

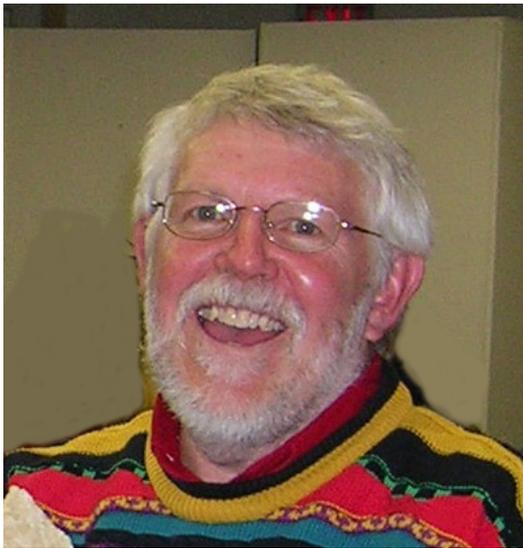


The Rockblast

The Kitchener-Waterloo Gem and Mineral Newsletter

April 2008

President's Message



A big “Thank you” to **Peter Russell** for stepping in at the last minute to be our featured speaker in March. It was an unexpected opportunity to hear about the Highgate Mastodon mystery, and Peter did not disappoint us. As one member commented after the meeting, he really spins a ‘good yarn’! Some of you who came to hear about the importance and value of thin sections heard a very different story, I’m sure.

And yet another “Thank you” to **Jeffrey Winkler** for agreeing to do the electronic advertising for our Club Show on Saturday, May 3rd. We still need lots of volunteers to help set up and run the show, so please be prepared to sign up at the April meeting. Please think about contributing a display for the show - perhaps a fossil collection, fluorescent mineral display, carving demonstration, or anything that might appeal to kids or adults.

Our guest speaker in April is Tony Steede of the Walker Club in Toronto. He is an expert on Mont Saint-Hilaire, the site of the largest variety of minerals in Canada. His talk is entitled “The Magic Mountain”. In lieu of an honorarium, the Club is treating Tony to a meal at Café Bon Choix, 100 Regina Street, across from the Waterloo Community Arts Centre. You are invited to join us for a social time over a meal, and/or desserts, between 5 and 7 pm.

A box full of slabs were donated to the Club recently. We’ve swapped them with London mineral dealer Tim Jokela for 10 thumbnail specimens, and we’ll use the thumbnails in our monthly raffle.

We have such a great club with so many willing hands. Your input and suggestions are always welcome and help keep our club active and interesting. --*Gary Partlow*

Upcoming Meetings

All meetings start at 7:00 PM for trading specimens at the Waterloo Community Arts Centre, 25 Regina St. South, Waterloo. Typical schedule:

7:00 - 7:30 PM: trading and socializing

7:30 - 7:45 PM: a "mini-talk" about some aspect of the hobby

7:45 - 8:00 PM: announcements

8:00 - 8:15 PM: monthly raffle

8:15 - 9:00 PM: featured talk

April 2 2008: Tony Steede from the Walker Mineralogical Club in Toronto will speak about "The Magic Mountain -- Mont Saint-Hilaire, Québec". Bring your specimens from this location! Join the speaker for dinner beforehand, at Café Bon Choix, 100 Regina Street, across from the Waterloo Community Arts Centre, 5 PM - 7 PM.

May 7 2008: **John** and **Tim Elliott** will speak about "The Dundas Quarry - its geology, history, and minerals". Bring your best Dundas specimens to show to everyone!

June 4 2008: Howard Plotkin from the University of Western Ontario will speak about "The Dresden Meteorite". Bring your meteorite specimens!

Upcoming Events

On **March 29-30 2008**, the Brantford Lapidary & Mineral Society the 36th Annual Lapidary and Mineral Society show (the Paris show) at the Paris fairgrounds, 139 Silver Street, Paris, Ontario. Adults \$3, Children \$1. 10 AM - 5 PM both days. For more information, contact Jenny Maracle-Jones at turtlefeathers@brant.net.

On **April 10-13 2008**, the 35th Annual Rochester Mineralogical Symposium takes place in Rochester, New York. For more information, visit <http://www.rasny.org/MinSymp.htm>.

On **April 18-20 2008**, the Club de Minéralogie de Montréal presents their 23rd Annual Gem, Mineral, and Fossil Show at the Centre Pierre_Charbonneau, 3000 Viau Street, Montréal. (Viau Métro) Friday, 3 PM - 10 PM; Saturday 10 AM - 7 PM; Sunday, 10 AM - 5 PM. Adults \$8, Children 6-12, \$4, Parking \$10. For more info, visit <http://www.salonminerauxmtl.com>, or call (450) 964-8472 or (514) 353-0101.

On **April 25-27 2008**, the 16th Annual Toronto Gem and Mineral Spring Show and Sale takes place at the Oriole Community Centre, 2975 Don Mills Road, West, North York, Ontario. Friday 4 PM - 9 M, Saturday 10 AM - 7 PM, Sunday 10 AM - 5 PM. Adults \$8, Seniors \$7, Kids 12-18, \$6, under 12 free with adult. For more information, contact Ohannes Bedrossian at (514) 989-9800 or e-mail torontogemshow@canada.com.

On Saturday **May 3 2008** our club hosts the Kitchener-Waterloo Gem and Mineral Show at the Waterloo Community Arts Centre (aka the "button factory"), 25 Regina St. S., Waterloo, 10 AM - 4 PM. Rocks, minerals, gemstones, jewelry, fossils, meteorites. Free admission. Free rocks for kids.

On **July 25-27 2008**, the 3rd Annual Toronto Gem and Mineral Summer Show and Sale takes place at the Leaside Gardens Arena, 1073 Millwood Road, East York. Adults \$8, Seniors \$7, Kids 12-18, \$6, under 12 free with adult. For more information, contact Ohannes Bedrossian at (514) 989-9800 or e-mail torontogemshow@canada.com.

On **July 31-August 3 2008**, the [45th Annual Bancroft Gemboree](#) will take place in Bancroft. For more information, call (877) 410-1513.

On **September 13-14 2008** the Scarborough Gem and Mineral Club presents their 40th Annual Show, 2467 Eglinton Ave. E., Scarborough, Ontario. Saturday 10-6, Sunday 11-5. Adults \$3, Children \$1. For more information, contact scarbgemclub@lycos.com.

On **October 10-12 2008** the Michigan Mineralogical Society hosts the 64th Annual Detroit Gem, Mineral, Fossil, and Jewelry Show, South Macomb Community College Expo Center, Building P, 12 Mile Road and Hayes Road, Warren, Michigan. Friday 9 a.m. - 7 p.m, Saturday 10 a.m. - 7 p.m., Sunday 11 a.m. - 5 p.m. Adults \$7, Seniors \$4, Children \$3. For more information visit <http://www.michmin.org/show/>. This is the largest show within a 4-hour drive of Kitchener-Waterloo, well worth a visit.

On **October 25-26 2008** the University of Waterloo Earth Sciences Department hosts the Annual Gem and Mineral Show, University of Waterloo Earth Sciences Museum, Waterloo, Ontario. For more information contact Peter Russell at (519) 888-4567, extension 32469.

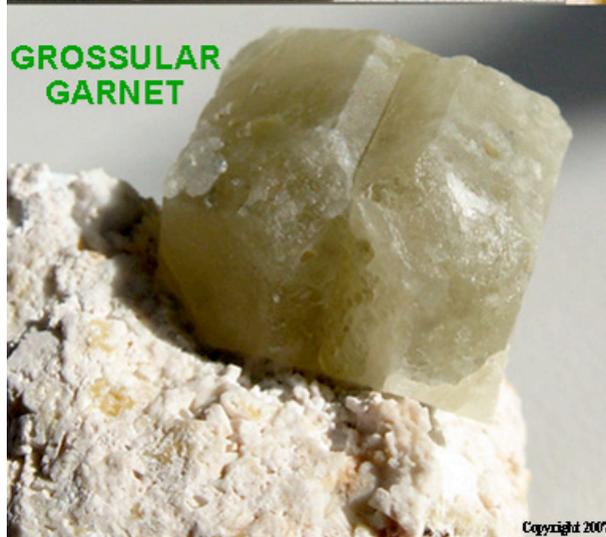
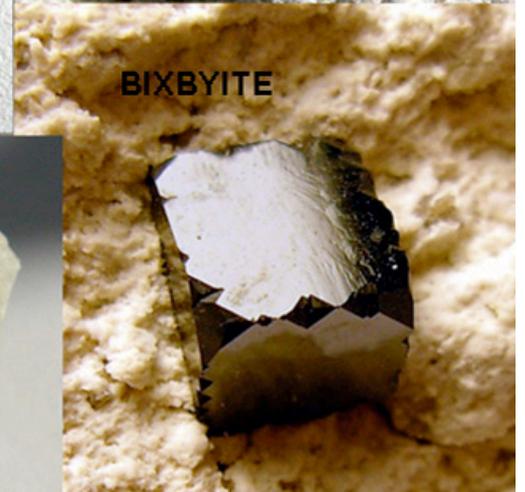
Rhyolite Treasures of Utah

by André Mongeon

Granitic magma cools to form several different types of rock, each with essentially the same composition: quartz, feldspar, mica and possibly a minor amount of a few other minerals. The textures, however, are different. Slow cooling produces granite with larger crystals. Very rapid cooling produces glass-like obsidian with no time for crystals to form. In between is rhyolite which has very small crystals. Occasionally gas bubbles get trapped in rhyolite as it forms resulting in pumice stone, sold in drug stores for foot care.

When granite cools there can be water, odd minerals and rarer elements (like beryllium, chromium and vanadium) that are not incorporated into the main rock. These “leftovers” also cool and can form crystals in whatever space is left in the granite. As the water is trapped inside near molten rock, it is under pressure and can reach temperatures that can melt many minerals, providing a (hydrothermal) solvent of sorts. As cooling continues, minerals like topaz can form and can be found lining (miarolitic) pockets where the leftovers were trapped. The water, having long disappeared, leaves only these crystals to prove it was once there.

Rhyolite is often a very drab fine-grained rock without very many interesting features. But because rhyolite is a volcanic rock, it is possible for it to be subjected to further alteration from nearby recurring volcanic activity. Such is the case of the rhyolites of Juab and Beaver Counties in Utah. Hot, solution bearing volcanic gases passed through



The RHYOLITE
TREASURES OF UTAH
Juab & Beaver Counties

the rhyolite and some interesting crystals grew in some pockets. Most notable is bixbite, a rich purple-red beryl coloured by manganese, found few other places on earth. Also found there is bixbyite, a rare iron manganese oxide that forms into amazing shiny black cubes with notches on the edges. The names are confusing as the two minerals were named for the same person, Maynard Bixby. To avoid confusion, many people use the name red beryl instead of bixbite. Red beryl is rarely cut into gemstones. Crystals are very rare to begin with, most of them are very small and they are usually so included it is difficult to cut them without breakage.

Also of note from these locations is topaz, which often forms nicely shaped crystals but with many inclusions. Although spessartine (a manganese containing garnet) is found there, it is another Utah garnet that is more interesting, a green grossular garnet. This is a bit unusual for two reasons. First, manganese (present in many minerals there) is absent from the garnet. If present, the grossular would be pink. Second, grossulars don't usually form in volcanic environments, they usually form in other types of metamorphic rocks. This garnet is therefore quite unusual.

The rhyolites of Utah bear many unique treasures made by volcanic activity. While red beryl can be expensive, the others mentioned are quite more affordable and would make fine additions to many types of collections.

Kamacite Discredited; Fluorapatite Renamed

In 2006, the Commission on New Minerals, Nomenclature and Classification discredited a large number of mineral names and changed others. For example, Kamacite (formerly, with Taenite, one of the main constituents of iron meteorites) was discredited and is now to be referred to simply as Iron. Calciovorbothite is now Tangéite. See <http://www.geo.vu.nl/users/ima-cnmmn/GQNminerals.pdf> for more details.

The latest edition of Fleischer's *Glossary of Mineral Species* also has a number of other changes. Fluorapatite is now Apatite-(CaF) and Chlorapatite is now Apatite-(CaCl). Ferroaxinite is now Axinite-(Fe), and Manganaxinite is now Axinite-(Mn). Fluorapophyllite is now Apophyllite-(KF) and Hydroxylapophyllite is now Apophyllite-(KOH).

The most surprising change is that Hancockite is now called Epidote-(Pb).

The official list of mineral names can be obtained from <http://www.geo.vu.nl/users/ima-cnmmn/MINERALlist.pdf>.

University of Western Ontario Astronomers Spot Meteor

A network of cameras trained on the sky in southern Ontario spotted a meteor on the evening of March 5, 2008. Wayne Edwards, a postdoctoral student in the Physics and Astronomy department at Western, said, “We tracked this one to an altitude of about 24 kilometres so we are



pretty sure there are at least one, and possibly many meteorites, that made it to the ground.”

If it hit the earth, the meteorite would have landed in the area of Parry Sound. So far, no one has reporting finding any fragments.

For more information, including a video of the meteor and maps indicating where fragments may have fallen, visit

http://communications.uwo.ca/com/media_newsroom/media_newsroom_stories/western_astronomers_on_hunt_for_meteor_20080307441590/ .

Unusual Meteorites Found in Antarctica

According to a recent [article at the BBC News website](#), scientists have found a pair of unusual meteorites in Antarctica that resemble no other meteorite ever found. The meteorites are known as GRA 06128 and GRA 06129, and were discovered in the Graves-Nunataks region of Antarctica. Ryan Zeigler of Washington University in St. Louis, Missouri, say, “It's unique - it's the only meteorite that has this much plagioclase (a form of feldspar) of this composition.”

Chip Shearer of the University of New Mexico suggested the meteorites may have come from Venus, but other planetary geologists disagree.

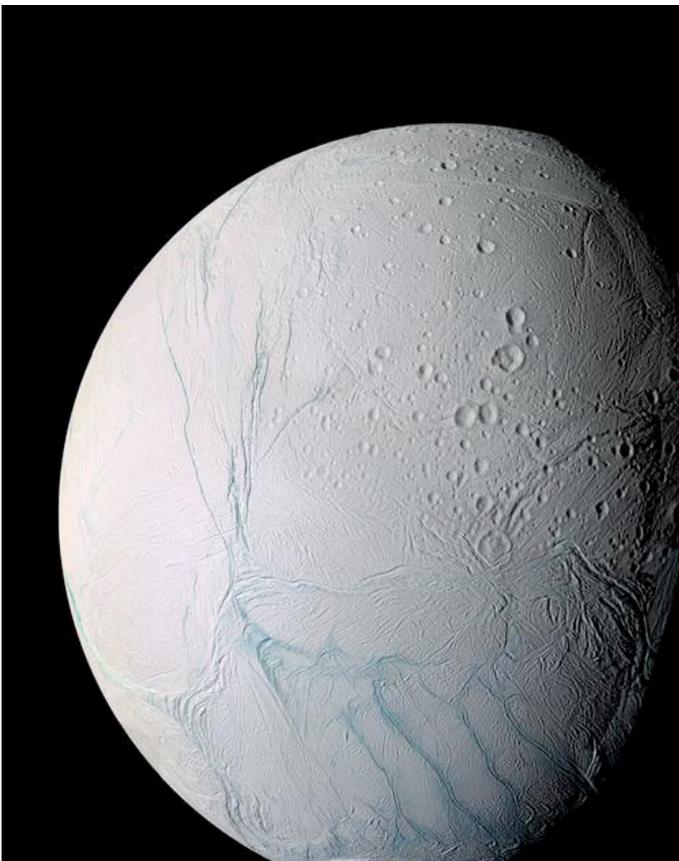
Spacecraft Flies Through Geyser on Enceladus

Cassini, a multinational spacecraft, recently flew through a “geyser” erupting particles on Saturn’s moon Enceladus.

The March 12 flythrough detected carbonated water and some organic molecules, as well as higher-than-expected temperatures.

Hunter Waite, a scientist at the Southwest Research Institute in San Antonio, Texas, compared the chemistry to that of comets.

For more information, go to http://www.news.com/2300-11397_3-6235783.html



Kitchener-Waterloo Gem and Mineral Club

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