

The Conglomerate

Newsletter of the Baltimore Mineral Society
<www.baltimoremineralsociety.org>

Volume 7, Number 10
December 2011



Let's Party!



The December BMS meeting is our highly anticipated annual Holiday Party . It will be held on December 17 beginning at 6 pm. Alice Cherbonnier has generously offered her home in Towson once again. The fun (and feasting) will begin at 6 pm.

Begin thinking now about what you will bring for our feast. As usual, the club will provide ham, turkey breast, rolls, condiments and drinks. Alice recommends against desserts because we rarely have room for them.

We'll have a very short business meeting - just long enough to elect officers for 2012. Alice promises some door prizes too.

As a courtesy, please give Alice a call or e-mail (410-828-0024 or <managingeditor@verizon.net>) and let her know if you are coming (and how many guests you'll bring along), then dust off your recipes!



Rubble from the President

by Brad Grand



It looks like your fearless leader made it through another year without dropping a rock on his foot or some other disaster. We won't talk about the "finger thingy" on the Mt. Pleasant Mills Trip.

It has been a good year for BMS. We were able to get in six quarry trips this year and we had a very successful symposium. Ed Goldberg was able to get several Maryland Mineral displays set up and we even had an outreach a scout troop. We also had some very interesting presentations at our club meetings this year and I would like to thank everyone who did a presentation.

Hopefully in 2012 we will be able to increase our membership by attracting more families to our organization. I'm not yet sure how we will do this. I also hope that as we get more opportunities to do outreach, more people will become aware of us and join the club. I am looking for any and all ideas to get more people involved in our hobby and our club, so if you have an idea please share it at a club meeting or with me via e-mail or phone.

As far as club meetings go, next year, I would like to add a "Show and Tell", a "Swap Meet" and a "Silent Auction" to our meeting schedule. This will give everyone a chance to see the neat specimens your fellow club members have collected and that you might be able to acquire.

Finally, Patty and I wish all of you a happy and safe holiday season and we look forward to seeing you at the holiday party and at the first meeting in 2012.

Brad

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> 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: Bob Hudgins, 6713 Balmoral Overlook, New Market, MD 21774.

Officers:

President.....Bradley Grant
<bgrant@aberdeen-md.org>

Vice PresidentJim Hooper
<jhooper@jhu.edu>

Secretary.....Jake Slagle
<jake@marylandminerals.com>

TreasurerCarolyn Weinberger
<cscrystals2@verizon.net>

Directors:

Bernie Emery
Ed Goldberg
Steve Weinberger

EditorMike Seeds
<mseeds@fandm.edu>

Write for "The Conglomerate"!

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

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Meeting Minutes

from Jake Slagle, Secretary

President Bradley Grant called the Baltimore Mineral Society's November meeting to order at 7:40 p.m.

Minutes of the September meeting were accepted as printed in the Conglomerate. Treasurer Carolyn Weinberger indicated that the BMS was solvent. She also indicated that a separate checking account at BBT, established for the Directory of Micromounters had been closed in order to avoid paying monthly service charges being imposed by the bank as of January 1. Monies from that account were deposited in the BMS regular checking account.

Brad noted that the upcoming field trip to the Churchville Quarry now slated for December 3, 2011, had been rescheduled to that date from the originally planned and published date of October 29. This subject led to discussion of a credible word-of-mouth provision that upcoming trips must be previously announced in print in The Conglomerate. Should a trip be scheduled or rescheduled during a period occurring between the publication of two Conglomerates, Carolyn Weinberger noted that a report of said trip must be published in the Conglomerate issue immediately following the trip.

Brad noted that the Desautels Symposium had been a success and encouraged all members to attend future Symposia.

Brad noted that election of Officers and Board Members would be at the December Holiday Party meeting at Alice Cherbonnier's on Sat., December, 17, 2011, at 6 p.m. It was noted that all current officers had agreed to serve an additional term.

President – Brad Grant

Vice President – Jim Hooper
Secretary – Jake Slagle
Treasurer – Carolyn Weinberger
Directors: Bernie Emery, Al Pribula, Steve Weinberger

The Holiday party/meeting was also noted as the preferred occasion for renewing memberships and paying dues.

Brad noted that he had been actively seeking more public exposure for the Society. He stated that current efforts were directed toward dialogue with the Board of Education.

Carolyn Weinberger moved that beginning in 2012 we hold an October general meeting and instead dispense with the November meeting since it always occurs on Thanksgiving eve. Seconded by many, the motion passed.

After the business meeting ended, the evening's program consisted of a DVD of John Betts' presentation at the 2006 Rochester Mineralogical symposium about diamonds from the perspective of the mineral collector .

2012 Dues Are Due

by Carolyn Weinberger

Once again it's time to renew your membership in BMS. Dues are \$10 for individuals and \$15 for husband and wife and all children residing in the home under the age of 18.



To renew, please fill in the form included in this issue and either bring it to the Holiday party or mail it. Checks should be payable to "BMS".

• 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>

Board Meeting Minutes

from Jake Slagle, Secretary

President Bradley Grant presided at a meeting of the Board of Directors of the Baltimore Mineral Society at 7:15 p.m. on Wednesday, November 23, 2011. Other Board members present were Jim Hooper, Carolyn Weinberger, Steve Weinberger, Al Pribula,, Jake Slagle and Bernie Emery.

The first topic of business was for a decision as to whether to honor a request for \$150 to help fund a senior thesis project for an Aberdeen High School student named Jared. The funds would be used to prepare and analyze thin sections of material from the Vulcan Quarry in Havre de Grace. Following discussion, the Board voted to table the request based on the lack of specific information or correspondence regarding the student (Jared), who would be receiving the funds.

A second issue involved Brad's request to purchase a first aid kit to be brought to collecting sites on Baltimore Mineral Society collecting excursions. The Board voted to allow Brad up to \$10 to purchase the kit and that it was to be brought on all field trips and brought to each meeting.

A third item of business was whether to continue funding the Society's subscription to the Mineralogical Record at a cost of \$62 per year. On word that Librarian Alice Cherbonnier had never received a request by anyone in the society for access to the publication, and that the accumulation of subsequent issues would most likely be of no pecuniary benefit to the Society, the Board voted not to renew the subscription.

Carolyn noted that in order to avoid monthly service charges, she had closed a separate BMS bank account for funding the International Directory of Micromounters and placed the funds in the main bank account of the Baltimore Mineral Society.

The meeting adjourned at approximately 7: 30 p.m.

What Do You Get Out of Rocks?

by Randy Ernst

Adapted from *Micronews*, Nov. 2011

What do you do when you get a new specimen? Catalogue it (hopefully), put



Rutile
Wannenköpfe
Eiffel Region, Germany

it away in a display case, in a box, in a drawer? Perhaps the next time it sees the light of day will be when somebody gets

your collection from your next of kin.

I try to learn more about a new specimen and the location where it was found. I look up the species and search my collection database to see if I have others like it and compare them. I also look up the location and see if there are other minerals I might be able to spot on this specimen. Or do I already have any of those other minerals on which examples of the newly acquired mineral might appear?

Google can help in finding information or articles that might be interesting. Books are helpful, of course, but Mindat.org is a powerful tool. You can look up the mineral, but you can also look up the location. Compared to smashing boulders in a quarry this is a little tame, but it can keep you busy on a cold snowy night with the cat on your lap. You can spend a lot of enjoyable time on just one specimen.

Mineral collecting is a "knowledge based" hobby, and doing a little research on a new specimen can teach you a lot about minerals and locations. Don't think that people who can identify minerals on sight got that superpower out of the blue. It takes time to learn, and that is the fun of our hobby.

Mineralogists assume that they have described the common minerals of the crust. They also pride themselves on having a rigorous international system for approving new mineral names to assure the names that get into print really do represent uniquely different minerals. Recently both of these assumptions have been thrown into disarray by a mineral called “moganite”. Moganite turns out to be so common that virtually every rockhound has unknowingly found, polished or bought it.

Moganite refers to a mineral closely related to quartz.



Moganite - 5.5 cm
Grand Canary
Canary Islands, Spain

Quartz is SiO_2 and crystallizes in the hexagonal system. Moganite is also SiO_2 , but it crystallizes in the monoclinic system. It was discovered in 1976 by a group of geologists led by the Russian O. W. Florke. This team was studying the rocks near Mogan in the Canary Islands

and found it as fine-grained gray fibers inter-grown with chalcedony and opal in cracks in the lava flows. Moganite's physical and X-ray properties are almost identical to quartz.

Florke submitted a description of moganite to the International Commission on Mineral Names and Naming (I.C.M.N.N.), who disapproved of it. They felt that not enough evidence was presented to show that moganite was not simply a mixture of quartz and other minerals. Florke and his co-workers then committed a cardinal mineralogical sin by publishing their data, using the name moganite as though it had been approved. They published more articles on moganite over the next decade, proving it was a unique mineral. They never resubmitted their data to the I.C.M.N.N. The I.C.M.N.N. just as stubbornly refused to approve the name without such an official resubmission. So goes mineralogy politics!

A recent article by Peter Heaney and Jeffrey Post in Science added insult to injury. They reported finding moganite in nearly all of the 150 samples of fine grained quartz they tested from the Smithsonian's mineral collection. Some samples contained over 75% moganite mixed with quartz. Chert had the most moganite. Flint contained 13-17% moganite. Agate had 5 to 20% moganite. Silicified corals from the Tampa Bay area in Florida averaged 20% moganite. The only samples found with no moganite were jaspers from iron formations, the weathered outer rinds of agates and Arkansas novaculite. Clearly moganite is a very overlooked mineral.

Why moganite forms is not known. In the Canary Islands it forms under extremely dry surface conditions. Since moganite is more soluble than quartz, it leaches out of chalcedony, which could account for chalcedony's lower density and higher permeability.

Here is a mineral we all have that doesn't have an approved name. What is a conscientious mineral collector to do? We'd best just label things “quartz”, “agate” or “chalcedony” until the semantic dust settles.

Words Worth Knowing

adapted from Wikipedia by Robert Miller

Adits are entrances to underground mines and are horizontal or nearly horizontal. Adits are usually built into the side of a hill or mountain, and often occur when a measure of coal or an ore body is located inside the mountain but above the adjacent valley floor or coastal plain. The use of adits is generally called drift mining

Dana Classification of Minerals. James Dwight Dana (February 12, 1813 – April 14, 1895) was an American geologist, mineralogist and zoologist. He made important studies of mountain-building, volcanic activity, and the origin and structure of continents and oceans. He was born in Utica, New York, and published more than 200 books and papers on mineralogy, geology, and fossils during his lifetime. His best known contribution is a classification system for minerals first published in 1837 and continuing through today. Dana's system of mineralogy classified minerals according to their chemical formulae resulting in classes such as “Native Elements and Alloys”, “Sulfides”, and “Cyclosilicates Three-Membered Rings”. See “<http://www.mindat.org/dana.php>” for a list of the classes.

Strunz Classification of Minerals. Strunz classification is a scheme for categorizing minerals based upon their chemical composition, introduced by German mineralogist Karl Hugo Strunz (1910-2006). While curator of the Mineralogical Museum of Friedrich-Wilhelms-Universität (now known as the Humboldt University of Berlin), Strunz had been tasked with sorting the museum's geological collection according to crystal-chemical properties. His “Mineralogical Tables”, first published in 1941, has been

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What can happen when two ambitious wealthy men with time on their hands, a grudge, and a passion for paleontology go head-to-head with collecting? Cutthroat competition, that’s what. From 1877 to 1892, short-term

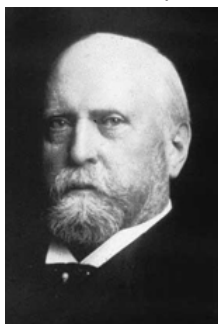


Edward D. Cope

Haverford College professor of zoology Edward D. Cope of Philadelphia (a largely self-trained paleontologist who published over 1,400 scientific papers, a record that still holds today) and Yale vertebrate paleontology professor Othniel C. Marsh (formally trained, thanks to support from his wealthy uncle, George Peabody, founder of Baltimore’s Peabody

Conservatory and Yale University’s Peabody Museum of Natural History) became locked in a contest to collect the most different species of fossilized dinosaurs, a competition that became so heated that it’s popularly called “The Bone Wars.”

Once friends, the two had a falling-out that began when Marsh pointed out rightly that Cope had put the skull of an aquatic plesiosaur on the wrong end of the skeleton, and Cope could not bring himself to admit he’d made a mistake. Their fossil-finding one-upmanship ensued,



Othniel C. Marsh

involving sabotage, insider tips, spying, and efforts at publication suppression. By the time the frenzied collecting concluded, both Copes and Marsh were nearly broke. Copes recouped some of his fortune by selling a set of 10,000 American fossil mammals for \$32,000 to the American Museum of Natural History in 1895, and received another \$29,000 for three other collections totaling 13,000 specimens. Marsh had far more specimens than Cope; his collection was once valued at more than \$1 million, but by the time he died in 1899, he too was in financial trouble.

Overall, the duo named hundreds of new species of fossil animals, including over 120 new species of dinosaur. Marsh, it is said, “won” the Bone Wars because he found 80 new species, while Cope could claim only 56. In their haste to amass specimens, however, they sometimes failed to notice duplications and misidentifications, and at times they made statements at odds with “recognized scientific method.” Paleontologist Kirk Johnson, in his lively and well-illustrated book, *Cruisin’ the Fossil Freeway*, observed, “In their haste to outpublish each other, they describe fragments rather than complete skeletons and made a mess out of the scientific literature.” Still, the competition of Cope and Marsh was widely publicized and their specimens were widely displayed, feeding the general public’s fascination with fossils, an enthusiasm that continues today.

Words Worth Knowing

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through a number of modifications; the most recent edition, published in 2001, is the ninth.

The current scheme divides minerals into nine classes, which are further divided into divisions, families and groups according to chemical composition and crystal structure. See “<http://www.mindat.org/strunz8.php>”.

There is also a newer, 10th version of this system that has been modified by a modern mineralogist, and this is known as the Nickel-Strunz Classification. See <<http://www.mindat.org/strunz.php>>.

Why Penguins Don’t Live Long



Sometimes you get more than you pay for, and that's part of the fun. At the October Desautels Symposium, one of the dealers was selling micromounts for \$2 each. They came from an older collection, and although most were common minerals, they were properly identified and labeled, so collectors lined up with cardboard flats to gather treasures. With thousands of minerals spread over the tables in multiple layers, it wasn't possible to study each on under a microscope. You had to depend on the label and a quick look with a loupe. Dozens of these little bargains went into my shoebox. Recently I pulled a couple out and discovered they were more than I paid for.

Cerussite is just lead carbonate and it isn't very colorful, but it twins easily and can form interesting structures of massed crystals. One of the micromounts that came out of my shoebox was a cluster of cerussite crystals about 2 mm in diameter. I bought it because it had a nice arrangement of crystal points and it was more white than gray. In fact, under my loupe, it was so white it had blue-green highlights in places. Nice. Two dollars.



Dioptase on cerussite
(Crystal length is about 0.8 mm.)

Under the microscope, the crystal structure is striking and twinning is obvious. The color is nice too. In fact, it is quite green on one edge. Tip the specimen slightly and you can see a tagalong, a perfect little elongated crystal of diopside partly imbedded in the cerussite. Tip the specimen the other way and there's another with shadowy green hints of more diopside crystals hidden deeper inside the translucent cerussite.

The cerussite comes from the Mammoth-St. Anthony Mine, at Tiger, in Pinal County, Arizona, and a check with Mindat.org reveals that diopside is indeed found with cerussite from this site. In fact, one of the photos on Mindat.org looks much like my little specimen, and another containing more diopside is from the Smithsonian collection. Their specimen is bigger than mine.

The diopside crystals are between 0.5 and 1 mm long and less than 0.1 mm in diameter. They look quite delicate, a bit like stray green sugar sprinkles that should be on a cupcake but somehow got imbedded in cerussite.

The other specimen comes from the same area of Arizona and it has tagalongs but they are stumpers. The mimetite consists of yellow jack straws down in a shallow vug. and they were easily visible with a loupe even in a quick look. For two dollars, it was a bargain.

Back home, the microscope reveals radial clusters of clear crystals with flat terminations. They are beautiful and delicate and complement the bold yellow mimetite as if it had been built by a talented jeweler. But what are those little crystals?



Yellow mimetite with radiating clusters of clear crystals
(Field of view 6 mm.)

The tagalong crystals are quite nice. They appear to be elongated rods possibly with hexagonal cross sections and flat terminations although they are small and the terminations are difficult to make out even at high power. They radiate from centers and seem to act as light pipes forming a dark image of the matrix at their free terminations. In that way they do resemble erionite. Unfortunately, erionite is not found with mimetite. Among the 100 or so photos of erionite on mindat.org zero include mimetite as a secondary mineral.

The specimen comes from "God's Claim, Pinal County, Arizona". That's all there is on the label. Mindat.org has no information about a location called "God's claim", and searching for "God's claim" on Google turns up over 103 million hits none of which talk about minerals let alone mimetite. Mindat.org has 87 photos of mimetite that come from Pinal County, Arizona, but none come from a location called "God's claim" and none have a secondary mineral that looks like the mystery tagalong. The photos do show that creaseyite, fluorite, phoenicochroite, selenite, and wulfenite as secondary minerals found with mimetite, but none match the tagalong exactly. Selenite comes closest. I'll probably label the specimen "Mimetite with Selenite(?)".

Elsewhere in this issue Randy Ernst writes about studying your minerals. That applies to any size specimens from micro to cabinet size. Internet is full of information about locations, minerals, and mineral associations, so anything you find on your mineral can probably be referenced on the web. And many minerals have interesting tagalongs that you can find with just a little time and magnification.

*Baltimore Mineral Society
Membership Renewal*

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____

E-mail: _____

Names of family members included in membership:

Mail or give to: Carolyn Weinberger
PO Box 302
Glyndon, MD 21071-0302

Renewal deadline is the February meeting
Annual dues for Individual memberships are \$10.00.
Annual dues for family memberships shall be \$15.00 for husband and wife and all children
residing in the home under the age of 18.

Where I've Been

by Larry Brennan, Professor of Humor Development

I have been in many places, but I've never been in Cahoots. Apparently, you can't go alone. You have to be in Cahoots with someone.

I've also never been in Cognito. I hear no one recognizes you there.

I have, however, been in Sane. They don't have an airport; you have to be driven there. I have made several trips there, thanks to my friends, family and work.

I would like to go to Conclusions, but you have to jump, and I'm not too much on physical activity anymore since my knee replacements.

I have also been in Doubt. That is a sad place to go, and I try not to visit there too often.

I've been in Flexible, but only when it was very important to stand firm.

Sometimes I'm in Capable, and I go there more often as I'm getting older.

One of my favorite places to be is in Suspense! It really gets the adrenalin flowing and pumps up the old heart! At my age I need all the stimuli I can get!

I may have been in Continent, but I don't remember which country I was in at the time. It's an age thing.

(Larry Brennan is a retired registered nurse, is a 30 year member of a barbershop society, and is a master ventriloquist who lives and entertains in the Syracuse, NY area.)

The Conglomerate

Mike Seeds, Editor
516 Bald Eagle Ct;
Lancaster, PA 17601



Upcoming Events

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

December:

17: Annual BMS Holiday Party. 6:30 pm at the home of Alice Cherbonnier.

20: Hanukah begins

25: Merry Christmas!

January:

25: Meeting of the BMS

February:

1 - 8: Tucson hotel shows

9 - 12: Tucson Gem & Mineral Society Club Show. Theme - Minerals of Arizona. Well worth attending! Fabulous minerals for sale and outstanding displays!

25: BMS meeting

Yellow Diamond Sale

excerpted from Huffington Post

The 110.3 carat pear shaped yellow "Sun Drop" diamond was sold at auction in Geneva for a record \$10.9 million. This price breaks the previous record for a gem of its type. With commission and fees, the final cost was around \$12.3 million making it the eighth most expensive diamond ever sold at auction.



The yellow color in diamonds is usually due to a trace of nitrogen impurities trapped in the diamond. The Sun Drop, exhibiting unusually strong color, was graded by gemologists as a fancy, vivid yellow, the highest possible color rating.

The purchaser, remains anonymous.

(Okay, come clean. Who in our BMS family bought it?)