Bay Area Mineralogists November 2015

Meeting: November 18, 2015; 7:00 pm USGS, 345 Middlefield Road, Menlo Park Building 3, 2nd Floor, Conference Room

President: Don Windeler, <u>don.windeler at rms.com</u> Editor: Barb Matz, <u>matz.barb at gmail.com</u> BAM web site: <u>www.baymin.org</u>



In this Issue:

- Program: Sphalerite in the Midwest
- Welcome New Member
- New California Mineral, Esquireite
- CA Academy Exhibit at SFO
- Trona Field Trip Report
- Upcoming Shows, Symposia, & Events

The Bay Area Mineralogists meet monthly during the school year, on the 2nd Wednesday. We meet at the U.S. Geological Survey in Menlo Park, on the second floor of Building 3, where the campus map (http://online.wr.usgs.gov/calendar/map.html) says "Rambo Auditorium." The front doors will be locked so you'll have to come up the stairs on the Middlefield Road side of the building. Parking is free.

NOVEMBER 2015 MEETING DATE CHANGE

Due to closure of USGS on Nov 11 for Veterans' Day, our meeting will be held one week later. Also: We'll be back across the hall in the Conference Room due to prior reservation of the auditorium for that date.

November Program: Sphalerite in the Midwest by Len Piszkiewicz

A wise old geologist once said, "Show me a Midwest quarry and I'll show you sphalerite." Most mineral collectors are familiar with sphalerite found in the lead/zinc mining districts of the American Midwest like the Tri-State district (Missouri – Kansas – Oklahoma) and Elmwood, Tennessee, but few are aware that sphalerite also occurs in hundreds of other locations in the Midwest outside of the usual

lead/zinc mining districts. This presentation will take a tour of a selection of the non-mining district locations where sphalerite is found (and still collected today) and show specimens from these occurrences.



Black sphalerite in quartz geode, Nauvoo, IL

Sphalerite occurs as single crystals, groups and even fossil replacements in limestones, geodes, shales, sandstones and coal deposits, and can be found in quarries, road cuts and stream beds.



Sphalerite replacing gastropod shell, Lewis County, KY



Red sphalerite, Bluffton Stone Quarry, Bluffton, OH



Yellow sphalerite, Lockport Quarry, Lockport, NY

November Show & Tell

Bring your favorite sphalerite specimens from the Midwest (and elsewhere) and/or some associated Midwestern minerals to show off.

Welcome New Member

Welcome to new member Peter Bissell and his dad Mark! We got him started as a BAMie with a free sample of enargite and pyrite from the Morning Star Mine, courtesy of David Lowe.

New California Mineral, Esquireite by Gail Dunning

If you have not read the current issue of The Canadian Mineralogist, January, 2015 issue yet (yes, they are just a bit slow in publication), you will note that a new mineral has been described from California. The title is: *Esquireite*, *BaSi₆O₁₃·7H₂O*, a new layer silicate from the barium silicate deposits of California, by Anthony Kampf, Robert Housley, Gail Dunning, and Robert Walstrom.



Photo of esquireite from Trumbull Peak

More specifically from the Ba silicate claim above Rush Creek, Fresno County, and from Trumbull Peak, Mariposa County. This new mineral has been known as "Mineral 21", a hydrous silica phase for many years.



Photo of the Esquire #1 claim above Rush Creek

More recently, additional samples have been examined and this phase was found to contain barium. After much effort, this phase finally has been officially described and given the name, Esquireite, for the original locality above Rush Creek, the Esquire #1 claim, owned by Robert Walstrom.

[Note: Gail provided me with a pdf of the article referenced. If you would like a copy of the article, please contact me or Gail.]



An incriminating or discriminating photo of a BAM member with his head in a hole trying to remove a large mass of sanbornite. One end of him is pointing East and the other, West. I, Gail, am holding the deciding hammer that will finally remove the sample! If you have not guessed the person digging, it is the one and only John Magnasco!

California Academy Exhibit at SFO

Do you ever travel through the SFO International Terminal? If so, you've passed by at least one of their exhibit spaces and perhaps stopped to marvel at the objects on display. A current exhibit sponsored by the California Academy of Sciences includes a few fine mineral specimens, as reported by John Magnasco. Quoting from the SFO website: "I Love You, California' explores

the state's natural history and touches on its cultural history through the collections of the California Academy of Sciences. Invertebrates from abalone to deep sea squid, birds such as acorn woodpeckers and tufted puffins, plant pressings including the state flower, the California poppy, land and marine mammal skulls, fossils, and a myriad of minerals [including gold, jade, and benitoite], are some of the many specimens that illustrate the diversity of the Golden State."



Benitoite specimen in the display.

The exhibit is on the International Departures Level, pre-security, near the A Concourse. Be sure to build some extra time into your itinerary, or maybe take an excursion to the airport just to view it. The exhibit will be in place through January 3, 2016.

(http://www.flysfo.com/museum/exhibitions/i-love-you-california-natural-history)

TRONA GEM-O-RAMA REPORT

Eight BAM members – Stan Bogosian, Gary Parsons, Barb Matz, Leslie Gordon, Ted Hadley, Harry & Mary White, and Delilah Sabba – and SFGMS member Jeanine Svahlin attended the Trona Gem-O-Rama on Oct 10 & 11. We went on all of the field trips – under absolutely clear skies with temperatures in the upper 90s!

On Saturday morning everyone groped through thick black mud in search of large hanksite crystals and clusters, and other minerals.



Mary White, ready to dive into the mud pile.

Saturday afternoon took us to a different area on the lakebed where a drill rig had brought up mineral-laden brine from a subsurface layer in the lake bed. We got to pick through numerous piles of mud-free crystals before gathering to watch the rig produce one more pile, spraying brine over a large semi-circle. The show volunteers kept viewers a safe distance away from the spray, which contained a lot of small crystals and a few large chunks of rock (ouch!).



Leslie Gordon with her hands full of pink halite.

On Sunday morning we visited the famous pink halite area. This year, a brine-filled ditch alongside the road provided good collecting right next to the car!

Everyone got all they needed and more, and also put in some time cleaning and preserving their specimens. Despite the work, the mess, and the distance to this show, there will likely be another BAM gathering at Trona in a few years' time...

Did You Know? (I Didn't)

If you are a member of the Mineralogical Society of America (www.minsocam.org), you can view full issues of American Mineralogist and other publications online. If you are not a member you can still read abstracts and also read/download some selected articles. In some (many?) cases the abstract is the best part of the article and may provide all the information you need.

Dan Evanich sent me a link to an interesting abstract entitled 'Earth's "missing" minerals' (http://ammin.geoscienceworld.org/content/100/10/2344.abstract). Without violating copyright laws, I can tell you that the authors concluded that more than 1500 mineral species on earth have yet to be described. The article purports to discuss the distribution of these minerals and possible factors in whether they will ever be discovered. Check it out!

Coming Soon...

Ted Hadley sent me an instalment of his "Occasional Stories from the Desert" and promised some pictures to illustrate them. As soon as I get a few photos from him, I'll publish the stories – next month I hope!

Upcoming Shows, Symposia, & Events

Nov 21-22 - Livermore CA

The Barn, 3131 Pacific Avenue; Sat. 10 am-5 pm, Sun. 10 am-4 pm

Nov 21-22 - Santa Cruz CA

Live Oak Grange Hall, 1900 17th Avenue; Sat. 10 am-5 pm, Sun. 10 am-5 pm

Dec 5 - Albany CA

Crystal Gazers Holiday Party – BAMies welcome! Sat. 5-9 pm; bring potluck & silent auction items