



The Brantford Lapidary and Mineral Society, Inc.

NEWSLETTER

October 2007

Executive

President : Phyllis Czarnowski 519-752-8276

Vice President: Garv Bechtel 519-756-8292

Treasurer: Ernie Edmonds 519-583-1957

Secretary: Maddie Lavender 905-634-1758

Show Chair – 2007: **Jenny Jones** 519-750-0953

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

Social: **Deborah Jackson** 519-770-4502 **Program:**

Field Trips and CCFMS Rep.: **Blair Batty** 519-426-8409

Librarian: **Russ McCrory** 905-389-6525

Workshop: **Brad McClelland** 519-751-3141

PROGRAMS

October Meeting: October 19, 2007 Time: 7:30 p.m. Location: Woodman Drive Community Centre 491 Grey St., Brantford Speaker: Mr. Jamal Amin Topic: Hawaii

This is also our awards night for the University of Waterloo students who received our scholarships. We again committed to give \$1000 each to two students in second year and two students in third enrolled in Earth Sciences.

Future Meeting November 17 – Topic : Landslides

Our Club needs volunteers.

If you are interested in being a part of the executive for 2008 please

contact Deborah Jackson (519-770-4502). Deborah and Susan Wakeley have agreed to be the nominating committee and will be phoning for your support to form an executive for next year. We are all looking forward to

great new year of interesting programs, fun activities, another successful show, exciting field trips and warm fellowship with old friends and new members.

Please Note: The Club is presently planning a bus trip to the Gem and Mineral Show at the University of Waterloo on Sunday Nov. 4 2007. The cost of the bus will be absorbed by the club funds. Please contact Phyllis C. at 752-8276 or Ernie Edmonds at 519-583-9457 if you are interested in going to the show.









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Upcoming Events

Oct 13-14 Sat. 10-6, Sun 10-5 Kingston Lapidary and Mineral Club presents Gem Storm 2007. Portsmouth Olympic Harbour, 53 Yonge St. Kingston, ON Admission: \$3 per person, \$5 per couple, children under 12 free with adult Contact: Les Moss 613-384-4439, <u>emoss@cogeco.ca</u> Website: <u>www.spaceclick.ca/klmc</u>



Oct 19-21

Toronto Gem and Mineral Show and Sale presented by 3416798 Canada Inc. Fri. 4-9pm, Sat. 10-7, Sun 10-5 Skyway Trade Centre, 65 Skyway Dr., Rexdale, ON near Hwy. 417 exit to the airport Features: Precious and semi-precious gemstones, fine quality jewellery, amber, stone beads unique worldwide crystal specimens, tools, and everything to create your own works of art! Admission: Adults \$8, Seniors \$7, 12-18 \$5, under 12 free with adult Contact: Ohannes Bedrossian (514) 989-9800 <u>torontogemshow@CANADA.com</u> Website: www.torontogemshow.com

Oct. 27-28

35th Annual Show of Rochester Lapidary Society, RAS Mineral Section Sat. 10-6, Sun 10-5 Monroe County Fairgrounds, Hylan Drive, exit off 390 Calkins Road, Henrietta (Rochester) NY Features: Mineral, Fossil, Gem, Jewelery ,Beads, Tools, Rough Stone and Lots more! Free kids Activities! Free Demonstrations! Contact: Ho;;is Heinzerling, (585) 343-5304, hheinzer@rochester.rr.com

Contact: Ho;;is Heinzerling, (585) 343-5304, <u>hheinzer@rochester.rr.</u> Website: <u>www.rochesterlapidary.org</u>

Nov 3-4

University of Waterloo Earth Sciences Annual Gem and Mineral Show Sat. 10-5, Sun 10-5. University Earth Sciences Museum, Waterloo, ON Features: This years theme is "Canadian Gold". Carving, minerals, gemstones, rocks, fossils Lapidary, jewelry, etc. As well there are Sunday afternoon lectures and activities for kids. Contact 519-888-4567 Website: <u>www.openhouse.uwaterloo.ca</u>

Nov. 2-4 "Heart to Hands Open House" Daily 10 –5 Fall Open House at Robert Hall Originals 138 Sugar Maple Road , St. George, Ont. Experience Ontario's Largest Rock/Mineral and Pewter Studio



Lapidary and Beading Supplier, Crystal and Mineral Specimens and Tons of Rock Tour the Pewter Studio to See How the Pewter is Hand-Crafted from Start to Finish



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Nov 10-11

36th Gemini Gem and Mineral Club of Burlington Gem and Mineral Show Sat. 10-6, Sun. 10-5 Show Mainway Recreation Centre, 4015 Mainway, Burlington, Ontario at the NE corner of Walkers Line and Mainway. Features Fluorescent mineral display, micro minerals, soapstone carving, sphere making,

Nov 17-19

Montreal Gem & Mineral 48th Annual Show Fri. 4-10, Sat. 10-7, Sun. 10-5 Hippodrome de Montreal (Blue Bonnets Race Track) Website: <u>www.montrealgemmineralclub.ca</u>

Faceting, silversmithing, kid's guarry and door prizes.



Nov. 24-25

London Gem and Mineral Show "Out of This Earth"

Sat. 9-6, Sun. 10-5 ; Special Events Bldg. 316 Rectory, Western Fairgrounds, London, Ont. Dealers, Demos, Prizes, Kids Activities, Auctions

Admission: Adults \$5, Children \$2 Website: www.gemandmineral.ca

Sept Meeting

Many thanks to Deborah Jackson for her program on Goldwire at the Sept. meeting.

Also thanks to all for the delicious lunch during the meeting.

A warm welcome to new members: Babs Kisiel-Pennell and Mary Lou Seiffert.

This editor would like to extend an apology to our new member George Dunn for omitting to include the club meeting address in the last Crystal. I am very sorry that you and your guests missed our Sept. meeting.



Deborah explains goldwire techniques

25 Years Ago

On Oct 15 1982, the general meeting was held at Woodman Community Centre and a program on 'micromounting the best way to view minerals' was presented by Peter Russell.



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WORKSHOP Goldstone

Goldstone is not a natural stone but man made. It can have a very beautiful effect if oriented properly. The same system is used as described for tigereye with a few possible exceptions. Do mark it under a good light for direction of sawcut. However do not rely on your marks too heavily. Mica flakes provide the chatoyancy and they are arranged within the piece in parallel form but there are also flowlines probably made by stirring the molten mixture and they are seldom straight. They may and often do change from slab to slab. Therefore special care has to be taken. A method to use in sawing slabs is to check each one as it is cut before the next is done. As soon as one begins to get a recognizable variation in chatoyancy take the piece out of the saw vise and reorient it before proceeding. occasionally in bad pieces this may have to be done after every second slab, though. just as occasionally one may saw the whole piece without having to re-orient. If one doesn't check after each slab one could wind up with the majority of slabs being improperly oriented which in Goldstone is a disaster. So the important point is to check often as sawing progresses to avoid disappointments later. Better yet is to watch for the flaw lines of the material when buying; If violent curvature exists in them the possibility of having good orientation is virtually impossible.

via The Canadian Rockhound

Did You Know?

Ice Age Ends Smashingly: Did a comet blow up over eastern Canada? Sid Perkins

Evidence unearthed at more than two dozen sites across North America suggests that an extraterrestrial object exploded in Earth's atmosphere above Canada about 12,900 years ago, just as the climate was warming at the end of the last ice age. The explosion sparked immense wildfires, devastated North America's ecosystems and prehistoric cultures, and triggered a millennium-long cold spell, scientists say.

At sites stretching from California to the Carolinas and as far north as Alberta and Saskatchewan—many of which were home to prehistoric people of the Clovis culture researchers have long noted an enigmatic layer of carbon-rich sediment that was laid down nearly 13 millennia ago. "Clovis artifacts are never found above this black mat," says Allen West, a geophysicist with Geoscience Consulting in Dewey, Ariz. The layer, typically a few millimeters thick, lies between older, underlying strata that are chock-full of mammoth bones and younger, fossilfree sediments immediately above, he notes.

New analyses of samples taken from 26 of those sites reveal several hallmarks of an extraterrestrial object's impact, West and his colleagues reported at the spring meeting of the American Geophysical Union in Acapulco, Mexico.

Samples from the base of the black mat yield most of the clues to its extraterrestrial origin, says Richard B. Firestone, West's coworker and a nuclear physicist at the Lawrence Berkeley (Calif.) National Laboratory. Some of the particles there are small, magnetic grains of material with higher proportions of iridium than are found in Earth's crust, he notes. Cont'd



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Also in the mat's base are tiny lumps of glasslike carbon that probably formed from molten droplets of the element. These lumps, as well as little spheres of carbon with a different microstructure, contain nanoscale diamonds formed under intense pressure. A host of unusual geological features, collectively known as Carolina Bays, hints at the cataclysm's location, says team member George A. Howard, a wetland manager at Restoration Systems, an environmental-restoration firm in Raleigh, N.C. Around 1 million of these elliptical, sand-rimmed depressions, measuring between 50 meters and 11 kilometers across, scar the landscape from New Jersey to Florida. In samples taken from 15 of the features, Howard and his colleagues found iridium-rich magnetic grains and carbon spherules with tiny diamond fragments similar to those found at Clovis archaeological sites.

The long axes of the great majority of the Carolina Bays point toward locations near the Great Lakes and in Canada—a hint that the extraterrestrial object disintegrated over those locales, says Howard.

Because scientists "haven't discovered a large, smoking hole" left by the event, the object that blew up in the atmosphere probably was a comet, says West. Heat from the event would have set off wildfires across the continent, the scientists suggest. The heat and shock from the explosion probably broke up portions of the ice sheet smothering eastern Canada at the time, they add. The flood of fresh water into the North Atlantic that resulted would have interrupted ocean currents that bring warmth to the region, and thick clouds of smoke and soot in the air would have intensified cooling across the Northern Hemisphere.

The inferred date of the event matches the beginning of a 1,200-year-long cold spell that geologists call the Younger Dryas, which in its first few decades saw temperatures in the Northern Hemisphere drop as much as 10°C.

Definition of Geology:

Geology is the study of the Earth, the materials of which it is made, the structure of those materials, and the processes acting upon them. It includes the study of the organisms which inhabit our planet. A very important part of geology is the study of how Earth's materials, structures, processes and organisms have changed over time.



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Crust

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The Brantford Lapidary and Mineral Society, Inc. Article Title: Larimar - Blue Pectolite By: Herman Dittrich



Barahona



At the begin of the century, the Catholic priest Miguel Domingo Fuerte Loren of Barahona sent a solicitude to the Treasury Department of the Dominican Republic to obtain the privilege of exploration and exploitation of the mine. However, for whatever reason, he never succeded and the " blue stones " remained in oblivion. What he was going to exploit was "Blue Pectolite".

Pectolite, formerly denominated "ratholite", is an acid silicate hydrate of calcium and sodium. Of ample diffusion in the world, we can find deposits of this mineral, known as outcrop, at very distant places of the planet: The United States (Michigan, Arkansas, New Jersey, California), Canada, England (Scotland), India, Austria (Tyrol), among others. All have in fact been results and consequences of this volcanic Earth activity, many million years ago. The only locality where Larimar or blue pectolite appears on the terrestrial crust, is the province of Barahona, in the south-western region of the Dominican Republic. In 1974 Norman Rilling, a member of the American "Peace Corps" in company of the Dominican Miguel Méndez, found blue pectolites at the coast of Barahona. On following the vestige upstream of the Bahoruco river, they achieved to reach in the outcrop at "Los Chupaderos" in the section "Los Checheses " about 10 kilometers southwest of Barahona, in the south-occidental region of the Dominican Republic.

In 1975, the exploitation is being initiated by means of little methodical techniques. 1988 sees a conflict with relation to contract of exclusivity between the "Cooperativa de Producción y Trabajo Extractadores y Procesadores de Larimar", who had under their responsibility the exploitation of the mine of Barahuco, and the private company " Larimar consortium S.A." (COLARSA).

The "Asociación Nacional de Artesanos" (National Association of Artesans), spear headed by their president Jorge Caridad opposed this contract, because of its strong character of monopolization, by means of mobilizing the intervention of different entities. As a result, at present, the mine is exploited by the "Coopertiva de Extractores de Larimar" and the "Asociación de Extractores de Larimar", and the raw material flows through the channels of open commercialization.

Nevertheless, this mine will not give Larimar forever. What will happen to this National Stone of the Dominican Republic (see http://www.larimarmuseum.com)? The question remains unanswered, since Larimar has not been found anywhere else.



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What Is A Geode?

The mysterious earth-shaped geodes have long challenged geologist to explain how they are formed. Geodes are a variable phenomenon and, therefore, many theories exists to explain how they are created. The term geode is derived from the Greek word *Geoides* which means "earthlike."

A geode is a sphere shaped rock which contains a hollow cavity lined with crystals. A geode which is completely filled with small compact crystal formations such as agate, jasper or chalcedony is called a nodule. The only difference between a geode and a nodule is that a geode has a hollow cavity, and a nodule is solid.

How Geodes Are Created

Geodes begin as bubbles in volcanic rock or as animal burrows, tree roots or mud balls in sedimentary rock. Over time, the outer shell of the spherical shape hardens, and water containing silica precipitation forms on the inside walls of the hollow cavity within the geode. The silica precipitation can contain any variety of dissolved minerals, the most common being quartz, but amethyst and calcite are also found.Over a period of thousands of years, layers of silica cool, forming crystals of different minerals within the cavity. Different types of silica cool at varying temperatures, thus creating layers of different types of mineral crystals. Each geode is unique in composition and can only be truly discovered when cracked open or cut with a rock saw. The size and formation of crystals and different shades of color within the crystals make each geode special. The rough exterior of the geode gives no indication of the secrets held within its core. The anticipation never fades for those who curiously collect buckets full of round geodes and eagerly expose the secrets of each individual sphere-shaped rock. The most prized contain rare amethyst crystals or black calcites. Where Can You Find Geodes?

Geodes are found throughout the world, but the most concentrated areas are located in the deserts. Volcanic ash beds, or regions containing limestone, are common geode locations. There are many easily accessible geode collecting sites in the western United States, including California, Arizona, Utah and Nevada. The state of Iowa is also has geodes, in fact, the geode is their state rock.

The finest concentration of geode sites in Southern California is in Riverside and Imperial counties. The most famous of these sites is called the <u>Hauser Geode Beds</u>, which are located at Wiley Well in the northern region of Imperial Valley, CA. In the same area there is also the <u>North Black Hills Geode Beds</u> and <u>the Cinnamon Geode Beds</u>



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Club History continued......(Chapter 3)

In 1966 the Club was well on their way for providing good programs, including some of their own club members, and special classes were well attended when instructions on geology and crystallography were presented. Lapidary classes were also going on. On Feb. 25,26 the Club had a display at the Sportman's Show held at the Brantford Armouries. Hedy and Paul Hobberlin brought along their their fossils, and it really helped to make the show a success. At this time, the realization came to Hedy that the students at the Institute for the Blind might want to handle the crystals, minerals and fossils. No amount of talking or reading can describe adequately a fossil or a mineral, but these children, with their sensitive fingers soon comprehended the shapes and delicate lines that we 'sighted' people often miss. Several sessions were arranged with the children, dealing with Earth History and early life. About forty-five students attended this new venture.

In 1967, several of the programs were presented by members, Dennis Thorn, Verna and Allan Schneider, Ernie Edmonds, Jean Erskine to name a few. This year a field trip was planned for the May 20th weekend to Toledo, Ohio, It was a well planned and well attended field trip. The Club rounded off the year with a bus trip to the Royal Ontario Museum and was introduced to the new Mineralogical Section. Along the way, the bus made a tour of the some of the streets that had their Christmas displays and lights on.

The Club is A Living Thing! The club is the body, The president, its tonque, The membership, its brains, The secretary, its circulatory system The treasurer, its heart, The historian, its memory, The editor, its arms The board, its reflexes The committee and helpers, its nervous system. We need to live, please volunteer for a part!



Hardly worth mentioning....

Did you know that one way to distinguish a rock from a mineral is: a mineral always has a definite chemical formula, while a rock doesn't. So the next time you pick up something you think is rock, look carefully on the backside... If you see a formula – it is not a rock. Via Gates Rockhound bulletin.