Greetings Friends,

Lots of news for this edition of the Mineralogical Cabinet, I’ll save perhaps the biggest for last…to force you read it all.

First and foremost, the mineral symposium as an in person event was approved by the university’s special events committee. This includes a Friday field trip to Copper Flat, courtesy of Dr. Virginia McLemore. That will be followed by our evening reception at the Mineral Museum. We may use the courtyard to increase space so you might bring a jacket. A complete schedule of presentations for Saturday and half of Sunday and a banquet on Saturday night is planned. Be prepared for possible changes in schedule due to potential responses to the Covid-19 situation. Please be patient with us and be sure to bring your masks. As of today, New Mexico requires masks in all indoor facilities but we do not have any quotas on the number of participants other than capping the banquet at 180 as is the custom.

We raised enough money to purchase new UV lighting units for the three display bays in the Ultraviolet Mineral room. The new units have arrived and we are planning to have them installed and operational before the symposium. Thank you, Friends!

Finally I want to announce to our friends that I have decided to retire at the end of this year. I have served in my position here at the Bureau for 27 years, that doesn’t include the five years at my previous professor job in Texas. I have enjoyed this job tremendously and have made so many wonderful friends and acquaintances. Lisa and I are not leaving the Socorro area, we plan to retire here and I will maintain a relationship with museum. So I will not be gone, only a bit less conspicuous. I am comfortable that it is time to move on and leave the museum to someone with a new vision for the facility. Thankfully Kelsey will still be here to help transition the museum to the next generations of friends, donors, and visitors. Please accept my heartfelt thanks for all the support you have given to me and the museum.

Onward,

Virgil W. Lueth

Director’s Choice

If you go back through the mineral museum catalog since January 4, 1994, starting at number 12810 and look at everything added to the collection up to number 20235 you would see 7,425 Director’s Choices. That is averaging 275 minerals per year! Obviously some choices are better than others but the museum has
changed a lot in my 27 years. Pieces we acquired and cataloged in 1994 look quite different than what we often handle today.

I collected a few of them myself (rare stuff...mostly jarosite and tellurates) but they are no more important than any others. We purchased many with the funds generated by visitors and friends. Many of my finest “choices” were made by donors who graciously gave parts of their collections to share with the visitors of the museum. Of course, I had to choose which specimens to keep but that does not diminish the fact that our donors generosity has had a huge impact on the success of the museum.

Many of you know, most of the pieces have their own stories...some of which the story is better than the specimen (remember Helen of the Organs?). Walking through the gallery or browsing through the reserve drawers brings back so many memories, some funny and some sad. Others the stories should remain untold for various reasons; discretion is also a very important trait of a good museum director.

For this edition of the newsletter, I have decided to share some images (all taken by Jeff Scovil) of some of my favorite New Mexico pieces in the museum that were acquired during my tenure. Don’t read too much into my choices of images (notice no pictures of jarosite). During one of our recent staff meetings we were asked to introduce ourselves and perhaps mention our favorite mineral. My answer was, “I don’t have a favorite mineral, they are all special in their own way.” Like one’s own children, picking favorites is a fool’s errand. Please enjoy, I’ve provided some personal annotations about each.

Azurite and calcite on malachite, Chino Mine. A beautiful specimen we acquired early in my tenure. Another piece, in the collection of Philip Simmons fits on the side of this specimen!

Chlorargyrite from the Bridal Chamber, Lake Valley. Notice the chisel mark where it was pried off the wall. A truly historic specimen.

Chalcophyrite from the Bridal Chamber, Lake Valley. Notice the chisel mark where it was pried off the wall. A truly historic specimen.

Vanadinite from the Hillsboro district. This specimen was given to us by Jim and Lequita Lett of Bayard, NM. Jim said it came from his uncle who owned “Let’s Bar” in Hillsboro. A miner paid for a bar tab with this piece. It came as a golf ball-size mass covered with clay and only a few crystals sticking through. Alternating episodes of soaking and picking revealed this stunning specimen.

Japan law twinned smoky quartz from the Ortiz Mountains. This piece was collected by Ron Boyd which was donated to the museum on his passing from his collection by way of Gary Young and Joe Dorris.

Aphthitalite (Latin for “stable salt”) from the potash mines at Carlsbad, NM. Few people appreciate the spectacular aspect of these pieces, this one gifted to us from Philip Simmons. Prior to this find, the largest crystals of this species were on the scale of millimeters. Some recovered from this find attained sizes of over 10 cm! The finest in the world.

Vanadinite from the Potash Lakes. This specimen was given to us by Jim and Lequita Lett of Bayard, NM. Jim said it came from his uncle who owned “Let’s Bar” in Hillsboro. A miner paid for a bar tab with this piece. It came as a golf ball-size mass covered with clay and only a few crystals sticking through. Alternating episodes of soaking and picking revealed this stunning specimen.

Carnellite crystals from Carlsbad gifted to the museum by Gary and Priscilla Young. This pieces was probably one of my greatest curatorial failures. After photographing the piece, it went back into the reserve collection. The next time I saw it, all that remained was a “skin” of varnish and a pool of brine, still in the box, that resembled clear syrup. Sometime during handling I must have scraped a hole in the varnish that protected it and it dissolved from humidity to a near eutectic composition of liquid “carnallite.” Although a sad result, the end product was fascinating to me, the brine did not even wet the cardboard specimen tray!

“Chile Pepper” Copper from the Chino Mine. This was a specimen that I felt had to come to the museum because it exemplifies the quality of Chino coppers yet also resembles one of the state’s iconic products. Ron Gibbs was gracious in letting us acquire it from him.

Carnellite crystals from Carlsbad gifted to the museum by Gary and Priscilla Young. This pieces was probably one of my greatest curatorial failures. After photographing the piece, it went back into the reserve collection. The next time I saw it, all that remained was a “skin” of varnish and a pool of brine, still in the box, that resembled clear syrup. Sometime during handling I must have scraped a hole in the varnish that protected it and it dissolved from humidity to a near eutectic composition of liquid “carnallite.” Although a sad result, the end product was fascinating to me, the brine did not even wet the cardboard specimen tray!

Aphthitalite (Latin for “stable salt”) from the potash mines at Carlsbad, NM. Few people appreciate the spectacular aspect of these pieces, this one gifted to us from Philip Simmons. Prior to this find, the largest crystals of this species were on the scale of millimeters. Some recovered from this find attained sizes of over 10 cm! The finest in the world.

Vanadinite from the Potash Lakes. This specimen was given to us by Jim and Lequita Lett of Bayard, NM. Jim said it came from his uncle who owned “Let’s Bar” in Hillsboro. A miner paid for a bar tab with this piece. It came as a golf ball-size mass covered with clay and only a few crystals sticking through. Alternating episodes of soaking and picking revealed this stunning specimen.

Carnellite crystals from Carlsbad gifted to the museum by Gary and Priscilla Young. This pieces was probably one of my greatest curatorial failures. After photographing the piece, it went back into the reserve collection. The next time I saw it, all that remained was a “skin” of varnish and a pool of brine, still in the box, that resembled clear syrup. Sometime during handling I must have scraped a hole in the varnish that protected it and it dissolved from humidity to a near eutectic composition of liquid “carnallite.” Although a sad result, the end product was fascinating to me, the brine did not even wet the cardboard specimen tray!

“Chile Pepper” Copper from the Chino Mine. This was a specimen that I felt had to come to the museum because it exemplifies the quality of Chino coppers yet also resembles one of the state’s iconic products. Ron Gibbs was gracious in letting us acquire it from him.
Hello again friends!

It has been since May since our last newsletter, and I can tell you that I’ve spent most of my time working on donations, donations, donations! Due to the Delta variant and the indoor masking policy back in effect, museum staff haven’t had many tour requests or outreach events. However, museum visitation and mineral sales are still going strong.

We have a small army of student assistants that allow the museum and bookstore to be open 7 days a week (minus holidays). The assistants have a variety of tasks, including (but not limited to): greeting guests, answering questions, cleaning glass, making sales, and stocking the shelves. They allow the museum and bookstore to be open 7 days a week and provide the most direct connection among Bureau staff and the general public. We are so grateful for our hardworking students, who allow us to focus on our workload in both the museum and XRD lab.

So let’s talk donations! Since May, the museum has received some nice monetary gifts, as well as a number of aesthetic mineral specimens (thanks to all of our generous donors!). In June we received a call from a woman named Jan Stevenson, who stated her father, Donald Krause, was a mineral collector. It took Virgil and I four trips to Albuquerque to move the sizeable (and I mean SIZEABLE) collection. Currently, we have numbered around 4,000 pieces, and estimate we might be close to the halfway point.

Since then, I have made a trip to Santa Fe to pick up worldwide minerals from the Estate of Bob Dodds III, and to Houston, TX for the rare-earth element-focused collection of Bob McNeill. I successfully avoided COVID by tent camping in Texas. It was uncomfortable, but it worked! All of the aforementioned donations are still being processed. Photos of both catalogued and uncatalogued pieces are included in the subsequent gallery. Enjoy!

We recently set up an exhibit at the Hard Rock Summit show in Denver. The theme this year was fluorite, so we decided to bring a variety of showy and interesting pieces from the Land of Enchantment. Virgil also gave a well-received presentation on the color of fluorite. Please enjoy a photo of the case taken during setup!

Kelsey McNamara

---

**Photo Gallery: Recent Museum Acquisitions**

A colorful exhibit of NM fluorite, in both raw and gemstone form, at the HardRock Summit in Denver!

Fluorite, Riemvrosmaal fluorite occurrences, Northern Cape, South Africa. Gift of Nancy Attaway.

Fluorite plate larger than Virgil's head, Last Chance Mine, Grant Co., NM. Gift of Mark Kielbaso & Mike Sanders.

Beryl var. Emerald, Makarah Outcrop, Sangre de Cristo Mountains, Taos Co., NM.

Sprays of yellow sklowdoskite with selenite, Naica, Chihuahua, Mexico. Gift of Savannah Bradley, NMT Class of 2022, In memory of her great grandfather CMSgt Donald L. Krause.

Wulfenite & mimetite, San Francisco Mine, Smora, Mexico. Gift of Savannah Bradley, NMT Class of 2022, In memory of her great grandfather CMSgt Donald L. Krause.

Epidote ps. Orthoclase, Jarilla Mountains, Orogrande District, Otero Co., NM. Gift of Erin Delventhal & Phil Simmons.

Two views of a favorite! Topaz with hematite ps. garnet, Thomas Range, Juab Co., Utah. Gift of Savannah Bradley, NMT Class of 2022, In memory of her great grandfather CMSgt Donald L. Krause.

Brochantite crystals on anglesite ps. galena, Blanchard Mine, Hansonburg District, Socorro Co., NM. Gift of Savannah Bradley, NMT Class of 2022. In memory of her great grandfather CMSgt Donald L. Krause.

Cadmian smithsonite from the Black Wolf Tunnel, Pierro-Hanover District, New Mexico.

Grossular var. Tsavorite, Merelani Hills, Simanjiro District, Manyara Region, Tanzania. Gift of Nancy Attaway.


Rutile & hematite (measuring roughly 19x11x5cm), Novo HORIZONTE, Bahia Brazil. Held with plastic packing material because of the splinter danger!

Bureau Periodicals

Would you like to know more about the effects of induced seismicity in the state? Are you interested in Pennsylvanian paleosols of central New Mexico? How does a publication full of geology resources (including virtual tours, citizen science and teaching activities)...

Mairi Litherland and Margaret Glasgow have produced an educational write-up on seismicity in NM, including topics of natural vs. induced seismicity, areas of frequent seismic events, and how those events are monitored and measured.

This edition of NM Geology is focused on calcareous paleosols (ancient soils) in the Upper Pennsylvanian Atrasado Formation of central New Mexico. Authors Spencer Lucas and Lawrence Tanner utilized stable isotope, petrography, and paleoflora data to determine paleoclimate.

The current issue of Lite Geology is focused on earth science teaching and learning resources—including (but not limited to!) a virtual tour of the Jemez Mountains, logging precipitation amounts for citizen science projects, and the geology of Fort Stanton-Snowy River Cave.
sound? Earth Matters, New Mexico Geology, and Lite
Geology are all free periodicals available for down-
load at this site: https://geoinfo.nmt.edu/publications/
periodicals/home.cfm

For updates and photos on what’s happening at the
museum, I try to post weekly/bi-weekly on our Face-
book page:
www.facebook.com/NMBGmineralmuseum
The New Mexico Bureau of Geology ALSO has a
Facebook page! Please check it out at this address:
www.facebook.com/NMBGMR

The Rio Chama guidebook is now up for sale! The little boater in
the bottom left is the Mineral Museum curator, floating toward
the ominous Chama Wall.

2021 Museum Show Calendar

Dec.  Earth Treasure Show, Los Alamos
Feb.  Tucson Gem & Mineral Show
Mar.  Albuquerque Gem & Mineral Club Show

“Friendly Reminder”

Annual Dues for the Friends of the Museum expire on
the weekend of the Mineral Symposium.

You can pay dues on site or remit payment to:
NMT - Mineral Museum Gift Fund
and send it to:
NMBGMR Mineral Museum
Friends of the Mineral Museum
801 Leroy Place
Socorro, NM 87801

You can use a credit card too, contact:
Kelly Luster or Michael Carroll
Publications Sales
575-835-5490

Contact Us:
Director: Virgil W. Lueth:
575-835-5140              Virgil.Lueth@nmt.edu
Curator: Kelsey McNamara
575-835-5418              Kelsey.Mcnamara@nmt.edu