



The Cutting Edge

Monthly Newsletter of the Ottawa Lapsmith and Mineral Club

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President's Message

We have now been in our new workshop for one year. Thanks goes out to our moving crew and construction crew who made the workshop possible.

We can always use new blood running the club. Our Vice-President Matthew Poirier has moved to Toronto. Our workshop director Jean-Guy Bradette is retiring in April. Our membership director Natalie Bourget has stepped down. Our dealer chair Vema Ho is stepping down. We could use a hospitality director. Some of us like myself, Eric Clara and Stephane Jette have been doing our jobs for a long time. No experience necessary. We will train.

Merry Christmas and Happy New Year

Kerry Day

OLMC President

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

Workshop Holiday Hours

The workshop will be closed from Wednesday, December 23, to Monday, December 29, and on December 31 and January 1. The workshop will be open Tuesday, December 30, from 10:00 am to 2:00 pm for general lapidary.

Special gift ideas

Found on Facebook Market Place

Complete Gemology and Gemstone Collection ([link](#))

Faceting machine from Brossard QC ([link](#))

Faceting machine from Laval, QC ([link](#))

[Vevor](#) is having a sale on faceting machines and 6" cabbing machines

Magazines for Sale

A complete set of Canadian Mineralogist magazines are being given away in Beaconsfield (Island of Montreal). The cabinet is not included. Interested parties should contact Daniel Joyce at ddjoyce@gmail.com.



Christmas Party

The Christmas party will be **December 13, 4:00 – 9:00 pm, at 380 Springfield Road.** This

is the Rockcliffe Park branch of the Ottawa Public Library, at the corner of Buena Vista Road and Springfield

Road. It is a potluck, so bring your favourite food to share. Drinks, plates and utensils will be provided. There is a small kitchen with a stove and a microwave. Each member can bring a guest.



Silversmith Tools for Sale

Veronica (veronmem@gmail.com) in Smith Falls has a bunch of items for sale. Here are some items. See the whole list here ([link](#)).

Jeweller's Bench: \$500

RayTech Dry Polisher: \$200

Digital 2.6 Qrt Ultrasonic Cleaner: \$100

Doming Block w/ 26 pcs: \$100

Alphabet metal stamps (36): \$25

Jewellery Boxes (65 white w/ clear tops): \$30

Brass Mallets of various weights: \$25

Bezel setting set wood box: \$15

Smith Little Torch with tips: \$150

Suede sand bag: \$35

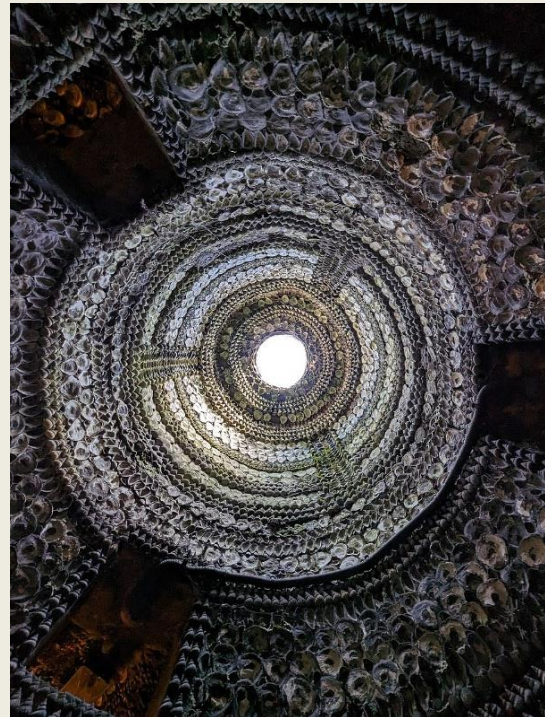
The Shell Grotto of Margate

In the small town of Margate, Kent, in England is an underground shell-encrusted grotto. The grotto, also known as the Shell Temple, has been a tourist attraction since 1837. It is not known who carved the grotto out of the chalk, or when, but other similar grottos were made in the 18th century. It may have started out as a chalk mine.

The Shell Grotto starts with a winding underground passage about 2.5 meters high and 21 meters long. Along the passage, is a so-called rotunda, a round room with a central equilateral triangular column rising to a domed cap that lets in some daylight. Three arches extend from the middle of each side of the pillar to the walls. A winding passage continues, ending in a rectangular “altar” room measuring 5 by 6 meters.

The rooms and tunnels from the rotunda to the altar room are covered in intricate mosaics made of locally found shells of mussels, cockles, whelks, limpets, scallops, and oysters.

https://en.wikipedia.org/wiki/Shell_Grotto%2C_Margate



By Alby - Own work, CC0,
<https://commons.wikimedia.org/w/index.php?curid=131710417>

From the Library

He soon discovered that in Labrador, with ice still in the lakes in June and the first snow returning in September, the prospecting season is a short one -- perhaps ninety days in the south and even less in the north. This did not leave long for Brinco to select its fifty-thousand-square-mile concession from the seventy thousand or so square miles available. ... But Beavan's worst problem was the virtual absence of any sort of useful maps of the interior of Labrador. The eight-miles-to-the-inch topographical maps available had large blank areas on them and were all but useless for his purposes.

Philip Smith
Brinco: The Story of Churchill Falls

Museum Adventures

If you are looking for entertainment during the holiday, keep museums top of mind.

The Museum of Nature in Ottawa is home of the [Earth Gallery](#), a large collection of minerals, interactive exhibits, and a limestone cave facsimile. There is a special Mont Saint-Hilaire display showcasing the 440 minerals found there, and 30 minerals only found at that mine including carletonite.

The Royal Ontario Museum in Toronto displays [Earth's Treasures](#) in a timeline from the planet's beginnings to present day. There are almost 3,000 meteorites, minerals, and gemstones to see. Plus the Barrick Gold Corporation Gallery explores the global mining industry and how it impacts everyday life.

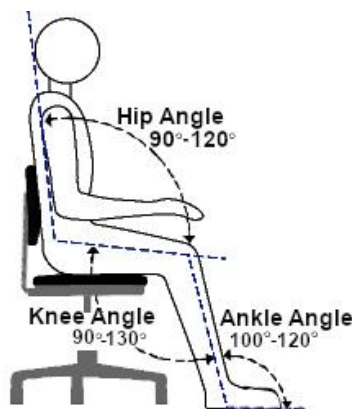
Ergonomics and Injury Prevention for Jewellers

Presented by Janet Borzeck at the Silversmiths Meeting 2023-06-20

How many of us get so involved in the creative process we forget to stand, drink, or eat? This can have long-term effects on our bodies.

Working in a poorly designed workspace can lead to musculoskeletal injuries like muscle strains, arthritis, spinal problems, tendinitis, and carpal tunnel syndrome. Even in a well-designed space, repetitive motion injuries can happen over time.

To achieve a balance between working hard and working smart, you need to think about ergonomics. Ergonomics is the study of workspace design to fit the body and movements of the worker.



WORKING POSTURE

Jewellers tend to hunch over their benches which leads to headaches, neck and back pain. This can lead to shortened muscles in the neck that lose the ability to relax.

While working, hold your head up and neck in a neutral position. The bench pin should be at armpit height to avoid hunching and keep the back in a neutral position. Look for a bench with arm rests to take strain from the shoulders. Your most frequently used tools should be stored within reach without making you twist or over-reach.

Chair suitability should be considered before workbench height. The bench height should be brought to the best fit chair instead of adjusting the chair to suit the bench height.

SET UP THE CHAIR

Use a chair that keeps your spine in a neutral position. The back rest should contact the back with appropriate lumbar support. It should have adjustable height and seat angle and adjustable back rest. Feet should be flat on the floor. Knees should be slightly higher than the hips.

Deep Dive Into Ergonomics

Canadian Centre for Occupational Health and Safety
[Working in a Sitting Position](#)

TIPS FOR GOOD WORK HABITS TO AVOID STRAIN

Take breaks and change your working positions frequently. Set up both sitting and standing stations and switch between these.

Only perform tasks that cause vibrations, noise or muscle strain for short periods of time.

Avoid twisting motions to reach for tools and materials.

If you use a magnifying device such as an optivisor, use the lowest magnification necessary to avoid hunching because of the shortened focal point with higher magnification.

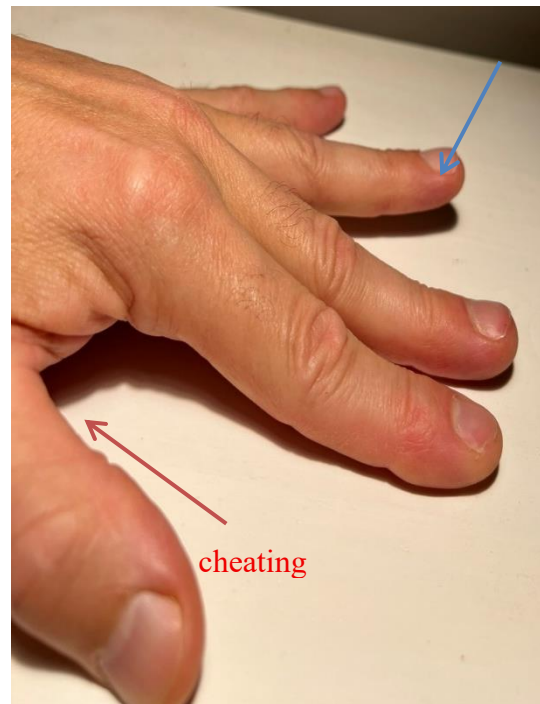
Check your grip on saws and hammers. Loose, relaxed grips cause less strain on muscles and tendons of the arms and hands.

Check the height you are hammering at. Your arm should always be in alignment, and the swing should be from the elbow, not the wrist.

EXERCISES TO HELP PREVENT INJURY

Do at least two of these exercises per day, and soon you will notice a difference in your strength and ability to use your hands longer without cramping up or getting tired.

- Place a rubber band around your thumb and index finger. Stretch out the rubber band as far as you can and hold for 5-10 seconds. Repeat the exercise with the band wrapped around your thumb and each of your other fingers, then do the same with your other hand.
- Make a fist as tight as you can (without pain), wrapping your thumb across your fingers. Hold the fist for 30-60 seconds, then release and spread your fingers wide. Hold your fingers spread for 10 seconds, and then repeat the entire process on both hands at least four times.
- Place a tennis ball or racquet ball in the palm of your hand. Squeeze the ball as hard as you can without causing pain. Hold the squeeze for five seconds and release. Repeat the process ten times and repeat with your other hand.
- Place the palm of your hand flat on a table surface. Lift one finger at a time and hold it for a quick pause at the top, then lower it down to the table. Do this for each finger on both hands, repeating 8-12 times.



REGULAR STRETCHES AT YOUR BENCH

Sitting up straight, try to touch your shoulder blades together. Hold, and then relax.

Sit facing forward, then turn your head to the left and your torso to the right, and hold a few seconds. Repeat 15 times, alternating sides.

Let your head loll over so that your right ear nearly touches your right shoulder. Using your hand, press your head a little lower. Hold for 10 seconds. Relax, and repeat on the other side.

Sitting tall in your chair, stretch both arms over your head and reach for the sky. After 10 seconds, extend the right hand higher, then the left hand.

CARPAL TUNNEL STRETCHES

Make a fist. Slide your fingers upward so they are pointing up straight. Repeat 5 to 10 times.

Make a fist. Release your hand and fan out your fingers, stretching them as far as you can. Repeat five to 10 times.

Extend your arm in front of you with your palm up. Bend your wrist, pointing your hand toward the floor. With your other hand, gently bend your wrist farther until you feel a mild to moderate stretch in your forearm. Hold for at least 15 to 30 seconds. Repeat 2 to 4 times.

Start with your hands together in prayer position. Spread fingers apart as far as you can, then "steeple" the fingers by separating palms of hands, but keeping fingers together.

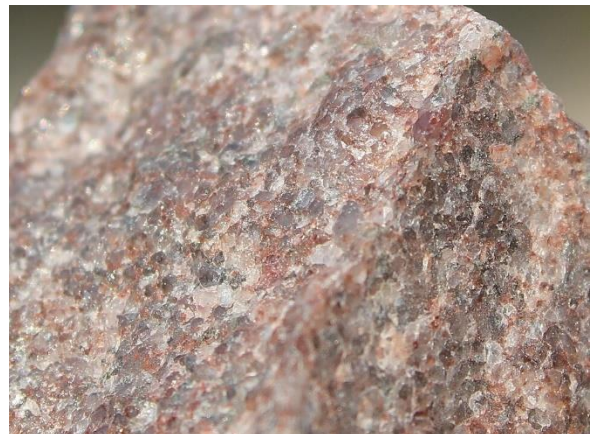
Quartzite

Pure [quartzite](#) is a hard silica stone coloured white to grey with a grainy surface. It could be other colours due to other minerals being present. It resists weathering, so it forms tough, bare ridges and hilltops. Some quartzites have enough weather-susceptible carbonates and chlorite to make a shallow, stony soil.

Quartzite forms from pure quartz sandstone that has experienced great heat and pressure (usually tectonic) so that the individual quartz grains recrystallize along with the former cementing material. Most of the original sedimentary look and texture is erased by this annealing process. The new interlocking mosaic of quartz grains are usually equal in size, coarser and more polygonal. The cementing material -- small amounts of iron oxide, silica, carbonate, and/or clay -- migrate during the recrystallization, forming streaks and lenses within the quartzite.

The La Cloche Mountains on the north shore of Lake Huron are made mostly of white quartzite. It can also be found under large parts of Nova Scotia.

Quartzite has been used since prehistoric times for stone tools. It is presently used for decorative dimension stone, as crushed stone in highway construction, and as a source of silica for production of silicon and silicon compounds.



Quartzite; Photo by Manishwiki15 - Own work, [CC BY-SA 3.0](#)

Iron Mines along the Mesabi Trail

The [Mesabi Trail](#) is a paved 3-meter-wide bike trail north of Duluth, Minnesota. When complete (Autumn 2026), it will stretch 265 km through the granite hills of the Iron Range, from Itasca Country Fairgrounds near Grand Rapids and the Mississippi River, to Ely and the Boundary Waters Canoe Area in the Superior National Forest

The web site has an [interactive map](#) that will help with planning a trip segment by segment. You will need a bike pass for any wheeled transport. Camping and horseback riding is allowed in certain areas. It seems fishing is not allowed. Still, there is a lot of nature to see.

There are many little towns to visit with a history of mining iron ore. Starting in the west close to Grand Rapids is Coleraine, which has a rich mining history and a number of historic buildings.

Further on is Marble, named after a U.S. Steel official from Duluth, and neighbouring town of Calumet, home to the Hill Annex Mine State Park. The old pit lake crosses the north edges of both towns.

Continuing east, riders will be just south of Nashwauk, the first mining town in Itasca County, and nestled between two inactive open pit mines. Hawkins Mine on the west side has an observation platform. The LaRue Pit on the east side is made of four inactive mines.

Much further east, after a bit of a loop, it the city of Chisolm, home of the Minnesota Discovery Center, and other museums: Minnesota Museum of Mining, the Rock Wall and Museum, Bruce Mine Headframe, and the Iron Ore Miner Memorial.

At about the mid-point of the Mesabi Trail is the town of Mountain Iron, where the “Iron Range” – the chains of mining districts – got started in 1890, when Leonidas Merritt found iron ore there. This town likes to showcase its mining history.

Right: [Hull–Rust–Mahoning Open Pit Iron Mine, Mesabi Range, 2010](#); Photo by [Chipcity](#) - Own work, [CC BY-SA 3.0](#)



Photo of the Vermillion Trail Segment of the Mesabi Trail; photo from <https://mesabitrail.com>



Speaking of the Iron Range...

There's helium in those hills

Pulsar Helium announced in November a third drilling well to extract a reservoir of helium gas under Minnesota's Iron Range. The first exploratory drill found the noble gas 670 meters underground. The exploration for this third well drilled 1.5 km down near the town of Babbitt (on the Mesabi Trail!), and 12.4% concentration was discovered, which is 30 times more than a typical well would require.

The Minnesota Department of Natural Resources is working on new regulations to manage the mining of gas.

Helium has a number of critical applications. It is used in healthcare to cool the magnets in MRI machines and is mixed with oxygen in respiratory machines. Semiconductor factories use it to make an inert atmosphere when chips are welded. It is used in space rockets to pressurize fuel tanks, to purge tanks, and to keep certain components cool.

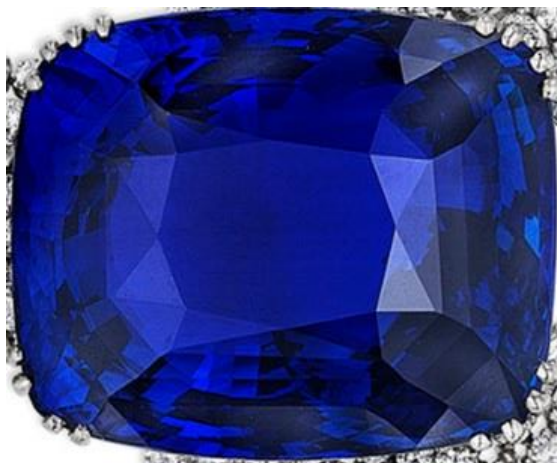
<https://www.cbsnews.com/minnesota/news/minnesota-iron-range-helium-more-drilling/>



The Blue Belle of Asia: World's Most Expensive Sapphire

As the [centerpiece](#) of a sapphire, diamond, and 18k white gold necklace sits the untreated 392.52-carat cushion mixed-cut "Blue Belle of Asia". It is the fourth largest faceted sapphire in the world. It is also the [most expensive](#), having been sold by Christie's auction house in Switzerland on November 11, 2014, for USD \$17,575,700.

This massive sapphire was mined in Ratnapura, Sri Lanka, in 1926, but the original size and weight was not recorded. The Macan Markar gem dealership in Colombo, Sri Lanka, acquired the sapphire. In 1937, the company sold it to [Lord Nuffield](#) of England. He made his money as an automobile designer and manufacturer. His motives for buying the gem are still unknown. The sapphire largely disappeared from view, until it suddenly came up for auction in 2014.



Front and back of Blue Belle sapphire in its white gold setting. Images courtesy of Christie's Auction House.

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Hayli Gubbi volcano erupts Nov. 23

For the first time in recorded history, or at least in the last thousand years, the Hayli Gubbi shield volcano in Ethiopia has erupted. It sent up a nearly 15-kilometer cloud of ash into the sky, which drifted over the Arabian Sea.

There have been no casualties reported, but many villages have been covered by ash what is causing starvation for farm animals.





A shield volcano is the result of repeated lava flows that create broad gentle slopes the resemble a shield lying on the ground. It is rare for them to generate big ash plumes. They are the largest volcanoes on Earth.



Modified Map of Ethiopia By Sadalmelik - Own work, Public Domain, [Wikimedia CC](https://commons.wikimedia.org/wiki/File:Map_of_Ethiopia.jpg)

Workshop Schedule

December 2025

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2 Lapidary 10-2 pm (RV) Silversmiths 6:30-9 (JB)	3 Lapidary 5-9 pm (JGB)	4 Faceting 6:30-9 pm (PC)	5	6 Lapidary 10 am-4 pm (JL, EC)
7	8	9 Lapidary 10-2 pm (RV) Silversmiths 6:30-9 (DA)	10 Lapidary 5-9 pm (CG)	11 Faceting 6:30-9 pm (RB)	12	13 Lapidary 10 am-4 pm (CG, KD) X-mas Party
14	15	16 Lapidary 10-2 pm (RV) Silversmiths 6:30-9 (JB)	17 Lapidary 5-9 pm (JGB)	18 Faceting 6:30-9 pm (DA)	19	20 Lapidary 10 am-4 pm (SJ, JC)
21	22	23 Workshop closed	24 	25 	26 	27 Workshop closed
28	29	30 Lapidary 10-2 pm (RV)	31 			

OLMC Membership Application

☐ New Membership

☐ Membership Renewal

☐ Individual **\$20**

☐ Family (2+ persons in the same residence) **\$30**

Benefits:

☒ Monthly Newsletter

☐ Newsletter advertisement: \$25 per year for members or \$55 for businesses

(Ten quarter pages per year over ten newsletters).

☒ OLMC online auctions

☒ OLMC field trips

*More information can be found at <https://olmc.ca>
You can also go on our Facebook page: [OttawaLapsmithMineralClub](#)*

Names(s): _____

Address: _____

City: _____ Province: _____

Postal Code: _____ Telephone: _____

Please specify your e-mail address to receive OLMC's newsletter:

Do you require a receipt? ☐

Yes

Payments are payable by **cash, cheque** to Ottawa Lapsmith and Mineral Club, or
E Transfer at treasurer@olmc.ca with the application form

Please mail your membership form and fees to:

Ottawa Lapsmith and Mineral Club

PO Box 57012, Ottawa 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: _____