Bay Area Mineralogists
March 2016

Meeting: Wednesday, March 9, 2016; 7 pm
USGS, 345 Middlefield Road, Menlo Park
Building 3, 2nd Floor, Auditorium

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In this Issue:

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.

DUES ARE STILL DUE!!

Our Treasurer is still accepting your $5 BAM renewals. You can pay at a meeting, or you can send them to him at:
Dan Carlson, PO Box 666, Belmont CA 94002

March Program: Tucson in Review

This is our annual opportunity to share our Tucson experiences.

What frauds did you suspect? Who had the most overpriced specimens? Where were the best margaritas in town? We'll all have a chance to comment, and someone will show pictures, especially of fine blue minerals on display at the main show.

We look forward to seeing plenty of Show & Tell and hearing lots of tall and/or outrageous tales from the various show venues that were Tucson 2016.

Seventeen members and friends of BAM gathered for dinner at El Minuto Café:

Editor's Note:

The following article is by one of our newest – and definitely the youngest – member. It's fun to relive some of our own collecting experiences through his eyes, and a real pleasure to see a youngster with such an interest in our pastime!

Peter's Clear Creek Adventure

by Peter Bissell

On December the 27th, 2015, my dad and I head out to Keefer's Inn, in King City (which had to have been the smallest city I had ever seen!) We checked into the hotel room and tried to get a good night's sleep (although I was way too excited and ended up falling asleep at about midnight). As soon as I closed my eyes, my dad was telling me to get up… 4:30 am. We got up and packed out of the hotel in case of early departure. I was unsure of this, but my dad insisted. (It ended up helping us in the end).

We got to Clear Creek Recreation Area and made a stop at the first rest-rooms, at Oak Flat Camp-grounds. My dad came out of the rest-room to me catching snowflakes in my mouth. Man was it cold!

We headed to the first stop near Staging Area One. We looked around and found some white minerals, so we packed them up. Heading back to the car, my dad stepped on (or in) a little peninsula of sand in the creek. Bad idea. He went for the step and splush. He sinks in both legs above the knees in the balmy, 20 degree water. I look over to see what's going on and instantly yell to myself , "Where is the camera when you need it?!!?" He finally gets himself out, and he is soaked. He says, "This is not a good start." Luckily, we had packed up all of our clothes before we left. We continued along the path, making a few stops along the way, hiking up creek beds, and decided to drive up to the Clear Creek Mine. We get about halfway up and see the steepest road we've ever seen. Too steep for our car. I start hiking up the mountain "until my head started disappearing and poking above the clouds," as my dad tells the story. We go back down and have some lunch on the Coleman stove. We wandered around the place until we saw a big boulder that had been chipped away a lot. When we looked closer, we saw some green stuff in the rock that we later identified as plasma agate. My dad headed back into the bushes and also found a small, orange rock with small, orange crystals:

We decided to start heading back (we wanted to be off the mountain before dark), checking various spots along the creek, finding a few specimens along the way, and we decided to check the spot with the white mineral again, being VERY careful of where we stepped, and didn't find a lot of new stuff. We head back to the hotel, an hour away, and get a nice, healthy dinner at KFC. 😉

Up again the next morning, closer to five, have Denny's for breakfast, same as yesterday, but today we have a plan. We had spent the last night studying the map, corner to corner, road to road and had the idea: we *hike* up the mountain and look for the mine. After about a two hour hike nearly STRAIGHT UP, we finally almost reached the top.


The author

We continued moving along various trails and dirt bike paths, and for the life of us, could not find the mine. After hours of searching, we found the spot with the quartz druzy. It wasn't the three-foot cinnabar specimen we had hoped for, but it was still really cool. We filled the backpack up with it and headed back down the mountain. While driving out, we saw a

black outcropping that looked cool, we broke some off (and we later sent it down to a lab in San Diego, where it was identified as Wustite with Baumite), and started the 3 hour drive back to Redwood City.

Photos by Peter and Mark Bissell.

2016 Summer Field Trip to da UP

John Magnasco has been working with Chris Stefano of the Seaman Museum at Michigan Tech to put together a week long field trip to various localities in northern Michigan's Copper Country. It looks like the target dates are sometime in late July to early August. Stay tuned for details…

Portable Emergency Transmitters

When heading into remote areas, you should always travel with someone else, in two or more vehicles. However, even a careful group with reliable vehicles can find themselves stranded, for example by a flash flood or landslide, and a lone traveler or vehicle can run into all sorts of trouble (don't do it!). Traditional means of emergency notification include: lighting a fire; laying out a bright/reflective cloth or spelling out HELP or SOS on the ground; or using a whistle, strobe light, or mirror to attract attention. If you're lucky, there is a nearby cell phone tower that carries your provider, but this is rare and unreliable. Fortunately, emergency alerts have been greatly enhanced in recent years with the development of personal locator beacons and satellite messengers. Both systems are useful but different.

Personal Locator Beacons: PLBs are designed to send out a personalized emergency distress signal. They generally require an open view of the sky to transmit successfully. PLBs are the land-based equivalents of Emergency Position Indicating Radio Beacons (EPIRBs), a technology that has been in use for decades in marine environments.

PLBs transmit powerful signals at 406 MHz, an internationally recognized distress frequency monitored in the U.S. by NOAA (National Oceanic and Atmospheric Administration) and the AFRCC (Air Force Rescue Coordination Center).

A PLB communicates with an international network of military satellites. After receiving your transmission, these satellites find your

location using a Doppler Shift method and relay your information to the AFRCC where search and rescue (SAR) procedures begin. A GPS-compatible PLB (not all are) can deliver your GPS coordinates very quickly without having to wait for the satellites to determine your position.

PLB owners must register their device with NOAA, which links essential personal information to a 15-character code known as a Unique Identifying Number (UIN). When activated, the PLB transmits the UIN to the satellites via electronic bursts. The electronic bursts provide SAR units with your location, and the UIN tells them personal information such as your name, address, phone number and any medical conditions you may have. Many PLBs include a built-in LED signal light to help catch SAR's attention when they get close. Unlike satellite messengers, you do not have to pay any recurring fees in order to use a PLB.

ACR PLB with GPS

SPOT satellite messenger

Satellite Messengers: Much like PLBs, satellite messengers are handheld transmitting devices that are useful in backcountry areas far from reliable cell phone coverage. These user-friendly devices allow you to communicate short text messages and/or your location coordinates with friends or family back home so you can report on your trip's status or, in an emergency, send calls for help. Satellite messenger signals are much less powerful than a PLB signal and virtually always require an open view of the sky to transmit successfully.

Satellite messengers are GPS-based devices that rely on either of two commercial satellite networks (not the military network used by PLBs). Emergency calls using either network are routed to the privately run GEOS International Emergency Response Coordination Center headquartered near Houston TX.

A subscription fee is required to use a satellite messenger. Each manufacturer offers a variety of usage plan options, usually including duration (yearly, seasonally or monthly) and GPS tracking frequency (with intervals ranging from hours down to a few minutes).

There is a lot of information about these devices on the internet. The source for this article was found on the REI web site and here is what REI sells: four satellite messengers ranging from $100 to $380 (not including subscription fees); and two PLBs, both with GPS, for $290 and $500 (no subscription required). Other brands are available from other sources, of course.

Upcoming Shows & Symposium

Mar 4-6, Newark CA
Mineral & Gem Society of Castro Valley
Newark Pavilion, 6430 Thornton Ave.
Fri 10-6, Sat 10-6, Sun 10-5.

Mar 12-13, Spreckels CA
Salinas Valley Rock and Gem Club
Spreckels Vets Hall; 5th and Llano Streets
Sat 10-5, Sun 10-5

Mar 12-13, Turlock CA
Mother Lode Mineral Society
Stanislaus Fairgrounds, 900 N Broadway
Sat 10-5, Sun 10-5

Mar 19, Jawbone Station
Southern California Friends of Mineralogy,
Mineral Locality Symposium (Lecture and Field Trip): "Darwin Lead/Silver Mine & Inyo Mountains Metamorphism"

Mar 26-27, Roseville CA
Roseville Rock Rollers Gem & Mineral Society
Placer Co. Fairgrounds, 800 All American Blvd
Sat 10-5, Sun 10-4

Mar 26-27, Angels Camp CA
Calaveras Gem & Mineral Society
Calaveras Co. Fairgrounds, 101 Frogtown Rd
Sat 10-5, Sun 10-4