



The Telephone City Crystal



The Brantford Lapidary and Mineral Society, Inc.

BLMS INC

NEWSLETTER

January 2008

2008 Executive

President :
Bill Boone
519-442-7543

Vice President:
John Moons
519-752-9756

Treasurer:
Karen Ward
905-525-0779

Secretary:
Kathy Campbell
519-442-6542

Show Chair – 2008:
Jenny Jones
519-750-0953

Newsletter Editor:
Roger Campbell
519-442-6542
roger.camp@sympatico.ca

Social:

Program:
Phyllis Czarnowski
519-752-8276

Field Trips
Gary Bechtel
519-756-8298

CCFMS Rep.:
Blair Batty
519-426-8409

Librarian:
Russ McCrory
905-389-6525

Workshop:
Brad McClelland
519-751-3141

Wishing Everyone a Year Filled With Joy, Good Health and Prosperity.

Please welcome our new executive with your support at our first meeting of the new year.

JANUARY MEETING

Program

A video: ' LIVING ROCK': An Introduction to Earth's Geology

Date: Friday January 18 2008

Time: 7:30 PM

**Place: Woodman Drive Community Centre
491 Grey St. Brantford, Ont.**



February Meeting – February 15 2008

I bring greetings from your newly elected president of the Brantford Lapidary and Mineral Society.

Happy New Year to all the club members, their family & friends. I would like to extend my heartfelt thanks to those who elected me for this position. Congratulations go to the executive for readily accepting their positions. It is my wish for renewed interest and attendance at our club meetings & activities. Your continued support is very much appreciated. Your input is valued, and it is hoped you would be willing to fill out a questionnaire that will follow in the next newsletter. It is only through your participation that we can make things more interesting.

One big event is booked for March 29th & 30th, 2008. It is only through your generosity, volunteering etc. that make it well advertised and such a huge success.

Looking forward to meeting many of you in the coming meetings.

**Thank you,
Bill Boone**



DECEMBER MEETING 2007 - Potluck Supper and Member's Sale



Great Potluck Supper



Ah come on, this is only my third piece!!!!



Our senior member Nellie and our new Pres. Bill



Susan takes advantage of member's sale to display her wood crafting hobby.

QUESTION?

If a collector of rocks is called a ROCKHOUND, why shouldn't one who does lapidary work on those rocks be called a LAPDOG? (via Chapparral Chatter 9/2000)

Unwritten Laws of the Land

Lockes Law: One day you are a peacock, the next day you are feather duster.

Lanigrens Law: Human beings are like tea bags. You don't know your own strength until you get into hot water.

"Life is easier than you think, all you have to do is: 1. Accept the impossible. 2. Do without the indispensable. 3. Bear the intolerable, and be able to smile at anything." (Barbara Johnson)



The Telephone City Crystal

The Brantford Lapidary and Mineral Society, Inc.

WORKSHOP

About Tumbling Grit

Abrasives used in the art of tumbling come in a wide range of grits, and in a lot of different materials. This can be confusing to the newcomer.

Here are some of the terms you'll need to know:

***Grit** refers to the size of the particles, and as with sandpaper, the smaller the number, the larger the particles are. 60/90 -- which means a range of particle sizes between 60 and 90 grit -- is the coarsest grit generally used in tumbling, though 46/70 is available. 500F or 600F is generally used for the prepolish step, although some people use 800F or even finer for prepolish. (The "F" means "and finer".)

***Mesh** is a little more precise, referring to the screen through which a particular grit must pass. The term mesh is more commonly used for abrasive sizes 1000 and higher. For practical purposes, however, grit and mesh can be considered the same thing: 1000 grit = 1000 mesh.

*A **micron** is 1/1000 of a millimeter. About the only time you'll come across this measurement is with certain polishes, like Linde A and Linde B. In the case of microns, the larger the number, the larger the particles -- the inverse of how the terms grit and mesh work. Therefore, 120 grit equals about 100 microns, whereas 220 grit equals 70 microns and 600 grit equals 25 microns.

***Silicon carbide** is the basic abrasive used in tumbling. It is very hard -- Mohs 9+ -- and each time it breaks, a new sharp edge is exposed. This makes it long-lasting and quite effective.

***Boron carbide** serves much the same function as silicon carbide, except that it is slightly harder. This makes it the abrasive of choice for tumble-polishing corundum, although it is both expensive and messy to use.

***Aluminum oxide** is a synthetic material most often used as a prepolish and polish, although you can get it in coarser grades. The advantage of aluminum oxide (or alumina) is that it breaks down to a more rounded edge than does silicon carbide, which is what you want in the finer stages of processing a batch. Aluminum oxide is Mohs 9.

***CPP tumble polish** is an effective and economical aluminum oxide-based polish for barrel tumblers. If you just want one polish for most stones, this is the one to go with.

***Cerium oxide** is a natural polishing compound particularly useful for materials that are between Mohs 5 and 7, like glass and quartz. It is more effective in a rotary tumbler than in a vibratory one, as the intense vibrations of the latter break the grains down very quickly.

***Tin oxide** is 99.9% chemically pure and finely graded in the submicron size. It's recommended as a final polish in flat lapping and for metal/stone combinations. (Cont'd)

*[Chrome oxide](#) is the medium of choice for getting a good polish on jade, lapis lazuli, rhodonite, peridot, and other colored stones.

*[Pro Polish](#) polishes a wider variety of gemstones than any other material, working like Tin Oxide but at half the price. It is composed of finely-graded aluminum oxide in the 1/2 micron range. *Polishing Tip: works best in a thin slurry.*

*Vibra-Dry is a proprietary prepolish and polish compound specially designed for vibratory tumblers. It requires no liquids, which makes inspection and cleanup very easy, and is excellent for soft, fragile, or difficult-to-polish materials. Vibra-Dry is also reusable. Processing cycles are somewhat longer than with polishes that use a liquid medium.

*Sapphire powder -- also sold as Linde A (0.3 micron) and Linde B (0.05 micron) -- is a synthetic polish manufactured from aluminum oxide. It has a hardness of Mohs 9, and is therefore most useful for polishing very hard and/or difficult materials (but not corundum).

*Diamond powder is the hardest abrasive available -- Mohs 10. It's also probably the most expensive, and is generally sold by the caret! However, if you need to get a good polish on corundum, diamond powder is probably the most effective way to go. (via Mama's Minerals)

How to Tell if You've Found a Meteorite

So, you think you've found a meteorite. . . but how can you be sure?

Every year, hundreds of people bring us rocks they've found in the desert, wondering if they might be from space. First, we inspect them visually for a few tell-tale signs that they did not form here on Earth:

Weight -- Unusual density is one of meteorites' more characteristic features. [Iron meteorites](#) are generally 3.5 times as heavy as Earth rocks of the same size, while [stony meteorites](#) are about 1.5 times as heavy. However, iron ores are also exceptionally heavy.

Appearance -- Of all the rocks that fall from the sky, stony meteorites are by far the most common, making up 85-90% of all meteorites. They can be tricky to identify, as they more closely resemble terrestrial rocks than do the iron meteorites. However, if your specimen contains quartz, it is not a meteorite. Quartz is produced on the earth at plate margins; other planetary bodies like asteroids do not have this kind of setting and do not produce quartz crystals.

Meteorites are rarely round or aerodynamically-shaped, and virtually never have a bubbly appearance or small holes in the exterior or interior. The surface of a meteorite is generally black or rusty brown (not shiny silver, unless [the fusion crust has completely disintegrated](#)), very smooth and featureless, and has shallow depressions or cavities resembling thumbprints (called *regmaglypts*, like those you can see in the [Canyon Diablo meteorite](#) pictured). Here are some simple tests you can use to determine if a suspected meteorite is worth sending to a testing laboratory for analysis:

The first test your potential meteorite will have to pass is the magnetic test. 99% of all meteorites are attracted to a strong magnet on a string (including stony meteorites, which contain 3-30% nickel). However, so are metal artifacts and iron ore. This is a simple test that will rule out [tektites](#) and many terrestrial rocks. Keep in mind, though, that exposing a meteorite to a magnet can corrupt or change its natural magnetic field -- possibly destroying research information, if your find is important. If you're concerned about this, use a compass needle to determine if your specimen is magnetic. (Cont'd)





The Telephone City Crystal

The Brantford Lapidary and Mineral Society, Inc.

Next, the streak test. Iron ore is the most common meteor-wrong; magnetite (lodestone) is very magnetic, and hematite is mildly magnetic. Fortunately, both of these minerals will leave a distinctive mark on a streak plate. Take your suspected space rock and rub it vigorously on the unglazed side of a ceramic tile (or the underside of your toilet tank cover, if you don't have a tile). If it leaves a grey-black streak (like a lead pencil), what you have is almost certainly magnetite; if the streak is red-brown, you likely have hematite. If there is no streak, your specimen has passed the second test!

Finally, the most complicated and definitive test you can do in your home -- a test for nickel. All iron meteorites and nearly all stony meteorites contain some nickel; a chemical test for nickel is definitive for meteorites 99% of the time. You should be able to buy all the chemicals you need at a hardware store (though you might need to get dimethylglyoxime from an online source). Be careful! Wearing gloves and goggles, dissolve about 1 gram of your suspected meteorite in heated chloridric acid. Add a few drops of nitric acid, then a few drops of citric acid, then add ammonium hydroxide. Filter the solution if it's cloudy. Then add a few drops of dimethylglyoxime. A nice bright cherry red color will indicate the presence of nickel.

If your rock passes all these tests, there's a good possibility you have a meteorite!

GEM NAME DERIVATIVES

Diamond: the name comes from the Greek word *adamas* meaning 'invincible,' and this alludes to the hardness and durability of diamond.

Sphalerite: it derives from the Greek word *sphaleros* meaning 'misleading'. Since it is variable in colour and appearance, it can be hard to identify and is often confused with other minerals.

Hematite: takes its name from the Greek word *haem* for 'blood' which describes the colour of its powdered form.

Fluorite: from the Latin word *fluere* meaning 'to flow' – a reference to its low melting point.

Calcite: from the Latin word *calx* meaning 'lime'.

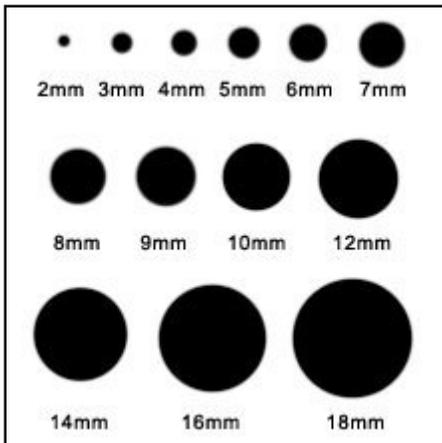
Chrysocolla: from the Greek words *chryos* for 'gold' and *kola* for 'glue,' because chrysocolla resembles other materials, including borax, used as a flux in soldering gold in ancient times.

Azurite: its name derives from the Persian word for blue, *lajward*.

Apatite: the name was created in Germany from the Greek word *apatao* meaning 'to deceive' because of its many colours create a confusion with other gemstones such as beryl and olivine.

Bead Sizes and Beads Per Inch

Sometimes, even veteran beaders have a difficult time visualizing exactly what an 8mm bead looks like and how many will fit into their latest creation. Here are some resources that may help:
BEAD SIZE CHART



Bead Size	Approximate Number of Beads Per:					
	1"	7"	16"	24"	32"	36"
2mm	8.25	57	203	200	265	288
3mm	8.25	57	132	200	265	288
4mm	6.25	43	100	150	200	225
5mm	5	35	82	124	160	180
6mm	4.25	28	67	100	132	153
7mm	3.5	24	57	85	114	126
8mm	3.25	22	50	75	100	112
9mm	2.75	19	45	67	90	101
10mm	2.5	18	40	60	80	90
12mm	2	15	33	50	66	72
14mm	1.75	13	29	43	56	63
16mm	1.5	11	25	38	50	54
18mm	1.25	10	23	34	45	51

Stones 'N Bones Museum

223 N. Christina St. Sarnia, Ontario, Canada

Phone: (519) 336-2100

The museum has an international collection of some 6,000 objects artistically displayed in a gallery setting. Fluorescent minerals, fossils, minerals, gemstones, artifacts, shells, butterflies, insects, antlers, horns, dinosaurs and huge shark jaws are all on permanent display. We suggest you allow a couple of hours to fully view our 10,000 square foot museum. Tourist information and a small gift shop are also provided on site.

When is the museum open?

Stones 'N Bones is open Thursday thru Sunday and Holiday Mondays from 10am to 5pm during the months of January to December; however, for the months of July and August we are open every day from 10am to 5pm.

Is there a cost?

Admission is \$6 for adults and \$3 for children 12 and under. A museum pass that is good for one full year of unlimited visits, plus 50% off the price of a regular visit to seven other area museums is available for \$20 single or \$30 for a family. The museum pass also entitles you to 10% off in all museum gift stores.

From Canada, we can be reached via Highway 402 using Exit 1 (Front Street) to downtown Sarnia.



The Telephone City Crystal

The Brantford Lapidary and Mineral Society, Inc.

COMING EVENTS

March 1-2 : 15th Annual Peterborough Gem, Mineral, and Fossil Show

Sat. 10-5, Sun. 10-5; The Evinrude Centre, 911 Monaghan Road, Peterborough, Ont.

Admission: \$3 for adults, children 12 or under free & must be accompanied by an adult

Directions: From Highway 115 at Peterborough, take the Parkway to Lansdowne St., then East 4 blocks to Monaghan Rd., then north 1 block. Or travel west to Highway 7 (Lansdowne St.) into Peterborough, turn right at the 6th traffic light onto Monaghan Rd. then north 1 block.

Contact: Mark Stanley at 705-639-2406 or markstanley@sympatico.ca

Website: <http://www.rockandfossil.com/index.htm>

March 29-30: 36th Annual Brantford Lapidary & Mineral Show

Sat. 10-5, Sun. 10-5; Paris Fairgrounds, 139 Silver St. Paris, Ont.

Features: Dealers from across Canada, Crystals/Minerals/faceted Gems, Fossils, Fluorescent Minerals, Hands-on Educational Learning, Gold and Silver Working, Bead Supplies and Demonstrations, Industrial Archeology Exhibits, Jewellery & Giftware, Equipment/Tools & and Related Supplies, Silent Auction, Free Parking, Wheel Chair Accessible, Hot Lunch Available

Admission: Adults \$3, Children \$1

Contact: Jenny Maracle-Jones at 519-750-0953 or turtlefeathers@brant.net

April 10-11: 35th Rochester Mineralogical Symposium

Website: <http://www.rasny.org/MinSymposium/MineralSymp.htm>

April 18-20: 23rd Annual Gem, Mineral and Fossil Show of the Mineralogie de Montreal

Fri. 3-10, Sat. 10-7, Sun 10-5 ; Center Pierre-Charbonneau 3000 Viau St. (Viau Metro), Montreal, Quebec.

Admission: \$8, children 6-12, \$4

Contact: 514-955-3758 or 514-332-9028 for more details.

Website: <http://www.salonminerauxmtl.com/>

April 25-27: Toronto Gem and Mineral Show and Sale presented by 3416798 Canada Inc.

Fri. 4-9pm, Sat. 10-7, Sun. 10-5; Oriole Community Centre, 2975 Don Mills Rd. West, North York

Features: Precious and semi-precious gemstones, fine quality jewelry, amber, stone beads Unique worldwide crystal specimens, tools and everything to create your own works of art!

Admission: Adults \$8, Seniors \$7, 12-18 \$6, under 12 free with adult

Contact: Ohannes Bedrossian 514-989-9800 torontogemshow@gmail.com

Website: www.torontogemshow.com

Members of Toronto-area gem and mineral clubs will demonstrate jewelry making, faceting And lapidary arts. Unknown gems will be identified by qualified gemologist from the Canadian Gemological Association.

MEMBER NEWS

Member Janice Peshke was featured in our local Expositor with her photo and examples of her handcrafted jewelry. Janice will be teaching Wire and Beadwork on Sat. Feb.16, Jewelry Intermediate on Sat. Feb. 23 and Jewelry Pendants on Sat. March 1 at Tollgate Tech. through general interest programs through the Grand Erie District School Board.

www.gedsb.net/genint. Congratulations to you Janice for promoting our hobby.

Club History – Chapter 5

In 1972 or 73, the club held its meetings at Echo Place School, Colborne St. until Dec. 8, 1978, when we attended at the Woodman Park Community Centre. It was in 1973 that the Club put on their first Show, 'Carnival of Colour', Apr 14 and 15, at the Lions Park Auditorium and continued there until 1977.

The 1977 April Show, 'Carnival of Colour' we had a couple of surprises, one being that the Club made a presentation of an onyx desk set, to the Brantford Mayor, Charles Bowman. This large desk set was made by Claire Fisher, and was kept at the Council Chambers at the Brantford City Hall. This year was the Centennial year, and the club gave out Centennial Mugs to guests at the Show. Also of note, this year at the Show, Brantford had on display the 'Rolling Stone'. In order to receive the 'Rolling Stone' five members of our club had to go to Thunder Bay to attend a regular meeting to claim it. This 'Rolling Stone' was large specimen of amethyst, attractively mounted on a white shield. The five ambitious members were Louise Dawson, Claire Fisher, Bob Douel and Rudi and Phyllis Czarnowski who went one weekend in March in Bob Douel's van. I must say, word got around quickly that we had the the 'Rolling Stone', because the Gemini Club of Burlington were at our show in full force that year to claim it for themselves. An added note would be that the 'Rolling Stone' had been waiting in Thunder Bay for almost 2 years. The Ontario Government made Amethyst the official stone of Ontario on May 8, 1975. All Clubs had a vote at the time as to what mineral we would like to represent Ontario. This year the club also presented a permanent display of Minerals to the Echo Place School in appreciation of having our monthly meetings at this school for several years. On May 13, 1977 the Club was incorporated, and changed the word Club to Society. That year, like other years Club displays were set up at the two Libraries, and Barry Clarkson set one up at the Paris Library, and Lawrence and Nellie Thompson set a display at the Valley Heights Secondary School. These attractive displays always create interest in our Club and hobby. (To be cont'd)

REMINDERS

1.

A reminder about our workshop at Woodman Community Centre for members to use our lapidary equipment. The workshop is open each Wednesday from 7:00-9:00 p.m. for a fee of \$8.00.



2. Remember to make use of our excellent library. Russ would be more than willing to help you find a book or magazine about any topics that you might want to research or to help you identify a fossil or mineral that you have collected.



3. **Dues is overdue!**

4. The Club is still planning to have goldwire lessons taught by Bev Anderson in Jan., however it is not yet confirmed. (Details at the Jan. meeting.)

5. Our Show will soon be here. Contact Jenny Jones if you have any questions about the show.