

November 2022



OCMS SHALE MAIL



**Welcome to an in-person meeting Friday
November 11th, 2022 at 6:30 pm!**

See you at: 81 Laroe Rd Chester, **NY** (Town of Chester Recreation Senior Center), (From KINGS HWY, Turn left on Laroe Rd by UPS office building)

[CLICK FOR MAP](#)

WHAT'S INSIDE?

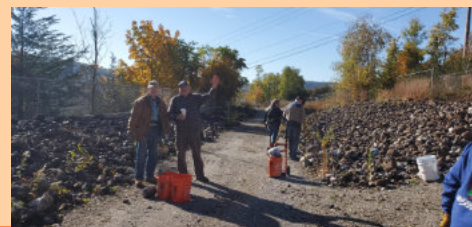
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2022 CALENDAR

Nov 11-Mystery Meeting, Senior Center

Dec 09-Meeting, Holiday, Pot Luck Dinner & Mineral Chinese Auction.

Proposed 2023 Meeting Times: Jan 13, Feb 10, Mar 10, Apr 14, May 12, Jun 3-4 Sat Mineral Show and Sale, Jul 14, Aug 11, Sep 9 Sat Rock BBQ, Oct 13, Nov 10 and Dec 8.



Mailing Address:

254 Rt. 17K, Suite 204, Newburgh, NY 12550-8300

PRESIDENTS MESSAGE & MINUTES!

By: Mike Tedford

President's Message

Please join us for our next live meeting Veterans Day, November 11th, 2022 at the Senior Center. To our members who are veterans: **Thank You for your service!**

We had a great turnout for our October 15th live meeting at Sterling Hill Mine and Museum combined with collecting specimens and mine tour. Thank you to the Kerstanski's who or-



ganized and led us in these activities. Words can not describe the extensive experiences we shared this day in collecting, meeting and touring. Likewise, the mineral displays there at the mine, the museum and gift shop are impressive with fluorescent displays and mineral and mining displays from other mines and collectors.



The museum portion also has public hours for anyone that wishes to see more.

OCMS paid the member's admission fee

for the collecting at the mine grounds that started at 10 AM and many members collected until noon. We had the use of the shortwave light at the building right near the piles of mine rocks and found many fluorescent specimens. This area is open on weekends for anyone wishing to do more collecting. We also had a brief walk to view the mine grounds.

Minutes of the Meeting

Our business meeting was a brief lunchtime meeting from around 12:15 PM to 12:35PM in the pavilion attached to the snack bar and gift shop. Some additional members arrived for the meeting. We reviewed old and new business with no official committee reports.

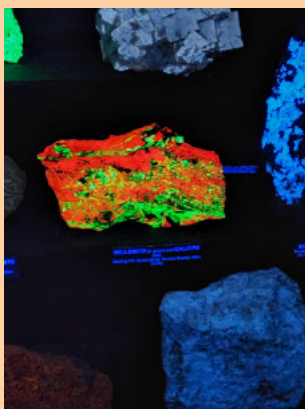
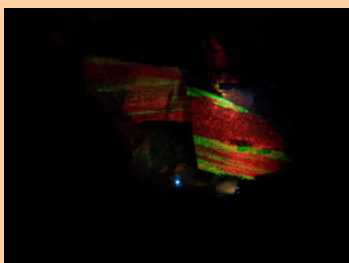
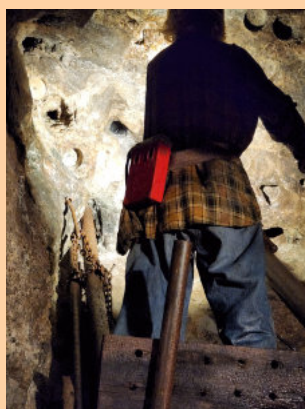
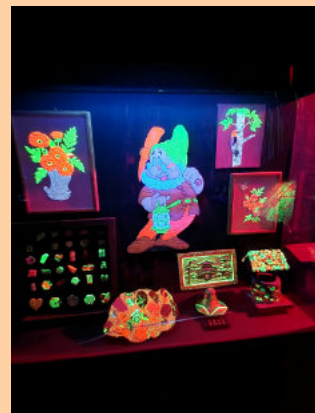
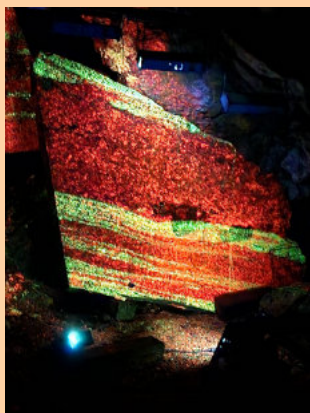


Enthusiastic discussions for future field trip opportunities ensued while we prepped for our walking tour of the mine. Alex Kerstanski led us on a walking tour of the mine. The mine was comfortably cool with a light sweater or jacket. Alex demonstrated several areas of the mine on the main level. This was a working mine for many years and the displays there give impressions of some aspects of the working there. These first-hand views amplified the excellent and informative presentations we have seen in meetings over the years. Many of us went on to tour the conveyor system that moved, crushed and processed the ore.

Thanks to all the OCMSNY members who joined in the rock barbecue at the Chester pavilion. We enjoyed sharing some wonderful potluck dishes in addition to the OCMS sponsored burgers, hot dogs, sausage and peppers and eggplant Parmesan.

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STERLING HILL - CONT.



A Brief History of Turquoise

By: Keith Allen

Turquoise is one of the world's most ancient gems. Archaeological excavations revealed that the rulers of ancient Egypt adorned themselves with turquoise jewelry, and Chinese artisans were carving it more than 3,000 years ago. Turquoise is the national gem of Tibet, and has long been considered a stone that guarantees health, good fortune, and protection from evil.



The gem's name comes from the French expression *pierre turques*, or "Turkish stone." The name, which originated in the thirteenth century, reflects the fact that the material probably first arrived in Europe from Turkish sources.

The earliest evidence of turquoise gemstones comes from ancient Egyptian tombs, which contain elaborate turquoise jewelry dating back to 3000 BCE. Egyptians set turquoise in gold necklaces and rings, used it as inlay, and carved it into scarabs. Most notably, King Tut's iconic burial mask was extravagantly adorned with turquoise.

The oldest turquoise mines are in the Sinai Peninsula of Egypt. One sat near an ancient temple dedicated to Hathor, the Greek goddess of love and joy who was worshiped as a protector in the desert and as the patron saint of mining. Egyptians called turquoise *mefkat*, which meant "joy" and "delight."

Ancient Persians decorated extensively with

turquoise, often engraving it with Arabic script. Turquoise covered palace domes because its sky-blue color represented heaven. This later inspired the use of turquoise in buildings like the Taj Mahal. Believing turquoise guaranteed protection, Persians adorned their daggers and horses' bridles with it. Their name for turquoise, *pirouzeh*, meant "victory." Persians wore turquoise gemstone jewelry around their necks and in their turbans. They believed it offered protection by changing color to warn of pending doom.

Meanwhile, pre-Columbian Native Americans mined the turquoise gemstone throughout the present-day southwestern United States. Shamans used it in sacred ceremonies to commune with the spirit of the sky. Apache Indians believed that attaching turquoise to bows improved a hunter's accuracy.

Turquoise became valuable in Native American trade, which carried North American material toward South America. Consequently,



Aztecs cherished turquoise for its protective power and used it on ceremonial masks, knives, and shields. The turquoise-studded silver jewelry that's commonly associated with Native Americans today originated in the 1880s, when a white trader convinced a Navajo craftsman to transform a silver coin into turquoise jewelry. While many historic turquoise deposits have depleted over the gemstone's long lifetime, some small mine operations (mainly in the U.S.) still produce fine material today.

Dixie Caverns!

^{ib} Having a long weekend in October 2015, John and I were off to Virginia to visit with family. While there, we visited the Shenandoah Caverns.

When we went on our visit in 2016, we decided to go somewhere a little closer to their house so we could take everyone with us. The place we took them too is called Dixie Caverns, in Salem Virginia. It was really awesome but had entirely too many stairs for toting three kids.

The reason there are so many stairs and no elevator is because instead of going down into the earth we had to actually climb up into the mountain. Here we enter the room they call the Majestic



Cathedral Room which was full of beautiful formations.

They have names for all the special formations all the way through the tour. We saw the turkey wing, the magic mirror and the wedding bell. The guide told us that many couples have been married under the wedding bell. I think the big attraction to the wedding bell is the fact it's still a living formation. Many of the formations in the Dixie Caverns are still growing. Droplets of water can be seen dripping off the thousands of

stalactites. When the tour was over we still had to walk all those steps to get out of the cavern.

Over all it was a really nice tour and the for-



mations were just amazing. We really enjoyed walking around the little rock and mineral shop that was there. John felt the prices compared to other tourist spots were a little on the high side. Needless to say he didn't buy any.

We found ourselves wandering the aisles of the gift shop. There were a lot of little trinkets, many different types of figurines, toys for children and lots of other stuff. It was a really cute little store.

Last but not least was the antique mall. Wow, what an awesome place, it was huge. I think if you stayed there for the whole day you could walk out with just about any kind of antique you would want. I bought a gift for my sister from Quebec when I was there. After that we were all tired, it was time to head back home. We had a great time with the kids and grand kids. If your ever in the Salem Virginia area I highly recommend the Dixie Caverns as a must see!

Lapis!

By: Keith Allen

Royal blue lapis lazuli, the gem variety of lazurite and one of the most beautiful opaque gemstones, is a sodium and aluminum mineral of considerable complexity. Known as “sapphires” by the ancients.



The ancient royal Sumerian tombs of Ur, located near the Euphrates River in lower Iraq, contained more than 6000 beautifully executed lapis lazuli statuettes of birds, deer, and rodents as well as dishes, beads, and cylinder seals. These carved artifacts undoubtedly came from material mined in northern Afghanistan. Later Egyptian burial sites dating before 3000 B.C. contained thousands of jewelry items, many of lapis. Powdered lapis was favored by Egyptian ladies as a cosmetic eye shadow and in later years it was used as a pigment for ultramarine paints. Pliny the Elder described the stone as “a fragment of the starry fir-



mament.”

The most prized lapis is a dark, nearly blackish blue, much deeper than turquoise and more intense than sodalite or azurite. Lazurite occurs most frequently in lighter shades commonly mixed with streaks of calcite. Although attractive, this material is less desirable and consequently fetches a lower price. Pyrite, a commonly associated mineral, is often liberally sprinkled throughout lapis specimens, to create a striking combination of rich blue and brassy gold.



The route to the lapis mines in the Kokcha Valley is long, tortuous, and dangerous. From Feysbad, capital of Afghanistan's northeast province of Badakhshan, a poor road stretches southward through tiny hamlets of mud-walled huts standing on uneven ground wracked by the earthquake of 1832. After motoring as far as Hazarat-Said, the traveler must spend another full day on horseback before reaching Kokcha Valley. The small Kokcha River is the eastern tributary of the River Oxus which Marco Polo traversed and wrote: “There is a mountain in that region where the finest azure [lapis lazuli] in the world is found. It appears in veins like silver streaks.”

Lapis - Cont.

The lapis is mined on the steep sides of a long narrow defile sometimes only 200 meters wide and backed by jagged peaks that rise above 6000 meters. Sparsely populated and covered with snow for much of the year the barren region is inhabited by wild hogs and wolves. The summer sun is scorching, but temperatures drop below freezing at night. British Army Lieutenant John Wood reached the lapis mines for the East India Company in 1837, and wrote in his Journey to the Source of the River Oxus, "If you do not wish to die, avoid the Valley of Kokcha." This is surely not one of the world's better sites for a field trip!

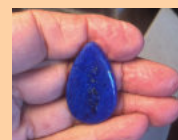


Darreh-Zu, one of the oldest mines along the Kokcha, is now closed and presumably exhausted. The nearby and relatively new Sar-e-Sang mine currently yields substantial amounts of good quality gem material and has produced



rare 5-centimeter lazurite crystals. The largest found thus far, a well formed dodecahedron imbedded in calcite, was collected in 1964 by Pierre Bariand, mineral collection curator at The Sorbonne.

Lazurite gem deposits occur in white and black marbles hundreds of meters thick. The gem veins, seldom exceeding 10 meters in length, lie in snow-white calcite. Associated minerals include pyrite, diopside, sodalite, forsterite, phlogopite, garnet, dolomite, apatite, and afghanite, a relatively new species of the cancrinite group.



Gem lazurite is found in three Persian color classifications: nili (dark blue), assemani (light blue), and sabz (green).

During the 1880s and early 1900s, lazurite was mined by the "fire-set" method: large fires were kindled at the tunnel face and then quenched with water. The sudden cooling caused face rocks to shatter, simplifying removal of the ore. The gem material was then cobbled away from its matrix. A critical shortage of wood and the availability of explosives eventually rendered the technique obsolete.

The Sar-e-Sang mine has reserves of high-grade lapis lazuli and possibly more of the very rare lapis crystals. But political instability in Afghanistan clouds the future for both mining and distribution of the noble blue gem.

OCMS members are covered by Society-sponsored insurance.

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