THE PICKING TABLE

JOURNAL OF THE FRANKLIN-OGDENSBURG MINERALOGICAL SOCIETY

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INSIDE THIS ISSUE:

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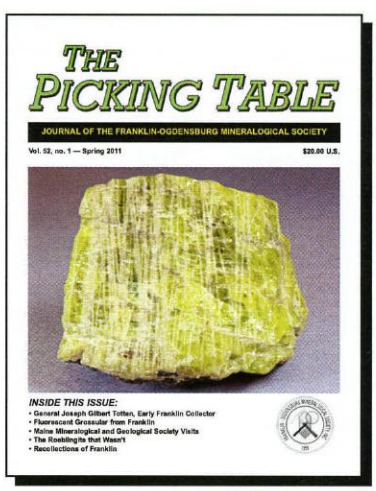
THE PICKING TABLE

Vol. 52, No. 1 – Spring 2011

About the Front Cover:

Massive, translucent to locally transparent vein willemite of uncommonly fine yellow-green color. Though the term "gem willemite" is much abused in the Franklin area and in truth applies to almost none of the specimens so labeled, parts of this specimen possess sufficient clarity that small cut stones could be prepared from it. It is indeed fortunate, however, that some such specimens have been preserved in their natural state by foresighted collectors. Specimen measures 2.8″ × 2.4″ × 2.0″ (7 × 6 × 5 cm); Mark Boyer collection # MB2301, formerly in the Ted C. Johnson collection. *E.R. Verbeek photo.*



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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 a double-spaced Microsoft Word document to Richard J. Keller, Jr. at FranklinNJ@hotmail.com.

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

FOMS is a member of the Eastern Federation of Mineralogical and Lapidary Societies, Inc. (EFMLS).

From the Editor's Desk

Richard J. Keller, Jr.
13 Green Street
Franklin, NJ 07416

Well, here it is: the issue of *The Picking Table* that some of our members thought would never happen.

In late November 2010, *The Picking Table*, out of necessity, was forced to undergo a facelift of the editorial staff. The editors started anew, reaching out to recruit fresh contributors of interesting and relevant articles. Happily, we found several who were ready, willing, and more than able to supply us with these. I think you'll agree once you've read this issue. Make note of the authors of these articles, both those new to the *PT* and former contributors alike. They are people you probably know and respect.

We've taken the time to accumulate articles of interest to those of our members who are more collectors than geologists or mineralogists, while also offering information to those of a more scientific bent. I think we've accomplished that goal here.

To make sure, we've created an e-mail address that we hope our FOMS members will utilize to give us **feedback** and let us know "how we're doing." The address is fairly simple: PTMemberFeedback@gmail.com.

If you like this issue, let us know! If you have **issues** with it, REALLY let us know! We only ask that you be specific in your criticisms and tell us who you are. If your e-mail address does not include your name, please sign the bottom of your e-mail with your full name. No feedback will be treated differently from the rest, *unless* you criticize under cover of darkness. If you're happy, we're happy. If you aren't, we can address your concerns and probably follow up with you directly. We care about the quality of the *PT*, and we care even more about what you think. We're here for you.

We've also been fortunate enough to find people who have graciously proffered articles. These include a report by Dr. Steven Kuitems on the most recent Taylor Road Dump field trip; an article by Clay Carkin on trips made by the Maine Mineralogical and Geological Society to Franklin from 2008 to 2010; a real golden oldie from Erich Grundel about General Joseph Gilbert Totten, an early (two centuries ago!) collector of Franklin minerals; a submission by past FOMS president Dr. William R. Truran on life in Franklin 100 years ago; and two reports by Dr. Earl Verbeek and Dr. Paul Carr, one on fluorescent grossular and the second on "roeblingite" that turned out to be calcite instead. Add to this our annual museum summaries from Lee Lowell of the Franklin Mineral Museum and Joe Kaiser of the Sterling Hill Mining Museum, plus a comprehensive FOMS Activity Schedule for 2011, provided, as always, by Tema Hecht, and you have a *PT* that covers a lot of ground.

We also painstakingly pored over photographs received. I doubt you'll find a single photograph in this issue that will have you asking yourself, "Why is THIS here?" As with most things, there is an exception — can you find it? Some of the photographs may be of people you do not know, but they are relevant to the articles in which they are embedded. The photographs you see in this issue were selected from more than 400 submissions. In short, it took many, *many* long hours to be able to present this issue of *The Picking Table* to you. We think you'll all appreciate the time and effort volunteered by our members.

In closing, I would be remiss if I failed to mention the tireless efforts of Caitlin Anne Mack, our new graphic artist. Asking that she create the layout for this issue in the limited time available was a true case of "trial by fire," especially since this is her first *PT*. We think she passed with flying colors and applaud her efforts.

So, without further ado, we bring you...the Spring 2011 issue of *The Picking Table*!

President's Message

Richard J. Keller, Jr.
13 Green Street
Franklin, NJ 07416

Greetings to all FOMS members I've had the pleasure to meet, as well as those I haven't...yet.

As we embark on our 51st year, I want to thank my predecessor, Bill Truran, for the fine job he did as FOMS's 27th President. His roots in the Franklin-Ogdensburg area were the proper foundation for his election, and he proved his tenure a success. As a more than competent president, he also continued to give us access to the history of the towns we all know and love, through his lectures and publications. I know I've benefited, and I live right here in good ol' Franklin!

I moved to Franklin in September 1999 as a serious collector of music, and I never thought anything would usurp that passion. All it took to change me was exposure to what we have here. I got to meet local dignitaries, national and local collectors and dealers, scientists, authors, and museum curators. Every single one of these people had a genuine interest in this area and was more than happy to share minerals and knowledge to rope me in. Good job...mission accomplished. You should consider these folks your friends also.

Most of us are in the FOMS for the long haul, not short-term gratification. For as long as I've been a member, our goals have never been simply to increase our funds for shows or acquiring old collections. Instead they've been about increasing our membership, expanding our reach, and "passing the torch." With that, the rest would follow. Those goals live on.

Many exciting events have occurred during the last two years. Yes, the New Jersey Zinc Company Mill Site in Franklin was developed, and much of our beloved collecting area is now covered, but for a good cause: low-income housing for the elderly among us. This is reminiscent of the erection of the Franklin Firehouse over the Parker Dump in 1963. The collectors mourned the loss of the dump, but the people whose homes were later saved by the fire department probably feel quite differently. The old Franklin Theater, for example, was saved from oblit-

FOMS president Richard Keller in his back yard, holding a fine fluorescent specimen of vein willemite and calcite in high-grade Franklin ore. *E.R. Verbeek photo.*

eration after a fire a few years ago. That's a *huge* piece of Franklin history, and without the firehouse being where it now is, it might have become a parking lot. Yes, although it's now an apartment building, the old theater still stands proudly as a part of Franklin history.

Though much of the Mill Site was lost to collecting, Steven Phillips in late 2007 was successful in his efforts to bring more than six million pounds of Mill Site rock to the Buckwheat Dump, behind the Franklin Mineral Museum, for the benefit of future collectors. The three-year requirement for holding this material to allow the donor to claim the tax benefit expired in December 2010. At about the same time, the board of the Franklin Mineral Museum established a timetable for making this material available to collectors. Stay tuned!

Also, the Franklin Mineral Museum recently obtained Pete Dunn's reference collection of Franklin-Sterling Hill minerals. Quite a few of his best specimens, some of them mind-boggling, were on display at the September show and are now on exhibit in the museum. If you have Pete's monograph, you've seen the black-and-white photos of some of these specimens. Now you can see them in living color, and I promise you, they are a sight to behold! I didn't know petedunnite occurred in well-formed crystals...now I do. Simply stunning!

Additionally, hundreds of historic photographs (many of them glass-plate negatives) were donated to the Sterling Hill Mining Museum by Irene Chorney, widow of Paul Chorney, who used to work in the New Jersey Zinc Company laboratory in Franklin with Lawson Bauer. The originals were loaned to Art Jordan, who digitally scanned each photograph and provided copies of the scans to Sterling Hill. Most are outdoor scenes, dozens of them from Franklin and Ogdensburg, and include farms, railroads, quarries, street views, individual buildings, and photos of church and civic groups. Also included are photos of the old Franklin mill and the interior of the New Jersey Zinc Company laboratory. Anyone interested in learning more about our beloved towns will prize these photographs, many of them previously unseen by collectors of local images.

Bill Truran touched on a few "visions" in his last President's Message, and I'd like to revisit a few of those. Bill stressed the need for a "more tangible presence" for FOMS. This included file space for records to be kept as part of our society's historical archives. This was accomplished when the Sterling Hill Mining Museum created that space. We've also established a starting point for our financial record-keeping, going back six years. Under the leadership of Denise Kroth, our record keeping has been immaculate, and if the IRS should ever feel the need to investigate us, we have no fears. FOMS is, pardon the pun, solid as a *rock*!

Next, Bill talked about establishing a Web presence for FOMS. This great idea, still in the works, seemed simple enough at first, but issues arose about who would design and maintain it, how we can make it an asset to our existing members, etc. The idea isn't dead...interested parties are still discussing it, and will continue to do so. I plan to include myself in these discussions to help bring this necessary goal to fruition. It hardly seems fair that only those lucky few living close enough to visit our museums get to experience the amazing minerals we've spent decades accumulating. To that end, Earl Verbeek and Lee Lowell have met dozens of times to photograph specimens in the Franklin Mineral Museum, not for their personal enjoyment, but to share with the world. An FOMS website will make their tireless labors worthwhile. A website could also function as an outlet for FOMS members wishing to sell specimens or purchase them. Books, some of them little known outside the Franklin area, could be offered as well. Naturally, when you have members born in the 1930s and 1940s, not all are eBay savvy, so PC support would be supplied by those capable of assisting. I include myself in that assistance. And I make local housecalls. If anyone wants or needs to make top-shelf specimens available for much-needed funds, a lack of computer knowledge should not prevent them from doing so. Who benefits? Everyone involved!

We also wish to bring the experience of FOMS meetings, and their informative and entertaining presentations, to our members too far distant to attend. They pay their annual dues too, and are entitled to more than just their two issues of *The Picking Table* per year. Methods by which we can enhance their FOMS experience are taken seriously and will continue to be discussed. Meetings and presentations occasionally are videotaped, and if we could make those available for viewing on an FOMS website, the benefits to our distant members would be considerable.

On the subject of *The Picking Table*, as you may have seen in the previous issue, all issues between Volume 1, No. 1 and Volume 50, No. 1 are now available as a 2-DVD set as Adobe Acrobat Reader PDF files. There were no administrative costs involved in this project, and 100% of the proceeds on sales of this invaluable item go to FOMS. Approximately 50 sets have been sold as of this writing, and no one has complained about the product, nor the ease of using it. So if you don't have one...get one! All winners, no losers!

And I recently looked up "Franklin, New Jersey" on Wikipedia. We're there, and there's nothing wrong with the data presented, but I'm sure we can expand on it with more information, and more links to our local organizations (FMM, SHMM, FOMS, etc.). Posting information to Wikipedia is free, and the space available is almost unlimited. We can, and should, do much more to proclaim to the world the special features of our area.

In closing, I'm hoping the fact that I live in Franklin makes me available for as many activities as I can help benefit. And in doing so, I want every single FOMS member to benefit as well. We want you for life!

The Franklin-Ogdensburg Mineralogical Society, Inc.

SPRING and SUMMER 2011 ACTIVITY SCHEDULE

Saturday, March 19, 2011

9:00 AM - NOON
FOMS Field Trip
Sterling Hill Mining Museum.
Collecting permitted on the Mine Run Dump and in the Fill Quarry, Passaic Pit, and "Saddle" area.

$5.00 admission fee
plus $1.50 for each pound of material taken.

10:00 AM - NOON
FOMS Micro Group — Franklin Mineral Museum.
BYO microscope and minerals.
Call Ralph Thomas for information: 215-295-9730.

1:30 PM - 3:30 PM
FOMS Meeting — Franklin Mineral Museum.
Lecture: *Anorthite and Native Brass*,
by Alfredo Petrov.

Saturday, April 16, 2011

9:00 AM - NOON
FOMS Field Trip
Collecting at the Braen Quarry
(a.k.a. Franklin Quarry)
Cork Hill Road, Franklin, N.J.
If gate is open, drive through and park to the left of the gate. Please don't block the roadway.

10:00 AM - NOON
FOMS Micro Group — Franklin Mineral Museum.

1:30 PM - 3:30 PM
FOMS Meeting — Franklin Mineral Museum.
Lecture: *Lighting Up the Darkness: The Evolution of Mining Lamps*, by Thomas Pallanta, Jr.

Saturday and Sunday, April 30 and May 1, 2011

!!!!! NEW DATES !!!!!

SPRING SHOW WEEKEND
39th Annual NJESA Gem & Mineral Show
held in conjunction with the
16th Annual FOMS Spring Swap-and-Sell.
Sponsored by the New Jersey Earth Science Association, the Sterling Hill Mining Museum, and the Franklin-Ogdensburg Mineralogical Society, Inc.
Franklin Middle School, Washington St., Franklin, N.J.

NJESA Show hours: Saturday, 9:00 AM to 5:30 PM;
Sunday, 10:00 AM to 5:00 PM.
Swap-and-Sell hours: Saturday, 8:00 AM to 5:30 PM;
Sunday, 9:00 AM to 5:00 PM.

Admission $5.00 per person,
children under 14 free with paying adult.

For Swap-and-Sell information, contact
Chet Lemanski after 8:00 PM at 609-893-7366.

BANQUET AND AUCTION
Saturday evening at the GeoTech Center,
Sterling Hill Mining Museum.
Admission limited to 60 people.
Social hour from 5:30 PM to 6:30 PM,
followed by an all-you-can-eat buffet
from 6:30 PM to 9:30 PM.

Banquet tickets are $18.00 each and include all food, coffee, tea, and soft drinks. **BYOB!!**

Silent Auction from 5:30 PM to 7:30 PM.
Live Auction begins 7:45 PM.

Both auctions are for the benefit of all three show sponsors: NJESA, FOMS, and SHMM.

(continued on next page)

****FIELD COLLECTING**
Sterling Hill Mining Museum.
Organized by the Delaware Valley
Earth Science Society (DVESS).
!!!!! Schedule: Saturday, 9:00 AM - 11:00 PM !!!!!

$20.00 per person includes
extended mine tour and registration.
$1.50 per pound for material collected.
Preregistration required;
see www.uvworld.org for more information.

Saturday and Sunday.
10:00 AM – 3:00 PM
****Garage Sale: Christiansen Pavilion,**
Sterling Hill Mining Museum.

9:00 AM – 3:00 PM, Sunday only
**Collecting on the Mine Run Dump and in the
Fill Quarry, Passaic Pit, and "Saddle" area.
Sterling Hill Mining Museum
(Open to the public!)

Fees for mineral collecting: $5.00 admission
plus $1.50/lb for all material taken.

Sunday, May 1, 2011

NOON
****Annual Volunteer Appreciation and**
Miners Day Tribute
at the Franklin Mineral Museum,
including special events and a concert
by the famous Franklin Band.

Saturday, May 21, 2011

9:00 AM – NOON
FOMS Field Trip
Collecting on the Buckwheat Dump.
Fee charged.

10:00 AM – NOON
FOMS Micro Group — Franklin Mineral Museum.
1:30 PM – 3:30 PM
FOMS Meeting — Franklin Mineral Museum.
Lecture: *Bedrock and Glacial Geology of the World Trade Center Site*, by Charles Merguerian, PhD

Saturday, June 4, 2011

7:00 PM – 10:00 PM
****Spring Night Dig and Mineral Sale**
at the Buckwheat Dump.
Sponsored by the Franklin Mineral Museum.
Open to the public – poundage fee charged.
Eye protection, flashlight, and UV lamp advised.
For more information, contact the
Franklin Mineral Museum: 973-827-3481.

Saturday, June 18, 2011

9:00 AM – NOON
FOMS Field Trip — Collecting
at the Taylor Road Dump.
Meet at the Franklin Mineral Museum.
Park, and walk from there. Fee charged.

10:00 AM – NOON
FOMS Micro Group — Franklin Mineral Museum.

1:30 PM – 3:30 PM
FOMS Meeting — Franklin Mineral Museum.
Lecture: *Travels with the FOMS, It's Been Quite a Trip*, by Bernard Kozykowski.

9:00 AM – 3:00 PM and 7:00 PM – 10:30 PM
Sterling Hill Mining Museum.
**Day and Night Collecting on the Mine Run Dump
and in the Passaic and Noble Pits.

Fees for mineral collecting: $5.00 admission plus $1.50/lb
for all material taken.
(Open to Sterling Hill Mining Museum members only.)

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, 32 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.
Compiled by Tema J. Hecht <thecht@att.net>

Franklin Mineral Museum News

Lee Lowell
Collections Manager
Franklin Mineral Museum
32 Evans Street, Franklin, NJ 07416

Ewald Gerstmann (1918-2005) was honored by the museum board this past year by being inducted into its "Hall of Fame." Ewald played a major role in this area in several ways: by encouraging new collectors too numerous to mention; by collaborating for many years with mineralogists to investigate unknown minerals; and by providing, in his private museum, a friendly gathering place for collectors, miners, and all others interested in our local minerals. Ewald's three daughters attended the May 2nd "Miner's Day" ceremony, where his plaque was shown to the attendees. It now hangs on the wall in company with those of other individuals who made significant contributions to the museum and to the local mining and mineral activities.

The June night dig on the Buckwheat Dump attracted 71 collectors, and the fall dig drew 105 collectors. These events are always well attended, thanks to the many collectors of Franklin fluorescent minerals.

Through the efforts of Earl Verbeek, Princeton University loaned the museum several high-quality Franklin mineral specimens, including manganosite, axinite-(Mn) with marsturite and ganophyllite, and a large roeblingite nodule. These are on display in the museum's "Local Room."

Several mineral photographs were submitted by the FMM to Dr. Peter Bancroft, who is preparing a new book on classic mining districts in the United States.

Over the summer, Carl Francis, curator of the mineral collection at the Harvard Mineralogical Museum, said it was time to bring home the Harvard minerals on display in our "Local Room." This display was loaned to the museum many years ago and was enjoyed by all who viewed it. When Carl arrived to retrieve these minerals, I reminded him that their real home was Franklin, where they were born and raised. Carl couldn't provide a rebuttal, but took the minerals anyway.

During the year, Earl Verbeek has been photographing the Franklin-Sterling Hill minerals in the museum's collection. Eventually he intends to put many of these photos on a new website dedicated to the local minerals. For now they serve to document the museum's mineral holdings and are a welcome addition to our archives.

Uvite: A well-formed uvite crystal 1" (2.5 cm) long, in calcite matrix, from the Pete J. Dunn collection acquired in 2010 by the Franklin Mineral Museum. *E.R. Verbeek photo.*

Jack Baum, the museum's Curator Emeritus, celebrated his 94th birthday this past March! We look forward to Jack's 95th and feel quite fortunate to still be enjoying his company, knowledge, and wry humor.

Anne Wronka continues to coordinate the museum's "Future Scientist" awards program for all of the local elementary and high schools. She has been the sole museum volunteer involved with this program for many years.

Steve Sanford, who has donated many hours of volunteer service to the museum, has had some serious ailments during the year. He has been very supportive in helping to identify minerals the museum acquired over the years. We hope he will be able to return to us soon, to resume doing work that we know he enjoys.

There have been quite a few inquiries about the status of the Mill Site rocks stored on the Buckwheat Dump, with many wondering when they will be available for collecting. The museum board decided that this material should be preserved for a few more years to maintain a sufficient supply for future collecting on the dump.

The Fall show continues to be a success, though several problems were evident this year. Attendance was down slightly over prior years, due, no doubt, to the global economic downturn. Several dealers suffered from health problems just before the show, and this required last-minute replacements. Moreover, because most of our volunteers working the show have gray hair or none, the museum board is looking into hiring a management company to handle most of the show tasks.

In September, the museum acquired the Franklin-Sterling ore collection of Dr. Pete J. Dunn. This was one of the most significant collections acquired in the museum's 45-year history. The full story of this important acquisition starts on page 17.

FOMS MEMBERSHIP INFORMATION

Since 1959, the Franklin-Ogdensburg Mineralogical Society (FOMS) has been devoted to fostering interest in the minerals, mines, and history of the Franklin-Ogdensburg, New Jersey, area. Membership in FOMS includes scheduled meetings, lectures, and field trips, as well as a subscription to *The Picking Table*.

MEMBERSHIP RATES FOR ONE YEAR:

❑ **$20 Individual $25 Family**

Please fill out the form below, include a check or money order payable to FOMS, and send to:

DENISE KROTH, TREASURER, FOMS
240 Union Avenue, Wood-Ridge, NJ 07075

NAME_____

ADDRESS_____

_____

CITY_____

STATE_____ ZIP_____

E-MAIL (OPTIONAL)_____

Sterling Hill Mining Museum News

Joseph Kaiser
40 Castlewood Trail
Sparta, NJ 07871

The Sterling Hill Mining Museum had a very successful year in 2010. With the bad economy and state cutbacks, we thought there would be repercussions, but we have been developing a strong customer base. In a way, the poor economy helped by motivating people to look for local and affordable attractions. In addition, many have commented favorably on the bargain prices in our gift shop. Sterling Hill also benefits from an excellent website, and the Travel Channel is still running the "Cash and Treasures" episode featuring our mine.

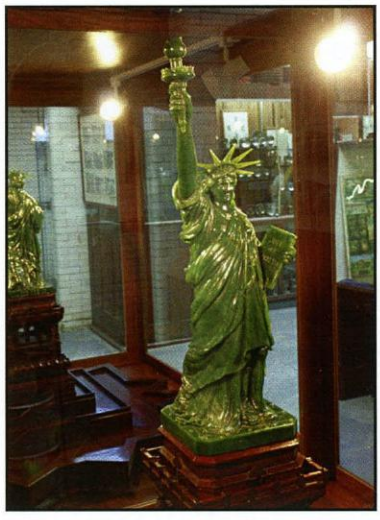
Several design concepts for the *Pillar of Light* have been released by Jason Peist, who works for an architectural firm. Though none of Jason's designs are fully practical at present, they are posted in the lunch room for all to see, and we believe they will stimulate comments and ideas to keep the *Pillar of Light* project moving forward.

John Kolic has been working toward opening the Trotter Tunnel, which will increase the attractions available on tours of Sterling Hill. Future tour highlights may include the *Pillar of Light's* spectacular fluorescence, and the surface opening of the historic Marshall Shaft, made with hand-laid fieldstone.

2010 was also a very good year for school tours. Even with the slowdown in the economy, the museum did well. However, we still do not have enough resources to develop important and needed teaching programs. For these, the museum needs to build support from a variety of sources.

Two new displays have been installed in Zobel Hall. One is a nephrite jade sculpture of the Statue of Liberty. This impressive piece stands about two feet high on a wooden replica of Liberty Island, and is protected by a glass case that allows it to be seen from any angle. Don and Pat Snyder commissioned this sculpture, which they have exhibited at mineral shows across the United States, and they have seen fit to donate it to our museum for permanent public display. Also newly donated is Dr. Kurt Nassau's case of natural and synthetic crystals; many such crystals are used in today's electronics, and Dr. Nassau did much pioneering work in this field.

The Super Dig, held on the first day of the NJESA Gem and Mineral Show at Sterling Hill, has proven quite popular. In 2011 it will be held on Saturday, April 30, from 9:00 AM to 11:00 PM. The Sterling Hill Garage Sale, held on the weekend of the spring and fall mineral shows, always has much interesting material available. On June 18, 2011, SHMM Foundation members will be able to collect both day and night. Internet users can check the status of scheduled events at our website, www.sterlinghillminingmuseum.org.

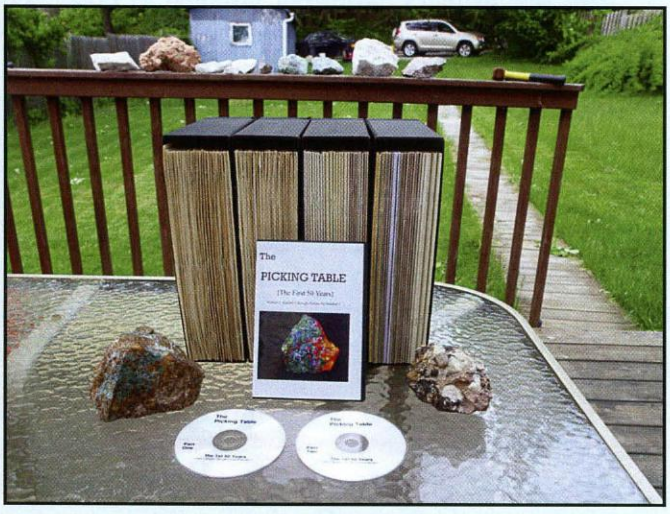


LEFT: Don and Pat Snyder of Richland, Washington, in front of their latest donation to the Sterling Hill Mining Museum, a carving of the Statue of Liberty. The statue is carved from nephrite jade and is mounted on a wooden replica of Liberty Island.

RIGHT: Close-up view of the jade Statue of Liberty. The statue is on display in Zobel Hall at Sterling Hill.

Photos by E.R. Verbeek

Now available!! *The Picking Table*, the "Official Journal of the Franklin-Ogdensburg Mineralogical Society," on DVD in Adobe Acrobat PDF format.



Ninety-three issues, 2,256 scans, and hundreds upon hundreds of both B&W and color photos of minerals, events, collectors, as well as articles, event schedules, past officers and editors, mineral descriptions, etc.

All pages have been scanned from ORIGINAL issues of the *PT*. In some cases "imperfections" will be evident such as yellowing of 50-year-old paper and the occasional marginal note, but all literary inclusions are clearly legible and the photos are true to the originals.

The knowledge you will acquire as you read through these issues will be evident.

Price for the 2-DVD set is $45.00, plus $5.00 shipping. Personal checks should be made payable to "FOMS" and mailed to Denise Kroth at: 240 Union Ave., Wood-Ridge, NJ 07075. Technical support is provided by Richard Keller (e-mail: PTMemberFeedback@gmail.com).

Sterling Hill Mining Museum Foundation

30 Plant Street
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Fax: 973-209-8505
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Memberships include:

- Wallet-size membership card
- The Sterling Hill Newsletter, 2 issues per year
- 10% discount on gift shop purchases (excludes consignment items)
- Special days to collect at the Mine Run Dump and special night collecting events (all to be announced)

Calcite Membership, Individual (one year): $20.00, includes 1 admission to the mining museum

Calcite Membership, Family (one year): $30.00, includes 2 admissions to the mining museum

Willemite Membership (one year): $50.00, includes 4 admissions to the mining museum and 10 pounds from the Mine Run Dump (when open)

Zincite Membership (one year): $100.00, includes 6 admissions to the mining museum and 20 pounds from the Mine Run Dump (when open)

Lifetime Membership: $500.00, includes unlimited personal museum admissions, 20 guest admissions per year, and 100 pounds from the Mine Run Dump (when open)

Club Membership: $500.00 This 10-year membership program enables a club to have a special day each year at the Mine Run Dump and mine tours for any member who comes that day.

PLEASE NOTE: For memberships outside of the U.S. and Canada, add $5.00 to each category.

The 54th Annual Franklin-Sterling Gem & Mineral Show

Steven M. Kuitems, DMD
14 Fox Hollow Trail
Bernardsville, NJ 07924

September 25 & 26, 2010, was a weekend eagerly anticipated by many in the mineral community. Our first and foremost concern was not what minerals and gems might be available, but what the weather would be. In fact, we had one of the finest weekends for a Franklin show in the last 15 to 20 years of the show's history. With that said, and acknowledging the fine weather was a blessing, I anticipated a record turnout. We had a good showing, but in truth, no records. There were 1,586 attendees, down 97 from 2009, but still an encouraging number in view of the poor economy. There were 75 dealers outdoors on Saturday and 44 on Sunday, and 31 indoor dealers for the weekend. Because there were fewer indoor dealers, the annex building did not have to be used; on the plus side, the New Jersey state fire inspector allowed the show to resume having daylight exhibitors in the hallway and our FOMS table in the lobby.

The five daylight exhibitors showcased our local minerals and historical items. Classic willemite, franklinite, and zincite were on view in superb specimens, as were many of the unique species of the Franklin-Sterling Hill mining district. One case contained just one species, willemite, in many colorful forms, both crystals and massive. Of particular note was the case put in by the Franklin Mineral Museum, which displayed key specimens from the newly acquired personal collection of Dr. Pete J. Dunn. Many of these were pictured in his monumental 1995 monograph, and what a pleasure it was to see them up close, in person, and in color!

I strongly encourage all in our mineral community to participate in the daylight displays of local minerals and historic/mining artifacts. There is room for at least ten cases to showcase your specimens and help educate the public, and our fellow hobbyists, about the huge variety of minerals in our district.

Ten display cases featured wonderful, brightly fluorescing minerals, ranging from large "museum" pieces from the Franklin Mineral Museum and the Sterling Hill Mining Museum, to the favorite specimens of eight individual collectors. Where else can you see, year after year, such a variety of fluorescent minerals, many from the heyday of Franklin mining, including those amazing lead silicate species, as well as first-, second-, third-, and original-find wollastonites? Some exhibits featured the best of what can still be found today, including superb sphalerites, willemites, and even cuspidine from the local mine dumps. Several well-stocked dealers just opposite these cases were available to satisfy any collectors who wished to acquire top-notch local and worldwide fluorescent specimens.

Anyone who wanted bargains had only to peruse the outdoor dealers for minerals from every corner of the world, including the Garden State. The "swap" is where one looks for the best local rocks and minerals. An abundance of trap rock species from the Watchungs was available, and I could not resist a few choice prehnites and New Jersey agates.

Inside the school and out, there was a healthy variety of fossils from trilobites to mammals, all very dead but well preserved. For those needing an early Christmas gift, birthday surprise, or peace offering of gems or jewelry for their spouse, an ample supply was at hand. Yes, I too found a fine pair of amethyst earrings for my bride.

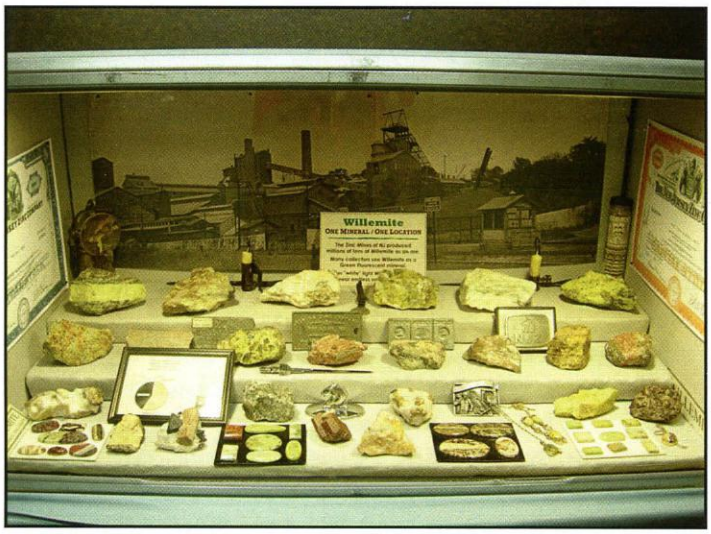
One of the most important aspects of this show has nothing to do with the minerals, but with the people without whom this show would not happen. The best place to meet both volunteers and attendees was the steps leading to the school cafeteria, a.k.a. the Rock Pile Café. In good weather, these steps are where a great deal of social interaction takes place between old and new members of our mineral community. Just sitting there and catching up with friends is part of the social glue that keeps our hobby together.

The largest social gathering during the show weekend is the annual FOMS banquet and fundraising auctions. There was constant activity at the silent auction tables, where both local and worldwide specimens were available. The live auction featured guest auctioneers Van King and Peter Chin, the latter all the way from Hawaii. They auctioned off everything from carbide lamps to books, and of course many local specimens, including one huge green willemite. Great fun, good humor, and tasty food were shared by all. So mark your calendars for next year, the last full weekend in September in Franklin, New Jersey, to see what it's all about. ⚒

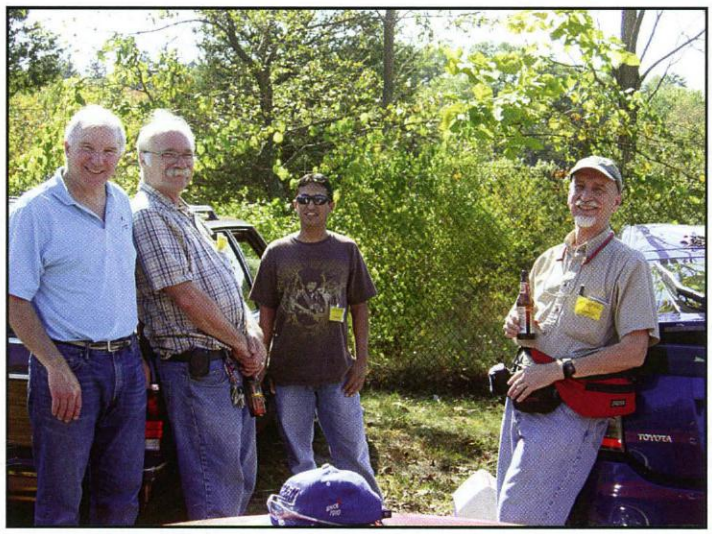
Scenes From the Franklin-Sterling Gem & Mineral Show, September 25-26, 2010

Tema J. Hecht
600 W. 111th St., Apt. 11B
New York, NY 10025

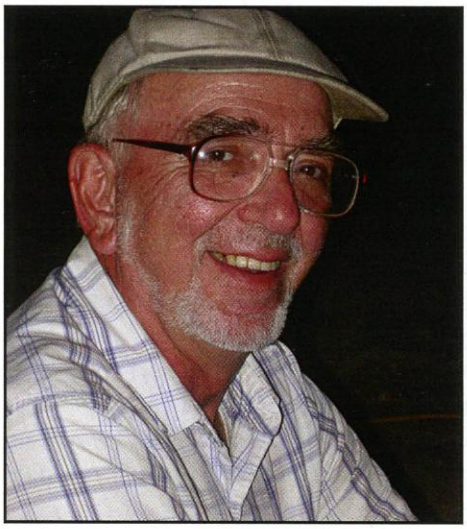
All photos by Tema J. Hecht



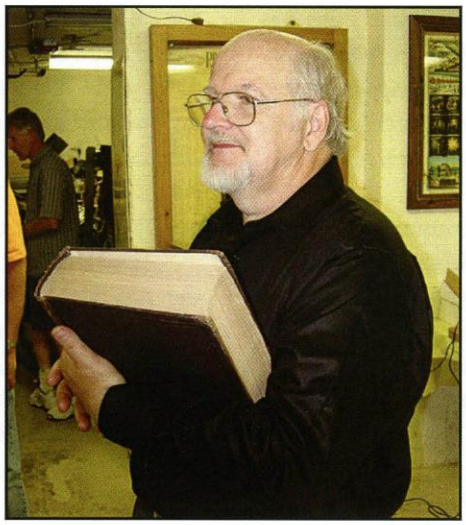
"The Wonderful World of Willemite" as displayed by Dick Hauck. A UV photo just wouldn't do this display justice.



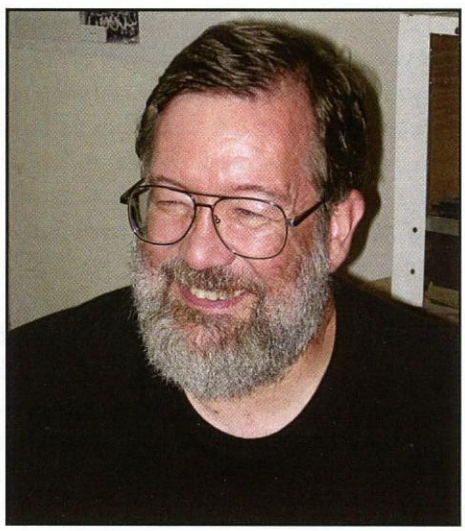
East meets West: Bill Truran and Dick Bostwick encourage Left Coasters Gabe Reyna and Art Barabas to blatantly disregard Franklin's open container laws.



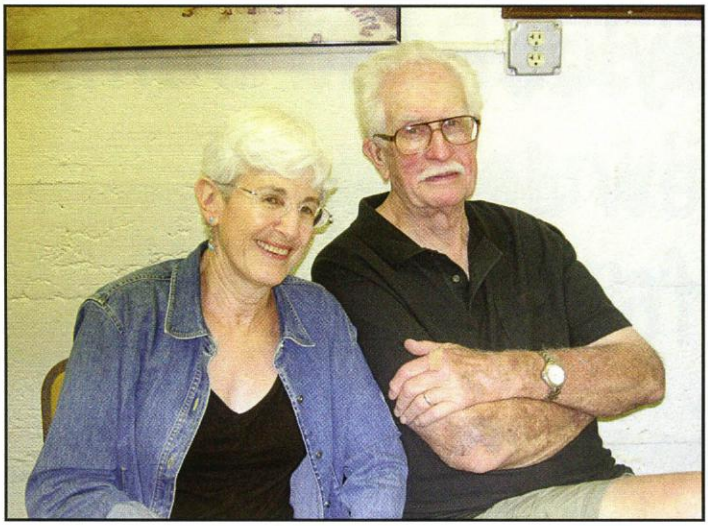
Westwood, New Jersey's own Terence "Skip" Szenics of szenicsite fame, enjoying the banquet.



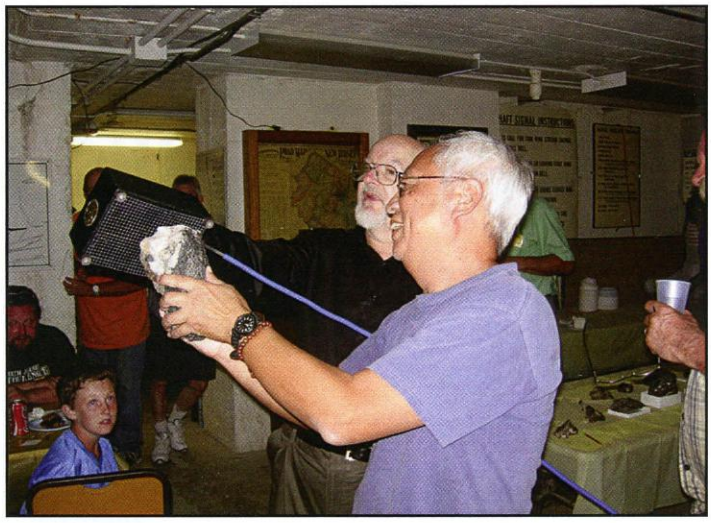
Auctioneer Vandall King attempting to unload a book he described as "heavy reading."



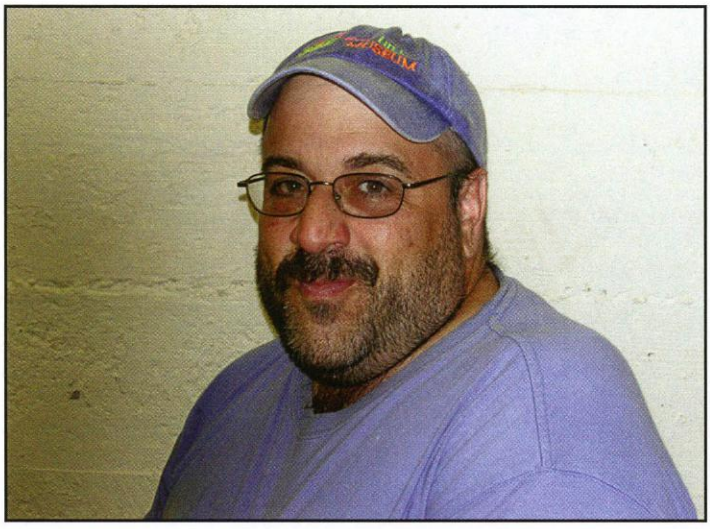
Jim Van Fleet, Bucknell's astute collector and eBay vendor of distinction.

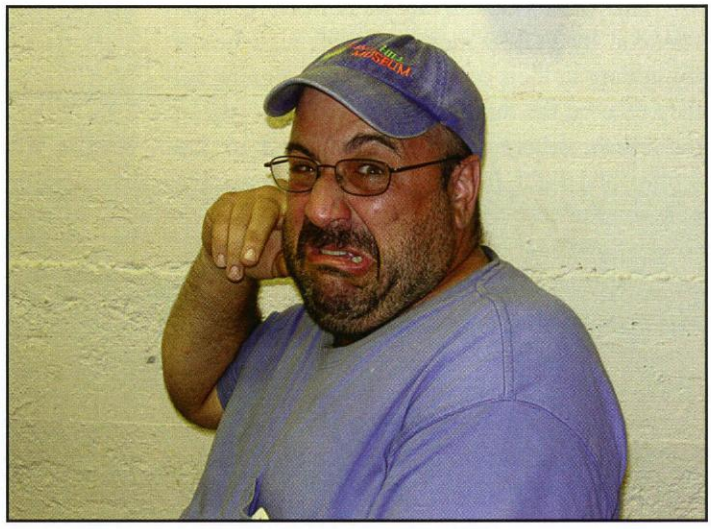


"Beauty and the Beast": Eve Anderson and her husband Greg.

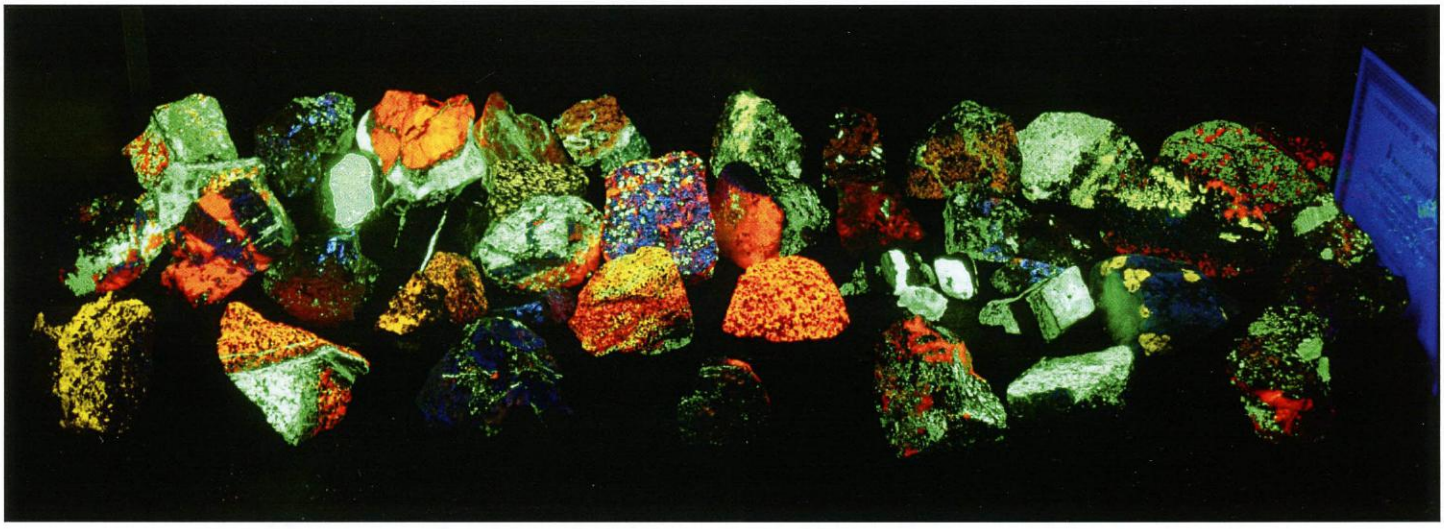


High priest Van King and acolyte Peter Chin, trying to resurrect a Franklinstein.





Freddie Jekyll and Mr. Lubbers: a moment of realization.



Rich Keller's reds, greens, and in-betweens at the fall show.

Collecting at the Taylor Road Dump, Franklin, New Jersey October 16, 2010

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This was a fine fall day for collecting, well-attended by FOMS members with high hopes for adding to their collections. After signing in, they entered the dump through a narrow gap in the brush, where their eyes adjusted to the diminished light from a canopy of trees that gently shaded the mound of boulders and mossy earth that make up the dump. What followed looked like so many collector-ants fanning out to select their digging spots, some upslope on the crest of the mound, and others downslope on the hillside below. What they noticed first were boulders with traces of sphalerite, and gradually our intrepid collectors found rich seams and layers of that mineral as thick as 5 cm, in boulders that were then split open by sledges and chisels. Silvery glittering sphalerite was revealed that fluoresced blue, orange, violet, and yellow under shortwave, midwave, and longwave ultraviolet light. Many specimens had combinations of these colors, and the author found one piece with all four. The most spectacular sphalerite was located downslope in a 1.5-meter boulder that took three collectors with a large sledge to dismantle; 8- and 10-pound sledges just bounced off. Eagerly sought were lenses of sphalerite shot through this massive rock, revealed by an ultraviolet lamp. Specimens from the demolished boulder ranged from 10 to 20 cm in size, and the best had silvery lenses of sphalerite up to 15 cm across.

Experienced collectors know that if you sit at the bottom of the dump long enough, the rocks will eventually come to you. These guys are at the top. Left to right, Daniel Kuitems, Claude Poli, and Mark Boyer. *Steven Kuitems photo.*

While enjoying the pursuit of sphalerite, I heard the cry of "Copper!" from several collectors upslope who found smooth-surfaced boulders as much as 25 cm long, covered in a coppery-red and green layer several millimeters thick, with a knobby surface that when broken open revealed small knots of calcite coated with the same copper-and-green-colored material. Inspection with a hand lens revealed not a trace of copper, but what is most likely a stilpnomelane-group mineral. Another cry of "Copper!" signaled a green mineral that appeared to be small masses of green serpentine; suffice it to say that no true copper was found this day. Much to my surprise, I neither saw nor heard of any euhedral crystals being collected, though I spotted many calcite boulders with the potential for andradite crystals, and some bright blue-green microcline masses. Today the hue and cry was for sphalerites and their fascinating fluorescence. ⚒

Changes to the Mineral Species List in 2010

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Two changes were made to the list of local mineral species in 2010. Brief explanations of these changes are provided below.

Villyaellenite is removed, and miguelromeroite added

The Sterling Hill material originally described as villyaellenite should now be referred to as *miguelromeroite*. Miguelromeroite, $Mn_5(AsO_3OH)_2(AsO_4)_2{\cdot}4H_2O$, is the manganese analog of sainfeldite, $Ca_5(AsO_3OH)_2(AsO_4)_2{\cdot}4H_2O$. However, the Mn and the Ca are distributed among three different crystallographic sites in these minerals, and cation ordering on these sites suggests that no continuous solid-solution series exists between end-member miguelromeroite and end-member sainfeldite. Instead, four species are probably involved: the Mn end member miguelromeroite (which contains $\mathbf{Mn_5}$ in the chemical formula), the Ca end member sainfeldite ($\mathbf{Ca_5}$), and two intermediate species that exhibit cation ordering on three crystallographic sites and that correspond to $\mathbf{MnMn_2Ca_2}(AsO_3OH)_2(AsO_4)_2{\cdot}4H_2O$ (villyaellenite) and $\mathbf{CaMn_2Ca_2}(AsO_3OH)_2(AsO_4)_2{\cdot}4H_2O$ (as yet unnamed). Note that villyaellenite remains a valid species but has now been redefined, and "our" villyaellenite now corresponds to miguelromeroite.

Reference

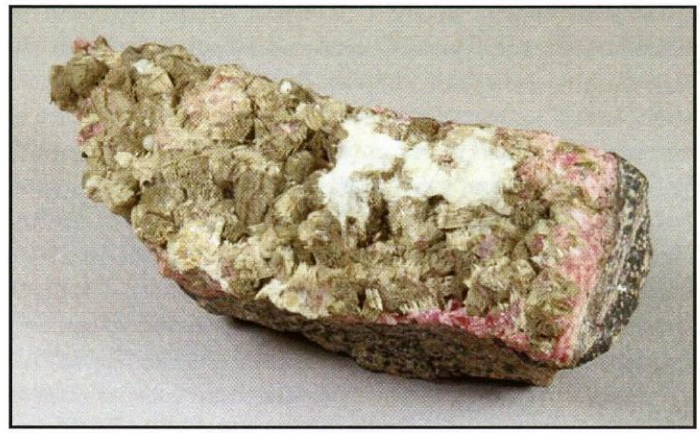
Kampf, A.R. (2009): Miguelromeroite, the Mn analogue of sainfeldite, and redefinition of villyaellenite as an ordered intermediate in the sainfeldite-miguelromeroite series: *American Mineralogist*, vol. 94, p. 1535-1540.

Pimelite is removed, and willemseite added

Pimelite as a species name was discredited in 2007 as part of a mass discreditation of numerous mineral species and varietal names. The chemistry and other properties of pimelite are essentially identical to those of willemseite, $Ni_3Si_4O_{10}(OH)_2$, the currently valid species name.

Reference

Burke, Ernest A.J. (2007) A mass discreditation of GQN Minerals: *Canadian Mineralogist*, vol. 44, no. 6, p. 1557-1560.



Johannsenite: Fibrous brown johanssenite growing epitaxially on pink rhodonite crystals, 3.7" (9.5 cm) long, from the Pete J. Dunn collection. *E.R. Verbeek photo.*

Flash and BIP

First in a Series on Franklin Collectors' Jargon

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As with any community of aficionados, Franklin mineral collectors have over the years developed a rich vocabulary of vividly descriptive if quirky expressions. Wherever Franklinphiles convene — shows, homes, museums, and on the collecting fields — a strange lingo is sure to be heard: "Christmas tree ore," "jelly rock," "crazy calcite," "first-find wollastonite," "sea-foam willemite" — the list of fanciful phrases goes on and on. Just what are collectors talking about when they use such terms? This article is the first in a series that examines Franklin collectors' jargon. Hopefully, this will help to clarify both for the new collector and for posterity one of the quirkier, and little-documented, aspects of Franklin mineral collecting. So let's start by taking a look at two terms that are well-known by fluorescent mineral collectors generally, and frequently used by Franklinphiles: *flash* and its would-be supplanter, *BIP*.

Flash. This is a colloquial term used by fluorescent mineral collectors to describe a short-lived phosphorescence. This so-called flash, usually of less than a second in duration, is seen in certain minerals when the UV light source is rapidly pulled away or extinguished. The perhaps more proper acronym *BIP* (brief intense phosphorescence), coined facetiously by Dr. Earl Verbeek, has gained little use outside of formal writing on the topic. Although the term *flash* is in general use throughout the fluorescent mineral hobby, it is especially important to the Franklin collector. Typically mentioned in conjunction with calcite, flash is also seen with other Franklin fluorescent species such as roeblingite, wollastonite, and pectolite. The presence or absence of flash is often used diagnostically to distinguish between calcite and axinite-(Mn) (a.k.a. manganaxinite) or between pectolite and clinohedrite, for example.

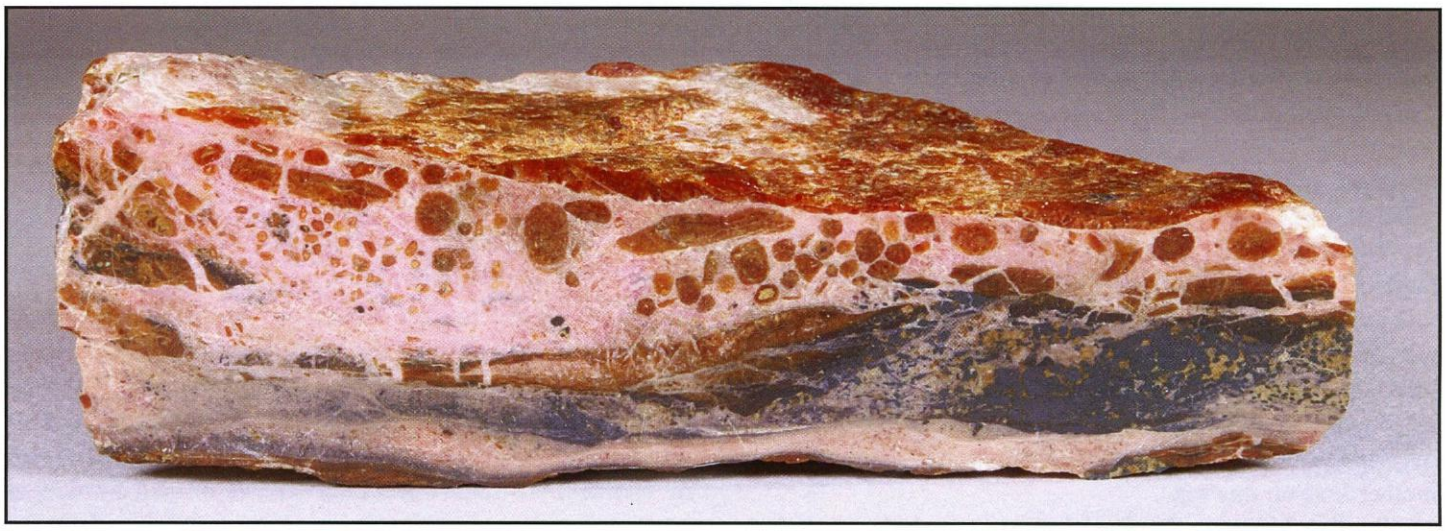
The term *flash* goes back as far as the seminal work on mineral luminescence, "The Action of Radium, Roentgen Rays, and Ultra-Violet Light on Minerals and Gems" by George Frederick Kunz (1856–1932) and Charles Baskerville (1870–1922). In their study, published in the journal *Science* in 1903, Kunz and Baskerville deplored the lack of uniformly accepted definitions for the terms *fluorescence* and *phosphorescence*. So, for their purposes, Kunz and Baskerville clarified the terminology: *Fluorescence* is "luminosity ... lasting only during the direct influence of the exciting agent," and *phosphorescence* is "light ... which persists after the removal of the cause. Substances, therefore, may be both fluorescent and phosphorescent." Interestingly, they also differentiated between a sustained phosphorescence and a flash when the source of fluorescent excitation is removed. They conducted their survey of mineral phosphorescence by instructing observers to close their eyes just before the excitation source was removed and then to open their eyes again after the source was removed, so that any "residual flash" would not "be mistaken for phosphorescence." Today, of course, we know that the flash is indeed phosphorescence of brief duration.

BIP. An acronym for "brief intense phosphorescence," *BIP* is the brainchild of Dr. Earl Verbeek and dates to 1998. It has appeared numerous times in *The Picking Table* and publications of the Fluorescent Mineral Society, and it surfaces occasionally in the electronic ether of the Web. According to Earl, however, this term was coined with tongue in cheek as a substitute for the term *flash*. In Earl's own words: "It was meant as a retaliatory jab at the term *flash*, which to my mind was nonsensical. Why? Because 'flash' implies a sudden burst of light, yet the phosphorescence of a mineral, even immediately after the UV lamp is turned off, cannot be brighter than the fluorescence that preceded it, so there is no flash at all, and the term is a misnomer. But here's the kicker: I coined the term *BIP* in jest and never intended it to be more than a bad joke. I then watched in horror as the term gained some currency in local circles as a replacement term for 'flash.' To my mind both are just awful."

So, until a better term — one that is precise and rolls off the tongue with ease — is proposed to describe phosphorescence of short duration, *flash* will continue to be used. A better description of the phenomenon may be "rapidly decaying afterglow," which is scientifically accurate, and which could conveniently be abbreviated as "RDA." But I won't hold my breath waiting for people to adopt that one.

Acquisition of Dr. Pete J. Dunn's Franklin-Sterling Hill Collection

Lee Lowell
Collections Manager
Franklin Mineral Museum
32 Evans Street, Franklin, NJ 07416



One of the prizes of Dr. Dunn's collection, a fine specimen of schallerite. The specimen is 4.3" (11 cm) long and is now on display in the Local Room of the Franklin Mineral Museum, along with other select pieces from the collection. *E.R. Verbeek photo.*

In April 2010, Dr. Pete J. Dunn, a retired Smithsonian Institution mineralogist, made the decision to no longer retain his collection of Franklin-Sterling Hill ores. He had accumulated this collection during 37 years of study and research on the minerals from this unique mining district, but had obtained all of the information he needed from it, so the specimens themselves were no longer needed.

When word reached collectors and organizations of this collection's potential availability, interest quickly built, and discussion ensued on where the collection should ultimately be housed. The board of the Franklin Mineral Museum (FMM) took the lead in suggesting that this collection belonged here, which since 1965 has been a Mecca for thousands of school children, mineral collectors, and scientists alike.

Following FMM board approval to purchase this collection, discussions took place over the summer between Dr. Dunn, FMM president Steven Phillips, and FMM treasurer and collections manager Lee Lowell. Finally, in September 2010, Phillips, Lowell, and FMM vice president Ray Latawiec journeyed to Dr. Dunn's residence in hot and humid Alexandria, Virginia. The collection we were to examine consisted of 502 mineral specimens, 367 from Franklin and 135 from Sterling Hill. Of these, petrographic thin sections had been prepared for 30 specimens from Franklin and 37 from Sterling Hill.

We started our examination of the 464 specimens stored in Dr. Dunn's woodworking shop behind his house. It was brutally hot and humid inside. While I was listening to Dr. Dunn explain how he had the specimen boxes arranged, I felt something brushing my head. Upon looking up I was somewhat startled to see snake skins! Dr. Dunn explained that snakes come into his shop and use the wires stretching across the ceiling to shed their skins. He said these were not a part of the collection. After some time sweating over the specimen boxes, we returned to the house and gathered around Dr. Dunn's dining room table for some much-needed refreshments.

After some pleasant conversation, Dr. Dunn unpacked the remaining boxes containing what he called his "pretty" minerals. As he spread these specimens over the table, I noticed how Phillips's and Latawiec's eyelids cleared their pupils.

There before us were 38 beautiful specimens, 21 of which were illustrated in Dunn's 1995 monograph on Franklin and Sterling Hill. Included was the best petedunnite crystal specimen known. This confirmed that the board's decision to purchase this collection was an excellent one.

On the way to Dunn's home, Steven Phillips had some trepidation about what we were getting into, as none of us had ever seen this collection despite Dunn's invitation for us to see it prior to buying it. Phillips made it known to me that my lead in this acquisition had better be worth his time and the museum's expense; if not, I suppose I would have heard about it as long as I volunteered at the museum. I wasn't worried because I knew in my heart that Dunn's collection was more than worthy of a home in the museum. After all, these rocks were born and raised in Franklin and Sterling Hill, were observed and studied by Dunn, and now they were coming home.

The deal concluded, Steven Phillips, Dr. Pete J. Dunn, and Ray Latawiec (L-R) load flats of minerals in the SUV for the long trip back to the Franklin Mineral Museum. *Lee Lowell photo.*

After we loaded the 67 flats into Phillips's huge SUV, we bade farewell to Dr. Dunn, thanked him for this fantastic opportunity, and left the ground George Washington rode over at another time. On our way back to what Dunn calls the "holey land," Phillips, having now seen the collection, showered me with compliments over and over. Even Ray Latawiec admitted that we struck a mother lode on this trip.

Several days later, Dr. Dunn called to say he'd decided to donate the "pretty" specimens and would return some of the money we'd paid for this collection. All in all, this whole affair turned out to be one the best acquisitions that the three of us had ever experienced in our volunteer efforts for the museum. As a special bonus, Dr. Dunn placed no restrictions on what the museum could do with his collection. Much will be retained, but some specimens will be offered for sale to interested collectors. This determination will be made in the coming months.

Steven Phillips (left) and Ray Latawiec examine specimens from Dr. Pete J. Dunn's collection. Ray holds the beautiful rhodonite crystal pictured at upper right on page 446 of Dr. Dunn's 1995 monograph on the minerals of Franklin and Sterling Hill. *Lee Lowell photo.*

Dr. Pete J. Dunn (left) wraps and boxes minerals for transport while Lee Lowell examines another choice specimen. Readers may recognize a few of these pieces from Dr. Dunn's 1995 monograph: the petedunnite crystal specimen (p. 436) at lower left, the uvite crystal in calcite (p. 427) at bottom center, and just to its left, a specimen of tephroite crystals rimmed by sonolite (p. 306). *Ray Latawiec photo.*

Fluorescent Grossular From Franklin, New Jersey
With Notes on Associated Gahnite

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Grossular, ideal formula $Ca_3Al_2(SiO_4)_3$, has been confirmed as a fluorescent mineral species from the Franklin mine, bringing the number of known fluorescent species from the local area to 91. Two specimens have been confirmed as grossular by X-ray diffraction and a third identified by visual methods, but more probably reside, as yet unrecognized, in institutional and personal collections.

The specimen upon which the original determination was made (no. PS07001, Fig. 1) was provided for study by Paul Shizume, its current owner. Its provenance is well known: The original owner was Louis Szabo, supervisor of the fine crusher at the Franklin mill from 1922 to 1949. The specimen eventually passed into the hands of Lou Cherepy, who offered it for sale during the April 2007 New Jersey Earth Sciences Association Gem and Mineral Show at Franklin. At first glance, the specimen resembles axinite-(Mn), but as Mr. Shizume noted at the time, both its color (dominantly ivory white, but showing faint hues of pink and green) and its exceedingly fine grain size seemed "not quite right" for that mineral. Axinite-(Mn) is indeed present, but only in minor amounts. Other than grossular, which apparently comprises the bulk of the specimen, the minerals so far identified (visually unless otherwise stated) are as follows:

Figure 1: Specimen PS07001, daylight view. Areas of delicate pink coloration fluoresce red, whiter areas are nonfluorescent, and areas showing faint green coloration contain gahnite. Dark gray at right is lead; tan at bottom is "caswellite." Specimen measures 4″ × 3.25″ × 2.25″ (10 × 8 × 6 cm); *E.R. Verbeek photo.*

Mica ("caswellite") — A pinkish tan, cryptocrystalline mineral or minerals pseudomorphous after mica, the material known to collectors as "caswellite," forms the base of the specimen, as shown in Figure 1.

Axinite-(Mn) — Several dozen small grains of axinite-(Mn), most of them only 2 to 5 mm across, are scattered within the grossular adjacent to the caswellite layer. The grains are inconspicuous upon casual examination but show the red fluorescence common to the species under shortwave ultraviolet light. Examination of these grains under a hand lens showed them to be of pale honey-yellow color, as is much axinite-(Mn) from Franklin.

Willemite — Willemite is present both as glassy, white to faintly green grains several millimeters across embedded in grossular, and as abundant thin films lining relict cleavage surfaces in the caswellite.

Clinohedrite — Two faces of the specimen are coated with bright orange-fluorescing clinohedrite, one heavily so.

Gahnite — Gahnite in this specimen was first identified through X-ray diffraction and is presumably the cause of the faint green coloration in small parts of the specimen. Gahnite was later confirmed in a second specimen, described below.

Andradite — Glassy andradite of orange-brown color is an abundant constituent of the caswellite layer.

Lead — Native lead, both as disseminated microscopic grains and as thin films lining small fractures, colors small portions of the specimen dark gray (Fig. 1, right side of photo) to black (on reverse).

Prehnite — Part of the specimen, the same part noted above to contain native lead, shows a dull mustard-yellow fluorescence under shortwave and medium-wave ultraviolet light. The material is too fine-grained for easy sight identification, but its optical properties strongly suggest it is prehnite.

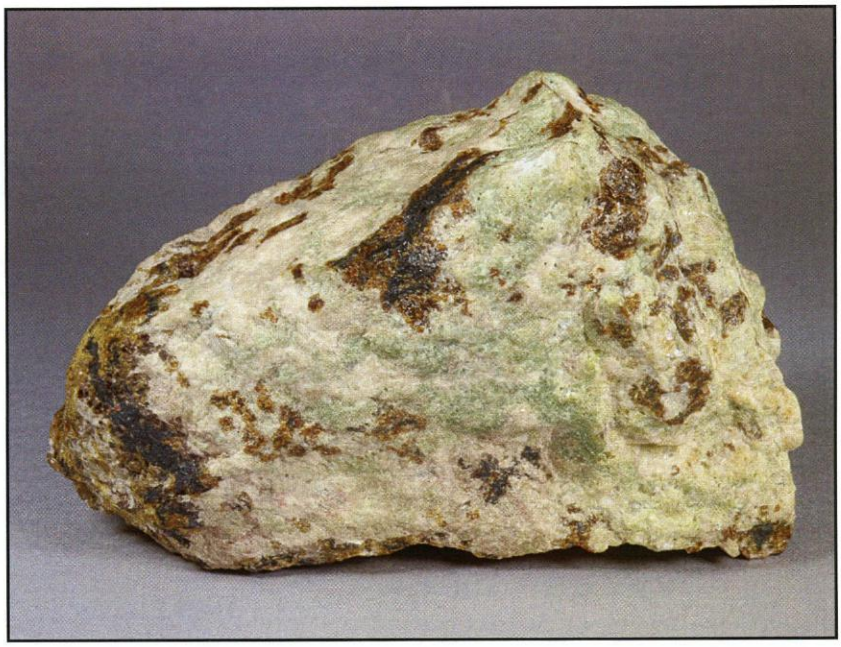

Figure 2: Specimen ERV-1481, daylight view. Dominant mineral is orange-tan axinite-(Mn); also present are andradite (brown), franklinite (black), gahnite (green, disseminated) and grossular. The grossular is intimately intergrown with gahnite and is distinguishable only by its fluorescence. Specimen measures 6″ × 3.25″ × 2.25″ (15 × 8.5 × 6 cm); *E.R. Verbeek photo.*

Other than the gahnite, collectors will recognize these minerals as a familiar assemblage from Franklin, one popular among collectors of rare species and fluorescent minerals alike. What sets the Shizume specimen apart from most others is its fluorescence. Under shortwave ultraviolet light, the grains of axinite-(Mn) fluoresce red, but, as was immediately evident to Mr. Shizume upon examining the specimen under a longwave lamp, a second red-fluorescing mineral is present. Not only is this second mineral more brightly fluorescent under longwave ultraviolet light than under shortwave — the reverse of axinite-(Mn) — but the color of fluorescence is clearly different, a much deeper red than that of axinite-(Mn).

In late 2009, a small fragment of the red-fluorescing unknown was analyzed by X-ray diffraction and returned a good pattern for grossular. Meanwhile a second specimen of the longwave red-fluorescing mineral had been recognized in the collection of the first author (specimen ERV-1481), and a fragment of it, too, provided a clear X-ray pattern of grossular, so the identity of the red-fluorescing mineral is now well established. Careful examination of the specimen showed that the longwave red fluorescence occurs in those portions of the specimen that in daylight show a delicate pink color. Beyond this we can say little without further study, inasmuch as there are several known causes of pink to red color in garnets *and* of red fluorescence in minerals of that group. We hope soon to obtain a fluorescence emission spectrum of Franklin grossular to narrow the possibilities.

In both X-ray patterns, the presence of a second mineral was indicated, and upon further study this proved to be gahnite. Gahnite is especially abundant as a fine-grained, pistachio-green mineral in specimen ERV-1481 (Fig. 2), a specimen formerly in the collection of Nick Zipco. Initially the green mineral had been sight-identified as vesuvianite, but the X-ray data are unambiguous in indicating gahnite. Armed with this new information, we looked through the axinite-(Mn) specimens on display in the Franklin Mineral Museum for others with gahnite and found one visually similar to specimen ERV-1481. That specimen (FMM-1070) also contains red-fluorescent grossular. Collectors are thus encouraged to examine all of their axinite-(Mn) specimens for the presence of grossular, paying particular attention to those that contain visible gahnite.

Acknowledgements

We thank Paul Shizume for bringing his specimen to our attention and providing a fragment of it for study, Lou Cherepy for revealing its history, and Herb Yeates for optical determination of prehnite in the Shizume sample.

Roeblingite — A Cautionary Tale

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Roeblingite, to many collectors of the local fluorescent minerals, ranks high on their list of most-coveted species. Rare to begin with in good specimens, it is even rarer than one might suppose, for mislabeled specimens are, if anything, more common than real ones. This is the tale of one such specimen, which nearly led to another, and could have led to many more, had not a cautionary approach prevailed.

An early acquisition in the collection of Mark Boyer, his no. MB462, is a small, visually striking specimen (Fig. 1) accurately labeled by the seller as cyprine (blue vesuvianite) with andradite (brown) from Franklin. These two minerals constitute the bulk of the specimen. Other minerals present include coarse-grained, pale gray calcite on one corner of the specimen; tiny scales of a lustrous, mahogany-brown mica; small, scattered grains of gray willemite; and sparse, tiny black grains presumed to be franklinite. Collectors will recognize this as a fairly common assemblage from Franklin, one described by Dunn (1995, p. 318, 423-424). Also present, however, is another pale gray to white mineral, which Mr. Boyer felt might be roeblingite, and which certainly resembles that mineral in all visual properties. John Cianciulli, former curator of the Franklin Mineral Museum, and one of this area's most respected authorities on the local minerals, seconded roeblingite as a possibility. Mr. Cianciulli's reputation as a skilled practitioner of sight-identification of Franklin minerals ensured that his assessment carried considerable weight. Accordingly, the specimen was entered into the Boyer collection with roeblingite listed as one of the minerals present.

It is easy to see why Mr. Cianciulli suspected the unknown mineral to be roeblingite. It is pale gray to nearly white, with an exceedingly fine grain size, and thus has the porcelain-like appearance of classic roeblingite. Under short-wave ultraviolet light it shows a moderately bright, pinkish red fluorescence, in contrast to the much more vivid, saturated, orange-red fluorescence of the associated calcite. Moreover,

Figure 1: Specimen MB462 from the Mark Boyer collection. Principal minerals are vesuvianite (var. cyprine), andradite, and very fine-grained calcite with a porcelaneous texture resembling that of roeblingite. Specimen measures 2.2″ × 2″ × 1.6″ (5.5 × 5 × 4 cm); *E.R. Verbeek photo.*

though the unknown occurs mostly as anhedral grains intergrown with cyprine, in one part of the specimen it forms several small (3-7 mm diameter) rounded, nodule-like masses in contact with andradite. All of these properties — color, grain size, fluorescence, nodular appearance — are consistent with well-documented examples of roeblingite. The only difference from "classic" roeblingite is the assemblage.

There the matter rested until 2009, when a similar specimen (Fig. 2) turned up in the collection of Philip Persson, which had just been acquired by a group of three collectors. Here again an exceedingly fine-grained, pale gray mineral with moderate pinkish red fluorescence occurred intergrown with cyprine, and this was quite a rich example. By analogy

to the Boyer specimen, it was initially regarded as roeblingite. Before selling the specimen or retaining it in the collection of one of the three owners, however, it was decided to have it analyzed. Accordingly, a small chip of the unknown, hoped-for "roeblingite" was submitted for X-ray diffraction. The answer was unequivocal: calcite!

Herein lies the cautionary part of this tale. Three collectors who examined the new specimen, and who have between them nearly a century of experience studying the local minerals, all agreed that the unknown mineral fitted the description of roeblingite. To date, however, the cyprine-andradite-mica assemblage is not one in which roeblingite is known to occur. This nagging doubt — "It's not the right assemblage" — was what tipped the scales in favor of analysis.

Careful readers might have already noted that no proof has been offered that the red-fluorescing mineral in the Boyer specimen is *not* roeblingite. However, when tested with dilute hydrochloric acid (10% HCl), the almost immediate evolution of CO_2 in all areas tested showed that calcite is present and calls into doubt the presence of roeblingite. Though some might wonder at the presence of calcite in two distinctly different textures and showing two different fluorescences in the same specimen, this is neither unexpected nor unprecedented in alteration assemblages. Given that the fine-grained, red-fluorescent mineral in the Boyer specimen is visually almost identical to that of proven calcite in the Persson specimen, we accept the identity of calcite for both.

In the time since the above words were written, additional specimens of purported roeblingite have been examined by Richard Bostwick, Mark Boyer, and the senior author. In all specimens where an identity of roeblingite was either proven or confidently inferred by analogy to analyzed samples, the roeblingite is of microscopic grain size, with a dull to earthy luster resembling that of porcelain. However, some of the other specimens that had been sold as roeblingite have a slightly coarser grain size and under a hand lens show tiny, bright reflections from cleavage or crystal faces. Such specimens almost certainly are calcite. However, none have yet been tested.

So what is a responsible collector to do when an X-ray diffraction spectrometer is not close at hand? We suggest removing a tiny fragment, immersing it in a dilute acid such as vinegar or 10% HCl, and looking for bubbles of evolved CO_2. Abundant bubbles indicate the presence of a carbonate mineral, likely calcite, and if the fragment dissolves completely, the answer is rather straightforward: it cannot be roeblingite. Conversely, an absence of evolved CO_2 would be consistent with (though hardly proof of) a suggested identity of roeblingite. But what if CO_2 is evolved but much of the mineral refuses to go into solution? That possibility was suggested indirectly by Jones (1964, p. 99), who noted that immersion of roeblingite in dilute HCl destroys its fluorescence. We have yet to repeat this experiment, but the loss of fluorescence led earlier collectors to suppose that (a) roeblingite occurred intergrown with calcite, (b) the calcite was the cause of the red fluorescence, and (c) dissolution of the calcite component was the reason the red fluorescence disappeared upon acid treatment. We doubt this is the case, as the fluorescence emission spectra of calcite and roeblingite are quite different (E.R. Verbeek, unpub. data, 2000). Nevertheless the loss of fluorescence and possibility of intergrown calcite introduced sufficient complications that the authors elected to go directly to analysis via X-ray diffraction to obtain definitive results for the Persson specimen. As a confirmatory test, a portion of the original powder that was X-rayed was introduced into a small quantity of dilute HCl and observed to dissolve completely, implying that the sample consisted only of calcite. To provide still further confirmation, we reexamined the X-ray pattern, this time not looking to identify the major mineral in the sample, but deliberately looking for roeblingite peaks in the known positions where these would occur. No peaks consistent with the presence of roeblingite were observed. We are thus quite certain that the pinkish-red-fluorescing mineral from the Persson collection consists only of calcite.

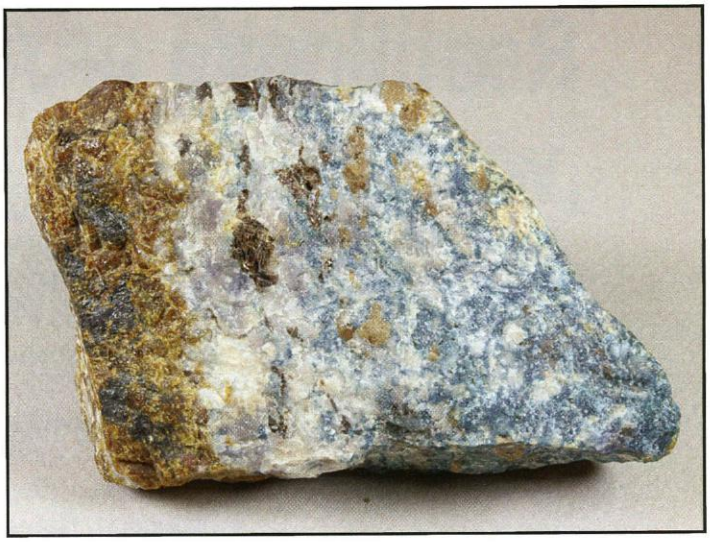

Figure 2: Uncataloged specimen from the collection of Philip Persson. Principal minerals are identical to those of specimen in Figure 1. Note pale gray, fine-grained mineral at left, adjacent to the andradite layer. This material much resembles roeblingite but is calcite. Specimen measures 3.1″ × 2.2″ × 1.6″ (8 × 5.5 × 4 cm); *E.R. Verbeek photo.*

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The Maine Mineralogical and Geological Society's Annual Trips to Franklin, 2008-2010

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Members of the Maine Mineralogical and Geological Society visit the Franklin Mineral Museum. Left to right: Duane Leavitt, Bill Bunn, Roy Dufour, Patrick Bigos, Chad Cramer, Kermit Smyth. *Clay Carkin photo.*

Chad Cramer, MMGS field trip chairman, collecting at the Mine Run Dump at Sterling Hill while a next-generation collector looks on. *Clay Carkin photo.*

The Maine Mineralogical Society is the oldest mineral club in the state of Maine. It has an active field trip program, led by Chad Cramer, that guides its members to mines in Maine and New Hampshire, but the grandest expedition of them all is to Franklin, New Jersey!

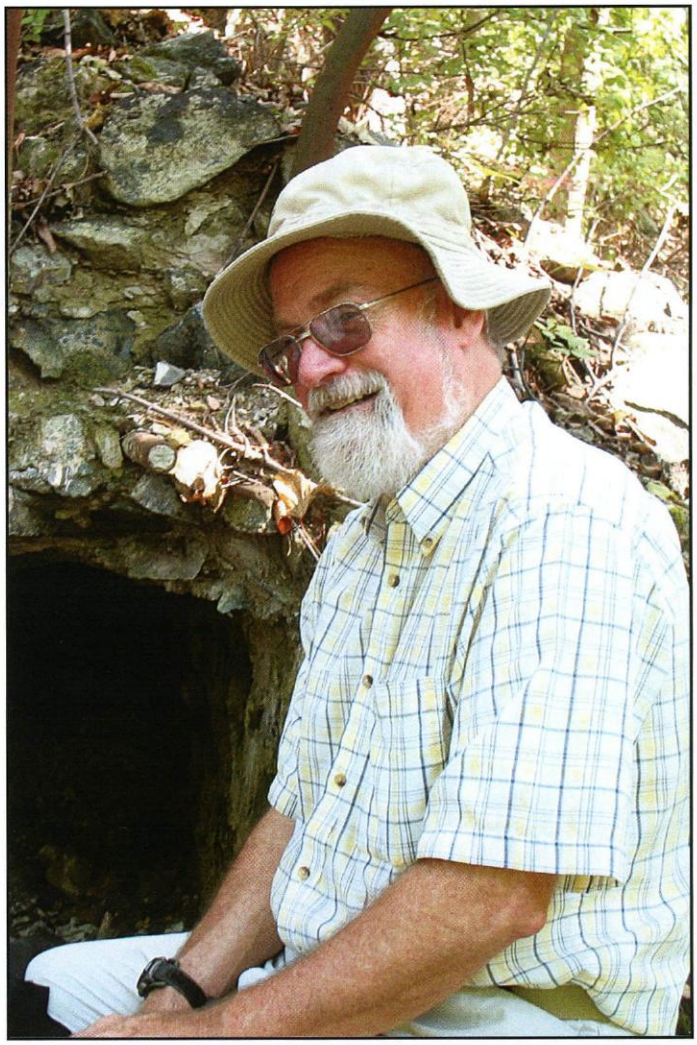
Our club's first trip to Franklin was in 2008 with seven people in attendance. Our priority was to visit the Franklin Mineral Museum and Sterling Hill Mining Museum. Thanks to a Fluorescent Mineral Society meeting at the SHMM, we were able to join the FMS in their night dig. That night, MMGS members stayed at a local motel, which was under renovation and looked like a disaster zone. On the flip side, construction-related excavation of the rock ledge in back of the motel exposed many nice specimens of diopside and norbergite. Who could have imagined gathering fluorescent minerals outside a motel's back door? What a great marketing ploy to attract fluorescent mineral collectors to lodge at their facility! Another unanticipated evening event at the motel was a teenage "fight club" making rounds (no pun intended) from one room to another. It sounded as if they were breaking rocks over each other's heads!

The second annual MMGS expedition to Franklin was in 2009 with eight people in attendance. The original weekend date for the trip was changed to align with the Franklin-Sterling Gem and Mineral Show. Not only did we visit the show and the SHMM Garage Sale, but we also found time for both a day dig and a night dig. We had missed the Sterling mine tour in 2008, so we made it a priority to include it in our plans. After the SHMM night dig and before retiring for the evening, we lamped the gravel and stone parking lot at the motel and discovered a milk-crate-sized boulder of diopside and norbergite under one corner of a dumpster. The boulder would have to wait until 2010, because it would have been impossible to extract without a bulldozer.

2010 was a banner year for our Franklin trip, as we had nineteen in attendance. Many members decided to make the seven-hour drive on Thursday, enabling them to get to the Franklin Mineral Museum sale early on Friday morning. Friday was a mellow day as our members leisurely shopped at the sale tables and spent time digging on the Buckwheat Dump. Saturday was to be our "mineral marathon," as the day was filled to capacity. After a survivalist breakfast at the newly refurbished motel, we made a quick dash to the Franklin mineral show to check the outside dealers' tables. A later opening for the inside dealers hastened our search for minerals, as we had to leave for the opening of the SHMM Garage Sale. We had an enjoyable morning looking for bargains that kept appearing on the SHMM tables. The afternoon's heat was like that of a sultry summer day, and we managed to get royally dirty digging for jeffersonite in the black manganese-rich soil of the saddle between the Passaic and Noble Pits.

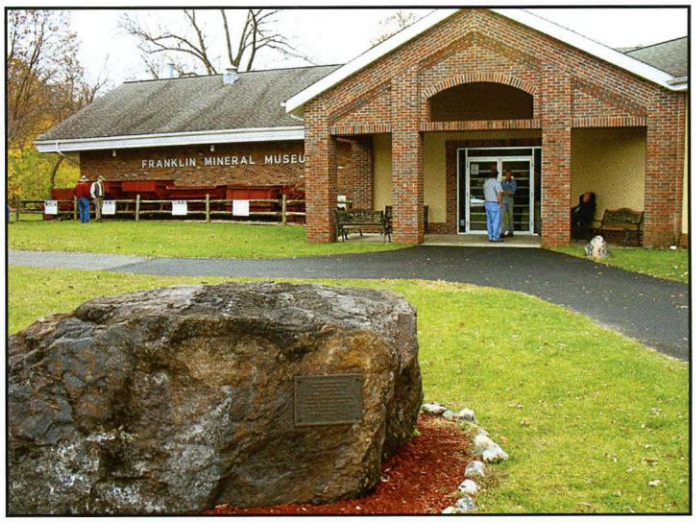
By late afternoon, we were ready for a dinner break at a local diner to replenish our rapidly falling energy levels. After a dinner that would make a lumberjack blush, we drove back to the SHMM to reconnoiter the mine by daylight. As the sun set, our evening began with the lamping of the dumps. A small group of children who came with their MMGS parents was in awe of the brilliant fluorescent colors that prevailed on the Mine Run Dump. Hoots, oohs, and ahs came out of the darkness. It had been a long day, and it was time to drive back to the motel for some much needed sleep.

Postscript: You're probably wondering whatever happened to that boulder of diopside and norbergite we found in 2009. Oddly enough, it had been bulldozed to the edge of the motel's newly paved parking lot. With the dumpster gone, the boulder was waiting for us to break it up. Museum-worthy pieces of norbergite and diopside were shared by all!



Duane Leavitt at the crusher foundation above the Buckwheat Dump at Franklin. *Clay Carkin photo.*

Duane Leavitt (standing) watching Patrick Bigos dig for "jeffersonite" and franklinite crystals in the saddle area adjacent to the Noble Pit at Sterling Hill. *Clay Carkin photo.*



Members of the Maine Mineralogical and Geological Society outside the Franklin Mineral Museum during their 2008 visit. Far left, Duane Leavitt and Kermit Smyth; far right standing, Chad Cramer and Bill Bunn. *Clay Carkin photo.*

General Joseph Gilbert Totten: An Early Collector of Franklin, New Jersey, Minerals

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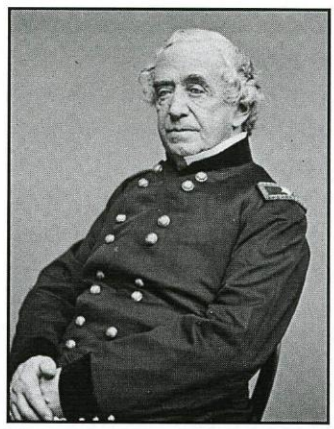
General Joseph Gilbert Totten was born on August 23, 1788, in New Haven, Connecticut. In 1802, at the age of 14, he became a member of the first class of cadets at the newly established United States Military Academy at West Point, New York. On July 1, 1805, at the age of 16, he received his commission as a Second Lieutenant in the Corps of Engineers. In 1806, he resigned his commission but continued to work in the military as Secretary to the Surveyor General of the Northwest Territories. In 1808, he rejoined the Army, never to leave it.

During the War of 1812, he served as Chief Engineer of the Niagara Frontier and Lake Champlain Armies under General Steven Van Rensselaer. He fought in many battles around Lake Champlain and Lake Ontario and was responsible for blowing up Fort Erie in upper Canada.

In 1838, he was appointed Chief Engineer of the Corps of Engineers, a position he held until his death. In this capacity he served under General Winfield Scott in the Mexican-American War (1846-1848) and was involved in the Siege of Vera Cruz. He served under various Union commanders during the Civil War in Washington, D.C., where, after a brief illness, he died on April 22, 1864 (Cullum, 1890). His grave, along with those of other well-known Americans, can be visited today in Washington's famous Congressional Cemetery.

From his experiences in the War of 1812, Joseph Totten came to realize the inadequate protection from invasion of the country's coasts. He embarked on a long period of improving homeland security through the construction of forts along all of the coasts (Barnard, 1877). Some of these forts still stand and were used as recently as World War II for their original purpose. He was also responsible for the building of lighthouses. He was known for his meticulous care to detail that made his works sound and lasting. He applied scientific methods, often conducted by him in the laboratory or the field, to study the materials he used in construction. He is probably the only officer ever to have three Army forts named after him, in Washington, D.C.; Queens (New York City); and North Dakota.

Despite his full-time duties in the Army, General Totten had many outside interests. He was active in natural history, specifically conchology, geology, and mineralogy. In 1824, he published a paper on the use of the blowpipe (Totten, 1824). In this paper, he began with an evaluation of a method developed by the English mineralogist James Smithson (1754(?)-1829). He modified Smithson's technique so that a smaller sample could be used.



General Joseph Gilbert Totten (1788-1864).

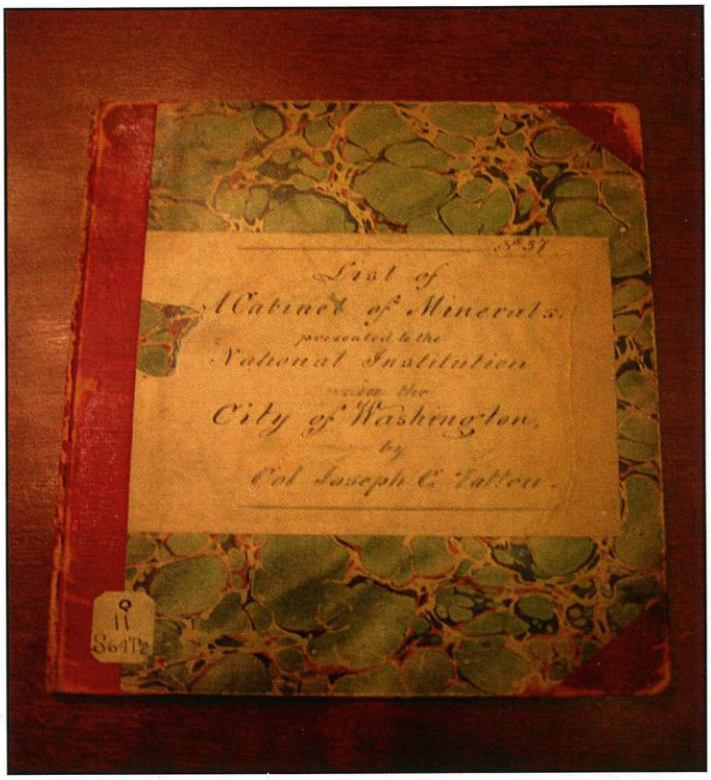
During the 1830s, General Totten was an important member of the National Institution for the Promotion of Science in Washington, D.C. This is regarded as the forerunner of the Smithsonian Institution. In 1841, he donated his mineral collection to the National Institution (Anonymous, 1842). During the National Institution's existence, Congress debated what to do with Smithson's bequest (Rhees, 1880). In 1846, in the act of Congress organizing the Smithsonian Institution, General (then Colonel) Totten was named a member of the Executive Committee of the Board of Regents. He was eminently qualified for the position, for he was not only an active scientist and a capable administrator, but was also acquainted with Smithson's scientific accomplishments.

In 1863, he was selected as one of the original members of the National Academy of Sciences (Cochrane, 1977). By this time, his mineral collection had been transferred to the Smithsonian Institution, and at least part of it was probably on public display along with specimens from Smithson's collection. In 1865, a fire in the museum destroyed most of the exhibits (Goode, 1897). Among the losses were Smithson's, Totten's, and other early collections (Paul Pohwat, personal communication, 2005).

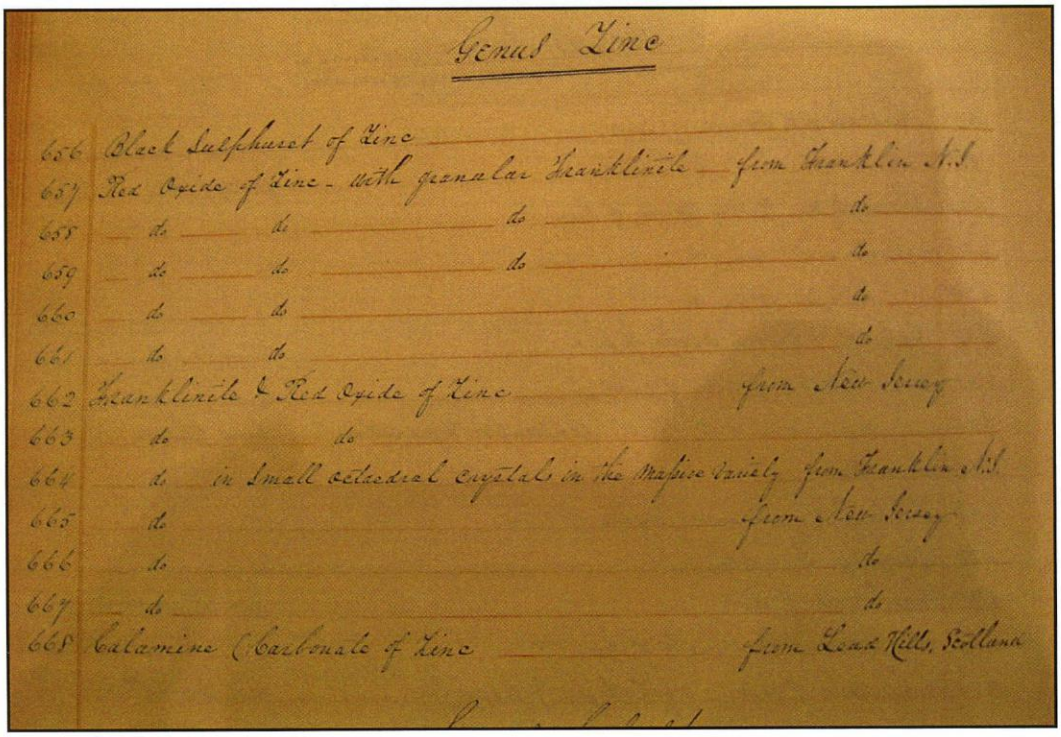
A year later, to ensure against future losses to fire, Joseph Henry, Secretary of the Smithsonian, transferred the museum's library to the Library of Congress. Among the items transferred was Totten's beautiful, bound manuscript record of his mineral collection, entitled: *List of A Cabinet of Minerals presented to the National Institution in the City of Washington by Col. Joseph G. Totten* (Totten, 1841). General Totten was known to be an "admirable draughtsman, executing his work with delicacy and finish that defied competition…" (Barnard, 1877). The catalog shows this quite well. In a fine handwriting, he flawlessly, probably in a day or two, compiled a 30-page list following approximately the classification system of Parker Cleaveland (Cleaveland, 1822) of 728 minerals, ores, rocks, combustibles, fossils, and a few artifacts. Most of the items appear to be minerals. The catalog is still in the Library of Congress, and it bears a stamp from the Smithsonian Institution.

The existence of this catalog has been noted by several modern bibliographers (Hazen, 1980; Schuh, 2008). No references have been found to indicate that the catalog's contents had been examined and evaluated by anyone until recently (Grundel, 2005). Among the mineral specimens listed are some from Franklin, New Jersey, as well as nearby localities in the Franklin Marble. Specimens from nonrelated sites in New Jersey are also to be found.

General Totten was known to be an avid outdoorsman. It is possible, when not involved with official duties in the harbor of New York or at West Point, that he visited Franklin and perhaps collected some of these specimens. Judging by the many specimens he lists from locations near where he was stationed during his career, for example, West Point and Rhode Island, it is plausible that he was an active field collector. The quality of the catalog's information, specifically localities, is variable. In some places it is exact: "from Franklin, N.J."; in others it is vague: "from New Jersey." Few other facts about the specimens are recorded. Overall, the information is valuable because it gives us insights into one of the earlier periods of mineral collecting in the United States. It also tells us what species a collector of that era could obtain from the mines at Franklin, New Jersey.



General Totten's mineral catalog.



General Totten's catalog entries for zinc-bearing minerals from Franklin, New Jersey.

Catalog Entries for Minerals From or Near Franklin, New Jersey

Editor's note: Some of the mineral names in this list are no longer used, or apply to different species. Brucite, for example, is a valid species in its own right (and occurs locally), but in the 1800s it was an early term for the mineral we now know as chondrodite, and was also used for zincite. Readers are referred to the list of *Obscure or general mineral names* beginning on p. 691 in Dunn (1995). Note also that "do" is an abbreviation for "ditto."

The following is a list of minerals from Franklin, New Jersey, as they appear in General Totten's catalog:

Catalog #	Species	Locality
Chondrodite-Brucite		
240	Chondrodite in carbonate of Lime	from Franklin, N.J.
Gahnite		
243	Gahnite	from Franklin, N.J.
244	do	
Feldspar		
280	Green Feldspar? Scapolite	from Franklin, N.J.
Garnet		
306	car. of Lime & var. of Epidote	from Franklin, N.J.
315	Melanite	from Franklin, N.J.
316	do	do
Augite		
415	Jeffersonite	from New Jersey
Genus Zinc		
657	Red Oxide of Zinc - with granular Franklinite	from Franklin, N.J.
658	do	do do do
659	do	do do do
660	do	do do do
661	do	do do do
662	Franklinite & Red Oxide of Zinc	from New Jersey
663	do	
664	do in Small octahedral crystals in the massive Variety	from Franklin, N.J.
665	do	from New Jersey
666	do	do
667	do	do

The following is a list of minerals from localities in, or probably in, the Franklin Marble as they appear in General Totten's catalog:

Catalog #	Species	Locality
Hornstone		
196	Hornstone	from Sussex, N.J.
197	do	do
198	do	do
Spinelle		
221	Spinelle	from Sparta, N.J.
222	do Octahedral magnetic with Brucite	from Amity, N.Y.
223	do	do
Chondrodite-Brucite		
237	Chondrodite (Brucite, Spinelle & Mica)	from Warwick, Orange Cty, N.Y.
238	do and black Spinelle	from Monroe, N.Y.
239	do Mica and Amphibole	from Orange Cty, N.Y.
241	do	from Warwick, Orange Cty, N.Y.
242	do	from New Jersey
Augite		
400	Common Augite	from New Jersey
Hornblend		
lis(?) 415	Hornblend, var. with corundum in imperfect crystals	from Newtown, N.J.
Diallage		
456	Bronzite in Calc Spar	from Amity, N.Y.
Genus Iron		
647	Granular Graphite	from Hamburg, N.J.

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Recollections of Franklin: The Mining Town

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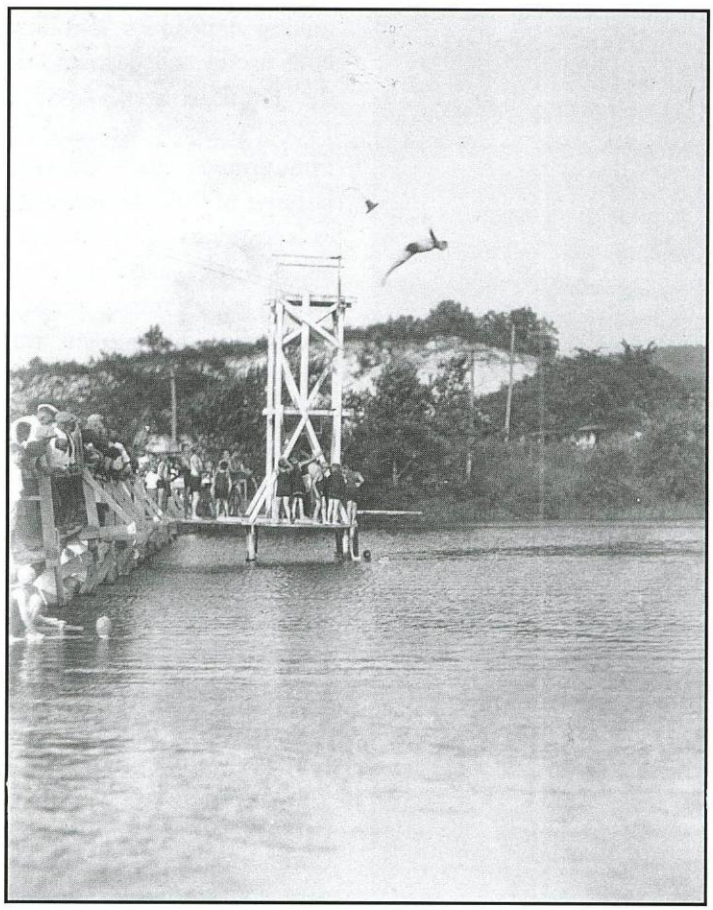
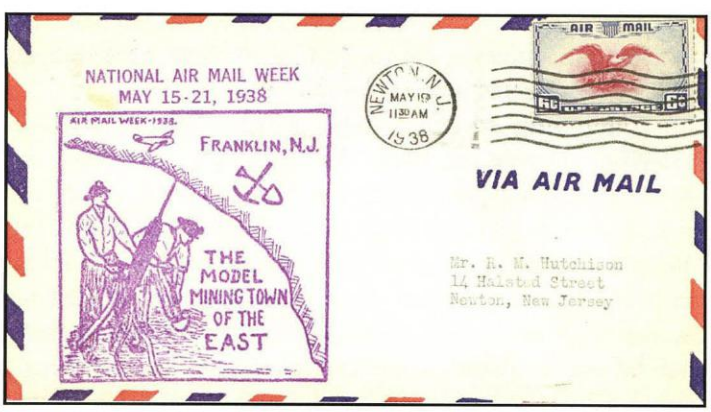


Swimming in Franklin Pond.



Franklin, "The Model Mining Town of the East."

Here are my recollections of the mining town we know as Franklin, New Jersey. This is a deeply personal "grass-roots" account of the Franklin community and its history and traditions, as I knew them.

All of us reflect on our life and experiences, and while doing so I've discovered more and more what was unique about my little corner of the world. Throughout my younger years, Franklin was known as a "one-horse town," an oblique reference to the omnipresence of the New Jersey Zinc Company, whose trademark was a horse's head. The "Zinc Company" or "the Company," as locals called it, was like a comforting father to the people of Franklin and Ogdensburg. The Company provided for all the needs of the community, including dormitories for the young men who came from all over the world to work here. It gave us housing, water, sewers, telephones, electric power, a hospital, nursing, schools, a fire department, baseball, bowling, and even the swimming and diving areas at Franklin Pond. Jobs were available, even during the Great Depression. All of my family, friends, and acquaintances from Franklin have expressed warm feelings for the Zinc Company because of the broad comfort it provided.

One hundred years ago was another time, an age we now find difficult to understand. Upton Sinclair's *The Jungle* is a world-famous novel about the plight of the American working class, graphically depicting poverty and hopelessness among laborers in the meat-packing industry in the early 20th century. I mention this well-known, pivotal book to draw a contrasting view. While the same immigrants and poor described by Sinclair worked in Franklin in the harsh and often deadly vocation of mining, they felt they were better off here. This attitude, as conveyed to me, was the result of having a benevolent employer. Immigrants "fresh off the boat" came here from over 20 foreign countries. Workers came here from silver mines in Montana, copper mines in Michigan, and coal mines in West Virginia. I firmly believe that here in Franklin, the Zinc Company offered good employment and a better life. I also think that the unique world-class minerals found here were matched by an exceptional working environment. This New World frontier town gave birth to an inimitable spirit of community and hard work. While we know it today as "The Fluorescent Mineral Capital of the World," back then Franklin was known as "The Model Mining Town of the East."

This is not to say that life in Franklin was easy or safe. One hundred years ago the Zeitgeist, or spirit of the times, was very different. Members of my own family were killed by falling rock while on the job. My great-grandfather's leg was crushed in the mine, and amputated on his kitchen table, in a former Thomas Edison house outside the gate at Mill #2 in the Sterling Park section of Franklin. It was dark, cold, and damp in the depths beneath Franklin, and blasting and mucking hard rock there was brutally rough. But these harsh conditions were accepted along with the opportunity to feed one's family, and no one that I knew complained about that life.

Here I will pause to give the reader an orientation in local history. This digression is necessary so the context of my story can be better understood.

The original name of the locality was Franklin Furnace. That furnace grew from a forge near Furnace Pond, a forge that smelted ore from an iron orebody close to the magnificent lode of zinc ore that has since made the town world-famous. In the 1760s a fellow named Potts cultivated the local iron industry, and most likely named the place after the English royal governor at the time — William Franklin, son of Benjamin Franklin. While at this time the local zinc ore was neither friendly to current refining processes nor profitable to mine, iron in northwestern New Jersey was of great importance. In the mid-to-late 1800s New Jersey was one of the nation's greatest suppliers of iron. During the early 1870s the railroad came through Franklin Furnace and "one of the largest blast furnaces in the nation" was built down at Furnace Pond, now known as Franklin Pond. This furnace was in addition to the original and rebuilt iron furnace. A few hundred feet away another stone fireplace was built, and still stands, as a lime kiln for the rich calcite deposits. Also important to our conversation is that around the same time (1860s) many Irish were employed at the furnace and mine. There was also a large iron mine in nearby Hurdtown, whose shafts today lie beneath the Route 15 cloverleaf at Lake Hopatcong. I mention this because my mother's mother's family, the Ramages, who were of Scots-Irish descent, came to Franklin Furnace from Hurdtown when that mine closed due to economic conditions — as did many other iron mines in northern New Jersey, including Thomas Edison's mine atop Sparta Mountain above Ogdensburg. My father's mother's family was the Garritys, who immigrated from Ireland and came down from Lakeville, Connecticut, for similar reasons as the Ramages — to find work related to their established vocation. All the rest of my family were "Cousin Jacks" from Cornwall in southwest England. Since the time of the ancient Phoenicians, the Cornish had been known as competent tin miners, and they possessed "hard rock" mining experience that was both useful and desirable in the Franklin area. Around 1900 many Cornishmen immigrated to America because of difficult economic conditions in Cornwall; and a way to land a job here was to have a miner, already employed, mention to his boss that he had his "Cousin Jack" coming from "the Old Country." That phrase many times spoke for itself in having a relative or neighbor, from Redruth or Camborne or the like, gain employment, sight unseen, across the sea. Some, like my father's father, went first to the silver mines in Idaho and then to the copper mines in the Upper Peninsula of Michigan (where you can still get Cornish pasties). This story was not written to detract from the contributions of the many nationalities who worked in the Franklin and Sterling Hill mines — at my last count there were over 20 nations represented here — but this is my story.

Brick Row, ca. 1870. At left is the author's grandmother, Grace H. Garrity Truran (b. 1894); at right is the author's great-great-grandmother, "Ma Mitchell" (b. 1844).

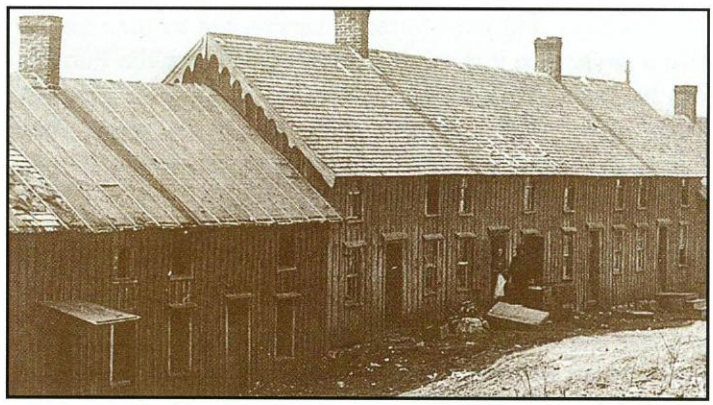
Michigan Row, ca. 1905.

There were several sizeable housing developments in Franklin. During the 1860s Bed Bug Row, a wooden row house built alongside Franklin Pond (where the fireworks are launched today), housed Irish workers until about 1900. The stone foundation is still there, and whiskey bottles were found in abundance in the pond when it was recently drained for dredging. (The bottles were thrown into the water there, behind the outhouses, doubtless after some hard drinking.) Around 1870 a similar row house was built of brick, up the hill about 500 feet to the northeast, and is known even today

as "Brick Row." Here, for a time, according to some records I found in the Alexander Library at Rutgers, lived my father's mother's father, William Mitchell. According to a letter he wrote to Mr. Catlin, very reminiscent of Tevye's plight in "Fiddler on the Roof," he became incapacitated while working at the Lehigh Mine and lived by taking in boarders and selling milk from a cow he owned. Next to Brick Row was, and is, Michigan Row, named for the many who came from the copper mines of Calumet to live and work here.

The period from 1905 to 1913 was a time of tremendous growth in Franklin and Ogdensburg. Many men and families were housed first in Sterling Park, outside the northerly upper railroad gate of the Palmer Mill, and in Bridal Terrace on Fowler Street, so named for the many weddings held there as the men brought their wives-to-be from across the sea. Next many bungalows were built, both in Franklin and two miles south in Ogdensburg (known as "The Burg," but not to be confused with the town of Hamburg, north of Franklin). More bungalows were built north of Sterling Park on Sterling Street, and while this section of town was nicknamed "Mexico," most of its residents were Hungarian. Housing was still in such short supply that many people took on boarders in "warm beds," where one man would get up for his shift in the mine and another would take his place in the bed. Even more bungalows were built to the east, near Hamburg Mountain, and this section was known as "Siberia." Many families from northeastern Europe lived there, from countries such as Poland and Lithuania. I recall as a kid seeing a number of the older "Babushkas" wearing kerchiefs over their heads, walking down Butler Street in their long skirts, high socks, and aprons.

Still, all those bungalows did not suffice to house the miners who poured into town to work for the Zinc Company. In the mid-1920s the Company built, on part of the old Fenner Farm, a housing development designed by the Better Homes company from New York City. This area of identical two-story dwellings is still known as "the Better Homes section" of town. I would say that in 1928 this was a very modern construction project, that for example included concrete roadways two lanes wide. (I say this because it was not until about 1932 that Route 23, the first concrete road in New Jersey, came through Franklin.) In addition to the concrete road, the Better Homes section had concrete curbs, concrete sidewalks on both sides with a grass strip between pavement and sidewalk, storm drains, fire hydrants, and garages for the homes. This is where I grew up. The Better Homes were occupied mainly by miners from Cornwall. My father's father Samuel Harty lived in the house where Dad grew up, and Mrs. Stephens lived across the street. She had lived across the street from Sam in "the Old Country" in Redruth. Rather than extreme coincidence, this is an example of what I have come to understand about my childhood; as they might say today, I grew up in an ethnic enclave.

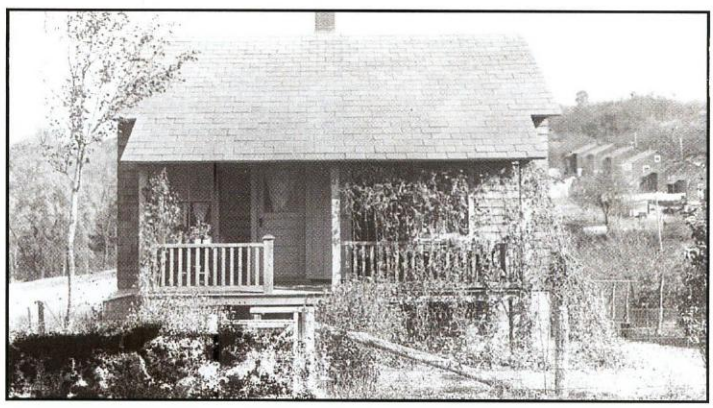


Bed Bug Row, ca. 1860.

A "Babushka."

Bridal Terrace, ca. 1905.

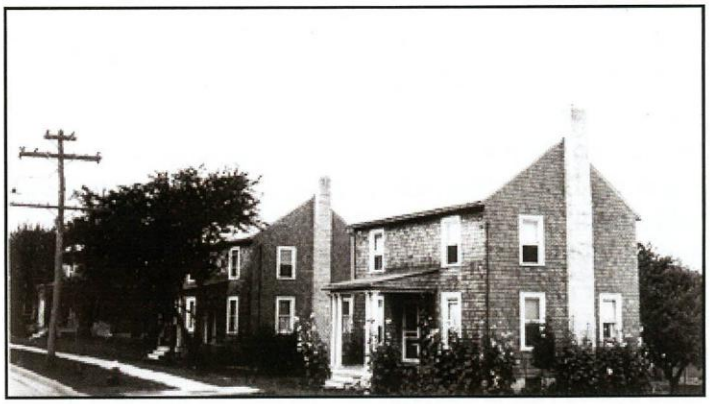
Miners' bungalows, ca. 1915.



Typical bungalow house built for miners, ca. 1915.

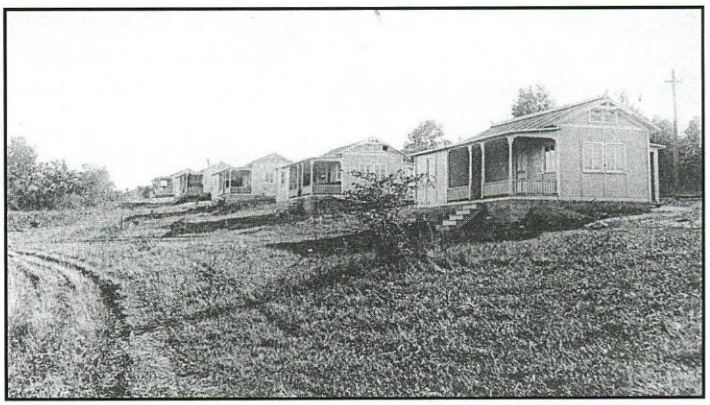
My story will have further chapters, but let me summarize it so far. The iron-mining settlement of Franklin Furnace can be traced back to the first maps of our area, sketches made circa 1760. Around 1905, the New Jersey Zinc Company began the grand undertaking of developing its world-class zinc mines. A rush of investment and effort followed, above and below ground, requiring many hands. This transformation from Franklin Furnace to Franklin, Model Mining Town of the East, was the legacy my generation knew, and the source of the many stories we heard. The housing boom began with the hotels: Franklin House, Sterling House, and Washington, Quinn's, and Snyder's Hotels. These were followed by dormitories for the single men (one of which is shown at bottom right) and portable housing for the families, while permanent dwellings were built by the score. The miners who came to the Franklin area for their livelihood were largely immigrants, plus many who migrated from other areas of the United States. The mines where they worked, and the minerals they mined, have become world-famous.

To close this chapter, at right is the residence of the mine superintendent, built in the early 1900s for B.F. Tillson. This large house overlooked the town and the entire mining operation. Today it is known by the older generation as "McCann's house" for the last superintendent of mines, Robert Leon McCann, who later became the president of Gulf & Western Corporation. This house, embodying the paternal spirit of the Zinc Company, was a constant presence in our life, casting a benevolent eye over every building and every person in Franklin.

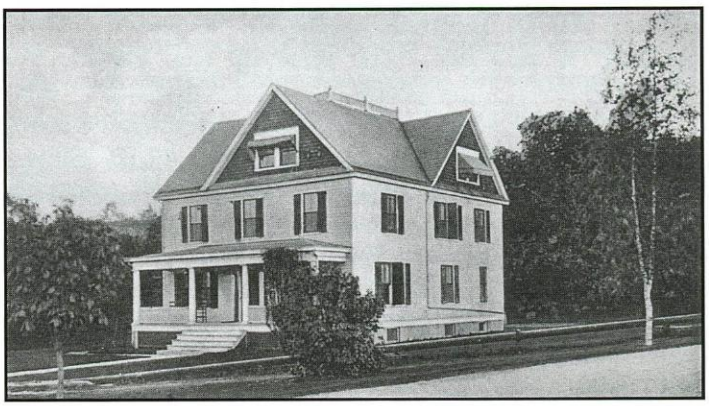


The "Better Homes" section of town, ca. 1927.

Residence of B.F. Tillson.

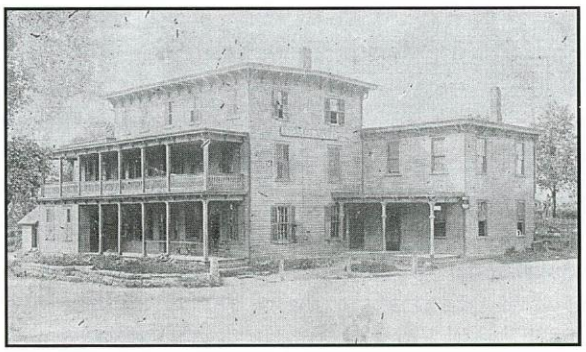


Portable houses for miners.



The Dormitory, ca. 1908.

Sterling House, ca. 1870.



Quinn's Hotel, ca. 1915.

Franklin Headframe Correctly Identified

On page 37 of the combined 2006 issue of *The Picking Table*, we showed a previously unpublished photograph, dated July 11, 1908, reproduced at right. The caption identified it as the headframe of Trotter Shaft No. 4 at Franklin. Recently, however, John Park of Stonerose Publishing Company (Miami, FL), sent us information that sheds new light on this photo. John supplied us with the illustration reproduced below, a schematic for the *temporary* headframe used to sink the Palmer Shaft. He notes that the date, 1908, even fits. Comparison of the photograph to the construction drawing shows that the two are virtually identical.

The article in which this illustration appeared is as follows: Haight, C.M. and Tillson, B.F. (1917), Zinc Mining at Franklin, N.J.: *Transactions of the American Institute of Mining Engineers*, vol. 57, p. 720-825.

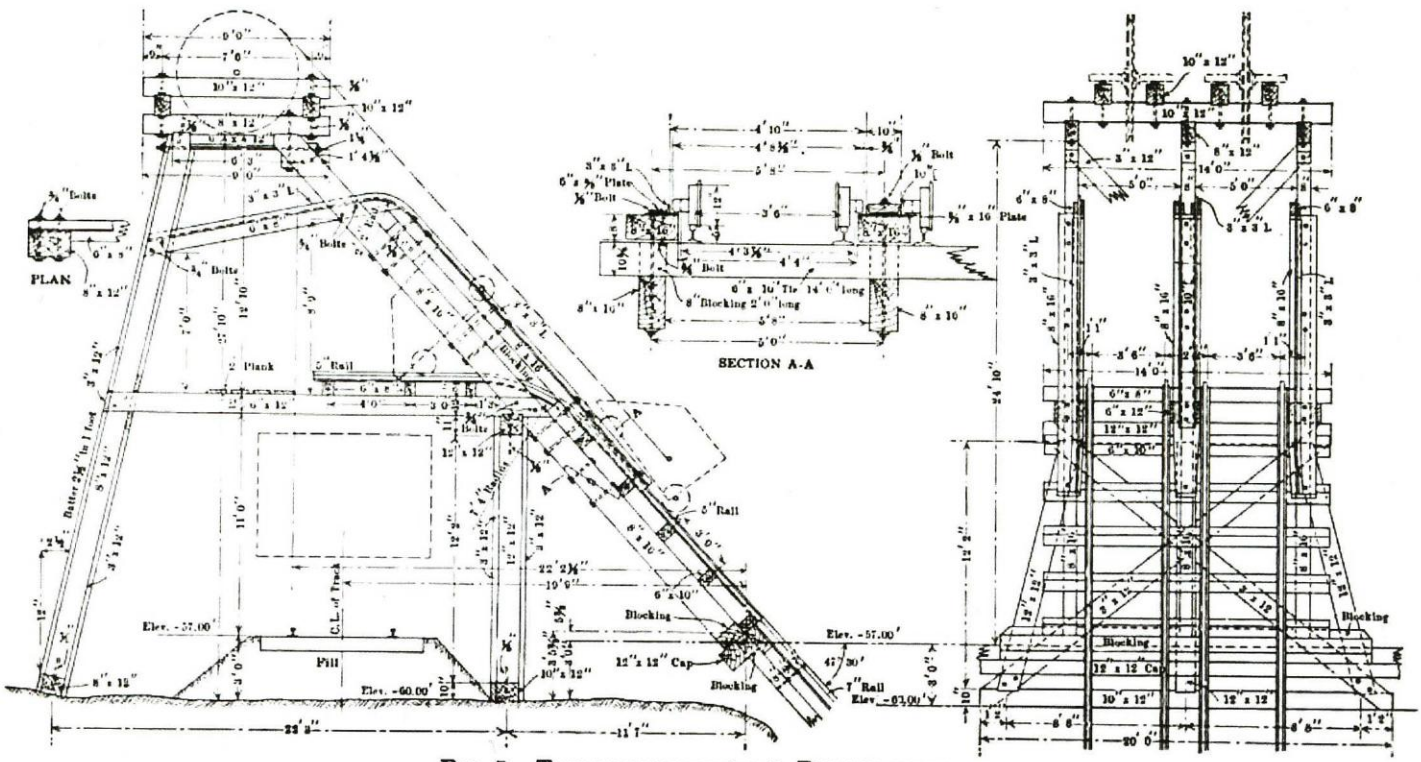


FIG. 5.—TEMPORARY HEADFRAME, PALMER SHAFT.

Roeblingite:
A True Franklin Classic

Roeblingite: White to pale brown, very fine-grained roeblingite (porcelaneous texture) in a granular matrix of franklinite, hendricksite, and willemite. Willemite grains (pale green) embedded in the roeblingite are surrounded by a thin, dark brown layer of pennantite, and then by a 1-mm layer of stark white, pearly prehnite in thin scales. White xonotlite forms thin, patchy films on fracture surfaces. Franklin Mineral Museum specimen FMM-1136; 4.3″ x 4″ x 2.8″ (11 x 10 x 7 cm); *E.R. Verbeek photo.*

Roeblingite: A complete nodule broken open in two places to reveal the roeblingite within. Associated species include hendricksite with minor andradite. Other species in the chalky, fine-grained, tan matrix have not yet been identified, but similar nodules mentioned by Dunn (1995) include "varying amounts of ganophyllite, manganaxinite [now axinite-(Mn)], andradite, xonotlite, hancockite, prehnite, willemite, hardystonite, clinohedrite, and barite." Pete J. Dunn specimen no. G-201, acquired September 2010 by the Franklin Mineral Museum. Specimen is 2″ x 1.6″ x 1.6″ (5 x 4 x 4 cm); *E.R. Verbeek photo.*