

# The Conglomerate

Newsletter of the Baltimore Mineral Society  
<[www.baltimoremineralsociety.org](http://www.baltimoremineralsociety.org)>

Volume 7, Number 6  
June, 2011



## • It's Picnic Time Again

from Alice Cherbonnier



The Baltimore Mineral Society annual picnic will be held on Saturday, June 18 at 5 p.m. at the home of Alice Cherbonnier. BMS will supply hot dogs, hamburgers, and beverages, while members are asked to bring salads, vegetables, and desserts (please, let's have more salads and veggies than desserts which rarely get eaten).

Alice's address is in the roster or e-mail <[alicecherbonnier@gmail.com](mailto:alicecherbonnier@gmail.com)> if you have questions, need directions or want suggestions on what to bring.

Come early if you'd like to visit the grounds of the adjacent Hampton National Historic Site.

## • Upcoming Field Trips

from Brad Grant



Mark your calendar now for these tentative field trip opportunities.

June 25th - University of Delaware Mineralogical Museum. No field collecting, but some wonderful specimens to look at in this recently remodeled "gem".

July 9th - Valley Quarry, Shipensburg facility. Minerals found there include calcite, celestine, fluorite and strontianite.

July 23rd - Havre de Grace Quarry. Always good collecting for pyrite, chalcopyrite, bornite, zeolites, etc.

August 13th - I am going to try getting us in York Building Products Roosevelt Quarry.

These trips are contingent on getting the quarry's approval and if there is enough interest from the club.

In the fall I'm lining up trips to:  
Churchville Quarry  
Teeter (Valley) Quarry, PA  
Cornwall, PA  
Marriottsville Quarry

And if you know of any other good collecting sites that you would be interested in, let me know and I'll see what I can arrange.

Gold  
California



A sample of one of the spectacular mineral specimens on display at the Univ. of Delaware Museum.

## Baltimore Mineral Society



The BMS was established in order to allow its members the opportunity to promote the study of mineralogy and to act as a source of information and inspiration for the mineral collector. We are members of the Eastern Federation of Mineralogical Societies and affiliated with the American Federation of Mineralogical Societies.

Meetings are held the 4th Wednesday of each month (except October, December and June) at the Cockeysville Volunteer Fire Hall beginning at 7:15 p.m. Visit the club website <[www.baltimoremineralsociety.com](http://www.baltimoremineralsociety.com)> for directions.

Yearly dues are \$10 for individual members and \$15 for family memberships. Send payment along with your name, list of family members, if applicable, address, phone and e-mail to: Carolyn Weinberger, PO Box 302; Glyndon, MD 21071-0302.

### Officers:

President..... Bradley Grant  
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### Write for "The Conglomerate"!

Send news, announcements, comments, observations, or articles to <[mseeds@fandm.edu](mailto:mseeds@fandm.edu)>. No e-mail? Hand in your submission at a meeting.

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## • Rubble from the President

by Brad Grant

Hi Everyone,

I am writing this today in the cooling comfort of the city's server room where the temperature is always 65 degrees even though outside it's a sweltering 99°. I do love summer!!!!

We had a very successful trip to Valley Quarry in Gettysburg, PA. I came home with some very nice stilbite specimens and some stuff that I need to identify and try to micromount. Speaking of heat, according to the quarry manager at The Valley Quarry the diabase came over the minerals back in the Triassic era, basically baking the rock underneath it (and you think it is hot out now!!!).

The club is going to have a trip to The University of Delaware's Mineral Museum on the 25<sup>th</sup> of June. This museum has been written up in several national publications and Jake Slagle has a very nice article about the museum on his blog.

So what do you do when it is this hot? Well have you considered micromounting?

This is an aspect of our hobby that doesn't seem to get talked about too much. However, some of the neatest crystal displays that I have seen are on specimens no more than centimeter.

All you need to become a micromounter is a microscope. You can get one for about \$100 on ebay. While part of the fun is preparing the specimens that you collected, you don't have to do this, you can buy some very nice specimens from dealers at very reasonable prices.

If you have not considered mi-

micromounting you might want to try it. It will add another dimension to your hobby. Also that squirrel ammo that you collected at the quarry might actually have some tiny treasures on it!



Our picnic is on June 18<sup>th</sup> at Alice's house. I want to thank Alice ahead of time for hosting the picnic. I hope to see everyone there.

## • Buying a Microscope

by Carolyn Weinberger

Brad mentions micromounting as a good hobby to pursue when the weather is too hot to be outside. It's a great hobby for cold and rainy days as well, but you have to enjoy looking at lovely crystals to really appreciate this aspect of the hobby.

You will need either a good 10x or higher loupe or, better yet, a good stereo microscope. You can obtain them on ebay, but you really won't know the condition of the scope or the optics.

Before you buy any scope - whether it's new or used - check out the "Stereo Microscopes to BUY and to AVOID" listing at <[www.absoluteclarity.com/buy&avoid.htm](http://www.absoluteclarity.com/buy&avoid.htm)>. This is a top-notch company that's evaluated all kinds of scopes and gives an honest opinion of each. They also sell refurbished and new scopes should you wish to purchase one from someone who vouches for their products.

• Other Local Clubs

♦ **American Fossil Federation.** Meetings are held the 2nd Sunday of alternate months (Jan., March etc.) at 10:30 am at the Bowie Community Center, Bowie, MD. <americanfossilfederation.com>

♦ **Chesapeake Gem & Mineral Society.** Meetings are held the 2nd Friday of each month (except August) beginning at 7:30 pm at the Woman's Club of Catonsville, 10 St. Timothy's Lane. Catonsville, MD.

♦ **Gem Cutters Guild of Baltimore.** Meetings are held the 1st Tuesday of each month except January, July and August beginning at 7:30 pm at Meadow Mill at Woodberry, 3600 Clipper Mill Rd, Suite 116; Baltimore, MD 21211. <gemcuttersguild.com>

♦ **Maryland Geological Society.** Meetings are held the 3rd Sunday of alternate months (January, March etc.) beginning at 11 am at the South Bowie Community Center. <www.ecphora.net/mgs>

♦ **Patuxent Lapidary Guild.** Meetings are held the 3rd Monday of each month at 7 pm. at 169 Defense Highway, Annapolis, MD. <www.patuxentlapidary.org>

## • **May Meeting Minutes** from Carolyn Weinberger, Secretary

President Brad Grant called the May 25, 2011 meeting of the Baltimore Mineral Society to order at 7:35 pm. Minutes of the April meeting were approved as printed in the Conglomerate. Treasurer Carolyn Weinberger indicated that BMS remains solvent.

### Unfinished Business:

• Brad reported that the field trip to Churchville was a success. He and Jim Hooper spoke to about a dozen Girl Scouts and their talk was well received. They gave out pyrite specimens.

### New Business:

• A Board of Directors meeting is scheduled for Thursday, June 9th at 7 pm at Wegman's Hunt Valley. Board members need to notify Brad if they cannot attend.

### Announcements:

• A tentative trip to the mineral museum at the University of Delaware is tentatively set for Saturday, June 25th and a possible trip to the Smithsonian sometime in July or August.

• The annual BMS picnic will be held at the home of Alice Cherbonnier on Saturday, June 18th beginning at 5 pm. BMS will supply hot dogs and burgers, plates, cups, cutlery. Attendees are asked to call Alice to let her know what they plan to bring – salads and veggies are the preferred items.

The business meeting was adjourned at 7:50 pm and was followed by a video of a talk entitled "Disposing of Your Collection: Where, When and How" given by Dr. Steve Chamberlain at the Rochester Mineralogical Symposium in 2004.

The meeting adjourned at 9:10 pm.

## • **First Class Specimens: What to Look For**

by Thomas Pallanta, Jr.  
from Rock Chatter, May 2011

When you collect minerals or fossils, it is not unusual to hear a number of terms tossed about. You sometimes hear of a specimen being referred to as 'World Class, First Class, Museum Quality, Low Class', or 'Poor Quality'. What is happening here is that various minerals and fossils are being classified according to the quality of the specimen.

This is because high quality specimens are much prized. To have a collection containing a good number of high quality pieces is a badge of honor. It marks you; the collector is being a person of discerning eye and a good judge of quality. Nothing is more satisfying than to have your friends praising your collection for all of its good qualities.

But how do you tell a good quality specimen from one of poor quality. What I am going to cover here are the basic ground rules that will help you pick out that quality piece, whether it is mineral or fossil.

### Mineral Criteria

When it comes to minerals there are a number of basic criteria necessary in choosing a good specimen.

1. Crystal Perfection – This is the most important first rule. A specimen whose crystals are well-defined and free of chips, nicks or scratches is first rate.

2. Color & Clarity – Besides having good crystal structure, it is important that the color of the crystals be as intense as possible; unless the crystals are clear. For instance, if the mineral has red crystals....then pick the specimen whose crystals exhibit the deepest and

*continued on page 4*

most uniform shade of red. If the crystals are clear, then pick the clearest ones.

3. Luster – Brightness catches the eye and gives sparkle to a specimen. Such specimens command attention and they are pleasing to look at.

4. Association – Minerals do not always form alone. They often form in association with other materials...like fluorite and sphalerite. Pieces where the contrast of association, like black crystals on white are more desirable. Picking a piece where this association is most pleasing to your eye is a good rule-of-thumb.

5. Size – In mineral collecting size does matter. It is the quality of the specimen that wins out over size. That is because smaller crystals are often more perfectly formed than larger ones. Then there are the more practical concerns of storage and display. You can store or display smaller pieces than you can with larger ones. However, if the big specimen has all of the above qualities then it is definitely worth taking home if you are in the field. If you are considering buying a specimen like this and the price is very reasonable, then perhaps you should consider it. A specimen like that can be traded later on.

#### Fluorescent Mineral Criteria

Fluorescent minerals are different from regular specimens. The depth and intensity of color exhibited under ultraviolet light is the most important quality in a fluorescent mineral. Pieces that exhibit a lot of deep rich color are preferred. If the piece displays three or more colors simultaneously under ultraviolet light, then you have very desirable item.

#### Fossil Criteria

Unlike minerals, fossils are the preserved remains of plants and animals from prehistoric times. The criteria for choosing fossils are different!

1. Preservation – When it comes to fossils, the quality of preservation is everything. A plant or animal fossil that is complete and displays clear and distinct features should be your first choice if purchasing a specimen. The same is true for bones and teeth. Always pick the most complete and best preserved piece that you can afford. If you are collecting in the field, then things are different. There is no way of telling with certainty which

way the rock will break. If the rock breaks and only partially exposes a potential good specimen, then wrap it up, and put it in your collecting bag. Wait until you are at home where you can take the time and care with finer tools to prepare the specimen properly. There are some localities where obtaining good specimens are difficult due to the nature of the preservation. In such cases, you simply take what you feel are the best pieces and leave the lesser pieces behind.

2. Preparation – When you are buying fossils which are on a matrix, the preparation is everything. A specimen which has been fully exposed without receiving damage in the process is the most desirable. Look the specimen over carefully to see that it has not been damaged or repaired. Repairs are something which you have to look out for. People in countries like China and Morocco have gotten very adept at repairing fossils. In some cases they will take two pieces and carefully splice them together to make a whole fossil. Through conversations with Billy Beal, I have learned that some Chinese are making 'fake' dinosaur eggs. They take eggshell fragments and glue them around a core of plaster to match the matrix. Such fakes can be very hard to spot.

In the case of bones and teeth which have been removed from matrix, look for pieces that show clear preservation, no chips, cracks, repairs, and no tool marks. Watch out for specimens that have been glued back together...if possible. In vertebrate fossils a repair job on the specimen is acceptable, if it has been done well. If you are purchasing, make sure that they are not asking a first class price for that item. Repaired pieces command lower prices.

If you are cleaning a specimen and damage occurs, keep the pieces and carefully try to glue them back together. A white glue or clear epoxy is best. When doing your own fossil preparation be patient. Take your time and use good judgment. It is nice to completely expose a good fossil, but it is not always possible. Sometimes, you just have to leave a specimen just as you found it, or only do a minimum cleaning. The choice is up to you. Just remember.....if it shatters ....you cry!

continued on page 5

## • *First Class Specimens*

*continued from page 4*

### World Class Specimens

A subject like this is not complete without a definition of 'World Class Specimens'. With minerals, 'World Class Specimens' are the 'Crème-de-la-cream' of our hobby. They are the most highly desired items, but they are usually out of reach of all but museums and very wealthy collectors.

With minerals, a specimen with very large crystals which exhibits all of the best qualities is usually described as 'World Class.' Such pieces are usually quite rare and their unusual size makes them real eye-catchers. These are the specimens which usually grace the collections of museums and the wealthiest of collectors.

However, there have been cases where a regular collector gets lucky. One former club member named Alex Kane went on a trip to New Hampshire where he collected a large specimen of fluorescent eucryptite. This specimen was a foot long and contained several veins of eucryptite which fluoresced so brilliantly red that the piece was declared to be the 'Type Specimen' for that mineral. In short.....it is 'World Class'.

### Museum Quality

The term 'Museum Quality' usually refers to fossils. Such a fossil should be perfectly preserved whether it's a plant or animal. All of the details should be crisp and clearly defined. When it comes to vertebrate skeletons... it should be complete or more complete than any skeleton of that species which has ever been found. In short.... it should be worthy of being in a museum display.

When it comes to obtaining 'Museum Quality' fossils it is not very hard to purchase plant and invertebrate specimens of that quality. In fact... some can be purchased quite reasonably while others are much more expensive. Finding such fossils in the field is still possible, but, it takes luck and careful preparation afterwards.

As for vertebrate fossils...there are some very fine fossils available on the market. Excellent quality specimens like shark teeth and Green River Fish can be obtained at reasonable prices. Beyond that, the regular collector usually has to be content with spare teeth and bones. Complete skeletons, even small ones, are usually beyond our means.....even in the field.

## • *Cleaning Specimens*

*by Robert Miller*

Here are some links on cleaning minerals and on conditions that are harmful to them:

A great article by John Betts:

<[www.johnbetts-fineminerals.com/jhbnyc/articles/minclean.htm](http://www.johnbetts-fineminerals.com/jhbnyc/articles/minclean.htm)>.

This one also shows mineral solubility (what kinds of things will dissolve a mineral):

<[www.mineraltown.com/infocoleccionar/cleaning\\_minerals/cleaning\\_minerals.htm](http://www.mineraltown.com/infocoleccionar/cleaning_minerals/cleaning_minerals.htm)>

An article on cleaning quartz crystals:

<[www.mineraltown.com/Reports/cleaning\\_crystals/clean\\_quartz\\_crystal.php?idioma=2](http://www.mineraltown.com/Reports/cleaning_crystals/clean_quartz_crystal.php?idioma=2)>

Another good article from The Vug:

<[www.the-vug.com/vug/articlecleaningccb.html](http://www.the-vug.com/vug/articlecleaningccb.html)>

A list of conditions and substances harmful to minerals:

<[www.sauktown.com/conditions](http://www.sauktown.com/conditions)>

Some general articles:

<[www.inlandlapidary.com/user\\_area/cleaning.asp](http://www.inlandlapidary.com/user_area/cleaning.asp)>

<[www.mindat.org/article.php/553/Solubility+Data+on+646+Common+and+Not+So+Common+Minerals](http://www.mindat.org/article.php/553/Solubility+Data+on+646+Common+and+Not+So+Common+Minerals)>

<[homepage.mac.com/rasprague/PegShop/extras/ultra/ultra.html](http://homepage.mac.com/rasprague/PegShop/extras/ultra/ultra.html)>

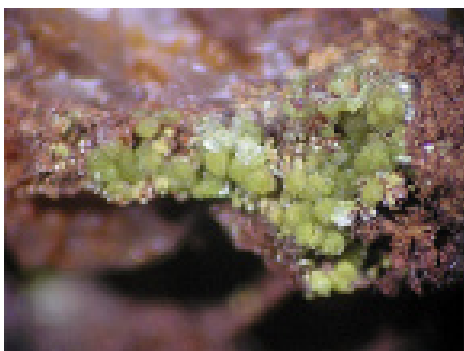
## • *Correction*

In last months article, Shoebox Adventures, Mike mentioned that turquoise is commonly faked with dyed halite. He meant howlite,  $\text{Ca}_2\text{B}_5\text{SiO}_9(\text{OH})_5$ , which is often found in white nodules and can be cut or made into beads and dyed to resemble turquoise. Halite is just salt.



The shoebox on the end of my bench is full of baggies and boxes of minerals waiting to be studied, trimmed and mounted in micromount boxes, but last week when I reached in I hit pay dirt. I pulled out a box of mineral specimens purchased from a dealer at last March's Levittown Micromount swap. The box contained 26 specimens with an average cost of about \$4 each. And they were all different.

The specimens included some common minerals such as a little vug filled with Adamite, but there were also some unusual things such as Tiemannite from the Hartz Mountains and Wittichenite from the Black Forest. There were some yellow Sonoraite from Mexico, tan Schoonerite from Bavaria, and pinkey-white Kimuraite-Y from Japan. Only on a micromount dealer's table would you find such variety.



Sonoraite  $\text{Fe}^{3+}(\text{TeO}_3)(\text{OH})\cdot\text{H}_2\text{O}$  from Moctezuma Mine, Mexico contains tellurium. Field of view 3 mm.

In fact, one micromount dealer at this spring's Rochester Symposium had roughly 2000 micromounts offered for sale representing almost 800 different minerals. (This result was not arrived at by actual counting but by sampling three boxes and then extrapolating.) That's quite a selection of different minerals. There were lots of common minerals like vanadinite, of course, but there were also some unusual minerals.

Admittedly there are a number of reasons to add a mineral to your collection. You might want yet another quartz if it a really beautiful specimen, but you might also want to add a mineral if it is unusual. It's hard to pass up a beautiful adamite, but sometimes it's fun to add a mineral you don't already have. Micromounters have an easier time of it because most minerals don't form large crystals. If you want Kimuraite-Y, you will

find it in a micromount box. So there are lots of minerals on the tables of micromount dealers that aren't available in larger sizes.

Dealers in larger minerals have less variety. One dealer at Rochester had about 150 palm-size specimens for sale, but they represented only 32 different minerals. Another dealer had an entire room full of palm-size specimens on display but they represented only 42 different minerals. A third dealer's room contained loads of specimens but only 31 different minerals. Of course, there was a lot of duplication among the dealer stocks, so there were significantly less than 100 different minerals offered by the three dealers and probably not much more offered by all 28 non-micro dealers up on the 4th floor.



Pinkish-white Kimuraite-Y  $\text{Ca}(\text{Y,Nd})_2(\text{CO}_3)_4\cdot 6\text{H}_2\text{O}$  from Japan contains yttrium and neodymium. Field of view 1 cm.

As another measure of what minerals get collected most often, consider Jeff Scovil's talk "What's New in Minerals" given every year on Saturday morning at Rochester. This year, Jeff showed beautiful photos of 92 specimens, but they represented only 41 different minerals, mostly the same minerals offered for sale by the three dealers mentioned above. Jeff is arguably the most famous mineral photographer in the world, and collectors bring him their finest specimens to be photographed, but the variety is limited.

To find a wide variety of mineral species, visit a micromount dealer. You will see unusual minerals from all over the world. There will be some beautiful adamites, of course, but there will also be some Tiemannites and Wittichenites and maybe even some Kimuraite's.

## • News from the Board

from your Board of Directors

The annual spring meeting of the Board took place on June 9th. Topics for discussion included recommendation of two candidates for induction into the Micromounters Hall of Fame in 2012. Announcement of the selection will be made at our Desautels Conference the weekend of September 30 - October 2.



The Board appointed Carolyn Weinberger as Treasurer to replace Bob Hudgins who cannot continue due to his health issues and Jake Slagle will become Secretary.

A small budget was approved for our Program Chairman so that non-club members who speak at our meetings can be given a small honorarium. Board members felt that those coming a distance certainly should at least have some monetary remuneration for their gasoline and time and that perhaps it would help in obtaining interesting speakers.

## Odd-Ball Stuff

via Gem Cutters News, June 2011

• In George Washington's days, there were no cameras. One's image was either sculpted or painted. Some paintings of George Washington showed him standing behind a desk with one arm behind his back while others showed both legs and both arms. Prices charged by painters were not based on how many people were to be painted, but by how many limbs were to be painted. Arms and legs are "limbs", therefore painting them would cost the buyer more. Hence the expression, "Okay, but it'll cost you an arm and a leg."

• As incredible as it sounds, men and women took baths only twice a year! (May and October). Women kept their hair covered, while men shaved their heads (because of lice and bugs) and wore wigs. Wealthy men could afford good wigs made from wool. The wigs couldn't be washed, so to clean them they would carve out a loaf of bread, put the wig in the shell, and bake it in the oven for 30 minutes. The heat would make the wig big and fluffy, hence the term "big wig". Today we often use the term "here comes the Big Wig" because someone appears to be or is powerful and wealthy.



## AFMS Code of Ethics

◆ I will respect both private and public property and will do no collecting on privately owned land without the owner's permission.

◆ I will keep informed on all laws, regulations of rules governing collecting on public lands and will observe them.

◆ I will to the best of my ability, ascertain the boundary lines of property on which I plan to collect.

◆ I will use no firearms or blasting material in collecting areas.

◆ I will cause no willful damage to property of any kind - fences, signs, buildings.

◆ I will leave all gates as found.

◆ I will build fires in designated or safe places only and will be certain they are completely extinguished before leaving the area.

◆ I will discard no burning material - matches, cigarettes, etc.

◆ I will fill all excavation holes which may be dangerous to livestock.

◆ I will not contaminate wells, creeks or other water supply.

◆ I will cause no willful damage to collecting material and will take home only what I can reasonably use.

◆ I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.

◆ I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and Will leave all collecting areas devoid of litter, regardless of how found.

◆ I will cooperate with field trip leaders and those in designated authority in all collecting areas.

◆ I will report to my club or Federation officers, Bureau of Land management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.

◆ I will appreciate and protect our heritage of natural resources.

◆ I will observe the "Golden Rule", will use "Good Outdoor Manners" and will at all times conduct myself in a manner which will add to the stature and Public "image" of rockhounds everywhere.

## *The Conglomerate*

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### *Upcoming Shows*

For the latest information, check out the web site of the Eastern Federation of Mineral and Lapidary Societies: <http://www.amfed.org/efmls>.

#### July:

9 - 10: "Gems Along the Erie Canal" and EFMLS / AFMS Convention, sponsored by the Gem & Mineral Society of Syracuse, NY. NY State Fairgrounds, Syracuse.

#### August:

12-14: East Coast Gem & Mineral Show. Eastern States Exposition, West Springfield, MA. Often called "Tucson East". This year featuring 20+ display cases of minerals from the Scott Rudolph Collection. Many of the minerals were acquired by Rudolph from renowned collector Keith Proctor for a rumored \$7 million in 2009.

19-21: 14th Annual Gem Miner's Jubilee sponsored by The Mid-Atlantic Gem & Mineral Association. Minerals, gems, fossils, tools, jewelry and beads indoors and out. Lebanon Expo & Fairgrounds, Lebanon, PA. <[www.gem-show.com/](http://www.gem-show.com/)>

#### September:

27-18: Harrisburg, PA - Central Pennsylvania Rock & Mineral Show sponsored by the Central PA Rock & Mineral Club. Zembo Shrine, 2801 N. 3rd Street, Harrisburg, PA. <[www.rockandmineral.org/annualshow.htm](http://www.rockandmineral.org/annualshow.htm)>.

24-25: West Friendship, MD - 47th Annual Atlantic Coast Gem, Mineral and Jewelry Show hosted by the Gem Cutters Guild of Baltimore. Howard County Fairgrounds, West Friendship, MD. <[www.gemcuttersguild.com/](http://www.gemcuttersguild.com/)>.

#### October:

29: 22nd Annual "Ultravioletation" Fluorescent Mineral Show sponsored by the Rock & Mineral Club of Lower Bucks Co., PA. First United Methodist Church, 840 Trenton Rd., Fairless Hills, PA. Hours 9 am - 4 pm.