MICROMOUNTERS OF NEW ENGLAND NEWSLETTER

The MMNE was organized on November 8, 1966 for the purpose of promoting the study of minerals that require a microscope

No. 308 September, 2010

Current Meeting
Saturday September 18
Trinity Lutheran Church
Chelmsford, MA

Map and driving directions are on last of this newsletter

For information regarding **MEETING CANCELLATION** due to inclement weather,
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bassmeister_2000
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Welcome to the September edition of the Micromounters of New England Newsletter!

Well summer may be still in full swing according to the astronomically gifted, but to me, September, school and crisp air coupled with diminishing daylight scream "FALL! Happily, fall is not a season to be dreaded. In addition to the most colorful of seasons and lower humidity, we all can look forward to the monthly MMNE meetings.

Our kickoff meeting is Saturday, September 18. The friendly mineral competition will feature New England Babingtonite. Later in this issue please find the resurrected article written originally by Paul Young and revised by Lee Hitchings. I have retyped this into the modern ages, added some updated information and added color photos of some nice specimens. It is not unnoticed by me that while the article touts Massachusetts as a hot bed of **Babingtonite**, our super photos are all from the 101/101A road cut in *New Hampshire*.

If you have information or photos regarding Blueberry Mountain in Woburn, please bring them to the September meeting for inclusion in a future article on this historic locality. Specimens for photography, old photos that can be loaned for scanning and stories of trips are all requested.

Well our summer symposium presenters are at it again. In this month's edition of Rocks & Minerals, **Gene Bearss** has a letter to the editor regarding the closing of the famous Sanford vesuvianite locality, also known as the Webster Prospect. Well know also for garnet and scheelite, this site has been posted by the new owners because of the liability of the excessive use by ATVs.

Tom Mortimer is also a featured presenter for his great New Hampshire Minerals interactive display. Tom carted up the whole kit and showed it to the world. As we all know, the physical display interfaces with his website MindatNH.org which continues to improve with more specimen galleries of New Hampshire minerals.

The 2010-2011 newsletter volume will also feature an ongoing series on mineral collecting by our own Jim Warner. In addition to being a fan of Palermo minerals, Jim also has a weakness for Anatase. Stay tuned as we wrap up editing, formatting and finalizing the accompanying photos.

See you all on September 18 with your favorite Babingtonites!

The ***Newsletter*** is the official publication of the Micromounters of New England (MMNE). The last by-laws revision was May 16, 2009. The MMNE is a member of the Eastern Federation of Mineralogical and Lapidary Societies (EFMLS) (http://www.amfed.org/efmls) and the American Federation of Mineralogical Societies (AFMS) (http://www.amfed.org). Material from the *Newsletter* may be copied in other rock and mineral publications if credit is given to the author and the *Newsletter* and permission has been obtained from the author. If there are questions regarding copying contact the editor. The club address is c/o the Secretary. Meetings are held monthly, September through May, except for December, and usually on an informal basis in July. Meeting sites may change and will be posted in the *Newsletter* as far in advance as possible. Visitors are welcome to attend all meetings. Bring a microscope and light source if you have one.
DUES are $12/year for a single person and $15/year for a family membership, levied on a calendar basis. The family membership includes two adults and all children under 18 living at the same address. One copy of the *Newsletter* will be sent on a family membership.

The Complete Guide to Micromounts
by Milton Speckels

Thanks to the gracious permission of Gemguides (http://www.gemguidesbooks.com/), we have been allowed to scan in this great book from the 1960's for sharing among the club. We have permission only for the members to access this file. I strongly request you not share it with non-members as that is not part of the agreement with Gemguides. Download the Speckels Book in the Members Only area of the MMNE. Be aware that this Acrobat PDF file is about 37 meg in size and will take days to download if you don't have broadband access.

Access to the member's area is still with the following account:
login: 2009member password: optic

Tom Mortimer continues to impress people with his New Hampshire mineral display. After a shopwing at Rochester in April, then our clubs annual symposium, he set up the display at the Capital Mineral Club show in August.

Tom writes:

"Here's a photo of my display at the 2010 CMC show. I displayed some recent NH species analytical results and new additions to the NH species display and web site."

Babingtonite

First discovered in 1824 in Arendel, Aust-Auger, Norway, Babingtonite was named for Dr. William Babbington (1757-1833), Irish physician and mineralogist. Babingtonite is typically found in veins cutting granitic pegmatites and diorites, cavities and vugs in mafic volcanic rocks and gneisses, skarns.

Massachusetts is one of the few areas in the world where thus usually jet black mineral with a brilliant submetallic luster is found. Although it occurs in a few other states and several foreign countries, the finest quality Babingtonite in the world has come from this state where there are more localities for this rare and most unusual mineral. The enactment of a bill designating Babingtonite at "The Mineral of the Commonwealth of Massachusetts" was passed through the legislation and signed by Governor Ed King in 1981. It took a lot of hard work buy the Association of Massachusetts Mineral Clubs wo had endorsed the legislation since 1975. It had the full backing of the entire 14 mineral clubs as well as Harvard notables Clifford Frondel and Cornelius Hurlbut, Jr., as well as Carl Francis, Curator of the Mineralogical Museum and Pete Dunn, Museum Specialist in the Department of Science at the Smithsonian Institution in Washington, DC. It was also endorsed by the Massachusetts Department of Natural Resources and many other experts. The mineral Babingtonite had long attracted the attention of mineralogists by reason of its attractive appearance, complex crystallography, and limited distribution. It was first observed in 1824 by French Mineralogist A. Levy in a collection of Norwegian minerals. Levy named it in honor of Dr. Babington who was a founder of the Geological Society of London and was also President of that society in 1822.

BABINGTONITE Ca2(Fe,Mn)FeSi5O14(OH)
Locality: Rt. 101 - Rt. 101A road cut, Amherst, NH
Specimen Size: 5 mm crystal group
Environment: Zeolite vein in Gneiss rock
Field collected: Tom Mortimer
Image courtesy of Tom Mortimer and MindatNH.org

Members of the Rhodonite group

BABINGTONITE	Ca2(Fe++,Mn)Fe+++Si5O14(OH)
LITHIOMARSTURITE	LiCa2Mn2HSi5O15
MANGANBABINGTONITE	Ca2(Mn,Fe++)Fe+++Si5O14(OH)
MARSTURITE	NaCaMn3Si5O14(OH)
NAMBULITE	(Li,Na)(Mn,Ca)4Si5O14(OH)
NATRONAMBULITE	(Na,Li)Mn4Si5O14(OH)
RHODONITE	(Mn++,Fe++,Mg,Ca)SiO3
SCANDIOBABINGTONITE	Ca2(Fe++,Mn)ScSi5O14(OH)

Babingtonite is a triclinic pinacoidal mineral, usually jet black with a submetallic luster, although greenish and brownish black crystals have also been observed. It is a calcium iron silicate. In general, as a low temperature mineral, it is mostly found in cavities in trap rock, gneisses and granite. Its distribution throughout the woprls has been recorded at such places as in the Baveno quarries at Lago Maggiore, Italy; the iron mines at Devonshire, England; Sutherland, Scotland; the Yakugi Mine in Japan, Herbornseelbach, Nassau, Germany; Three Kings Island, New Zealand; Poonah, India and Arendal, Norway. In the United States it is notable at the zeolite localities of Paterson, New Jersey.

The mineral was first reported from Massachusetts in the vicinity of Athol by Charles U. Shepard of Amherst College in the 1930's. Excitement was aroused in 1931 when Dr. H.O. Hastings collected some specimens from a locality near Holyoke, presumed to be on Mount Tom. Dr. Hastings donated his finest specimens to the Harvard Museum, and later led Dr. Palache to the site of his find where an abundance of specimens were collected. When Dr. Palache was Curator of Harvard Museum, he led a group of his students to some of the Westfield trap rock quarries. It was here that one of the finest specimens of

Babingtonite was found. After removing a great deal of calcite from the specimen it was found to contain deep green Prehnite and crystals of Babingtonite over one half inch in length.
Blueberry Mountain in Woburn is another old-time locality for the mineral. (Developed into an industrial park, collecting is now off limits) The rocks at this locality consist largely of granodiorite which have faulted against pre-Cambrian gneisses. The gneiss is exposed in the eastern part of the quarry where most of the Babingtonite is found.
The frequent discovery of Babingtonite in Massachusetts stems from the fact that New England has always had a number of professional mineralogists, trap rock flows, sills, and dikes which are the most favorable places to search for this mineral.
There are now more than 16 occurrences of Babingtonite that have been recorded in the commonwealth, some of which are still accessible to collectors. Information on accessibility changes so often that it should be noted that most localities are closed and should be checked out by the collector before proceeding to or entering these localities.
Massachusetts Babingtonite Localities
Deerfield – Cheapside Quarry
Hardwick – Quabbin Aqueduct, Shaft #10
Holyoke – Mount Tom Quarry
Peabody – Bourbon St.
Reading Tow localities adjacent to the 128 / 28 clover leafs.
Westfield – Lane trap rock Quarry
West Roxbury – working quarry
Woburn – Blueberry Mountain
Woburn – 93N north of the 128N exit.

References:

Athena.org, Babingtonite reference
Carpenter, A.B. (1959) Boston Mineral Club Program Book
Hitchings, L. (1988) Micromounters of New England monthly newsletter
Levy, A. (1824) Annals of Philosophy, 2nd Series
Mindat.org, Babingtonite reference and photos
MindatNH.org, Babingtonite photos
Palache, C. (1932) American Mineralogist 17:295-303
Richmond, W.E. (1937) American Mineralogist, 22:290-300
Young, P. (1985) Boston Mineral Club Program Book

If you have information or photos regarding Blueberry Mountain in Woburn, please bring them to the September meeting for inclusion in a future article on this historic locality.

September Mineral Competition: Babingtonite

Babingtonite :
Photo Copyright © Scott M. Whittemore 2005
Locality: Route 101/101A road cuts,
Amherst, Hillsborough Co., New Hampshire, USA
Field of view ~ 2 mm

Babingtonite : Ca2(Fe,Mn)FeSi5O14(OH)
Photo Copyright © 2010 Peter Cristofono
This image is copyrighted. Unauthorized reproduction prohibited.
Locality: Route 101/101A road cuts,
Amherst, Hillsborough Co., New Hampshire, USA
2 mm black crystal. Field collected by
Bob Janules. P. Cristofono photo.
This photo has been shown 49 times
Photo added: 24th Jan 2010

Household Mineralogy

by Andrew A. Sicree

Minerals and rocks in the home

We live in a world of plastic and steel. Apart from those household items that have their origin in plants (wood and cotton) or animals (wool), most of the things we use every day originate from a hole in the ground. Plastics come from petroleum, steel from iron ore, wallboard from gypsum from the burning of coal, and computer chips come from quartz sand. The list goes on. All of these items are derived from highly processed minerals.

Our ancestors lived in a world of stone and wood – they were perhaps more familiar with the raw minerals and rocks that they used in everyday life. But still today, we have minerals around the home, minerals and rocks that are used with a minimal amount of processing – typically little more than cutting or crushing and mixing with other materials. Let's go on a geological field trip around the typical home.

Scoria

The "lava rock" sold for use in gas barbecue grills is typically a basaltic scoria. Heated stone evens out the grills heat and the vesicles in the basalt help to catch grease falling from grilled food.

Pumice

Pumice is a volcanic rock – it really is a volcanic glass. Pumice makes a good abrasive and blocks of the stone are used to scour dead skin from calloused feet. Pumice is also found in Lava brand soap – this soap is a good hand cleaner precisely because it takes off skin as you use it. It is definitely not a beauty soap!

Graphite

Pencil lead is made of the mineral graphite, admixed with some clay minerals. And, as pencils are common household items, so graphite is, too. But another household use for graphite is as a dry lubricant for locks. We use a small tube of graphite powder to lubricate the wheels of our sons' Cub Scout Pinewood Derby cars.

Chalk

Chalk is a calcium carbonate rock formed from deposits of the carbonate scales of marine phytoplankton. Blackboard chalk is a big use for this soft white rock. Around the home it can be found in children's sidewalk chalk and in toothpaste, where it serves as a mild abrasive (chalk has Mohs hardness of 4, your teeth have a hardness of about 5, so it won't scratch your teeth.)

Slate

Slate is a very fine-grained metamorphic rock that lends itself to being cut into flat plates. Schoolhouse chalkboards were classically made of slate (although artificial "blackboard" materials have taken over in many school). Household uses of slate included slate roofs. A properly installed and maintained slate roof can last 100 years, compared with a 20-year life span for asphalt roofs. Because it is non-conductive, slate was formerly used as backboards for household circuit breakers. Slate circuit boards will have been replaced in any house with modern wiring, but the old slate circuit boards may still be hanging on the basement walls.

Slate is used in the bed of better-quality billiards and pool tables. It makes the pool table very heavy, but gives a very flat and stable surface that will not warp with changing humidity.

Vermiculite

Vermiculite, an expandable mica, finds a variety of uses in the home. Vermiculite is a sheet silicate mineral with water molecules between its layers. Upon heating, the interplanar water boils to a vapor and puffs up the vermiculite crystals in much the same manner as popcorn pops.

In many old houses, expanded vermiculite has been used as a thermal insulation material. Typically, single crystal flakes about 0.25 inches across are expanded and the puffed up granules are poured or blown into spaces between the walls. Expanded vermiculite is inexpensive, nonconductive, and fireproof – an ideal insulating material. Unfortunately, vermiculite insulation

got a bad rep when it was discovered that vermiculite from a major producer – W. R. Grace's mine in Libby, Montana – contained very unhealthy levels of asbestos. Although many homes have been remediated, houses still have asbestos-containing Libby vermiculite hidden in their walls. It is important to recognize that vermiculite itself isn't a health hazard.

Vermiculite can be spotted around the home in plant potting mixes (as those silvery or golden flakes), in kitty litter, and in gasoline spill clean-up kits.

Coal

Coal, of course, has been popular for home heating for more than 150 years. Many houses still heat with coal, although the advent of automatic coalers make shoveling coal into the furnace a thing of the past for most householders. Many automatic coalers require "pea" (13/16" – 9/16") or "buckwheat" (9/16" – 5/16") sizes, so the coal cellar full of baseball-sized rocks is also a thing of the past. Although coal produces about 50% of our country's electricity, Americans are becoming less and less familiar with coal. Each year, I'm amazed at the fact that few of my geology students recognize coal, even though I teach geology in Pennsylvania, a major coal-producing state.

Even if an older house is now heated with gas or electricity, one can still sometimes spot the metal hatches over the coal chute through which the deliveryman poured his load of coal. An overlooked chunk might still lurk in a dark, unswept corner of your basement.

Both anthracite (hard coal) and bituminous (soft) coal are used for home heating. Coal can also be found in some aquarium filters and water filters.

Kitchen countertops

Stone countertops for kitchens and bathrooms crop up in expensively-appointed homes. The custom stone industry sells a variety of "granites" and "marbles" but these are trade names, not geological terms. In general, the "granites" are silicate rocks while the "marbles" are carbonate rocks. Some stone, such as "Missouri Red Granite," really is granite. Other stones, such as "black granites," might really be gabbros, diorites, anorthosites, or even larvikites. Some stones sold as "granites," especially those with swirled patterns, are metamorphic gneisses. One can even find pegmatite veins running across some people's kitchen counters.

Countertop marbles can be true marble. Snow-white marbles are often preferred for bathrooms, for instance. Other stones sold as "marbles" include travertines and limestones. Green marbles may be serpentinites. Travertines are hot-spring deposits and often are very porous – usually these rocks must be coated with a plastic sealant before use. Fossiliferous limestones display interesting patterns from the cut-through brachiopods and gastropods that are commonly found in such stones. Fossil-bearing limestones from Pakistan are popular for use in stone bathroom sinks and stone urns and pillars. Clearly, any rock displaying well-preserved fossils cannot be a true marble.

Talc

Formerly, most baby powder was made from talc, the softest mineral. Often the bottle read "talcum powder." Concerns over exposing infants to trace asbestos and other mineral dusts resulted in the replacement of talc with powdered corn starch in most baby powders in use today.

Soapstone (massive talc) is used for side panels in some modern wood burning stoves manufactured in Vermont. The soapstone absorbs heat and radiates it more steadily than iron stove sides. For a similar reason one may find soapstone used to make boot warmers.

Hand-carved gemstone boxes, made of soapstone and sometimes inlaid with mother-of-pearl flowers, are popular gift items. Many of these are carved in India, Pakistan, or China.

Garnet

Garnets can be gemstones, but it is more common to find garnets at home in the form of garnet sandpaper. Some sandpapers were originally covered with grains of quartz sand but synthetic materials like aluminum oxide (the mineral corundum is aluminum oxide) are more commonly used today. Similarly, emery paper and emery boards for sanding fingernails utilize

synthetic or natural corundum (emery) as the abrasive. Garnet sandpapers are used for woodworking and have a distinctive orange color.

Mica

Muscovite mica, a silvery sheet silicate mineral, is found in a surprisingly wide range of household products. Crushed mica is used as a glitter in make-up products ranging from lipstick to blush to metallic fingernail polishes. Similarly, crushed mica is used in automobile paints to give a "metallic" flash to a car's paint job.

Boards made of compressed mica fragments are used as insulators in kitchen toasters where the support the electrical heating coils. Mica is ideal for this job because it is a non-conductor and is fireproof.

Sheets of mica called isinglass were used to make fireproof lampshades and employed in windows in wood burning stoves.

Feldspar

Crushed feldspar has been an abrasive ingredient in scouring powders such as Bon Ami – although its tendency to scratch plastic, vinyl, and metal finishes has made it decline in popularity.

Borax

Although many are not aware that it is a natural product, borax makes a good detergent. The borax in Twenty Mule Team Borax, a laundry detergent, is a naturally occurring mineral. As mined in places such as Death Valley, "borax" is a mixture of the mineral borax and other closely related sodium borate minerals.

Halite or salt

Salt is perhaps the oldest household mineral. It comes from either evaporate deposits near the sea ("sea salt"), or from underground mines as the mineral halite. The salt used in household saltshakers has typically been recrystallized and iodized, and it has some anti-clumping agents (such as sodium silicoaluminate) added to keep it free-flowing even in humid environments.

Rock salt is used to de-ice sidewalks and driveways in winter. This material is usually obtained from underground salt mines and the amount of processing is minimal.

Gemstones

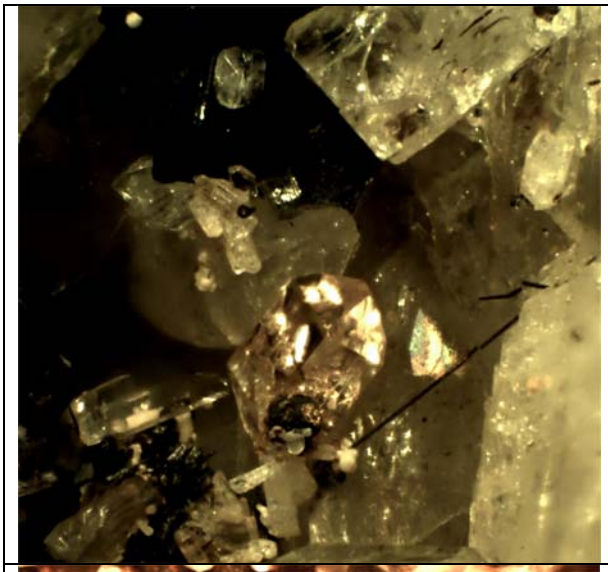
No discussion of household minerals would be complete without mentioning gemstones. Gemstones found in the typical jewelry box range from the rare (diamond, tanzanite) to the common (smoky quartz and amethyst). Gemstones usually come from among the harder minerals like corundum (ruby and sapphire), beryl (aquamarine and emerald), and topaz. Turquoise, opal, and jet are typically the softest and most easily damaged of the common gems. Garnets, lapis lazuli, citrine (yellow quartz), agates, and many other minerals and rocks can be found in jewelry as well.

Dr. Andrew A. Sicree is a professional mineralogist and geochemist residing in Boalsburg, PA. This ***Popular Mineralogy*** *newsletter supplement may not be copied in part or full without express permission of Andrew Sicree.* ***Popular Mineralogy*** *newsletter supplements are available on a subscription basis to help mineral clubs produce better newsletters. Write to Andrew A. Sicree, Ph.D., P. O. Box 10664, State College PA 16805, or call (814) 867-6263 or email sicree@verizon.net for more info.*

Emery

Emery in the form of emery boards and emery paper is a common enough household item and we are told that emery is just a variety of corundum (hexagonal Al_2O_3). This is true up to a point, but naturally-occurring emery is usually a mixture of minerals. The predominant mineral is corundum, which is quite hard (H = 9). But other minerals occur intimately mixed with the corundum in the emery. Iron-bearing spinel minerals such as magnetite (cubic Fe_3O_4) and hercynite (cubic $FeAl_2O_4$), and rutile (tetragonal TiO_2) contribute to making emery a dark gray to black material. Because these minerals are softer than corundum, the effective hardness of emery is something less than nine.

Formerly, the Greek island of Naxos was the most important source of this industrial abrasive, but the widespread manufacture of cheaper synthetic abrasives has cut into demand for emery.



As most of us know, Bill Henderson collected extensively in Italy. He has written and spoken (MMNE Symposium 2008) about the mineralogy evolving from Etruscan smelting.

Among many notable mineralogists both professional and amateur, Bill collected with Italian General Robert Allori. On one of their journeys they collected volcanic ejectum at a locality believed to be known only by the General at the time.

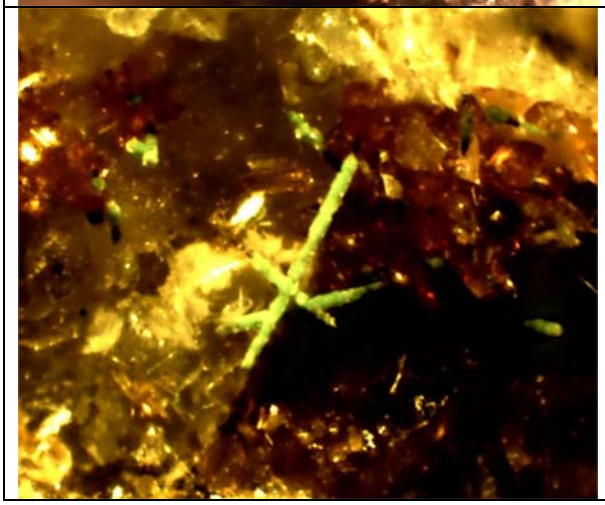
In this region of Italy, Viterbo, Lazio, Italy there are many interesting minerals to be found and discovered.

Location of Vetralla in Italy

Robert Allori was very kind in sharing his knowledge and expertise with Bill, and now Bill has continued that level of geological generosity by donating a flat of volcanic ejectum to the MMNE.

Later in this newsletter please read further information about Roberto Allori.

(Photos Top Left: Zircon, Center Left – Sanidine)



To your left is a photo of some strangely colored acicular crystals. This was found while perusing a box of material in the club giveaway piles. Location is Palermo #1, donating the material were Anna and Bob Wilkens.

The color reproduction here is not the best.

On a bed of childrenite I found these baby blue colored crystals. Width of the photo is about 4 millimeters.

Could it be vivianite stained strunzite?

Alloriite : (Na,Ca,K)26Ca4[Cl6|(SO4)6|(Al6Si6O24)4]

Roberto Allori

A 0.5 mm crystal of Alloriite from the type locality at Mount Cavalluccio, Sacrofano, Italy.
Specimen and photo: Knut Eldjarn. Photo Copyright © Knut Eldjarn - This image is copyrighted. Unauthorized reproduction prohibited. **Special thanks to Knut for his permission to use this photo.**

Alloriite : (Na,Ca,K)26Ca4[Cl6|(SO4)6|(Al6Si6O24)4]

Locality: Mt Cavalluccio, Campagnano di Roma, Sacrofano Caldera, Rome Province, Latium, Italy

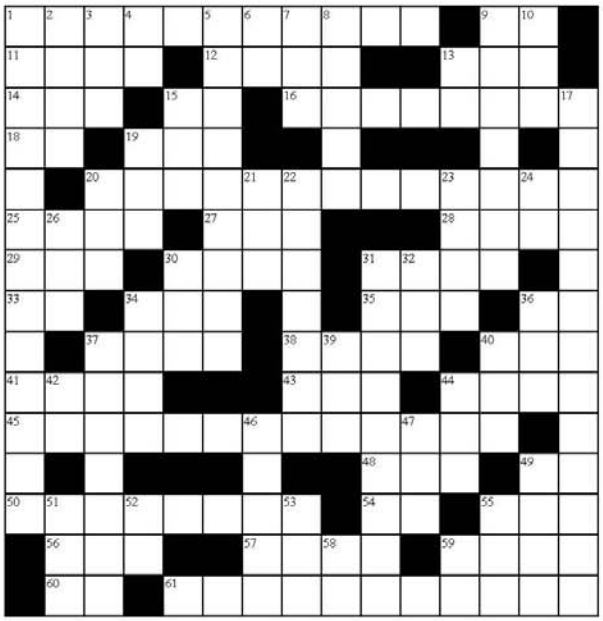
Alloriite was named after its discoverer: Roberto Allori.

A member of the cancrinite group and related to afghanite, the crystal structure for each shares a similar tetrahedral framework.

A great, free guide to Italian Type Minerals is available online at:
http://www.socminpet.it/Uploads/Pubblicazioni/ITM09_sel.pdf

Crystal Matrix Crossword

Arsenic



ACROSS

1 orpiment _____ realgar
9 metal that melts in your hand
11 composed of mineral grains
12 Brits call it a bonnet
13 source of fine adularia
14 when I dropped my crystal I was ___
15 dawn, early
16 more than one arsenic sulfides
18 Lord or God
19 after your money
20 killed off by arsenic
25 low, woody, and windy
27 Chinese name
28 geological (ab)
29 edible fish
30 worse than a dam
31 not a paddle but they're ours
33 lanthanum
34 part of rock drill
35 good ___ now, ya'll
36 __, that stinks
37 used to drop into mine
38 inside a tire
40 water, salt, and gypsum
41 today, maybe in a minute
43 Zambezi Resources Ltd.
44 covered with native gold
45 iridium ruthenium arsenide minerals (pl)
48 tree resin
49 state for quartz
50 copper arsenic sulfide
54 washboard muscle
55 Star Wars
56 the ___ Khan
57 better than a little
59 the play's the thing
60 found with sphalerite
61 iron arsenide

DOWN

1 manganese arsenate
2 black organic roack
3 charge coupled device
4 Okie state
5 zinc arsenate hydroxide
6 giant mythological Chinese turtle
7 neither this ___ that
8 an unchipped crystal
9 arsenolamprite and galena are arsenic and lead ___
10 the fourth month (ab)
13 element that tarnishes
15 division of geologic time
17 palladium arsenide
19 end of the mineral
20 found covering rocks
21 done while cleaning your crystals
22 ancient Chinese river
23 mean guy
24 found in carrollite
26 a main squeezer
30 best way to find rocks
31 indispensable music
32 roger
34 what agate has
36 skinny but not a snake
37 made from Cu, Ag, Au
39 place for ashes
40 your sister
42 either ore or __
44 fine hard stone
46 gecko foot hairs
47 place to wash minerals
49 mine entrance
51 an old horse
52 radium
53 nickname for Ellen
55 on water or snow
58 __ Miss
59 Singapore (ab)

LAST MONTH'S SOLUTION: Not Quite

S	E	D	I	M	E	N	T	A	R	Y		V	T	
E	O	N	S		X	R	A	Y			P	E	N	
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M		A	A		L	A	U	R	I	O	N	I	T	E
O	K	L	O		I	L	R				O	N	E	R
L	I	E		A	B	B	A		T	T	A	G		O
O	N		S	T	E		N		R	A	H		E	G
G		D	O	E	R		I	L	E	T		D	B	L
I	D	E	A				U	L	A		R	U	B	Y
C	O	C	K	S	C	O	M	B	S		A	G		P
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	A	A	A			L	Y	M	E		T	A	L	C
	F	L		R	E	S	E	A	R	C	H	E	R	S

Directions to the Trinity Lutheran Church in Chelmsford, MA

170 Old Westford Rd., Chelmsford, MA.
From Rt. 3, take Exit 32, (The "Drum Hill Rotary").
From Rotary, Take Old Westford Rd. towards Westford for about .85 miles to Grandview Rd.
Entrance for Trinity Lutheran Church on left.
Proceed up rather long driveway to parking area.
Our meeting room is at the far end of the low building.

Those coming from the south may want to try an alternate route, exiting from Rt. 495 at Exit 33, then taking Rt. 4 north to a left onto Davis Rd. See map below.

Fall Meetings are at Trinity Lutheran Church in Chelmsford, MA. Meetings start at 9am and wrap up around noon.

September 18

October 16

November 20

Table of Contents

Membership in the MMNE runs from January 1st to December 31st. Dues are payable on or before January 1st for the upcoming year. Failure to renew on time will result in cancellation of membership including the subscription to the Newsletter. Please fill out this form and return it with your payment.

Name: _____

Street/PO Box Address: _____

City/State/Zip : _____

Telephone: _____E-mail address: _____

___ Hard copy via USPS or ____ via email to above address

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TO: