Fall/Winter 2023
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STERLING HILL NEWSLETTER

Franklinite

The New Jersey State Mineral

Recipient of the 1999 Carnegie Mineralogical Award

Recipient of the 1999 Carnegie Mineralogical Award

A nonprofit foundation in furtherance of mining preservation, scientific research and earth science education.

President's Message

Bill Kroth

As I look at the overall health of the Sterling Hill Mining Museum, I see a very stable condition. Attendance of schools, camps, colleges, and the general public is at our maximum, with up to eight school groups per day. Very surprisingly, we had over 400 visitors for the 1:00 PM general public tour on President's Day! Weekend general public visitation averages approximately 175. We have a new way of dealing with high numbers on the weekends; we start the tours up to 30 minutes earlier so that the gift shop is less crowded and, more importantly, our guides have "clear sailing" without other groups ahead. We no longer have the requirement of making reservations, and we never turn away any arriving guests.

Our greatly improved pavilion is certainly proving to be a major factor in handling the extra visitor load as it provides a nice, comfortable waiting area along with a good place for students to eat lunch. Our new pavilion floor gives it a nice feel, lower noise, and an easy-to-clean surface.

We have several terrific volunteers helping out this year. Rich Cerbone and Bruce Bannon, both geologists, give great tours. Bruce is from Arizona and gives us several months of volunteer service. Rich is from central New Jersey and drives up to Sussex County several times a week to help with school groups. Also joining our tour guide team is Sarah Derwick, who just moved into the area. Sarah has a degree in forestry and fits nicely into the position.

Rich Cerbone, retired geologist for the State of New Jersey, travels to Sterling Hill several times a week as a volunteer to share his vast geological knowledge.

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On the cover: Franklinite from the Franklin Mines. Pete J. Dunn specimen G-208, 9.5 x 5 x 7 cm. This specimen was donated by Pete Dunn to the Franklin Mineral Museum in September 2010, and is now on display in Baum Hall. The crystal, an octahedron beveled by dodecahedral faces, is well-formed, with planar faces, sharp edges, and submetallic luster. Photo by Earl Verbeek.

..."there's no other place like it on Earth."

Listed on the National Register of Historic Places since 1991

Sterling Hill Newsletter

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The *Sterling Hill Newsletter* is the official journal of the Sterling Hill Mining Museum Foundation, a nonprofit institution. It is published two times a year, in April and September.

Subscription to the *Sterling Hill Newsletter* is included with membership in the Sterling Hill Mining Museum Foundation. For details look for the membership form in this issue. If the form is missing, contact the museum for information.

PRESIDENT'S MESSAGE

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Sarah Derwick recently joined our tour guide team. She fits in perfectly giving great tours, and really loves what she does here.
Welcome aboard!

Irv Brown, mineral collector and dealer from Great Rocks, Inc. of Warwick, NY has recently gotten involved in helping the Sterling Hill Mining Museum acquire new collections and additions for our Zobel Museum. One of our new exhibits is a wonderful, handmade diorama of a mineral shop that Irv donated a few months ago. Additionally, he facilitated the donation of a major general collection of 380 specimens from Ms. Hedy Hartman of Manhattan, NY. Irv was kind enough to drive with our own Alex Kerstanski to pick up the collection from her apartment in midtown. At this time, we are cataloging the entire collection and selecting the best specimens for display in our Zobel Museum.

Irv Brown of Great Rocks Inc. has been a tremendous help in getting us mineral donations and evaluating our collection and displays.

Friend, dealer, and collector Irv Brown donated this amazing diorama of a miniature mineral shop containing over 200 tiny but wonderful specimens, including crystals and a vial of real gold dust. It generates a great deal of interest and there is always a line of visitors waiting to get a good close look.

The Hedy Hartman Collection's best 40 specimens are now on display in our Zobel Museum.
Thank you, Ms. Hartman!

Finally, we are proud to report that franklinite is now the Official New Jersey State Mineral. Legislation making this designation was signed on July 19, 2023 by Governor Phil Murphy. Many have spearheaded this major accomplishment, with our Board Vice President, Jeff Osowski, and former Board Secretary Haig Kasabach taking the lead in this wonderful accomplishment! We have large banners (to hang from the conveyor tower), magnetic placards (to attach to the steel bridge on Passaic Street), posters, and a huge clothing order scheduled as part of this celebration. This designation of franklinite as the New Jersey State Mineral provides great recognition to both the town of Ogdensburg and our museum! Check out the article in this edition of the newsletter for more information.

Sterling Hill Mining Museum Mission Statement

Our mission is to tell the story of the Sterling Hill Mine and to inspire lifelong learning about earth sciences, engineering, and the responsible use of the Earth's nonrenewable resources.

What We Do

1. We inspire students to pursue careers in science and engineering.
2. We inspire people to be thoughtful and responsible stewards of our environment.
3. We are committed to preserve our historic facility, rock and mineral samples, artifacts, and records to support research and foster understanding of this unique geologic area.
4. We provide visually stimulating, hands-on experiences in earth science and technology in an historic, immersive, real-world setting.
5. We promote an understanding of human involvement in our environment and how science and technology relate to that connection.

Franklinite: The New Jersey State Mineral!

Jeffrey Osowski

On July 19, 2023 Governor Phil Murphy signed legislation (P.L.2023, Chapter110) designating franklinite as the New Jersey State Mineral. New Jersey now joins 28 other states that have an official state mineral. This legislation was passed unanimously in both the State Senate (36-0) and State Assembly (73-0). The Primary Sponsors of the legislation were Senator Steven Oroho, Assemblyman Parker Space, Assemblyman Hal Wirths, Senator Edward Durr, and Assemblyman Kevin Rooney. The legislation was co-sponsored by Senator Andrew Zwicker, Senator James Holzapfel, and Assemblyman Daniel Benson.

Octahedral crystals of franklinite 0.8-1.3 cm across in a coarse-grained matrix of calcite and orange-tan willemite, from the Sterling Mine. The specimen is 8 x 6 x 5 cm, and is on display in Baum Hall in the Franklin Mineral Museum (FMM-291). It is from the Ewald Gerstmann and SPEX Industries (Art and Harriet Mitteldorf) collections. Photo by Earl Verbeek.

The Sterling Hill Mining Museum will celebrate this accomplishment with ceremonies at the museum to honor the legislative sponsors, with commemorative T-shirts and posters, magnetic placards, educational information on the Sterling Hill Mining Museum website, and with a huge banner hanging on the conveyor at the museum.

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The State Senate version (S1727) of the legislation is provided below. The identical legislation (A3393) was passed in the State Assembly. Governor Murphy's press release also is provided below.

SENATE, No. 1727
STATE OF NEW JERSEY
220th LEGISLATURE

INTRODUCED FEBRUARY 28, 2022

Sponsored by:
Senator STEVEN V. OROHO
District 24 (Morris, Sussex and Warren)

Co-Sponsored by:
Senator Zwicker

SYNOPSIS
Designates franklinite as official mineral of State of NJ.

CURRENT VERSION OF TEXT
As introduced.

AN ACT designating franklinite as the official mineral of the State of New Jersey and supplementing chapter 9A of Title 52 of the Revised Statutes.

WHEREAS, The mineral franklinite was first described in 1819 by Pierre Berthier and was named in honor of Benjamin Franklin; and

WHEREAS, Franklinite, with a striking black color, submetallic luster, and sharp octahedral crystals, is aesthetically pleasing and makes for handsome mineral specimens, creating the potential for strong interest from mineral collectors around the world; and

WHEREAS, New Jersey has a long history of mineral mining, including two world-famous zinc mines in Sussex County, at Franklin and at Ogdensburg, which operated for more than 250 years, producing more than 33 million tons of high-grade zinc ore and contributing significantly to the economic vitality and cultural history of the State of New Jersey and the nation; and

WHEREAS, Three hundred fifty-nine different confirmed minerals have been found in these two mines, 19 of which are not found anywhere else on Earth; and

WHEREAS, Though millions of tons of franklinite, willemite, and zincite are found in these mines, they are found elsewhere only in small amounts; and

WHEREAS, The Franklin Mine closed in 1954, and the Ogdensburg (Sterling Hill) Mine closed in 1986, but both are memorialized by the Franklin Mineral Museum, the Sterling Hill Mining Museum, and the Franklin-Ogdensburg Mineralogical Society; and

WHEREAS, In 1968, New Jersey passed a resolution declaring the Borough of Franklin the "Fluorescent Mineral Capital of the World"; and

WHEREAS, In a poll conducted by the New Jersey Department of Environmental Protection with several thousand national participants, 96 percent voted in support of franklinite as the New Jersey State mineral; and

WHEREAS, In order to pay recognition to the scientific, economic, and historic importance of franklinite, it is fitting and appropriate to designate franklinite as the official mineral of the State of New Jersey; now, therefore,

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FRANKLINITE: THE NEW JERSEY STATE MINERAL!

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Be It Enacted *by the Senate and General Assembly of the State of New Jersey*:

1. Franklinite is designated as the official mineral of the State of New Jersey.

2. This act shall take effect immediately.

STATEMENT

This bill designates franklinite as the official mineral of the State of New Jersey.

The mineral franklinite was first described in 1819 by Pierre Berthier and was named in honor of Benjamin Franklin. With a striking black color, submetallic luster, and sharp octahedral crystals, franklinite is aesthetically pleasing and makes for handsome mineral specimens, creating the potential for strong interest from mineral collectors around the world.

New Jersey has a long history of mineral mining, including two world-famous zinc mines in Sussex County, at Franklin and at Ogdensburg. These mines operated for more than 250 years, producing more than 33 million tons of high-grade zinc ore and contributing significantly to the economic vitality and cultural history of the State of New Jersey and the nation. Three hundred fifty-nine different confirmed minerals have been found in these two mines, 19 of which are not found anywhere else on Earth. Though millions of tons of franklinite, willemite, and zincite are found in these mines, they are found elsewhere only in small amounts.

The Franklin Mine closed in 1954, and the Ogdensburg (Sterling Hill) Mine closed in 1986, but both are memorialized by the Franklin Mineral Museum, the Sterling Hill Mining Museum, and the Franklin-Ogdensburg Mineralogical Society.

In 1968, New Jersey passed a resolution declaring the Borough of Franklin the "Fluorescent Mineral Capital of the World." In a poll conducted by the New Jersey Department of Environmental Protection with several thousand national participants, 96 percent voted in support of franklinite as the New Jersey State mineral. In order to pay recognition to the scientific, economic, and historic importance of franklinite, it is fitting and appropriate to designate franklinite as the official mineral of the State of New Jersey.

Governor Murphy Signs Legislation Designating Franklinite as State Mineral

07/19/2023

TRENTON – Governor Phil Murphy today signed S1727/A3393, which designates franklinite as the official mineral of the State of New Jersey. Sponsored by Senators Steven Oroho and Edward Durr and Assemblymen Parker Space, Hal Wirths, and Kevin J. Rooney, the legislation recognizes a source of New Jersey pride and a crucial contributor to the state's industrial history.

"By designating franklinite as the official State Mineral, we celebrate yet another quintessentially Jersey piece of history," **said Governor Murphy**. "Franklinite quite literally helped build our modernizing nation's foundation while fueling the growth of the railroad industry and New Jersey's local economies. This legislation will ensure that franklinite's enduring economic and cultural legacy is remembered not just in Sussex County, but across the Garden

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State."
"The Murphy Administration's recognition of franklinite as the New Jersey State Mineral underscores the worldwide renown and critical role that franklinite has had in the industrial history of our state," **said New Jersey State Geologist Jeff Hoffman**. "The largest deposit of franklinite in the world is in the ore bodies that supplied the Franklin Mine and Sterling Hill Mine in Sussex County. Zinc from these mines supported many uses and was crucial to early industrial development in New Jersey. Moreover, these mines were the largest supplier of zinc during World War II, providing the raw materials needed for weapons that helped protect our country and troops."

"Franklinite represents an important part of New Jersey's history for the role it played in helping to industrialize our state," **said Senator Steven Oroho**. "Found exclusively in the United States in the communities of Franklin and Ogdensburg, franklinite is a critical link to our state's mineral mining heritage and its designation as New Jersey's official state mineral is most appropriate."

"Franklinite is a mineral unique to New Jersey and was a key component to the modernization of our state during the 19th and 20th centuries," **said Senator Edward Durr**. "With the signing of this bill, New Jersey will recognize the tremendous impact this mineral has had on the construction of water, electric, and other crucial infrastructure we rely on every day."

"Franklinite is as unique to New Jersey as the Pine Barrens are, and was the driving force behind the state's thriving mining industry," **said Assemblyman Parker Space**. "The discovery and mining of this rare ore built Franklin. Its importance can't be overstated."

"There are many people to thank who helped get this bill to the Governor's desk," **said Assemblyman Hal Wirths**. "Jeff Osowski of the Sterling Hill Mining Museum built the momentum for this years ago; Bill Truran took a keen interest in organizing support when he became the Sussex County Historian in 2019; and all the students in Northern New Jersey who kept writing letters to get this bill through the legislative process and now signed into law. This is a great day for everyone involved."

"Franklinite, an ore only found in New Jersey, built a town and was a driving force in our state economy while benefitting millions around the globe," **said Assemblyman Kevin J. Rooney**. "It's fitting to name it the official state mineral."

"The Sterling Hill Mining Museum has been working for years to gain recognition for franklinite as the New Jersey State Mineral. It was one of the driving forces in the economic development of Sussex County in the 1800s," **said William Kroth, President and Executive Director of the Sterling Hill Mining Museum, Inc**. "After the franklinite ore was processed to remove the zinc, it then became the source of high manganese steel, which was vital for the railroad industry. Franklinite is found nowhere else in the world in as great a quantity as in New Jersey. The Sterling Hill Mining Museum, a 501(c)(3) educational institution, is looking forward to building on this recognition in its outreach to students."

Attention All Mineral Collectors

Franklinite is now the Official New Jersey State Mineral. We would like to give our readers/collectors the opportunity to show off their favorite franklinite specimens in our newsletter. Please send your photo to jvotmo@comcast.net. Include information about the specimen, such as size, how and when it was acquired, etc. Your photos will be published in future Sterling Hill Newsletters.

Father Steve and "Minerals in the Collection Basket"

Jeff Osowski, Bill Kroth, and Jim Osowski

Jeff Osowski

This is a story about a rock collecting priest, Father Steve Dabkowski, who was pastor at two churches in Sussex County (Franklin and Stockholm). He was born in 1919 grew up in South River, Middlesex County, NJ, where he attended St. Mary's School. You will see the connection to South River and St. Mary's later in this article, as well as the connection to local miners and fluorescent minerals.

Father Steve Dabkowski. Photo possibly taken in the late 1950s.

Father Steve was ordained in 1946 in the Paterson Diocese, and his first assignment was at Immaculate Conception Roman Catholic Church in Franklin, Sussex County, NJ, where he served as pastor for 13 years, from 1946 to 1959. During his early years as a priest, he played football for the Franklin Miners, a semi-professional team. In 1959 he was assigned to the Stockholm section of Hardyston, where he founded and was responsible for construction of St. John Vianney Roman Catholic Church. From 1956 to 1959 he served as pastor for both Immaculate Conception in Franklin and St. John Vianney in Stockholm.

Immaculate Conception Church today in Franklin, NJ.

During the transition, before the St. John Vianney Church was even built, he celebrated his first Mass for the parish on June 24, 1956 in a steak and seafood restaurant, the Tamarack Corral on Rte. 23 in Stockholm. He served as pastor at St. John Vianney for 35 years, and was elevated to Monsignor in 1984. He died in 1994 at the age of 75 and is buried at St. Mary's parish cemetery in East Brunswick, NJ.

Bill Kroth

My interest in Franklin minerals began in seventh grade during a "show and tell" when a fellow student brought in some Franklin fluorescents and a shortwave ultraviolet light one Friday afternoon. A second influence was that my family, including a cousin, owned summer cabins at nearby Lake Gerard in Stockholm, NJ, right on Rte. 23 at the top of the hill, about three miles to the southeast from Sterling Hill and Franklin.

In the 1980's I took a path that so many in the hobby have also traveled -- the search for all of the local fluorescent minerals. I met all of the local collectors; we would go to their houses each weekend to see if they had

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FATHER STEVE AND "MINERALS IN THE COLLECTION BASKET"
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anything new. During this time, I would hear every now and then about miners giving specimens to various churches as an offering in place of cash, especially in Franklin. I never gave it much thought, figuring that those specimens were long gone.

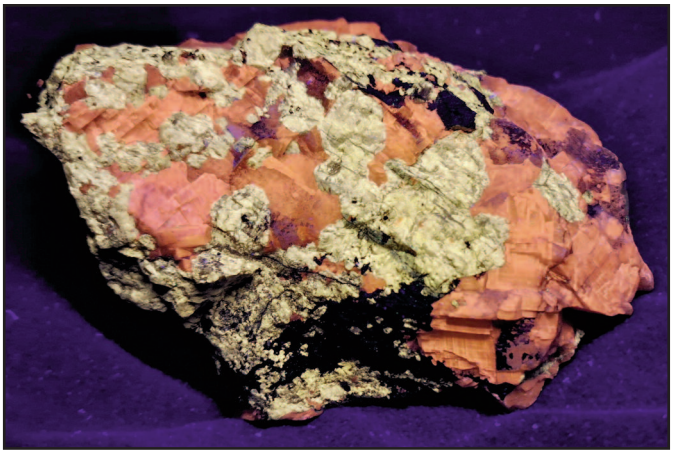
My cousin, Carol, who is both of Polish heritage and a Catholic, when on vacation at Lake Gerard would visit her church, St John Vianney in Stockholm, right on Rte. 23 about one mile south of her cabin. During one sermon in August 1991 while she was present, Father Steve Dabkowski for some unknown reason, mentioned the beautiful glowing minerals from the local zinc mines. While shaking hands with Father Steve at the end of the mass, she mentioned that her cousin (that's me) collected these glowing rocks. Father Steve responded that indeed miners would give minerals from the local zinc mines as offerings instead of cash (of which they had little), He noted that he still had a few boxes left, but they were tightly jammed under the stairs at the church. Without any further prompting, he said that I could give him a call and stop by if I wanted them!

St. John Vianney Church today in Stockholm, NJ.

I was really eager to see the minerals, so I called to make an appointment, and the next weekend my wife, Denise, and I stopped by to meet Father Steve. He was very cordial and took us down to the basement where there were four or five boxes jammed under the stairs. They were nearly impossible to move, being jammed under the stairs in what was a tight triangle of the floor and the sloping stairway above. My pulse quickened, and there was no way I would give up trying to pull them out!

I was able to get all of the boxes out in the open. I could immediately see that all of the minerals were local and were covered in dust. Father Steve told me I could purchase them right then! My initial response was only lukewarm as the dust obscured the true fluorescence of the specimens. I am not sure what the final purchase price was, but I think it was in the neighborhood of $1000. I met his request and took all of the minerals back to my cabin where I sprayed them with water. It was the afternoon and still quite bright out. The response was better once they were cleaned, but I was still not too impressed. We drove home to our home in Bergen County where I unpacked them, scrubbed them with Dawn detergent, and used a good ultraviolet lamp in complete darkness. I excitedly exclaimed, "God Bless Father Steve" as I pulled a few "killers" from the pile!

My favorite was/is a large turneaurite, bigger than anything that I had in my collection and of "Warren Miller caliber." There also was a native copper with zincite, a margarosanite with axinite, a quite rich margarosanite, and a very rich clinohedrite, all of which are still in my present collection. I felt as though I did not pay enough for this treasure trove. Even though they were sitting in my display case I didn't feel that they were fully mine.



Now a major centerpiece in the Bill and Denise Kroth collection, this beautiful turneaurite specimen came from under the dusty stairs of the St. John Vianney church. The typical associated minerals help to identify turneaurite., including salmon calcite (fluorescing red) and andradite garnet (not fluorescing). The specimen is shown under shortwave ultraviolet light, and is 20 x 20 x 13 cm.

So, the next weekend we went back to the St. John Vianney church, met again with Father Steve, and we made things right by giving him an extra donation of

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$1000. When leaving the church, I felt great knowing that those minerals were now truly mine, and I would not burn in Hell for stealing from the Church!

Many of the specimens were of lesser quality or duplicates, and I sold them to other folks in the hobby, but the ones that I got from Father Steve have a special place in my heart due to the serendipitous sequence of events that drew me to them.

So, the legend of "minerals in the collection plate" was real and I have wonderful proof. You simply can't make this up!

Jim Osowski

I was ten when Mom took me with a friend to Franklin in the early summer of 1968. I remember it was before my birthday which is in July. We had a good time collecting on the Buckwheat Dump. Before heading home to South River, Middlesex County, where we lived, my mom said she wanted to go to a church not far from Franklin to visit a priest she knew who was from South River. We all had a great time collecting on the Buckwheat, but now we were going to a church, on a Saturday! I guess that was to be the price we had to pay for the more than one hour trip from home to Franklin. Little did I know what was in store for us!

That church, St. John Vianney, was in Stockholm, NJ, a short drive from Franklin, and the priest my mom wanted to meet with was Father Steve Dabkowski. After some introductions Father Steve learned that we had just been collecting on the Buckwheat dump. He could not wait to show us his collection of fluorescent minerals. When we put an ultraviolet light on them it seemed that the whole room glowed! The minerals we found on the Buckwheat that day could not hold a candle to what Father Steve showed us. I was ten years old, and it was a long time ago, so I don't remember what minerals he gave us, but I'm sure they are probably still in my collection.

Now I'm not really sure how my mom got to know Father Steve. They both grew up in South River, but he was about seven years older than her. He was never assigned to St. Mary's in South River, but I'd bet the nuns were very proud of their "locally grown" priest, and he likely returned to St. Mary's to visit or maybe even celebrate mass. That connection is gone as my mom, Regina Osowski, passed away last year at the age of 96. There are several possibilities:

1. He was from South River so possibly he came home to visit from time to time.
2. While in town he could have been asked to assist Monsignor Wujek with Mass.
3. He could have filled in for other priests who were away.
4. His was the story of a local boy who done good and was thought of highly in the South River community - especially Polish Catholics.
5. He could have visited St. Mary's School and talked to the students about life in the Church. The Nuns would have loved that.

Any of the above could lead to Mom knowing him. She was always very friendly with most of our local priests - some would drop by the house for a visit.

Jeff Osowski

This is a great story about Father Steve, the rock collecting priest. We have learned a lot through research and recollections of Bill Kroth and Jim Osowski (my cousin). But many questions remain:
1. How exactly did Father Steve acquire all those local mineral specimens? We assume that cash-strapped miners made the donation of rocks in lieu of cash. It is, of course, highly unlikely that miners actually put them in the Sunday collection basket. Which local miners made the donations? Was it just one miner or several? How did they make these donations to the church?
2. Were the minerals in Father Steve's collection all from Franklin, or were some from the Sterling Mine?
3. Were the minerals all collected by Father Steve when he was pastor in Franklin, then transported to St. John Vianney? Or, did he also acquire specimen donations at St. John Vianney?
4. Did any other collectors of local minerals obtain some from Father Steve?
5. Did Father Steve ever celebrate mass or engage in other religious ceremonies at St. Mary's parish in South River?

We've uncovered some great stories about Father Steve, but would like to know more. So, if anyone, mineral collector or not, can answer any of the above questions or provide additional information and recollections of Father Steve, please send them to Jeff Osowski at jvotmo@comcast.net. Any new information or recollections will be published in future editions of the Sterling Hill newsletter.

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FATHER STEVE AND "MINERALS IN THE COLLECTION BASKET"
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Bill Kroth is a retired geotechnical and civil engineer who has been involved with the Sterling Hill Mining Museum since the early 1990s. Bill developed a love of minerals in the 7th grade and an interest in amateur astronomy in high school. Now in his "golden years" with plenty of "retirement time" Bill and his wife, Denise, are at Sterling Hill every day hoping to pass their love of science to the current generation and to help make the museum a world class attraction.

Jim Osowski has been an avid mineral collector for 50 years, on and off. He has traveled all over the world with his wife, Darlene, collecting minerals; and they especially love collecting in the Franklin/Sterling district. Jim has a BA from Rutgers in geology. He has worked with his brothers in the HVAC business for more than 40 years, in the Hanco Company, founded by their father. His other hobby is keeping his 1965 Thunderbird on the road.

Jeff Osowski, PhD, is Vice President of the Sterling Hill Mining Museum Board of Trustees. He has had a long and varied career in the education and science realms, including Vice President for Learning and Teaching at Liberty Science Center; Vice President for Education Policy at the New Jersey State Chamber of Commerce; Assistant Commissioner and State Director of Special Education, both at the NJ Department of Education. He also has been a school district administrator, psychologist, and teacher.

John Kolic's Sterling Hill Mining Diaries

Doug Francisco

Four more years of John Kolic's mining diary entries are now on the Sterling Hill Mining Museum website. John spent many years helping develop our present-day museum and grounds. He stayed behind the scenes, preferring blacklights to spotlights. This next batch of diary entries finds John still in our "outback," i.e., the fill quarry, the Nobel Pit, the Passaic Pit, and the old west vein stope. In one entry, John muses about a strange sound heard on September 11, 2001. You must read his diaries on our website to find out what he was wondering about! Just as in his diary entries while actually mining before 1986, not too many days go by in this new batch when he's not mentioning specimen hunting. Franklinite, jeffersonite, wollastonite, "crazy" calcite -- these were all in his sights. He drilled and wedged and split many tons of rock to free them. There are a lot of repetitive entries, and you might find yourself wanting to fast forward, I suggest that you read each one as there's always a tidbit of interest in every day's work. Many of these days revolved around rehabilitating the basement of the original six-story mill, which now houses our GeoTech Center. This was a monumental task involving drilling and breaking through one-foot-thick concrete walls, and of course cleaning it all up. John was a force to be reckoned with. The Sterling Hill Mining Museum would not be what it is today without John's incredible contributions. He passed away in the fall of 2014 so there will only be a few more releases of his work pages. This makes the reading of his diaries all that much more poignant.

John Kolic working at the site of the Great Sterling Mill.

Doug Francisco, a trustee at the Sterling Hill Mining Museum, is a graduate of the Brinker School of Surveying and Mapping. For 12 years he was a miner at Sterling Hill; and he worked for 30 years in heavy highway bridge construction. His love for Sterling Hill runs deep.

My Memories of Jeff Wilson

Denise Kroth

Jeff Wilson was a member of the Sterling Hill Mining Museum Board of Trustees. He passed away on March 31, 2023. He is fondly remembered by all involved with the Sterling Hill Mining Museum.

I first met Jeff when the North Jersey Mineralogical Society held their twice-yearly sell and swap meetings at the pavilion at Sterling Hill. He always had interesting merchandise at great prices. He wasn't in it to make money, but just to have fun and try to get people interested in the hobby. He was always laughing and having a great time. After the swap, he would always get the grill going for a fantastic barbeque. I can still see him with his apron and all his barbeque items ready to go.

Jeff, our special grill master at Sterling Hill.

When the caboose was brought to Sterling Hill from Fanwood, Jeff created a Facebook page to "save the caboose," and he took many photos to show progress as it was being restored. He was into trains as well as rocks and minerals, and was very excited about the project.

In later years, Jeff, Derek Yoost, Diana Tasco, and Ron Schulz ran the twice-yearly garage sale at Sterling Hill. Once again, Jeff had great prices that even I could not pass up! I would take a flat and many times during the day I would go around the tables, finding more and more items to put in it. At the end of the weekend, he would add it up and give me even better prices than they were marked. Unfortunately, Jeff was diagnosed with cancer in 2022, but still always had a very positive attitude. During the last show he attended, in September 2022, he was still cheerful and looking forward to going back to work. Once again, I filled a flat with goodies and got really great prices. I had two little wooden carved animals, a turtle and an owl, which he gave me as gifts. I will always treasure them as they are the last things he gave me.

On March 31, 2023 he lost his battle and left us all very saddened. For all who knew him, he will be sorely missed. Goodbye to our rock friend, train friend, and ultimate grill master.

Denise Kroth has been involved with the Sterling Hill Mining Museum for over 30 years; first in helping her husband and president, Bill, in many of the initial tasks of obtaining the Certificate of Occupancy for the Museum. With a strong background in corporate bookkeeping (having worked for a large food production company), Denise has been the bookkeeper and treasurer for Sterling Hill since 1993. Denise is at the facility every day as a volunteer, and her tasks also include everything from buying food for the Snack Bar to working in the Gift Shop. Her hobbies include reading, baking, and collecting colorful minerals.

Minerals from the Sterling Mine Named for Local People or Places

Gerstmannite

Ken Daubert

This article begins a series authored by Ken Daubert, a member of the Sterling Hill Mining Museum Advisory Council. In each edition of the Sterling Hill Newsletter, a mineral found in the Sterling Mine that is named for a local person or place will be featured. When a mineral has been identified and confirmed it is given a name, which must be approved by the International Mineral Association (IMA). Some minerals are named for their physical characteristics, such as chemical composition, color, or crystal form. A large number of minerals are named for people or places, and this was often the approach taken by scientists identifying minerals from the Franklin and Sterling Mines.

I am not an expert in mineral terminology or chemistry, so my goal in researching and writing these articles is to connect the mineral to the local personalities or places for whom the mineral has been named. For example, when I hold a specimen of fowlerlite I think of the accomplishments and worthwhile life of Dr. Samuel Fowler, for whom this mineral was named.

To have a mineral named for you is quite an honor. There are approximately eight billion people on Earth. The International Mineral Association (IMA) reports that there are approximately six thousand approved minerals; so, the odds are very slim at best to have a mineral named for you.

Ewald "The Dutchman" Gerstmann, at his microscope.

Gerstmannite, a manganese magnesium zinc silicate hydroxide mineral, with the chemical formula $MnMgZn(SiO_4)(OH)_2$, is named in honor of Ewald "The Dutchman" Gerstmann. This rare mineral is light pink to white, and occurs as bunched, flattened sprays of radiating prismatic crystals, up to several centimeters in length. It is translucent to opaque, with vitreous luster, good cleavage, and a density of 3.68 g/cm^3.

Some unidentified miners collected specimens in 1970 in the 1120 stope above the 1100-foot level in the Sterling Mine. According to John Baum, the late former geologist of the New Jersey Zinc Company, gerstmannite occurred in the west vein just north of the east branch of that vein. Only a few specimens were preserved, making it a very rare mineral. There is one specimen at the Smithsonian Institution in Washington, D.C., one at Harvard University, one at the Sterling Hill Mining Museum, two at the Franklin Mineral Museum, and a few in private collections.

Gerstmannite from the Sterling Mine. Franklin Mineral Museum specimen 1146, 10 x 6 x 4 cm.

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These specimens had originally found their way to Ewald Gerstmann, who held onto them for approximately five years before sending them for analysis. In 1975, Paul B. Moore and Takaharu Araki analyzed the specimens and determined that the mineral was new to science, never having been found anywhere on Earth. It was approved by the IMA in 1975. Moore and Araki named the mineral in honor of Ewald, who first brought samples to them for study. The type locality for gerstmannite is the Sterling Mine, where it was first identified. And it is unique to the Sterling Mine, i.e., gerstmannite is found nowhere else on Earth. It truly is a rare and distinctive mineral.

Gerstmannite from the Sterling Mine. Franklin Mineral Museum specimen 1146, showing details of the same specimen in the photo above.

So, who was Ewald Gerstmann? The following excerpt was taken from the 2005 memorial about Ewald by the Franklin Ogdensburg Mineralogical Society (FOMS), and could not have been written better.

"Ewald H.G. Gerstmann was born September 19, 1918 in Bremerhaven, Germany. At the age of eight, he emigrated to America with his mother Johanne and older brother Reinhold (his sister having died during the trans-Atlantic voyage), arriving in New York on October 4, 1926, aboard the S.S. Hamburg. The family settled in Franklin, New Jersey and Gerstmann left school after the eighth grade to go to work. In January 1942 he joined the Army and served in India, Egypt, and elsewhere. He met Helen Kotnok, a New Jersey woman, and they were married on "May 28, 1943, while he was still in the military. After returning home from the war, Gerstmann and his brother Reinhold began the Gerstmann Bottle Gas Company retailing propane gas. Eventually he also became a chief power operator at Newton Memorial Hospital and at Morristown Memorial Hospital.

"In 1954, when Gerstmann's daughter Karen was in high school, she received a science assignment: to collect some minerals near her home in Franklin, Sussex County. Gerstmann remembered seeing some minerals in crates in the basement of a local miner, and so he paid him a visit and was allowed to select a boxful for his daughter's project – only to be astounded to learn that he had to pay $60 for them. Afterward, when Karen's project was completed, the minerals ended up in several buckets discarded on a back porch. As it happened, a local mineral collector came by and offered Gerstmann $100 for the specimens. That got his attention again, and he developed an interest in Franklin minerals.

"Gerstmann became a dedicated mineral collector focusing on Franklin and Sterling Hill specimens. He bought books and educated himself on minerals; he studied the Franklin collection at the nearby Paterson Museum and at the American Museum of Natural History in New York. Honest, generous and straight-forward, Gerstmann made many friends among local collectors and among mineralogists and curators, including the man who became his principal mentor, John L. Baum. In 1963 he purchased the Lang and Riker collections, and by 1964 Gerstmann had established himself as one of the leading collectors of Franklin and Sterling Hill minerals.

"During the next 15 years Gerstmann purchased over 500 private mineral collections in order to get the Franklin/Sterling Hill minerals they contained. He even encouraged and trained local miners to look for interesting specimens, and he freely supplied research specimens to any scientists who asked for them; in doing so he was instrumental in the description of over 30 new species. After supplying Paul B. Moore with an unknown mineral he had found, Moore named the new Sterling Hill mineral gerstmannite in his honor in 1975. Gerstmann was also awarded an honorary doctorate from Harvard University.

"Gerstmann set up display cases in a building adjacent to his house on Walsh Road in Franklin and opened it as the

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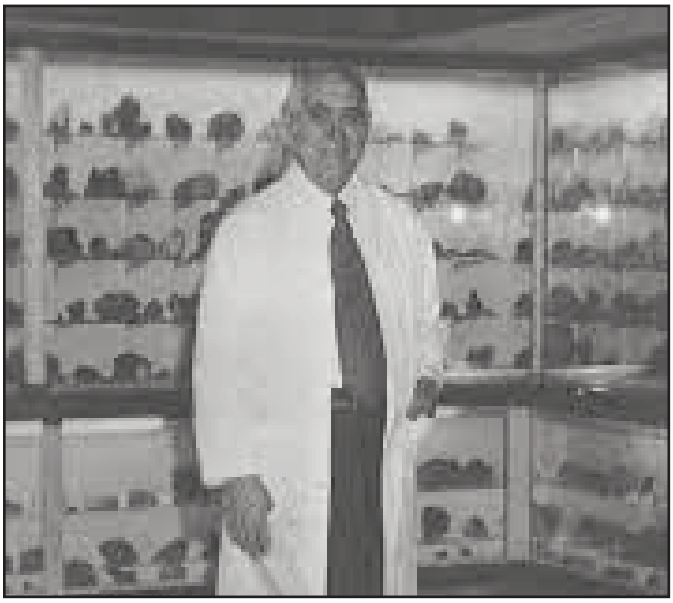
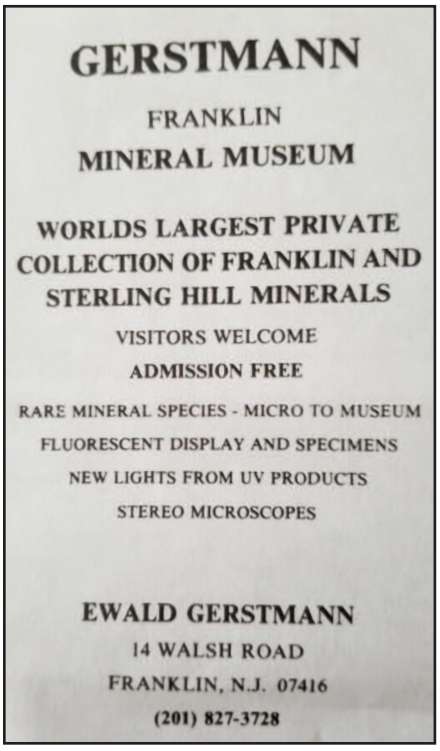
Gerstmann Mineral Museum in the early 1960's. The museum had on display more than 1,500 specimens. In 1980 Gerstmann sold his enormous collection to Spex Research Company on the condition that it be permanently housed at the Franklin Mineral Museum in Franklin New Jersey, where it remains today. Ewald Gerstmann died December 14, 2005, at the age of 87 in Andover, New Jersey."



Ewald Gerstmann in his mineral museum on Walsh Road, Franklin, NJ.



The Gerstmann Mineral Museum poster.

I regret that I didn't have the pleasure of knowing Ewald personally. All of the people I spoke to who did remember him held him in the highest regard: "He always spoke his mind." "He was a man you could trust." "He always conducted business in an honest manner." "He treated mineral novices with the same respect he treated mineral experts." "He didn't play games or politics, he was a man of class."

Ewald was honored with his name on a locker in Zobel Hall at the Sterling Hill Mining Museum, for his many contributions including volunteering to install the plumbing when the museum was being created.

References:

Dunn, Pete J. Franklin and Sterling Hill. New Jersey: the world's most magnificent mineral deposits, Part Three, p. 369.

Hauck, Richard. Ewald Gerstmann, expert in minerals [obituary], Franklin-Ogdensburg Mineralogical Society, Inc., 2005.

Moore, Paul B. and Araki, Takaharu. Gerstmannite, a new zinc silicate mineral and a novel close-packed oxide structure, American Mineralogist, Volume 62, pages 51-59, 1977.

Ken is a member of the Sterling Hill Mining Museum Advisory Council. He has a Degree in Geology from SUNY at Stony Brook a long time ago. Ken is retired from Monroe-Woodbury Central School District, after 30 years as Transportation Supervisor. He now enjoys being a tour guide and working on special projects at Sterling Hill.

Deaths in the Sterling Mine

Stephen Gordon

[Ed. Note: Working in a mine is very dangerous, to be sure. Fortunately, the Sterling Mine was quite safe. It was a hard-rock mine, so cave-ins were not a major problem, as is the case in soft-rock mining, e.g., coal mines. Nevertheless, miners in the Sterling Mine had to be very careful after blasting to ensure that the rock was stable, by scaling down loose rock or by installing roof bolts. Further, the Sterling Mine did not have dangerous gasses, as is the case in coal mines, so gas explosions were not a problem. However, mining of any sort is dangerous, and there was an average of approximately one death per year in the Sterling Mine, although there were no fatalities in the later years, from 1972 to the closing of the mine in 1986. We will be publishing some of the old newspaper obituaries in the Sterling Hill newsletter; the first of which is below. Ogdensburg Police Chief, Stephen Gordon, has done extensive research on this matter. Through his research, we have learned much about mine safety and danger; but also a great deal about the Sterling miners who perished, their heritage, personalities, family, and more.]

Franklin Workman Killed in Mine

Skull Fractured by Falling Rock Wednesday Morning. July 16, 1924

Franklin — Carmelo Arimondo, an Italian, aged twenty-three was killed Wednesday morning when he was struck by a falling slab of rock in the 1500-foot level of the Sterling Hill mine. Arimondo received a fractured skull and had his right leg broken in several places, death coming probably instantly. This man was working as a drill runner and had just drawn his drill out of the hole when the stress occurred in the rock overhead and the slab fell striking him on the right side of the head and body.

Only a few minutes before this happened, Tom Bolitho the shift boss, and the level boss had both been inspecting the workings and had found everything apparently all right. Such a stress causing breaking of the roof or wall, is a mining hazard that cannot be foreseen. Arimondo had worked in the mines last year and had then gone to Italy in the fall to visit his parents, returning to work in the Sterling Hill mine last May. He is unmarried, leaving a brother, Innocet Arimondo, living at 978 Hammonton Avenue, Brooklyn and parents in the old country.

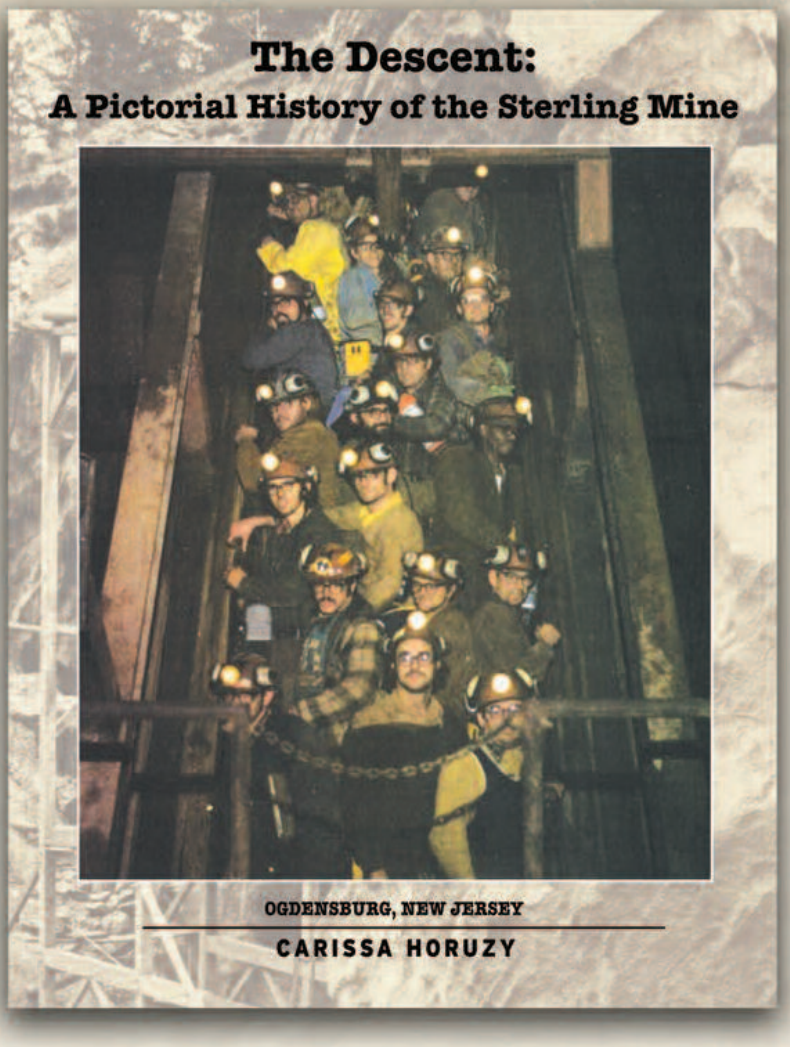
Stephen Gordon has been a Police Officer in Ogdensburg, from 2000 to present. He also works at the Sterling Hill Mining Museum, and was a tour guide at the museum from 1990 to 1996.

AVAILABLE NOW!

A NEW BOOK ABOUT THE STERLING MINE

THE DESCENT: A PICTORIAL HISTORY OF THE STERLING MINE

BY CARISSA HORUZY



In 1990, not long after the Sterling Mine closed, and shortly before the opening of the Sterling Hill Mining Museum, Paul Horuzy, then mayor of Ogdensburg, wrote *The Odyssey of Ogdensburg* and *The Sterling Zinc Mine*, describing the history of the mine and the Borough of Ogdensburg.

Carissa Horuzy, granddaughter of Paul Horuzy, has now written a greatly expanded book about the history of the Sterling Mine, including hundreds of archival photographs of mining activities. The book is published and sold by the Sterling Hill Mining Museum, and now is available for purchase ($29.95) at the Sterling Hill Mining Museum gift shop.

Multi-Club Jamboree at the Sterling Hill Mining Museum

Diana Tasco

One night last year, at one of the Mid-Hudson Valley Gem & Mineral Society meetings in Poughkeepsie, club treasurer June Scott mentioned that she wished she lived closer to us so she and her husband, John, could join the North Jersey Mineralogical Society, and attend some of the many fun functions we have. That was when the idea for the Multi-Club Jamboree was born; we just ran with it from there. It took a long time, a lot of planning, and the help of many people to make it a success.

We started gathering a list of local clubs to invite, but it seemed to take on a life of its own when some of the clubs reached out to other clubs, spanning from North Carolina to Connecticut. More than 100 members from a wide range of mineral clubs responded, and most were able to attend. Some had never been to the Sterling Hill Mine, so, from the moment they registered at the welcome table, we did not see them for hours until the barbeque later in the day. They quickly went to the Mine Run collecting piles, gathering specimens, and enjoying the camaraderie with other collectors.

After lunch, a large number of the attendees participated in the extended, in-depth mine tour, led by former Sterling miner, Doug Francisco. The feedback from the attendees about Doug's unique tour was extremely positive.

Jamboree rock hounds ready for Doug Francisco's mine tour.

Rock hounds collecting on the Sterling Hill Mine Run.

Doug Francisco in the mine with the tour group.

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JAMBOREE
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Many people stepped forward to help make this Jamboree a great success. June and John Scott helped throughout the day in many different areas. John Scott and Alaine jumped right in to help Derek Yoost at the grill so we could serve 100 hungry folks in an organized manner. Thank you to everyone who participated in the pot luck sides and desserts; they were exceptional. Rich Drake, our parking attendant, kept things in good order, ensuring a smooth flow in the lot. Dave "Lerminator" Lerman and Dave Shapiro helped out wherever they were needed. Ron Schultz worked on the scale all day, weighing the collectors' finds. Karen Padreza helped with the food setup and cleanup. Dan and Linda Sackerman provided great photography. And it goes without saying that none of this could have happened without the great support and hospitality of everyone at the Sterling Hill Mining Museum, especially Bill and Denise Kroth. It was a great day at Sterling Hill!

Diana Tasco is president of the North Jersey Mineralogical Society which meets at the Paterson Museum on the second Thursday of each month, except July and August.

Element Carbon

Gordon Powers

This seventeenth article in the continuing series on our periodic table display in the Zobel Hall will focus on the nonmetallic element, carbon. The six-foot by ten-foot periodic table display in the Zobel Hall is a teaching tool that helps people understand the science behind the everyday items they use in their lives and the role of mining in producing those items.

The atoms of pure elemental carbon can bond in a variety of forms called allotropes, including graphite (a very soft, dark, opaque form) and diamond (highly transparent and the hardest know natural material). Carbon is well known for being an essential part of organic compounds. It is the second most abundant element in the human body, the fifteenth most abundant element in the Earth's crust, and the fourth most abundant element in the universe. The chemical symbol for carbon is C.

Carbon was used in some of the earliest human civilizations as charcoal for fires, and diamond for drilling of beads, as early as the second millennium BCE. In the 1700s research on the different forms of carbon, including anthracite and diamonds, led to the recognition that they were the same element. The name carbon comes from the Latin carbo for coal. The leading coal mining producers are China, India, the United States, and Australia. The leading graphite producers are China, Brazil, Mozambique, and Madagascar. And the leading natural industrial diamond producers are Russia, the Democratic Republic of the Congo, Botswana, and South Africa. Synthetic diamonds now account for almost all of the industrial diamond production and consumption.

Given the many forms that it takes, carbon finds wide use in today's world. The major economic use of carbon is fossil fuel hydrocarbons. Cellulose contains carbon, and is found in wood, cotton, linen, and hemp. Other carbon containing polymers are wool, cashmere, silk, and plastics; which are found in almost all clothing. Carbon is used in metal alloys such as carbon steel, case-hardened steel, and many carbide alloys. This element can be used as a lubricant, electrodes for batteries, motor brushes, for smelting processes, and as a moderator in nuclear reactors. Graphite is used in pencils and charcoal in some artwork drawing materials. Industrial diamonds are used extensively in drilling, cutting and grinding applications,

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ELEMENT CARBON

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and gem quality diamonds are an important staple in the jewelry world. Activated charcoal finds many uses in filtering applications such as gas masks and water filters. Some of the more recent uses are carbon fiber in sports equipment and aerospace where its light weight and strength are important assets. Carbon finds extensive use in the chemical industry, and newer more exotic uses are in nanotubes and graphene which are helping to revolutionize the electronics and nanotechnology fields.

Given that carbon is found in all organic molecules it is essential to life and, as such, the uses are too long to list here.

There are many uses of this important element in today's world, and you can probably list many more uses than were covered here. Look a little closer at the items you use throughout your day to think how carbon may have played a part in its production. And if you want to collect minerals containing carbon at Sterling Hill or Franklin, there are over 20 with calcite being the most abundant. A list of these minerals can be found at the Franklin-Ogdensburg Mineralogical Society (FOMS) website at: http://www.fomsnj.org/Franklin_Mineral_PeriodicTable.aspx.

If you enjoy these brief articles on the elements, you may also want to watch the many YouTube videos available on this topic. The Periodic Videos channel from the School of Chemistry at The University of Nottingham is one that is very good.

Gordon Powers, a trustee at the Sterling Hill Mining Museum, worked for the US Army as a civilian mechanical engineer for almost 39 years before retiring in 2017.

Dewatering the Sterling Mine

Doug Francisco

The Sterling Mine was 2670 feet deep, and required extensive pumping to keep the mine dry. In 1913, after years of litigation, the newly-formed New Jersey Zinc Company was consolidated, and finally got serious about operations at their property in Ogdensburg. Much of the mining in many decades prior to 1913 had been conducted in above-ground quarries, which today are 500 feet south of the present-day adit entrance. During those early years, there had been drilling, blasting, and removal of zinc bearing ore in the Nobel Mine, the Passaic Mine, and other locations, with various exploratory shafts and workings to depths up to 600 feet. Test drilling revealed a much larger orebody than previously understood or known. In 1913, the NJ Zinc Company began drilling the first deep shaft on the Sterling Hill property -- the 1850-foot-deep East Shaft. In conjunction with the shaft sinking a new state-of-the-art, six-story mill was built, known as the Great Sterling Mill. In 1916, with both the shaft and mill completed, the Zinc Company could mine and mill 20 thousand tons of rich zinc ore per month.

As in most mining operations, dewatering was a major issue. On the 1850-foot level, adjacent to the bottom of the shaft, they drilled and blasted out a pump room and two large sump chambers. Large pumps were installed there, which lifted water from the sumps 2294 feet, the length of the shaft measured on the incline, to the 500-foot level where another gang of pumps lifted the water to the surface. The new mill consumed much of this water for the milling process, but some of this water was reintroduced into the mine to produce a slurry of waste rock and sand used to backfill mined-out areas. Any excess water flowed into the Wallkill River.

This pumping operation worked well until the Zinc Company determined that the East Shaft was insufficient for an effective and efficient mining operation at Sterling Hill. As early as 1932, an audit suggested a new shaft be driven. Work on the new West Shaft started in the early 1950s, and by 1956 a new five-compartment shaft was completed at the top of the hill. Two of those compartments ran men and equipment throughout the mine; and two compartments were used to hoist the new seven- and half-ton ore skips. The fifth compartment contained a ladderway, supply lines that carried air and water into the mine, and a large pipe that carried waste water out of the mine. A new mill complex was constructed on top of the hill. In 1961, the old Great

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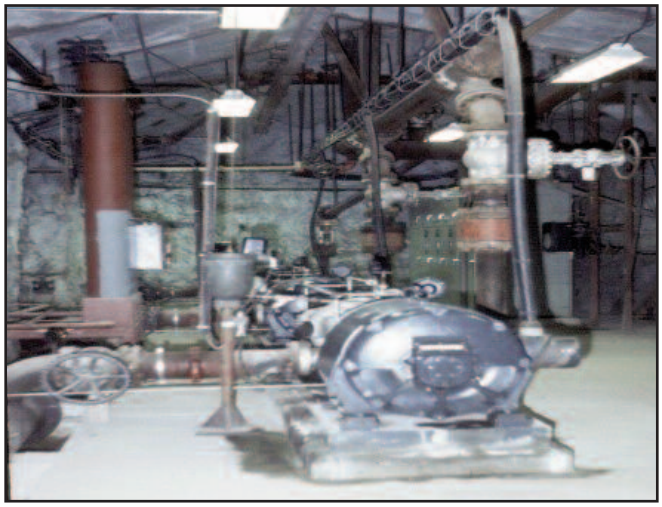
Sterling Mill was demolished, and the East Shaft was used only for ventilation.

The West or New Shaft

Shown in the photo below are the pumps on the 1850-foot level of the West Shaft. These pumps drew their water from two large sumps drilled and blasted out just below the 1850-foot level drifts. Water flowed by gravity into these sumps, and was allowed to sit for a period of time. The particulates and sludge would settle to the bottom (which needed to be cleaned out periodically), and the cleaner water would spill over into a chamber where the pumps could do their work.

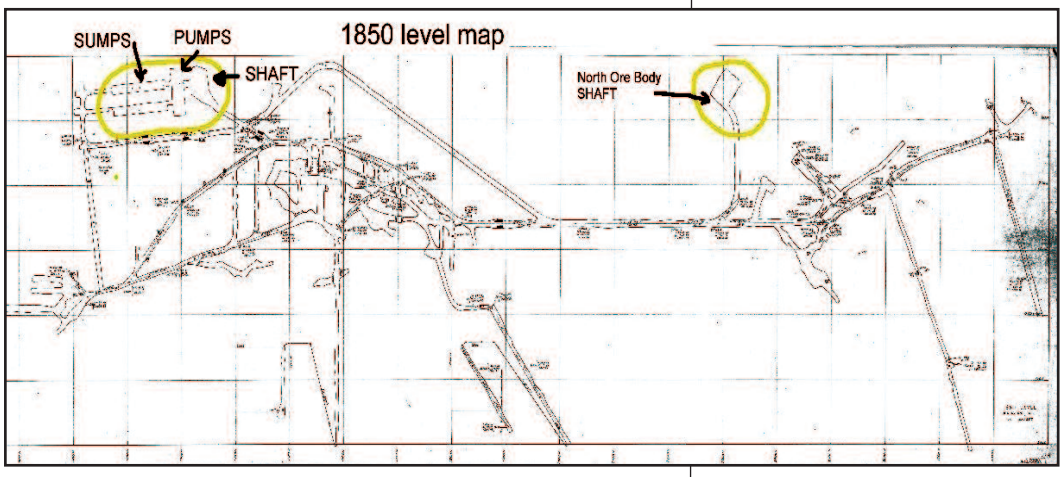


Pump on the 1850-foot level of the West Shaft.

The map below shows the 1850-foot level. The sumps and pumps which discharged to the new West Shaft are circled on the map. When the West Shaft was in operation, the Sterling Mine had three pumping stations, at the 2550-, 1850-, and 500-foot levels. The pumping station at the 2550-foot level (the lowest working level in the mine) had two centrifugal pumps powered by 50-horsepower motors, and pumped water from the North Ore Body up to a "mud ditch" on the 1850-foot level. This water flowed slightly downhill to the main shaft sumps, one quarter mile to the south. The inflow of water into the North Ore body was very nominal, with only three to four hours of pumping each week needed.

The pump installation on the 1850-foot level was the main pumping plant in the mine. Water from the North Ore Body, from the main shaft bottom sump, and from all levels below the 500-foot level was collected in those sumps. Three centrifugal units, one powered by a 250-horsepower motor and two powered by 400-horsepower motors, delivered water directly to the adit level, and had a combined capacity of 1750 gallons per minute. Mining reports in 1963 and 1964 showed that the 1850-foot level pumping station handled an average of 64 gallons per minute (92,160 gallons per day). That output would take only seven days to fill an Olympic-size swimming pool.

The pump installation on the 500-foot level handled the water flowing into the mine from the surface and the three working levels above. The open pit quarrying and very early shafts and numerous openings had been ongoing since the early 1800s. Although long since filled in, the porous nature of that fill allowed all the rainwater to seep through and find its way into the mine. All these old workings were connected either by shafts or drifts (tunnels), and gravity did its job bringing water to the pumps. Every drift had its own "mud ditch" which carried water from workplaces, active or mined out, to the main shaft. The 500-level pump station included two 150-horsepower positive displacement pumps, each of 700 gallons per minute capacity. Although the capacity of the 500-foot level pumps was exceeded during periods of extremely heavy runoff, the average amount of water pumped in 1963 and 1964 was only 21 gallons per minute. A valve on the 500-foot level could stop the discharge from the 1850-foot level, and



Map of the 1850-foot level of the West Shaft.

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DEWATERING THE STERLING MINE
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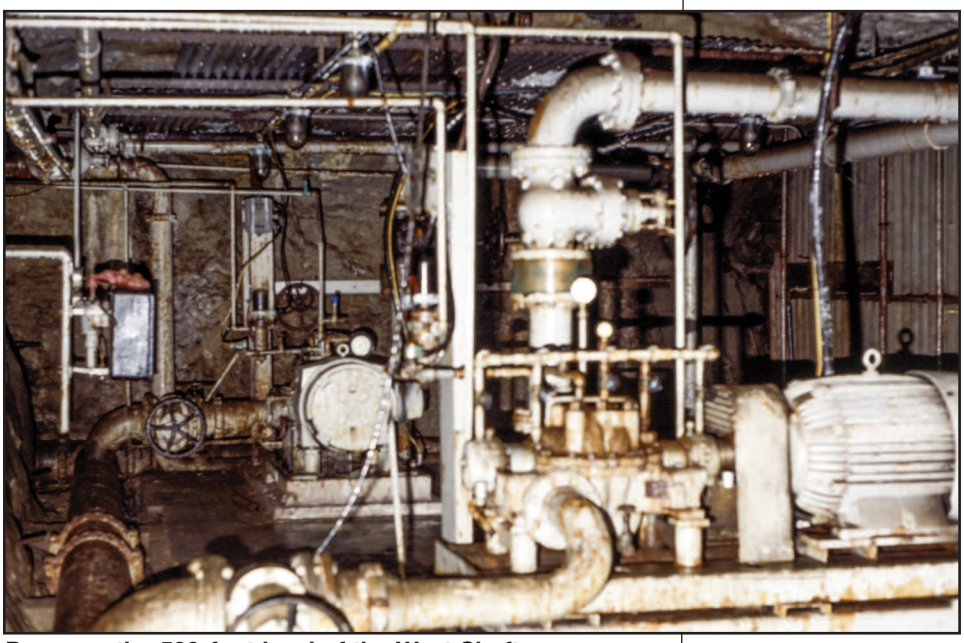
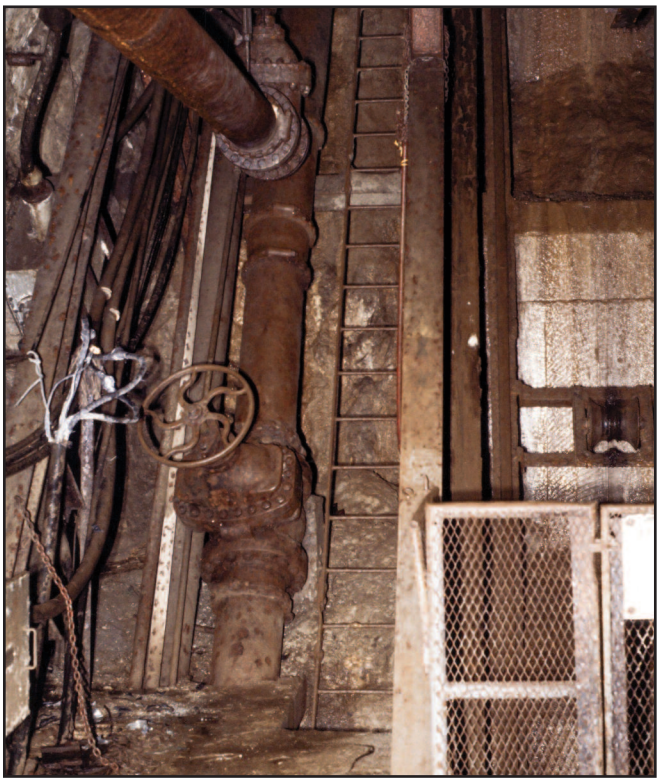
allow the 500-foot level pumps to use the same discharge pipe to the adit. From there, water discharged through a continuous pipe running the length of the adit, under the lower yard, under Plant Street, and finally into a ditch which carried the water to the Wallkill River.



Pump on the 500-foot level of the West Shaft.



Valves on the 500-foot level of the West Shaft.

When I worked on the 500-foot level I walked past this pump station many times each day. What I remember most is that there was a phone with an outside line in one of the panel boxes. Only a few of us knew this, and you could make outside calls any time you wanted. This was a well-guarded secret, to be sure.

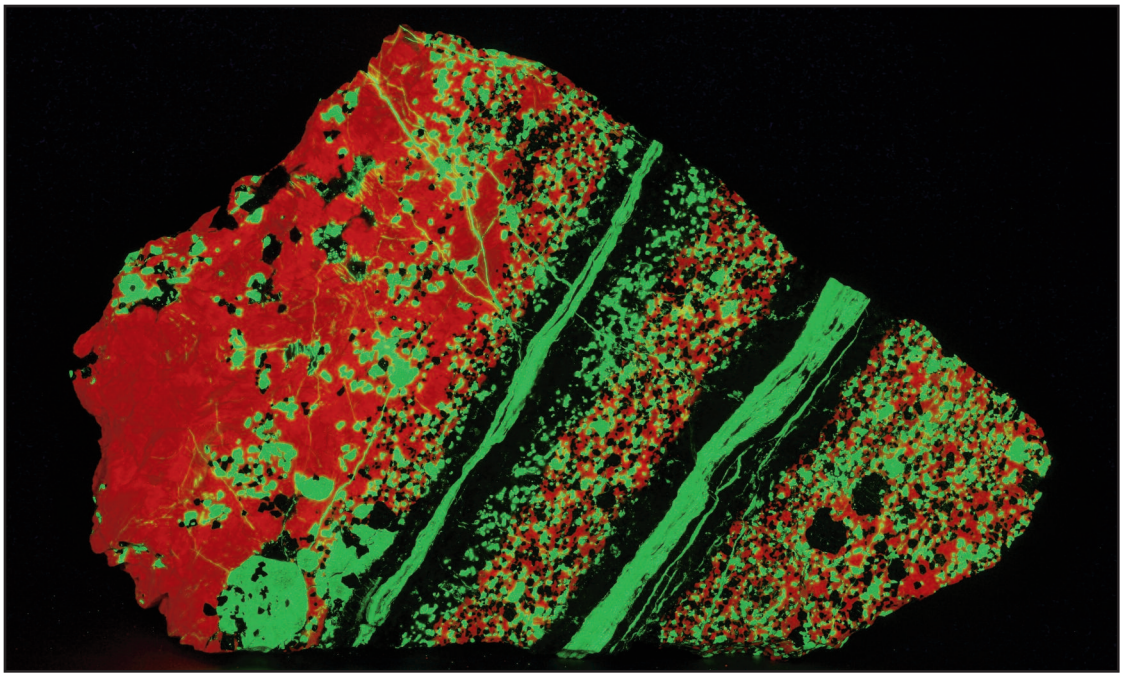
The water that eventually made its way to the Wallkill River was very clean, cold, and highly oxygenated, all of which benefited the fish and wildlife in river. The Wallkill is one of only a few rivers in the state of New Jersey that flows north, and it feeds the Franklin Pond. When the mine turned off the pumps in 1986, the fish in the river and in the Franklin Pond started dying. The delicate ecosystem that they'd enjoyed for over one hundred years had been altered.

Doug Francisco, a trustee at the Sterling Hill Mining Museum, is a graduate of the Brinker School of Surveying and Mapping. For 12 years he was a miner at Sterling Hill; and he worked for 30 years in heavy highway bridge construction. His love for Sterling Hill runs deep.

An Iconic Fluorescent Specimen from the Sterling Mine

Bob Hauck and Earl Verbeek

[Ed. Note: Most Franklin/Sterling Mine fluorescent mineral collectors are familiar with a beautiful iconic specimen of willemite (fluorescent green) and calcite (fluorescent orange-red) from the Sterling Mine. You can see this specimen in the fluorescent mineral exhibit at the Franklin Mineral Museum; and also, on the Sterling Hill Mining Museum website on the Visitor Information/Mineral Collecting page (https://www.sterlinghillminingmuseum.org/mineral-collecting). The specimen is shown below. Bob Hauck describes below how and where he found this incredible specimen.]



Franklin Mineral Museum specimen 7303; 39 x 25 x 5 cm; shown under shortwave ultraviolet light. Photo by Earl Verbeek.

Bob Hauck

I remember collecting this specimen when working with former Sterling Miner John Kolic after we reopened the mine in 1989. We were at the bottom end of the gravity tram which was accessed from the 180-foot level. We went down the right-hand drift as you left the 180-level station after passing through the bulkhead door. There was a ladder there that went up a short distance, approximately 15 feet, into the gravity tram. The gravity tram was used to distribute fill from the glory hole on top of the hill at the Sterling Mine to various fill raises located along its length. It was on a fairly steep angle and used gravity to help run the ore cars up and down its length. Near its bottom, the gravity tram intersected the East Limb; and that is where some really spectacular specimens came from.

I originally had three nearly identical pieces that came off the wall in that area, one after the other. I sold one of them a very long time ago to an avid collector from the Mobile, Alabama area. One went to Steven Phillips when he purchased my Sterling Hill collection around 13 years ago. Another specimen (pictured above) was in my collection for years, then I sold it to Earl Verbeek, and it now is in the Franklin Mineral Museum. There also is a very large specimen of this same material in the Rainbow Room in the Sterling Hill Mining Museum.

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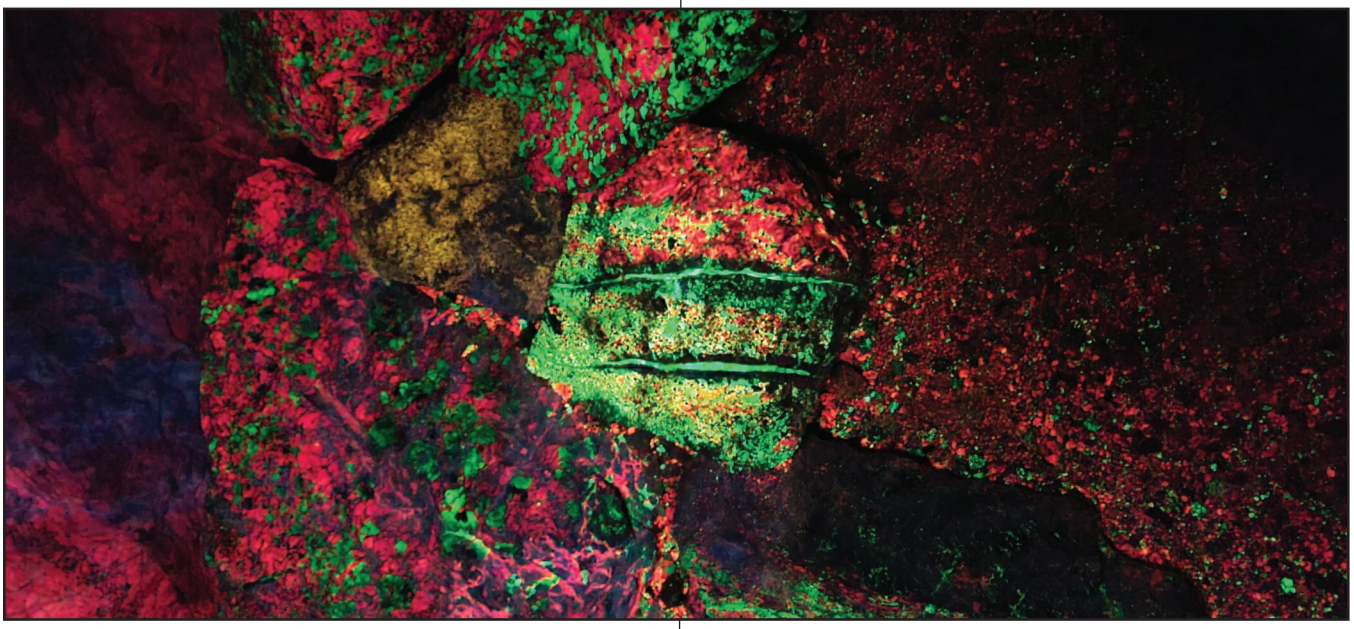


Specimen in the Rainbow Room in the mine at the Sterling Hill Mining Museum; shown under shortwave ultraviolet light. Photo by Alex Kerstanski.

Earl Verbeek

This specimen is what is known locally as "dead zone" willemite, characterized by centimeter-thick veins of solid willemite in granular, brightly fluorescent calcite-willemite ore. Adjacent to each vein, for a distance of two to four centimeters, the calcite and willemite grains in the ore are "dead"; that is, they show no fluorescence. So, under shortwave ultraviolet light, one sees a prominent slash of green (the willemite vein) bordered by two strips of black; these in turn are bordered by fluorescent red (calcite) and fluorescent green (willemite) ore. Such specimens are visually dramatic, and are highly prized by collectors.

Many of the "dead zone" willemite specimens were collected in the Sterling Mine at the 430-foot level, East Limb haulage drift, west rib, between 70 and 120 feet north of the safety exit, centered on mine coordinates, 1030N, 980W. That is considerably deeper in the mine than the locality specified above by Bob Hauck. However, "dead zone" willemite specimens also were found just above the 180-level, in the gravity tram in the East Limb of the orebody, at mine coordinates 1040N, 960W. This is probably the locality that Bob described as it is at the bottom end of the gravity tram.

Bob Hauck: I started collecting minerals nearly 70 years ago. In the mid-1960s I spent two years in the army. Then, my brother Dick and I ran the family greenhouse business for more than 25 years. I also ran a 200-acre tree farm in Stillwater NJ which I sold to get some of the funds needed to purchase the Sterling Mine. After Dick and I purchased the mine, I spent most of my time for the next ten years refurbishing the mine buildings and doing salvage work underground. After that, the day-to-day running of the museum took all of my time, usually seven days a week, 365 days a year. The museum became my life's work, and I am very happy with the way the museum has turned out.

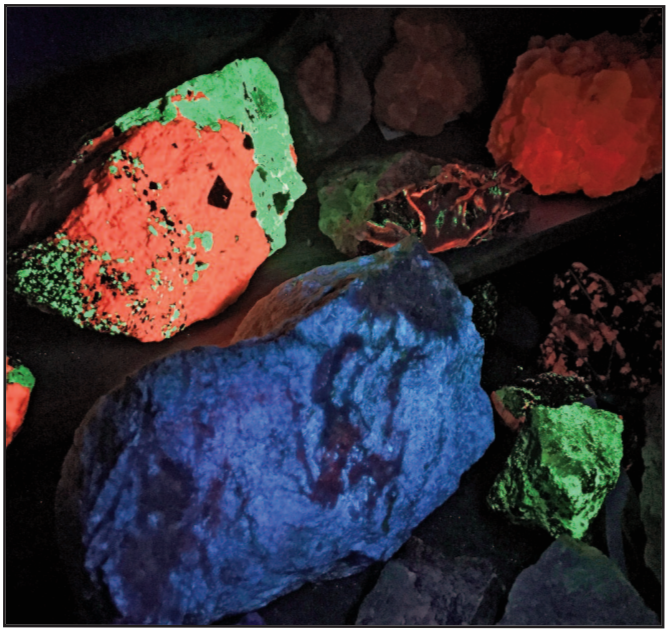
Earl R. Verbeek spent his career as a research geologist for the U.S. Geological Survey in Lakewood, Colorado, and retired to New Jersey in 1998. Subsequently he served as Resident Geologist of the Sterling Hill Mining Museum and as Curator of the Franklin Mineral Museum.

Manuel Robbins' Fluorescent Mineral Collection Donated to the Yale Peabody Museum

Harold Moritz

Avid fluorescent mineral collector, Fluorescent Mineral Society Hall of Fame inductee, and author Manuel Robbins has donated his mineral collection to the Yale Peabody Museum (YPM). Before dawn on October 4, 2022, collection "movers" Stefan Nicolescu (YPM Mineralogy & Meteoritics collections manager), Harold Moritz (YPM volunteer), and YPM museum assistant Nathan Utrup trekked from New Haven, Connecticut to the Robbins residence in Cherry Hill, New Jersey, carefully packed the collection and returned well after dusk. It was a long but rewarding day meeting the Robbins family and handling the wealth of rare and/or aesthetic fluorescent specimens Manny collected from around the globe. The moving team could not help but notice many pieces from, of course, the Franklin-Ogdensburg mining district, Greenland, and Terlingua-type calcite localities, among many others, plus individual surprises like fluorescent witherite, grossular, and rhodochrosite. The approximately 1800-piece collection, which filled the back of a large pickup truck, has been temporarily stored at the Yale West Campus facility where it is undergoing sorting, cleaning, and cataloging.

Manny expressed his great satisfaction that the collection will find its permanent home at YPM where there is "strong curation and strong control" and that it will always be available for study and teaching. Interim Director of Collections & Research, Susan Butts, noted that YPM provides safe and regular access to researchers at Yale and around the world, ensuring that the Robbins collection continues to be a resource for those working to advance the field. Stefan, Mineralogy & Meteoritics curator Jay Ague, and Assistant Director of Development Eliza Gomez King are absolutely thrilled and excited by the tremendous grace, kindness, generosity, and friendship displayed by the Robbins family with this donation.



A small part of the Robbins collection. Photo by Elaine Robbins.

Harold Moritz and Nathan Utrup work on packing the Robbins collection. Photo by Susan Schwarz.

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MANUEL ROBBINS FLUORESCENT MINERAL COLLECTION
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Renee Robbins, Harold Moritz, Stefan Nicolescu, Nathan Utrup, and Manny Robbins. Photo by Susan Schwarz.

Harold Moritz is a geologist, a mineral specimen collector, and photographer who spent 24 years as an environmental geologic consultant, working to characterize and remediate pollution. His collecting focuses on Connecticut, and after becoming a founding member of the Sterling Hill Mining Museum, the magnificent Franklin-Ogdensburg deposits, too. He happily worked on the district's "color book" photography and mindat.org has become his virtual repository for more than 11,500 photos. He belongs to several mineral clubs and to the Geological Societies of Connecticut and America. He volunteers at the mineralogy collections department at Yale Peabody Museum.

STERLING HILL MINING MUSEUM
Calendar of Events

Private tours are available for groups of at least 15 paying people. We will try to accommodate your request on the day of your choice if we have staff and space available. Please call to discuss details, availability, and to make reservations. Reservations should be made at least two weeks in advance.

We are open for school tours, scout groups, and birthday parties. Please call for more information.

Mineral collecting on the Mine Run Dump is available and is recommended for avid rock collectors age 18 and older, but not for children. Sluicing for minerals and fossils would be a better option for children.

Please contact the museum at (973) 209-7212 to make reservations (required) for tours. Please check the Sterling Hill Mining Museum website (https://www.sterlinghillminingmuseum.org/) for updated information and announcements.

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STERLING HILL MINING MUSEUM
Calendar of Events

Saturday, September 23, 2023
Sterling Hill Garage Sale
Christiansen Pavilion, Sterling Hill Mining Museum, 30 Plant Street, Ogdensburg, NJ
10:00 AM to 5:00 PM

Sunday, September 24, 2023
Sterling Hill Garage Sale
Christiansen Pavilion, Sterling Hill Mining Museum, 30 Plant Street, Ogdensburg, NJ
10:00 AM to 5:00 PM

October 9, 2023 (Columbus Day)
Open 10:00 AM to 3:00 PM.
Tours at 1:00 PM

October 20, 2023
Annual Halloween Tour (Fundraiser for Ogdensburg Elementary School)
5:00 PM to 6:00 PM: "not so scary" tour
6:00 PM to 10:00 PM: "scary" tour
Check our website for more information as we get closer to the date.

October 21, 2023
Annual Halloween Tour (Fundraiser for Ogdensburg Elementary School)
5:00 PM to 6:00 PM: "not so scary" tour
6:00 PM to 10:00 PM: "scary" tour
Check our website for more information as we get closer to the date.

November 23, 2023
Closed for Thanksgiving

November 24, 2023
Open 10:00 AM to 3:00 PM.
Tours at 1:00 PM

December 25, 2023
Closed for Christmas

December 26 through December 31, 2023
Open 10:00 AM to 3:00 PM.
Tours at 1:00 PM

January 1, 2024
Closed for New Year's Day

January 15, 2024
(Martin Luther King's Birthday)
Open 10:00 AM to 3:00 PM.
Tours at 1:00 PM

February 19, 2024
(President's Day)
Open 10:00 AM to 3:00 PM.
Tours at 1:00 PM

March 31, 2024
Closed for Easter Sunday

Sterling Hill Mining Museum

30 Plant Street • Ogdensburg, NJ 07439-1126

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For more information contact:

Membership Chairman

Sterling Hill Mining Museum

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www.sterlinghillminingmuseum.org

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Mines, Metal & Men Site

Home of the Thomas S. Warren Museum of Fluorescence, the official fluorescent museum recognized by the Fluorescent Mineral Society