Message from the President

August is the Pot Luck Luncheon and the club auction. Please be at the Nature Center early as 6 PM so we can start the meeting and enjoy the evenings events!!

During the August 13th meeting of the SMRMC Rock Show Planning Committee with Kyle Lowe of Parks and Planning, it became obvious that the option for renting the Showplace Arena for our 2016 Show was no longer there. The originally planned date during President’s Day weekend was taken by another group. The only remaining date available during Jan – Feb – March was January 16th. The rental fee for Show Place for the 2015 Rock Show that the Clearwater Nature Center was charged was $6,400. This made our 2015 show a “break even” event (at best) since the income from vendor table fees and customer admission tickets barely totaled $6,400.

As we learned at our meeting with Mr. Lowe, this $6,400 rate was ½ of the regular rental fee of $12,000 per day because we were affiliated with Parks and Planning. January 16, 17 & 18 (Martin Luther King weekend), 2016 had also been requested by another group willing to pay the full rental rate of $36,000 for the 3 days. The decision facing Mr. Lowe for the 2016 Show was $36,000 income from the other group versus $6,400 from us. We decided to withdraw our request for Jan 16th.

The future of our show is undetermined at this time.

Rich

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Next Meeting:
August 25, 2015@6:00 PM

Program:
Auction and Pot Luck Dinner

Refreshments:
All Members

Clearwater Nature Center, 11000 Thrift Road, Clinton, MD.
The June/July newsletter of the AFMS recognizes AFMS rockhounds of the year.

The Austin Gem and Mineral Society’s annual show, Gem Capers 2015, will host the American Federation and South Central Federation conventions and show on October 23rd – 25th. There is an lengthy article on the final ruling by the USDA for the National Forest Service regarding rockhounding and casual (unplanned encounter of fossil sites) collecting.

For these and other information, visit www.amfed.org

The EFMLS Newsletter for June/July has the minutes of the 65th Annual Meeting of the EFMLS convention at Hickory, NC. There is a call for judges to evaluate competitive cases. Training is free and takes place August 14-16, 2015 at the Lodge Hotel and Banquets, 3551 Pennridge Drive, Bridgeton, Missouri. An article on James Dwight Dana, the father of the Dana’s System of Mineralogy, also is included in the newsletter.

For these and other information, visit www.amfed.org.efmls

Upcoming Shows and Events: 2015

September 12-13 --52nd Annual Gem, Mineral, and Fossil Show sponsored by the Northern Berkshire Mineral Club. Fraternal Order of Eagles, 515 Curran Hyway, MA

September 19-20 --Annual Gem, Mineral, Fossil, Jewelry Show and Sale sponsored by the Mid-Hudson Valley Gem and Mineral Society. Gold’s gym and Sports complex, 258 Titusville Road, Poughkeepsie, NY

September 26-27 --51st Annual Gem, Mineral, and Jewelry Show hosted by the Gem Cutters Guild of Baltimore. Howard County Fairgrounds, West Friendship, MD (see ad, page 6)

Upcoming Field Trips

None scheduled at this time.
On The Lap
John Pesch

Looking for something new? Try “K2 Blue”. At our last rock show a friend of mine purchased a stone from one of the vendors and asked if I could re-shape and set it in a bracelet for her. The stone, marketed as K2 Blue in lapidary circles, is also known as K2 granite, K2 jasper and K2 agate among other things. Definitely not a jasper or an agate, K2 Blue is a white to gray granite found near the base of (you guessed it) the world’s second highest mountain K2 (aka Mount Godwin Austen). What makes this material unique and desirable to the lapidary are the bright blue orbs (or spherules) of what is believed to be azurite. Figure 1 below is a slab of some rough that was cut by Bill Oakley from the lapidary club.

I recall first seeing the material around 2011 or 2012 and as you might suspect it has raised a lot of interest as well as questions. There has been much discussion by the “mineral heads” and “chem heads” as to the composition of these little blue spots since the formation of azurite is inconsistent with the conditions that granite is formed under. Some have even speculated that the material might be dyed or irradiated. I believe the latest is that someone was able to isolate some of the blue material and run Energy Dispersive Spectroscopy (EDS) and X-Ray Diffraction (ERD) analyses which confirmed the material as azurite.

I found the blue dots to be somewhat 3-dimensional and scattered randomly throughout the rock. This would seem to me to dispel the dyed or irradiated possibility. Regardless, for lapidary work, the material is easy to cut and quite striking when finished. Even with the differences in mineral hardness (quartz, felspar, azurine, biotite?) I found very little undercutting. You do need to be careful not to cut completely through the azurite spots as this could ruin the composition of your piece (no guarantee what is beneath). I found that polishing with diamond compound up to 50,000 did a great job. Figure 2 is a picture of the finished and set stone.
Travel: A tour back in time at Sterling Hill Mine

Jenna Intersimone

Together with the Franklin Mine, the Sterling Hill Mine was one of the top five in the world for having the most fluorescent minerals with 80 documented species.

In the Rainbow Tunnel, brightly fluorescent zinc ore is exposed in the mine walls. (Photo: ~Courtesy of Sterling Hill Mining Museum)

Travelers often head to the tristate area to get a taste of Manhattan, but Bill Kroth, president of Sterling Hill Mining Museum, knows that Sussex County has its own tourism gem hidden in the caverns of Ogdensburg.

“When you get up here, it’s like taking a step back in time,” said Kroth. “Where else can you walk into a real mine and learn about earth science and see fluorescing minerals?”
About 45,000 people visit the Sterling Hill Mining Museum every year. (Photo: ~Courtesy of the Sterling Hill Mining Museum)

Many New Jerseyans are unaware of the fame that surrounds the now-inactive mine, which closed in 1986 because of the low price of zinc and a property tax dispute with Ogdensburg after 138 years of mining of zinc, iron and manganese. Together with the Franklin Mine, it was one of the top five in the world for having the most fluorescent minerals with 80 documented species.

“I tell visitors, ‘Can you name one thing that came out of a factory that didn’t need a mine to make it?’ ” said Kroth. “Everything started underground. Everything we need came from mining, even our iPads, tires and makeup.” Kroth said that those who are the slightest bit interested in rocks and minerals or earth science and chemistry should visit the mining museum and take the tour.

From start to finish, the tour takes two hours and includes the main museum Zobel Exhibit Hall, which provides educational exhibits and an introduction to the Sterling Hill Mine, as well as the hourlong mine tour, which includes the lamp room, shaft station, mine galleries, a sight-and-sound blasting demonstration and the favorite “Rainbow Tunnel,” where brightly fluorescent zinc ore is exposed in the mine walls.

Numerous pieces of mining equipment are scattered throughout the nine passages within tour exhibits for visitors to learn about the mining process such as sinking buckets, stamp mills, sheave wheels, crushers, ball mills, drum hoists and compressors.

Inside the 1300-foot, well-lit underground mine, the air is a cool 56 degrees, making it a fitting pseudo-outdoor activity for a hot summer day. No climbing is involved on the wheelchair-accessible tour — visitors walk on gravel throughout the mine.
To those who haven’t been on the tour, two hours sounds like a long time to be wandering around a mine, but Kroth said that many people come to him afterward and tell him that they can’t believe it went by so quickly.

“People don’t understand the process of mining, so when they learn about it, they’re mesmerized,” he said.

About 45,000 people visit the Sterling Hill Mining Museum every year, a number that has doubled over the past three years because of an increase in staff and the ability for the museum to accommodate more tours and visitors. Zobel Exhibit Hall also has more pieces, and the actual mine has been expanded with more stations, plus a new pavilion was recently built to accommodate large groups of schoolchildren for lunch.

The Sterling Hill Mining Museum isn’t done yet with its expansion. It is polishing its current exhibits, as well as exploring the possibility of incorporating the mining crushing plant on to the tour.

The Sussex County mine is lucky. Throughout the years, many former mine sites have been torn down, but the Sterling Hill mine was purchased three years after its closing and made accessible to the public as a museum only about a year later.

One of the oldest mines in the United States, the area was first worked before 1739, more than 265 years ago. Together with the Franklin Mine, 350 different mineral species have been found in the vicinity — a world record for such a small area. More than two-dozen of these have been found nowhere else on Earth.

**STERLING HILL MINING MUSEUM**

**Where:** 30 Plant St., Ogdensburg  
**Cost:** $11 for adults, $8 for children 4 to 12, children 3 and under are free  
**Hours:** Public tours are at 10 a.m. and 1 p.m., seven days a week until after Labor Day  
**Contact:** 973-209-7212 or sterlinglehillminingmuseum.org
Jacobsville sandstone explored during tour
August 8, 2015
Mining Journal
By DAN ROBLEE
Daily Houghton
Mining Gazette

Above, in this recent photo, Georgia Makens, left, stands on a sandstone balancing rock she found at Bare Butt Beach near Jacobsville while geoheritage tour companions search for rocks. At left, Dale Pracht of Eau Claire, Wis., left, checks out a sandstone formation at Bare Butt Beach while Michigan Tech University professor emeritus Bill Rose looks on. Rose led a geoheritage tour group that spent the day exploring the sources and use of Jacobsville sandstone. (Houghton Daily Mining Gazette photos by Dan Roblee)

JACOBsville - Not many folks from out of town make it to Jacobsville, but the Jacobsville sandstone the village is built on is downright cosmopolitan.

From about 1880 to 1910, sandstone from Jacobsville quarries was used to build landmark buildings in New York, Chicago and throughout the nation, as well as locally, Michigan Tech University professor emeritus Bill Rose said.

"Big buildings, famous buildings," said Rose, who led a group of nearly 20 inquiring adults on a daylong, by-land and by-sea exploration of the Jacobsville stone, from its geological beginnings as part of a pre-glacial Huron Mountain Range as tall as the Rockies, to the tall buildings of downtown Chicago. The group even got together with some of today's Jacobsville residents, to chat about what that history and somewhat changed geography means to them.

It was the final day of a three-day geoheritage tour of the Keweenaw, one of a handful that have now been led by Rose and colleague Erika Vye, linking the rocks and minerals of the Copper Country with the history and culture built upon them. It's a new twist on the old idea of educational tourism, a long-time area staple with the Keweenaw National Historical Park and mineral-focused attractions like the Quincy and Delaware mines.
It's a concept that's quickly gaining popularity. After a slower start last year, when the first tours were held, this year's excursions sold out, Rose said.

That didn't surprise Steve Trynoski, who splits his year between Bete Gris and St. Paul, Minn.

"There's a crying need, a demand for adult education," Trynoski said, noting that the majority of the tour members were retirees with challenging careers behind them and a desire to learn more about the world.

"People need to be challenged intellectually," he said.

"I think it just opens your eyes, broadens your horizons," Hancock resident Sue Ellen Kingsley said. "There's a lot I don't know about geology. I wanted to learn more."

She said Rose did a great job explaining human impacts on the Keweenaw's geologic and overall environment, and the tour also gave her an up-close look at Rabbit Island, a secluded spot she'd been curious about.

Rose said the geoheritage project's partnership with MTU has been a boon. Tech hosts his geoheritage web site - geo.mtu.edu/KeweenawGeoheritage - and allows the project to charter Tech's 20-person research vessel, the Agassiz, for the tours.

Along with Rabbit Island, the aquatic itinerary included Big and Little Traverse bays, Rabbit Bay and one of the larger quarries cut along from the Keweenaw coast.

Not only does geoheritage have a good chance to carve out a larger niche in the Keweenaw's tourism market, Rose said it and other educational tourism activities provide great opportunities to teach people about issues like mining, dealing with waste and finding the most logical energy sources - issues where many people have opinions, but often poor information to base them on.

"It can depolarize people so they're not adamantly opposed to every kind of mining, or not so pro-mining they won't listen to an environmentalist's opinion," he said. "Neither of those points of view are good for us. It's better to know what's real."

Laurium resident Barb Flanagan was learning plenty at Bare Butt Beach, one of Jacobsville's best up-close examples of sandstone geology. But while senior citizen Georgia Makens was indulging the pleasure of rocking back and forth on a balanced sandstone rock, she too indulged in a simpler geologic pleasure, collecting a few of the more striking rocks to bring home.

"It's hard not to (collect)," she said. "Every beach has something new. I couldn't resist."
Member’s Finds
Photos of crystals of the mineral rutile, bottom photo is massive limestone with fluorite, collected by David and Jeff Lines from the Champion Sparkplug sillimanite mine in California. The photo below shows a large crystal before cleaning in “Whink” Rust Remover, which contains 1% hydrofluoric acid. Top right photo shows a crystal after cleaning in the product, and the bottom right photo is a close-up of the cleaned crystal. Hydrofluoric acid, even at 1%, is a dangerous chemical, capable of dissolving glass, and every precaution must be taken—protective clothing, resistant gloves, and adequate ventilation—to prevent exposure to skin if this product is to be used safely. It is available at hardware stores.

Collected any interesting specimens? Send a photo or two to the editor at bmorebugman@yahoo.com for inclusion in the next issue of Rock Talk.
The Southern Maryland Rock and Mineral Club

Meetings take place on the 4th Tuesday of each month at 7:00pm
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