

CRYSTALS AND CABS Newsletter of the Capital Mineral Club **Concord**, New Hampshire

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May 2010

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		Capital Mineral Club News		
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Calendar of Events 4 Editors Note: The deadline to get info to me for publication will be the 3 rd Saturday of every month • My e-mail address: steffenh@comcast.net		them and why a large number of caves of the region are historically significant from pre- Revolutionary times to the present. This months refreshments will be provided by John McCrory. Also thanks to Edna Whitmore for bringing refreshments.		
<u>CMC Website</u> : www.capitalmineralclub.org Website designed and maintained by:		2010 MEMBERSHIP DUES ARE DUE! If you haven't paid your dues this will be your last newsletter and you will no longer be a member of the club.		
 Website designed and maintained by: Robin Edgewood-Reece & Steffen Hermanns If submitting material to the newslet- ter the editor requests that it be sent in Microsoft Word format. This will help in getting the newsletter to- gether. 		Welcome new club members: Larry and Kathleen Welker, Cornish, NH Joe Maloney, Honeybrook, PA John and Sharon Walsh, Taunton, MA Robert and Bonnie Herlihy, Franklin, NH Thomas Sibley, Nashua, NH		

<u>**Mineral Clubs - Meeting Dates**</u> <u>Saco Valley Gem and Mineral Club</u>: 3rd Thursday of each month at the Tin Mt. Conservation Center, Albany, NH – 7:00 PM www.sacovallevgmc.com

Keene: 1st Saturday of each month at Keene State College, Science Bldg. Room SCIC 126, Keene, NH – 7:00 PM

keenemineralclub.50webs.com

Nashua: The Nashua Club is in a period of suspension of many of its traditional activities, but a core group of members plans to continue with some field trips and group participation at the Gilsum Rock Swap.

North Shore (MA): 3rd Friday of each month, St. Paul Episcopal Church, Washington St., Peabody, MA – 7:30 PM Boston Mineral Club: 1st Tuesday of each month, Harvard University Geological Lecture Hall, 24 Oxford St., Cambridge, MA -7:30 PM www.bostonmineralclub.org

Southeastern NH Mineral Club: 2nd Wednesday of each month, St John's Methodist Church, 28 Cataract Ave., Dover, NH – 7:00 PM senhmineralclub.org

Presidential Gem and Mineral Society: 2nd Friday of month at 7:00 P.M. North Country Education Services Center; 300 Gorham Hill; Gorham, NH



These are the minutes of the March 6th, 2010 meeting of the Capital Mineral Club. The meeting was held at the Audubon Society Building on Silk Farm Road in Concord, New Hampshire. Meeting called to order at 2:07 pm by president Robert Whitmore, there were 23 members present, 2 guests

Secretary's report: A motion was made by Carlos Gristani to accept the March minutes as posted in the newsletter seconded by Gordon Jackson, the membership passed the motion.

Treasurers report: A motion to accept was made by Martin Kippley and seconded by Carlos Gristani the membership passed the motion.

Correspondence: Champlain Valley Show Flyers for July 24-25 2010.

Old Business: There are still perky boxes available see Martin Kippley.

Martin Kippley made a motion to donate two of our old display cases to the fossil guy that presents at the show each year, seconded by Don Dallaire, motion passed the membership.

Martin Kippley made a second motion that the remaining four cases would be available for club members if there is more interest than the 4 we will draw names, seconded by Carlos Gristani, passed by the membership.

New Business: The nominating committee has come up with the following candidates for the following offices:

President: Charles Forsberg; Vice President: Martin Kippley; Treasurer: Donald Dallaire BOD: Scott Higgins; Auditor: Peter Cram; Secretary: Steffen Hermanns A motion was made by Edna Whitmore to accept the slate as presented, Dana Jewell seconded, membership accepted.

Bob Whitmore talked about possible dates available for a Palermo trip, Field Trip to Gordon Jacksons

New memberships recommended by the board for approval, motion made by Bob Whitmore, seconded by Gordon Jackson, motion passed the membership.

Larry and Kathleen Welker, Cornish, NH; Joe Maloney, Honeybrook, PA; John and Sharon Walsh, Taunton, MA; Robert and Bonnie Herlihy, Franklin, NH; Thomas Sibley, Nashua, NH

Door Prizes: Thank you to Mike Undercofler and Carlos Gristani for donating door prize specimens. Winners were: Kathy Welker, Terry Crowell, Thomas Sibley, Tony Howd

Meeting adjourned at 2:40pm. The video presentation on the Stewart Tournaline Story was brought in by Martin Kippley.

Respectfully submitted Steffen Hermanns Secretary

> Capital Mineral Club Concord, New Hampshire

Emeralds - the birthstone for May

The story of gemstones is as old as the hills, in which they were formed, millions of years ago. Gems were used for weapons, as well as for adornment. Jewels ranging from seashells to emeralds have been found in graves, dating back at least 20,000 years. To be considered a gem, a substance has to be beautiful, usually in terms of color and the way it reflects light. It also has be rare and durable. Gems are either minerals, which have a regular internal structure and fixed chemical composition, or organic, which are produced by plants and animals.

Deposits of gemstones have been found in almost every part of the world. They are dependent on particular geological conditions, so some areas have a heavier saturation, of many different gemstones, and other areas have few.

The emerald is a variety of Beryl. The emerald is one of the more valuable gemstones and is the better known variety of Beryl. The color of Beryl varies greatly, it may be colorless (goshenite), white, green (emerald), yellow (heliodor), pink (morganite), red (bixbite, which is very rare), and blue (aquamarine). Dark blue beryls are available, but they are actually light colored beryls that have been treated with radiation.

Legend says beryl was used to ward off demons and evil spirits. Ancient literature notes that Pliny used powdered beryl to cure eye injuries. It is said to protect travelers from danger and to treat disorders of the heart and spine. Other legends about beryl indicate it was used to promote cheerfulness and marital love, to retard laziness and maintain youthfulness. Golden beryl is said to make one sympathetic and increase sincerity. Emeralds were used as amulets to ward off epilepsy in children and thought to cure diseases of the eye. Folklore suggests these stones will improve memory, intelligence and enhance clairvoyance thus helping to predict future events. They are also worn to enhance love and contentment. Cleopatra prized emeralds above all other stones. The emerald is the only stone, besides topaz, that is listed in all ancient birthstone tables. This gem is suggested as an anniversary gift for the 20th and 35th anniversaries and as an alternate stone for the 55th.

The emerald is a brittle stone and have a lot of natural flaws and in some instances the gems are treated to hide the flaws by using oil and in recent times stones have been fracture-filled to enhance the stones and hide many of the flaws, and some gems have been irradiated to remove the flaws. Emeralds should never be immersed in an ultrasonic cleaner or subjected to steam cleaning, and you should never wash them in soap and water. You should also be careful of extreme temperature changes as it may cause internal cracks.

Fine emeralds are even more valuable than diamonds. The Incas and Aztecs of South America regarded them as a holy gemstone. The oldest known finds were once made near the Red Sea in Egypt. These gemstone mines already exploited by Egyptian Pharaohs between 3000 and 1500 B.C. and later referred to as "Cleopatra's Mines" had already been exhausted by the time they were rediscovered in the early 19th century. Emeralds from Zimbabwe are among the oldest gemstones in the world. They were already growing 2600 million years ago.

What makes the emerald green? Pure beryl is colorless. The color does not occur until traces of some other element is added. In the case of emerald it is traces of chromium and vanadium. These elements are concentrated in quite different parts of the Earth's crust, so the emerald should not exist at all. But, during intensive tectonic processes such as orogenesis, metamorphism, emergences and erosion of the land, these contrasting elements found each other and crystallized out to make one of our most beautiful gemstones.

Colombia is at the top list in terms of countries in which fine emeralds are found. It has about 150 known deposits. The best known are Muzo and Chivor, where emeralds were mined by the Incas in pre-Columbian times. In economic terms the most important mine is at Coscuez which produces three-fourths of Colombia's emeralds. There is a rare form of emerald that comes from the Muzo mining district of Colombia, it is known as "Trapiche emerald" and it is characterized by star-shaped rays that comes from its center in a hexagonal pattern. These rays are caused by black carbon impurities.

There are many varieties of emeralds and some of them are:

Colombian Emerald - usually of exceptional quality.

Brazilian Emerald - generally a lighter color than the Colombian.

Zambian Emerald - quality emerald from Zambia

Trapiche Emerald - these have black impurities in the form of a six-rayed star.

Star Emerald - usually refers to the Trapiche Emerald but may also refer to the rare occurrence of an emerald displaying asterism. Cat's Eye Emerald - an emerald exhibiting cat's eye effect. Cat's eye emeralds are very rare, and only exists in paler emeralds.

The transparent emeralds are usually faceted into gems and the translucent material is cut and polished into cabochons and beads. Emeralds have been synthetically made since 1848 but have only recently been available on the market. These synthetic emeralds are so similar to natural stones that they are virtually indistinguishable by normal methods. There is also a lot of fake emeralds on the market and they are other stones, such as fluorite, prehnite, dioptase, chalcedony and green tourmaline, that have been dyed and passed off as real emeralds.

So beware when purchasing an emerald, go to a reputable jeweler.

Pearl Nadeau



Steffen Hermanns

Editor

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Keep on **ROCKIN'** in the Free World

Email: steffenh@comcast.net

WE'RE ON THE WEB WWW.CAPITALMINERALCLUB.ORG

2010 Club Dues are due please send your dues to Steffen Hermanns

Capital Mineral Club Meetings & Events			Gem & Mineral Shows
MAY 1, 2010 Board of Directo Club Meeting: Speaker: Refreshments:	Ernst Kastning Stories: Spelea John McCrory	12:00PM2:00PMSmall Caves with Big n History in New EnglandMay 1-2 — TOPSFIELD, MASSACHUSETTS: 47th annu show, "New England Mineral & Gem Show"; North Shore Rock & Mineral Club; Topsfield Fairgrounds, Rte. 1; Sat. 9-5 Sun. 10-4; retail and wholesale dealers, door prizes, exhibits, mineral and fossil identification, gold panning, geode crackin spin-a-gem, mineral sifting; contact Joe Weisberg, 29 Justin S Lexington, MA 02420, (781) 861-6653; e-mail: nsrmc@verizon.net; Web site: www.nahant.com/nsrmc	
JULY 9-11, 2010Poland Mining Camps Field TripSEPTEMBER 4, 2010Board of Directors Meeting:12:00PM		12:00PM	May 7 - 9 — Augusta, ME - 21st Maine Mineral Sympo- sium, The Senator Inn (Best Western) Western Ave., Au- gusta, ME, Friday afternoon mineral dealers open, Evening Talk at 7:00pm, Saturday 9am - 4:15pm, Talks on Minerals;
Club Meeting: Speaker: Refreshments:	TBD Steffen Hermann	2:00PM	exhibits; publication sales; benefit auction and dealers in the evening, Sunday Field trips to mineral collecting sites. Contact woodrow.b.thompson@maine.gov 207-287-7178 June 26-27 — GILSUM, NEW HAMPSHIRE: Show, "Gilsum Rock Swap and Mineral Show"; Town of Gilsum;
OCTOBER 2, 2 Board of Directo Club Meeting: Speaker: Refreshments:		12:00PM 2:00PM	Gilsum Elementary School, Rte. 10; Sat. 8-6, Sun. 8-4; free admission; more than 60 dealers, buy, sell or swap, displays; contact Rob Mitchell, Gilsum Recreation Committee, P.O. Box 76, Gilsum, NH 03448, (603) 357-9636; e-mail: gilsum- rocks@gmail.com
NOVEMBER 6 Board of Directo Club Meeting: Speaker: Refreshments:	/	12:00PM 2:00PM	August 28-29 — CONCORD, NH: 47th Annual Gem, Mineral and Jewelry Festival– Capital Mineral Club, Everett Areana, Concord, NH, Sat 9am to 5pm, Sun 10am to 4pm, www.capitalmineralclub.org, steffenh@capitalmineralclub.org