lives in the Dominican Republic and has a larimar mine there. It is hard to find good quality larimar, so Diane couldn't resist buying a nice slab of it for a future jewellery/beading project.

As we had already been to the Beryl Pit, where one of the field trips was going, we ended up only going on one field trip to the Bear Lake diggings, which are located near the town of Tory Hill, Ontario. It was interesting to note that the group going on the field trip consisted of many who appeared to have never gone on a field trip before. You could tell because they were not dressed properly for the conditions and did not have proper tools in many cases.

The Bear Lake site consists of many trenches in a forested area. It looks kind of like the Lolo Pass, Montana quartz crystal site, except there are trenches instead of holes in the ground. As it had rained a lot recently, parts of the trenches were filled with water. On top of this, the whole area is swampy and thus filled with mosquitos and deer flies. We shook

our heads at all the people wearing shorts to this trip, as they clearly did not know what they were in for. This is a site where you have to get dirty if you want to have a chance to find the good crystals, so of course, I was down in a trench shovelling out dirt from the bottom of a pool of water in search of apatite, feldspar, and the elusive titanite crystals. We ended up collecting a good number of apatite crystals up to over an inch in length and were fortunate to find a nice titanite crystal as well. This is a must see site if you are ever in Ontario, as it is a place where if you are prepared to work hard, you will definitely come away with some good materials. There are very large apatite crystals at this site, some of which are on display in various museums. You are permitted to dig anywhere you want on the site, which is operated by the Bancroft Chamber of Commerce. You can either work in an existing trench, or start your own. Although there is a large network of trenches here, there is still lots of area yet to be explored. Just be prepared to get dirty and have good bug spray. Diane and I used the mosquito netting over our faces for the first time, and it worked very well. We used the Watkins bug repellent which has lots of Deet, however, I did not put enough on under my shirt, and ended up with 25 to 30 bites on my upper back.

We hope to get back to Bancroft perhaps in October to check out a few more of the field trip sites. There is definitely lots to explore in this area, so we will keep you posted. Next up: a visit to the Poland Mining Camp in Poland, Maine and a trip to Herkimer New York for Herkimer diamonds.

PRECIOUS OPALS from Canada's first precious opal deposit



Opal Cutting Shop · Retail Store · Opal Digging



OKANAGAN OPAL INC.

7879 Hwy 97 - 4 miles North of Vernon
okopal@junction.net

Ph: (250) 542-1103 Fax: (250) 542-7115
www.opalscanada.com

Ode to a Trilobite

Timothy A. Conrad (1840)

Thou large-eyed mummy of the ancient rocks,
The Niobe of ocean, couldst thou tell
Of thine own times, and of the earthquake shocks
Which tore the ocean-bed where thou didst dwell;
What dream of wild Romance would then compare
With the strange truths thy history might unfold?
How would Geologists confounded, stare
To find their glittering theories were not gold?

Methinks I see thee gazing from the stone
With those great eyes, and smiling as in scorn
Of notions and of systems which have grown
From relics of the time when thou wert born.
Thou ne'er saw glittering fishes in the deep,
Which now in multiform

profusion play,
Nor giant shells, nor monsters such as sweep
Along the surge and dash the ocean spray.



Yes, small in size were most created things
And shells and corallines the chief of these;

No land but islets then, nor trees nor springs,
And no tornado thundered o'er the seas.
But the wild earthquake did the work of death,
And heaped the sand and tore the Naiad's cave.
Race after race resigned their fleeting breath -
The rocks alone their curious annals save.

And since the trilobites have passed away
The continent has been formed, the mountains grown
In oceans' deepened caves new beings play,
And Man now sits on Neptune's ancient throne.
The race of Man shall perish, but the eyes
Of Trilobites eternal be in stone,
And seem to stare about with wild surprise
At changes greater than they yet have known.

Flintknapping: The Art of Making Stone Tools

Of all the history of mankind, nine tenths of it is written in stone. Able to make tools from flint cobbles, our fore-bearers gained an advantage over other predators. We not only rose to dominate our environment, but we went on to alter it, for the production and use of stone tools followed our progress well into the age of agriculture. Even today, in the remote highlands of New Guinea, there are humans who still practice this ancient craft.

Flint working is a universal part of our heritage. It is the one thing that all races of mankind, the world over, have in common. If you could trace your ancestors back far enough, you would certainly find flintknappers among them.

How is it done?

The surface of a stone tool will exhibit a wavy appearance. These scars are a frozen record of shock waves generated by a series of blows dealt to the edge. Geologists tell us that flint has a "conchoidal fracture". This is best illustrated when a BB strikes plate glass. A cone is removed opposite the point of impact. When striking the edge of a piece of flint, only a portion

of that cone is removed. By controlling the angle, placement and weight of the blows it is possible to fracture this material in a predictable manner. In making his implements, prehistoric man used one or a combination of three techniques which are known as percussion flaking, indirect percussion, and pressure flaking. **Percussion flaking:** Flakes are driven off the edge with a hammerstone or deer antler.

Pressure flaking: Flakes are pried off with a deer antler tine or copper pointed tool.

Indirect percussion: Flakes are removed by striking a punch placed on the edge.

What kind of tools do I need?

Hammerstones were the first and simplest flint knapping tools. They were just water worn pebbles that fit the hand well, used to break up nodules and blocks of flint into workable spalls, and to rough out blanks. Hammerstones are made of granite, quartzite or greenstone. The antler billet is used to thin, shape and sharpen the flint tool. The ideal billet is made from

the trunk of a moose antler. However, smaller antlers, such as those from the white tailed deer, can also be used.

Pressure flakers were made from the upper tine portion of the antler rack. Many people use copper pointed tools. Punches used for indirect percussion can be made from antler, or antler tipped with copper. Abraders are made from quartzite or sandstone. An excellent substitute can be a broken carborundum grinding wheel. These are one of the more important tools, necessary for grinding the edge to make striking platforms.

Last but not least important are protective gloves, safety goggles, and leather knee pads.

Can I learn to do this?

Anatomically, modern humans are no different than their ancestors of 10,000 years ago, so you should be able to learn this craft. Today flint knapping has been rediscovered by those who are interested in reviving ancient skills. In fact, a whole industry has grown up to aid and support those who wish to learn. Books, tapes, tools, materials and classes are now readily available.

For Sale: Best offer on below items. Contact Ann Little - 604-261-6525

Genie Diamond Galaxy Unit

6 metal bond diamond grinding wheels
Light and magnifier
Diamond Pacific
1/4 HP 115 Volts
1 phase 3 amps
60 cycle 1725 RPM
Frame 3200
White Enameled table, the Genie sits on it.
40" by 25" with drawer for the doping waxes
A supply of red and green waxes and wooden rods.
Asking \$800.00

Cress Electric Kiln

115 AC volts 12 Amps
Interior: 81/2" wide by 61/2" high by 10" deep
Exterior: 131/2" wide by 173/4" high, 151/4" deep
Temp 70 degrees F - 2400 degrees F
0 degrees C - 1300 degrees C
Extras added: interior fire brick, screen, 2 asbestos type gloves,
assorted spatula and tools, flat iron for weight
Asking \$250.00

C&D Gemcraft

Custom Made Gemstone Jewelry & Repairs

David Barclay
Accredited Gemologist (C.I.G.)

Phone/Fax: (250) 766-4353 Box 42015, R.P.O. North
Email: davebarclay@telus.net Winfield, BC V4V 1Z8

Ken Dewerson

Authorized Dealer

Tesoro
Metal Detectors



#338-2330 Butt Rd. 250.707.0618
Westbank, BC V4T 2I3 kdewerson@shaw.ca

Professional training courses leading to "Accredited Gemmologist (C.I.G.)" by home study and extension courses

- Diamond Expert (C.I.G.) Certificate
- Fine Jewellery Appraiser Program
- Gem Study Tours



For more details visit our website at www.cigem.ca
or write to C.I.G. PO Box 57010, Vancouver BC, V5K 5G6
604-530-8569 toll free: 1-800-294-2211

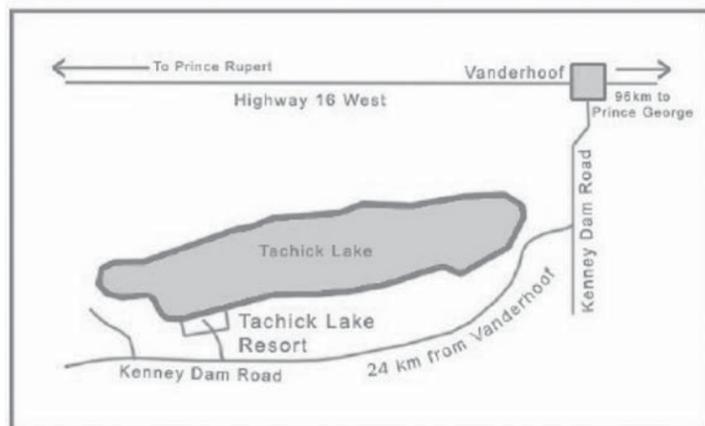
Silver & Metal Settings
Lapidary Supplies
Minerals
Jewelry
Slabs

DESAUTELS ROCK DEN

By Appointment
604-467-5445
Maple Ridge

Summer Camp '09: Tachick Lake Resort

Lionel and Cally Cathcart
 Telephone: 250-567-4929
 Fax: (250) 567-5566
 Toll free: 877-567-4929
 Email: tachicklake@explornet.com
 P.O. Box 1112
 Vanderhoof, BC V0J 3A0
<http://www.tachicklakeresort.com>



The resort consists of 8 rustic cabins which are located on the lake shore and are all equipped with kitchenettes. Some of them have showers and flush toilets. There is also a campground right on the lake with full-hookup and non-hookup sites. Our central wash-house offers hot showers and flush toilets. A washer and dryer are also available for our guests.

There is a covered picnic shelter which would offer enough room to set up a buffet dinner, childrens playground and a small sandy beach for the little ones.

Cabins #1-4 (up to 4 people)
 One room with 2 double beds, kitchenette, bathroom (shower/toilet)

Cabins #5 & 6 (up to 4 people)
 One room with 2 double beds, kitchenette, running water behind the cabin

Cabin #7 (sleeps up to 7 people)
 One separate bedroom with double bed, one double bed in main room, single bed in an alcove, pull out sofa bed, kitchenette, running water inside.

Cabin #8 (up to 8 people)
 Three bedrooms, living room, kitchen with dining area, bathroom (shower/ toilet). One queen size bed, one double, one futon double, and two twin beds. Satellite TV.

Damage deposit required on this cabin. Small pets only allowed in this cabin.

Cabin Rates: (based on 2 guests)
 Cabins 1-4: \$ 70.00/night
 Cabins 5-6: \$ 60.00/night
 Cabin 7: \$ 70.00/night
 Cabin 8: \$105.00/night

Additional person \$5.00 per night (children 6 and under free). Please add 5% GST and 8% Hotel Tax. Cooking utensils and dishes supplied, bedding and bath towels not supplied.

One week cancellation policy or charged for one night per unit. Long weekend minimum 3 night charge. There is a central wash-house with showers, flush toilets, washer and dryer.

Other Accomodations:

Hillview Motel & Blue Spruce Restaurant
 Tel: 250.567.4468
 Fax: 250.567.9515
 Toll free: 1.888.387.9788,
 Email: hillviewmotel@yahoo.com
 1533 Highway 16 East,
 Vanderhoof, BC V0J 3A0
<http://www.hillview.bcnetwork.com>

Kitchenettes, fridges, microwaves, coffee makers, queen beds, cable, movie channel, phones, high-speed wireless internet, guest laundry, Pets Allowed.

Major CC, Cash, DC
30 Units: \$63—\$88
Add'l 15

For further information check the BC Accommodation Guide & BC Campgrounds Guide

14 full service hookup campsites and almost unlimited regular sites. Only some sites with electricity.

Rates (based on two people)
 Regular sites: \$ 18.00/night,
 Electricity: \$ 20.00/night
 Full service: \$ 25.00/night
 Additional person \$2/night (children 6 and under free)
 Please add 5% GST.

North Country Inn & Log Cabin Restaurant

Tel: 250-567-3047
 Fax 250-567-2308
 E mail: ncinn@hwyl6.com
 2645 Burrard Avenue,
 Vanderhoof, BC V0J 3A0
www.northcountryinnmotel.com

Clean, modern rooms; queen & double beds; kitchen units; fridges; courtesy coffee/tea; cable TV; some air-conditioned rooms; wireless internet; smoking and non-smoking rooms available; Pets allowed.

Major CC, Cash, DC, Travellers Cheques
27 Units: \$65—\$96; Add'l 10

Rendezvous '09



Planned activities:

Friday
Late Afternoon /evening:
 Registration and setting up of display cases
7pm: Pot Luck Dinner in the Hall

Saturday: Field trips
7pm: Rock Auction

Sunday: Field trips
4pm: Bucket Raffle
6 pm: Catered Dinner

The Annual General Meeting of the British Columbia Lapidary Society will be held after the dinner Monday morning Pancake breakfast.

Club members are invited to display their collections and demonstrate their skills. If you require a Society case please contact Dave Barclay at 250-766-4353.

May 15—18, 2009
 Winfield Memorial Hall
 3270 Berry Road, Winfield, BC
 Hosted by the 1120 Rock Club

Field trips will be posted at registration.

Donations for the bucket raffle and the rock auction are needed and greatly appreciated.

KOMAREVICH ORIGINALS LTD.
 Will be the dealer at Rendezvous, If there are any special requests for items we carry, contact Mike:
 Phone: 403-244-3244
 Fax: 403-244-3424
 Email: info@komarevichoriginals.com
 1510-7th Street SW
 Calgary, AB T2R 1A7

Visit the store at:
www.komarevichoriginals.com

Accomodations:

*For further information check the BC Accommodation Guide & BC Campgrounds Guide
 Dry camping is available at the hall for \$10.00 for the weekend*

Lake Country Inn
 10010 Hwy 97 N.
 Winfield, BC, V4V 1V7
 Tel: 1-250-766-4928 or
 1-250-766-4925
 Toll Free: 1-866-796-3453
 Fax: 1-250-766-3805
 E mail: lakecountryinn@gmail.com
 Independently owned inn with king and queen beds, with pillow top mattresses, deluxe rooms, microwaves, fridges, and coffee in every room; a great accommodation value, with friendly honest service; Smoking Policy: non-smoking facility: Major CC, Cash; Pet Policy: no pets; CP: all cancellations must be received within 48 hours.
28 Units: \$95—\$140; Add'l 15
<http://www.lakecountryinn.ca>

Super 8 Lake Country Inn
 9564 Hwy 97 N.
 Winfield, V4V 1T7
 Tel. 1-250-766-5244
 Fax 1-250-766-2103
 8 km north of Kelowna airport.
 27 new (2007) rooms; 13 completely renovated (2006); In the heart of Winfield, minutes to downtown Kelowna. Air-conditioned; queen & king beds; free local calls; high-speed wireless internet access; cable TV; fridges; kitchens available; in-room coffee; continental breakfast; hot tub; guest laundry; smoking in designated areas only; no pets;

Cash, DC, MC, Travellers Cheques, VI;
 Pet Policy: CP: 2 days.
40 Units: \$95-145; Add'l 10

Airport Inn Lakeside
 11474 Petrie Rd.
 Lake Country, V4V 1Z9
 Tel. 250-766-2621
 Fax 250-766-2603,
 Toll Free 866-402-4030,
airportinnlakeside@shaw.ca
 10 km north of Kelowna airport.
 Come & enjoy the beautiful view with a friendly atmosphere; we have daily, weekly & monthly rates; restaurants, amenities, golf & stores close by, minutes from public beaches; wine tours and boat rentals nearby.
 Smoking outdoors only in designated areas; pets allowed, call for details;
 Cash, DC, MC, Travellers Cheques, VI;
 CP: 48 hr on daily stays
35 Units: \$65—\$250
<http://www.airportinnlakeside.com>

Alberni Valley Rock & Gem Club
Club Contacts: Joan Humphries
 (250) 723-6882
 Dot West
 (250) 723-0281

Burnaby Laphounds Club
Club Contact: George Mitchell
 (604) 433-4043

Courtenay Gem & Mineral Club
Club Contact: Jack Boyes
 (250) 337-8461
 janboyes@telus.net

Cowichan Valley Rockhounds
Club Contact: Gene Leavitt
 (250) 246-4571
 gleavitt@shaw.ca

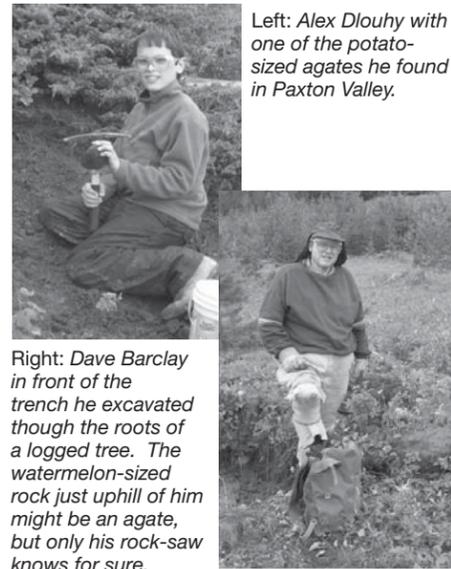
Creative Jewellers Guild of B.C.
Club Contact: Maria Tomsich
 (604) 224-1951
 mtomsich@interchange.ubc.ca

Hastings Center Rockhounds
Club Contact: Linda Foy
 (604) 421-1068

Maple Ridge Lapidary Club
Club Contact: Walt Pinder
 (604) 826-2342

Vernon Lapidary & Rock Club
 Fourteen adult and five youth members went rockhounding for agates in Paxton Valley (North Okanagan) on Sunday June 9th, in the care of Wagonmaster Dave Barclay. The weather was a mix of sun and rain, but it was one of the more beautiful spots we have visited with wide valleys and distant mountain views. Everyone found their agates, and the next step will be visits to the newly installed rock shop in the Vernon Art Center to see what lies within. *Photographs at right.*

Maple Ridge Lapidary Club
 Our building is going to get a new coat of paint in early July (weather permitting). After some discussion about paint schemes, you and the neighbors will be relieved to hear that our official club colours, purple and yellow, were rejected as a choice for the building. With the loan of a pressure washer from the Goodwin's Walt Pinder has completed cleaning the building exterior. The paint job should cost around \$300. Saturday the 5th of July is the target if the weather holds. If you can swing a brush we can use you. Call the Shop and ask for Walt or Ken. Anniversary celebration is set for September 13, 2008. Guest lists and Invitations are being prepared and should be sent out by the end of July. Irene Gross has kindly offered to arrange for catering to this special event. Lots of extra cleaning and organizing is needed to prepare for our guests. Showcases and walls need to be washed down and dusted and some painting will



Left: Alex Dlouhy with one of the potato-sized agates he found in Paxton Valley.

Right: Dave Barclay in front of the trench he excavated though the roots of a logged tree. The watermelon-sized rock just uphill of him might be an agate, but only his rock-saw knows for sure.

also be required. Our guest list will included municipal officials and staff, representatives from local arts and community groups, The B.C. Lapidary Society & all B.C. clubs. Please help to make this a truly special event.

Cowichan Valley Rockhound Club

Hi folks, what a steamy beautiful day we've enjoyed here in the Cowichan Valley. The sun has just set, everything is golden, still and settling after another busy yet pleasant day. Mid-August for us means the preparation for the Cobble Hill Fair is well underway. This is a lovely local small fair with 4-H, pet shows, the regular exhibitors and fun events for the children but no midway. Normal good food, and reasonably priced family fun. Our members create lovely polished rocks set with bell caps and neck cords, home-made thunder eggs with agate treasures and lots of prizes for the always popular spin and

win game, pounds of polished rocks for those baggies, rock bracelets and so on. Members have the opportunity to sell their items with a small fee paid to the club. Very few of us have jewellery for sale, we either give them away as gifts or just have to keep them. At the shop the other day twelve members were working away preparing Cobble Hill items, and yet friendly conversation and laughter sold the fact this was just plain fun with friends.

Our members continue to spend their time enjoying geology, lapidary, silversmithing, wire wrapping and beading all in addition to our field trips. The shop provides pretty much everything one would need in the way of machines and equipment. We have two Genie and two Pixie units plus the Dunbars, two trim saws, a Fordom and jump ring maker, a silver cutter, polishers, large saws, a selection of slabs and large rocks, a terrific library just to list a few, and best of all talented and sharing instructors. The club membership continues to grow and to be a very active and involved group as well. The shop sessions are really fun and yet the finished products are astounding, really lovely.

We have had a really busy year in 2008 so far and even though it's summer with camping, fishing, gardening and all that other stuff competing for time our shop sessions have continued without a break. Now that's either dedication or a way to get out of weeding. We plan on having a dinner meeting in September, usually very well attended. The rivers are low, there's no snow on the hills, the planters are in full bloom and yet when

we read this Rockhounder the winter winds will probably be howling and we'll all be wishing it would be warm again. Then also it will be shopping and planning for the very special celebration. Where or where does the time fly—we are very fortunate to spend this time together learning and creating lovely things. At home we hardly know what we're up to in a month or two, at shop today we were already discussing travelling to the Madras Powwow in 2009. Now that's a Rockhound! We send our best wishes to you all and hope we'll meet somewhere along the way. Regards from the Cowichan Valley Rockhounds—*Ulla Williams, President*

Golden Rock & Fossil Club

The Story of the Hector Rock
 During the summer of 2007, the Canadian High Commissioner in New Zealand contacted the Mayor of Golden asking assistance in finding a rock from the Kicking Horse River. This was requested by the National Museum of New Zealand, which was organizing a Symposium, 100 years after the death of Sir James Hector. This was to recognise the contributions he made in his life in Canada and particularly in New Zealand. The Rock was to be symbolic of his exploration contribution in the Rocky Mountains.

The task to find a suitable rock was given to the Golden Rock and Fossil Club and Ken Piggot and Stan Walker, on behalf of the club, set out to do that. A rock was chosen, that as a geologist. Hector would more than likely have taken note of as he passed through the area.

Port Moody Rock & Gem Club
Club Contact: Andrew Danneffel
 (250) 942-0617

Richmond Gem & Mineral Club
Club Contact: Eric Kemp
 (604) 278-5141

Ripple Rock Gem & Mineral Club
Club Contact: Emily Faak
 (250) 337-5724
 wiredbyemily@msn.com

Selkirk Rock & Mineral Club
Club Contact: Maureen Kromha
 (250) 367-9605

Thompson Valley Rock Club
Club Contact: Jacki Dowdell
 (250) 554-9519
 jackidowdell@telus.net

Victoria Lapidary & Mineral Society
Club Contact: Magdalene Magon
 (250) 592-8963
 www.islandnet.com/~vims/

Yellowhead Lapidary Club
Club Contact: Lita Hansen
 (250) 672-5876
 lita_hansen@telus.net

For More Information
 about the BC Lapidary Society or
 a club near you, visit us online
 www.lapidary.bc.ca

The rock was crated, along with information material from the Town of Golden and transported to New Zealand by CP Rail and Air New Zealand. At the Symposium in New Zealand, The Rock was one of the highlights, and it now has a prominent place in the Museum's Hector display.

In November 2007, the Piggots and Walkers were in New Zealand and accepted the appreciation of the Museum officials for the role the Golden Rock and Fossil Club made to the success of the Hector Symposium.

The plaque beneath the rock records the gift of the rock from the people of Golden.

James Hector's Centenary Boulder

The gift of this boulder symbolises the legacy of James Hector (1834-1907) in the histories of both New Zealand and Canada, and marks the centenary of his death.

James Hector was part of the famous 'Palliser Expedition which explored western Canada. He is especially remembered for discovering a pass which later became a major rail and road route through the Rocky Mountains. The boulder comes from the pass—which was named 'Kicking Horse Pass' after Hector was nearly kicked to death by a horse there.

Creative Jewellers Guild Open House

On Saturday, May 31st Creative Jewellers Guild held their 2nd Annual Open House in the Richmond Cultural Centre. We all had a good time demonstrating although we had hoped to have more of the public come in and take a look. All in all it was very successful, our way of giving back to Richmond and the Cultural Centre. Thanks to everyone who helped to make this possible.

Thompson Valley Rock Club

We had our June Social at the last meeting. Mike Pease won the Montgomery Award, the food and treats were great and a good time was had!

The workshop has been open since June 5, 2008, and the shop foremen have been going out to the Wildlife Park four times each week, and no members have shown up to work on rocks. It is a fairly long drive if no one is going out (because the weather has been great, there are too many things to be doing outside, we're all busy, etc....) We're pretty excited about our workshop and how it keeps getting better and better as each little thing is set up and running.

We have decided that for the summer months, when interest is low, the shop foremen will be available to come out and open the workshop and work with members on rocks, but the members will have to call whoever is on the schedule below for the day they want to go and make arrangements. This will save the foremen from wasting their time and gas to go out to the workshop and just sit. The workshop fees are only \$1 per hour and we need to see how much interest there is in and on which days of the week members want to come out. So give someone a call if you want to go out and we'd be only too glad to meet you there.

TVRC Workshop Schedule:

Tuesday evenings 7:00—9:30pm
Call Rob Davis at 554-0765

Thursday Evenings 7:00—9:30pm
Contact Bernie Vanderwal

Saturdays 10:00 am—3:00pm
Call Jim Lott at 554-3931

Sundays 10:00 am - 3:00 pm
Call Jacki Dowdell at 554-9519

Burnaby Laphounds Club

The June program was a video on Southwestern Indian Jewelry (Hopi, Navajo and Santo Domingo) featuring mostly turquoise and silver. We would like to thank Yurika for providing us with the very interesting video, featuring some very lovely jewelry.

The July program also featured a video, this time on Diamond Jewelry, which was also provided by Yurika. One fact I never knew, was that diamonds come in numerous colours, such as red and pink!!

Stan's Tip: Glass or Tile Cutters work well, rather than a saw, to cut away excess material when making a cabochon.

Fred Wiley's very comprehensive letter relating the information from the May Annual General Meeting of the BC Gem and Mineral Society was read out at the July General meeting.

Fascinating Fact – Up to 100,000 tons of rock a year fall to earth from space. The largest meteorite in the world lies in the ground in Africa and weighs more than 60 tons.

Did you know that rocks are constantly being recycled? Recycle means to take something old and change into something new. So some of these old rocks that have been around for more than four billion years are being changed into different rocks. Of course, that doesn't happen over night, it takes millions of years. To better understand how this happens, let's take a journey through the rock cycle.

First, our journey begins in the mantle. Here we see some red hot magma that is being pushed up towards the crust. Some of this magma creeps into the cracks of the volcano; while, the rest is forced out of the top of the volcano. Once the magma

is out of the volcano, it is called lava. The lava cools and forms igneous rocks. Then, some of the igneous rocks roll down the mountains formed by the volcanoes and eventually end up in the ocean. As they roll, bits and pieces of the igneous rocks are broken and form sediments. Layer after layer of sediments are pressed and cemented together forming sedimentary rocks. Some of the sedimentary rocks on the very bottom get hot because of the pressure and change to metamorphic rock. When the metamorphic rock is buried deeper, it gets hotter and melts. Once again, it becomes magma and may eventually be pushed up and out of a volcano. The rock cycle begins all over again! Source: Internet

Port Moody Rock & Gems Club

A prospecting geologist stumbled upon a ragtag bunch of bones in the northern part of British Columbia more than three decades ago. A new study suggests these fossils could represent a new species of dinosaur. But beyond that, the dinosaur's identity is a mystery—sort of a Dino Doe.

The small collection of bones includes seven shin, arm and toe bones, as well as a possible skull fragment. Based on the shapes and sizes of the bones, paleontologists think they could have belonged to a type of small- to medium-sized dinosaur, possibly a pachycephalosaur or ornithopod.

The specimen is referred to as the Sustut dinosaur, because it was found in the Sustut Basin in North-Central British Columbia. Kenny Larsen found the bones in 1971 while prospecting for thorium, a radioactive element. During his fieldwork, his instruments registered above-

background levels of radiation, which turned out to be emitted by the bones. Larsen collected the loose bones from the rubble and held onto them until donating them to Dalhousie University in Halifax, Nova Scotia, in 2004. The bones were studied by then-undergraduate student Victoria Arbour who soon realized the remains were a rare find: They are well-preserved and are the most complete dinosaur specimen found in British Columbia to date.

Larsen's original field notes were lost, so paleontologists don't know the exact location where the bones were found, making them harder to date. Based on properties of the rock attached to some of the fragments, Arbour and her colleagues think the specimen may date to about 70 million years ago in the Upper Cretaceous Period. The bone fragments resemble those from a small two-legged, plant-eating dinosaur, Arbour found. Certain bones are similar to those from pachycephalosaurs, which ran on two legs and sported thick, domeshaped skulls, while others are similar to ornithopods, bipedal grazers with horny beaks.

"There are similarities with two other kinds of dinosaurs although there's also an arm bone we've never seen before," Arbour said. "The Sustut dinosaur may be a new species, but we won't know for sure until more fossils can be found."

The bone fragments could possibly be from more than one individual, or even more than one type of dinosaur, the study notes. Arbour's findings are detailed in the most recent issue of the Canadian Journal of Earth Sciences. Her research was funded by the Natural Sciences and Engineering Research Council of Canada and Alberta Ingenuity. The fossils are currently in the collection of the Royal BC Museum in Victoria, BC.

Tips & Advice

Geode Polishing: When you grind down geodes before the polishing stage, protect the crystals by placing a coat or 2 of shortening on the crystals. It will come off with soap and hot water after completion. Another version of protection is to pack the geode with damp Ivory Soap Flakes. The grit or polishing agent washes right out and the remaining soap will soak away in warm water.

Geode & Nodule Sawing:

When sawing geodes or agate-filled nodules, first look for the largest dome on the specimen. This dome was at the top when the specimen was forming. Saw through the largest dome and it is likely that you will expose the best "picture" or surface. If the piece is elongated or egg-shaped, saw length-wise in order to obtain the best exposure. (from *Fossil Trails*, 1992)

Sanding Discs: Instead of throwing away your used sanding discs, try this: mix in a small container: 1/4 tsp of grit, pour on top 1/2 tsp water glass (glue) mixed with 1/4 to 1/2 tsp water. Mix and apply to used sanding discs and let dry for 2 hours. You will have discs as good as new. (from *Northwest Newsletter*, 1992)

Chrysocolla: To bring out the colour in Chrysocolla, put it in full strength Purex bleach for as long as it takes. This really brightens the blues and greens. This works with any copper material. REMEMBER: bleach with acid releases poisonous gas. Work in good ventilation. (from *Pegmatite*, San Diego, 1992)

Richmond Gem & Mineral Club

The Richmond Gem & Mineral Club is a nonprofit organization formed to foster, promote and develop the interest and education of its members and others in geology, mineralogy, lapidary, gemology and related subjects, and in the pursuit of such subjects as a hobby for social, recreational, and educational purposes. For our club to continue providing these services or improving upon them, we need the support of every able bodied member.

Membership is the heart of the organization and the members on the Executive make up the mind. Now the election of executive members takes place during June's general meeting. Nominations can be taken from the floor. How much time does a person sacrifice when they take on a position on the executive? Very little if you would ask me. While most members like to participate in the club's activities, few members actually know what goes on in the background. Becoming a member of the executive enhances your knowledge of how the club operates, provides an opportunity to promote your craft, and is an environment where friendships can develop. As a member in good standing, you attend at least 6 regular club meetings per year, and volunteer a minimum of 6 hours of your time working at our annual club show and/or the BC Gem show each year.

Have you thought about new ideas for the club? Is there something you would liked introduced? Are you willing to

work towards your goals? Then you may be the perfect candidate for an executive position. If you would like to participant in the club as a member of the executive, please contact John llott or any other member of the executive to put your name on the ballot. The Executive would like to thank Ernest Krahulec for his generous donation of a flat lapping machine to the club. Everyone is looking forward to giving it a try. Thanks Ernest.

Ripple Rock Gem & Mineral Club

Report from the Upper Campbell Lake Adventures

by Dorothy Young

Sunrise Saturday morning... Charlie, our fearless ferry (not fairy) captain, set out to launch his craft, and get in a few hours of fishing before the field trip. Well, after getting unstuck at the first boat ramp off he went to the second. Meanwhile, Doug our Wagonmaster gathered a crew of 12 rockhounds at the Canadian Tire parking lot, and set out for the lake. We got there to find Charlie's boat and trailer 1/2 way into the lake.....stuck again! He looked mighty happy the see the cavalry arrive and help him on to dry land. Unfortunately we had to leave and do some maintenance on his waterlogged trailer, so we waved goodbye, and on we went to the Dallasite Creek and gathered our samples. Bev found an interesting array of elk...bones and teeth??? Doug served up a tasty BBQ lunch of burgers and hot dogs. After which we all went our separate ways.

Thanks Doug for an adventure-some outing. The other story by Barb W Aileen, Jasper and I could not get away at the prescribed time, so we ventured into the hills an hour behind the rest of the gang. Familiar with the area, I was pretty confident that I understood where the spot was, to find the group. Watching for a sign, we drove past the turn in. I promptly turned around wondering if they had just forgot to put the sign out. Coming from the other direction though, we could see that the sign was there; it had just been blown over. There were fresh tracks in the snow, and we drove into this spot where I had been many times before, and promptly got high centered and good & stuck on the snow. Ugh! Expecting help from the members at the lake, we grabbed our buckets and walked in. To our surprise, there was no one there. We collected a few pebbles anyways and set off pondering how we would get the car out of the snow. After some digging, my two strong accompanying rockhounds, had the car pushed out of the snow, after a few attempts.

We doubled back to another familiar spot, looking for the rest of the group and the boat. The place was vacant except for a couple, who thankfully asked if we were looking for a large group. They informed us that they had been spotted further along towards Gold River. Aileen knew the spot, so off we went. We were a bit concerned when we passed Doug going the other way. Fortunately, we finally spotted Beba, Barb A and Bev, at a rest stop. They filled us in

on the rest of the story, and that everyone was now gone. They were not able to reach us about the change of location, as there is no cell phone coverage in the mountains. They spoke of good Dallasite where they eventually went. They all had enough, and had been fed a good lunch, so they were heading home. As Aileen and I were looking for Dallasite, we went there anyways. After bribing my young rock hauler to carry heavy buckets uphill, we ended up happy with our collections.

As we had lots of day left we then decided to carry on exploring, and went to Gold River for coffee. It took a while to find coffee, but eventually we discovered a lovely new café just past the high school. Ours was a different adventure from the rest of the group, but we had fun. Thanks Doug for inspiring us to get out!

Easter Egg Hunting

As described in the previous Bugle, our Club was invited to Jack & Jan Boyes' on Easter afternoon for a Potluck lunch and Egg/Treasure hunt. It was a friendly and fun event. The 'ballroom' was occupied with members of all ages from the Courtenay and Campbell River clubs. Newcomers marveled at Jan's baking skills on her funky cook stove. With all the food that the hosts contributed, together with a nice mix of offerings from the guests, it was a wonderful mid-day feast amongst friends. Somehow we all mustn't have eaten enough chocolate on Easter morning, as Jeannie Billings' sinful chocolate desert was quickly devoured. It was deter-

mined as a 'must have' for future potlucks (we hope).

Once sufficiently stuffed, the children moved outside to seek out the eggs that had been scattered about the 'rock pile'. Then the adults moved in to search for treasure. There was a wide assortment of rocks scattered about behind the home, some that Jack and Jan had deposited through the years, and others deposited by other members of the Courtenay Club. Some of the piles took some digging to reach, through the grass and brambles. Everyone seemed to go away with something special to them, and likely more rocks than any of us needed.

Jack and Jan put a lot into all that they do for the clubs, and their efforts and contributions are much appreciated. This one may have been a bit of a win-win, as I think they may have had an ulterior motive, of getting their yard tidied. It was a fun way to do it. Thanks! —Barb

Parksville Picnic

submitted by Janice Boyes

On Saturday, May 31, the Parksville and Area Club had their Annual Picnic and Auction in Lorne and Marion Barclay's lovely back yard. The weather was lovely, to go with the garden. Shade (not rain) shelters, devised by Max Baaske, were set up, but the sun was warm and delightful to sit in.

As usual there was a wonderful selection of goodies brought by the approximately 20 people that came. I ate 'til I couldn't hold any more. Joan Hoyer's delicious dessert, with coolwhip and rhubarb and ginger, and Marion's wonderful strawberry trifle were worth second helpings. (I stole some of the Rhubarb/ginger Fool to eat on the way home, yum).

After the food, there was the auction. Mabel and Linda were the capable assistants and Claude Levesque did a really good job on his first stint as Auctioneer. He really didn't need to ask for outside help-- he did fine, and experience will

make him even better. Dan, you may have a replacement! Jack and I bid for 3 of the good books that were on the table, and got them. I brought some plants home too.

Attending the seasonal parties of other clubs, is a great way to get to know Rockhounds from all up and down the Island, and they are all friends just waiting to meet you.

Rendezvous '08

reported by Dorothy Young

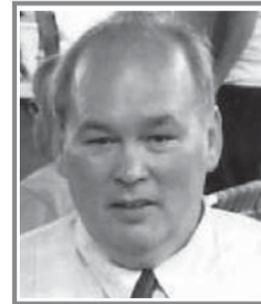
On Friday morning May 16th a beautiful morning, registration was underway at the Chase Arena for the Shuswap Rock Club's hosting of Rendezvous "08". The parking lot was full of RV's as over 200 hundred attended the gathering. I signed in and set up Ripple Rock's



“Wrap Artist” showcase for display, and received some very nice comments on the work and how it was displayed. The Shuswap Club had just finished some very brand new showcases for various clubs and individual displays, one of which they loaned our club. There were many lovely displays of rocks, crystals and agates from local sites as well as some very well done jewellery and cabbing works from various clubs. From the Island, the Parksville Club was also there, represented by Claude & Lynda.

On Saturday and Sunday there were fieldtrips for blue agate, crystal, geodes and opal. Some were 4x4 with a good walk, and others you could drive to without any difficulty. A good time was had by all. Saturday night was the auction with a variety of geodes, many great fossils, and an amethyst cave, which went for \$450!!!

Sunday afternoon, there was a bucket raffle for rocks and books and rock related and non-rock related articles. That evening a dinner was catered by the Adam River Band in their new community centre of roast beef, potatoes, peas and carrots, deep fried bannock, salad and many sweet treats. It was absolutely scrumptious!



After dinner the Lapidary Society meeting convened and the Local Zone reports were read out. I read the report Jan had prepared, which was well received. Comments and questions were raised on the collection of dues by clubs who had members in common, being duplicate payments to the Lapidary Society. It was determined that it constituted a very small sum on a yearly basis. Most in attendance were content that this was a negligent amount. Also brought up were the finances for storing rocks owned by the society, some of which it donates to the various clubs to help with expenses of Rendezvous. These were sold at auction.

All in all it was a pleasant and productive weekend and my thanks to the Shuswap Rock club for doing an excellent job of their “Rendezvous ’08.” ...and now for another perspective...

Charlie Hallstrom

“One of the good guys”
Well, who doesn’t have something to say about Charlie (it’s all good)? I was afraid if I put it out to everyone that I would have to devote 10 extra pages of the Bugle to Charlie. The following starts with the writing of Gwen Langill, our retired Bugle Editor, with comments from Gordon Billings, then with a piece from Bill Luoma, and a final comment from me, Barb W, present Editor.

As unofficial caretaker of past Bugles, I have the best opportunity to peruse them and track down some of Charlie’s many contributions to the Ripple Rock Club. He can’t disagree— it’s all in black and white! Charlie burst on the scene at the October 2000 meeting and I see that by the November 2000 meeting, he was already assisting to install a new ceiling at the shop. Over the years he has served in official positions within the club —Assistant Wagonmaster, Wagonmaster, Vice-President, President and Entertainment Chair as well as countless other jobs throughout a club year. He has always been one of the main cogs that keep the machinery at the shop in good running order. He has repaired, organized, built shelves, painted, scrubbed and installed windows, not forgetting maintenance of the all important port-a-potty.

When Charlie joined with his friend Kevin they were ‘Gold Prospectors’ and probably would have been hard pressed to tell the difference between Jade and Serpentine. Today Charlie is very good at rock identification and probably has the largest and certainly the best displayed rock collection in the club. His specialty is the fabrication of knife handles, which he has displayed at many of our previous shows.

His extensive know-ledge of the island has enabled us to field trip near, far and farther afield. We have trekked to Shelter Point,

Oyster River, Quinsam Coal, Adams and Eve Rivers, Keogh Lake, Upper Campbell (this is where we are ferried by Charlie’s boat to inaccessible spots when the water is low),Tahsis, Bonanza Lake, Cop Creek, McNair Lake, Hill 60, Meade Creek, Mt. Washington, Rock Candy Mine, Alone Mountain (who could forget that trip?) and the annual Fraser River Bars trip.

Lunch with a roaring fire is usually accompanied by coffee, burgers and hot dogs. In the beginning, it was a bit of a battle to get Charlie to submit a bill for the provisions.

Charlie and his wife Lena are great hosts. Be it Executive meetings at his home, or hosting Ripple Rock’s annual summer picnic, or inviting the whole island to Gemboree when it’s our turn. All members, children and their visitors plus dogs are included in the warm invitation that is sent out by e-mail. The summer camp organized by Charlie and the crew was a never to be forgotten event. People are still talking about it. Charlie’s own workshop is often the site for workshops for carving or hobbit houses or whatever is ongoing at the time.

In a hobby devoted to precious minerals and gemstones we have a real gem in Charlie. It is only fitting to quote what Charlie has to say of other members, “Thank you Charlie, thank you very much from all the Island clubs.” One would think with his

devotion of so much time and energy to the club, that besides his family and work, there would be little time for much else. Not the case with our Charlie. Fellow club member and his good friend Bill helps to explain:

“I met him when I was 14 years old, so I’ve known him for...34 years! If you have ever heard of Ventures (a step higher than Boy Scouts), he was our Advisor (Leader) then. We did lots of hiking, all the trails on Vancouver Island anyway (he did Forbidden Plateau 14 times), lots of canoeing on the lakes and rivers around here, we even built a few of our own canoes! We did Scout Camporees and Venture Meets. We had a group of about 20 and by the time Charlie quit he had been through about 160 kids! Charlie tells me when he was just 13 years old his dad gave him a boat and motor for his birthday.

Every weekend he would be off exploring the islands and inlets around here. Charlie held jobs as a bartender, logger, lumber grader and millwright, just to name a few. He also did a lot traveling...been to Mexico, Thailand, Bangkok, Hawaii, Alaska, Arizona...etc. He did a turkey hunt in North Dakota and moose hunting all over BC. As his parents got older he really took extra good care of them. He took them on a trip every year. He bought land from his mom & dad and eventually bought the house he is in from them too! Charlie was involved with the

Mensa Club. It’s a group of really smart people that get together and compete with each other for...bragging rights, I think.

He waited until he was 50 years old to get married to Lena, on his dad’s advice. (Note: not sure if it was the waiting till 50, or if marrying Lena was his dad’s advice, but either way his dad must have been a smart man).

These days with the Rock Club and moose hunting, and fishing on the West Coast, we still do a lot of exploring, trying to go to different places all the time.

He has been interested in Rocks and Astronomy as long as I can remember. He has always had a Springer, Butch, Barney(1), Bruno, Pogo and now Barney. He likes them so much he named his boat Springer.

Here are some quotable quotes: “FYC!”
“Charlie, how...much... farther?”
His reply: “...Just around the corner...Owen!”
“OH, NO!..my flashlight is ON! my batteries are going to be dead!”
“Want another Sambuca, Kim?”
“Yes it’s nice...but it could rain today.”
“I think the duck ate your finger... Bill!”
Filling up his diesel truck at Mohawk one day: “Charlie, is that gas I smell?”
“Oh, no...the controls are locked and we are heading...straight for ...MR. SUN!!!”
“GEEEEEEEEETTTTTT!!!”

In closing, Gwen summed it up above when turning the collective thanks to Charlie. Charlie was the face of the club at the time when my son Jasper asked if we could join, and he welcomed us wholeheartedly. It is awkward at times when joining into a new club, not knowing how members feel about kids. Well, Charlie made Jasper feel welcomed, excited and inspired. It is because of this that we ended up becoming active members of the club. Charlie has always been mindful of the kids and I have seen him take many extra steps to help keep them enthusiastic about the hobby and the club. He has recognized that without kids to carry on the hobby, these sorts of clubs are at risk of drying up as the members age. I think that Charlie should be taking much responsibility for helping this club to be a vibrant organization for families, with the largest membership on Vancouver Island. He does this all without thanks, and is yet so willing to acknowledge and thank all of the other important Ripple Rock members, past and present.

Aside from all of the things mentioned above, I also would like to thank Charlie for all of his contributions to the Bugle. Your spirited writings about other members have been well received. This month the light shines on you Charlie, with much thanks from all of us.

Vernon Lapidary Club

Submitted by Pat O'Brien

Squilax Field Trip

On June 21st Dave Barclay from the Vernon and Kelowna clubs and Ward Toll from Vernon took our small band of intrepid rock hounds up the steep slopes to the 'potato patch' famous to all Squilax aficionados. The necessity of 4 wheel drive vehicles for the trip probably limited some members from coming but some doubled up. The trucks numbered 5 and about 10 occupants watched the clouds form as we climbed higher and higher. The weather was cloudy but no rain fell, perfect for scouring the terrain. We were joined by Pierre and Jenifer visiting from Richmond. The road was dry but several spots still held water and deep ruts. Ward Toll (in front) stopped briefly at the 'patch' to which we would return later.

Ward lead us further up to a fairly new road and we scattered. Everyone found some nodules but Ward pulled out a big blue agate that took the prize for the area. Dave Barclay and myself left a bit early to start digging for the red skinned potatoes. We got into quite a good spot and were soon turning up geodes and nodules ranging in size from golf ball size to two or three clam shell types as big as dinner plates and 4-5 inches thick. The small geodes contained relatively large quartz for their size.

The rest of the group arrived after lunch and continued cul-

tivating the prolific area. The enthusiasm was infectious. I believe we all left happy and happily clutching our treasures. Thanks to Dave and Ward it was a great trip enjoyed by all.

Spring Windup Potluck

The last meeting for the spring was held on June 11/08. It was a very short meeting followed by a potluck dinner which, as is usual, came off as a great success. All the upcoming events were reviewed including the spectacular Winfield "Gems in our Back Yard" show—July 19th and 20th. Our little shop recorded 30 visits in prior month and a total of 117 visits since our move and setup in mid Feb. What a great improvement this has been. A silent auction was held with a highlighted piece of petrified wood 18" long and polished on one end going for a good price. This was donated to the club by Thor Aasland.

The potluck satisfied more than 44 people and allowed lots for seconds. This was taken advantage of and still we managed a few leftovers. One unnamed person was witnessed to have combined, as a second course, icecream and baked beans. Obviously two of his favourite dishes.

This was our first potluck dinner meeting and turned out very well and climaxed a fantastic spring season for new members, shop use, silent auctions and junior members who enjoyed all that the club has to offer.

Victoria Lapidary & Mineral Society

This has been a busy time for our club. We have had two big events—the Gem & Mineral Show and the Auction. Both events were very well attended and by all accounts very successful. I, myself was able to buy some nice specimens during the show. Thanks to everyone who attended these events and a very big "thank you" to everyone who participated.

Old Bones

In recent years ancient animal bones have been found on the Saanich Peninsula. Just last week a discovery was made of bone from a woolly mammoth. In 1987 a bison skull was found in North Saanich, this was a very important find and was dated 11,750 years old. It has not been proved that there were humans in this area at the time but some bones found had spiral fractures which are generally caused by heavy blows (possibly from clubs) Artifacts found on the Queen Charlotte Islands suggest people were there 11,200 years ago. Mammoth remains have been found near Island View Beach and also some from Royal Oak. From five to nine thousand years ago the sea level was much lower and animals could easily swim to the Gulf Islands. About three thousand years ago the bison here were killed off, probably when the area had a

bout of severe cold which lasted about 400 years.

Source: Grant Keddie of the Royal B.C. Museum & Saanich News.

Trip to Madras

Five of us left Victoria on the 1st July sailing on the Coho. No problems at the border and we traveled to Cedars Casino where we ate our picnic lunch. There were a few holdups on the road to Olympia as they were resurfacing the road. Otherwise it was an uneventful trip to Portland. We ate supper at Chillies and did a little shopping.

Next morning we traveled to Woodburn where we did more shopping, returning to town before the rush hour. Early next morning we headed to Madras, arriving there around lunchtime. Stops along the way provided us with lots of fruit. We made a trip to the fairgrounds and registered. After supper we played cards and retired for the night. Early next morning three of us went out for a run/walk. After breakfast we went to Sisters and spent a few hours going around the Gem Show there. We ate lunch in town and then had a look around the shops.

On our return to Madras we went for a swim to cool off. After supper we went to the Auction at the fairgrounds and afterwards watched the fireworks celebrating the 4th. of July. Next day we went to Richardson's and had a great time prowling through the rocks and of course buying some. On returning to town

we checked out the fairgrounds again and a Market, held in the park. For supper we were invited to Richardson's for a bar-b-que. It was a great meal with about 70 people there.

On the Sunday we left for Portland, via the Columbia River, stopping at Multnomah Falls where we ate a picnic lunch. We stayed the night in Portland and did a bit more shopping. Early next day we drove to the B.C. ferry, going through the border like a dose of salts. No wait at all. We were fortunate in getting straight on the ferry also with no wait and arrived home just before 5 p.m. after a most enjoyable trip.

Gemboree Alberni

At 10 a.m. on Friday 6th June I picked up my girlfriend Pamela at the Coho Ferry Terminal in Victoria. We then proceeded to drive up to Alberni for the Gemboree. It had been decided to change the venue from Parksville to Alberni as it was their 50th anniversary.

Pamela is from Sequim Washington and knows several people from up island. We took our R.V.s up island to rockhound with Dan & Rose Mooney when I lived in Port Angeles. It had been 6 years since Pamela had seen friends on the island so she was excited about the trip.

We arrived in Alberni around 2 o'clock. Danny had given me their address. They had moved a couple of days after their show in March. We recognized their place

with rocks of various shapes and sizes dotting the landscape. Dan had said if they were not home they would probably be at the Arrowvale Campground, just East of town so we went there to find them.

We were welcomed with lots of hugs going around. Dan & Rose, Karl and Jan, Joan & Herb were there with many others from the various clubs on the island. There were about 10 R.V.s who stayed at the campground. We built a nice bonfire and visited for a bit.

It was really chilly so we headed 'home' to put our jammies on ready to visit some more. Pamela and I stayed with Dan & Rose, along with Lynn and Gwen from Campbell River. Dan and Rose showed us around their new home which has lots of room to do their hobbies.

Saturday morning I was up bright and early to head for Maggie Lake. Pamela awoke with a migraine so I left her in bed while I headed to the campground. With Max driving, Claude (vice president from Parksville) and I joined the procession of four vehicles to Maggie Lake on the road to Tofino. If you have never driven here, it is a nasty road. It is winding, narrow and full of ruts and bumps. It took us a little over an hour to reach the old quarry at the lake. Lots of material there from small rocks to very large ones. We were looking for antigorite (verde antique) which is harder than talc but softer than nephrite. It is a clear green gemmy material that looks as if it had been poured onto other rock. It is classified as a magnesium silicate. Known in stone circles for its unique coloration and high

density. It is used in countertops and tiles, exteriors and monuments. It does not stain and keeps its shine when exposed to the elements. There was a lot of magnetite in the area also.

For those who do not know Max, he is a rock enthusiast to the utmost, having worked in that field. He has had several heart attacks including one on the way down Mt Washington loaded with rock (Pamela & I were with him at that time) but that is another story. Max proceeded to load his truck with those magnetite rocks. I wandered into another area, not wanting to even watch.

The weather was overcast and cool, great for rockhounding. We headed back to camp at about 1:30pm. I was glad to see that Pamela was back on her feet and feeling better.

The auction was about to begin as we arrived back. We were given paddles with numbers on them and away we went. It was lots of fun and the money all goes to the Island Zone. Then it was supper time with Hobo Stew on the menu. Everyone brings a can of something and it's all added to the pot. Your can then becomes your bowl to eat out of. A large cake to celebrate Alberni's 50th anniversary was our dessert. Another campfire was lit and more visiting. The marshmallows were absent which, in my opinion, is the only reason to have a bonfire. Roasted marshmallows in between graham crackers with squares of Hershey chocolate Yummy! It continued to be chilly but no one minded. Then off for our final sleepover.

Sunday morning we packed up and headed to breakfast

which Danny was cooking at the campground. Lots of plump sausages and fluffy pancakes were enjoyed by all.

Approximately 40 people attended and some newcomers joined the 'rockin-fest.' What a fun bunch rock people are! Lots of good company and more wonderful memories of a fantastic weekend.

Yellowhead Lapidary Club

Our spring election was most interesting due to the resignation of our president Tom Hambrook, treasurer Jean Hambrook and secretary Carol Strom whom we thank for the time and energy they put into a job well done and was very much appreciated. We welcome the new officers. It is proving to be a learning experience for all of us.

New Executive President: Herman Schneider—moving up from vice-president; Vice-President: Ed Valenta; Secretary- Lita Hansen; Treasurer: Monique LaFrance

The club has a new meeting place at the Ridge School. The spaciousness of the facility will be great for meetings, demos, guest speakers and related courses.

Seven members attended the May Rendezvous in Chase. Tom Hambrook demonstrated his skills in cutting and shaping cabochons. A group of five went on a field trip and came home with some nice agate.

Our June wind up meeting included a pot luck with great food, presentations to our retiring executive and a back yard agate hunt. The mosquitoes were ferocious and Monique LaFrance and Lil Klassen were the only

ones brave enough to face them.

A joint field trip with the Shuswap Club in June was a great success. Many fine specimens of petrified wood were recovered. Four more field trips are scheduled over the summer. Happy Hounding!

Lakes District Rock & Gem Club

It was a long Winter but Spring has finally sprung (well, at least we hope it has) and our club has, very quickly, sprung to life with three back to back Sunday field trips. Our first excursion was to the Thunder-Egg Site where we took Summer Camp last August. We thought Summer Camp would have polished off most of the Eggs leaving just a few for us to glean. Boy, were we fooled! Since last summer the tree planters have been in and the ground was raked to ready the area for the new seedlings. More Eggs were exposed.

Instead of taking the lower road to the site and hiking in, this time we took an upper road that looks down on the site. There are lots of small diameter Eggs around the upper road. At one place, where a tree uprooted during the winter, dozens of small Eggs were hanging from the roots like Christmas baubles. We all came home with some good samples.

We stopped at another point en route to the Thunder-Egg site where there is a basalt bank. In the crevasses of the bank were some small pockets of agate, some of which contained many beautiful crystals.

The following weekend, we took a field trip to Dog Creek, a site Summer Camp 2000 visited

with Ian McEwen. The area had been well picked over but we thought we would see if there was anything new in that area.

Sure enough there was. A new pit was opened and the rocks from it were used to make a new road. All we had to do was walk along the ditch edges to scoop up numerous fist sized agates and lumps of jasper. It was so much fun and so easy to do. We did not stay long so there is, undoubtedly, much left for collecting on another visit.

From the Dog Creek Road, we drove up a new road that looped back behind an old pit.

We found a very interesting rock by the side of the road and chiseled it out to share amongst the whole club. We have not yet identified the rock. In parts it is very hard and in other parts, quite soft. We hope it will take a polish.

A small track, probably a well rutted remnant of a winter logging road led us to a ditch with a basalt bank. Before long, we were finding agates and common opal all along those banks, too. It was a great day and very rewarding.

On June 8th, we again headed across Francois Lake to the Knapp Lake Site where we took Summer Camp 2007 to. It was

a perfect day for chiseling out agates and jasper from the road banks. The weather was cool and slightly windy which meant

there was not a bug in sight, unless of course, you chose to walk into the woods. Our approach to the site scared a sow and cub and they took off quickly.

It was Helene's birthday so we had a small tailgate birthday party. A candle and some sparklers were lit but, it was windy and they blew out as fast as you could light them. Ernie presented Helene with a birthday gift, one of his famous cross pendants.

Her other birthday gift consisted of "what else" but buckets of rocks.

It was a special trip because we had two of our members from Terrace, Norma and Solveig, join us for

this outing.

That site always supplies us with nice agates and jasper, so everyone went home with some good samples.

When it was time to leave, we decided we could not make the next ferry so would go to a beach on Cheslatta Lake to find agates and walk on the shoreline. Irene found a perfect stone dice with five bumps on it. We hope it brings you good luck, Irene!



Richmond Gem & Mineral Club "48th Annual Rock & Gem Show"

September 6 & 7

10:00am – 5:00pm

Richmond Cultural Centre
7700 Minoru Gate, Richmond, BC
Dealers, Displays, Demonstrations,
Spin and Win, Boutique
Admission by Donation

Contact:

Linda Boyce: 604-271-7676,
Bill Hughes: bhughes@shaw.ca

Surrey Rockhound Club

Annual Show: "Natures Creations"

September 20 & 21

10:00am – 5:00pm both days

Sullivan Hall, 6302-152 Street,
Surrey, BC

Dealers, Demonstrations, Silent Auction,
Spin & Win, Children's Corner
Good Food

Admission by Donation

Contact:

Alice Clarke: 604-584-5592
E mail: ag_clarke@shaw.ca

Vernon Lapidary & Mineral Club

"Mall Show & Sale"

September 26 & 27

Village Green Mall Dealers, Demonstrations,
Silent Auction, Spin & Win,
Children's Corner

Contact:

Clara Rodrigue: 250-542-2437

Vancouver Island Rock Clubs

Annual "Tailgator"

September 7

10am – 4pm

Jonanco Hobby Workshop

2465 White Rapids Rd.

Junction of White Rapids Rd. &

Nanaimo River Rd

Buy, Sell or Swap, Plus Demonstra-

tions in the Club House on the activities that are available at Jonanco. This is an outdoor event, held at the gravel pit at the back of Jonanco. You will require your own table or tailgate, so come prepared. Hamburgers & hotdogs for \$4.00 each, \$4.50 with cheese and tomato, pop, \$.50. There will be a \$3.00 charge to each tailgater for washroom supplies. Remember this is September and the weather is unpredictable!

Come and Join us and have Fun!

Contact:

Dan Mooney: 250-723-2832

BCLS Interior Zone Clubs

Annual "Tailgator"

September 21

9am – 5pm

North end, Villiage Green Mall

Vernon, BC

Contact:

Clara Rodrigue: 250-542-2437

Port Moody Rock & Gem Club

"Rock my World: The Personal Stories behind the Stones"

October 25 & 26, 2008

10 am – 5 pm

Kyle Centre

125 Kyle Street, Port Moody, BC

Admission by Donation

Contact:

Shirley Edwards 604-931-6986

Vernon Lapidary & Mineral Club

"Mall Show & Sale"

November 7 & 8, 2008

Village Green Mall Dealers, Demonstrations,
Silent Auction, Spin & Win;

Children's Corner

Contact:

Clara Rodrigue: 250-542-2437

A Series of Five Field Trips:

In and Around the Quartzsite Area

By De Morgan



Trip # 1: Psilomelane

January 2008

Our friends, Ron and Sue Vauthrin, knew the way to the psilomelane site, and led a happy group of 9 people in the direction of Blythe, California, about 48 kilometres away.

Our caravan turned the corner at the abandoned plant site for refining the manganese ore and headed for the hills to find the main source for the psilomelane. One can find bits and pieces of it by wandering around in the desert, but I had seen a cabochon made of psilomelane in a Quartzsite library display, and I was after the best specimens that show the detail in the botryoidally formed material.

The day was windy, but sunny, and we had lots of area to explore. The hill turned out to be the most productive, and soon the group was wandering all over, picking up interesting pieces. I found a couple of pizolitic pieces that were artistically clustered together. There was a deep and dangerous old mineshaft, and I walked well around it. In the old mine

tailings was a 4 pound piece with a flower formation made of calcite. I protected it with some newspaper, and loaded it into my already heavy packsack.

I noticed there was a small flurry of excitement and some hammering over by the big hole, so I wandered over to see what was being found. Marv Iverson had located the main seam, about 6 feet long and 12 inches wide, just at the edge of the big drop into the hole. The seam was very striking with the sunlight hitting the curves of the psilomelane. The material required hard rock mining to loosen it from the seam, so I decided against using the sledge, and wandered the area near the hole to do some surface collecting. Almost immediately, I found a 5 pound piece, about 3 inches by 4 inches of the dense, heavy material, and felt pleased not to have to swing the sledge to get a good sample.

We stopped for lunch, and then parted ways, with many heading home. Bob and I

stopped on the way back to investigate the area around the abandoned manganese plant, and collected a few more samples before turning back toward our Quartzsite home base.

Once back in Surrey, B.C., I took a piece of psilomelane to my club workshop to see if I could create a cabochon worth displaying in my showcase at the upcoming B. C. Gem Show.

Psilomelane, also known as romanechite, is a hydrous barium manganese oxide. It is black, and rubs black off on anything it touches. It has a hardness of 3.7 to 4.7, so working this mineral is a very dirty business. While it rubbed off easily onto my fingers, it took several washings with warm, soapy water to get it off, and a week's worth of effort to get my fingernails looking clean again! My cabochon is well polished, but plain. I may try cutting my larger piece into slabs to get a cabochon with the look I was after—once I'm willing to get my hands that dirty again!