THE PICKING TABLE

JOURNAL OF THE FRANKLIN-OGDENSBURG MINERALOGICAL SOCIETY

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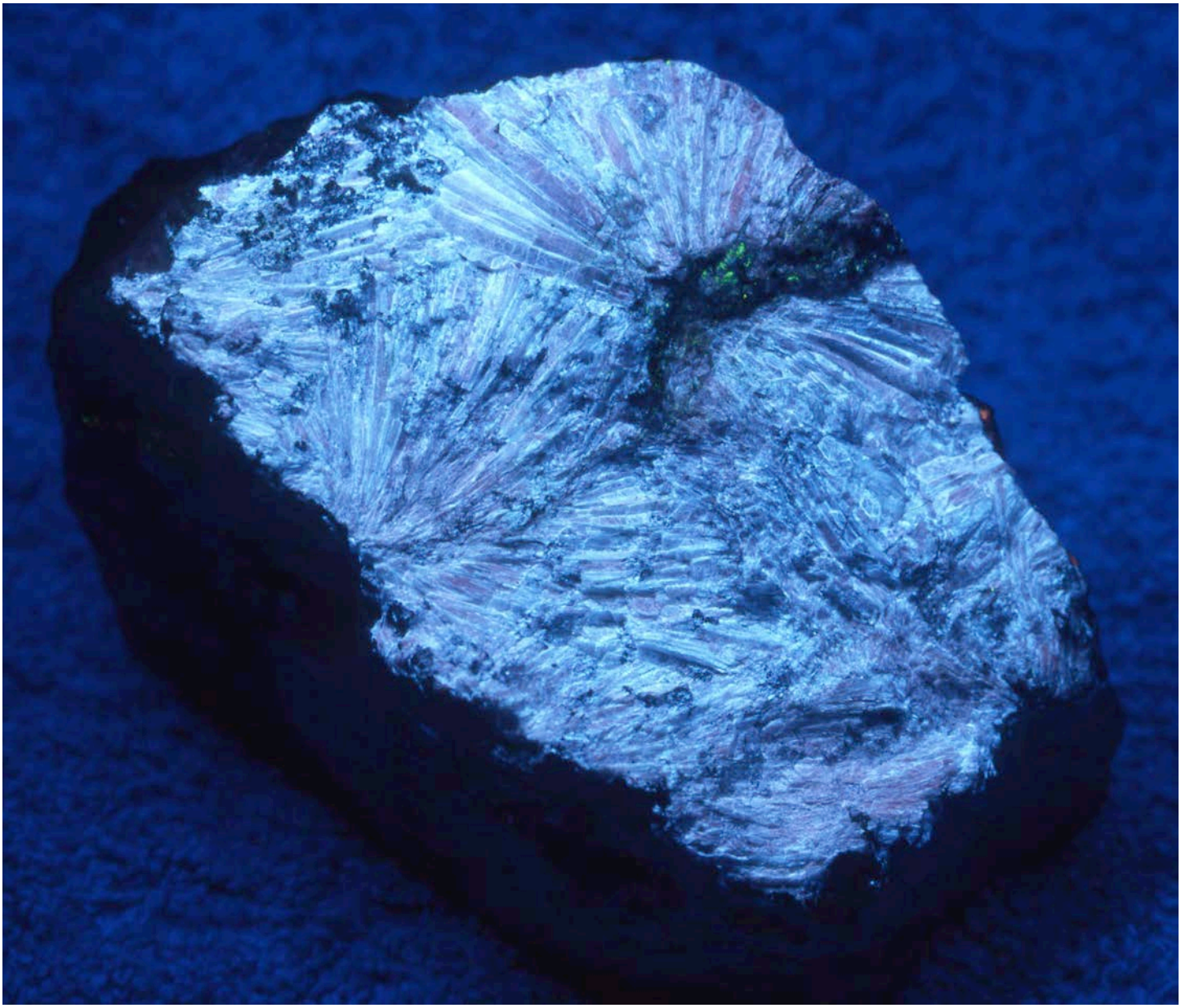

IN THIS ISSUE

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THE
PICKING TABLE

VOL. 60, NO. 2 – FALL 2019

About the Front Cover

Radiating margarosanite from the Franklin Mine. This rare variety of a rare mineral fluoresces blue, with red highlights, under shortwave UV, and fluoresces red under midwave UV. Several sub-mm grains of green-fluorescing willemite can also be seen in the vein. The largest margarosanite "fan" is 6 mm across, and this face of the specimen measures 5 × 8 cm.

The matrix is dark green diopside and gray microcline, with minor amounts of orange-fluorescing fibrous wollastonite mixed with pink grossular, and a few flakes of minehillite that fluoresce violet under midwave UV. On the base of the specimen is a parallel vein with a patch of fish-scale margarosanite in a thin layer of red-fluorescing orange calcite.

Franklin is the type locality for margarosanite, which was found in the Parker Shaft workings in 1898 but not named and described until 1916. While margarosanite was found intermittently at Franklin, radiating and fish-scale margarosanite appear to have been found only in the minehillite assemblage which was recovered from the Palmer Shaft pillar in the last years of the mine.

This specimen was in the collection of Franklin miner Michael Massey and his wife, Anna Zipco Massey. It is currently in the collection of Richard Bostwick and Tema Hecht. *Photo by Tema J. Hecht*

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The Picking Table is the official publication of the Franklin-Ogdensburg Mineralogical Society, Inc. (FOMS), a nonprofit organization, and is sent to all members. *The Picking Table* is published twice each year and features articles of interest to the mineralogical community that pertain to the Franklin-Ogdensburg, New Jersey, area.

Members are encouraged to submit articles for publication. Articles should be submitted as Microsoft Word documents to Richard J. Keller, Jr. at: PTMemberFeedback@gmail.com.

The views and opinions expressed in *The Picking Table* do not necessarily reflect those of FOMS or the editors.

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FRANKLIN-OGDENSBURG MINERALOGICAL SOCIETY

Fall and Winter 2019 Activity Schedule

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SATURDAY, SEPTEMBER 21, 2019

9:00 AM – NOON
FOMS Field Trip and BBQ
Sterling Hill Mining Museum.
Collecting permitted on the Mine Run Dump and
in the Fill Quarry, Passaic Pit, and "saddle" area.
Admission fee waived. $2.00 for each pound of material taken.
BBQ will begin at 12:30 (**BYOB**)
with a short meeting at 2:00 PM to discuss the upcoming show.
Thanks to Bill and Denise Kroth and
the Sterling Hill Mining Museum for hosting the BBQ!

10:45 AM – NOON
Future Rockhounds of America
We will meet at the Sterling Hill Mining Museum
outdoor pavilion and take a special tour of the Warren Museum
of Fluorescence. Then we will start working on the
Fluorescent Minerals badge by learning about fluorescent
minerals from Ogdensburg, Franklin and other famous locations,
and by talking a bit about what makes a mineral fluorescent.
Then, of course, there will be fluorescent door prizes for
attendees to add to their collections.
Following the meeting, stick around for some food
at the FOMS cookout and the awarding of badges
at the beginning of the FOMS general business meeting.
Questions about FOMS FRA? Please contact Mark Dahlman:
fra@fomsnj.org or 301-428-0455.

SATURDAY AND SUNDAY SEPTEMBER 28-29, 2019

****63RD ANNUAL FRANKLIN-STERLING GEM & MINERAL SHOW**
Sponsored by the Franklin Mineral Museum.
Littell Community Center (formerly the Franklin Armory),
12 Munsonhurst Rd., Franklin, New Jersey.
9:00 AM – 5:00 PM Saturday (indoors)
10:00 AM – 4:00 PM Sunday (indoors).
The ticket price covers the show, The Pond outdoor swap,
and admission to the Franklin Mineral Museum:
$7.00 per day for adults, $4.00 per day for children (6-16).

***The Pond Swap-and-Sell*, sponsored by the FOMS,**
takes place outdoors on the Littell Community Center grounds
from 9:00 AM – 5:00 PM on Saturday, and from
10:00 AM – 4:00 PM on Sunday. Show admission required.

The FOMS Annual Banquet starts at 6:30 PM on Saturday
at the Lyceum Hall of the Immaculate Conception Church,
located at the south end of Franklin's Main Street.
Tickets may be obtained at the FOMS show table for $20.00.
The meal is an all-you-can-eat buffet;
soda, tea, and coffee are included.
♦BYOB♦
After the banquet there will be an auction
for the benefit of the FOMS.
Please plan on donating a good specimen, artifact, book, etc.!

** Saturday and Sunday:
Garage sale and mineral collecting at
the Sterling Hill Mining Museum.
For more information, please call: **(973) 209-7212**.
Or you can visit the website at
www. sterlinghillminingmuseum.org

SATURDAY, OCTOBER 12, 2019

6:00 PM – 10:00 PM
****Nighttime Mineral Collecting at**
the Sterling Hill Mining Museum
Collecting permitted on the Mine Run Dump
and in the Passaic Pit and "saddle" areas.
For museum members only. $5.00 admission fee
plus $2.00 for each pound of material taken.
For more information, call 973-209-7212.

SATURDAY AND SUNDAY OCTOBER 12-13, 2019

9:00 AM – 5:00 PM
****NORTH JERSEY MINERALOGICAL SOCIETY SWAP**
Sterling Hill Mining Museum.

SATURDAY, OCTOBER 19, 2019

9:00 AM – NOON
FOMS Field Trip
Collecting at Limecrest-Braen Stone Quarry,
Limecrest Road, Sparta, NJ.
Meet 15 minutes before starting time at the gate.
We will enter as a group and the gates will be closed.
Hard hats, leather shoes, preferably steel tipped,
gloves and glasses required.

NOON – 1:15 PM
Future Rockhounds of America
Franklin Mineral Museum.
Parents are welcome to attend.
For questions please contact Mark Dahlman at:
fra@fomsnj.org or 301-428-0455.

1:30 PM – 3:30 PM
FOMS Meeting,
Franklin Mineral Museum.
Lecture: *A Mineralogical and Geological Search: Why do you collect what you do?*,
by Dr. Steven Kuitems

FRIDAY AND SATURDAY OCTOBER 25-26, 2019

****Sterling Hill Mining Museum Halloween Tour**
Tours every 15 minutes from 6:00 PM to 9:45 PM
Admission: Aged 12 and under $5.00, 13 and up $10.00

SATURDAY, OCTOBER 26, 2019

****30TH Annual *ULTRAVIOLATION***
Show-Swap-Sell Session featuring fluorescent minerals *only*.
First United Methodist Church, 840 Trenton Road,
Fairless Hills, Pennsylvania.
9:00 AM – 4:00 PM, $2 donation (children 12 and under are free).
"If your rocks don't glow, you're at the wrong show."
Table space available. For information call Lee McIlvaine at
215-713-8020 or e-mail uvgeologist@yahoo.com.

SATURDAY, NOVEMBER 2, 2019

6:00 PM – 9:30 PM
****Night Dig on the Buckwheat Dump,**
for the benefit of the Franklin Mineral Museum.
Admission $10.00 adults, $8.00 children.
Poundage fee charged. **Call for details: 973-827-3481.**

SATURDAY, NOVEMBER 16, 2019

9:00 AM – NOON
FOMS Field Trip
Collecting at the Old Andover Iron Mines, Limecrest Rd.
Hard hats, leather shoes (preferably steel-tipped),
gloves and glasses required.

NOON – 1:15 PM
Future Rockhounds of America
Franklin Mineral Museum.
Parents are welcome to attend.
For questions please contact Mark Dahlman at:
fra@fomsnj.org or 301-428-0455.

1:30 PM – 3:30 PM
FOMS Meeting,
Franklin Mineral Museum.
Lecture: *General Geology and Hydrogeology*,
by William Prehoda.

SATURDAY, DECEMBER 7, 2019

9:00 AM – 4:00 PM
****FLUORESCENT MINERAL SOCIETY MEETING**
GeoTech Center, Sterling Hill Mining Museum.
Lunch will be served ($10.00 contribution).
♦BYOB♦
!Reservations necessary! Please contact Howie Green:
royalp53@verizon.net.
Further details will be posted at:
www.facebook.com/groups/fluorescentminerals/events/

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Events of interest to FOMS members will take place throughout the season at the Franklin Mineral Museum (website: www.franklinmineralmuseum.com and telephone: 973-827-3481) and the Sterling Hill Mining Museum (website: www.sterlinghillminingmuseum.org and telephone: 973-209-7212). Call, or visit their websites for further information.

Scheduled activities of the FOMS include meetings, field trips, and other events. Regular meetings are held on the third Saturdays of March, April, May, June, September, October, and November, and generally comprise a business session followed by a lecture. FOMS meetings are open to the public and are held at 1:30 PM, usually in Kraissl Hall at the Franklin Mineral Museum, 30 Evans St., Franklin, N.J. (check listings for exceptions).

Most FOMS field trips are open only to FOMS members aged 13 or older. Proper field trip gear required: hard hat, protective eyewear, gloves, sturdy shoes.

**Activities so marked are not FOMS functions but may be of interest to its members. Fees, and membership in other organizations, may be required.

Any information in this schedule, including fees, is subject to change without notice.

Thanks go to Gary Kerstanski, Bernard Kozykowski, Richard Keller, Howie Green, Mark Dahlman, Bill Pazik, the Franklin Mineral Museum, and the Sterling Hill Mining Museum for this information.

President's Message

GARY MOLDOVANY
116 LAFAYETTE ST.
HACKETTSTOWN, NJ 07840

As I sit here, typing my final President's Message, I can't help remembering some of the highlights we have experienced together since 2016.

New collecting opportunities always come to mind first. The opening of the High Street property to FOMS collecting is certainly memorable. This site still has lots of mysteries to uncover, and interesting minerals are found there every time we visit. Another important event for the past three years has been the opening of the Mill Site collecting area at the Franklin Mineral Museum for the Super Diggg in April.

The change in location of our two annual mineral and gem shows to the Littell Center was also important. I believe it has been 20 years since our last show at that location, and hope we can continue to hold our spring and fall shows there, though I have been told the State of New Jersey is offering the property for sale.

The resurgence of interest in fluorescent mineral collecting over the past few years is also significant. The availability of less expensive UV lamps is contributing to this. Also, the abundance of rare Franklin-area minerals has increased lately due to the diligence of some of our dealers in obtaining long-hidden caches from local miners' basements. Everyone needs more material in their collection!

I will continue to serve FOMS behind the scenes as Past President and I welcome any of your advice and suggestions.

One more thought before I sign off: The hardworking staff members of *The Picking Table* are always looking for articles and photographs. If you have a topic you feel would be interesting to FOMS members, please submit it to the editors for consideration. Contact information for our officers and staff is inside our magazine's front cover.

From the Editor's Desk

RICHARD J. KELLER, JR.
13 GREEN STREET
FRANKLIN, NJ 07416
FranklinNJ@hotmail.com

This Editor's Message will be my last. Due to an impending medical procedure, I can no longer commit to spending the time and effort required to be managing editor of *The Picking Table*.

I take this opportunity to thank those who comprised the best editorial staff a person could hope for, without whose talents and efforts I would never have accepted the managing editor's position eight years ago. That staff has included Dr. Earl Verbeek, author and technical editor; Mark Boyer, author and copy editor supreme; Richard Bostwick, author and editor; and Tema Hecht, author, copy editor, and photo editor.

During my tenure, there were three issues of *The Picking Table* of which I am particularly proud. One was the Fall 2011 issue, which was my first; it was completed in a little over two months after the resignation of the previous editor-in-chief. Two later *Picking Tables* (Vol. 57, Nos. 1 and 2) were entered in the American Federation of Mineralogical Societies (AFMS) Bulletin Editors Contest, and won second prize in the Large Bulletin category after being docked ten points for not mentioning the Eastern Federation of Mineralogical and Lapidary Societies (EFMLS), of which FOMS is a member. This is a tacit recognition of FOMS's intense focus on the minerals and mines of Franklin and Sterling Hill, one of the world's great mineral localities – a distinction of which we also should be very proud.

I plan to stay as active as I can in other areas such as field trips, banquets, and copy editing. My replacement is Jim Van Fleet, who has proven himself to be a more-than-capable managing editor, as he has been the managing editor of the *Journal of the Fluorescent Mineral Society* for the past three years. Anyone interested in assisting in the creation of future *PT*s is welcome. As for my final words…"Thanks for the wild ride" and "What a long, strange trip it's been."

Franklin Mineral Museum Report

MARK BOYER
PRESIDENT, FRANKLIN MINERAL MUSEUM
32 EVANS STREET
FRANKLIN, NJ 07416
markaboyer@earthlink.net

2019 has been an eventful year for the Franklin Mineral Museum. On April 27, the Delaware Valley Earth Science Society once again held its annual "Super Diggg" on the museum's famous Mill Site mound. In addition, the Buckwheat Dump was turned over with a trackhoe in previously untouched areas, which over the season yielded several large boulders of massive hardystonite and other boulders rich in sphalerite. Grading and drainage improvements were also done to the pavilion area and the ramp leading down to the dump.

Miners Day was held with great success, and the rain held off long enough not to spoil the event, which included a performance by the Franklin Band. As usual, scholarship awards were presented to local high school students, and we especially thank Anne Wronka for her continued support of this award. Museum board advisor Kristofor Giordano produced a booklet of photo portraits he shot of New Jersey Zinc Company miners who attended the 2018 Miners Day celebration. This booklet was well-received and is an important document about the men who worked in the mines.

In July, the museum hosted its second annual FOMS picnic, and opened the Taylor Road Dump for collecting. On August 17, the museum again was the starting point for Franklin Borough's annual Franklin Fluorescent 5K Run, sponsored by SB One Bank. This year's participants ran a course through the streets of Franklin after sunset through blacklight-lit "glow zones" that made the runners' neon-colored clothing fluoresce.

Our summer mineral sale featured local and worldwide minerals at deeply discounted pricing. The mineral sale held during the fall show weekend featured worldwide fluorescent and geology specimens deaccessioned from the collection of Dr. Earl Verbeek.

Our fall show was again held at the Littell Community Center. The weather was perfect and the show was well attended. This year, our show boasted a record number of dealers. Unlike many mineral shows that have become diluted with an increasing number of dealers of nonmineral merchandise, our show had 22 mineral dealers plus an additional 7 dealers of mineral-related jewelry and other merchandise. And of course, there were dazzling exhibits of daylight and fluorescent mineral specimens strictly from the Franklin mineral district. We thank Ed and Pat Seger for managing the show, as they have done since 2010.

New mineral acquisitions continue to improve both our local mineral exhibit in Baum Hall and our worldwide mineral displays in Welsh Hall. Specialized exhibits of worldwide minerals now include a mineral color spectrum, New Jersey minerals, mineral oddities, and meteorites. For young visitors, our ever-popular gem panning troughs have been expanded and upgraded. With help from the Franklin Forward educational grant, our fossil dig area was improved with a replica Allodesmus dinosaur skeleton buried in the sand. For the comfort of our visitors, a sun and rain shelter was constructed on the Buckwheat Dump and several wooden benches were built for use in the exhibit halls.

To supplement our security system, surveillance cameras have been installed throughout the museum to increase our vigilance in protecting our property and assets. On the roads throughout the area, Steven Phillips has installed new directional road signage that can be customized for special events. To give our promotional efforts a consistent branded look, Jess LaBrie has designed colorful materials, including brochures, business cards, show fliers, banners and signs, print advertisements, and a user-friendly mineral identification card. Art prints of a photorealistic painting of the Buckwheat Open Cut by John R. Meeks are available for sale in our gift shop. A second painting by the artist features the two smokestacks from Franklin Mill No. 2, and art prints will also be available for purchase.

Lastly, we'd like to remind you that the museum participates in the Amazon Smile program, which donates money to charities chosen by Amazon customers. Please consider choosing the Franklin Mineral Museum as your favorite charity the next time you make a purchase on Amazon. The donation is at no additional cost to you; it is Amazon's way of letting its customers direct its charitable giving. For updates on the museum's events and schedule, please check out our website and postings on Instagram and Facebook.

Happenings at Sterling Hill

BILL KROTH
PRESIDENT, STERLING HILL MINING MUSEUM
30 PLANT STREET, OGDENSBURG, NJ 07439

Sterling Hill continues to thrive! We are proud to report that we have increased typical school class bookings from a maximum of ten per day to thirteen per day. As our reputation grows, the demand from schools is stronger. Our aim is to provide mine tours that not only stimulate youngsters but also provide a true educational experience. Much of our success is due to careful planning, including time management of each tour and better communication between our guides. We often interview teachers after their tours and ask them if the increase in school classes per day has negatively impacted their experience; in reply, we get a resounding "Not at all!"

The crux of our mission statement is EDUCATION. Our increased admission numbers place us in the fortunate position of having plenty of funds for the physical operation of the facility, including salaries, insurance, utilities, maintenance, and improvements. There is also a significant amount of money available for pure education at American colleges and universities. We are proud to use a portion of these funds to help local students by providing financial aid for STEM education (STEM = Science, Technology, Engineering, and Mathematics). We are in our third year with the STEM program, and have developed great relationships with these students, their parents, and the community. Sterling Hill's four-year commitment for a student studying a STEM discipline is $10,000, and we cannot think of a better use for this money.

These are our STEM students:

Another educational opportunity occurred a few months ago when Carissa Horuzy, one of our senior tour guides, asked to help catalog our vast files of old photos. Carissa has been with us for four years; her grandfather, Paul Horuzy, was a historian and past mayor of Ogdensburg. Paul was also the author of a mining history book that is a mainstay of our gift shop: "*The Odyssey of Ogdensburg,*" written over 25 years ago. While cataloging our historical mining photos, Carissa thought it would be beneficial to use some of them to develop a PowerPoint presentation for training our tour guides. Her presentation was of such positive value that we immediately asked her to expand her work to book form, but a book that will be even more comprehensive than her grandfather's. Sterling Hill miner Doug Francisco is working with Carissa on mining technology, and geologist Dr. Earl Verbeek is helping with geological and mineralogical aspects. After selling thousands of copies of Paul's book, we plan on complementing that work with his granddaughter's new volume, sometime this fall. What a fine tribute!

Today, we at Sterling Hill are using the latest technologies for analyzing minerals, while supporting college education for local residents, and publishing a book about local mining history. Just a few years ago, I could not imagine this happening. Great things indeed!

Name	Hometown	College (year)	Major
Elizabeth Appaluccio	Sparta, NJ	Stockton (3)	Geology *
Francesca Ciasullo	Ogdensburg, NJ	Villanova (1)	Chemical Engineering
Gabriella Ciasullo	Ogdensburg, NJ	Villanova (3)	Chemical Engineering
Shane Geene	Ogdensburg, NJ	Moravian (1)	Mechanical Engineering
Randi Lyn Hornyak	Ogdensburg, NJ	Stockton (3)	Physical Therapy
Jacob Janosko	Ogdensburg, NJ	Stevens (2)	Electrical Engineering
Alex Kerstanski	Goshen, NY	SUNY-Binghamton (2)	Geology *
Allyson Lame	Ogdensburg, NJ	Lock Haven (1)	Veterinary Medicine
Emma McGuire	Ogdensburg, NJ	Rutgers (1)	Nursing
Ryan McGuire	Ogdensburg, NJ	The College of NJ (1)	Civil Engineering
Sebastian Mianowski	Ogdensburg, NJ	Rutgers (1)	Biology/Pre-Dental
Brianna Rocks	Ogdensburg, NJ	Ramapo (3)	Mathematics
Courtney Rocks	Ogdensburg, NJ	Ramapo (3)	Mathematics

* While not Ogdensburg residents, Elizabeth and Alex have volunteered at Sterling Hill during their high school years, continue to intern now, and are studying geology.

Our Ten-Hammer Stamp Mill Is Now Complete

BILL KROTH
PRESIDENT, STERLING HILL MINING MUSEUM
30 PLANT STREET, OGDENSBURG, NJ 07439

While we easily visualize mining as an extraction process, the equally important crushing or milling process is also critical, especially in refining. Crushing rock provides major benefits for transportation, in that more weight may be included in the transport container since no air voids exist between boulders. Next, with the rock in powdered form, we may better exploit differences in magnetism, density, and color to better segregate valuable ore minerals from barren host rock. Finally, powders have more surface area than chunks of rock, and the chemical reactions needed for the extraction of metals occur faster and more completely. Many types of mills exist, such as the ball mill and gyroscopic/cone mill, but the most impressive in operation is the stamp or hammer mill, which uses a large belt-driven pulley connected to a huge camshaft that lifts and sequentially drops thousand-pound hammers onto a moving stream of rock. The noise from these monsters could be heard miles away!

Over 15 years ago, the Hauck brothers secured a wonderful example of a ten-hammer stamp mill (also called a 10-stamp mill) that had been languishing in a building in the Canadian forest. This stamp mill, built around 1900, appears to have been part of a failed scheme to attract investors. We know this from two obvious clues: The stamp mill was assembled on a floor that could barely support the dead weight of the machine, much less the pounding of the hammers during operation, and this stamp mill was never used!

The machine was in excellent condition, having been protected in a secured building, and was complete with all of its feeding mechanisms. Normally these units were left outdoors, susceptible to deterioration from the weather, but ours was in beautiful shape. The complete unit was dismantled and shipped by truck to our upper mill building where it sat for nearly two decades. Our delay in reassembling it was threefold: First, we already had a nice example of a smaller five-hammer stamp mill on display just south of the gift shop; second, one of the ore silos in the mill had accidentally discharged tons of gravel-sized processed ore on top of the stamp mill, burying many components. Finally, other projects took priority, and we needed someone with an interest in spearheading the assembly operation who had the ability to get it done for a reasonable cost.

Every time I looked at the buried pile of stamp mill parts, I quickly resigned myself to the fact that it was simply not worth all that effort. However, two men were paramount in moving the project ahead. Mr. Charlie Connell of Phoenix, Arizona, visited our site in 2015 and introduced himself as a stamp mill aficionado and head of a museum and club that specializes in this particular type of crushing machine. We showed him our five-hammer stamp mill and then took him to our upper mill, where he saw the ten-stamp mill. He has been pushing us ever since, as well as giving us instructions on how to complete the assembly, providing scores of photos of other stamp mills on display, and advising us how to build a protective roof for ours. We realized that our stamp mill could be one of the best preserved!

Then Doug Francisco, a member of our board, became the project manager. My biggest concern was removing all of the gravel-sized ore burying the unit. Doug quickly used his mining knowledge to rig up a slusher bucket like the one we have on display in the mine. This large steel bucket uses cables and pulleys to drag ore from one place to another. In this case, the cables were pulled by our Kubota excavator, while tour guide Barry Blatman helped adjust the pulleys and cables, right through final clean-up. A job I thought would take weeks was completed in a few days!

With all its components now visible and accessible, the tasks of moving and assembling our 10-stamp mill seemed less daunting. Fortunately our friend and tenant Fred Rowett had a large Komatsu excavator available for us to use on-site, and of course Doug knew how to operate it. The Komatsu was easily able to lift and place all of the components including the three 22-foot-long vertical wooden posts, as well as the cast steel mortar boxes. Using Fred's excavator saved us thousands of dollars that would have otherwise gone towards crane rental.

A strong concrete pad was needed to support the stamp mill, and the cost and trouble of constructing such a foundation had always been a concern. Doug suggested using an existing concrete pad just south of the main adit entrance. This, along with an adjacent smaller pad, had been used by NJ Zinc as a railroad unloading platform. All that was required now was to move some hoists that had been previously placed on the pad as a display. Again, Fred's Komatsu lifted these huge hoists as though they were toys!

The Sterling Hill Mining Museum's recently reassembled 10-stamp hammer mill, with its protective roof. *Photo by Bill Kroth.*

Final assembly was completed in a matter of weeks by Doug Francisco, safety engineer John Gumbs, property manager Tom Hauck, and our geology intern and scholarship winner, Alex Kerstanski.

All that remained to be done was placing about two cubic yards of grout underneath the metal mortar boxes, and constructing and installing a protective wooden roof to cover the complete stamp mill.

This undertaking not only provides another very impressive visual display for our visitors, but also frees up nearly a thousand square feet of extra storage space in our mill building. My thanks to all who have helped complete a project I once thought was doomed! ⚒

The 47th Annual New Jersey Earth Science Association Gem, Mineral & Jewelry Show & Outdoor Swap

April 27 & 28, 2019

STEVEN M. KUITEMS, DMD
14 FOX HOLLOW TRAIL
BERNARDSVILLE, NJ 07924
smkuitems@gmail.com

The onset of spring would not be complete for our mineral enthusiasts and "fluoresophiles" without the NJESA's mineral extravaganza. This year there were eight white-light exhibits and eight fluorescent exhibits featuring the colorful beauty of the mineral kingdom.

Leading off the white-light exhibits was Richard and Elna Hauck's case, "New Jersey Copper – Chimney Rock." On display was a large native copper from the Chimney Rock Quarry in Bridgewater, N.J. As this specimen is nearly two feet long and six inches thick, and composed of large interlocked copper crystals, viewers need to be reminded that it is ***not*** from Michigan. Bridgewater copper specimens are the largest American coppers found east of the Keweenaw Peninsula.

Bernard Kozykowski's two cases were both titled "Classics." In one case was a deep-orange-red, eight-inch Tasmanian crocoite to focus the viewer's gaze, opposite a large impressive cluster of pinkish-red rubellite crystals in lilac-colored lepidolite, from the Stewart Mine in Pala, California. The second case featured an eight-inch-tall specimen of orange scheelite crystals from Ping Wu, China, balanced by a large example of orange wulfenite in thick, tabular crystals, on calcite, from Chihuahua, Mexico. Not to be outdone in this worldwide lineup was a superb cluster of light brown radial stilbite from Prospect Park, N.J.

Ken Reynold's case, "Franklin & Sterling Hill Classics," was the most colorful daylight case at the show. Hues of pink, green, red, and blue abounded, while the purple standouts were a fine example of crystallized hodgkinsonite in massive franklinite from Franklin and a holdenite vein from Sterling Hill. A hot pink rhodonite with willemite and a large pink rhodochrosite in calcite, both from Franklin, drew my eyes to the front row of the display, as did a bright blue Franklin vesuvianite in andradite. At the center of Ken's case were two large red rhodonites in blocky crystal form – again, classic Franklin.

Showdown at the Littell Center? These four very serious mineral collectors (from left: Richard Bostwick, Charles Gould, Earl Verbeek, and Lee McIlvaine) are obviously ready for a rock fight, so don't even *think* about starting one. *Photo by Tema J. Hecht.*

The Morris Museums's case, "Fossils," highlighted a selection of plant and animal fossils from its collection. Front and center was a sharp, black, complete six-inch shark's tooth from a *Carcharocles megalodon*, found in Lee Creek, Aurora, North Carolina. Less flashy but extremely rare was a dragonfly fossil cast of *Asiagomphus intermedios* from the famous fossil locality of Solenhofen, Germany. A matrix specimen of the New Jersey state fossil, *Belemnitella americana* from Big Brook, N.J., stood proudly in the right front of the case, while in back was a large *Anomoepus* footprint from the Brunswick Formation, found in Chatham, N.J.

Steven Kuitems's "Franklin Classics" exhibited a diverse selection of willemite specimens from both the Franklin Mine and the Sterling Hill Mine. This included examples of yellow, green, and colorless gemmy (transparent) willemite. Notable

were blocky crystals and long, delicate prismatic crystals of willemite from Franklin's Trotter Mine, as well as three quite different examples of radiating willemite. One very old specimen of yellow willemite crystals had been collected by William Jefferis in the 1870s.

Brendan and Connie Dunn presented "The Many Forms of Calcite," exhibiting a wide diversity of colors and crystal shapes. A large specimen of scalenohedral crystals from Concepción del Oro, Zacatecas, Mexico, dominated the back of the case, while a delicate pink-colored cluster of stacked calcite blades from Hunan Province, China, was front and center. Some atypical forms were the spherical yellow calcites from Montalto di Castro, Lazio, Italy, and mushroom-cap-shaped crystals from the Camp Bird Mine, Ouray, Colorado.

Brad Plotkin's case, "The Minerals of Laurel Hill, Secaucus, New Jersey," was an in-depth introduction to the New Jersey traprock outcrop and mineral locality which is now part of Laurel Hill County Park but was once known as Snake Hill. The central specimen was a huge sheet of actinolite var. mountain leather, with casts that once held large rhombic calcite crystals. Next to it was a four-inch rhombic calcite crystal with included actinolite. Also displayed were some surprises: a pale-green agate, velvet malachite on opal, a wheat-sheave cluster of amethyst crystals, and the rare minerals langite and petersite-(Y). These were accompanied by many historic photos of the locality.

The Franklin Mineral Museum's case, "Crystal Mountain," featured five large specimens with weathered crystals of andradite, willemite, franklinite, and "jeffersonite," typical of many found on the surface or in the soil, particularly at Sterling Hill. In 1669 a Dutch explorer told the British that he had found a "crystal mountain" midway between the early Dutch settlements on the Delaware and Hudson Rivers. Since numerous weathered-out crystals of franklinite, "jeffersonite," and other minerals were found by early English settlers at both Mine Hill and Sterling Hill (and can still be collected on the surface at Sterling Hill), this is a plausible if unprovable explanation for the legendary "crystal mountain."

The last of the daylight exhibits, Steve Sanford's "Plastic Flow in Minerals," was truly a teacher's delight. An explanation was written by Steve: "At some point during the complex metamorphism, the marble became so hot that it was nearly liquid. The ores, though more viscous than the marble, deformed, and because of the great difference in specific gravity, sank through the marble. This action caused many textural features that are preserved today." To illustrate this premise, many geological specimens were presented, with explanations. I especially appreciated the yellow uvite crystal that had been broken by movements in the marble, and showed many fissures filled with marble.

The eight fluorescent exhibits began with Richard Bostwick's and Tema Hecht's longwave UV display, titled "Sphalerite From Sterling Hill." Each of the seventeen specimens fluoresced brightly, and I observed five different fluorescent colors. Sphalerites from the lower levels of the east limb of the main orebody fluoresced predominantly orange. Specimens from the upper levels of the west limb of the main orebody fluoresced blue and pink. Sphalerite from the

Brad Plotkin's "Minerals of Laurel Hill, Secaucus, N.J." is an impressive and comprehensive exhibit of minerals from one of New Jersey's lesser-known and now extinct mineral localities, once known as Snake Hill. Wave at what's left of that hill when you pass it on the N.J. Turnpike's northeast extension, or are riding by on a Northeast Corridor N.J. Transit train. *Photo by Tema J. Hecht.*

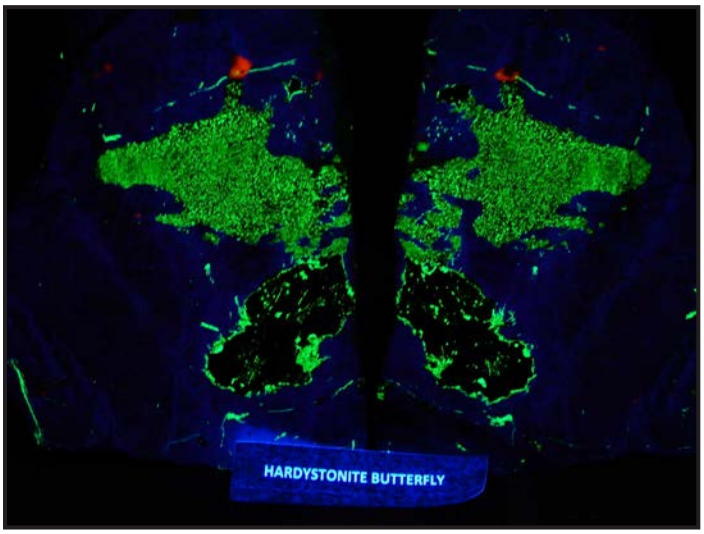
This remarkable native copper, from the Bound Brook Quarry in Bound Brook, New Jersey, is among the largest well-crystallized copper specimens found in the eastern United States. It weighs about 90 pounds, is approximately 28 inches long, and is from the collection of Dick and Elna Hauck. *Photo by Tema J. Hecht.*

"Black Ore" fluoresced blue-white, while sphalerite from the north limb of the north orebody responded with a pink-orange color. In contrast, "Golden Sphalerite" from the south limb of the North Orebody fluoresced bright yellow. This presentation, organized around different zones in the Sterling Hill orebody, was a first for me, and illustrated the wide range of fluorescent colors in sphalerite from just one mine.

Richard Keller's case was titled "One of These Is Not Like the Others." The viewer was challenged to find out which of the 26 specimens was the one referenced. Was it a species or locality that was different? I think everyone needed a hint. There was a large array of specimens and species, colors and textures, from both Franklin and Ogdensburg. But if memory serves, "it" was a Garpenberg, Sweden willemite and calcite that fluoresced red and green and looked quite like our local specimens under shortwave UV light. Only in white light could I have easily found that difference, but viewers like me did not have that advantage. Yes, this was another "teaching moment" for the audience.

The Franklin Mineral Museum's case, "Franklin Classics," included two sets of matching specimens: a pair of esperites, and a sawn pair labeled "HARDYSTONITE BUTTERFLY." And while Franklin is known for fluorescent specimens with multiple colors, just above the "Franklin Classics" label were three monochromatic specimens: a solid orange-fluorescing wollastonite, a solid yellow-fluorescing esperite, and a solid blue-fluorescing margarosanite, all in cabinet-sized specimens.

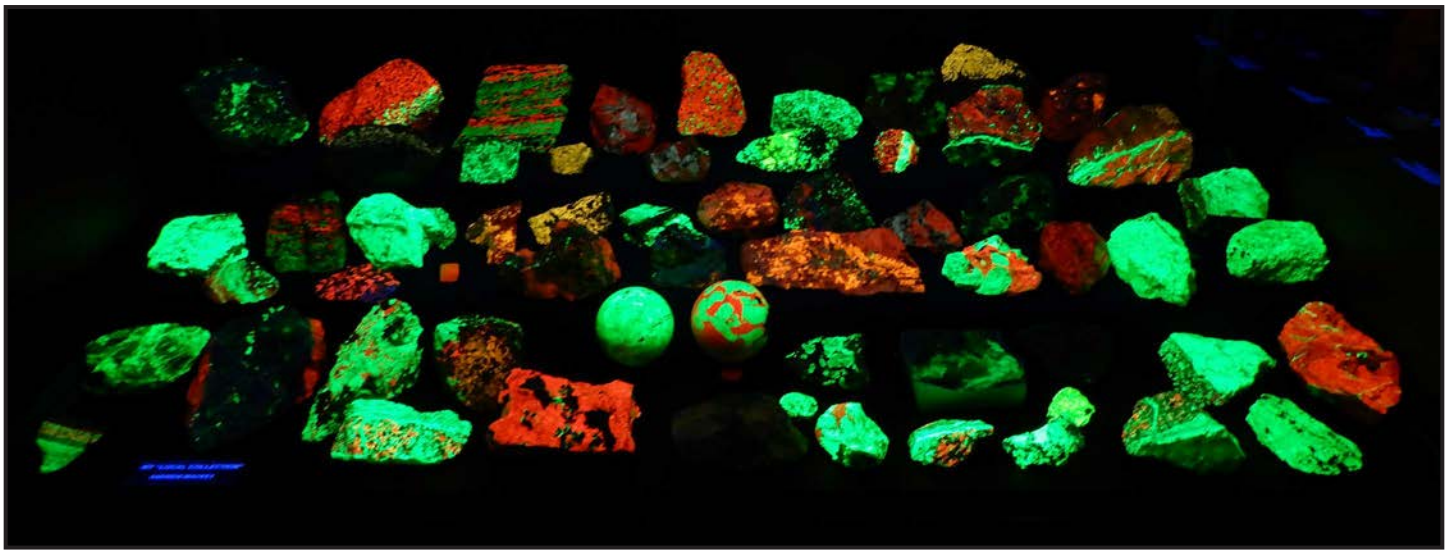
The author's case was "Franklin Delights." Favorites included a large specimen of cuspidine, with calcite and a little willemite, from the Buckwheat Dump, and a remarkable "green-eye" wollastonite from Sterling Hill's 340 level. Next to that wollastonite was a fibrous "half and half" wollastonite



A fluorescent butterfly? NJZ horse heads? Howling coyotes? Another Rohrschach test from the vaults of the Franklin Mineral Museum. *Photo by Tema J. Hecht.*

from Franklin, half orange-fluorescing wollastonite and half green-fluorescing willemite. The visual textures of the orange and green fluorescences in these two wollastonite specimens were quite distinctive.

Alex and Gary Kerstanski presented a case titled "Classic Hardystonites," all from the Franklin Mine and all under shortwave UV. Some were solid violet-fluorescing masses, while many were infiltrated with green-fluorescing willemite veinlets, and others included thick masses of willemite. Several hardystonites also had thin layers of orange-fluorescing clinohedrite, while most included some red-fluorescing calcite. In these specimens, with from one to four fluorescent minerals



Andrew K. Mackey's "Local Collection" from the Fluorescent Mineral Capital of the World. *Photo by Tema J. Hecht.*

Outdoor dealers José Paz (on left) and Juan Gonzalez, enjoying the indoors show. *Photo by Tema Hecht.*

present, you could see subtle differences in fluorescent hues, brightness, and color saturation. Having so many specimens from the same assembly displayed side-by-side made these observations possible.

Andrew K. Mackey's case, "My Local Collection," included a number of willemite/calcite combinations along with many other local fluorescent minerals. There were three specimens of barite in calcite, and wollastonite from both local mines, including a large, stunning Third Find Wollastonite from Franklin. Several esperites, hardystonites, and clinohedrites were in the mix, as well as a pair of three-inch willemite spheres.

"Minerals Aroused by Midwave Ultraviolet Light" was the stimulating title of Brendan Dunn's case. The brightest specimens there were two calcites that fluoresced "hot pink," one from Iraí, Rio Grande do Sul, Brazil, and the other a manganoan calcite from the Manaoshan Mine, Dongpo Ore Field, Hunan, China. I also enjoyed seeing a fluorapatite crystal specimen with bright yellow fluorescence, from the Hunza Valley, Gilgit, Pakistan. There was also a large specimen of agrellite from the Kipawa Alkaline Complex in Quebec, Canada, which fluoresced a striking pink-violet hue characteristic of that species.

Chris Luzier's case, "Greenlandic Glory," included fifteen fine tugtupite specimens, with a large, fine example for its centerpiece, all under shortwave UV light. Several polychromatic specimens nicknamed "Fantasy Rock" were also displayed. All specimens in Chris's display came from the Ilimaussaq Alkaline Complex in southwest Greenland, but Fantasy Rock in particular comes from the Taseq Slope and is usually a mix of tugtupite (FL red), sodalite (FL orange), chkalovite (FL green), and analcime (FL blue-white).

Ralph and Zack Bonard dubbed their case "Dr. Franklinstein's Pattern Pieces." The myriad possibilities of willemite patterns in the ore from the Franklin and Sterling Mines was brilliantly presented. Much of the metamorphic activity from this region is most visible under shortwave UV light: Shearing, intrusions, veins, faults, reaction rims, and multiple criss-crossing events are recorded in these rocks. What better way to appreciate the region's geological history than to collect a variety of ore samples? Three samples from Ralph and Zack's case illustrated that complexity to this viewer. The first sample consisted of about ten criss-crossing diagonal willemite veins plus a darkened zone of quenched fluorescence. The second included a single willemite vein that split into a triple vein on the face of the specimen, and the third (a large specimen) had at least fifteen veins in one direction, and at right angles to them, a single willemite vein. All of these specimens had a matrix of red-fluorescing calcite. Needless to say, we look forward to seeing more displays from our newest participants.

Thanks to all who brought their specimens for public display, in white light or under UV. This truly was a springtime mineral extravaganza. ⚒

Two of life's guilty pleasures: Zack Bonard, celebrating his acquisition of a large green willemite by eating a chocolate brownie. *Photo by Tema J. Hecht.*

Miners Day, May 5, 2019

All Photos by Tema J. Hecht

Andy Gancarcik (on left) and Ned Hamilton, both Sterling Hill vets, seem skeptical about having their pictures taken. Perhaps their expressions say, "Read my lips!"

Tom Laner, a Sterling Hill miner who wore a spectacular Grateful Dead T-shirt to Miners Day. Thanks, Tom; we suspect your friend likes it too.

John Anderson, a champion wrestler in high school and the only Sterling Hill miner who knew James Joyce's *Ulysses* inside out, with his friend Jacalyn.

Two Franklin residents, Bob Allen (on left) and Mike Krupa, stop swapping yarns long enough to smile for the camera. Bob worked for many years at the Scrub Oak iron mine near Dover, and Mike is a life-long resident of Franklin who among other things was a lifeguard at Franklin Pond and a Special Ed teacher at the Hamburg School. Seated behind Mike is Sterling Hill miner Steve Sanford, who has photographed many of his peers and written about his adventures underground, and now helps identify minerals for the Franklin Mineral Museum.

2019 is the year that Dr. Pete J. Dunn, a mineralogist who spent his career at the National Museum of Natural History (part of the Smithsonian Institution) and specialized in the minerals and history of Franklin and Sterling Hill, was posthumously elected to the Franklin Mineral Museum's Hall of Fame. Pete's friend Maureen Verbeek announced the award, displayed the plaque that will hang in the Hall of Fame, and shared with us some memories of Pete, whose most important writings include a monograph, *Franklin and Sterling Hill, New Jersey: The World's Most Magnificent Mineral Deposits,* and a treatise, *Mine Hill in Franklin and Sussex County in Ogdensburg, Sussex County, New Jersey: Mining History, 1765-1900.*

While some miners just let their facial hair grow (Mr. Gancarcik, in back, has a classic full beard), his fellow miners can be more stylish. Chris Auer, on left, has a well-trimmed Vandyke, while John Antal flaunts a bushy horseshoe mustache. (Yes, that's what *The Guinness Book of Beards and Moustaches* calls them.)

Sterling Hill miners (from left, Al Grazevich, Doug Francisco, and Tom Laner), share mine stories. Many such stories are always told at Miners Day, and whenever miners get together.

EXHIBITOR AND MUSEUM ALERT!!! TUCSON IN 2021!!!

On February 13-16, 2021, the Fluorescent Mineral Society (FMS) will celebrate its 50th anniversary with a multicase exhibit of the world's best fluorescent minerals, to be presented at the world-famous Tucson Gem & Mineral Show. Museums and collectors are invited to participate, either by filling a case, or by loaning specimens for display.

In 1996, for its 25th anniversary the FMS organized a similar exhibit with 76 cases, the largest such display ever. Twenty-two were filled by museums and collectors from east of the Mississippi, including the Franklin Mineral Museum, the Sterling Hill Mining Museum, and many Franklin-area collectors. "The Fluorescent Mineral Capital of the World" was very well represented.

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If you are interested in being part of this historic event in 2021, contact Richard Bostwick and Tema Hecht for details. Our home phone is **212-749-5817**, or we can be reached at either e-mail: **rbostwick@att.net** or **thecht@att.net**.

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The Epting Collection, A Window Into Franklin Collecting 65 Years Ago

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At the 2018 Springfield East Coast Gem, Mineral & Fossil Show, Howie Green was approached by another attendee who wanted to ask about fluorescent minerals. The fact that Howie was draped with UV lamps à la Paul Shizume may have been a factor. Barbara J. Wagner had inherited a large collection of Franklin minerals, and she had questions! Barb is an amateur mineral collector, and a member of the Lapidary and Mineral Society of Central Connecticut in Meriden. She had also recruited Harold "Fritz" Moritz, a long-time mineral collector, who has been involved with the Sterling Hill Mining Museum since its founding. Fritz is also a great photographer, and regular contributor to mindat.org, and he posted some of Barb's "unknowns" on the forum for comment.

Long story short, Howie invited me to come along and view the collection, and perhaps apply some of the analytical tools at my disposal. Barb Wagner was a gracious host, and had done her homework by preparing a short history of the Roy W. Epting, Sr., mineral collection, and a biography of the collector, worth reproducing here:

> Roy W. Epting, Sr., was born December 6, 1904 in Camden, New Jersey, and died in Warwick, New York on January 7, 1967 at the age of 62. He was the son of Henry and Anna [Swartz] Epting. He was married to Martha [Wagner] (no relation to me) Epting. Their son, Roy W. Epting, Jr., was my uncle by marriage.
>
> Roy, Sr., obtained his bachelor's degree from Colgate University and his master's from Columbia University. He taught science in the Warwick, New York schools from 1926 to 1929. He went on to teach in Chester, N.Y. for eight years, and then became principal of the Chester school. He was appointed supervising principal of the Warwick school district in 1937 – a post that he held for 29 years until his death. At different points in his life, he served as president of the Orange County Teacher's Association, president of the Chester Town Community Association and chairman of the Orange County War Training Committee for the War Council.
>
> He was an avid outdoorsman – hunting, fishing, and rockhounding for much of his life. He was also a judge at dachshund shows, a calligrapher and illuminator, and was certified in Esperanto. Roy married Martha in 1926. She joined him in his rocking ventures and they took up the lapidary arts. They collected primarily along the Eastern seaboard (New York, New Jersey, Pennsylvania, New England, and the Canadian Maritimes) with occasional trips to Ontario and the Southern, Midwestern, Southwestern, and Western Regions of the United States. It is apparent they spent a good deal of time hunting Herkimer diamonds in upstate New York, and agate in Nova Scotia.
>
> Living in Warwick, N.Y., only 15-plus miles from the Franklin-Ogdensburg area, they collected a lot of material in that region; most from the Franklin mine. It is unclear how much was collected at the Sterling mine. The Eptings also collected a good deal of material from the carnelian areas of New Jersey (Stirling Brook and probably the Watchung Mountains area).

In the *American Mineralogist* volume 48, May-June 1963, Clifford Frondel and Jun Ito of Harvard University credited Roy, along with Stanley J. Schaub, with the first recognition of manganberzeliite from the United States. Roy and Stanley discovered it in franklinite / willemite ore. To quote from the article:

> This species and its magnesium analogue berzeliite are known chiefly from their occurrences in Långban and at the Sjö mine, Sweden. The present occurrence is the first in the United States. The recognition of the mineral at Franklin is owing to the interest of two private mineral collectors, Roy W. Epting of Warwick, N.Y. and Stanley J. Schaub of Westfield, N.J., who noted an isotropic mineral that contained arsenic and manganese in specimens acquired from an old collection.

There is also a reference to Roy, Sr., on mindat.org under the title / section "Who influences you?" where Phil Walsh mentions meeting him as a child around 1950.

Roy and Martha's collection was extensive, but poorly labeled. Of the very few labels found, the earliest was dated 1939. It's a good bet he was collecting prior to that date, given his science background and where he lived. A heart attack suffered in early 1966 stopped his field collecting. It is doubtful that Martha collected after Roy's death in

1967, but may have continued with her lapidary work. When Martha died in 1973, the collection was transported to their son's house in Massachusetts, where it remained untouched for 44 years!

Barb still owns a specimen of manganberzeliite as described in the *American Mineralogist*, and also in *The Picking Table*, Volume 4 no. 2, August 1963. The small specimen has a half-inch-wide vein of yellow manganberzeliite in green willemite/franklinite ore, and has been carefully sawn in half, exposing more of the vein. This is very likely the specimen from which samples were taken, analyzed by Frondel and Ito, and identified as the first manganberzeliite recognized from Franklin. Fritz Moritz was able to have a fresh sample from this same specimen analyzed via energy-dispersive X-ray spectroscopy, and verified again as manganberzeliite.

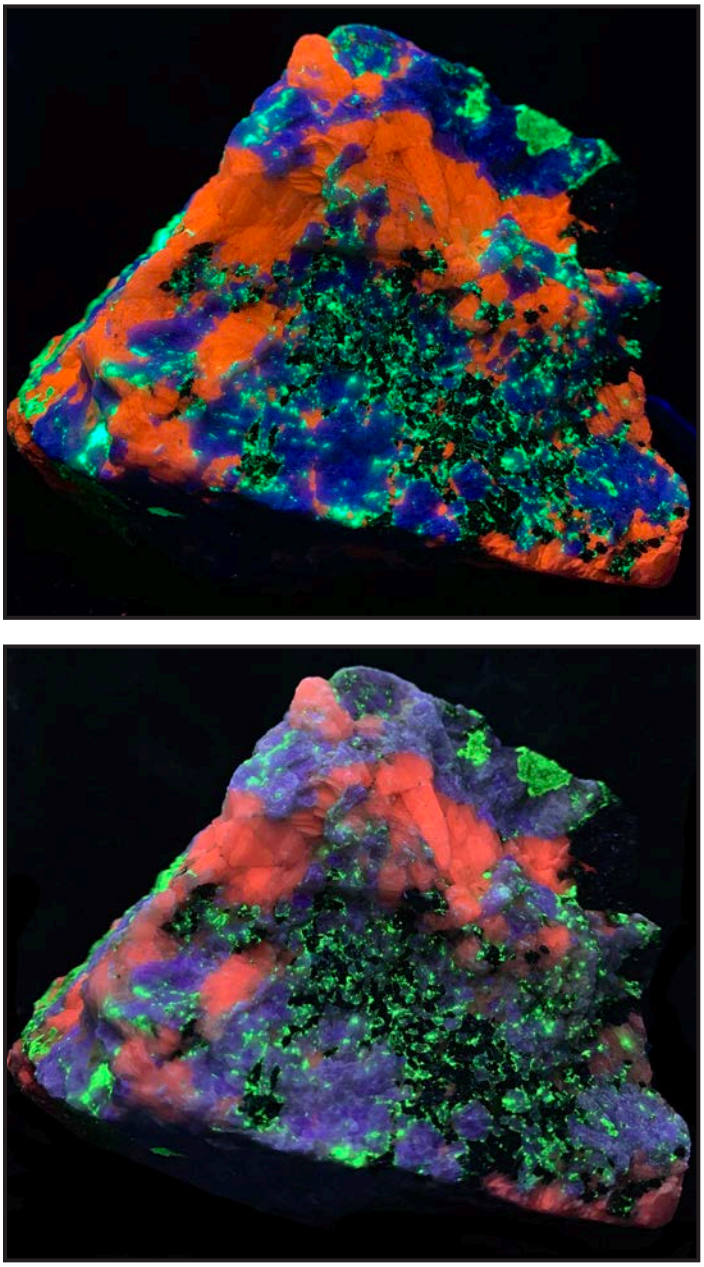
After an intense and enjoyable period of negotiation, the Epting collection was purchased, with the expressed goal of sharing it as widely as possible within the collecting community. I took home 1100 pounds of rocks in a 14-foot U-Haul van, and continued the process, begun by Barb, her husband Kent, and Fritz, of sorting, cleaning, identification and labeling. Howie Green sorted through the esperites and hardystonites, enjoying especially the hardystonite specimens that fluoresce bright violet-blue under midwave UV light.

Our next step was to pack the best of the collection back up, and transport it "home" to Franklin, for a viewing and consultation with the experts…an event that was perhaps the most fun I have ever had sorting through boxes of rocks. Howie and I met with Richard Hauck in his darkened garage on a rainy Sunday morning, the second day of the Franklin mineral show weekend. Also attending were Dick Bostwick, Tema Hecht, and Earl Verbeek. It was a chance to review the collection as a whole, admire individual specimens of note, and notice some interesting trends or characteristics of the Roy Epting collection.

There was general agreement that the most interesting fluorescent specimen in the whole collection is a large sphalerite that features irregular rounded masses of zincite surrounded by sphalerite rims. We dubbed it "The Octopus" for its colorful resemblance to a marine cephalopod in full mating display! Earl Verbeek carried it home for further study and photography, and you can see his excellent photos on the inside back cover of this issue.

My own take on putting together a collection of Franklin minerals is that you need both good taste and good luck to build a really interesting collection. Roy Epting and his wife, Martha, were field collectors, and digging was, and still is, an important source for great specimens. It is possible that some of the margarosanite specimens in the collection were dug from the Parker Dump sometime between the 1930s and the 1960s. But it is equally clear that Roy was willing and able to purchase specimens, such as the manganberzeliite "acquired from an old collection." Barb Wagner told us a bit about finding the collection, stored in a garage, in a heap of crates and "peach baskets."

That last detail caught my attention. I remembered reading something about it, and sure enough, there is a very interesting article in *The Picking Table*, Volume 46, 2005. Gary Grenier wrote about a "'Peach Basket' First-Find Wollastonite" being offered by well-known dealer Stan Hocking. Given some of the contents of the Epting collection, I believe that Roy was purchasing specimens by the basket-load as well.



Hardystonite (violet), calcite (red), and willemite (green), fluorescing under shortwave UV light (upper photo), and midwave UV light (lower photo). Franklin, N.J., Epting Coll., 5 × 4 × 2 in. (13 × 10 × 5 cm.). *Photo by Howie Green.*

The collection includes a large box full of Third-Find wollastonite, some pieces weighing up to five pounds. Some of these are exceptionally rich in blebs of barite, and about one third of the specimens include laths of colorless to pale-pink bustamite, verified by XRD (X-ray diffraction) analysis. The bustamite fluoresces a weak dark-red under shortwave UV.

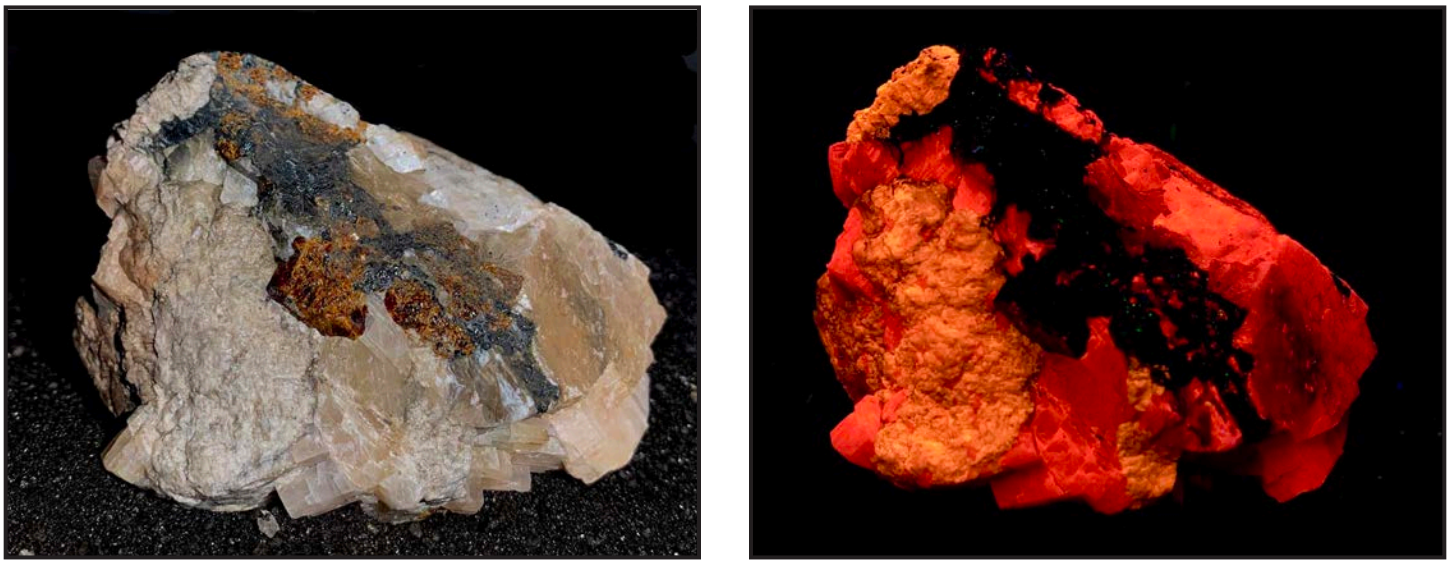
There are about a dozen specimens of margarosanite, varying a great deal in quality and coverage, and assemblage. Arguably the best single specimen in the collection is a large (three pound) specimen of margarosanite on feldspar, with fibrous wollastonite, minehillite, and native lead. There are perhaps a half-dozen other specimens of fibrous wollastonite with willemite, some with margarosanite, but none have appreciable minehillite.

Roy, like most Franklin collectors, was fond of esperite, and hardystonite, and there are dozens of specimens of each, again varying a lot in quality and coverage. As noted above, quite a few of the hardystonite specimens fluoresce bright violet-blue under midwave UV light, and a number are associated with pink bustamite that fluoresces a weak dark-red under shortwave UV, and cherry red under the intense UV of a Convoy S2+ LED (a tool that Roy Epting never had at his disposal!). One outstanding esperite specimen includes blebs of a deep purple mineral that XRD testing verified as hodgkinsonite, also fluorescent red under a 365nm UV LED.

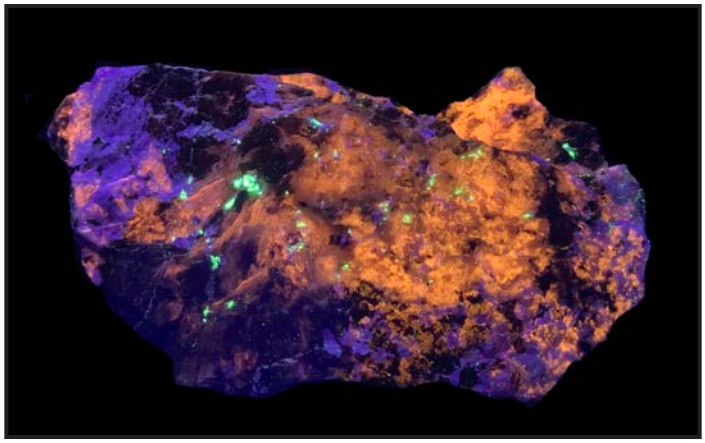
The collection includes just a few small specimens of pectolite and prehnite, and Franklin barite in calcite. Surprisingly, there are only two small specimens of axinite-(Mn), which are nonfluorescent. There is at least one excellent specimen of what is probably turneaureite in calcite, perhaps destined some day for microprobe quantitative chemical analysis.

Wollastonite (orange) and barite (pale gray) in calcite (red), fluorescing under shortwave UV light. Franklin, N.J., Epting collection, 4.5 × 4 × 2 in. (12 × 10 × 5 cm.). *Photo by Jim Van Fleet.*

There are a few specimens of gray sphalerite veins in calcite, characteristic of the material being found on the Buckwheat Dump today. Rhodonite from Franklin, mostly massive, some crystallized, fills one flat. One granular specimen seems to show a dull red fluorescence in shortwave UV light, a phenomenon that has been commented on by Dr. Steven Kuitems, and noted



Turneaureite in calcite, with andradite. On left, in white light, turneaureite is gray, andradite brown, and calcite pale orange. On right, under shortwave UV light, turneaureite fluoresces orange, calcite red. Franklin, N.J., Epting collection, 2.5 × 2 × 1 in. (6 × 5 × 2.5 cm.). *Photos by Howie Green.*



Pectolite in prehnite from Franklin, N.J. On left, in white light. On right, under shortwave UV light, pectolite fluoresces orange and prehnite floresces violet. Epting coll., 3.5 × 2 × 1 in. (9 × 5 × 2.5 cm.). *Photos by Howie Green.*

in the official list of Franklin fluorescent species.

Two aspects of the Epting collection really stood out; the first was the green willemite: boxes and boxes of green willemite, often associated with just franklinite. There are more than 70 specimens, including some up to five pounds, and a good percentage are "gemmy," at least in patches. Roy clearly loved green willemite, as many collectors do today. I sometimes wonder, though, if it was preferentially collected because it was so easy to see and identify, or if it responded well to the UV lamps being used in the 1950s and 1960s? Did the miner/dealers of the day such as Stan Hocking offer it up by the basketful? You won't find green willemite on the dumps today, but clearly it was easy to collect in the past, despite being 100% zinc ore. There are also 40 or so good specimens of gneissic, granular green willemite ore with zincite and franklinite: mostly high-grade 100% zinc ore.

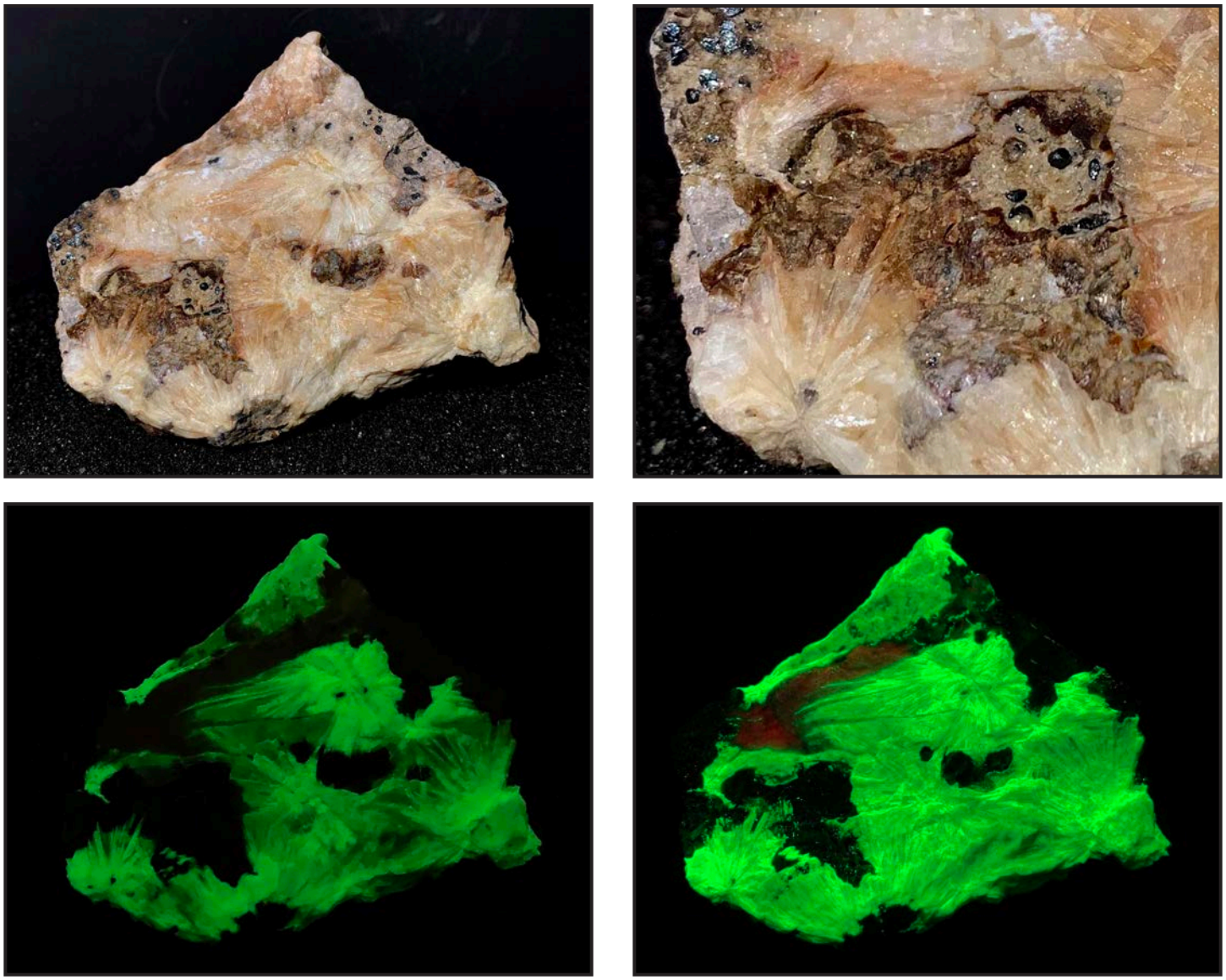
Dick Bostwick offered an interesting perspective on the green willemite phenomenon:

> Every mineral collector who isn't color-blind has always loved green willemite. One reason is that green willemite is unusually sensitive to LW UV, which is present in sunlight, so if a miner found a piece of it in the Buckwheat Open Cut in the 1880s, it looked great. If the Eptings bought a piece from a miner, it looked great in daylight when they took it out to their car. If all you had was a longwave lamp, it looked great, and if like many old-time collectors you had a shortwave lamp with a solarized filter, you probably had a longwave bullet lamp or longwave tube lamp that worked just fine with green willemite. Lots of collectors back then had LW displays with LW classics like Bancroft sodalite, Canadian "wernerite," English fluorite, Spruce Pine hyalite, Virgin Valley opal, and green willemite from Franklin. Sorry to rant and rave about the "old days," but the Corning SW filters we had before Hoya developed its long-life SW filters were both expensive and short-lived. When I worked for Tom Warren in 1973, after every mineral show he'd replace the shortwave filters in the display lamps. Now and then I'd meet a collector who was sad because his fluorescent minerals had "worn out."

The second surprise was the volume and variety of specimens from Sterling Hill. There are 30 or more pieces of red, pink, or brown willemite, sparse ore in calcite typical of the Sterling Mine, vein specimens, and rocks with slip surfaces, a.k.a. slickensides. There is sphalerite from the North Orebody (NOB), and indeed, a large amount of NOB ore, including sussexite, dolomite, and some of the funky cherty chrysotile serpentine. There are many specimens of cherty red friedelite in veins, perhaps reflecting Martha Epting's interest in lapidary work. The collection includes just a few specimens of massive coarse-grained pink kutnohorite.

The collection includes one very nice example of radiating willemite from Sterling Hill, and a few examples of franklinite crystals in calcite matrix that could have come from either mine! As with so many Franklin collections, outstanding crystal specimens are few.

Howie and I joked that a large number of rocks from the Epting collection are "lunch bucket" sized specimens, and since both the Franklin mines and the Sterling mine were still in operation at least part of the time that Roy was collecting, some of his better specimens may have been purchased directly from miners, or from the dealer intermediaries of the day, such as Stanley Hocking or Ewald Gerstmann. Dick Bostwick commented "the NOB was very productive in the early 1960s, and NOB specimens were relatively cheap compared to the usual Franklin classics. Mrs. Palsulich was another good source, and so were ex-miners like Mike Petro and Nick Zipco." Sadly, as noted by Barb Wagner, only a single mineral label was part



An outstanding radiating willemite from Sterling Hill (3 × 2.5 × 2 in.; 7.5 × 6 × 5 cm). The lower right photo shows the green fluorescence of willemite and the red fluorescence of calcite under shortwave UV light, while the lower left photo captures the phosphorescence typical of radiating willemite. The two upper photos were taken in white light, one with a close-up of the animal image. *Photos by Howie Green.*

of the collection, which she kept as a memento!

It is also possible that Roy Epting collected Sterling mine specimens on the surface; in fact the FOMS club used to organize digs on the property, which drew astounding numbers of field collectors, as noted in this report from *The Picking Table*, volume 3, no. 2, July 1962:

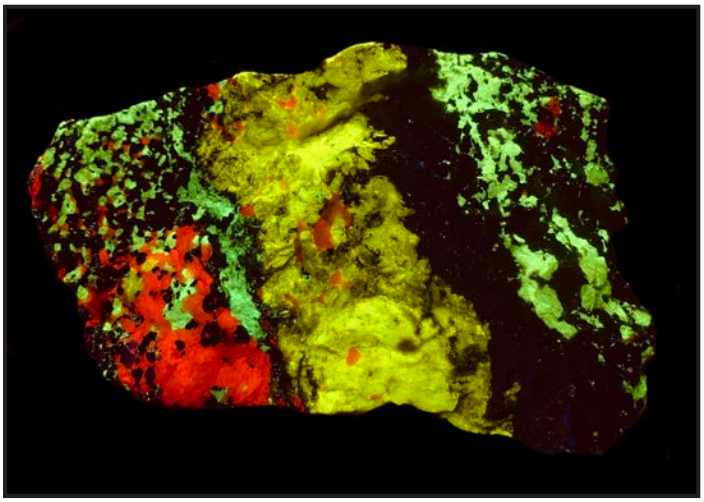
"On June 9th, almost 150 members explored and collected at the Noble and Passaic Pits, Sterling Hill. The opportunity to visit this historic locality was most welcome. It marked the first time that the New Jersey Zinc Company has permitted a non-professional group to collect in the area. Our sincere thanks to Messrs. Goodwin, Baum and Metsger for making our visit possible."

Again, Dick Bostwick could comment from experience: "Those early FOMS field trips to the surface workings were very exciting, but everything collected was from the outcrops, i.e., scruffy. The real prizes were weathering products of galena (e.g., cerussite) and copper minerals like azurite and malachite, or the weathered-out crystals from the saddle area."

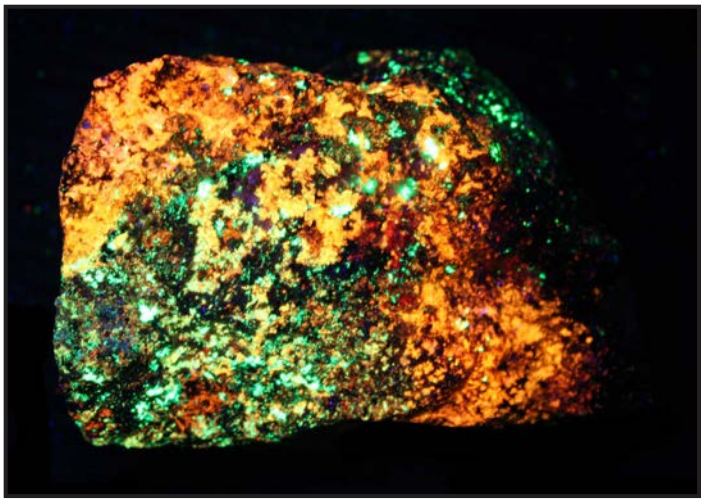
Concerning our goal, the wide dispersal and sharing of the Roy W. Epting, Sr., collection has been largely achieved as of this writing. Collectors got their first look at the entire collection at the Spring 2019 Franklin mineral show, and subsequent sales online, through the mail, at FOMS gatherings, and at the Fluorescent Mineral Society (FMS) Midwest Chapter meeting have enlarged many collections across the country. Of course Howie and I kept a few favorites, which we can share here through photographs.

A SELECTION OF SPECIMENS FROM THE COLLECTION OF ROY EPTING, SR.

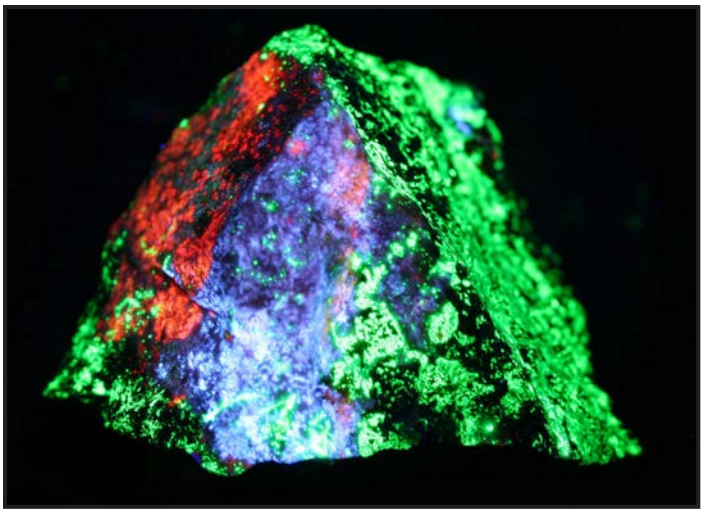
Photos by Howie Green.



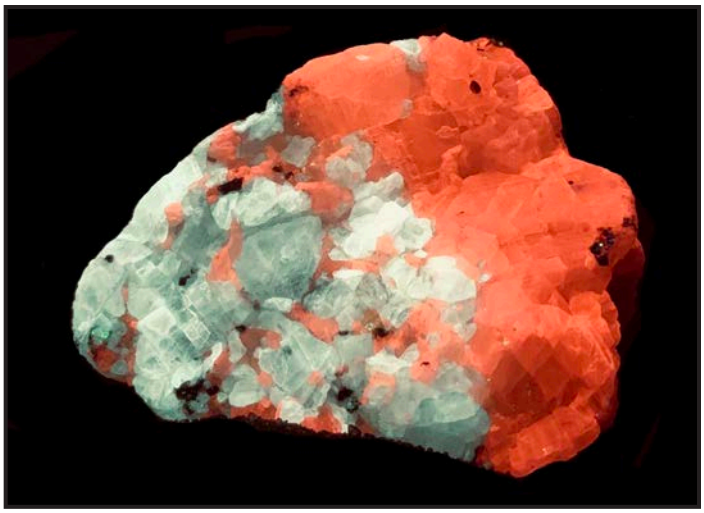
Esperite (yellow), willemite (green), and calcite (red), from Franklin, N.J., under shortwave UV light. (4 × 3 × 1.5 in.; 10 × 7.5 × 4 cm.)



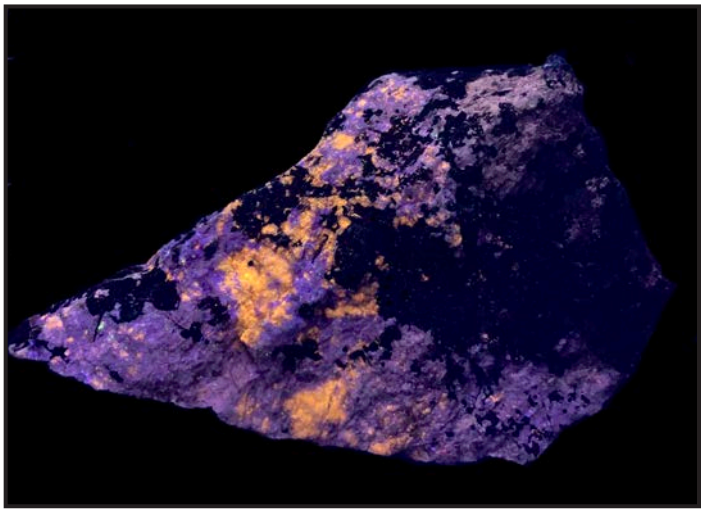
Fibrous willemite (orange) with willemite (green), from Franklin, N.J., under shortwave UV light. (3 × 2 × 1 in.; 8 × 5 × 2.5 cm.)



Margarosanite (blue), willemite (green), calcite (red) and clinohedrite (orange), from Franklin, N.J.. under shortwave UV light. (3.5 × 2.25 × 2 in.; 9 × 6 × 5 cm.)



Barite (white) in calcite (red), from Franklin, N.J., under shortwave UV light. (2 × 1.5 × 1 in.; 5 × 4 × 2.5 cm.)



Prehnite, pectolite, andradite, franklinite, and hancockite, from Franklin, N.J. On left, in white light. On right, prehnite (violet) and pectolite (orange) fluoresce under shortwave UV light. (4.5 × 3 × 2 in.; 11.5 × 7.5 × 5 cm.)

Bringing the Roy Epting Collection to Light

Personal Recollections by Barbara Wagner and Harold Moritz

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For years, I (Barb) and my husband, Kent Peterson, knew there were some rocks way back in the corner of my aunt's garage on Cape Cod. Way, way, way back there…

Roy Epting, Jr. married my aunt, Hope Wagner, in 1959. His father, Roy Epting, Sr., passed away in 1967. When Roy, Jr.'s mother, Martha, passed away in 1973, he had his parents' things brought up from Warwick, N.Y., to his home on Cape Cod in Brewster, Mass. This included an extensive rock collection.

Only a couple of specimens made it into the house on the Cape, to be admired on shelves. The big monster pieces were set out on the breezeway. Everything else (approximately 2 tons) was put in the garage, in wooden boxes, cigar boxes, cardboard boxes, jewelry boxes, peach baskets, old-timey glass "refrigerator" jars, and even an old galvanized trash can, filled to the brim.

Sadly, just two years after this, my Uncle Roy died. He and Aunt Hope had no children, and she worked at a very good job until taking early retirement. Living alone with plenty of money for herself, she began to spend it compulsively on a huge variety of things: fabric, yarn, clothes, housewares, silverware, knick-knacks and jewelry, to name a few. If she liked it, she bought it. Between that and the fact that she didn't throw much away, the house and garage were bursting at the seams, and the rocks became totally buried. Over the years we knew they were there, but to get at them would have taken a gargantuan effort and was not something we felt would be appropriate to ask about, as Aunt Hope was very proprietary about her "stuff." And so the collection remained untouched…

My Aunt Hope remained in her home on the Cape until she passed away in September 2017. Being her only heirs, my three sisters and I had the task of making sense of this mess. Because we desperately needed the garage space as a staging area to move stuff from the house as we sorted through it, getting the garage cleaned out was our first priority. Being rockhounds, my husband and I were quite curious to see exactly what had been in the back of that garage for 44 years. So, first things first: make a path to the rocks! I recall a snow shovel played a big role in this endeavor.

Well… the peach baskets were disintegrating, with rocks tumbling into piled-up tires. There were mouse nests everywhere, and spiders. The sight was overwhelming, but we dug in and started sorting as best we could. Luckily the wooden boxes,

The Epting collection uncovered, Brewster, Mass., 2017. *Photo courtesy of Barbara Wagner.*

Manganberzeliite vein in green willemite / franklinite ore (3.5 × 1.75 × 1.5 in.; 9 × 4.5 × 4 cm.). *Photo by Harold Moritz.*

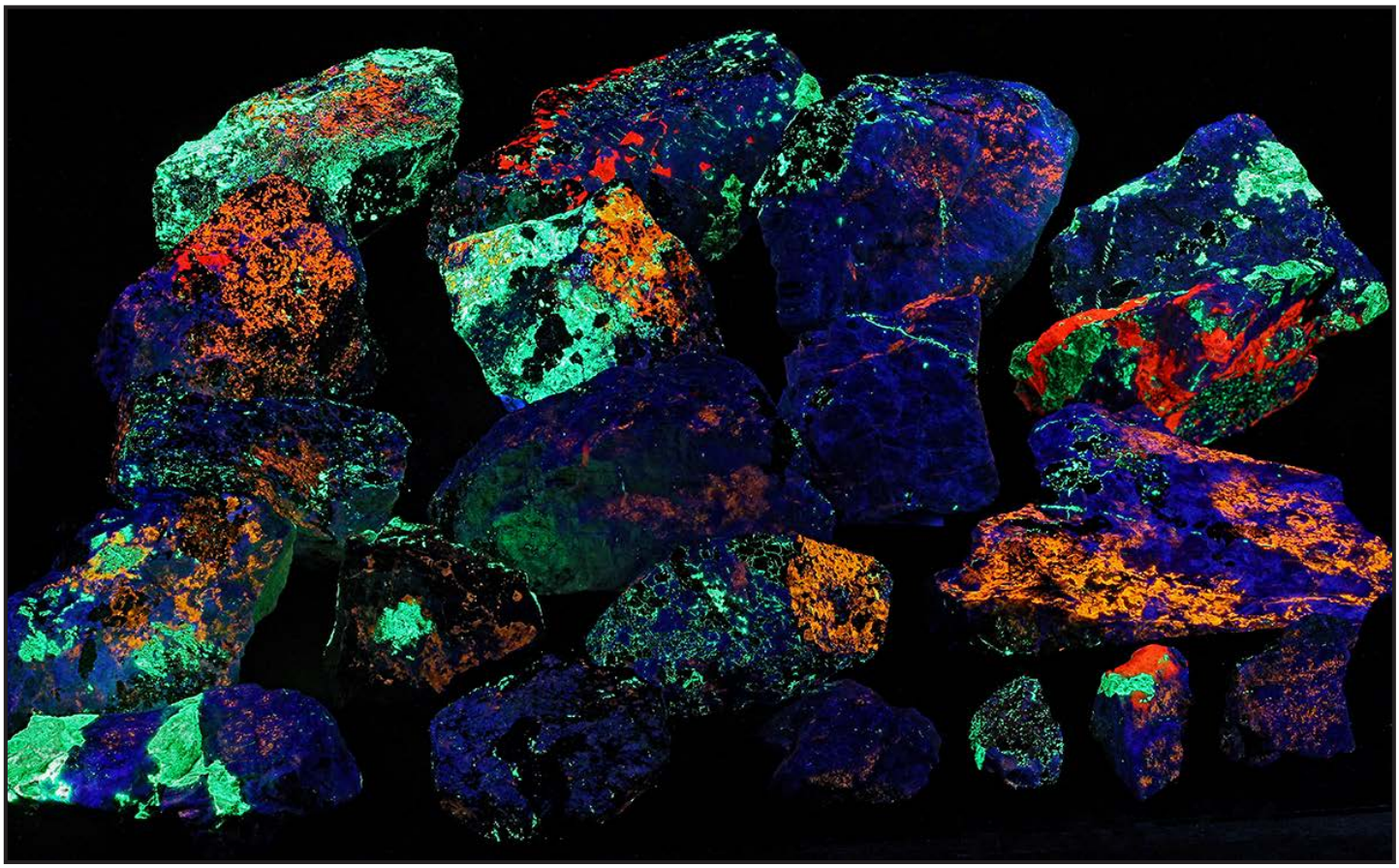
which we think Roy, Sr., made himself, had held up. My husband Kent made many more in their likeness, some to accommodate all the loose rocks strewn about, and some for sorting.

Years before, when Aunt Hope realized Kent and I were interested in rocks, she told us her father-in-law had a rock named for him! She had no other information, so we did some research on the Internet. We discovered an article by Clifford Frondel and Jun Ito in the *American Mineralogist*, vol. 48, p. 663, that cited Roy, Sr., and Stanley Schaub as having played a part in identifying manganberzeliite from Franklin, N.J., the first recognition of a specimen of manganberzeliite from the United States. Aunt Hope didn't quite have the story straight, but it was still cool!

With that tidbit of information, knowing that many of the rocks were disproportionately heavy for their size, and knowing where Roy, Sr. and Martha had lived for some 40 years, we put two and two together… Hmm, we wondered, are there Franklin rocks in this mish-mosh of a mess? We had a tiny, inexpensive UV light that had come with some sample fluorescent rocks as a gift years ago, so we decided to bring it down to the Cape. Little did we know what we were about to discover! Fluorescence everywhere! Unbelievable amounts of fluorescence!

This is where the generosity and camaraderie of "rock" friends kicks in. Kent and I are rank amateurs. We're members of the Lapidary & Mineral Society of Central Connecticut, but not nearly as knowledgeable as many of our fellow members. We reached out for help. And the cavalry came!

First, Rich & Eva Kupisz. They had been to Franklin and Ogdensburg many times and knew way more than we did about fluorescent minerals. They were planning to visit the Cape in October anyway, and said they could swing by with their three-way UV light. Rich spent a good part of that day looking over as much of the pile as possible. Very little sorting or cleaning had been done at this point, but I think what they saw "blew their minds" – esperites, hardystonites, willemites, calcites, wollastonites, margarosanites, and more. There was so much that at one point, Rich thought it might make more sense to leave some of the really common stuff (lots and lots of willemite) on the Cape, but we definitely needed to get the majority of these rocks home. In the end, we brought all the fluorescent specimens home to clean and sort, along with most of the nonfluorescent rocks. (Yes, there was some 'leaverite' in that group.) We would be traveling to the Cape every week for months on end anyway, so we might as well take a few hundred pounds home with each trip, right?



Hardystonite (violet), clinohedrite (orange), willemite (green) and calcite (red), from Franklin, N.J., fluorescing under shortwave UV light. Epting collection, field of view 2.5 feet wide. *Photo by Harold Moritz.*

And so the work began. We started triaging, finding the fluorescent minerals and taking them home on our earlier trips, while leaving the nonfluorescent stuff for later. Rich had left us his UV light to use, but we soon purchased our own. Bit by bit we got the rocks loaded, and started making a pile of wooden boxes in our driveway in Connecticut. At this point, sorting was not a priority, as we really didn't have the knowledge. And, alas, there was nary a label to be found. Occasionally we'd see a piece of masking tape with long-faded ballpoint pen markings. Finally, we found one piece of paper in a cigar box! It had writing on it! It was legible! Thankfully the bugs and mice had not destroyed it! Handwritten in pencil, it said:

Calcium-Larsenite 6/28/39
Parker Dump

Hooray! Something definitive!

In Connecticut, once again friends came to the rescue. Rich and Eva and another friend, Mike Zagielski, came over to help sort and identify pieces that we had brush-washed. Their advice regarding the fluorescent rocks was to ask another friend more knowledgeable about fluorescent specimens – Harold "Fritz" Moritz – to come by and see what he thought we should do.

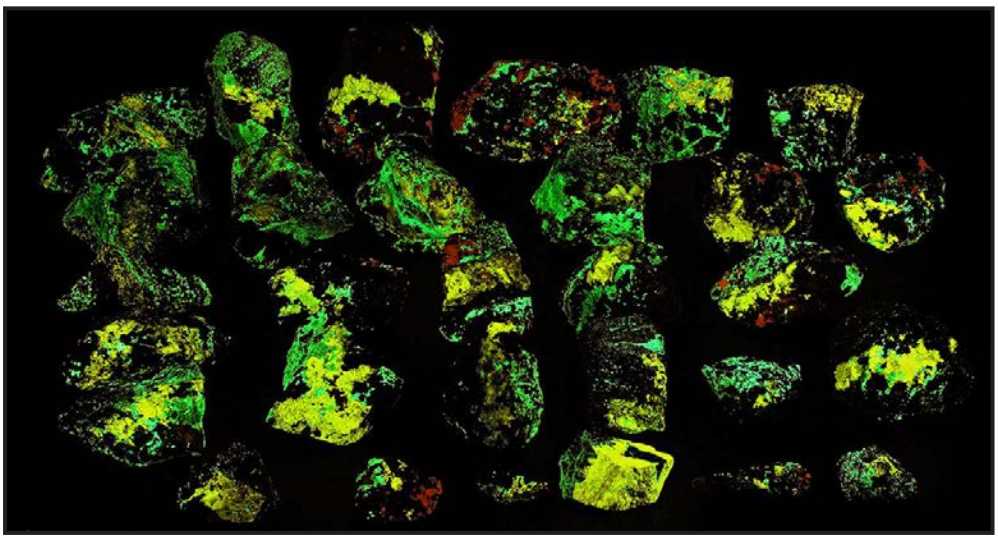
Fritz is a geologist whose supreme expertise is Connecticut mineralogy. But beyond that, his knowledge of the Franklin area is remarkable. He happily came over to have a look-see and seemed truly impressed. To be able to look at specimens that had been collected well before his time and in such quantity was exciting. He ended up coming over many, many times, working hard to sort, identify and photograph pieces for us. Then he would go home and do research. He always assured us that he was having a great time. I hope so.

We will never be able to thank him enough for the enthusiasm, the guidance and the teaching that he brought to this endeavor. If it weren't for him, we would be looking at two huge piles of rock-filled boxes in our driveway thinking, "OK, we've moved it 170 miles. What now?!"

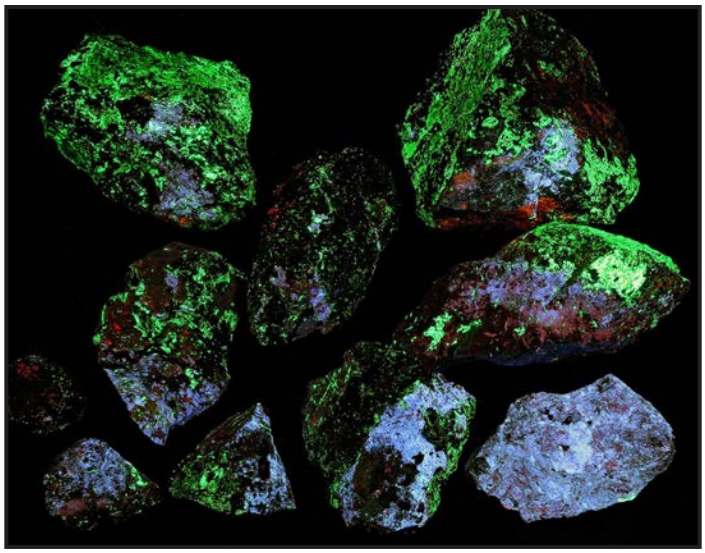
THE TALE CONTINUES FROM FRITZ'S POINT OF VIEW

On the 4th Monday of March 2018, after that month's nearby meeting of the Lapidary and Mineral Society of Central Connecticut, I got my first look at the Epting Franklin collection. Barb and Kent were forced by its volume and weight to store it outdoors in an array of 16 sturdy wooden boxes, each measuring 17 × 15 × 7.5 inches, stacked two high. They'd covered the boxes with heavy tarps, which did a fine job of keeping the elements at bay. As a resident "expert" on rocks and minerals from the Franklin area, I was invited over that night to give their pile, which I had heard about from Rich and Eva Kupisz, an initial once-over. I suggested we do a UV light triage so that the different minerals could be segregated and the best/rarest brought inside for further work. Barb and Kent had already done some of this, but there was much more to sort through, and we all were worried that we might miss something good.

Although Barb and Kent are rockhounds, they admitted to having only peripheral knowledge about the Franklin area, but fortunately the fame of the "Fluorescent Mineral Capital of the World" had made enough of an impression on them to give the collection due respect. As for me, nearly all my collecting in that district, and most of my hands-on experience with its minerals, is based on what occurs at Ogdensburg, where I had been collecting since becoming a founding member of the Sterling Hill Mining Museum (SHMM). I have, however, collected a few times at the Trotter Dump, I have purchased Franklin minerals, and photographed many old-time Franklin rarities in the Yale and Harvard collections for Van King's book, and I have spent many years using Pete Dunn's great tome and other relevant publications. I had a decent working knowledge of Franklin-area minerals, and an understanding of the rare Parker Shaft minerals likely to be found in this old collection, which was like a time capsule from the era when those minerals could be picked up on the Franklin dumps.



Esperite specimens from the Epting collection, fluorescing yellow under shortwave UV light (view 3.5 feet wide). Commonly associated fluorescent minerals are willemite (green), calcite (red), hardystonite (violet), and clinohedrite (orange). Esperite was originally named calcium larsenite by Charles Palache, Lawson Bauer, and Harry Berman in 1928 in honor of Esper S. Larsen, Sr., and renamed esperite in 1965 by Paul Moore and Paul Ribbe. *Photo by Harold Moritz.*

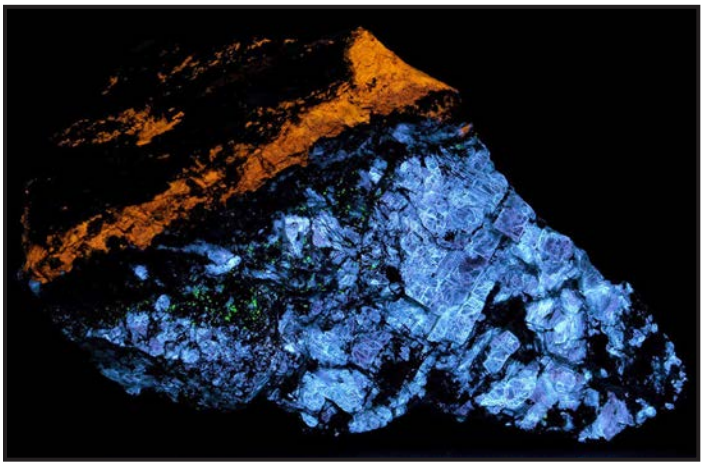


Margarosanite specimens fluorescing blue under shortwave UV light (view 2 feet wide). Most are associated with green-fluorescing willemite. Some specimens include orange-fluorescing fibrous wollastonite. *Photo by Harold Moritz.*

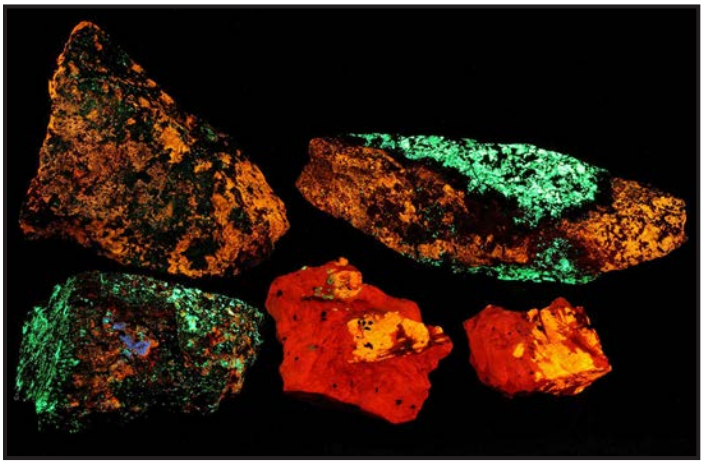
Having been night collecting at SHMM I knew enough to expect prolific green-fluorescing willemite dust on everything from Franklin and Sterling Hill, which was in fact the case. This can obscure other fluorescent responses, but it turned out not to be too big a problem as the first box glowed with chunk after chunk of esperite/hardystonite/clinohedrite/willemite/calcite-rich rocks! Holy crap! I had never seen or held so many blazing yellow esperites in one place. Other boxes held yellow-orange granular wollastonites, orange sphalerites, pale blue barites, and other fluorescent minerals I was less sure about, but knew they had to be something good.

Of course there was a plethora of rich willemite specimens, some wickedly phosphorescent, and abundant reddish-fluorescing calcite. We sorted similarly fluorescing pieces into boxes, while putting less interesting things together for sorting in daylight. I forgot how chilly it was and didn't want the experience to end. To assuage the Fear Of Missing Something (a phrase I soon aptly shortened to "FOMS") we ended up repeating this process at least two more times over the next year, and did find a few more sleepers each time. Clearly Roy, Sr., had an early portable UV lamp to have found this concentration of good fluorescent minerals.

For about the next year I made periodic trips to Barb and Kent's to work on the long process of sorting and identifying the pieces. Nothing was labeled, so we were on our own. Fortunately, Franklin material is distinct enough to easily separate it from the other parts of the collection that were "from away" — like the many pieces of weathered-out spinel and related minerals from near Warwick, where Roy, Sr. lived.



Outstanding specimen of platy margarosanite associated with fibrous wollastonite and minor willemite (3.5 × 3 × 2 in.; 9 × 7.5 × 5 cm), in daylight (upper photo) and under shortwave UV (lower photo). This specimen also features abundant minehillite and native lead. *Photos by Harold Moritz.*

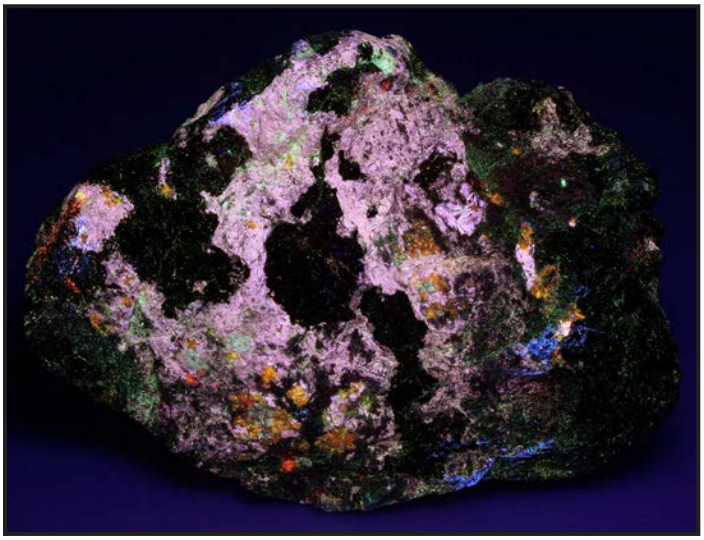


Wollastonite from Franklin, N.J. Specimens with a matrix of fibrous wollastonite at top and left, fluorescing bright pumpkin orange, some associated with willemite that fluoresces green in shortwave UV (view 1.5 feet wide). The two specimens at bottom right are Third Find wollastonite, in a matrix of red-fluorescing calcite. *Photos by Harold Moritz.*

(When we were in doubt, the coating of fluorescent willemite dust was diagnostic.) Barb and Kent undertook massive amounts of scrubbing and cleaning and took an initial stab at identifying the minerals. They were getting a crash course on Franklin mineralogy and all its complexities, and I admit to leading them astray at times with my own uncertainty. (What the hell is this creamy, barely fluorescent stuff in so many pieces with andradite and hendricksite? D'oh — microcline!) They made a black box for putting minerals in to check fluorescence during the day with their new three-way Way Too Cool UV lamp. Gradually we narrowed the number of unknowns, with much help from Dick Bostwick's fluorescent descriptions, photos on mindat.org, and many publications. Eventually some of the wooden boxes were used for the dozens of pounds of (daylight) green or red willemite-rich rocks. Only the gemmiest or most aesthetic pieces of willemite were cleaned and labeled, as there was just too much of it. A few colorless sprays of elongated secondary willemite crystals were identified by their wickedly bright fluorescence and long-lasting phosphorescence.

In daylight we identified many ubiquitous nonfluorescent minerals (franklinite, zincite, andradite, hendricksite, rhodonite, augite, "caswellite," friedelite, sussexite, serpentine, etc.) but were also stumped by others. For all the mention by Dunn of manganaxinite in many Franklin assemblages, I just was not seeing any. Eventually two small pieces of nonfluorescent massive manganaxinite were pointed out to me by Howie and Jim. There were surprisingly few specimens with decent crystals, large or small, mostly andradites and some franklinites and a thin, bright-orange-fluorescing vein of calcite with clinohedrite microcrystals. Barb and Kent learned that willemite can have many different colors, lusters, and habits in daylight, but its green fluorescence would usually resolve any uncertainty. I told them the legend of Lawson Bauer's infamous box of diverse "unknowns" – all actually willemite and sphalerite – and how the ugliest pieces often have the best fluorescence, so don't chuck anything before a thorough investigation. Pieces with no redeeming value were literally tossed over the property line fence into no man's land and became known as "fenceite." There were many pieces that should have been "leaverites" to begin with (like chunks of pure franklinite, calcite, or augite with no crystals), but all were carefully checked anyway (did I say we were afraid to miss something rare?). There was also a small amount of ore that was obviously from the Sterling Mine, and three mcgovernite specimens, so Roy, Sr., did obtain some material from Ogdensburg, even though in his day there were no accessible dumps like those in Franklin.

Some pieces were strange and/or interesting enough for me to take home and work on, and this is how we eventually identified the turneaureites (three pieces that matched the assemblage described in Dunn), wollastonites (in veins rather than grains), prehnites, margarosanites, and minehillites, though none were abundant. These pieces were posted to forums on mindat.org for help, and with that feedback, more reading and careful observation, I came to understand these minerals and how they occur at Franklin. Prehnite was the most vexing, as the description of its fluorescence was the only one we found inadequate – it can show color beyond the usual term "peachy." After a while, anything we could not figure out turned out to be that mineral; though there were not many, they tend to have a similar daylight appearance/assemblage.



On left, in white light, prehnite with brown andradite from Franklin, N.J. On right, under shortwave UV light, prehnite fluoresces a hard-to-describe pinkish lavender. Other fluorescent minerals include pectolite, willemite, axinite-(Mn), etc. Epting collection, 9 × 6.5 × 4 cm. (3.5 × 2.5 × 1.5 in.). *Photos by Harold Moritz.*

Illustration of the Mindatg.org Menu Bar that can be used online to access additional Harold Moritz photos of Epting Collection specimens.

I took focus-stacked photos of many of the rare species to add to the mindat.org database because they were the least-well-represented minerals online. These Epting specimen photos can be found on the Franklin mindat.org page: www.mindat.org/loc-8541.html. In the blue menu bar (pictured above), select Photos — All Photos, at top change Category to Other, change Photo Type to Mineral Cabinet or Display, change Order by to Newest First, add the Keyword Epting, and click the green Filter Search button.

Perhaps the funniest story is the found, then lost, then found again manganberzeliite specimen. Early in the process Barb and Kent learned of this rare mineral and how Roy Epting, Sr. and Stanley Schaub found it. However, Barb and Kent had given the piece, which they thought was a yellow willemite vein in granular ore, to their nephew in Maine (Barb is splitting all the inheritance with three sisters, but she is in charge of the mineral portion). When Barb and Kent saw the FOMS website photos, they recognized that the piece, one of the few that was on a shelf in the house rather than in the piles in the garage, could be "the one." No other pieces turned up in the rest of the collection, and many a similar vein turned out to be willemite. A photo of the piece was sent from Maine and it matched those on the web, so it had to come back to Connecticut (I think it was hand-carried!) so it could be tested and subsequently confirmed by EDS and XRD. This now famous specimen is back with Barb and Kent and thoroughly documented, though I don't know what Barb promised her nephew in exchange.

Throughout this process I had in mind that we might have a unique opportunity to fill up the dining-room table with a pile of each rare mineral and photograph them fluorescing. It would be a fun thing to do before they were eventually dispersed, and the chance would likely never present itself again. We did this one night in October 2018 with the esperite/hardystonite/clinohedrite rocks, wollastonite rocks, and margarosanite rocks. I set up the DSLR (digital single-lens reflex) on a tripod and Barb and Kent held our two UV lamps over the pieces. For each tableful I took three or four exposures at different focus depths and stacked them into one image. I also did a few close-up stacks of selected groups of pieces. The results are pretty impressive.

In the end, Barb and Kent graciously let me keep a few nice pieces. Frankly I did not want many, because for me this experience had mostly been about the fun of working with, learning from, and documenting the more unusual aspects of the collection. However, those two needed to maximize the return after all their hard work. It was kind of a sad day when Howie and Jim loaded up the collection. But Barb and Kent will be reminded of it whenever they use their UV lamp outside at night, because part of their driveway now glows bright green from the residual willemite dust! I wonder if a future owner of their home will stumble upon and ponder this phenomenon.

A BIT ABOUT ROY EPTING, SR. AND MARTHA

Much of what we know about Roy, Sr., and Martha's rockhounding is based on best guesses, supposition and logic.

According to his obituary, Roy, Sr., was born in Camden, New Jersey, on December 6, 1904, the son of German immigrants. He received a bachelor's degree from Colgate in 1927 and a master's from Columbia in 1933. He taught science in the Warwick schools from 1927-1929, and then served in the Chester schools from 1929-1937 (first as a teacher, then as principal). In 1937 he became the principal of the Warwick school system, where he remained until his death on January 7, 1967. So he lived and worked within twenty miles of Franklin and Ogdensburg from 1927 on. He may have started collecting in the area earlier than 1927, as his interest in science and nature seemed to be lifelong and he had grown up in Camden, N.J. We also realized that he and Martha were into lapidary, as we found many cabochons, jewelry findings, some grinding equipment and an old rubber stamp that said 'Genuine Gems' with Martha Epting's name and address. I have found out that Roy, Sr. was also an avid fisherman (ice and stream), an outdoorsman, a dog show judge (dachshunds), an artist, and was certified in Esperanto: a Renaissance man for our time.

Roy W. Epting, Sr., (left) with Martha and their son Roy, Jr. *Photo courtesy of Barbara Wagner.*

BARBARA WAGNER CONTINUES

I remember Roy, Sr. and Martha from my Aunt Hope and Uncle Roy, Jr.'s, wedding. I was seven. I think I saw him only one or two more times during my childhood, probably at Christmas gatherings at my grandfather's. To me, he seemed very dignified. I think Martha was the smallest grown-up I had ever seen. She seemed kind of shy and quiet.

ON FINDING HOWIE AND JIM

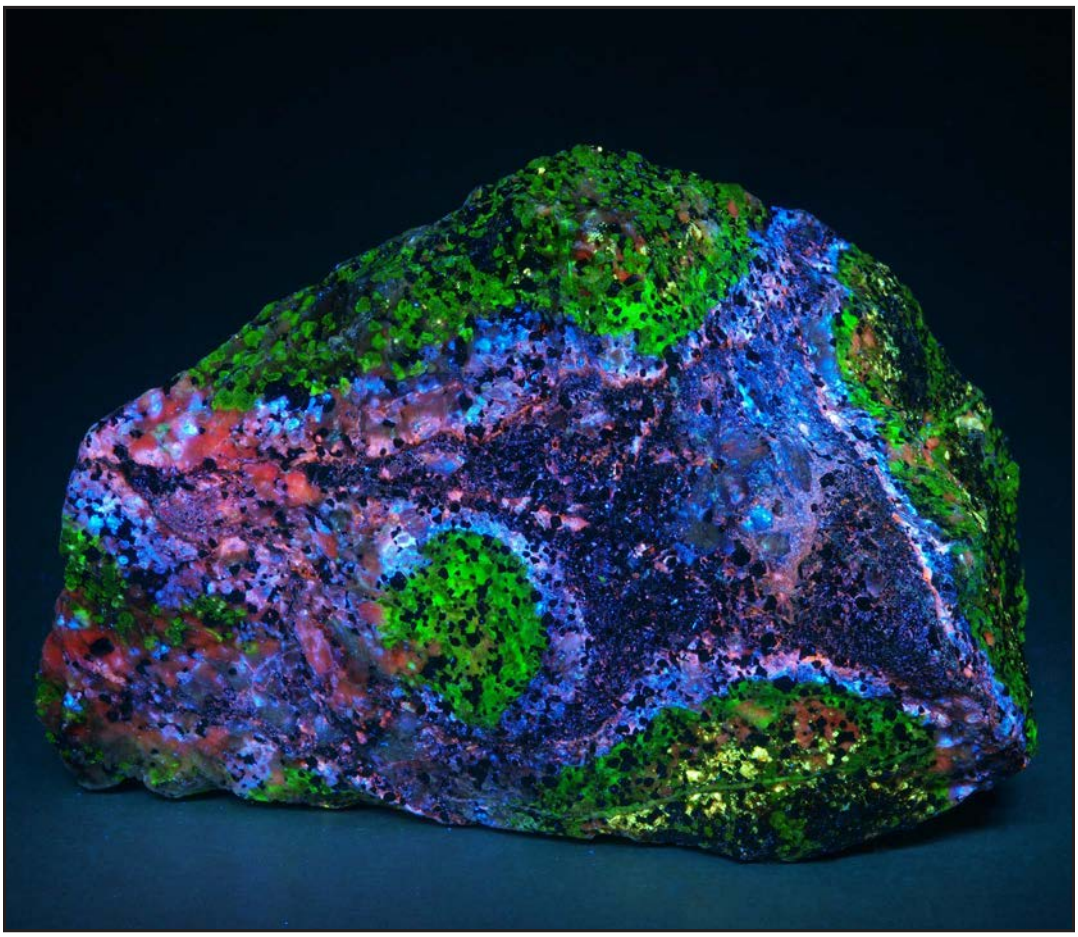
So, Kent and I are at the Springfield, Mass., show in August 2018, enjoying the beauty of it all. I'm at a booth admiring the specimens, when out of the corner of my eye I see a gentleman pulling a fluorescent light out of his backpack. I kind of sidle over to him and say, "Are you interested in fluorescents?" He says, "Yes, I am. In fact, I'm the Vice-President of the Fluorescent Mineral Society. My name is Howie Green." I mention that my sisters and I have inherited a collection and are trying to figure out what to do with it all. After conversing for a while, we exchange numbers/email, etc. and part ways. That was the start of how we got the 'glowing rocks' out into the world.

GOODBYES ARE HARD

The date was determined: mid-April. Howie Green and Jim Van Fleet were coming up with a van to take our rocks away. Not surprisingly, it was a day of mixed emotions for me. We were happy we had found someone to appreciate them, with the time and means to get them out into the world. At the same time, we were very sad to see them go. I had hand-washed each piece in my kitchen sink and examined each one. My husband had lugged all of them many times over. All that weight! All those colors! I got very emotional seeing them leave our driveway.

The Epting collection carefully sorted in wooden boxes.

That, and thinking about the story of a man I really didn't know. I imagined him as a young boy in the early 1900s, becoming interested in science and exploring his New Jersey. Collecting prehnites, going to Stirling Creek and finding loads of carnelians. As an adult, getting spinel from Warwick, Herkimer diamonds from the N.Y. north country and, of course, fluorescent rocks from Franklin and Ogdensburg. Back then, if you had a car and the roads were good enough you could go decent distances. There weren't the restrictions on collecting that we have now. It truly was a "Golden Age" for American rockhounds.



THE OCTOPUS

A remarkable mimetolith ("picture rock") from the Sterling Mine, discovered in the collection of Roy W. Epting, Sr.

A polymict breccia consisting of altered, rounded to subrounded clasts of (a) high-grade zincite-franklinite-willemite ore, (b) high-grade willemite-franklinite ore with subordinate calcite, and (c) a few smaller clasts of low-grade ore consisting of white calcite lightly "peppered" with grains of franklinite. The zincite-rich clasts in particular show a prominent, orange to yellow alteration rind in which most of the zincite has been removed. The matrix of the clasts is mostly fine-grained and of medium gray color; it consists largely of sphalerite (fl. blue LW) with subordinate secondary zincite (fl. pale yellow LW) and residual grains of franklinite. The specimen was photographed using a Convoy S2+ LW UV LED light source. It measures 6 × 3.75 × 3 in. (15 × 9.5 × 8 cm.) and is from the Epting collection. *Photos by Dr. Earl R. Verbeek.*

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A nodule of gemmy green and purple willemite in granular willemite-franklinite ore, from the Franklin Mine, Franklin, N.J., viewed in direct sunlight. Most collectors are aware that viewing an "apple-green" Franklin willemite in sunlight intensifies its color, but the way this specimen responds is an off-the-charts shock that reminds us how gorgeous willemite specimens can be, if you give them a place in the sun.

The face of the willemite nodule measures 3 × 2 in.; 8 × 5 cm., and the specimen is 6 × 2.5 × 2 in.; 15 × 6 × 5 cm overall. It was in the collection of Fred Howell, and was acquired by Tema Hecht and Richard Bostwick during a sale at the Franklin Mineral Museum. *Photo by Tema J. Hecht.*

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