



# The Cutting Edge

Monthly Newsletter of the Ottawa Lapsmith and Mineral Club

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<https://www.instagram.com/olmcnews/>

## President's Message

We have received and processed the fourth and last installment of the Gauthier collection. The last installment produced an abundance of garden rock which disappeared within 24 hours! The better rock is now in our storage locker and will be used to replenish the entrance way bins.

Our last auction netted \$2100 for the club. We don't often get machine donations like that one! The next auction will be in November.

We have purchased new 280-grit wheels for the Titans, new 100-grit wheels for the blue grinders and new saw oil for the oil saws.

Kerry Day

*OLMC President*

**LOST AND FOUND:** On one of the display cabinets in the workshop, there is a basket of items waiting for their owners – reusable drink containers, small slabs, finished cabochons, and other things. If you own any of these, please take it. Soon, they will be disposed of somehow.

All members are invited to submit articles, proposals, and thoughts that could be included in the newsletters. Also, feel free to send your Classified ads by e-mail to: [news@olmc.ca](mailto:news@olmc.ca)

## ***Ammolite for Sale!***

If you are interested, then please contact Francois directly

Gatineau collector Francois Levesque [asanayogi@gmail.com](mailto:asanayogi@gmail.com) is selling a wholesale lot of rough Ammolite from Drumheller, Alberta. Legal status unknown. Asking price \$400. There is a kitchen sink for scale. Photographed wet.



## ***Hot Rock Buckets***

The club received and processed the fourth and last installment of the Liette Gauthier collection. Eighteen five-gallon pails and one crate of garden rock were given away. The rock buckets were very popular. **They are now all gone!**



Most of the stone came from localities within two hours of Ottawa -- an abundance of feldspar, perthite and pale amazonite from Blue Sea Lake. The crate held local calcite.

## **Blue Point Mine trip**

July 4 - July 5, hosted by CCFMS ([link](#))

*Blue Point Amethyst Mine, Shuniah, Ontario*

Due to the successes of past trips to this amazing site, the CCFMS is planning to organize a two-day, weekend field trip to the Blue Point! The club is planning a trip for the weekend of July 4th and 5th which will be open to ALL CCFMS Clubs. Adult trip (18+): While the Blue Point is a public business that welcomes all ages, the public is restricted to the blast piles, and not allowed into the mine itself.

The CCFMS club trip provides a unique opportunity to dig in the "restricted area", the open pit/working mine. For legal reasons all attendees must be 18 years of age or older.

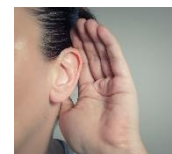
## ***Lively Machine Auction***

The club hosted an on-line auction of various lapidary machines, tools, and books April 25 to May 2. Total proceeds were \$2,296.



## ***People are talking***

Alta Vista News will publish a small article about our club in their June newsletter. Many thanks go to Michele Legault Dooley for writing this article. The Alta Vista News readership is about 6,000 people.



## ***Rockhounding with the OVMC***

Check out the [Ottawa Valley Mineral Club](#) for field trip information. Memberships are reasonably priced.

## Rubies of Enormous Size from Myanmar

In mid-April, miners near the town of Mogok, Myanmar, discovered a [huge ruby](#) weighing 11,000 carats (2.2 kg).

Even though it weighs about half the weight of a 21,450-carat (4.29 kg) ruby that was found in 1996, this latest discovery has superior colour and quality. It was described as purple-red with yellow undertones, a high-quality colour grade, moderate transparency and highly reflective.



*What rough ruby may look like; stock image*

Myanmar produces as much as 90 per cent of the world's rubies, mostly from around Mogok and Mong Hsu. They are a major source of revenue for Myanmar. Unfortunately, gemstone mines also fund ethnic armed groups fighting for autonomy from the government and causing decades of internal conflict.

## Golden Helmet of Coțofenești back in Romania

In April, prosecuting lawyers in Assen, Netherlands, announced the recovery of a 2,500-year-old golden helmet and two of three gold bracelets. The items date from the Dacia civilization, and were on loan from Romanian National History Museum to the Drents Museum. They were stolen in January. Three people were arrested soon after.

Authorities had worried that the helmet would be melted down because its fame and distinctive appearance make it unsellable. Now these relics are back in Bucharest under heavy guard. The search continues for the third bracelet.

<https://www.theguardian.com/artanddesign/2026/apr/02/stolen-romanian-gold-helmet-recovered-netherlands>

## Your Name in Geography

NASA Landsat geolocations that look like letters

Enter text into the form and this web site will present satellite photographs of land formations that look like the letters. Sorry, letters with accents are not accepted.

<https://yournameinlandsat.com/>



## Boot of Cortez gold nugget auction

The largest surviving natural gold nugget in the Western Hemisphere [will be auctioned](#) off in Glendale, Arizona on June 12. The auction house EJ's Auction & Appraisal hosted a free preview on May 20.

Discovered in 1989 in Caborca, Sonora, Mexico, the gold nugget weighs about 11.88 kg and measures over 25.4 cm high and 17.78 cm wide. It is 98% pure gold, according to the auction house, and in "pristine condition."

When the nugget was last auctioned in January 2008, it sold for more than \$1.3 million USD.



**44<sup>th</sup> Annual  
Sudbury Gem & Mineral Show**

**Northern Ontario's Largest  
Gem, Jewellery & Mineral  
Show and Sale**

**July 17 to 19, 2026**

**Friday July 17, 5 pm - 9 pm  
Saturday July 18, 10 am - 6 pm  
Sunday July 19, 10 am - 5 pm**

- Dealers • Displays • Door Prizes
- Gems • Beads • Handcrafted Jewellery
- Minerals • Fossils • Rock Craft
- Demonstrations • Mineral ID
- Kid's Activities • Metal Detecting
- Outdoor Vendors, Sat. 10:00 to 4:00

**Carmichael Arena  
Bancroft Drive, Sudbury, Ontario  
Barbecue, Free Parking**




For more information, go to <https://www.srls.ca/1st-show/> or call (705) 522-5140

## Secret Ingredients

Here is a short video of a goldsmith (Hallmark Craft) using Play-Doh to form a mould like a plaste cast to hold loose parts of a ring in place for soldering. 9:27 minutes. The magic starts at 4:15.

[How to make unique ring design](#)

## From the Library...

Of all man's arts, ceramics deals most directly with earth, wter, air and fire -- those elements which the ancients considered the essentials of our world. The fire is the key. By its action the soft and formless clay is given hardness and permanence, and a range of color related to the colors of the primordial igneous landscape.

Daniel Rhodes  
Kilns: Design, Construction, and  
Operation

The Bancroft Gem & Mineral Club  
Presents its

# 28<sup>th</sup> Annual Gem & Mineral Show

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**Sunday, July 26, 2026**  
10:00 am - 4:00 pm  
Bancroft Fish & Game Club  
27602 Hwy 62, 2 km S of Bancroft

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**Exhibits & Displays**  
Lapidary Demos × Mineral Specimens  
Rock & Mineral Identification Service  
3 Silent Auctions × 3 Door Prizes  
Grand Live Auction

**Featuring**

**FLUORITE**  
**Here, There, Everywhere!**

Admission: \$3 Adults  
Admission to both Mineral Show & Mineral Museum \$5  
Children and Students free (15 yrs or less)  
All proceeds to the non-profit Bancroft Mineral Museum

**Thank you**  
Mark Stanley  
of Norwood, Ontario  
for generously donating his services for our live auction.

## A Century of Service: The Hundred Year History of the Canadian Mines Branch/CANMET, 1907-2007

By John E. Udd, FCAE, Ph.D., P.Eng.

This is a set of notes from part of Chapter 1. See the book in our library to get all the juicy details. DVD included.

### Chapter 1: The Accomplishments of a Hundred Years

In the early 20th century, Canadian mines and mineral industries were adopting more technological advancements, going from a labour-intensive and risky occupation into a more productive skill-based one. In those early days, operations were small, with minerals transported by river to harbours or rail stations.

At that time, alongside new methods of rock drilling, blasting, and processing, the establishment of a trans-continental railway uncovered valuable ores around Ontario and in British Columbia.

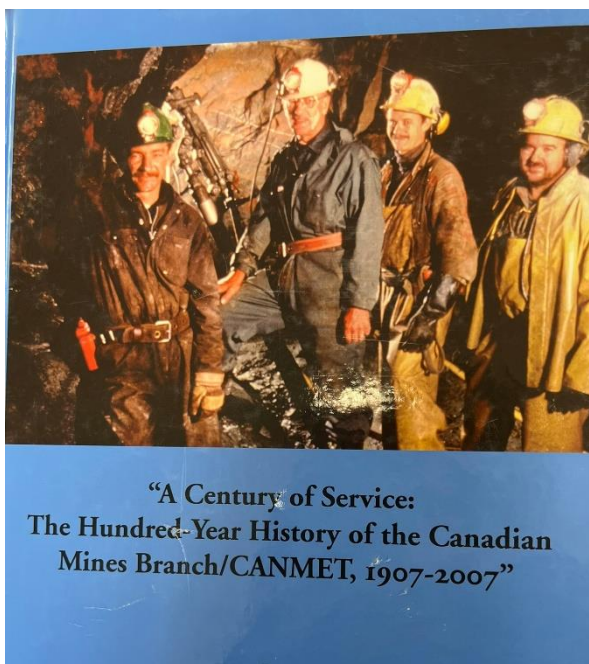
The Canadian Mines Branch was created in 1907 to meet the needs of industry, taking functions from the Department of the Interior and the Office of the Superintendent of Mines including assay work, testing and prospecting. The first job was to test Canadian coal and peat at the Fuel Testing Station on Division Street (now Booth Street) in Ottawa.

By 1912, the Mines Branch had grown to eight Divisions with seven major labs testing bituminous shales, oil, and gas from New Brunswick and Tar Sand deposits from Alberta.

During World War I, Canadian metal supplies were critical for munitions production, yet producers were still small and lacking ore processing capabilities. The Mines Branch was given the responsibility of being "the millers and assayer" in business related to metallic ore and mineral supplies. In the case of molybdenite, production from small mines around Ottawa were sent to the Ore Dressing Laboratory that worked around the clock to process and concentrate the metal for steel manufacturing.

A Fuels Research Laboratory was added to the Booth Street complex in 1929. The work level of the Ore Dressing and Metallurgical Laboratory had increased over 230%.

In the 1930s, precious metal processing capacity increased. Fifty gold mills were brought into service. Plus shipments of silver ore and pitchblende found at Great Bear Lake were sent to the Mines Branch for treatment. At this time, the carbonate leaching method to treat radium ores was developed by the Mines Branch and used by Eldorado Gold Mines Limited at its radium refinery. This work set the stage for the Mines Branch involvement in the Manhattan Project during World War II.



The department continued to expand and erect more buildings at Booth Street as work expanded to find substitute materials for non-strategic steel alloys.

1947 was a major turning point for the Branch as the petroleum industry boomed, turning Canada into a major oil producer, and surpassing gold as Canada's leading export commodity. From this point, energy mineral production would become increasingly important in comparison to metallic and non-metallic mineral production. At the same time, Canadian mineral production and consumption was growing by leaps.

Also that year, ceiling prices for metals were removed, and the Emergency Gold Mining Assistance Act was passed. Massive supplies of iron ore produced, and more was discovered in the Labrador Trough.

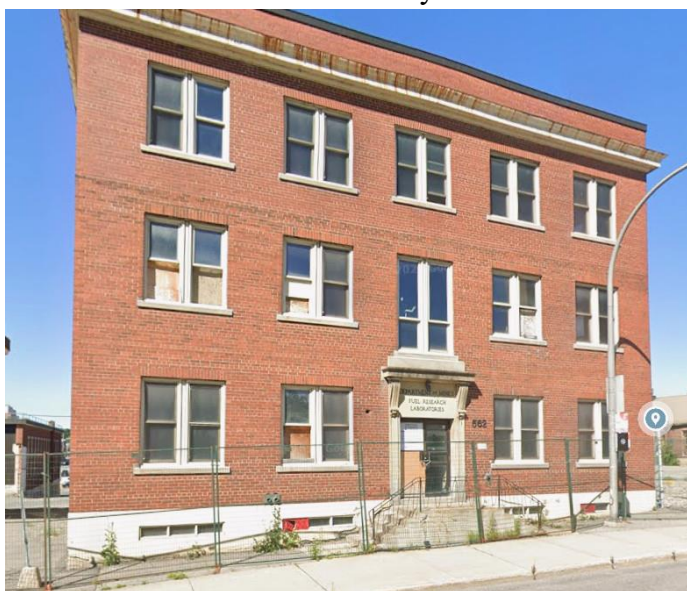
In 1948, the Fuels Division examined the use of "flame proof" electric machines in coal mines. This work grew as the lab became responsible for certifying this type of machinery, work that continues to this day at the Canadian Explosive Atmospheres Laboratory (CEAL) at the Bells Corners Complex.

Throughout the 1950s and 1960s, much time was spent to find efficient large-scale methods to hydrogenate bitumen and possibly coal to extract liquid fuel, and to separate bitumen from sand. Budget cuts in 1971 forced an end to these research efforts.

Another change in focus happened in the 1950s. As certain functions like industry statistics and resource reviews were transferred to other departments, the Branch got more involved with research related to mining. At first, this work was intended to support the coal mining industry.

After the expansion of the Booth Street complex, a decision was made to move the whole Branch to what is now the Bells Corners Complex, starting in 1966 and ending in 1968. There are still regional offices established since the 1950s in towns and cities around the country.

One of the most successful projects of CANMET started in 1985. A five-year Canada-Ontario-Industry Rockburst Research Project (COIRRP) was created to improve seismic monitoring systems for detection of rockbursts caused by zones of high stress in hard rock mines of the Canadian Shield. Rockbursts had caused fatal accidents in narrow gold mines, plus losses of \$200 million in the early eighties. After the project, in addition to fewer deaths, one estimate said the industry received \$245 million in benefits. The second phase of rockburst research in the nineties focuses on more technological improvements and changes to mine design. At the same time, the management and expertise was being led by the industry players.



*Department of Mines Fuel Research Laboratories at 562 Booth Street, Ottawa.*



## Terra dos Gigantes

The "Terra dos Gigantes" park at Uberaba is Brazil's sixth and latest geopark. Designated in 2024 after twelve years of extensive research by the Geological Service of Brazil, it covers 4,523.957 square kilometers in the tropical state of Minas Gerais.

The primary draw of the park is fossils from the Late Cretaceous period, 80 to 66 million years ago, including Brazil's largest discovered dinosaur the *Uberabatitan ribeiroi*, and many *Abelissaurus* and *Uberabasuchus terrificus* specimens. There are crocodyliforms, turtles, and more. Over 10,000 fossils from the Late Cretaceous period have been recovered, some of which are displayed in the Peirópolis Dinosaur Museum inside the park.



Photo by André Borges Lopes/Divulgação, [Agência Brasil](#), 2024-04-07.

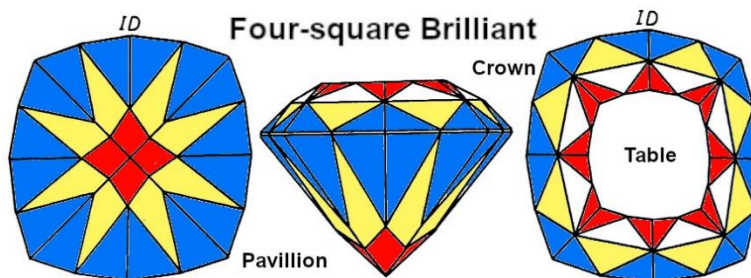
The abundance of fossils in this area is attributed to the prominent basalt flows of Serra da Galga and Serra Geral formed during the volcanism at the breakup of the Gondwana supercontinent and the beginnings of the South Atlantic Ocean. The Serra da Galga is dated to the Late Maastrichtian age. The mountains of Serra Geral were formed as part of the Paraná large igneous province that erupted in the early Cretaceous age. Matching segments can be found in Angola and Namibia.

These flows cover the Botucatu Formation that contains the Guarani Aquifer, which is one of the largest sources of freshwater in the world. Significant erosive elements in the area, which contains river plains, interbedded fluvial systems, and shallow lagoons, resulted in fine-grained sandstones interspersed with silty deposits and conglomerate layers.

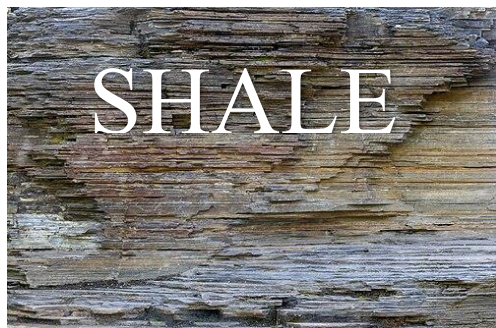
There is an interior plateau to the west of the Serra Geral range that is drained by tributaries of the Uruguay River. The plateau is the coldest part of Brazil, with frequent frosts and yearly snow, being home to the montane *Araucaria* moist forests.

## Faceting Design: Four-Square Brilliant

The design shown here is a variation of the [square brilliant design](#) using 77 facets and four-fold symmetry. The crown is a "mixed crown". The pavilion has long slender facets like round brilliants. The girdle can be done as shown or made to look a bit more square with a simple adjustment.



From "Diagrams for Faceting Volume 1" by Glenn & Martha Vargas, page 66.



*Shale formation, Marble Canyon, Kootenay National Park, British Columbia; Photo by Chris Woodrich - Own work, [CC BY-SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/)*

Shale, the most common sedimentary rock, is a sedimentary mix of flakes of fine-grained clay minerals and small silt-sized bit of other minerals, usually quartz and calcite. Shale can be split into thin layers less than a centimeter thick (fissility). Shale is sometimes used as another word for "mudrock".

The fissility happens because the clay mineral flakes run in thin parallel layers. Rocks made of the same material, but non-fissile, are mudstones (30-65% silt) and claystones (30% silt). Siltstones are more than 2/3 silt-size particles.

Shales are typically deposited in slow-moving water and are often found in lakes and lagoonal deposits, in river deltas, on floodplains and offshore below the wave base. As sediments continue to accumulate, the heavy mass causes compaction, the expulsion of water, and lithification (turning to stone).

Gray is the most common colour of shale, but it can vary with small amounts of hematite (red), goethite (brown), limonite (yellow), and mica (green). Shale with more than one percent of carbon will look black, and high amounts of carbonates create pale blue to blue-green shale.

The clay part of shale is often kaolinite, montmorillonite or illite. Clay minerals of Late Tertiary mudstones are smectites (clay minerals characterized by their ability to swell when water is absorbed). Over time the smectites turn into illites (non-expanding clay minerals) releasing silica, sodium, calcium, magnesium, iron and water that form sedimentary quartz (but rarely crystallized), chert, calcite, dolomite, ankerite, hematite and albite.



Ottawa Lapsmith & Mineral Club's  
**58<sup>th</sup> Annual Gem,  
Mineral & Jewellery  
Show & Sale**

**58e Salon annuel  
des pierres,  
minéraux et bijoux**

**September 19-20, 2026**

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## Dike Swarm!

There are more than three dozen dike swarms in the Canadian Shield. One of them, the [Mackenzie dike swarm](#), forms a large igneous province, which itself is part of the greater Mackenzie Large Igneous Province.

The claim to fame is that the Mackenzie dike swarm, located in present-day Nunavut, over 500 km wide and 3,000 km long, is the largest dike swarm on Earth. The mafic dikes cut through Archean and Proterozoic rocks, including those in the Athabasca Basin in Saskatchewan, Thelon Basin in Nunavut and the Baker Lake Basin in the Northwest Territories.

Experts think the source for this dike swarm was a mantle plume center labeled the Mackenzie hotspot that happened about 1,268 million years ago. The Slave craton was uplifted and intruded by this gigantic Mackenzie dike swarm. This was the last major event to affect the core of the Slave craton.

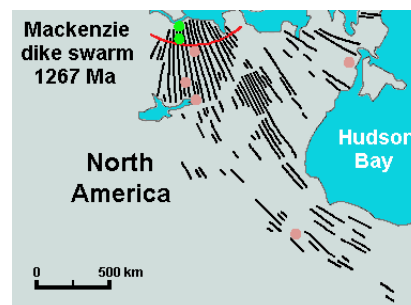


Diagram by Black Tusk - Own work based on Mackenzie dike swarm image on [www.mantleplumes.org](http://www.mantleplumes.org), [CC BY-SA 3.0](#)

## Workshop Schedule

June 2026

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2 Lapidary 10am-2pm (RV) Silversmith 6:30-9pm (JB)	3 Lapidary 5-9 pm (JGB)	4 Faceting 6pm-9pm (DA)	5	6 Lapidary 10 am-4 pm (EC,JC)
7	8	9 Lapidary 10am-2pm (RV) Silversmith 6:30-9pm (DA)	10 Lapidary 5-9 pm (CG)	11 Faceting 6pm-9pm (DA)	12	13 Lapidary 10 am-4 pm (CG, KD)
14	15	16 Lapidary 10am-2pm (RV) Silversmith 6:30-9pm (JB)	17 Lapidary 5-9 pm (JGB)	18 Faceting 6pm-9pm (DA)	19	20 Lapidary 10 am-4 pm (JC, SJ)
21	22	23 Lapidary 10am-2pm (RV) Silversmith 6:30-9pm (DA)	24 Lapidary 5-9 pm (CG)	25 Faceting 6pm-9pm (JL)	26	27 Lapidary 10 am-4 pm (EC DF)
28	29	30 Lapidary 10am-2pm (RV) Silversmith 6:30-9pm (JB)				



# OTTAWA LAPSMITH AND MINERAL CLUB

[www.olmc.ca](http://www.olmc.ca)

## Membership Application

### Membership Type:

- New Membership
- Membership Renewal

### Number of Members:

- Individual **\$20**
- Family (2+ persons in the same residence) **\$30**

### Benefits:

- Use of supervised workshop
- Monthly newsletter
- OLMC online auctions
- Access to free and paid courses
- Newsletter advertising: \$25/yr for members, \$55/yr for businesses (*ten quarter-page ads across ten issues*)
- Participate in *Club Creations* tables at annual gem show
- Membership in *Central Canadian Federation of Mineral Societies (CCFMS)*
- Opportunity to get involved in club leadership

Name(s): \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ Province: \_\_\_\_\_

Postal Code: \_\_\_\_\_ Telephone: \_\_\_\_\_

Email for OLMC newsletter: \_\_\_\_\_

Do you require a receipt?  Yes

### 3 ways to join the OLMC:

- **In-person** at our annual gem show or at the workshop (**cash** or **e-transfer**)
- **Email** your form to [treasurer@olmc.ca](mailto:treasurer@olmc.ca) (**e-transfer** to same email)
- **By mail** with a **cheque** to Ottawa Lapsmith and Mineral Club  
Ottawa Lapsmith and Mineral Club  
P.O. Box 57012 RPO Gladstone, Ottawa, ON K1R 1A1

*Please note that all membership information is used only for administrative purposes.*

### Administration use only

Card provided:  Yes  No

Supervisor signed:  Yes  No

Date: \_\_\_\_\_