

THE PICKING TABLE

JOURNAL OF THE FRANKLIN-OGDENSBURG MINERALOGICAL SOCIETY, INC.



40TH ANNIVERSARY COLOR ISSUE COLLECTORS' STORIES

VOLUME 40

COMBINED ISSUE 1999

\$20.00

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Anyone interested in the minerals, mines, or mining history of the Franklin-Ogdensburg, New Jersey area is invited to join the Franklin-Ogdensburg Mineralogical Society, Inc. Membership includes scheduled meetings, lectures and field trips; as well as a subscription to *The Picking Table*. Dues are \$15 for individual and \$20 for family memberships. Please make check or money order payable to **FOMS**, and send to:

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THE PICKING TABLE

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The Picking Table is published twice each year, in March and September, by the Franklin-Ogdensburg Mineralogical Society, Inc. (FOMS), a non-profit organization.

The Picking Table is the official journal of the FOMS, and publishes articles of interest to the mineralogical community which pertain to the Franklin-Ogdensburg, New Jersey area.

Articles related to the minerals or mines of the district are welcome for publication in *The Picking Table*. Prospective authors should contact the Editors at the address listed above for further information.

Subscription to *The Picking Table* is included with membership in the FOMS. For membership, back-issues, and information on available publications, see the opposite page and the inside back cover.

The views and opinions expressed in *The Picking Table* do not necessarily reflect those of the FOMS, the Editors, or the Editorial Board.



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

THE PICKING TABLE

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1999

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ABOUT THE COVER

FOMS co-founder Ethel Packard "Sunny"
Cook at her favorite collecting spot, the Parker
Dump in Franklin, New Jersey, circa 1960.
"Sunny" Cook Archives.

SPRING 1999 ACTIVITY SCHEDULE

Saturday, March 20, 1999

10:00 A.M. - Noon — F.O.M.S. Micro Group, Franklin Mineral Museum
1:30 - 3:30 P.M. — F.O.M.S. Meeting and Lecture, Franklin Mineral Museum
Rocks from Space, by Derek Yoost and William Kroth

Saturday, April 17, 1999

9:00 - Noon — F.O.M.S. Field Trip — Mine Run Dump, Sterling Hill Mining Museum
This field trip is open to all F.O.M.S. members, but a \$1.00/lb. fee will be charged.
10:00 - Noon — F.O.M.S. Micro Group — Sterling Hill Mining Museum
1:30 - 3:30 P.M. — F.O.M.S. Meeting and Lecture — Franklin Mineral Museum
Macrophotography, by Steven M. Kuitens, D.M.D.
6:30 P.M. - 9:00 P.M. — **Night Collecting on the Mine Run Dump, Sterling Hill, for members of the Sterling Hill Mining Museum Foundation *only*. Fee: \$1.00/lb.

Saturday and Sunday, April 24 and 25, 1999

SPRING SHOW WEEKEND

The Seventh Annual F.O.M.S. Spring Swap-and-Sell, held in conjunction with the **27th Annual N.J.E.S.A. Gem & Mineral Show. Both events are being held at the Robert E. Littell Community Center in Franklin, the F.O.M.S. Swap-and-Sell outside and the N.J.E.S.A. Show inside. The Littell Center is the former Franklin armory, located just south of Route 23 at the east end of town, near the intersection with Route 517.
Swap-and-Sell hours: Saturday, 7:30 A.M. to 6:00 P.M.; Sunday, 9:00 A.M. to 5:00 P.M.
N.J.E.S.A. Show hours: Saturday, 8:30 A.M. to 5:30 P.M.; Sunday, 10 A.M. to 5:00 P.M.
[For Swap-and-Sell information, contact Chet Lemanski after 8:00 P.M. at (609) 893-7366.]

SPECIAL FEATURES:

**Auction Dinner at the Ogdensburg Firehouse, Saturday at 6:00 P.M.:
an all-you-can-eat Italian-style buffet for \$11.00 per person (beverage included),
followed by the **Fourth Annual Sterling Hill Mining Museum Auction at 7:00 P.M.

**Trotter Dump field trip, organized by the Delaware Valley Earth Science Society.
Schedule: Saturday, 9:00 A.M. to 9:30 P.M.; Sunday, 9:00 A.M. to 5:00 P.M.
Fee: \$20 for one day or \$30 for both, plus \$1 per pound except for material collected after dark on Saturday (fee \$2/lb.). For information contact Don Halterman, 1708 Ralston Drive, Mt. Laurel NJ 08054, mrngstar@uscom.com

Sunday, May 2, 1999

Noon — **Miner's Day and Open House at the Franklin Mineral Museum,
including special events and a concert by the famous Franklin Band.

Saturday, May 15, 1999

9:00 A.M. - Noon — F.O.M.S. Field Trip — Buckwheat Dump, Franklin Mineral Museum
10:00 - Noon — Micro Group — Kraissl Hall, Franklin Mineral Museum
1:30 P.M. - 3:30 P.M. — F.O.M.S. Meeting and Lecture — Franklin Mineral Museum
Franklin and Sterling Hill Classics from University Collections, by George Elling

Sunday, May 16, 1999

9:00 A.M. - 3:00 P.M. — F.O.M.S. Field Trip — Lime Crest Quarry, Limecrest Road, Sparta, NJ. This is an invitational field trip hosted by the F.O.M.S., and is open to members of mineral clubs which carry E.F.M.L.S. membership and liability insurance.
Proof of E.F.M.L.S. membership/insurance required. Proper safety gear a must.

Saturday, May 22, 1998

8:00 A.M. - 3:00 P.M. — ****Field trip to the Passaic and Noble Pits, Sterling Hill, for members of the Sterling Hill Mining Museum Foundation only. Fee: \$1.00/lb.**

Saturday, June 4, 1999

****Night collecting at the Buckwheat Dump, Franklin**
Sponsored by the Franklin Mineral Museum
Open to the public – poundage fee charged

Saturday, June 19, 1999

9:00 A.M. - Noon — F.O.M.S. Field Trip — Franklin Quarry, Cork Hill Rd., Franklin
1:30 P.M. - 3:00 P.M. — F.O.M.S. Meeting and Lecture, Franklin Mineral Museum
Hydrothermal Mineral Deposition at Sterling Hill, by Earl Verbeek

Scheduled activities of the F.O.M.S. 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. F.O.M.S. meetings are open to the public, and are held at 1:30 P.M. in Kraissl Hall at the Franklin Mineral Museum, Evans St., Franklin NJ

F.O.M.S. field trips are generally held on the mornings before regular F.O.M.S. meetings. These field trips are open only to F.O.M.S. members aged 13 or older. An exception to the membership requirement is the Lime Crest Quarry field trip, sponsored twice a year by the F.O.M.S.; this is open to members of clubs which have E.F.M.L.S. liability insurance or equivalent coverage. Proof of membership is required for all field trips, as well as proper field trip gear: hard hat, protective goggles or glasses, gloves, and sturdy footwear.

****Activities so marked are not sponsored by the F.O.M.S. but may be of interest to its members; such functions may incur fees and/or require membership in other organizations.**

FALL 1999 ACTIVITY SCHEDULE

Saturday, Sept. 11, 1999

****9:00 A.M. - 3:00 P.M. — Collecting at the Noble and Passaic Pits at Sterling Hill. Restricted to members of the Sterling Hill Mining Museum Foundation. Fee: \$1.00/lb.**

Saturday, September 18, 1999

9:00 A.M. - Noon — FOMS Field Trip — Collecting on the Buckwheat Dump, Franklin.
10:00 - Noon — Micro Group, Kraissl Hall, Franklin Mineral Museum.
1:30 - 3:30 P.M. — FOMS Meeting and Lecture — Franklin Mineral Museum
Cretaceous Amber from Sayreville, N.J., by Derek Yoost

Friday, Saturday, and Sunday, September 24-26, 1999

****43RD ANNUAL FRANKLIN-STERLING GEM & MINERAL SHOW**
Sponsored by the Franklin Mineral Museum.
Franklin Middle School, Washington St., Franklin, N.J.
Hours: Friday, 5:00 P.M. to 9:00 P.M.; Saturday, 9:00 A.M. to 6:00 P.M.;
Sunday, 10:00 A.M. to 5:00 P.M. Admission charged.

The Pond Swap-and-Sell, sponsored by the FOMS, takes place outside on the school grounds, all day Saturday and Sunday. Show admission required.

The FOMS Annual Banquet starts at 6:30 P.M. on Saturday at the Lyceum Hall of Immaculate Conception Church, located at the south end of Franklin, N.J.'s Main St. Tickets are \$13.50 each and may be reserved by calling Steve Misiur at (973) 209-7212 or John Cianciulli at (973) 827-6671.

The meal is an all-you-can-eat Italian buffet, and soda, tea, and coffee are included. BYOB OK. After the banquet there will be a talk by noted mineral adventurer, bon vivant, and raconteur Rock Currier. There will also be an auction for the benefit of the FOMS, with Vandall King as auctioneer. Please bring a good specimen, artifact, book, etc. for this auction! Note that auction items may be earmarked for the benefit of the Color Fund of *The Picking Table*.

Saturday, October 16, 1999

This is *Thomas S. Warren Day*, sponsored jointly by the FOMS, the Franklin Mineral Museum, the Sterling Hill Mining Museum, and the Fluorescent Mineral Society (FMS). In Tom's honor the FOMS will present a fluorescence-theme speaker at its meeting and the Sterling Hill Mining Museum will hold its semi-annual night collecting trip. The Franklin Mineral Museum and its world-famous fluorescent exhibit will be open on a walk-through basis to FOMS and FMS members, and the newly dedicated Warren Museum of Fluorescence at Sterling Hill will also be open to the public. FMS members are welcome as guests at today's functions. (Bring safety gear for field trips!)

9:00 A.M. - Noon — FOMS Field Trip — Collecting on the Mine Run Dump of the Sterling Hill Mining Museum, Ogdensburg. Fee: \$1.00/pound.

****10:00 A.M.** — Dedication of the Thomas S. Warren Museum of Fluorescence, Sterling Hill Mining Museum, Ogdensburg. This event is open to the public, and Mr. Warren is planning to attend. President of Ultra-Violet Products, Inc. (now UVP, Inc.) for most of his life, he is considered the father of fluorescent mineral collecting.

1:30 - 3:30 P.M. — FOMS Meeting and Lecture — Franklin Mineral Museum: *The Chilling Side of Fluorescence*, by Bill Mattison.

****6:30 P.M. - 9:30 P.M.** — Night collecting on the "Mine Run Dump" of the Sterling Hill Mining Museum, Ogdensburg, N.J., for members of the FMS and the Sterling Hill Mining Museum Foundation. Fee: \$1.00/lb. Flashlight required.

Sunday, October 17, 1999

9:00 A.M. - 3:00 P.M. — FOMS Field Trip — Lime Crest Quarry, Limecrest Road, Sparta, N.J. This is an invitational field trip hosted by the FOMS, and is open to members of mineral clubs which carry EFMLS membership and liability insurance. Proof of EFMLS membership/insurance required. Proper safety gear a must.

Saturday, November 6, 1999

****7:00 P.M. - 10:00 P.M.** — Night Dig on the Buckwheat Dump, for the benefit of the Franklin Mineral Museum. Poundage fee charged, reservations suggested.

Saturday, November 20, 1999

9:00 A.M. - Noon — FOMS Field Trip — Franklin Quarry, Cork Hill Rd., Franklin, N.J.

1:30 - 3:30 P.M. — FOMS Meeting and Lecture — Franklin Mineral Museum: Speaker and topic to be announced.

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 memberships in other organizations may be required.**

FROM THE EDITORS' DESK

HAPPY 40th BIRTHDAY, FOMS!

This *Picking Table* marks the 40th anniversary of the Franklin-Ogdensburg Mineralogical Society, Inc. This organization, known to its several hundred members as FOMS (rhymes with "moms"), is the largest of the few locality-centered mineral clubs. Its focus, the Franklin-Sterling Hill mining district, is the most important mineral locality in North America and certainly one of the greatest on planet Earth.

The *Picking Table* concentrates on Franklin and Sterling Hill's minerals, mining, mineral collectors, and mineral collecting. Vol. 1, No. 1, printed in February of 1960, was 10 pages long and printed on a mimeograph. This Volume 40, celebrating four decades of FOMS and appearing just in time for the millennium, is a double issue for the spring and fall seasons of 1999. Its 88 pages are professionally printed in offset by Nadelstein Press in Manhattan, and include not only many black-and-white photos but also eight pages of color. (Paul Olsen of Nadelstein has helped us for several years now and deserves much credit for the final appearance of this publication.)

This is a landmark *Picking Table*, with twice the size and twice the color of any prior issue. It has also been a long time in preparation, but your co-editors believe you will find it worth the wait.

The very first *Picking Table* included a list of 172 validated mineral species from the Franklin-Sterling Hill area. At that time "The List" was maintained by Prof. Clifford Frondel of Harvard. Pete Dunn assumed Frondel's Franklin mantle in the early 1970s, and since then the species total has more than doubled to 350, which remains a world record for a mineral locality*. Maintenance of "The List" has now passed to John Cianciulli of the Franklin Mineral Museum, and the 1999 version is on page 21.

In 1959, when FOMS was born, the Franklin Mine had been closed for five years and the Sterling Hill mine had suspended operations. There was no Franklin Mineral Museum or Sterling Hill Mining Museum, and collecting was pretty much limited to what could be carried off the Buckwheat Dump, or silver-picked from the car trunks and basements of many ex-miners. Luckily there was an energetic group of mineral collectors determined that the fame of Franklin and Sterling Hill should not die. The three founders of FOMS were "Sunny" Cook, Dick Hauck, and John Hendricks, who bolted together from the fledgling Franklin Mineralogical Association started by Gerry Navratil in 1958. The survivor of that intrepid trio sketches in their story on pages 60-61.

The story of FOMS has not been told: how its members have always supported the Franklin show with manpower, exhibits, and the outdoor swap, "The Pond;" how they helped the Franklin Kiwanis Club build the Franklin Mineral Museum, and then filled it with minerals; how they created a field trip program which still has access to local collecting sites, and boasts an unblemished forty-year safety record; how they sponsored symposia on the local minerals and orebodies, reprinted Palache's USGS PP180, and now dis-

*Bill Henderson's column "Microminerals" on p. 492 of the Sept.-Oct. 1998 *Mineralogical Record* mentioned the Mont Saint-Hilaire species total as "about 364," but according to Les Horvath this includes unknowns, and MSH confirmed species still number fewer than 350.

tribute Pete Dunn's monograph; how a decade ago they provided volunteers to help bring the Sterling Hill Mining Museum to life, and how most recently, in 1999, they helped that museum and the New Jersey Earth Science Association realize the dream of a spring show in Franklin.

It's both wonderful and lucky to have been in the right place at the right time, doing the right thing.

IN THIS ISSUE

First: President Kuitens' message, news from the local museums, field trip notes, and coverage of the 1998 Franklin show and the NJESA show this spring. Then Cianciulli on "The List," more Dunn bibliography, Jaszczak and Hanna on graphite, and Wilbur on cuspidine, with additional news of Franklin cuspidine and French znuclite. Finally, the twin triumphs of this issue: 51 (count 'em) "Collectors' Stories," and 8 pages of color. When you see these you will understand why this issue took a little longer than usual.

Most FOMS members are mineral collectors, whose experiences at Franklin and Sterling Hill are rarely told in this or any other publication. Earlier this year, when your co-editors asked these members for their stories, evidently we had asked for something they *could* write about. This 40th Anniversary *Picking Table* contains those experiences, and is dedicated to all Franklin collectors, starting with the Lenni-Lenape who prowled the outcrops and took zincite back to their lodges for face-paint. Here is the essence of the Franklin collecting experience. Members of FOMS, this is truly your *Picking Table* at last.

The color section is pure "Eye Candy:" many of the best photos ever taken of the most eye-catching Franklin-Sterling Hill mineral species and specimens. Gary Grenier took the photos; he and Peter Chin made the selection. Your editors are grateful to Gary for his permission to use these examples of his craft, which present the spectacular aspects of Franklin and Sterling Hill more eloquently than reams of prose.

THE COLOR FUND

Wonderful as they may be to look at, color photos are very expensive to print. There is no room for that cost in the FOMS budget, and *The Picking Table* can only include color when it is paid for by separate donations: hence the FOMS Color Fund. For this 40th anniversary issue, Color Fund support has come not only as checks from dozens of donors, but also as specimens and memorabilia donated for the FOMS auction at its annual banquet. Even so, more support is needed. If you enjoy and approve of color in this *Picking Table*, please help by making out a check to FOMS and marking it "Color Fund."

The editors offer their heartfelt thanks to FOMS members for their contributions, and to the FOMS leadership for its courage in authorizing color for this issue.

This is the list of contributors to the FOMS Color Fund since the fall of 1998, as supplied by FOMS treasurer John Cianciulli: Greg Anderson, Anonymous, John Bauer, Jack Baum, Larry Berger, Bob Boymistruk, Bill Butkowski, Jim Chenard, Peter Chin, John Cianciulli, Ron DeBlois, Carol Durham, John Ebner, George Elling, Franklin and Lavina Ellis, Farrah Fawcett, Jim and Selena Fowler, Al Grazevich, Richard and Elna Hauck, Kurt Hennig, Robert Horn, Terry

continued on page 87

MESSAGE FROM THE PRESIDENT

Steven M. Kuitens, D.M.D.
14 Fox Hollow Trail
Bernardsville NJ 07924

Dear F.O.M.S. members,

This is a good time to reflect on the past year and look forward to the challenges and adventures of the new year. Being new to the role of president, I look forward to getting to know more of my fellow F.O.M.S. members, and helping people get involved in our activities. I hope as you read this you will be motivated to join in when a helping hand is needed on a project, or be inspired to do something more than sit on the sidelines as an armchair coach or critic. So much of our society is geared to being passive that we would rather watch something than actually participate in it. Virtual reality may have its place in entertainment but it does not hold superiority over the real experiences of life. Witness the delight of one of our senior collectors literally jumping for joy at having found a long-sought-after mineral species...he collected it himself! The joy of seeing a knowledgeable member sharing his knowledge with a novice collector...right in the middle of an active open-house collecting trip!! You see, I am very grateful that people took time, energy, and resources to help me learn and enjoy a new hobby as a teenager just getting started. Many people over the years helped me grow not just by sharing knowledge but also by doing sometimes thankless jobs so that I might enjoy reading informative articles or books, or going to a mineral show, a club or society meeting, a seminar, a symposium.

Many relatively new collectors have asked me, "How did you learn about minerals?" As already mentioned, I had a lot of patient mentors and read everything I could get my hands on concerning minerals and mineralogy, but what I forgot to include is the many fine exhibits, both public and private, that I was able to study up close and in the hand. This is still one of my favorite

ways to learn: by directly studying a specimen that has been identified and labeled correctly. Taking this a step further, the use of a low-power microscope to examine the crystal habits and the associated mineral species has proved very enlightening. This approach, that of studying a mineral in conjunction with its associated minerals and host rock, works for micros, macros, and even fluorescent specimens. The big point here is that both the novice and the advanced collector need to be able to study accurately labeled exhibits and collections of minerals. To advance this concept requires the efforts of individuals and institutions to present to the public attractive displays of properly identified and labeled mineral specimens. Therefore I want to encourage strongly our many advanced collectors to put together displays for the spring NJESA show and the fall Franklin show. We need your creative efforts to put together meaningful and educational exhibits at our shows. I look forward to seeing more of our members join in what are surely the brightest mineralogical highlights of the F.O.M.S. year.

Without active, participating, unselfish members the F.O.M.S. will fade and decline and so will the hobby we enjoy. There is room for almost everyone to participate, even if you can't swing a 16-pound sledgehammer. Our society needs your creativity, your intellect, your ability to reach out. Whether your interests are limited to collecting minerals, or include history, publications, public relations, photography, teaching, learning, or sharing, please look for opportunities to get involved. This year give back some time and effort, encourage a new member, help make something happen. When opportunities to serve arise, take up the challenge and enjoy the rewards from being involved in your F.O.M.S.



LOCAL NOTES

NEWS FROM THE FRANKLIN MINERAL MUSEUM

John Cianciulli, Assistant Curator
Franklin Mineral Museum
P.O. Box 54
Franklin NJ 07461

Local Collections

The Franklin Mineral Museum is experiencing much change and growth on all fronts, from the new gift shop to curation of collections and the creation of new and better exhibits. The big story is the consolidation and reorganization of the local collections, i.e. collections of specimens from the defined "Franklin-Sterling Hill Area." The process is tedious and ongoing. The fruits of our labor can be seen in our Local Room. Minerals are organized and displayed according to species, highlighting the primary ore minerals. Not so obvious is the process of reorganization going on behind the scenes. Specimens not displayed have been properly cataloged and are being systematically stored in specimen drawers in the archive room. This is our reference collection. More than 4000 specimens have been added to our

database during 1998. Particular species can be located through our database to facilitate research or satisfy collector curiosity. Plans are underway to reorganize our fluorescent collection.

Welsh Collection

One of the Franklin Mineral Museum's greatest assets is the Welsh collection. This collection has three themes: Indian artifacts, fossils, and worldwide minerals. These collections comprise more than 7000 specimens and artifacts. The curatorial department is presently entering these holdings into a database that will be used to create case maps to help find species on display in Welsh Hall. The database will also be helpful for upgrading the collection in the future.

Archive

The archive is constantly growing. Retired collectors and local folks from time to time will offer an old photo, news clipping, or artifact. This year's most significant addition to the archive is the collection of Dr. Pete J. Dunn's color slides. For your information, the museum has a complete set of *American Mineralogist* and *Mineralogical Record*. These and other publi-

cations are accessible for research purposes by appointment. At no time will these references leave the archive.

Research and Education

Some very exciting things have been happening in our research endeavors. Most notable is the discovery of one and possibly more distinct assemblages of cuspidine. More to come on this in *The Picking Table*. There also seems to be a variety of "not-so-hot" rocks turning up on the Buckwheat Dump. Jim Rumrill leads the pack in collecting "hot stuff" on the Buckwheat. Jim has brought to our attention tiny pyramidal terminated lath-like dark-brown to black crystals in pegmatite that resemble brannerite or a brannerite-series mineral. Efforts are being made to analyze this unknown. Jim has also found some canary-yellow sprays on pegmatite which closely resemble uranophane. About a year ago Anthony DenUyl collected some yellow coatings on weathered pegmatite that fluoresce green under short wave UV and are moderately radioactive. Because of the paucity of material it was very difficult to get enough for study. I was able to determine that these crusts consist of three separate components: serpentine, barite, and extremely tiny yellow square-to-rectangular plates. The serpentine was the matrix for fragments of barite (determined optically) and the yellow plates. Given the obtained optical data and the mixture assemblage, the yellow plates fit the description of novacekite, which is in the autunite group and has a formula of $Mg(UO_2)_2(AsO_4)_2 \cdot 12H_2O$. Unfortunately this material is of very poor quality. Hopefully someone will find samples good enough for further investigation and possible confirmation. Other significant finds include John Corsello and son's unusual yellow-fluorescing calcite, donated to the museum. Rich Bieling and Joe Klitsch found some manganoan brucite as veinlets in lean ore. More recently Joe Klitsch discovered anatase crystals in monazite-bearing dolomite. These are just some of the highlights of mineral identification activity here at the museum.

The Franklin Mineral Museum will continue to oversee "The List" of mineral species found within the defined "Franklin-Sterling Hill Area." Any proposed additions or deletions to "The List" should be directed to John Cianciulli, Assistant Curator, in writing.

Other Exhibits

Kraissl Hall has been completely renovated. Included in those renovations was the installation of custom-built wall cases. So far we have placed two major exhibits in these cases: one of antique fluorescent lamps and iron-spark units, and one of local Native American stone tools from the Mary Weslowski collection. Many of these stone tools were collected in this century on the Weslowski farm in Vernon, NJ.

New Collecting Areas

At the 1999 Franklin-Sterling Gem & Mineral Show, the Franklin Mineral Museum will dedicate and open two new collecting areas near the Mine Replica building. They are at the same level as the museum buildings and are designed for easy access by small children and the handicapped. One of these "mini-dumps" contains worldwide minerals and is ideal for beginning collectors. The other has a high-grade mix of selected specimens from Franklin and the Sterling Hill Mine. Admission to either area requires special permission and the payment of special fees for poundage.

By making these special collecting areas available to the public, the Franklin Mineral Museum hopes to provide the thrill

of collecting for the very young, the old and infirm, the handicapped, and anyone else who finds the walk down to the Buckwheat Dump difficult or inadvisable. The quality of local specimens on the high-grade dump also makes it an attractive destination for experienced collectors.

[Editors' Note: most of the above article is a slightly edited version of the "Curator's Message" from the Franklin Mineral Museum Newsletter, Vol. 1, No. 1, p. 2., printed here with the approval of the author and permission of the FMMN editor, Dr. Steven M. Kuitens.]

NEWS FROM STERLING HILL

Joe Kaiser
40 Castlewood Trail
Sparta NJ 07871

Spring 1997

Additions have been made to the lamp room inside the Sterling Hill adit with a 1950s-style Edison charging rack complete with original Edison miners' lamps. This rack is identical to those installed in this room in the 1950s. There is also a newer Kohler heat charging rack complete with 60 miners lamps. Robert Hauck was able to locate and obtain an intact lamp room full of 1930s- and 1940s-style Edison miners lamps in a coal mine in Shamokin, Pennsylvania. These will be installed in the mill ruins in the old lamp room there.

Work has been progressing on the Geo-Tech center, but a little slower than expected. Plans are developing for a worldwide longwave and shortwave fluorescent collection to be displayed there. A few items are on hand or promised, such as a 300-pound boulder of Canadian scapolite and a large example of Nevada hydrozincite. It has been suggested that this display area be named in honor of Tom Warren – the godfather of the fluorescent mineral hobby. If you have any comments or suggestions, please forward them to the museum for consideration.

The Mine Run Dump has been enhanced by additions of large amounts of material from the East Limb outcrop being worked by miner John Kolic. Much of this looks like ore from Franklin, as it consists of gemmy yellow and green willemite with franklinite and zincite. There are also grains and masses of brown tephroite, and the ore is often coated with hydrozincite.

There will be collecting in the Noble and Passaic Pits on May 23, for members of the Sterling Hill Mining Museum Foundation only.

Fall 1997

The Sterling Hill Mining Museum and the Franklin Mineral Museum have started joint advertising to bring more summer visitors to the area. This could be a boost for both museums and the Franklin-Sterling Gem & Mineral Show in September. The spring 1999 show – a joint effort of the New Jersey Earth Science Association, Sterling Hill Mining Museum, and FOMS – was very successful and will be expanding in the spring of 2000.

The Merck Geo-Tech Center is moving along. A cement cap has sealed the roof, and doors and windows are in. The Thomas S. Warren Museum of Fluorescence will be dedicated on Oct. 16, 1999. Everyone is invited to see the progress on the new center.

In cooperation with the Franklin Mineral Museum's September show, the Sterling Hill Mining Museum will have a collecting day at the Passaic and Noble Pits from 9:00 A.M. to 3:00 P.M. on Sunday, Sept. 26. This will be open to the public.

FIELD TRIP REPORT

Steven M. Kuitens, D.M.D.

14 Fox Hollow Trail
Bernardsville NJ 07924

NOBLE AND PASSAIC PITTS, STERLING HILL
Sterling Hill Mining Museum Foundation Field Trip
Open to Foundation Members Only
Poundage Fee Charged
Sept. 12, 1998

This was a mild, cloudy day in early autumn, which brought a medium-sized crew to poke, pry, and dig along the saddle between the Noble and Passaic Pits. This area has always been known for its clay-filled "pockets" where ages of weathering have removed the calcite that enclosed crystals of augite ("jeffersonite"), franklinite, microcline, scapolite, fluorapatite, and other minerals. The odds are that this is what the collectors on the cover of last spring's *Picking Table* were looking for in 1966. However, instead of having to climb in single file up a narrow path punctuated by boulders and fallen trees, we dilettantes of the nineties stroll to the saddle via a muddy boulevard recently created by "Bulldozer Bob" Hauck. His work has exposed a lot of material, from huge boulders of nearly unsledgeable scapolite to the wollastonite in the hanging wall of the West Vein to marble outcrops with suspiciously green-fluorescing crusts. Add to this the occasional swatch of galena, often weathered, and the promise of other vugs here and there, and it can be truly said that there is something in this area to satisfy every seasoned collector of our local minerals. However, almost everything collectable requires vigilance, persistence, and extra gear: a bucket and brush for the muddy large crystals, a good hand-lens (and later a microscope) for the smaller, cleaner crystals, or a UV lamp and portable darkroom for the wollastonite and scapolite.



Franklinite crystals and augite crystal group (on right, 12 cm+) from the Noble Pit at Sterling Hill, freshly dug by the team of Martin Pitts and Harold Moritz, 9-12-98.

Richard Bostwick photo

One determined crew working just off Bob's Boulevard on the Noble Pit side of the saddle got into a "pocket" area which yielded some fairly large, clean crystals of franklinite, augite, scapolite, and so on. It should be noted that in this context "clean" means "sharp and well-formed," not pristine or brightly colored as might be the case in a pegmatite pocket. These Sterling Hill classics are often textbook examples of euhedral crystals, but they emerge from the ground as dark brown mudballs, and their color does not improve much even after repeated scrubblings reveal their crystal form and identity.

Across the Boulevard much wollastonite lay in boulders sprawled about and ready for hammering. While the material found here is rarely as rich or brilliantly fluorescent as the best wollastonite found on the 340 level of the Sterling Mine in the early 1990s, it is well worth collecting. Weathering has produced some very interesting fluorescent effects and some specimens were seen with three, four, even five fluorescent hues. Though the calcite matrix is generally nonfluorescent, here and there are patches that are presumably manganese-rich and certainly red-fluorescing. Under the shortwave UV lamp, the familiar yellow fluorescence of wollastonite grains is frequently overlain or augmented by coatings which fluoresce bright green, as well as varied shades of off-white, pale yellow, blue, and even violet. Most of these coatings exhibit some phosphorescence. The green fluorescence strongly suggests the presence of the uranyl ion, known to occur in the Sterling Hill orebody as the activator of fluorescence in monohydrocalcite, and as a major component of secondary uranium minerals like zncalcite. However, no analytical work has been done on this material from the Passaic-Noble saddle, even fluorometry to establish the presence of the uranyl ion, much less elemental or structural analysis to determine the mineral species involved. The notorious green-fluorescing coatings on nonfluorescent calcite, first collected from outcrops on the east side of the saddle a year or two ago, are more or less in the same (not analyzed) category.

Ten yards or so off the saddle on the Passaic side were the aforementioned scapolite clunkers. One of our more determined and muscular collectors has splintered at least one sledgehammer handle here, and quite a few of the specimens seen were flakes ablated during the forcible rounding-off of the scapolite masses. As with the wollastonite found nearby, most of the best specimen material recovered here was notably fluorescent under shortwave UV. Most abundant were pieces (some quite large) of mixed calcite and pale-gray scapolite. The scapolite fluoresces a cherry-red of moderate intensity, which contrasts nicely with the brighter orange-red fluorescence of calcite, and many of these specimens are attractive. Some also include microcline, which in two pieces examined closely has a weak red fluorescence but is selectively overlain by a pale-blue-fluorescing coating. Another specimen of scapolite and calcite includes hydrozincite coatings and some cm-sized prisms of dark bluish-green fluorapatite that fluoresces weak orange.

Worthy of mention is a specimen of similar scapolite found at the same spot during the spring '98 field trip. Once its collector examined it carefully at home, several unusual associated minerals were noticed, including grains several mm across whose appearance matches that of thorite var. orangite. These grains examined under the shortwave UV lamp have a halo of "uranium-green" fluorescence. At the center of one grain is a vug lined with a transparent mineral in cubic crystals, probably fluorite; on this is a small cluster (less than 1 mm across) of bright greenish-yellow plates. The plates fluoresce a vivid green and are almost certainly crystals of a secondary uranium mineral, its



Excavating at the saddle, Noble Pit, Sterling Hill, 9-12-98. L. to R.: Martin Pitts, Harold Moritz, an anonymous collector, and Rich Bostwick. Richard Bostwick photo

identity undetermined. Also present in the scapolite are radial sprays of a black mineral, probably a species of tourmaline; scattered grains of red-fluorescing calcite and orange-fluorescing wollastonite; and one 4mm grain of a whitish-fluorescing mineral that looks like barite. Other collectors who had kept pieces from that particular boulder were questioned, but none of them had noticed the unusual minerals present, and no more pieces of this uranium-bearing assemblage could be found. However, on this occasion one of the scapolite boulders yielded masses of gray scapolite associated with dark-green pyroxene, red-fluorescing calcite, and a glassy, dark-grayish-green mineral with very bright yellow fluorescence under shortwave UV. In one area the latter mineral displays partial faces of an octahedral crystal and is probably powellite or molybdenite scheelite.

Speculative identification is not the preferred *modus operandi* of this publication, but we wish to emphasize that the Sterling Hill surface is yielding some very odd things to collectors. Whatever you find there should be given close scrutiny before tossing or pulverizing it.

STERLING HILL MINE RUN DUMP Sept. 19, 1998

Just when your average collector would have thought there was nothing new on the Mine Run Dump, a fresh load of material was deposited. This came from work on the East Vein exposure. The majority of this material consisted of very rich willemite/zincite ore that was noticeably poor in calcite, very heavy, and often quite colorful. The willemite was greenish-yellow and glassy, and was accompanied by dark ruby-red zincite plates and masses; no willemite crystals have been found in this association to date. Some of the gemmier large willemite grains (1-2 cm) had

a zoned fluorescence, with the cores fluorescing more brightly than the rims.

The next most notable East Vein material had large masses (up to 12 cm across) of brown tephroite containing exsolution willemite. Better specimens had intriguing patterns of layered and crosshatched green lines under the UV lamp, sometimes with a red-fluorescing rind of calcite surrounding the tephroite.

Numerous pieces of rich white hydrozincite coating ore were seen, but oddly enough only a few of these fluoresced brightly enough to be kept by fanciers of fluorescence. Several veins of yellow secondary zincite were observed crosscutting rich dark-red blocks of ore; I do not know if any of these zincite veins fluoresced.

Some of this dense East Vein ore has produced 2-5 cm franklinite crystals at its contacts with calcite; these crystals were sharp but usually had many small fractures. One specimen of ore showed a slip surface partly covered with brilliant hetaerolite microcrystals.

LIME CREST QUARRY Oct. 18, 1998

A pleasant day near the peak of fall foliage set the stage for a good turnout at the quarry. Along with the fine weather there was something else going on throughout the day, and that was teaching! Yes, even on a field trip, knowledgeable people were taking time out to instruct others on the geology and minerals of the quarry, as well as how to collect specimens in what at first glance is an overwhelmingly white, uniform, and monotonous host rock.

A few reminders of past quarry finds turned up, including one hand-sized specimen of deep blue corundum in crude 1-2 cm



Ed Wilk, FOMS Field Trip Chairman, sledging scapolite at Lime Crest, 5-16-99. Richard Bostwick photo

A few reminders of past quarry finds turned up, including one hand-sized specimen of deep blue corundum in crude 1-2 cm crystal cross-sections reminiscent of finds in the mid-1960s. This piece was heavily weathered after apparently having been exposed to the elements for thirty-plus years. There were also leftovers from the Mississippi-Valley-Type find of several years ago, several large dolomite boulders containing pockets of 1-4 cm crystals of barite, calcite, and quartz. Small (up to 1 cm across) transparent golden-yellow crystals of barite were collected, quite different from the usual opaque white barite typical of the MVT assemblage here.

On the floor of the quarry many large sphene crystals were found in pegmatite. The largest crystals were 1 x 5 cm in size, and some had transparent areas with bright internal reflections showing off their golden-brown color. Numerous small to medium-sized spinel crystals, as large as 1.5 cm and generally dark purple in color, came from boulders of compact white marble which also held isolated orange-colored crystals of norbergite as much as 4 cm long. (The trick here is to retrieve these crystals intact as you split up the marble blocks.) Several diopside crystals were found, the largest being 2 x 4 cm in size. Associated with these crystals was pyrrhotite in mostly rectangular cross-sections, including one rare complete 1 x 2 cm bar-shaped crystal. Several finds of uvite crystals were noted, some as dark brown prisms as large as 2 x 6 cm in a greenish matrix which appeared to be altered massive scapolite. Other uvite crystals took the form of transparent brown needles, 1-4 mm in diameter and 3-4 cm long, in a matrix of milky quartz rather than the usual marble.

Scapolite showed up in numerous areas throughout the quarry in different colors: green, yellow-green, blue-green, and off-white. The latter occurred as masses of crystals as large as 4 x 12 cm and in veins as much as 5 cm thick. Some of this pale-colored scapolite fluoresced red of medium intensity in short-wave UV, while a few pieces fluoresced bluish-white. Pseudomorphs of scapolite crystals were widespread.

A peculiar bright-pink grossular was found on the quarry floor, in pieces of altered marble from just above the pegmatite zone. Most often it was mixed with green serpentine, actinolite, and scapolite. However, one distinctive occurrence had subhedral grossular crystals in a layered structure 6 cm thick, associated with brown dendrites and two unidentified minerals: a colorless unknown that fluoresced a moderately intense green under shortwave UV, and small black grains of a radioactive unknown.

All in all most people went home considerably heavier than when they entered the quarry.

FIRST FALL NIGHT DIG ON THE BUCKWHEAT DUMP

Franklin Mineral Museum Field Trip

Open to the Public

Poundage Fee Charged

Nov. 6, 1998

The night was clear, crisp, and calm with temperatures in the forties, a pleasant change from a cold windy day with opaque skies. About forty participants showed up to enjoy the nocturnal hunt for fluorescent mineral specimens. Some came as families, others singly, and several formed small groups taking advantage of whoever had the brightest portable shortwave UV lamp. Everyone I watched had a great time clambering over the dump with twinkling stars overhead and shortwave UV lamps below. Most learned that you had to select a slower pace at night to maintain your footing. But what a surprise when the drab gray and black boulders seen by daylight jumped to life in various shades of red and green. Everyone went home with something colorful they had personally collected. Many found various combinations of willemite and calcite, and willemite with blue-fluorescing sphalerite. There were rich hydrozincite veins on calcite, fluorescing blue and red together under shortwave UV, and a spectacular twenty-pound block of very rich sphalerite fluorescing blue, pink, and orange. Minerals of the marble were also in evidence: norbergite and diopside combinations, fluorescing yellow and blue under shortwave UV, and fluorborite which fluoresced creamy pale yellow.

The most unusual find of the evening was petedunnite, found in two large pieces, the larger 8 1/4 x 5 x 2 1/4 inches in size; the two pieces were found separated by about 20 yards but matched exactly. The willemite in the rock had an unusual tight cauliflower-like pattern with some red-fluorescent calcite and nonfluorescent quartz. Needless to say we were all surprised when these two specimens were observed in visible light and revealed to be a rather rare mineral species, identical to those in the museum. The excitement level was quite high that evening during the checkout and weigh-in time with people showing off their mineral finds. This should be enough to whet any new collector's appetite for more! The next night dig will be the second annual spring dig on June 4, 1999, and our second fall dig will be on November 6, 1999. See you there!

[This report on the Buckwheat Night Dig is a slightly edited version of Dr. Kuitens' article in the *Franklin Mineral Museum Newsletter*, Vol. 1, No. 1, p. 3. It appears here with his approval.]

FRANKLIN QUARRY

Nov. 21, 1998

A brisk sunny day with no ice to contend with made the collecting trip easier, but the general lack of new quarrying made for a different type of challenge. O.K., you had to look harder! The north wall to the right of the quarry entrance was almost cleared of freshly blasted rock, and the new pit was filled with water. The quarry owners are concentrating on Lime Crest, not their Franklin quarry, and as a result only a small amount of change (i.e. fresh material) was evident. The adherence to safety in dress and conduct by FOMS members was appreciated and noted by the new quarry manager during our field trip, and it was a pleasure to be able to thank him personally for allowing continued FOMS field trips here.

With some diligent searching a number of modified cubic pyrite crystals were recovered intact, the largest about 2 x 2 cm. Several larger crystals were seen in-situ but did not survive the extraction process due to many stress fractures from previous quarry operations. A few small arsenopyrite crystals, the largest 1.5 cm long, were found in the vicinity of contacts between the marble and masses of green amphibole. Pods of bright green diopside/"edenite" were taken but I was not told if they fluoresced. Many collectors found bright green equant crystals of diopside, some 2 cm across, isolated in the marble; these fluoresced bright blue under shortwave UV. Various combinations of diopside, tremolite, and norbergite were found including a few classic "bullseye" pieces. One remarkable meter-sized boulder contained a vein of very pale-colored, bright-yellow-fluorescing norbergite with some diopside.

The last scraps of pale blue margarite, in the form of platy masses 1-3 cm across, were vacuumed up near the south wall of the quarry and distributed to several collectors who had missed this bonanza previously.

As a final note, the use of a portable darkroom-type bag proved very useful at this site for collectors trying to sort out pale-colored keepers from the abundant "leaverite."

BUCKWHEAT DUMP

May 15, 1999

Something old, something new, that seems to be the case for collecting on the Buckwheat. Several collectors attacked the vuggy dolomite boulders to find some really well-crystallized micros and macros of quartz and sphalerite. Calcite was found here also as scalenohedrons and pseudocubic crystals up to 1 cm across.

Several nice pieces of green willemite in calcite and in a very hard yellow andradite matrix were seen this day. Sphalerite in veins up to 4 cm wide with hydrozincite made the fluorescent collectors quite happy. Two pieces of hardystonite with calcite were found on the wooded south edge of the dump. The most unusual find was a large 20-Kg boulder of lennilenapeite with white willemite crystals in a matrix of serpentinized calcite. Collectors who took the time to work the dark granular-looking boulders found some rich veins with mixed fluorite, sphalerite, willemite, and fluorapatite; these have a nice four-color response to short-wave UV.



Steve Misiur with his piece of "discrete 1-cm crystals" of graphite as described below. Lime Crest Quarry, 5-16-99.

Richard Bostwick photo

LIME CREST QUARRY

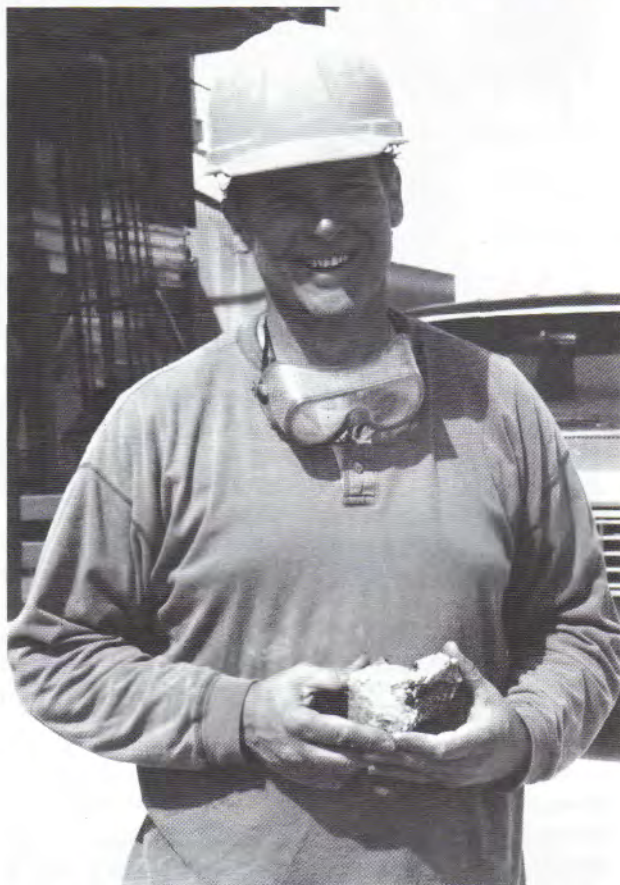
May 16, 1999

A tremendous amount of new work in several areas produced lots of fresh material for rockhounds to search through, but the finds were rather widespread. The upper left bench produced more of the bright-blue-fluorescing (under short-wave UV) scapolite, while on the second bench pale-gray veins of scapolite, 3 to 6 cm wide and bordered by thin rims of phlogopite, yielded an orange-yellow fluorescent response. At least two sharply formed scapolite crystals up to 6 cm in length were found, but these are of a moderately dark green color and do not fluoresce.

Several collectors put a lot of energy into several small pockets in a dolomitic rock, extracting crystals of barite, calcite, and quartz as long as 2 cm. Pyrite showed up as single crystals 1 x 2 cm, and as thin veins yielding specimens with 10 x 10 cm coverage. Small but sharply crystallized spinel and phlogopite crystals occurred in a very tightly crystallized marble; the spinels this day were very dark, almost black, and about 1 cm in average size. Graphite was found as discrete 1-cm crystals oriented in sheet-like planes in the marble, yielding good specimens 10 x 20 cm in size.

Several occurrences of blue corundum were encountered, one in a greenish altered mica on a slip face of a huge 2 x 3 meter boulder, and another in a more typical pod-like structure of mica. Both these finds yielded small (1 cm) crystals, but the last corundum find was very different. This produced dark purple crystals with black coatings of graphite, one specimen revealing a complex 4 x 6 cm crystal in the shape of an abstract horse's head. This corundum fluoresces a bright crimson in long-wave

UV. The matrix for this find was a meter-wide vein of coarsely crystallized phlogopite with abundant masses of graphite and some scattered rutile crystals up to 5 mm long. One other feature, right through the middle of this corundum-bearing zone, was a slip face of of bright green serpentine. This find was on the periphery of the recently blasted mud zone on the second bench.



Above: Joe Kaiser with "the finest garnet crystal to have come out of Lime Crest in the past ten years!"

Below: Joe Kaiser's 1.5 cm almandine from the Lime Crest Quarry, 5-16-99. Tema Hecht photos



The most spectacular find of the day was a 1.5 cm dark reddish brown almandine garnet crystal of textbook dodecahedral form. The matrix is an altered pale green marble from near a gneissic zone on the second bench. To my knowledge this is the finest garnet crystal to have come out of Lime Crest in the past ten years! Almandine is often seen here in large pods in the gneiss, and this day a large 3 x 3 meter boulder was found covered with anhedral almandine masses.

Some collectors worked the pegmatite for scapolite masses and small but sharp sphene crystals of gemmy brown color and lustrous faces, the largest of these crystals being 1 x 3 cm. Once again, many thanks are due to the cooperation of the quarry owners in allowing open-house collecting to the FOMS and its many guests.

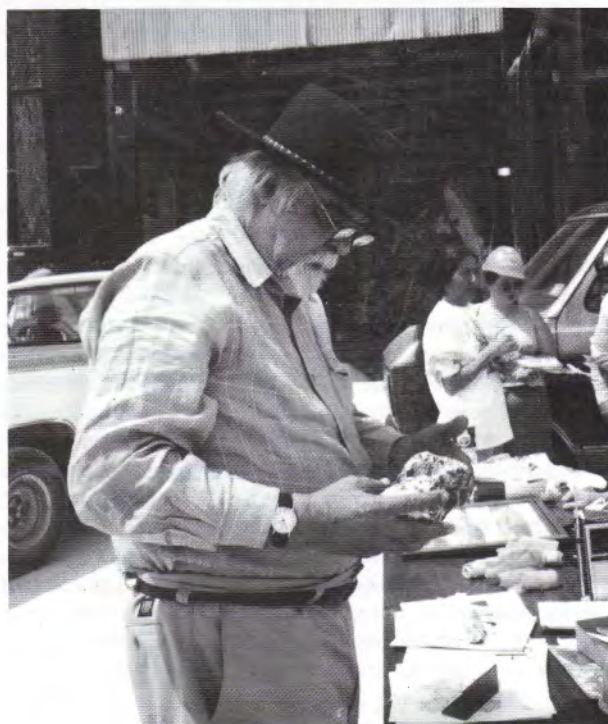
FRANKLIN QUARRY

June 19, 1999

While only one fresh blast had occurred here since our last field trip, persevering collectors were rewarded with some fine specimens. Numerous small pyrite crystals, the largest 1.5 cm in size, were liberated from the marble; most were modified cubes and octahedra, but a few small bar-shaped crystals were seen.

It seemed that bright green crystals of diopside, though small, were widespread, with many people taking pieces home. These crystals fluoresce bright blue in short-wave UV. Many large dark-colored tremolite crystals and sprays were seen, the largest 1 x 8 cm. Several masses of diopside, norbergite, and pale purple fluorite were removed with a bit of effort. The best norbergite seen today was a bright yellow band about 5 cm wide, with a sinusoidal wave-like shape.

At least three collectors went home with well-crystallized uvite specimens containing pale green to pale olive crystals as large as 3 cm across. One large pod of purple fluorite was seen in a dolomite boulder, and near this a fine 2-cm quartz crystal was recovered. A nice surprise was a 1.5-cm crystal of *pink* spinel!



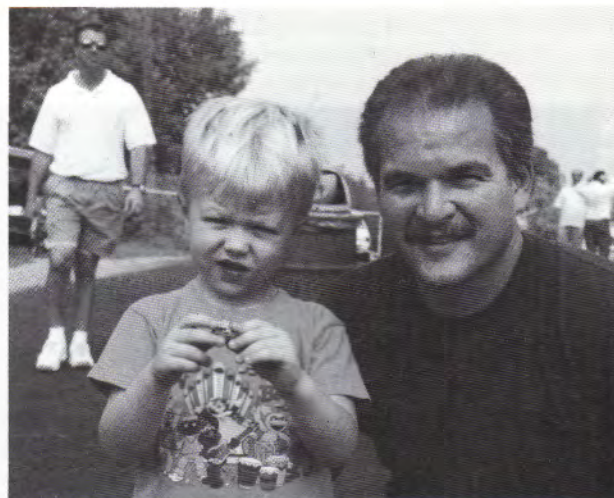
Dr. Paulus Moore "unscrewing the inscrutable" at the Lime Crest Quarry, 5-16-99. Richard Bostwick photo

THE PICKING TABLE

**42ND ANNUAL FRANKLIN-STERLING GEM & MINERAL SHOW
SEPTEMBER 25-27, 1998**



Anne Wronka and Nina Kulsar, perennial guardians of the gate and sellers of tickets. Anne hand-decorated Nina's shirt.
Tema Hecht photo



Little Billy's first pyrite. Bill Fithian and son at the FOMS Swap-and-Sell.
Tema Hecht photo



Franklin old-timer Anna Elekes relaxes (and remembers) in front of the Franklin Mineral Museum.
Tema Hecht photo



Mark Leger, now known as "The Agate King," behind his table at the FOMS Swap-and-Sell, hanging out with friends.
Richard Bostwick photo



Doreen Longo, Manager of the Franklin Mineral Museum, on duty during the show.
Tema Hecht photo

1998 FOMS BANQUET AND AUCTION
SEPTEMBER 26, 1998



Dr. John S. White defends true scholarship and the integrity of mineralogy in an era of carelessness and ignorance in publishing (among other things). Tema Hecht photo



"Sold to the bewildered tourist in the loud shirt!" Auctioneering wizard Vandall King demonstrates another use for traffic cones. Richard Bostwick photo



The Fluorescent Mineral Society is devoted to increasing the knowledge of its members in the luminescence of minerals, with an emphasis on fluorescence and phosphorescence. It promotes increased knowledge with emphasis on collecting, displaying, studying and understanding. It publishes a bi-monthly newsletter, the *U.V. Waves* and an annual or biennial periodical, *The Journal of the Fluorescent Mineral Society*.

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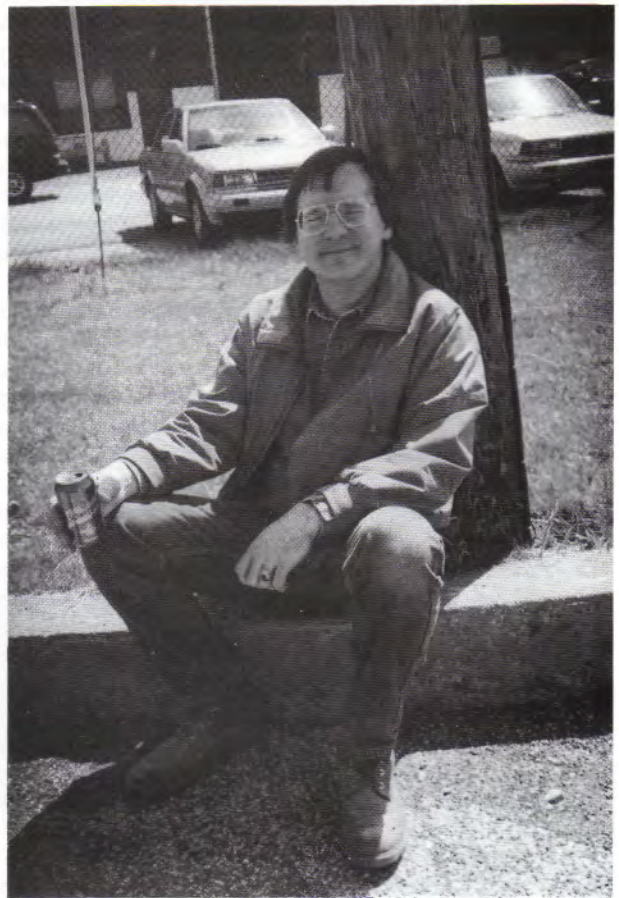
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27TH ANNUAL NEW JERSEY EARTH SCIENCE ASSOCIATION SHOW,
FOMS SWAP-AND-SELL, AND STERLING HILL MINING MUSEUM BANQUET AND AUCTION

This show was held in Franklin for the first time this year, in a robust joint effort with the FOMS and the Sterling Hill Mining Museum. NJESA ran the indoor show, which took place at the old Franklin Armory, now the Robert E. Littell Community Center. The FOMS moved its Spring Swap-and-Sell from Sterling Hill to the armory grounds. Publicity and groundwork were Sterling Hill's role: that, and arranging the Saturday night auction and banquet. By now, nostalgia buffs may have noticed a suspicious resemblance to the old Franklin show: same location, similar format, fuller flavor.

It's good to have the NJESA show so close to hand. When your editors were just getting started as collectors, this show was always tied in public awareness to its location: it was the "Seton Hall show," then the "William Paterson show," and through last year the "Westfield show." Whatever it was called, it was always a first-class show for serious mineral collectors, and it seems all the stronger now for being linked to the FOMS and SHMM in the one town in New Jersey known to every American rockhound.

One of the biggest differences between this new show and the old Franklin show is the cosmopolitan atmosphere in the armory. The NJESA show has always had wonderful exhibits, but without the Franklin show's insistence on cases full of local specimens. Add to this a remarkable cadre of mineral dealers, many of whom have been with the NJESA show for decades, and you have a winning combination. This show is also noted for its excellent speaker program, which this year included Koskie on Herkimers, Yoost on meteorites, Dudley on dream catchers, and Prof. Okulewicz on magic for kids and geology for growups. None of this would happen without NJESA's phenomenally experienced and dedicated staff, which this year included the already overworked Steve Misiur as president. Steve is Asst. Treasurer of the FOMS, a board member of the Franklin Mineral Museum, the SHMM's curator, and....obviously as competent as he is indispensable.



Steve Misiur in back of the armory, taking his first break in about two months. Richard Bostwick photo



NJESA Staff relaxing before the SHMM auction: from left, Show Chairman Fred Stohl, John Ebner, Mary Guinter, Ruth Samuda, Russ Brarens, Ellie Wilson, Tema Hecht photo

This year's show theme, the "Million Dollar Show," was backed up by an exhibit of diamonds with a value of \$1,000,000.00, provided through corporate support from two local banks, the National Bank of Sussex County and the Lakeland Bank. The diamond display was surrounded by 20 Federation cases full of everything from gold to fool's gold to dinosaur eggs. The fluorescent display was in its old hidey-hole across the armory, and the gem theme was picked up there by a display of Earl Verbeek's fluorescent gemstones in a custom case built by....Steve Misiur. Otherwise that room was 50/50 local minerals and "foreign" ones, a reminder that Franklin may be "The Fluorescent Mineral Capital of the World" but still is not the only place where spectacular minerals can be found. The Lemanskis made the point with a display of worldwide minerals titled, "Anything But Red and Green."

Between the two display areas there were 34 cases, too many to enumerate in detail. Several exhibitors had cases in both rooms, an heroic effort which deserves mention: the Franklin Mineral Museum, Dr. Steve Kuitens, Peter Mackey, Hugh Ronemus, and Rich Eisenman. John Sanfacon and Brendan Dunn were the prime movers behind their own cases, a third from the Morris Museum, and a fourth from the Morris Museum Mineralogical Society. Likewise both Hauck brothers had their own cases of memorabilia and mined metals, while the SHMM put in a case of it's own post-1990 fluorescent classics – a case arranged by....Steve Misiur. Frank Cygler also put in a case of recently mined augite ("jeffersonite") crystals from the Noble Pit, while FOMS Field Trip Chairman Ed Wilk exhibited "Minerals of the Franklin area."

The caliber of the fluorescent displays may be gauged by exhibitors who came in from Pennsylvania (Lee McIlvaine), Maryland (George Durland), and Georgia (Denis DeAngelis). FOMS stalwart Claude Poli's case of non-Franklin fluorescent minerals was a first-timer for him and a revelation for the rest of us. Several cases of NJLS lapidary work and Rich Eisenman's spheres in the main display area were complemented by Ralph Kovach's fluorescent cabochons and obelisks across the hall.



Rich Eisenman (L.) visits Ed Letscher's Swap-and-Sell table.
Richard Bostwick photo

Thanks in part to the flawless weather, the FOMS Swap-and-Sell was in full swing outside, with the usual suspects wheeling and dealing. The contrasts from table to table were, as always, breathtaking, from world-class Millington and Paterson specimens to the humblest field-trip scraps, and from healing stones and chakra-aligning crystals to some pretty raw evidence of evolution in the form of fresh fossils. A bumpy ride, but always worthwhile. Then there are the occasional treats, which your editors never hear about until afterwards. Well, almost never. Ray Latawiec showed up on Sunday with a truckload of Franklin/Sterling rocks: "Ten dollars for big pieces, five dollars for small ones." We became aware of this when Don Lapham, Jr. staggered into the armory with a large and fine sphalerite from the Sterling Hill black ore, and an even more impressive lunker of Franklin "grape willemite," total tariff \$20. A true blast from the past. Thanks, Ray, you made us feel decades younger for a few minutes there.



Ray Latawiec's table at the FOMS Swap-and-Sell: \$10 for big pieces, \$5 for small ones.
Richard Bostwick photo



Cathi and Pete Mackey making out like bandits at the FOMS Swap-and-Sell, vending (among other things) lapidary remedies for coughs, lovesickness, and hair problems.

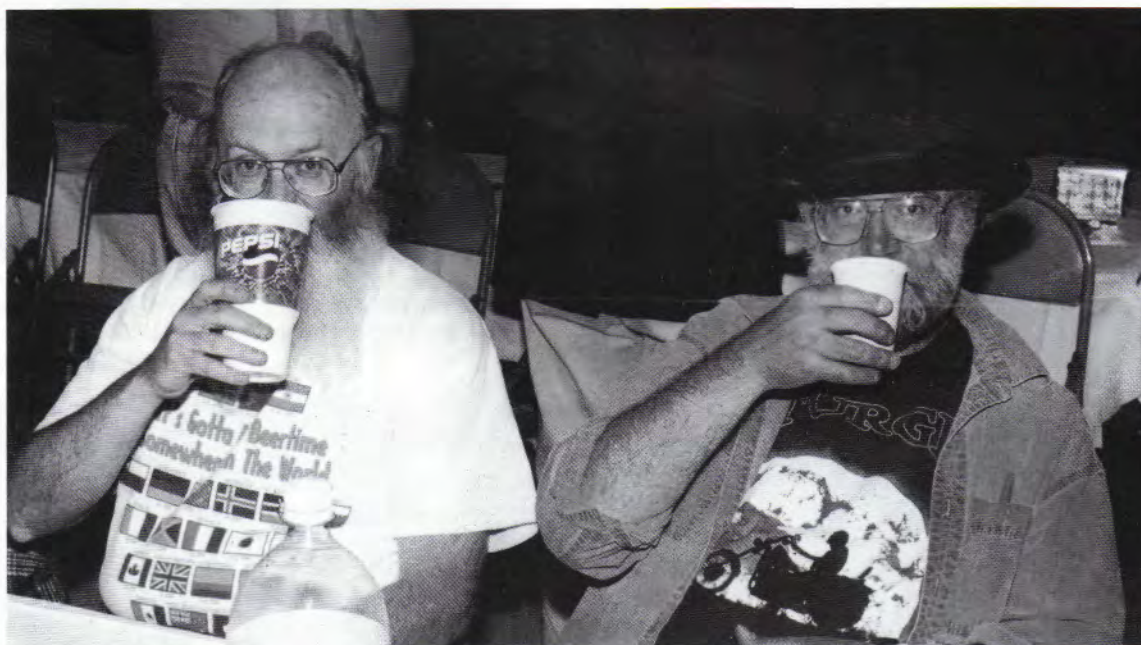
Tema Hecht photo

THE PICKING TABLE

The banquet, followed by the 4th Annual SHMM auction, was a wild ride in itself. There were 68 lots in the auction, 60% of them "foreign" (not from Franklin or Sterling Hill), with many of the latter supplied by the Morris Museum and Rutgers University. As usual, top-hatted Rockphlogger Supremo Dick Hauck made a heroic effort to jangle the jaded ganglia of a lasagna-stuffed audience, with patter like, "Good appearance, good form,...good grief, give me twenty," and "Looking for twenty, looking for fifteen, looking for sympathy." If there was a trend in the currency flow from audience to auctioneer, it was biased in favor of good Franklin/Sterling pieces, but a lot of fine minerals from all over went to deserving homes that evening: Michigan copper, faceted Westmoreland fluorite, Brazilian emerald.... Based on the feeble notes kept by your editors, top honors went to a rhodonite crystal group from Franklin (\$600) and a Wheatley pyromorphite (\$550). The greatest surprise for insiders was a slender (4" x 13") slab of sphalerite-cemented ore breccia from Sterling Hill, which Charlie Ward snapped up for \$400. True, it was a John Kolic specimen, and (in keeping with his taste) a remarkably attractive piece, but as far as we know this establishes a record for a cabinet specimen of Sterling Hill ore. Skeptics, take note: Charlie turned over the piece the next day to a collector who had chosen to spend that Saturday night banging on the "White Boulder" at the Trotter Dig. Speaking of which.....



Patti Hauck snuggles with Mary Bridget and Chester Lemanski's dachshund, Siobhan Mabhe, at the SHMM banquet. Chet informs us that Siobhan Mabhe was sired by Little Oscar Mayer on Copper Penny III. Tema Hecht photo



Pepsicolaholics Anonymous at the banquet. K*vin O'S* and B*b J*nkns modestly consume their beverage of choice. Tema Hecht photo**

Trotter Dump Field Trip

Steve Phillips has been trying for years to interest mineral clubs, including the FOMS, in spending enough money per person to do a thorough job of opening the Trotter Dump to collectors. This includes trenching the dump to expose fresh material, bringing in port-a-potties, setting up a darkroom and a generator, having some sort of supervision and insurance, and on and on. Local collectors kicked at the proposed admission fee of

\$20 *plus* a poundage charge, and besides, many of them had been on the Trotter in one way or another in years past, and for various reasons remained underinspired.

It took an out-of-towner, Don Halterman, to break the deadlock. Working through the Delaware Valley Earth Science Society (DVESS) and propelled by his vision of a great Franklin dump threatened by extinction, Don put his project on the Internet. After a colossal amount of e-mailing, organizing, and negotiating with Steve Phillips over poundage fees, hours, and countless other details, Don and the DVESS crew made it work:

Steve's minimum attendance requirement was 100; Don brought in 146, almost all of them from "away." Your editors met enthusiastic collectors from all over south Jersey, as well as Connecticut and both Carolinas.

In a nutshell, then: 1) the Trotter Dump was never so thoroughly turned over, or so appreciated; 2) most of the diggers were new to the Trotter and Franklin, but a lot of them got the Franklin bug and will be back; 3) the benefits and publicity for Franklin, the NJESA show weekend, and the Trotter Dump were all considerable and will continue and increase. The net effect is overwhelmingly positive.

I'll let Don tell the story. The following is pieced together from two e-mail reports he wrote, the first to his constituency immediately after the event, on April 26, and the second a little later to the Fluorescent Mineral Society. Some of his initial rhetoric is due to the shockingly clear weather and Don's consequent sunburn.

"As I reminisce about the trip, feeling roasted like a Planter's peanut, crispy as the Colonel's chicken, the first words in my mind are, 'thank you.' Thanks to all who put their faith in this unique venture, and especially to Sid, who takes great joy in having sent the first check; thanks to Steve Phillips, who opened his historic family property to a group of eager strangers; thanks to the wise men and women of Franklin and vicinity who lent their expertise to our guests, and without whose presence the trip would not have been as rewarding. And thanks to divine providence; for if you don't believe in a greater power, you might want to start: given the fact that I stood in the freezing rain on Friday gazing at the dump, and prayed not altogether eloquently, 'Look, there's been a week of rain already, so there's plenty of water, and we're good there; so please at least give us the weekend. I'll take just Saturday.' I retired Friday night to the sound of rain, and awoke Saturday to blazing sun and a cloudless sky. Whether you believe in a creator, meaningful coincidence, or pure random chance, we could not have asked for a better day; and though my face is peeling already I would have it that way all over again.

"The last lone guest left at 17:00 on Sunday and we tallied up quickly. In all, I counted 2.804 tons of rock leaving the gate, plus several hundred pounds of fluorescent sand. It was indeed a good day to dig."

"After a week of torrential rain, Saturday dawned bright and cloudless. This was good news for both the diggers and the NJESA/FOMS show. By 09.00, over 60 of the guests had entered the property and the clink of hammers resounded throughout the hill. The dump area was thoroughly dug out. There were four major trenches and several smaller pits. Three heavy earth movers were parked nearby, ready to dig further if necessary. A Ryder van was parked on site, serving as a mobile darkroom, while a gasoline generator provided electricity.



Don Halterman of the DVESS, Ewald Gerstmann, and Steven Phillips. Trotter Dump, April 24, 1999.

Richard Bostwick photo



The Trotter Dump on April 24, 1999, looking east, with remnants of the Franklin ore body's hanging wall in the background. Foreground, L. to R.: exhausted collector, portable john, excavating equipment, collector still standing (Wayne Cokely of North East Field Trip Alliance), and Ryder rent-a-darkroom. Richard Bostwick photo

"What did we find? Of course there was plenty of 'Christmas tree' (calcite, franklinite, and willemite) and 'chocolate chip ice cream' (white calcite & franklinite crystals). Also abundant were rhodonite in both massive form and small terminated crystals, as well as bustamite. Neither the bustamite nor the rhodonite fluoresced. Both of these came in a matrix best described by Harold Moritz of Connecticut: 'a coarse mix of pink rhodonite, cinnamon garnet, green microcline, black pyroxene, white calcite, fleshy willemite, dark green gahnite, and some other light green (non-fluorescent) mineral that I was praying was esperite (but was not). Not an exciting fluorescent piece, but great normal colors.' There were also some showy specimens that contained bright pink rhodonite speckles in a white calcite matrix. I found some 5 and 6 mm franklinite crystals, but none were perfect.

"Some other notable finds were a thumb-sized green microcline crystal that impressed Dr. Paulus Moore, and a boulder of salmon calcite so richly colored that, next to a piece of broiled salmon, you could not tell the difference from a distance. (This is not an exaggeration but actually occurred. By coincidence my mother made salmon for dinner last Thursday when I went over to display my finds. I placed the thumbnail calcite on the plate next to my fish and said 'look.' Mom said, 'Where did that piece of salmon come from?') This calcite is beautiful in both daylight and under shortwave UV...

"Saturday night was notable, not just for the eerie glow of red and green throughout the area, but for the 'White Boulder.' This large anomaly yielded a white, crusty mineral with a bluish-white pale pastel fluorescence, and a medium-duration light green phosphorescence under shortwave UV, all on a substrate of deep magenta fluorescing material. It" [the crust] "dissolves completely with muriatic (hydrochloric) acid. The mystery mineral only formed at the fracture zones of the boulder.

"A photo may be seen at <<http://members.home.net/netgrl/trotter3.jpg>>.

"Mark Boyer describes his favorite find: 'a 4-1/2" x 3" rock that had a metallic sparkle that looked to me like sphalerite. One crack with a hammer broke it into five pieces, both of which revealed the same throughout. At home I lamped it confirm it as sphalerite. Shortwave UV reveals dull orange sphalerite with blue streaks, along with willemite and calcite. Longwave UV reveals bright, rich orange and blue sphalerite with pink phosphorescence that is visible for nearly 10 minutes. The sphalerite is also triboluminescent. Beautiful stuff.'

"Some of the more novel finds were two miners' carbide lamps, an ore cart, a rail car wheel, two railroad spikes, and buckets of fluorescent sand (actually the 'sand' is finely ground calcite and willemite).

"Most of the guests were delighted with the trip and said they would come next year. Mr. Steve Phillips, the owner, welcomes the DVESS and the North East Field Trip Alliance to do it again, so keep an eye out for announcements. Thanks to everyone who made the trip a success!"

Steve Phillips brought to the Trotter for this occasion not only his camper, but also many flats of Franklin/Sterling Hill specimens winnowed from his own collection following its consolidation with Richard Hauck's Franklin/Sterling Hill collection and the Joe Cilen collection. Needless to say, local collectors were out in force for this, the first infusion of fresh local material in some time.

After the Trotter Trip was over, Steve stayed behind, finally deciding to fill the trenches back in and smooth everything over. If you want to participate in next year's Trotter Trip, contact the DVESS either by writing them at P.O. Box 372, Maple Shade NJ, or by going to their website at <<http://www.terryfic.com/dvess>>.



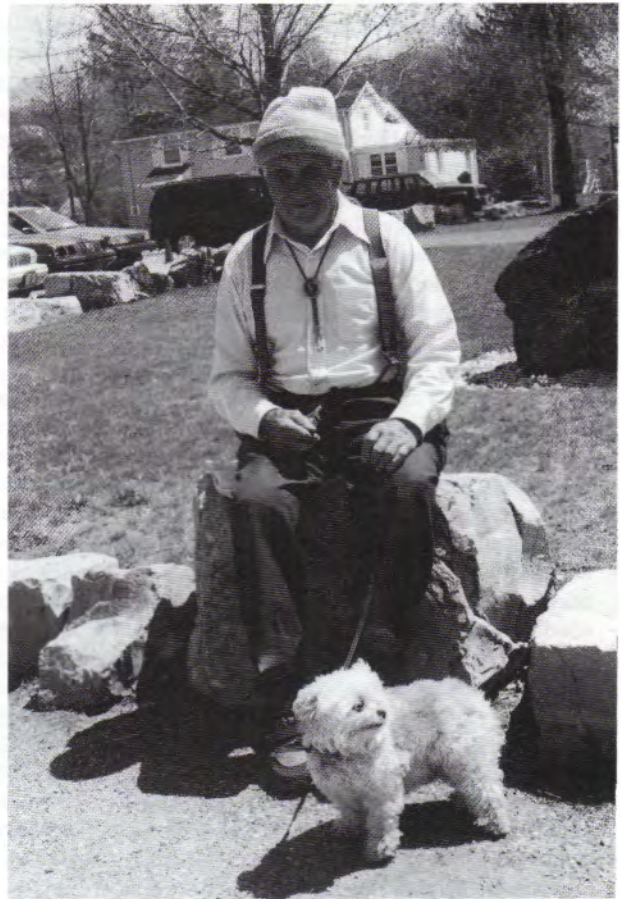
Tourists at the Trotter Dump field trip, April 24, 1999: L. to R.: Richard Bostwick, Pete J. Dunn, Earl Verbeek, and Tema Hecht. Maureen Verbeek photo

MINERS DAY, MAY 2, 1999

Genuine Franklin miners get fewer every year, but some were still there at the Franklin Mineral Museum to enjoy sunny spring weather, food, speeches from community leaders and icons, and the music of the the Franklin Band. This year's educational award went to Dennis Sensale of Hamburg, a former pupil of former Supt. James Kane; new Supt. Dr. Tom Turner made the presentation. Steve Phillips, FMM president, spoke about the improvements to the museum and the ongoing efforts to have the Franklin/Sterling Hill area made a World Heritage Site. Museum curator John L. Baum reminisced about his days as an exploration geologist for the New Jersey Zinc. Co. Finally the Franklin Band wrapped it up with an eclectic program including some stirring marches and the overture to "Tannhäuser."



Miner's wife Irene Zipco. Miners Day 1999.
Tema Hecht photo



Miner Nick Zipco with friend. Miners Day 1999.
Richard Bostwick photo



Award winner Dennis Sensale with his family and, on far left, Hamburg school principal Robert McCann. On far right, Supt. Dr. Tom Turner.

Richard Bostwick photo

THE LIST: CHANGING OF THE GUARD

John Cianciulli, Assistant Curator
Franklin Mineral Museum
P.O. Box 54
Franklin NJ 07416

INTRODUCTION

Each year for many years, John L. Baum, Curator of the Franklin Mineral Museum, provided an updated list of mineral species found at Franklin and Sterling Hill. This was published in the program of the annual Franklin-Sterling Gem & Mineral Show, most recently in 1998. The list was prepared in collaboration with Dr. Pete J. Dunn of the Department of Mineral Sciences, Smithsonian Institution, and he and Mr. Baum spent countless hours of research and investigation making this list definitive. To insure its integrity, Dr. Dunn and Mr. Baum established certain requisites for the inclusion of species in the list. These appeared in *The Picking Table*, Vol. 28, No. 1, pp. 4-5, in an article which included the "Definition of the Franklin-Sterling Hill Area" and "Criteria for Changes to the List."

UPDATE

Last fall Dr. Dunn announced in these pages (Vol. 39, No. 2, p. 7, "Messages") that he and Mr. Baum would "no longer be responsible for producing, updating, or publishing this list," and it was up to the F.O.M.S. to announce a successor. George Elling, then F.O.M.S. president, selected me to do the honors. While I welcome the challenge, it is a great responsibility, too big a task for one person. Accordingly I will be asking qualified experts to

be part of a committee which will review published reports of new species from the Franklin-Sterling Hill area. This committee will observe the following protocols for addition of species to the Baum-Dunn species list of fall 1998:

The committee must be convinced that the specimen originated within the defined Franklin-Sterling Hill area.

The committee must be convinced of the correct verification of the species, and must approve all nomenclature.

These protocols are consistent with those published by Baum and Dunn in *The Picking Table*, Vol. 28, in the article referenced above.

FINAL DECISION

The committee will make recommendations to me, and subject to my review of the facts presented, I will decide whether or not the mineral is worthy to be included on the list. Literature with reported new mineral species from the Franklin-Sterling Hill area, species new to the area or new to science, shall be directed to me and I in turn will distribute such materials to the committee for review. Reported new finds must be published and pass the review process before being put on the list. Reported finds not published in a reputable scientific or mineralogical journal will not be considered for review.

MINERAL SPECIES FOUND AT FRANKLIN AND STERLING HILL, 1999

There have been no changes since 1998

Acanthite	Anglesite	Bakerite	Breithauptite
Actinolite	Anhydrite	Bannisterite	Brochantite
Adamite	Annabergite	Barite	Brookite
Adelite	Anorthite	Barium-pharmacosiderite	Brucite
Aegerine	Anorthoclase	Barylite	Bultfonteinite
Akrochordite	Antlerite	Barysilite	Bustamite
Albite	Aragonite	Bassanite	
Allactite	Arsenic	Baumhauerite	Cahnite
Allanite-(Ce)	Arsenosiderite	Bementite	Calcite
Alleghanyite	Arsenopyrite	Berthierite	Canavesite
Almandine	Atacamite	Bianchite	Carrollite
Analcime	Augite	Biotite	Caryophilite
Anandite	Aurichalcite	Birnessite	Celestine
Anatase	Aurorite	Bornite	Celsian
Andradite	Austinite	Bostwickite	Cerussite
	Azurite	Brandtite	Chabazite

Chalcocite	Franklinfurnaceite	Kaolinite	Ogdensburgite
Chalcophanite	Franklinite	Kentrolite	Ojuelaite
Chalcopyrite	Franklinphilite	Kittatinnyite	Oligoclase
Chamosite	Friedelite	Koettigite	Orthochrysotile
Charlesite		Kolicite	Orthoclase
Chloritoid	Gageite-1Tc	Kraisslite	Orthoserpierite
Chlorophoenicite	Gageite-2M	Kutnahorite	Otavite
Chondrodite	Gahnite		
Chrysocolla	Galena	Larsenite	Parabrandtite
Cianciulliite	Ganomalite	Laumontite	Pararammelsbergite
Clinochlore	Ganophyllite	Lawsonbauerite	Parasymplesite
Clinochrysotile	Genthelvite	Lead	Pargasite
Clinoclase	Gersdorffite	Legrandite	Pectolite
Clinohedrite	Gerstmannite	Lennilenaite	Pennantite-1a
Clinohumite	Glaucochroite	Leucophoenicite	Peteddunnite
Clinozoisite	Goethite	Linarite	Pharmacolite
Clintonite	Gold	Liroconite	Pharmacosiderite
Conicalcrite	Goldmanite	Lizardite	Phlogopite-1M
Connellite	Graphite	Loellingite	Picropharmacolite
Copper	Greenockite	Loseyite	Piemontite
Corundum	Grossular		Pimelite
Covellite	Groutite	Magnesianhornblende	Powellite
Cryptomelane	Guerinite	Magnesianiebeckite	Prehnite
Cumingtonite	Gypsum	Magnesium- chlorophoenicite	Pumpellyite-(Mg)
Cuprite		Magnetite	Pyrite
Cuprostibite	Haidingerite	Magnussonite	Pyroaurite
Cuspidine	Halotrichite	Malachite	Pyrobelonite
	Hancockite	Manganaxinite	Pyrochroite
Datolite	Hardystonite	Manganberzeliite	Pyrophanite
Descloizite	Hastingsite	Manganese-hoernesite	Pyroxmangite
Devilline	Hauckite	Manganhumite	Pyrrhotite
Digenite	Hausmannite	Manganite	
Diopside	Hawleyite	Manganosite	Quartz
Djurleite	Hedenbergite	Manganpyrosomalite	Rammelsbergite
Dolomite	Hedyphane	Marcasite	Realgar
Domeykite	Hematite	Margarite	Retzian-(La)
Dravite	Hemimorphite	Margarosanite	Retzian-(Nd)
Dufite	Hendricksite-1M	Marialite	Rhodochrosite
Dypingite	Hercynite	Marsturite	Rhodonite
	Hetaerolite	Mcallisterite	Richterite
Edenite	Heulandite	Mcgovernite	Roebbingite
Epidote	Hexahydrite	Meionite	Romeite
Epsomite	Hodgkinsonite	Meta-ankoleite	Rosasite
Erythrite	Holdenite	Metalodevite	Roweite
Esperite	Hornblende	Metazeunerite	Rutile
Euchroite	Huebnerite		
Eveite	Humite	Microcline	
	Hyalophane	Mimetite	Safflorite
Fayalite	Hydrohetaerolite	Minehillite	Samfowlerite
Feitknechtite	Hydrotalcite	Molybdenite-2H	Sarkinite
Ferrimolybdate	Hydroxyapophyllite	Monazite-(Ce)	Sauconite
Ferristilpnomelane	Hydrozincite	Monohydrocalcite	Schallerite
Ferroactinolite		Mooreite	Scheelite
Ferroaxinite	Illite	Muscovite-1M	Schorl
Ferrostilpnomelane	Ilmenite		Sciarite
Flinkite		Nasonite	Scorodite
Fluckite	Jacobsite	Natrolite	Seligmannite
Fluoborite	Jarosewichite	Nelenite	Sepiolite
Fluorapatite	Jerrygibbsite	Neotocite	Serpierite
Fluorapophyllite	Johannsenite	Newberyite	Siderite
Fluorite	Johnbaumite	Niahite	Sillimanite
Forsterite	Junioite	Nickeline	Silver
Fraipontite		Nontronite	Sjögrenite
		Norbergite	

Skutterudite
Smithsonite
Sonolite
Spangolite
Spessartine
Sphalerite
Spinel
Starkeyite
Sterlinghillite
Stibnite
Stilbite
Strontianite
Sulfur
Sussexite
Synadelphite

Talc
Tennantite
Tephroite
Tetrahedrite
Thomsonite
Thorite
Thortveitite
Tilasite
Tiroidite
Titanite
Todorokite
Torreyite
Tremolite
Turneaureite

Uraninite
Uranophane
Uranospinitite
Uvite

Vesuvianite
Villyaellenite

Wallkilldellite
Wawayandaite
Wendwilsonite
Willemite
Wollastonite
Woodruffite
Wulfenite
Wurtzite

Xonotlite

Yeatmanite
Yukonite

Zinnsite
Zincite
Zinkenite
Zircon
Znucalite



The 43rd Annual Franklin-Sterling Gem and Mineral Show

Presented by the Franklin Mineral Museum

**Friday, Saturday and Sunday
September 24 - 26, 1999**

Hours: Friday, 5:00 P.M. - 9:00 P.M.

Saturday, 9:00 A.M. - 6:00 P.M.

Sunday, 10:00 A.M. - 5:00 P.M.

Daily Admission: \$4.00 Adults, \$2.00 Children.

Two-day tickets:

(Sat. & Sun.) \$7.00 Adults, \$3.00 Children.

**Tickets include FREE admission to THE POND
and The Franklin Mineral Museum exhibits**

**Location:
The Franklin School**

Washington Avenue

Franklin, New Jersey

(Just off route 23, opposite MacDonald's)

Featuring:

Unique displays of local minerals

Top dealers selling minerals, jewelry, and gems

Large fluorescent-mineral display

Free parking

Cafeteria



**For Show information contact
The Franklin Mineral Museum
Evans St., Box 54
Franklin NJ 07461
Phone: (973) 827-3481**



During the show, be sure to visit...

THE POND Swap-and-Sell area on the Franklin School grounds all day Saturday and Sunday.

THE POND is sponsored by the Franklin-Ogdensburg Mineralogical Society, Inc. For further information about THE POND contact: Chester Lemanski Jr., Phone (609) 893-7366, after 8:00 P.M. please.

After the show on Saturday night...

Attend the F.O.M.S. banquet, held at the Lyceum Hall of Immaculate Conception Church in Franklin.

Socializing begins at 6:30 P.M. and the Italian buffet dinner at 7:00 P.M.

Dress is informal and the atmosphere likewise (BYOB).

After dinner there will be a talk by Rock Currier.

This will be followed by an auction of mineral specimens and memorabilia.

Tickets are \$13.50 and may be reserved by calling Steve Misiur at (973) 209-7212
or John Cianciulli at (973) 827-6671

The Picking Table announces:
Supplement to the bibliography of Franklin and Sterling Hill,
an addendum to the bibliography in Part One of Dr. Pete J. Dunn's
Franklin and Sterling Hill, New Jersey:
the world's most magnificent ore deposits.

The following page, front and back, was sent to *The Picking Table* by Dr. Dunn so that it might be distributed by all F.O.M.S. members who have a copy of his 1995 monograph. The *Supplement* is reproduced here as closely as possible to the form in which it was received, and ideally should be, in Dr. Dunn's words, "attached with traces of adhesive behind page 66 of Part One" of his monograph. For this purpose we suggest our readers photocopy the two *Supplement* pages on opposite sides of a single sheet of paper.

The *Picking Table* volume, number, and page information at the foot of the *Supplement* pages were not provided by Dr. Dunn, who intentionally did not number his pages; you may trim off that information, or leave it to indicate the source of your *Supplement* copy.

Dr. Dunn considers this *Supplement* to be in the public domain, but has asked that any further distributions (e.g. a photocopy which you make from these pages but mail to a friend) be accompanied by a page with the name and address of the distributor. This page should also include a statement that the distribution is free of charge and done with Dr. Dunn's consent, but is not his activity. If any such distributions involve rekeystroking the *Supplement*, the name of the keystroker should also be included on that page.

Dr. Dunn will not provide copies of the publications listed in this *Supplement*.

More detailed information about Dr. Dunn's monograph, and how to obtain it, is included elsewhere in this *Picking Table*.

Tema J. Hecht and Richard Bostwick, editors, *The Picking Table*.



The Parker Dump around 1960. "Sunny" Cook Archives.

Supplement to the bibliography of Franklin and Sterling Hill

Introduction

Below are noted additional references to publications and maps of interest. This supplement was compiled in November, 1997, by Pete J. Dunn.

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A NEW FIND OF SPHERICAL GRAPHITE FROM STERLING HILL, NEW JERSEY

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323 E. Midland Ave.
Paramus NJ 07652

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During a monthly collecting trip in July 1997 to the Mine Run Dump of the Sterling Mine, Ogdensburg, New Jersey, one of the authors (GAH) and fellow collector James Zigras found spherical graphite aggregates in a 5' x 3' x 2' slickensided boulder of fairly typical Franklin Marble. The samples were identified by Richard Hauck (personal communication, 1997) as the first reported discovery of graphite in that form from the surface at Sterling Hill. About 10 small hand-specimens containing graphite spheres up to 2 mm were collected.

Although graphite is common as small, disseminated flakes in the Franklin Marble generally, it is not very common in or adjacent to the Sterling Hill orebody. Exceptions do prove interesting, however. For example, the zinkenite-arsenopyrite-realgar assemblage on the 900' level produced remarkable, barrel-shaped graphite microcrystals (Palache 1941; Jaszczak 1994). Other interesting exceptions are the occurrences of spherical graphite that have been reported. For example, spheres up to 9 mm in diameter were found by Chet Lemanski in a pink carbonate in "black ore" with black willemite and franklinite at the 1000 stope, 30-40' above the 430' level of the Sterling Mine (Lemanski 1991). Stephen Sanford (personal communication, 1993) reported two finds in the black ore: 1) graphite spheres to 2.5 cm across were found by John Kolic in pinkish-gray calcite lenses in black ore at the 1060 pillar, 20' above 500' level, and 2) around 1978 Roy Russman mined samples of graphite from 1180 pillar near the 700' level. HCl-etching by Stephen Sanford of the samples collected by Russman revealed rosettes of bladed graphite crystals to 2 cm, and a 0.75 cm graphite sphere perched on a prismatic hexagonal crystal of gray willemite. In addition, graphite roses to 2 cm and spheres to 1 cm in calcite/sulfide veins in blocks of hornblende "megabreccia" have been reported from a drift near the east vein of the orebody on the 180' level (Richard Bostwick, personal communication, 1992). These examples were all from within the boundary of the orebody, even though some were not associated with the ore. Bostwick (1992) also reported that a short distance outside the orebody boundary on the

430' level, 1-2 mm graphite spheres occurred in calcite with corundum (var. ruby) crystals.

Unlike the spherical graphite found in the black ore at Sterling Hill, the newly discovered graphite spheres occur in siliceous Franklin Marble that is similar in appearance to that from the Lime Crest Quarry, Sparta, New Jersey. However, Robert Hauck (personal communication, 1999) verified that he found the graphite-bearing boulder in the Passaic Pit and moved it to the Mine Run Dump. While he cannot be sure that the boulder originated in the Passaic Pit, it showed no signs of glacial transport, and he is positive it came from nearby, either from the Passaic Pit or the hillside immediately west of the Passaic Pit and West Vein.

The graphite from the marble boulder found in the Passaic Pit forms isolated spheres up to about 2 mm in diameter (Fig. 1) in the calcite or associated silicates. Graphite also occurs here as

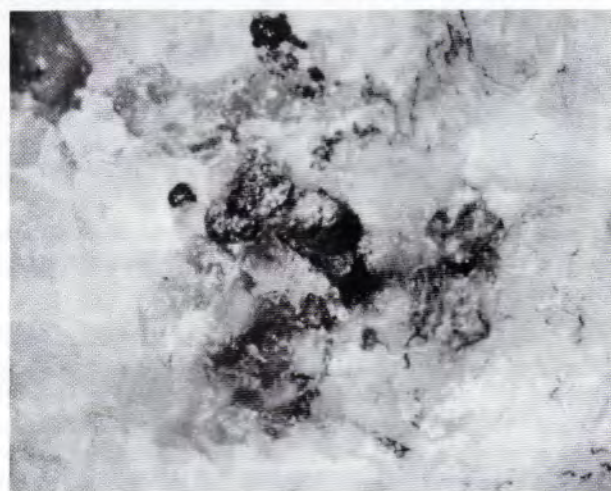


Figure 1. Isolated 2-mm graphite sphere in siliceous marble from Sterling Hill (JAJ2042 63-30).

botryoidal lenses that pinch and swell, particularly at the interfaces between the calcite and other crystals (Fig. 2). Veins of single spheres aligned in a row have also been observed (Fig. 3). The surfaces of the spheres appear velvety to lustrous like a droplet of solder which has been melted and then solidified. When broken the spheres show a radiating texture and a layered, concentric zoning. Crystals up to several mm across with more typical tabular, hexagonal morphology also occur sporadically in these samples. Associated minerals in the boulder include pyrrhotite, norbergite or chondrodite (weakly fluorescent yellow in shortwave UV), euhedral arsenopyrite crystals, uvite, a green amphibole, and an orange pyroxene. Small vugs contain crystals of a brown carbonate, golden goethite, and prismatic quartz.

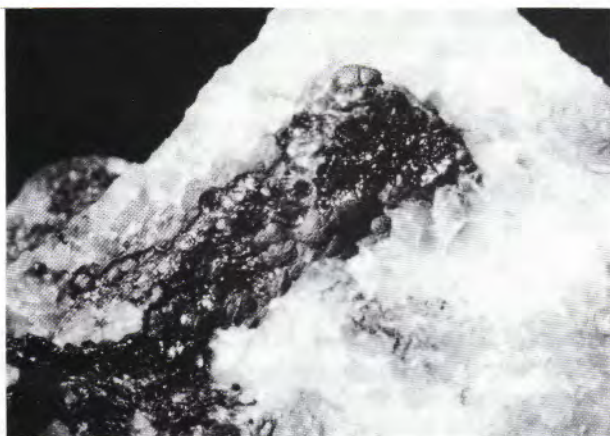


Figure 2. Botryoidal graphite showing smooth and broken surfaces, in siliceous marble from Sterling Hill (JAJ2042 63-25).



Figure 3. Graphite "vein" with cluster of spheres, associated with orange pyroxene and pale green amphibole in siliceous marble from Sterling Hill (JAJ2042 63-28).

Polished sections of the graphite spheres, viewed in reflected plane-polarized light (with crossed polarizer and analyzer) reveal a delicate-looking, feathery internal texture (Figs. 4a and 4b). The wispy textures are somewhat random near the centers of the spheres but become more ordered near their surfaces. Reflectance variations viewed as the sample is rotated (with the polarizer and analyzer parallel to each other) indicate that the graphite basal planes are predominantly arranged circumferentially. Such a circumferential arrangement of graphite planes in spheres has been observed in samples from localities

in Ukraine (Kvasnitsa & Yatsenko 1991, Kvasnitsa *et al* 1998) and Canada (Jaszczak & Robinson 1998), as well as in nodular cast iron (Double & Hellawell 1974, 1975, 1995).

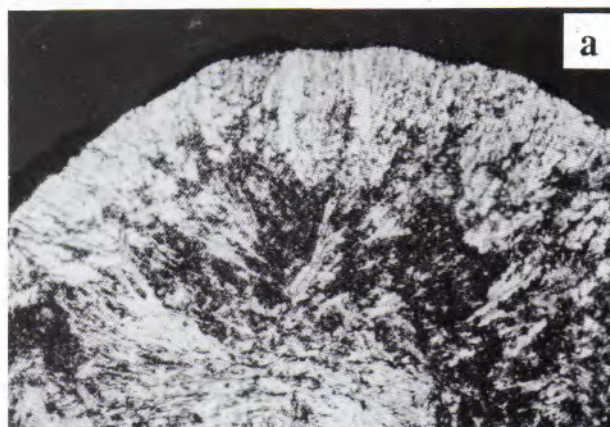


Figure 4a. Polished section of a 1-mm graphite sphere from Sterling Hill photographed in reflected plane-polarized light with crossed polars (JAJ2040a 56-34).

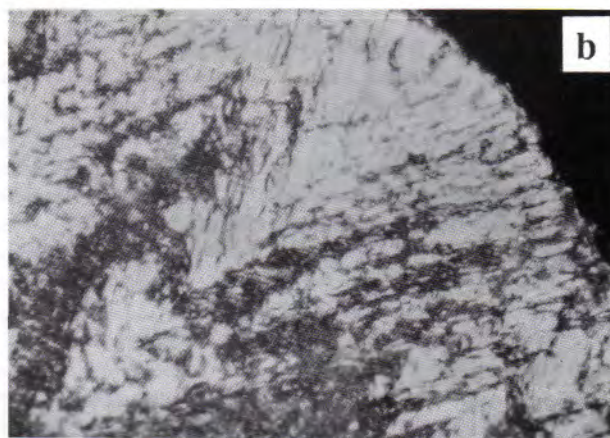
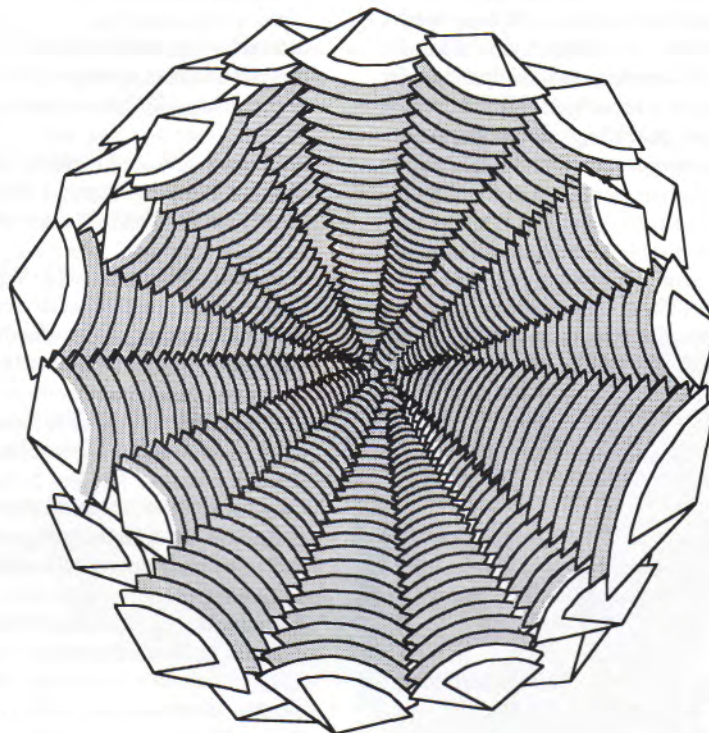
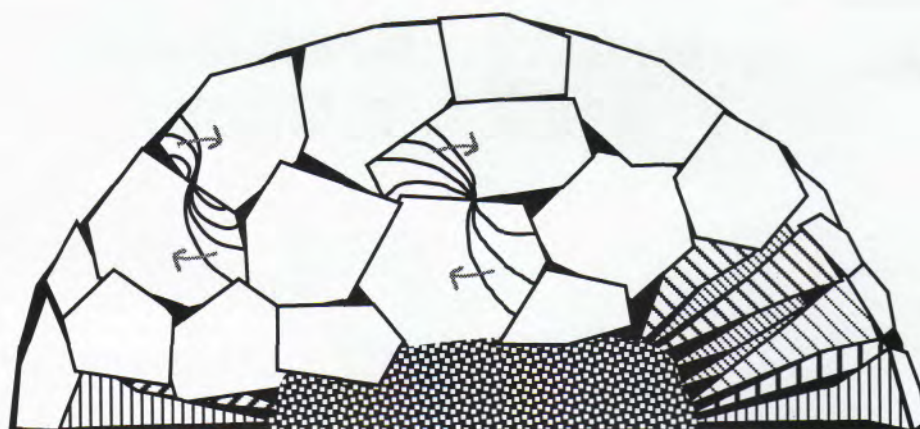


Figure 4b. Higher magnification of Fig. 4a showing details of the feathery texture (JAJ2040a 56-35).

Although it is not known satisfactorily when and why graphite forms spheres, two models suggested by Double and Hellawell (1974, 1975) may be applicable (Fig. 5). In the first model (Fig. 5a) growth takes place rapidly in the radial direction due to the formation of cone-helix structures, each of which has a perpetual growth step. In the second model (Fig. 5b) growth takes place radially due to preferred nucleation at low-angle twist-tilt grain boundaries. More work is needed to determine the precise three-dimensional microstructure of these spheres and to refine possible growth models. Stable carbon isotope analyses of the spherical graphite and associated calcite from various Sterling Hill finds could also help shed some light on the conditions of formation. Such analyses should be able to yield peak metamorphic temperatures and a measure of the degree of variability among the different finds (Dunn and Valley 1992). Based on the occurrences of spherical graphite at Gooderham, Ontario (Jaszczak and Robinson 1998), Mt. Kearsarge, New Hampshire (Rumble and Chamberlain 1988), and other localities (Kvasnitsa *et al*. 1998), it is probable that the graphite spheres are a result of high-grade metamorphic activity that followed the original formation of flake graphite in the Franklin Marble and resulted in recrystallization of calcite and graphite.



(a)



(b)

Figure 5. Models of possible mechanisms for the growth of spherical graphite proposed by Double and Hellawell (a) Cone-helix model, modified after Double and Hellawell (1975). (b) Twist-tilt grain-boundary model, modified after Double and Hellawell (1974).

ACKNOWLEDGEMENTS

We are grateful to Richard and Robert Hauck for preserving this wonderful locality and for helping to provide detailed information regarding the origin of the specimens described here. Thanks to James Zigras for sharing pieces of the graphitic boulder after first breaking it. We also thank Wai C. Chan for preparing polished sections of samples, and the Institute for Materials Processing at Michigan Technological University for use of their Nikon Opti-phot-pol polarizing microscope. We are grateful to George W. Robinson for performing SEM/EDS analyses.

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Buckwheat Dump, October 3, 1960.
Ralph Walters photo, Franklin Mineral Museum archives.

ANOTHER LOCALITY FOR ZNUCALITE: LODÈVE, HÉRAULT, FRANCE

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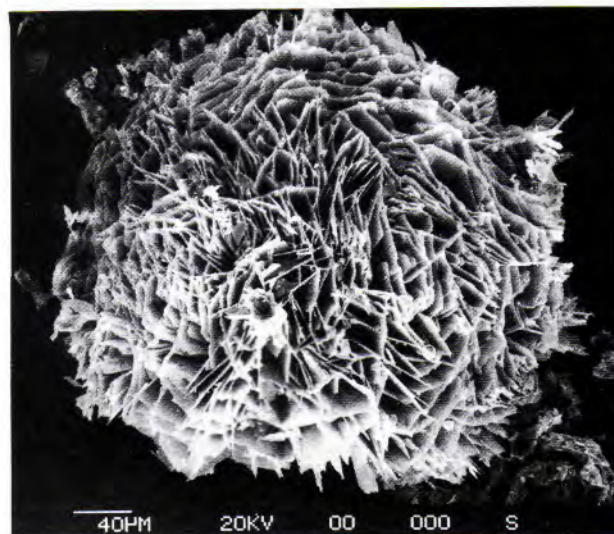
Connoisseurs of rare mineral species may recall that znucalite, a zinc uranium calcium carbonate hydroxide hydrate, was described from the North Ore Body at Sterling Hill in the Fall 1991 *Picking Table*. It is cited there in two articles, "Notes from the laboratory & changes to the list of species from Franklin and Sterling Hill," by P. J. Dunn and J. L. Baum, and "A second locality for znucalite: the Sterling Mine, Ogdensburg, N.J." by R. Bostwick. As these articles tell, Sterling Hill znucalite had been collected underground in 1976, mentioned as a green-fluorescing yellow crust by Manuel Robbins in 1983, and reported in 1986 by Pete J. Dunn as an unnamed zinc uranium mineral which was too impure to characterize well. Between 1976, when it was found on the 2350 level at Sterling Hill, and 1991, when its identity as znucalite was confirmed, specimens of the unknown mineral found their way into local collections labeled "unknown" and "metalodevite." The green fluorescence of these znucalite specimens, of moderate intensity at best under shortwave ultraviolet radiation, was in a few examples augmented by the presence of blue-fluorescing hydrozincite.

Znucalite was named and described as a valid mineral species in 1990 by P. Ondruš, F. Veselovský, and R. Rybka, from well-crystallized material found on the dump of the Lill Mine in Pöibram, in what is now the Czech Republic. The formula given by Ondruš et al was $\text{Zn}_{12}(\text{UO}_2)\text{Ca}(\text{CO}_3)_3(\text{OH})_{22}\cdot 4\text{H}_2\text{O}$, and their data enabled Dunn to match the new Czech species with Sterling Hill's unnamed zinc uranium mineral. Specimens of Lill Mine znucalite consisting of thin crusts coating dump rock have been sold in the U.S. by Josef Vajdak of Pequa Rare Minerals. In these specimens blue-fluorescing hydrozincite is commonly associated with green-fluorescing znucalite, and some pieces are fairly attractive under a shortwave ultraviolet lamp.

In 1993 the article, "Nouvelles données sur la znucalite et seconde occurrence: Le Mas d'Alary, Lodève (Hérault, France)," by Pierre-Jacques Chiaperro and Halil Sarp, appeared in French, and was abstracted in English in 1994 by John L. Jambor in *American Mineralogist*. Jambor's abstract of the description begins, "Occurs as spherules to 350 μ in diameter in the oxidation zone of the Mas d'Alary uranium deposit near Lodève, Hérault, France." The znucalite from Lodève is also described as being nonfluorescent, with a new unit cell and density leading to a revised formula of $\text{Zn}_{11}(\text{UO}_2)\text{Ca}(\text{CO}_3)_3(\text{OH})_{20}\cdot 4\text{H}_2\text{O}$. Extensive optical, chemical, and X-ray diffraction data are given, along with two striking SEM photos, one of which is appended.

Chiaperro and Sarp describe the specimen from Lodève used for their analysis as having approximately one square centimeter of clear yellow to white to colorless microcrystals of znucalite on its surface, associated with 2-3 mm grains of "carburan" (a black, pitchy, uranium-bearing organic material) and coating a crust of adamite microcrystals. Other uranium minerals on the specimen include metalodevite, umohoite, calcurmolite, uranophane, and studtite.

Lodève is the type locality for metalodevite, $\text{Zn}(\text{UO}_2)_2(\text{AsO}_4)_2\cdot 10\text{H}_2\text{O}$, another rare zinc uranium mineral which was also identified from Sterling Hill as a minor constituent of the great 340-level arsenate find of the 1970s.



Sphere of Znucalite crystals, 250X.
SEM photo by J. Breton, BRGM, Orléans, France.
Figure 1 in Chiaperro and Sarp (1993).

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A BRIEF ANNOUNCEMENT OF NEW FINDS OF CUSPIDINE FROM FRANKLIN, N.J.

Until mid-1988, cuspidine at Franklin was known only as a minor constituent of the rare glaucocroite crystal assemblage found in the Parker Mine prior to 1900. It has now been identified in several massive ore assemblages, at least two of which were collected on the surface at Franklin. Cuspidine in these specimens is pale to medium gray, and associated mostly with franklinite, willemite, calcite, and a nonfluorescent pink to gray mineral (possibly glaucocroite). One type has been on the market locally since the early 1990s, sold as "johnbaumite;" most specimens from this find are associated with andradite and abundant calcite, and are quite showy under shortwave UV.

Cuspidine fluoresces moderate to bright yellow-orange under shortwave UV, with brief intense phosphorescence (BIP) of the same hue. It also exhibits a moderate to weak violet-pink fluorescence under mid-range UV, and a weaker orange-pink fluorescence under longwave UV, both with a much-subdued but still apparent BIP. In all cases there is a weak phosphorescence following the BIP.

Franklin cuspidine's distinctive yellow-orange fluorescence and BIP under shortwave UV, coupled with its odd violet-pink fluorescence under mid-range UV, should lead to identification. On first sight the minerals with which it is most likely to be confused at Franklin are clinohedrite and johnbaumite. However, clinohedrite fluoresces orange (not yellow-orange) under shortwave UV and has a fairly bright persistent phosphorescence with no BIP. Johnbaumite and other orange-fluorescing members of the apatite group at Franklin (fluorapatite and turneaureite) do not phosphoresce. Some examples of wollastonite, especially from Sterling Hill, exhibit yellow-orange fluorescence similar in hue to cuspidine's, but an experienced collector is unlikely to confuse the two minerals.

In specimens where cuspidine grains are surrounded by typically orange-red-fluorescing calcite, the more intense and


long-lasting BIP of calcite can obscure the BIP of cuspidine. Masking the calcite can assist here in observing cuspidine's BIP.

A more detailed report is in progress but could not be completed for this issue of *The Picking Table*. Collectors Dru Wilbur, Bill Mattison, and Peter Chin played lead roles in finding cuspidine, thrusting it into the hands of the scientific community, and tracking down its sources. John Cianciulli has been very active in the investigation, providing sage advice and technical support including optical determinations for all the current finds. EDS analysis of Dru's cuspidine, the first of the recent finds to be properly identified, was done by Tony Nikischer, with subsequent EDAX and XRD analysis by Lance Kearns of both Dru's find and the more abundant andradite-rich material. Photos of Dru's cuspidine appear in the color photo section of this *Picking Table*, and his account of his find appears following this column. Dru has also donated an excellent example to the Franklin Mineral Museum. I am indebted to Bill Mattison for his observation of cuspidine's odd fluorescence under mid-range (approx. 300 nm) UV.

Anyone interested in the original Parker Mine glaucocroite/cuspidine is urged to read the entries under those minerals in Pete J. Dunn's monograph, *Franklin and Sterling Hill, New Jersey; the world's most magnificent mineral deposits* (1995), on pages 342-344 and 409, respectively. More detailed information is given in the article, "Glaucocroite (olivine, CaMnSiO_4) from Franklin, New Jersey: Its composition, occurrence, and formation," by Peter B. Leavens, Pete J. Dunn, and Donald M. Burt, in *American Mineralogist* (1987), Vol. 72, pages 423-428. An superb specimen of original Franklin glaucocroite crystals with cuspidine is in the collection of the Franklin Mineral Museum, and has recently been exhibited in the museum's fluorescent case at both the NJESA and Franklin shows.

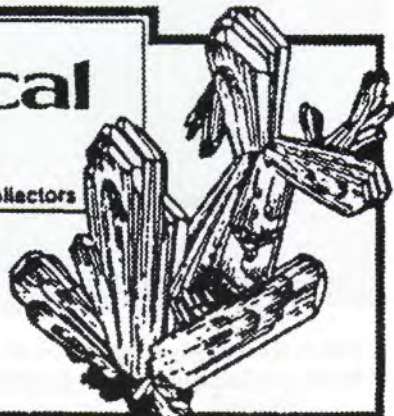
The acronym BIP, for Brief Intense Phosphorescence, was originated by Earl Verbeek in 1998 as a more accurate substitute for the misleading term "flash," used locally to describe the bright, short-lived phosphorescence of minerals like typical red-fluorescing calcite.





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CUSPIDINE: A SURPRISING REDISCOVERY OF AN OLD CLASSIC, AND A NEOPHYTE'S EDUCATION

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My introduction to Franklin, New Jersey and its plethora of minerals came about two years ago when I moved to Hoboken with my girlfriend due to her new job. Minerals and field-collecting had always been a passing interest and I was aware of the glowing rocks of New Jersey, but only from a distance. That was about to change.

We visited the New York Mineralogical Club show in January of 1996 and purchased our first UV lamp, a little UVP 4-watter. This little guy was soon to get a lot of use. (This small light-source came to illuminate a much larger world than I had imagined.) After buying the lamp I was chomping at the bit to get up to Franklin, but we had to wait until the museum opened in the spring. We went the first weekend in March the museum was open, and I'll never forget it. We crawled around the Buckwheat Dump, freezing and trying to make sense of all the rocks piled up everywhere. We ended up taking home some little screamers, including a killer hydrozincite/calcite that's still on the shelf. I was ecstatic. More importantly, we had also brought home some reading material. We picked up copies of *Rainbow Minerals* by Bob Jones, and *Ultraviolet Light and Fluorescent Minerals* by Warren, Gleason, Bostwick, and Verbeek. Those books were read and reread over the following months, and there was one

sentence in Jones' book which caught my attention. He said, when discussing collecting localities in Franklin, "Some of this material was later used as roadfill throughout the town, so you are apt to find bits of fluorescent rock anywhere." "Wow," I thought, "let's move there!" This idea proved to be impractical (and unpopular). Instead I began to spend as much time as was prudent at the dumps and museums, especially looking at rocks in the dark, trying to figure out what I was seeing. I was hooked.

In the spring of 1997 I happened to find myself in Franklin, driving around soaking up some of the old mining town's ambience. I had become reasonably familiar with Franklin's common fluorescent minerals and some of the oddballs as well. I had also been taking part in dump hunts and field trips of the FOMS and Sterling Hill Mining Museum Foundation, and enjoyed these immensely. One habit I had developed was checking the roadsides of Franklin whenever I drove through, and this day was no exception. I came upon a large pile of construction or demolition debris. I looked closely and there was a rock. And another, and a couple more. I checked them with the UV lamp, and lo and behold there was some green light. In the backpack they went. I then noticed a rock sticking out of the cement-filled void in a concrete block. Whack! Out it came, and a few more as



Debris from a demolished building, somewhere near Franklin. This is the site where Dru Wilbur, in 1988, found cuspidine in a piece of willemite-franklinite-calcite ore cemented to a concrete block.

Dru Wilbur photo

well. It appeared someone had been using Franklin ore as ballast in a building. I took these pieces home and proceeded to give them a scrubbing. Then I looked them over and frankly, I was a little disappointed. They were heavily weathered and didn't show much color other than the obvious willemite-green. As they didn't appear to be anything special, they went into the bottom of the closet to wait for another day.

I didn't think about these rocks until they reappeared again on Cleaning Day. I thought about tossing them out, but figured I should at least break them open to expose fresh surfaces. Whack! And again, wow! Here was some gemmy green willemite, granular franklinite, and something else I didn't recognize: kind of like hardystonite in daylight but a weird peach color under SW UV. I hadn't seen this color before except in a small piece of "svabite" I had bought from Nick Zipco outside the Franklin Mineral Museum one day, but this mineral didn't look the same. The books mentioned johnbaumite as having a similar fluorescent color so I thought maybe that's what it was. I was very excited to have perhaps found one of the Franklin's more unusual fluorescent minerals.

I took a piece down to the Franklin Mineral Museum and pestered John Cianciulli to take a look. He did, and said that based on the association and fluorescence it looked like johnbaumite, but to get a conclusive ID I would have to get it analyzed. I was thrilled at this point; finding a rare mineral was astonishing, exciting, and something that happened to other people. Not content with a "maybe," I took John's advice and sent a sample off to Tony Nikischer of Excalibur Mineral Co. for electron microprobe analysis. I waited anxiously for the findings, excited by the thought of some mysterious high-powered equipment working on my specimen. It came back in a couple of weeks and I nervously opened the envelope. Tony had found that the sample's profile matched that of cuspidine. "What the heck is cuspidine?" I thought. I looked up cuspidine in Dunn's monograph and his description was nothing like the specimens I had. Very confusing, but worth a call to the Franklin Mineral Museum.

I made another trip there and John was gracious enough to do an optical analysis of the mineral, even though he was properly skeptical of Tony's identification. It turned out that, up to this

point, cuspidine had been considered one of the rarest of the fluorescent minerals of Franklin. The odds that a novice had made a find of this magnitude were slim indeed; the rocks of Franklin have received a great deal of attention over the years from some very perceptive and enthusiastic collectors. However, one of the wonderful qualities of mineral collecting is that no one ever knows what is going to be in the next shovelful, particularly at Franklin with its extremely varied mineralogy.

John and I were both pleasantly surprised when his optical data matched those of cuspidine. He said, "I'd never have believed this if I wasn't looking at it." But here was the proof. Since that time an X-ray powder diffraction analysis has also been performed on the material John and Tony had already studied, confirming their optical and microprobe work. Since then, cuspidine has been optically identified in a couple of other assemblages at Franklin. Perhaps it has been misidentified there for quite a while, as its fluorescent response under SW UV is superficially similar to that of clinohedrite and some members of the apatite group. My specimen of Franklin cuspidine on which the initial analysis was performed has been deposited with the Franklin Mineral Museum for further study.

The experience of making this find and then taking it through the various stages of observation, discussion, analysis, skepticism, and finally acceptance has been illuminating in many ways. In a personal sense it confirmed that my interest in minerals was one that should be pursued and deepened. In a social sense it introduced me to many of the personalities and some of the history of Franklin mineral collecting, an intriguing and very involved world of its own. In a larger sense it has been an affirmation of the value of a closer look.

ACKNOWLEDGEMENTS

I would like to thank: the staff of the Franklin Mineral Museum and in particular, John Cianciulli, for their patience in dealing with my repeated queries; Dick Bostwick for his advice and his wide-ranging knowledge of Franklin's history and fluorescent minerals; Peter Chin for providing the X-ray powder diffraction analysis; Tom Cowell for his enthusiasm; and particularly Kim Meadow for her love, support, and understanding when I would sit in the dark looking at rocks.

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"The Pond" Swap-and-Sell back when it really was held next to the Franklin Pond.

Dr. Alfred Standfast photo, courtesy of Lee Lowell.



**Above: the excitement of collecting in a group. Buckwheat Dump, circa 1960.
Franklin Mineral Museum Archives.**

**Below: The contrasting thrill of solitary collecting. Gooseberry mine, Balls Hill,
Franklin, November 17, 1963. "Sunny" Cook Archives.**



COLLECTOR'S STORIES

INTRODUCTION

Perhaps you are wondering why this issue of *The Picking Table* is so fat, so firm, so fully packed, especially when its editors are always complaining about never having enough to print. The answer seems to be that at long last, *Picking Table* readers were offered a topic they could write about: their own experiences.

In late May, Co-Editor Tema Hecht sent a letter to a majority of FOMS members, including all those we knew to be active collectors. This is how it began:

"The FOMS's 40th anniversary is fast approaching. **WE NEED YOUR HELP!**

"Please write something for the 40th anniversary *Picking Table* (Fall/Winter 1999 issue) about your life and times as a mineral collector at Franklin and Sterling Hill. Did anything particularly funny, strange, or serious happen to you while collecting? Is there a moment or event which 'crystallized' the Franklin/Sterling Hill experience for you? Were you present at a key time in the history of the FOMS?

"No reminiscence, story, or tale is too short...."

Whether it was Tema's personality, the importance of the occasion, the opportunity to shoot from the hip, or forces beyond our control, we were promptly deluged with responses: more than fifty to date. Because they were written for this issue by FOMS members, whose magazine this is, we are printing nearly all of them. The few which do not appear here are of two types: 1) the rare article which had little or nothing to do with local minerals and collectors, and 2) fascinating accounts of their experiences underground at Sterling Hill by Gary Grenier, Bob Hauck, Steve Misiur, and Steve Sanford. These, with some additions in a similar vein, are being saved as a group for a future issue.

The Picking Table exists to serve FOMS members, who may curse it for being late once again, but are the ones for whom it is written. Here, finally, on the 40th anniversary of the FOMS, is a *Picking Table* which is for the people, of the people, and *by* the people. You have spoken; now read.

Vox Populi, Vox Dei.

IF MY WIFE ONLY KNEW...SHE'D KILL ME!

Anonymous

Finally it has arrived. It's very early Saturday morning and a perfect September day. I leave my wife and kids fast asleep in our home and jump into my car. I am headed for Franklin, New Jersey and the Franklin-Sterling Gem & Mineral Show.

My first stop is the Franklin Diner, where I wolf down a tasty, greasy breakfast of eggs, sausage, and home fries, instead of what my wife insists I have: fruit and cereal with skim milk. When I'm done with breakfast I drive over to the Franklin School where the show is being held and the real fun begins.

It's so good to see my buddies, whom I haven't seen in months, at the show. The best part of this weekend is that I'm by myself, without my wife or children, who usually cause me one restriction after the other, and make me feel inhibited with the guys. And I have money to buy minerals. Who could ask for anything more?

After standing around with my friends and catching up quickly with the latest news, I run around from table to table and see what the outside dealers have for sale. It's very important to get to these dealers as early as possible in order to get the "pick of the litter." We all do that. Lengthy conversations come after our purchases. One of my buddies told me that certain dealers are

selling interesting minerals, fluorescent and non-fluorescent, with unusual associations, and more. After making lots of purchases and happily spending money, I take some time out to be with my friends. They invite me to have a couple of beers. This reminds me that I stocked up my cooler with beers for the weekend and I offer mine around too. So we hang out, drink beer, tell dirty jokes, and curse without guilt.

What a pleasure this weekend is for me. I can do and say what I want without having to look over my shoulder. No kids yelling at me "Daddy, I'm hungry; Daddy, I have to go to the bathroom; Daddy, I'm bored and wanna go home!" No, none of that this weekend. At my leisure, I can look at the mineral displays, both daylight and fluorescent; I can walk around the show, inside and out; I can purchase minerals that I want to add to my collection without my wife saying, "Dear, how much did you pay for those ugly rocks?" Most important, I can spend time alone with my mineral buddies.

Saturday goes on like this all day, buying minerals and spending time with friends. I also make sure that I buy my kids a pretty cluster of calcite crystals and my wife a piece of jewelry so she will be happily distracted from asking what I spent at the show on those "ugly rocks."

I also take time out to see what will be auctioned at the FOMS banquet this evening. There are some really exciting pieces, including more than a few with historical value. The more time I spend perusing what will be auctioned the more

excited I get. This calls for another discussion with the guys and another beer!

It's now getting close to 6:00 P.M. when the show closes for the day. I and my friends, exhausted but happy, pile into cars with designated drivers, and we're off to the Ogdensburg firehouse for our dinner, lecture, and best of all, the auction. Everyone at the firehouse is in high good spirits looking over the items that will be auctioned. During the meal and the lecture I can feel the anticipation of the audience mounting.

It is now time to begin the auction! We each take a number to hold up in order to bid. Mine is number 13.

The auctioneer holds up lot #1, a spectacular specimen from Franklin with an old label. Ten people hold up their numbers at the same time to bid for this piece. Gradually, as the price goes higher, fewer hands pop up. This repeats itself many times over the next hour, with some prices creeping into four figures!

The specimen that I want is up next for auction. I **must** have this one, I say to myself. Nobody must own this but me no matter what it costs. I can already see it in my display case at home, placed perfectly in the center so that everyone will notice it at first glance. The bidding starts and about 15 hands shoot up, mine included. The bidding continues and now fewer hands are raised. I can feel the sweat under my arms and can hear my heart pounding in my ears. The auctioneer yells again and number 2, number 5, and number 43 go up along with my number 13. Now it's between me and number 43. Everyone is waiting and watching to see who will give in. My mind goes blank, my hands begin to shake, and my vision blurs. Then all at once I hear, "Going once, going twice, SOLD to number 13, the mineral collector with the dazed smile on his face!"

And as I snap out of it I think: thank God, if my wife only knew...

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FRANKLIN MEMORIES

John L. Baum

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The assignment as a mine geologist at Franklin and Sterling mines afforded many opportunities for collecting. There are five ways to collect as buy, trade, gift, find and steal. Mostly at F-S I found. The first specimen, a radiating white willemite, was obtained when I was being introduced underground at Franklin by the fellow whose job I was taking when he was transferred. He asked a miner, Garfield Finigan, father of twelve, where we could find such a specimen and we were directed to feel on top of a timber in another area and there it was. I felt a lot of timbers in the next four years underground at Franklin.

The first wollastonite found at Franklin was shown to me when I met the mine captain, Art Watt, outside the time office. He gave it to me as a new one to him and I had it under ultra-violet as soon as I could return to the office. The next morning I was underground in Harry (Bake) Hardy's working place with my little M-12 battery lamp. The site had been blasted and dumped down the chute but there were two big chunks of wollastonite in the loose alongside the center and somehow I got them both up to the surface. Later I drew up a map of the working so that when Hardy and his buddy mined the next slice below, they would be alert. They did very well. I broke up and distributed one chunk and kept the other intact.

The south end of the Franklin mine seemed like a mile from the shaft but it was only a thousand feet to a source of coarse rhodonite crystals in white calcite. Thinking back on this place, I realize now that I was in Fort Knox, but I was young then, the company had rules and I was well paid at \$120 a month. The wall was loaded with crystals and I am sure that a lot of them found good homes. I took a biggie and some hand specimens but there was no market known to me and the penalty for sales in my case would probably have been transfer to Gilman, Colorado, the company's Siberia.

Nick Trofimuk's Parker Shaft mineral location was a treasure house. I don't believe that there was ever anywhere a more prolific mineral locality for crystals and choice species. The Opatic-Gerstmann-Hendricks-Hauck-Phillips copper specimen contains a good dozen species, including the new mineral charlesite, and several professional papers benefited from this discovery. I am so pleased to have been able to collect and to describe for publication this Franklin locality. The mineral science owes a great debt to Nick for salvaging so much of his find; he was a kind and generous friend as well.

While descending a ladder into a Franklin working place I noticed an area of "Christmas Tree" rock behind the ladder and managed to get into the space to pry off a large slab of this red and green fluorescent speckled pyroxene, the largest I have seen. This clunker was not broken up but smaller pieces accompanied it and some became trade goods with the natives of western states who seem to have collected mostly agates and petrified wood.

On the way through the deserted 300 level at Franklin to map some high north end workings I observed a weathered fissure which proved to be lined with platy crystals of gypsum. At the north end of one of these upper levels the ore was cut off by the unconformity atop the Precambrian and there was no way to introduce fill. A shift boss making his inspection took me down a raise into this shrinkage opening and we stood in a long room with inclined roof, standing on fallen rubble with a trail winding



John L. Baum, Curator of the Franklin Mineral Museum, between acts at Miners Day, May 2, 1999.

Tema Hecht photo

down among boulders, and off to the side the timbers of a level below. I was so taken with this enormous cavern that I returned alone another time, a crazy stunt because the ladder was in bad shape and no one knew I was there.

A pegmatite sampling project was undertaken at Franklin, and one of the samples appeared to contain copper. It sat on a windowsill for over a year until I showed it to L.H. Bauer who borrowed it for study. This turned out to be a source of mineralogical excitement, the world's finest yeatmanite according to Prof. Frondel of Harvard, with romeite in a matrix of johnbaumite, according to Pete Dunn of the Smithsonian, and fluorescent to boot. It now reposes in those two institutions.

The footwall of Franklin's Palmer Shaft pillar was the source of vuggy rhodonite which contained tiny crystals. Again I relied on Bauer's experience. Clear glassy twinned crystals were cannite and buff-colored crystals with greasy luster were hedyphane. These were my introduction to the beauty of micromounts. It was my habit to share finds with Bauer as did a number of miners. His enthusiasm made the relationship a pleasant one even though when relating my finds to the Harvard mineralogists whom I would have loved to impress, not having been their best student, he always referred to me simply as "one of our geologists." So much for credit.

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OUR FIRST DATE

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Franklin and Sterling Hill mean a lot more to me than to most mineral collectors. My wife and I had our first date there.

I first saw Franklin fluorescents as a 12-year-old, in 1955. A friend had talked me into visiting Ron Januzzi's Dinosaur Gift and Mineral Shop in Putnam, NY. I fell for Franklin and for mineral collecting immediately. Ron led groups of kids on collecting trips to many "old time" Connecticut localities and to the Buckwheat Dump, to which I returned with my family several times. These trips stimulated my life-long interest in geology.

After receiving a Ph.D. from Ohio State, I began teaching geology and mineralogy at Waynesburg College, a small, private, church-related school in southwestern Pennsylvania. One of my first students was Franklin native Bob Svecz. Bob's goal at the time was to get a B.S. in geology so that he could become a mine geologist for New Jersey Zinc. This he did in 1975. From then on, Bob, through the good graces of Bob Metsger and others at New Jersey Zinc, arranged nearly annual underground tours for Waynesburg College students and myself. These continued until the mine closed.

It was also my good fortune to spend a couple of months each summer directing Waynesburg College's geology field course in Florissant, Colorado. In August of 1978, I met a couple who were building a house in the mountains near the famous amazonstone locality of Crystal Peak. It turned out that they were from Sparta, NJ. Walt Ibach worked as a free-lance artist, and his wife Nell had taught junior high school in Ogdensburg. When their kids finished high school, Walt and Nell sold their house in Sparta, packed up their African-art collection, and moved into a tent in Colorado. Their dream was to hand-craft a house in the mountains, incorporating all kinds of energy-efficient design innovations. Unfortunately Walt had a fatal heart attack in the winter

of 1983, before he could finish the house. Nell returned to the east coast to visit with family and friends and to get her life back together.

Nell and I talked on the phone and wrote to each other a couple of times that winter and spring. Then I had an inspiration. I was scheduled to take a group of students for our annual Sterling Mine tour that May; Nell had taught in Ogdensburg. It made sense to invite her to join us for the tour (what could be more fascinating than a mine tour; and, besides, I thought she was pretty fascinating herself!!). Surprisingly, she agreed.

On May 9, 1983, my students and I got up early and went (as was our tradition) to the Franklin Diner for breakfast. Nell met us there, and we all went to the mine for our orientation. Thankfully, Bob Svecz waited until later to tell me that I wasn't supposed to invite non-students to tag along; besides Nell, another Waynesburg grad, George Polman, had also come along for the tour. We all walked to the lamp house, where Bob fitted us out with hard hats and lamps and described how to use a self-rescuer. Nell, at just over 5 feet and 100 pounds, had trouble finding anything that fit. Little did I know that this trip, rather than being the highlight of her life, was a cause of some apprehension.

Finally, we all walked over to the incline for the rapid (and, for first timers, hair-raising) descent into the mine. The plan was to visit several levels, culminating with a chance to collect some rare arsenates near the bottom of the mine. Bob thought we would be underground for 3 or 4 hours—all too short for my students and me.

To get from level to level and to visit some of the stopes between levels, one climbed up and down metal ladders mounted inside corrugated pipe like that used for culverts. This provided passage through the areas that had been mined and backfilled with waste. In places, the ladders had offset, and some emerged, in open space, from the ceilings, forty or fifty feet above the floors of the stopes. Tourists like us had to feel around carefully with our feet, to be sure we didn't misplace the next ladder rung; inside the conduits, one couldn't really see what was coming up below. Although I didn't know it at the time, Nell had the added problem of trying to keep her hat, lamp, and belt from falling off, and was having a nicotine withdrawal problem as well.

We finally made it to an active stope on the 1200-foot level, the last stop before we were to get a chance at the really rare stuff. By then, Nell was wishing we would leave her at the nearest shaft station so that she could relax and smoke a cigarette while we finished the tour. I had other worries, though. While I was searching through the ore that had recently been blasted from the stope, George Polman came over and, with an embarrassed expression that I will always remember, informed me that he had lost his safety glasses somewhere. It took only about two minutes for Bob Svecz to discover that George had no glasses, at which point we were unceremoniously marched back to the shaft, not to go down to the mother lode we had anticipated but to return to the surface. Nell nearly kissed George for his thoughtfulness, while the rest of us mumbled words that don't bear repeating.

Afterward, some of us went to the Fone Booth for dinner, and Nell got me drunk on Blue Nun while we spent the evening listening to a local band playing golden oldies. This was the end of our first date; later that year, Nell agreed to become my wife.

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CRYSTALLIZATION OCCURS LATE

George S. Chewey
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As a young boy I was very close to both of my parents. A simple pleasure we all enjoyed were our weekly rides through various parts of beautiful rural Sussex County. These rides were in the late 1940s and early 1950s. The zinc mine of Franklin, New Jersey, was active and still open. The Sterling Hill Mine in Ogdensburg would be open for many more years. As we all know, the Franklin Mine closed in 1954.

I remember asking my dad, as we traveled through Ogdensburg on Rt. 517, "What is that colorful quarry across the valley?" "An open surface pit, part of the Sterling Hill Mine," he would say.

I always had a great interest in nature, and my parents were both very supportive of it. My mom gave me my first mineral handbook, *The Field Book of Common Rock and Minerals* by Frederick Brewster Loomis, published by Putnam & Sons of New York, NY. The bug had bitten. A virus was injected. How sweet it is!

I guess I got my interest in earth science from one of my grandfathers. They worked briefly in the Dover district. This was the iron mining area in Morris County. One grandfather worked in the mines at Hibernia, and the other in a smaller mine, called "The Beach Glen Mine," just down the valley about 1½ miles to the southeast.

The loved ones I speak of have all drilled their last rounds and are resting in heavenly peace with the Lord. How quickly forty to fifty years become the dim past.

In the early seventies, my cousin, John Kolic, had come to work at the Sterling Hill Mine. He started at the bottom of the ladder and through a lot of hard work became a well-respected miner. As I remember it, John's interest in mineralogy goes back many years. He worked at the mine until 1986. Because of the low price of zinc in the world markets, plus rising property taxes, Sterling Hill closed at that time.

A period of court hearings and litigation followed. Ogdensburg finally put the Sterling Hill Mine up for tax sale. The brothers Hauck eventually purchased the mine. The late eighties through the early nineties featured many volunteers and others, including John Kolic, working hard to create the Sterling Hill facility as we know it today.

In January of 1995 I retired from Picatinny Arsenal, where I had worked as an engineering technician. Shortly thereafter, in February or March of 1995, I visited John Kolic in Franklin. John asked, "Are you looking for a part-time job?" The rest is history. I had acquired, by that time, some knowledge of geology, minerals and the Franklin-Sterling Hill district. When I know the subject, I speak well in front of an audience. At that time, as now, tour guides were needed at the Sterling Hill facility. A program of basic training was initiated.

In the lives of some people, crystallization of purpose occurs late. "Better late than never," I say. At the time, my wife, Virginia, who was a teacher, encouraged me to be involved. I feel very fortunate to have such an interesting avocation. I am lucky to be able to rub shoulders with so many interesting people.

I sincerely feel that if I can encourage a child to become interested in science, especially earth science, maybe someday someone will remember that I passed this way during my life.

LASTING IMPRESSIONS

John Cianciulli, Asst. Curator
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Somewhere along our vast experiences at mineral collecting we meet people who have been influential and/or inspirational to that end. I'm sure we can rattle off at least a dozen names of people we have met who are distinguished in mineralogical literature. For most of us though, it is someone we meet in the field or at a show who leaves a lasting impression. For me one of my most memorable mineral collector friends was a gentle old man known to collectors as "Old Joe." Many local collectors, who have had the privilege of actually meeting him, knew of him long before. Local collector legend was replete with stories about "Old Joe."

"Old Joe's" real name is Joseph Hines. I first met Joe in 1972 shortly after I arrived home from a tour of duty in Southeast Asia during the Vietnam conflict. Every spare moment I had was devoted to field collecting. I met Joe at the Trotter Dump. Joe always had a smile on his face, a look that gave most people the impression that he knew something you didn't...and he did! Trotter was "good pickins" back in those days. For the first few years occasionally I would find weather-beaten New York Times papers under a rock or two and at first paid little attention to it.

Then one day I decided to look under the paper and discovered a cluster of "melanite" garnets with scapolite xls. From that day on I paid special attention to papers found on the dump. It was like the Fairy Godmother of rock collecting was guiding the way for me. Specimens I was finding under these now obvious markers were remarkable. Three-inch rhodonite xls, one-inch barian microcline xls, four-inch gray willemite xls, allanite xls and much more. Then one day during lunch I mentioned to Joe about my incredible luck. Joe's grin spread from ear to ear as he scratched his head and said, "So that's why I couldn't find my papers!" Joe explained he often marked finds he did not want to carry out at the time and would recover them at a later time. He thought he was becoming forgetful when he could no longer find his markers!



John Kolic and Joe Hines, Trotter Dump shack 1974.
Fred Howell photo. Franklin Mineral Museum Archives.

continued on page 49

THE PICKING TABLE

KING FRANKLINITE, PRINCE ZINCITE, AND QUEEN WILLEMITE

Fig. 1. Single terminated franklinite octahedron with zincite in calcite, 2 x 3 in., from Franklin, N.J. George Elling specimen, originally in the Hancock collection.

Gary Grenier photo.



Fig. 2. Exceptional freestanding 5/8-in. pyramidal crystal of gem zincite on fibrous sussexite, from Franklin, N.J. Peter Chin specimen, Gary Grenier photo.

Fig. 3. Pale yellow gem willemite crystals, 1 x 3 in., from the Trotter Mine, Franklin, N.J. Crystals from this find have been cut as gemstones. George Elling specimen, Gary Grenier photo.



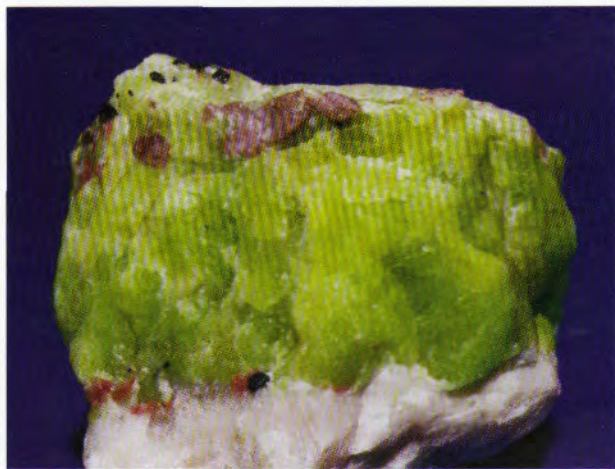


Fig. 4. Massive "apple-green" willemite, 2 x 2 in., from Franklin, N.J. The best-known and most widely collected variety of willemite from this locality. Its vivid color is further enhanced by exposure to sunlight. Gary Grenier specimen and photo.



Fig. 5. A rare and exceptional 1-inch crystal of transparent honey-yellow willemite from Franklin, N.J. Excellent faceted gems have been cut from similar crystals. George Elling specimen, Gary Grenier photo.

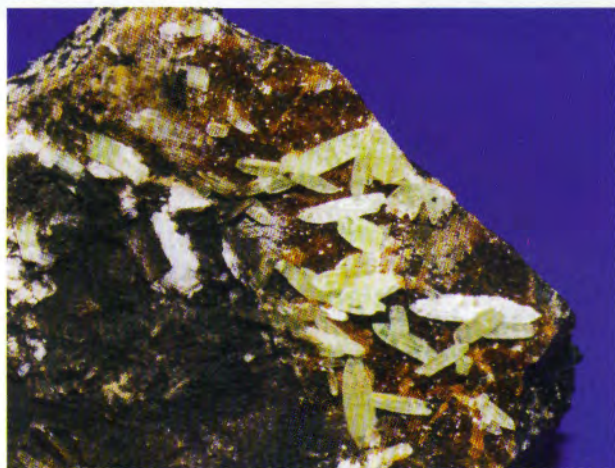


Fig. 6. Pale-green prismatic willemite crystals on drusy andradite, 3 x 3 in., from Franklin, N.J. Such crystals are highly prized for their distinct form, brilliant color, and transparency. Dr. Steven Kuitens specimen, Gary Grenier photo.



Fig. 7. Massive "sulfur-yellow" willemite with gemmy areas, 2 x 4.5 in., from Franklin, N.J. A spectacular example of an extremely scarce variety of willemite. George Elling specimen, Gary Grenier photo.



Fig. 8. Equant hexagonal crystal of brownish-red willemite in franklinite-willemite-calcite ore, 2.5 x 3 in., from the Sterling Hill mine, Ogdensburg, N.J. A classic example of the manganoan variety of willemite known since 1832 as "troostite." Gary Grenier specimen and photo.



Fig. 9. Pale-yellow gemmy willemite crystals in parallel growth, 2.5 x 2.5 in., from Franklin, N.J. Known as "Trotter Willemite" from its original occurrence in the Trotter mine at Franklin in the nineteenth century. Steven Phillips specimen, Gary Grenier photo.

Fig. 10. Reddish-lavender sonolite hosts pale-green willemite crystals, 3.5 x 4.5 in., from Franklin, N.J. The color contrast is almost shocking. The sonolite in this specimen, a famous Franklin showpiece, was originally thought to be leucophoenicite. It was displayed for many years in the Franklin Mineral Museum as part of the Richard Hauck collection. Steven Phillips specimen, Gary Grenier photo.



Fig. 11. Gemmy lavender-purple hodgekinsonite intergrown with white barite, 2.5 x 3 in., from Franklin, N.J. "The clear-pink color and brilliant cleavage of the hodgekinsonite, together with the snow-white barite, make such specimens both striking and attractive in appearance" (Charles Palache, USGS PP 180, p. 110). A fine example of a showy and sought-after assemblage. Gary Grenier specimen and photo.

Fig. 12. Raspberry-colored leucophoenicite crystals, with willemite and calcite crystals, on drusy andradite in a cavity in ore, 2 x 3 in., from Franklin, N.J. A notorious specimen, described by Charles Palache on pages 104-105 of his monograph, *The Minerals of Franklin and Sterling Hill, Sussex County, New Jersey*, USGS Professional Paper 180 (1935). Needless to say, "Palache Specimens" are highly prized. George Elling specimen, Gary Grenier photo.

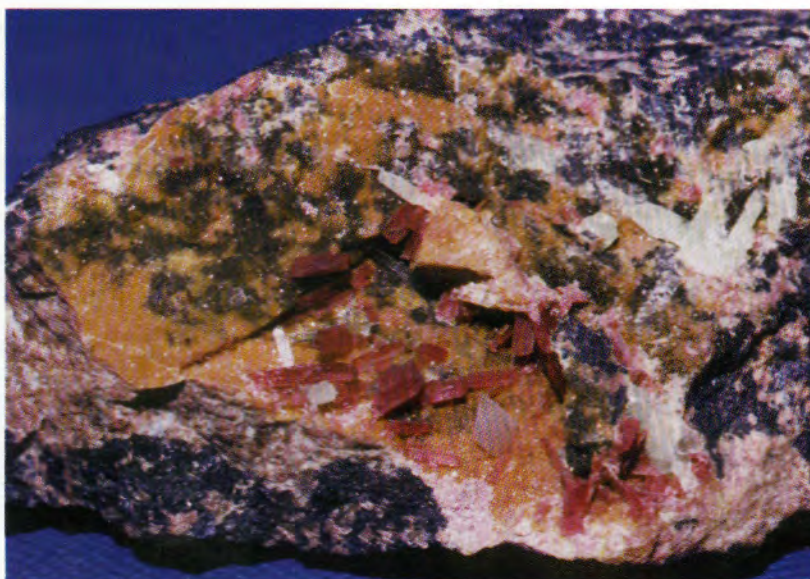




Fig. 13. In color and crystal form this is one of the finest bladed rhodonite specimens to come out of the Franklin mine. The "Ramage Rhodonite" measures 3.5 x 4.5 in., and for many collectors it is the standard by which other bladed rhodonites are judged. Ramage specimen, currently on display at the Sterling Hill Mining Museum. Gary Grenier photo.

Fig. 14. Rhodonite in elongated blocky crystals which have been carefully excavated by hand from the enclosing calcite, 2 x 4 in., from Franklin, N.J. Dr. Steven Kuitems specimen, Gary Grenier photo.



Fig. 15. Gemmy crystals of bladed rhodonite in a pocket with individual blades over 0.5 inches in size, 2.5 x 3.5 in. overall, from Franklin, N.J. Gary Grenier specimen and photo.

Fig. 16. This cluster of rhodonite crystals, painstakingly worked out of its calcite matrix, was for many years one of the highlights of the Richard Hauck collection. 4 x 4 in., Franklin, N.J. Steven Phillips specimen, Gary Grenier photo.

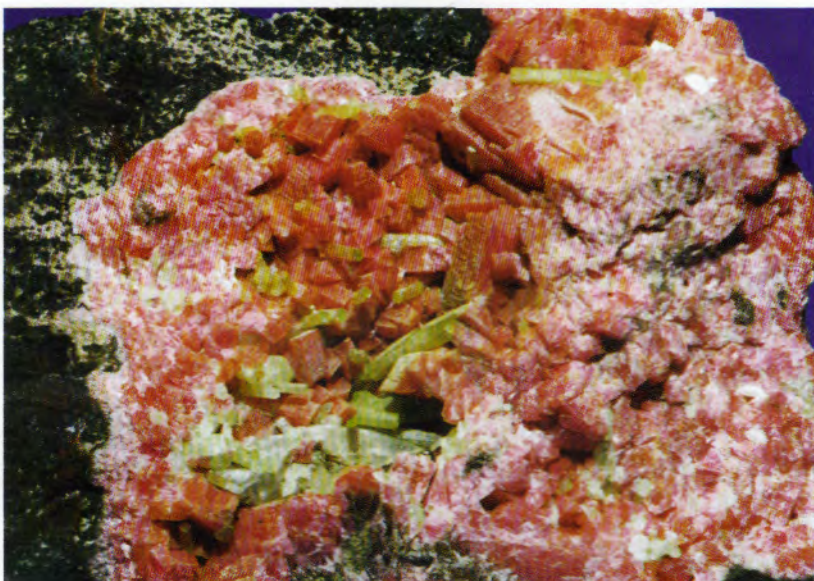


Fig. 17. A cavity of bladed rhodonite crystals with prismatic green willemite crystals, 5 x 5 in., from Franklin, N.J. This colorful assemblage is popular and highly sought after by collectors. George Elling specimen, Gary Grenier photo.

Fig. 18. A fine example of tabular and blocky crystal habits of rhodonite in calcite, 3 x 4 in., from Franklin, N.J. Gary Grenier specimen and photo.



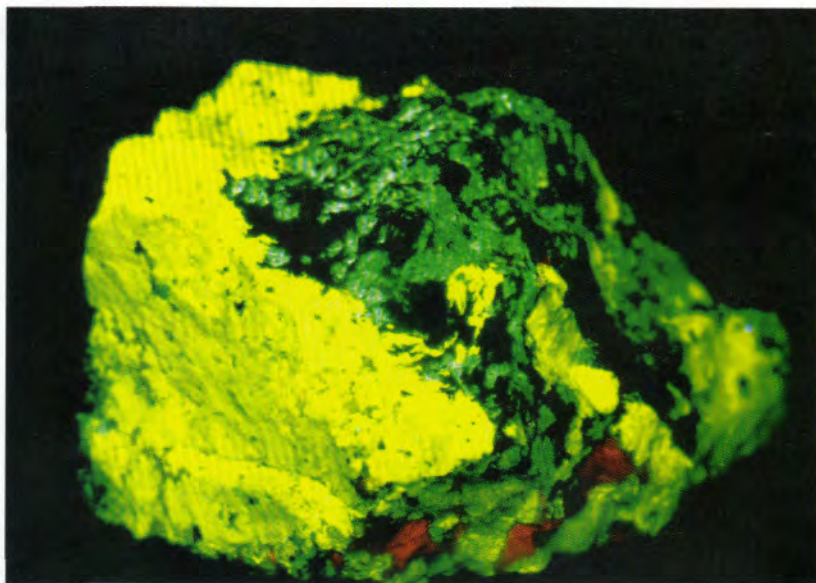


Fig. 19. Esperite (yellow) with willemite (green) and calcite (red), fluorescing under shortwave UV (254 nm). 4 x 6 in., Franklin, N.J. Previously known as calcium larsenite, esperite is one of the brightest of all fluorescent minerals. Although it is relatively common among the important Franklin rarities, superb larger specimens like this are scarce and desirable. Gary Grenier specimen and photo.

Fig. 20. Hardystonite (violet-blue) with calcite (red), willemite (green), esperite (yellow), and clinohedrite (orange), fluorescing under shortwave UV (254 nm). 3 x 4 in., Franklin, N.J. Such "5-color specimens" are highly prized. Dave Wellbrock specimen, Gary Grenier photo.

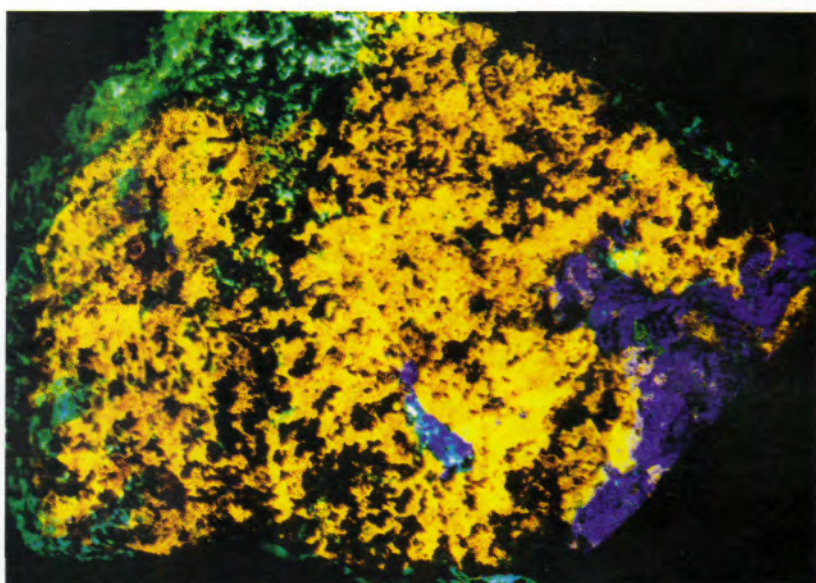
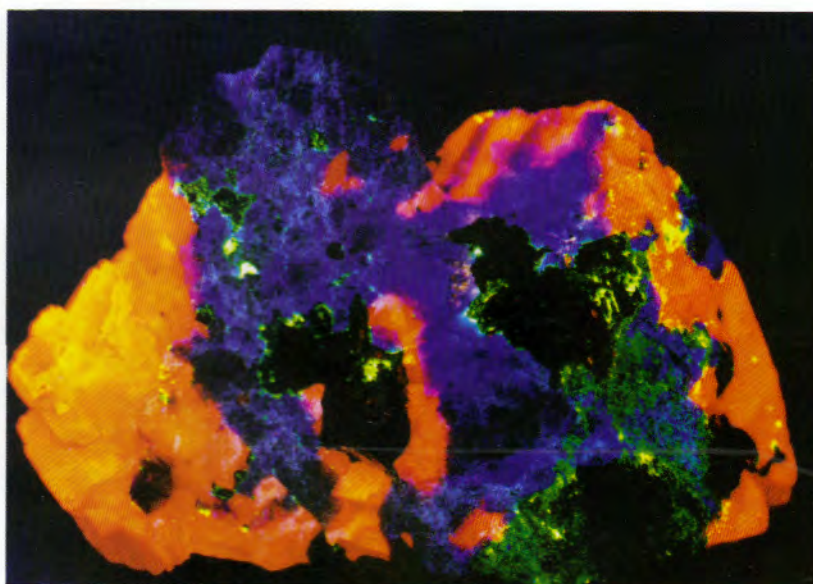


Fig. 21. Clinohedrite (orange) coating hardystonite (violet-blue) and willemite (green), fluorescing under shortwave UV (254 nm). 4 x 5 in., Franklin, N.J. Clinohedrite, for reasons apparent in this photo, is one of the most popular fluorescent species from Franklin. Gary Grenier specimen and photo.

Fig. 22. Wollastonite (orange) with feldspar (dull red), willemite (green), and calcite (red), fluorescing under shortwave UV (254 nm). A striking example of the very rare "first find" wollastonite from Franklin, N.J. 3 x 3 in., Gary Grenier specimen and photo.

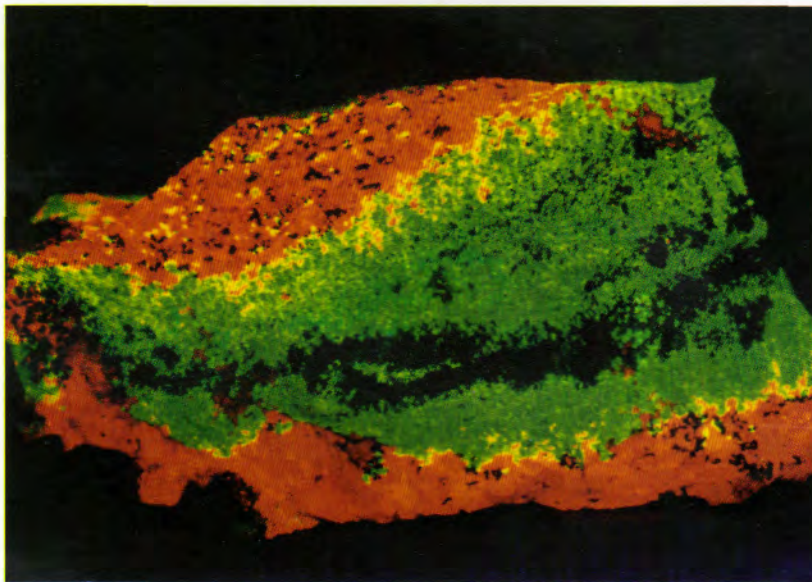
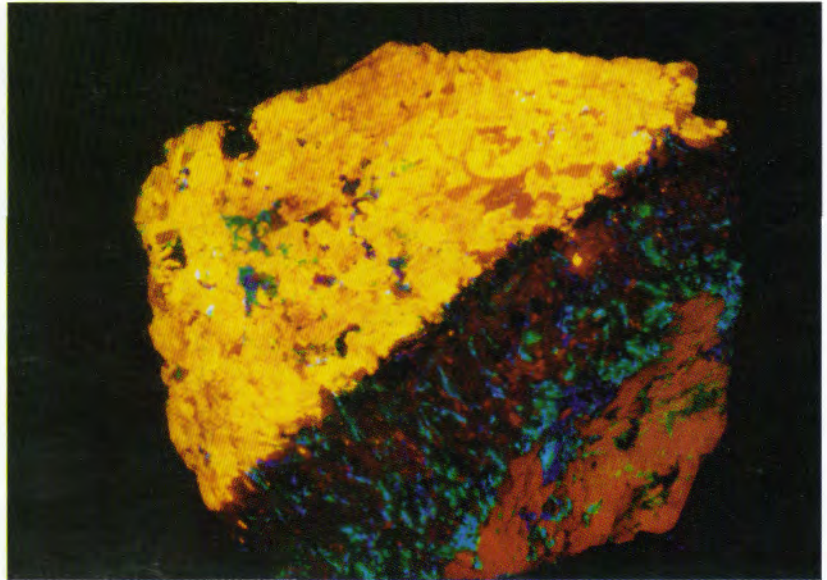


Fig. 23. The best-known combination of fluorescent minerals in the world: willemite (green) and calcite (red) from Franklin, N.J. In spite of the abundance of this material, specimens are eagerly sought after for their apparently infinite variety of patterns. Do you see the head of an alligator with its red eye staring you down? 4 x 6 in., Gary Grenier specimen and photo.

Fig. 24. Margarosanite (pale blue) with manganaxinite (red) and pectolite (orange), fluorescing under shortwave UV (254 nm). 2 x 3 in., Franklin, N.J. Margarosanite, always a rare mineral, inspires local collectors to an unusual degree and has been aggressively pursued by them for decades. Interest has been so intense that the terms "margarosanite frenzy" and "margarosanite envy" have found their way into the Franklin vernacular. Formerly a Gary Grenier specimen; Gary Grenier photo.





Fig. 25. Massive cuspidine with franklinite and willemite, 2.5 x 3 in., collected in 1998 by Dru Wilbur in dump material from Franklin, N.J. See his article on page 34. Gary Grenier specimen and photo.

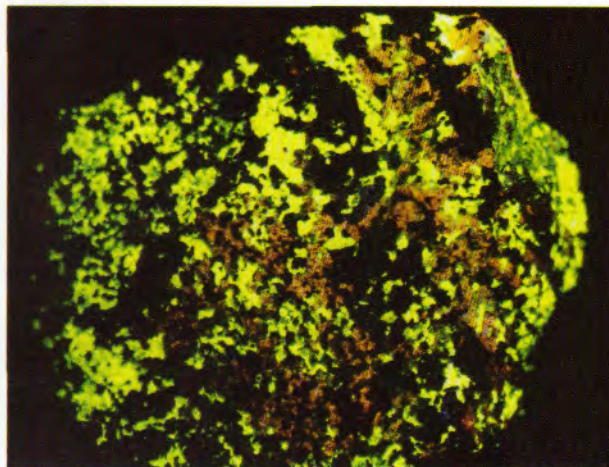


Fig. 26. Cuspidine (orange) and willemite (green) fluorescing under shortwave UV (254 nm), from Franklin, N.J. Same specimen as in Fig. 25. Gary Grenier specimen and photo.

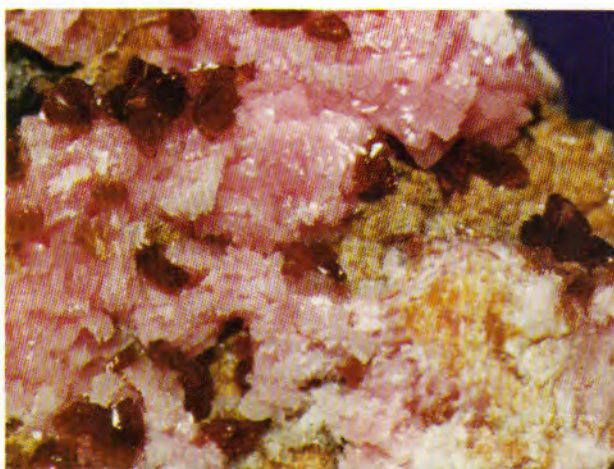


Fig. 27. Rare red allactite crystals in fan-like sheaves, on a bed of pink rhodochrosite crystals. Sterling Hill mine, Ogdensburg, N.J. Field of view approx. 1 x 1.25 in. John Kolic specimen, Gary Grenier photo.



Fig. 28. Kolic's kolicite: a 1-inch cluster of intergrown crystals of kolicite (red) and holdenite (pink) from the Sterling Hill mine, Ogdensburg, N.J. John Kolic specimen, Gary Grenier photo.

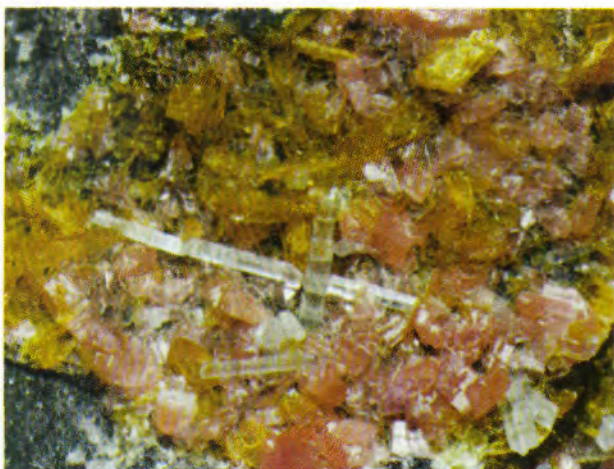


Fig. 29. "Eye Candy" for the Franklin collector. Pale green willemite crystals with gemmy rhodonite crystals and yellow tabular crystals of manganaxinite, from Franklin, N.J. Field of view approx. 1 x 1.25 in. Fred Parker specimen, Gary Grenier photo.

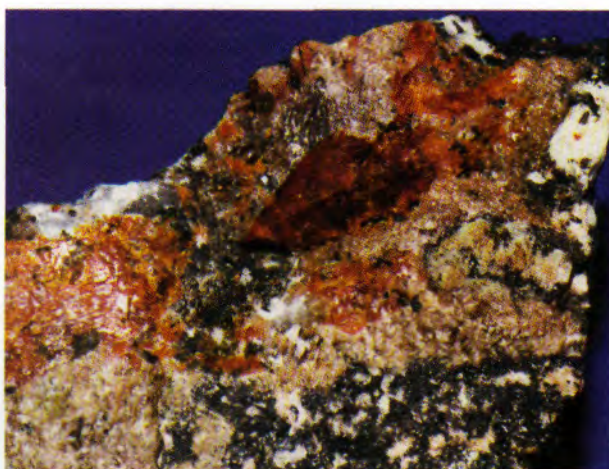


Fig. 30. The last word...in zincites: a 0.75-inch sharp, gemmy zincite crystal reclining on a bed of tephroite and franklinite, from Franklin, N.J. Jim Chenard specimen, Gary Grenier photo.

PETE DUNN IS SUPER GROOVY

Susan Cooper
14 Ravine Drive
Newton NJ 07860-8817

Pete Dunn has, through frequent visits and correspondence, been a dynamic member of Mrs. Cooper's Super 5th Grade in the Ogdensburg School District for 3 years now. He has touched the minds, hearts, and funny bones of many, many students. Eyes light up, spines straighten, giggles of interest abound when Pete pounds on the table and enthusiastically uses his booming voice to describe a scientific phenomenon. He gave the students the confidence to put forth their own theories about the Lost Orebody as he taught them about the interesting and unique geology and mineralogy of their own very special town.

Pete has instilled in the students a passion for learning in general as he has generously shared his interests with them. The munchkins, as he calls them, are sure that he is the greatest scientist in the world. They all agree that he is "super groovy". They aspire to his greatness in their own way because he has let them know that the important thing is to immerse themselves in a lifelong search for knowledge.

These three cartoons are tributes from some of Pete's former students.

Thanks, Pete!

[Editors' Note: additional cartoons appear on pages 50 and 51.]



CONCEPT BY KATHLEEN DURAND
ILLUSTRATIONS BY MICHAEL VANDENBERG
6/99

A CONFLUENCE OF RANDOM EVENTS or LONG ODDS ON THE ROCKS

Warren Cummings
1191 Parkside Ave.
Ewing NJ 08618

In 1957, when I was 10, the confluence of 3 circumstances set me on the principal course of my life. First was the influence of my Uncle, Raymond W. George. Although he was, among many things, a trotting horse trainer and driver, he came from a long line of Cornish miners. He was named for Rossiter W. Raymond, a well-known mining engineer of the late 19th century. His father was superintendent of the iron mines at Chester, NJ. His grandfather, son of a mine captain in Carn Brea, near Redruth, Cornwall, started his career at 15 as "two thirds of a man" and went on to become superintendent at Andover and then Ringwood, NJ. Uncle Ray really didn't know much about mineralogy other than some mineral names but he talked about it frequently and encouraged me to pick up stones and wonder about what they meant.

Coincidentally a neighbor a few houses up the street, in Newton, got the mineral collecting bug. He dumped all his scraps in a small stream that ran through a vacant lot behind his house. By this time Uncle Ray had me trained to look at objects on the ground and I thought I'd found a bonanza.

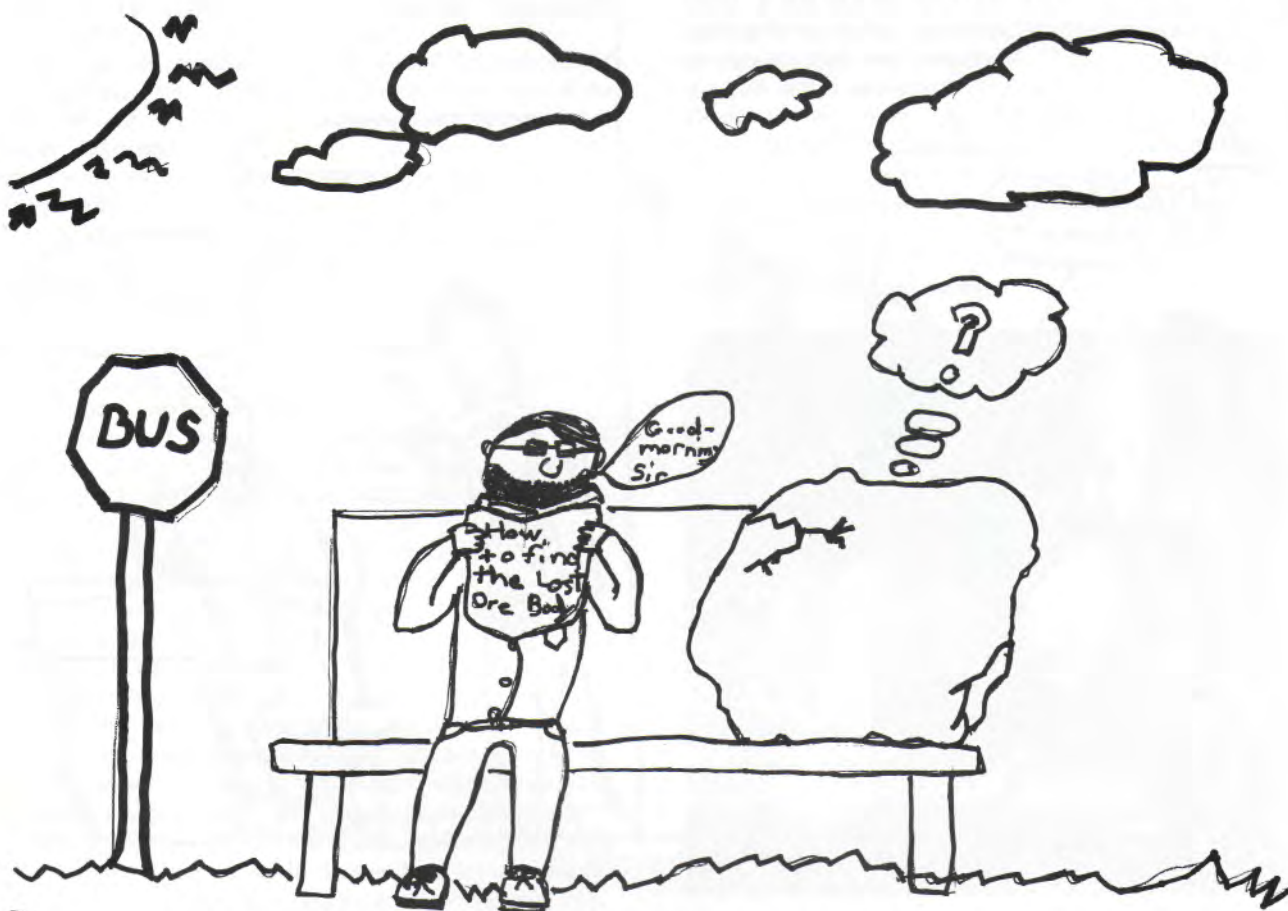
That fall the first Franklin Mineral Show was held at the Neighborhood House. I was sufficiently enmeshed in collecting that my father took me to the show and my first collecting outing to the Buckwheat Dump. From that day, I believe it was the first Saturday in November, 1957, through 7 years of college and a career that's ongoing after 29 years, minerals and the geology relating to them have been a focal point of my life.

That the initial key experiences of what became the pivotal theme of my life occurred at Franklin was due simply to proximity. That Franklin was such a powerful influence is a reflection of what a special place it is.

I was fortunate that in 1957 the Buckwheat Dump was far more rocky than it is today. Finding things was easy. Among the boulders there was sufficient variety of colors and textures within easy reach to hold the interest of a 10-year-old novice. And some glowed in the dark when a special light was put on them. And there were lots of people, grownups, pawing and hammering thru the rubble. They are faces I don't remember and names I never knew, but I do remember their enthusiasm and that it was infectious. I suspect I was born with a collector personality and, therefore, highly susceptible to the infection.

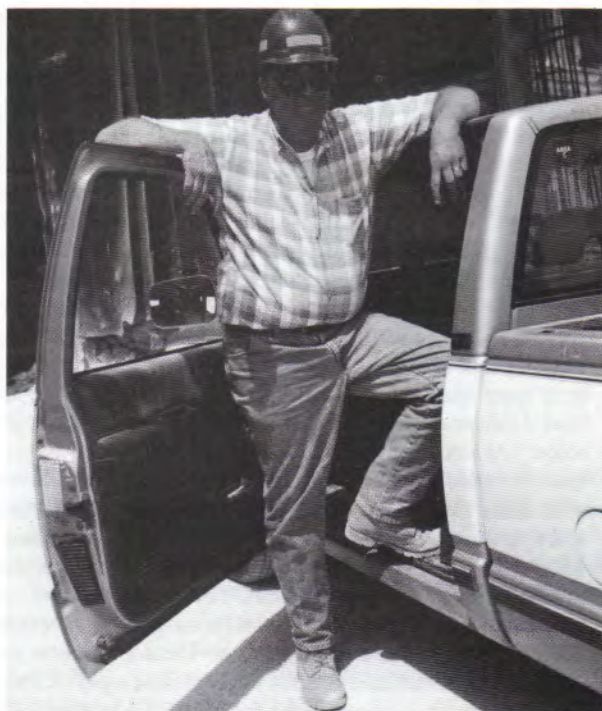
I was also fortunate to have stumbled upon Franklin early in the television era (we'd only had one a year) and long before PCs. I'm thankful I had the time to look at and cultivate an interest in the real world. In life's crap shoot Lady Luck really does smile now and then and some of us really do walk away winners. I rolled Franklin and was set for life.

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Has Pete Dunn found the Lost Ore Body???

Doug Fischer 6/99



Warren Cummings at the Lime Crest Quarry, May 23, 1999.
Richard Bostwick photo

DOES IT EVER END? I HOPE NOT.

Joseph R. Daley
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Destrehan LA 70047

Mineral collecting for us began in the summer of 1973. There was a show at the Morris County Museum in Morristown. All the minerals were okay. But a Terlingua calcite was displayed under UV light and my son and I had to have a piece of that. So for \$25.00 we got about a ten-pound chunk and took it home to Montville.

Now we needed a UV lamp and the phone book listed a rock shop in Denville. The next Saturday found us in Denville where they had a small green box with long-wave and short-wave UV light. The shop owner said if we were really interested in fluorescent minerals we should meet a part time employee of theirs whose name was Steve Sanford. We contacted Steve and he showed us a piece of Franklin calcite-willemite and told us about the Buckwheat Dump.

The following Saturday's trip was to the Franklin Mineral Museum and the Buckwheat Dump. We gathered up a bucket full of rocks and took them into the little shed and everything glowed red and green. My son and I were now confirmed fluorescent mineral junkies.

We joined the FOMS where Ewald Gerstmann had a few minerals for sale, and learned he had a museum of Franklin-



Good job, Pete! You found it!

Concept by Alex Hay

Artwork by Louis Cunningham

6/99

Ogdensburg material. Our first visit was impressive with minerals everywhere, and as you walked in the door there was a broom-closet-sized room to the right that had fluorescent minerals for sale. After several visits to Gerstmann's, when we entered the closet we always wondered if we had arrived ahead of Warren Miller, or if the rocks in there were stuff Warren didn't want.

We'd become serious fluorescent collectors so our goal was to know an actual miner. Steve Sanford did some mining but his brother-in-law was not only a miner but also a fluorescent mineral collector. Steve arranged a meeting with this fellow who lived in a two-story house on Route 23 north of Franklin. On a Sunday afternoon we went to meet Dick Bostwick. Dick had fluorescent minerals in bookcases made of bricks and boards all around an otherwise bare room. He had just gotten a large quantity of brown willemite crystals in calcite and was willing to sell us a flat of material.

Our collecting became limited when we moved to Louisiana. Business would bring me to New York where I would immediately call Dick Hauck to see what was available and arrange a visit to Bloomfield.

Mineral collecting picked up in 1993 when I moved to Connecticut. I visited the Sterling Hill Mine and offered my services as a Gopher ("go for"). Dick somehow talked me into being a guide, and I often heard, "We have an unusual group coming, Joe, will you take them?" It was most rewarding. One such group was a birthday party. During the tour we went through the underground room where we light a candle and turn out the lights. The birthday girl blew out the candle and we sang *Happy Birthday* in the darkness.

Collecting minerals has been a very rewarding experience, and after more than 25 years in the hobby I'm still a fluorescent mineral enthusiast. Oh, by the way, I heard from a friend of a friend that a large margarosanite might be for sale, and the Russians have some new stuff, and that guy from Canada's got something. Do you think there will be a cheap fluorescent laser soon? Have any old collections come on the market? I haven't gotten any new stuff for a while. Do you know the feeling?

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RAMBLINGS BY A PAST EDITOR

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My wife and I started collecting minerals in 1973 while residing in Norwalk, Connecticut. The Westport Nature Center, located nearby, had a retired teacher and geologist named Dena Humphries who led field trips to collecting sites such as Strickland Quarry in Portland, Connecticut. She was an ideal leader for those new to the hobby—patient, knowledgeable, and generous with encouraging comments. She made loving minerals easy because she made it an exciting learning adventure.

During the spring of 1975, Dick Ruka (a co-worker at Seagram's main office in New York City) and his wife, Mary, introduced us to some fluorescent Franklin minerals at their home in Stamford, Connecticut. Next, we tagged along with them on a trip to the Trotter Dump. Our interest in Franklin was growing.

In the interim we joined the Stamford Mineralogical Society and came under the influence of such knowledgeable collectors as Audrey and Bill Henderson (willhendersonite) and Charles

and Marcelle Weber (charmarite). This was followed by membership in the New Haven Mineral Club and the Danbury Mineralogical Society, and by 1976 we were attending meetings of the FOMS. It was at a meeting of the Stamford Club in the spring of 1976 that we met Neal Yedlin (yedlinite and nealite), sometimes referred to as "Mr. Micromounter." It was from Neal that we purchased our first microscope (a reconditioned Bausch & Lomb). When we visited Neal and his wife, Helen, in New Haven to pick up the microscope, we had no idea what to expect. It was one of the most memorable experiences imaginable.

Their lovely home had magnificent copper specimens everywhere—on the wall, on end tables, on book shelves. There wasn't a sign of a micro specimen to be seen. Neal and Helen were most hospitable. After much pleasant talk, filled with Neal's renowned stories, it was off to the basement to pick up the scope. At the bottom of the stairs one encountered boxes of specimens stacked so that only a narrow path was available to his work area. He delivered the scope to our hands, demonstrated some micromounting techniques, presented us with a list of where to obtain supplies, and then set about getting us specimens to take home to mount. He must have spent over an hour accumulating a huge bag of material for us that had to be worth more than he charged us for the scope. Those gift micros were beautiful and are still treasured by us. That same night we bought one of his yedlinite micromounts for \$100—we have saved the canceled check with his signature. Also that same night Neal convinced us we should acquire all back copies of *The Mineralogical Record*; we did so almost immediately and remain subscribers. This led, in short order, to my reading of all the back issues of *The Mineralogical Record* on the New Haven commuter train to New York City. Thankfully, my fellow travelers didn't complain when I passed up playing cards with them during that period. Most collectors wouldn't consider that visit to Neal Yedlin's a field trip, but it was more memorable than any field trip we ever made.

The following is typical of our experiences with field trips. On July 4, 1976 we went to the Wheatley mine in Phoenixville, Pennsylvania. The mineral pickings were slim and it was close to 110 degrees that day. We forgot to bring water bottles, and after three to four hours we became very dehydrated. Betty still remembers trading her best anglesite specimen for a drink of water. Driven by thirst, we abandoned collecting and found a restaurant in town. The waitress could hardly believe it when we each drank close to one gallon of water before our meal was delivered. Why would this field trip be memorable? The heat to some extent, of course, but primarily because of our encounter with Ralph Thomas ("Mr. Ultraviolation"), who was also in pursuit of pyromorphite, and who soon became a close friend.

By 1977 we were regulars at Franklin on the FOMS meeting days. We considered Franklin and Sterling Hill as one of our primary localities for study. Trips to the Buckwheat Dump were stimulating to everyone but me. My daughter-in-law, Mary, found better material on the dump than I did that year. That should not have come as a surprise to me since my wife routinely found more just sitting in one place than I did scouting around on field trips. Let's face it, I just don't have the eyes for it, and they can't be corrected any better than they are. Soon we became buyers of minerals more than being field collectors. We appreciate beautiful specimens whether we find them or not.

No one goes to Franklin very long before they hear of Ewald Gerstmann and his museum. It became ritual for us, beginning around 1976, to visit Ewald and Helen the day of every FOMS meeting we attended. Ewald has been most helpful in acquaint-

ing us with numerous Franklin and Sterling Hill species that occur primarily as micros. He always found time to help collectors with identification. Ewald, like Neal Yedlin, truly appreciated the beauty and perfection of micros and has a fabulous memory for the subtle morphological nuances that distinguish some species from others. The most striking F/SH specimens viewed there over the years, to me at least, included elongated, colorless cahnite twins on matrix, squat cahnite twins coated with white datolite, a datolite sphere perched on altered brush-like johannsenite crystals, a dark brown retzian-(Nd), an olive-green platy hexagonal crystal of zincite, a group of leucophoenicite crystals with calcite and willemite, a huge specimen covered with köttigite, parasymplectite, and pharmacosiderite, a magnificent manganaxinite with johannsenite and epidote, a manganite (bronzy sprays) with cahnite and barite, pimeite on nickeline, sjögrenite with pyroaurite, and the numerous examples of kolicite and holdenite zoned within the same crystal. Oftentimes it was difficult to view much because of the constant stream of collectors paying Ewald a visit and everyone exchanging hellos. Thank you, Ewald, for your many hours of time and for permitting me to photograph so many great things at your museum.

In the late 70s and the 80s visits to see Bill and Audrey Henderson, who lived in Stamford at the time, permitted me to see some of their Franklin-Sterling Hill micromounts. Much of this material had come from Neal Yedlin, of course, and in particular I remember a beautiful tephroite specimen and another with a gorgeous, colorless, complexly-terminated willemite sitting on clinohedrite. The trips to visit the Hendersons and Charlie and Marcelle Weber were meaningful in that it helped keep things in perspective regarding Franklin-Sterling Hill minerals. One soon realized that species occurring at F/SH were often very different in size, quality, color, and crystal habit from their counterparts occurring elsewhere—an interesting fact, but not universally known by F/SH collectors, particularly those who begin their collecting careers in that area.

In the late 70s we met Alfred Stevenson at various shows and at Baltimore Micromount Symposiums. It was during one of these that I first learned of his skills at photomicrography. We were invited to his home in Mineola, New York, to see his setup and meet his wife Jeannette (now deceased). It proved to be a turning point for me as I became very interested in photographing through the microscope. In addition, we got to see many of the specimens in Al's collection, as well as many of his slides. I'll never forget the fabulous slide he has of a gemmy, dark blue Franklin gahnite octahedron. By 1982 we owned a Nikon scope-camera combo complete with dual-wand fiber-optic light source. My efforts at mineral photography were under way.

The early 80s and micromounting brought about encounters with Will Shulman (now deceased) and his wife Gerry. The Shulmans had us over to view their fine collection and their fluorescent fireplace. They arranged for us to see Wilfred Welsh and his wife, Mary (now deceased), and accompanied us there a few weekends later. We were certainly impressed by the scope and quality of the minerals and the artifacts of the Welsh collection. We are all fortunate to have the Welsh collection on display in the Franklin Mineral Museum—it is, indeed, a treasure and, certainly, a work of love.

We met Dick Bostwick at FOMS meetings on numerous occasions—particularly as an auctioneer of mineral specimens. We were surprised when our friends, the Webers, indicated they knew Dick when he was at Yale. Then we arranged for the Webers and Dick to visit us at our house in Norwalk so they could

talk about old times. It was at this time we first got to really know Dick, his interests, and background. This eventually led to my visiting Dick at his home and photographing many of his Franklin-Sterling Hill specimens through the scope. In particular, I will never forget the beauty of his friedelite specimen, the two generations (one lavender and one orange) of hodgkinsonite crystals found on his analyzed “most Mg-rich known” magnesium-chlorophoenicite specimen, the difficulty I had in trying to photograph his bostwickite while minimizing glare off the crystals, or the opportunity to examine first-hand his schallerites, both type 1 and type 2. Other interesting items included a specimen where the alleghanyite crystals had leucophoenicite tips, the barylite crystal, the canavesite, and the dravite from the Gooseberry mine. Needless to say, I didn't get away from the Bostwick household before he could get out the UV lamp and permit my eyes to feast upon row after row of fluorescent minerals. Now that day certainly qualified as a field trip for me! On other visits with Dick I got to see his petedunnite specimen, the johnbaumite enclosed within a willemite crystal when viewed down the *c* axis, his hauckite (type 3) from the north ore body at Sterling Hill, a well-formed pale green sphalerite crystal from Sterling Hill, a gorgeous nickeline specimen, and his pennantite cast formed around willemite.

My visit to see Fred Parker (the younger) was around 1983. I took my camera equipment with me, hoping for a field day. Many of the rarer things from the F/SH area were Fred Parker finds, and I hoped they were waiting to have their picture taken. I was not disappointed. I met his parents, had a very pleasant visit, and viewed their fabulous display of F/SH minerals. Austinite, bakerite, bassanite on fibrous sussexite, cuproadamite, kolicite, laumontite, sulphur on altered galena, tilasite, and wendwilsonite were among the items photographed that day.

It was about this same time that we visited Ralph Thomas and his wife, Nora, in Yardley, Pennsylvania, to photograph certain items in the Dr. William B. Thomas Collection of micromounts which he owned at that time. I found much to like and much to photograph. In particular I remember the thomsonite, the datolite, the aurichalcite on hemimorphite, and the anatase. Yes, it was the same anatase, that one that everyone remembers seeing as a brilliant blue crystal sitting on the edge of a vug in Buckwheat dolomite as photographed by Al Standfast (now deceased). I don't know when Al photographed that anatase, but I didn't see the results of his work until much later. I can't tell you how surprised I was when I first saw it. My slide of the same specimen showed the anatase with a metallic rainbow iridescence. It was years later when I re-examined the specimen itself and found the cause of the color difference was a minute difference in the angle of the illumination. The story doesn't end here—when we left Norwalk to live in San Antonio in 1993, Ralph gave us that anatase specimen as a token of our long friendship because he knew how much we admired it.

Going to shows became a must. The New Haven Mineral Club Show, the Franklin Show, and New Jersey Earth Science Association Shows were notable for us in the late 70s and early 80s. We'll never forget Paul Moore's lecture on Långban. Even more so, we'll never forget Cornelius Hurlbut's lecture-slide show on the borates during which he described the struggles of a miner and his wife in their search for a find. Dr. Hurlbut stirred everyone while describing their tension, after years of failure, as they prepared to flame test a sample and loudly voiced the words of the miner as he flamed it, “We're rich, Rosie, she burns green!” Then, of course, there was Paul Seel and his lecture on the identification of faces on quartz crystals. Paul had the

audience repeating happily in unison the names of the faces as he pointed to them in succession on the screen. He really made it fun! Yes, oftentimes, the lectures were the highlight of the shows.

One cannot mention mineral shows without thinking of the symposia, particularly the Rochester Mineralogical Symposium and the Baltimore Micromount Symposium. The speakers were always first rate. Who could forget Lou Perloff showing hundreds of photomicrograph slides, naming each species shown, and from memory describing each chemically? Or who could forget Paul Desautels describing the minerals of Mapimí and the physical setting of the locality itself? How about the lecture by Paul Pohwat concerning mineralogical fakes in the Smithsonian collection (some notable Franklin specimens among them)? A memorable encounter was a conversation in Rochester with Michel Deliens, Belgian Royal Institute of Natural Sciences, who has authored more mineral descriptions in the literature than any other person. Another such experience occurred following the Lehigh Symposium (dealing with the character and origin of the Franklin-Sterling Hill orebodies), when I had the pleasure of having a leisurely dinner with Clifford Frondel and Carl Francis while chatting about the Sterling Hill uraninite in the Harvard Mineralogical Museum collection, and which Cliff had procured from Charlie Key in the 70s.

I'll never forget Betty's and my visit to Joe Cilen's house. Of course, we had no idea what to expect. Being collectors of worldwide material we were fascinated by the tremendous size and variety of Joe's collection. Minerals were located throughout the house, and one was impressed by the large number of species this friendly species collector had acquired. Joe ordered in pizza for lunch. So we ate and listened to jokes when not talking about Franklin or the old days when he was at Curtiss-Wright. I remember being shocked the most by the numerous large tourmalines in his collection. To me the most memorable item in his Franklin material was a gorgeous, well-crystallized willemite on andradite specimen. I always wondered what I didn't see there because it was impossible to view it all in eight hours or so.

One of the major sources of good specimens in Gerstmann's Franklin Mineral Museum was John Kolic, Ewald's perennial card-playing buddy, known for his fabulous underground spatial-relationship ability at Sterling Hill and his keen eye for new species and/or choice specimen material. I got to visit John at his residence in Franklin and take a few photos of his collection. What an opportunity! Specimens which quickly come to mind are his Sterling Hill azurite, the alleghanyite with sarkinite, the allactite with rhodochrosite, the greenockite with galena and mammillary sphalerite, the several 'Chinese lantern' zincites, and naturally those wonderful kolicites. I remember that day because I was embarrassed to find when I set up my equipment that I had forgotten the rice that I use to nestle specimens in a secure position during photographing. John brought me a supply of large rice grains from the kitchen for my use. Believe it or not, I have used those same rice grains ever since. Thanks again, John, for the rice and the opportunity to view your marvelous collection.

On a couple of occasions I visited Dick and Elna Hauck in Bloomfield, New Jersey. Their collection was beautifully housed in a large drawered cabinet. Its contents represented years of upgrading choice hand-size to cabinet-size specimens of F/SH material. Truly a remarkable collection! Mind-boggling to me, of course, was the apparent absence of micro material. With the subsequent passing of Alice and Fred Kraissl, much of their collection was moved to the Haucks in Bloomfield for sale. I gave

the Haucks a visit so that I could inspect the Kraissl micromount material and took along the photo gear. Some of it was breathtaking. Among the micro crystals were jarosevichite with flinkite and cahnite, gageite on zincite, a gorgeous hauckite, choice pyrobelonite, magnesiochlorophoenicite with zincite, ganomalite with barysilite, kittatinnyite with bostwickite, hydrotalcite, and some lovely red vesuvianite. I'm thankful that I got to photograph these specimens because the micro collection had to sell as a unit and I considered it out of my price range. My mistake! I went on vacation following this visit and when I returned I found it had been sold to Ward's Natural Science Establishment. I found out later that Phil Betancourt had purchased many of the items individually from Ward's. Knowing that several of the truly choice items were now safely in the custody of a friend was a great relief.

Within a year or so I had the privilege of visiting Phil and Mary Betancourt at their home in Moorestown, New Jersey. What a magnificent setup! Greeting the visitor were several rooms with numerous large showcases, as one would expect to see in a museum, filled with well-labeled specimens. It became immediately apparent that Phil liked choice material regardless of whether it was macro or micro. Among the large F/SH specimens which I truly appreciated were an anhydrite, a kutnahorite, a lennilenapeite with magnesioriebeckite and sphalerite, a monohydrocalcite specimen, scorodite crystals, a pyroaurite, and a magnificent large native copper. Among the micros were a wulfenite, a zincite with a pyroaurite perched on it, and, of course, some of the items from the Kraissl collection mentioned above.

In 1987, following The Rochester Mineralogical Symposium, we visited Jackie and Bill Pinch (pinchite) at their Kensington address in Rochester. Never had I had such an experience. His basement was lined with well-lighted display cabinets. I remember that when you entered down a short flight of stairs, there was a desk immediately on your left. As you approached the wall ahead, Bill's Shinkolobwe minerals were displayed there, in the left corner, just before one turned right to proceed down to his work area (complete with trimmer and scope). Behind this spot he had an area where minerals (including F/SH specimens) were stored in drawers. Almost directly in front of his work area was his fabulous display of Franklin-Sterling Hill minerals. So, he turned me loose here to photograph. Franklin in front of me and Franklin behind me, and all of it choice. I could have photographed for weeks, and did for two days. When I burned out looking at and photographing F/SH material, I took a break by viewing and photographing some Shinkolobwe uranium minerals. Bill showed me also his collection of Långban species for F/SH comparison purposes. The learning curve was steep when one visited the Pinches. Among the fabulous F/SH material on view were an ilmenite specimen and a marsturite on rhodonite (both from the Neal Yedlin collection), well-formed platy chlorophoenicite crystals on zincite and pyrochroite, gageites from both the Gage and the McGovern collections, the renowned Franklin "V-twin" pink holdenite, a gorgeous large Franklin tephroite crystal, several nice cahnites, Lawson Bauer's Franklin xonotlite specimen, a great cluster of clinohedrite crystals, an ex-Joe Cilen specimen of mooreite with grossular, the prehnite/pectolite specimen, and lastly, a group of stout, stubby, gemmy, beautifully terminated, pale yellow willemite crystals sitting in a dark red patch of hancockite crystals. The days were filled with mineral talk, too. A surprising thing happened: we were talking about pyrobelonite while Bill was breaking up some massive white barite, and I had

just commented about how rare it was, when suddenly the white barite broke open to reveal a vug full of fantastic orthorhombic dipyrramids of red pyrobelonite. The greatest surprise had nothing to do with minerals, however (we found out that Jackie's maiden name was Dean).

In mid-1980s I had the privilege of viewing Harvard's treasure of F/SH minerals at my leisure. What an experience it was. Thank you, Carl Francis and Bill Metropolis!! I'll never forget seeing a spray of roweite crystals for the first time, or viewing the type specimen of torreyite, or seeing a crystal of clinochrysotile stacked on franklinite which in turn was stacked on zincite. In the gem collection was a red zincite, weighing 3.08 carats, faceted by Art Grant and made from Charles Key rough. Also, there was a faceted willemite of 36.93 carats from the Canfield collection. Large and gorgeous corundums, fluorapatites, franklinites, hemimorphites, willemites, and zincites were numerous. I would be remiss if I didn't mention the thrill of seeing the large twinned cahnite which was displayed on a pedestal. Uvites from the Hancock and Losey collections clearly demonstrated the skill of some individuals, around the turn of the century, at removing matrix to better display the beautiful crystals. I was drawn to items like the well-formed hedyphane with rhodonite, the loseyite crystals, the nasonite crystals on hancockite, the pyrobelonite specimen, the hydroxyapophyllite, the striated faces on a hematite crystal, the goldmanite crystals, and a knock-out, gemmy, yellow sphalerite crystal. My gratitude to Harvard for the experience will be everlasting.

Jack and Augusta Baum honored me with viewing their collection before it moved on to reside at the Smithsonian. What gracious hosts they were, and what significant and wonderful minerals they owned. The size ranged from macro to micro. Among the ones which quickly come to mind are the twinned cahnite on rhodonite, the exceedingly rich charlesite specimen with clinohedrite and ganophyllite, Lawson Bauer's torreyite specimen, the yeatmanite with johnbaumite and romeite, the

zincite crystal growing in the hodgkinsonite patch, the larsenite with clinohedrite, the margarite on corundum, the celsian with native lead, the zincian forsterite with phlogopite, the wonderful rhodonites, and the large group of allanite crystals in matrix. Yes, it was truly a memorable visit which included, among other things, a splendid martini prepared by Jack.

It was around 1990 by the time I got around to the Franklin Mineral Museum in search of minerals to photograph. By this time the Gerstmann collection had been added to the FMM inventory, and most of it was on display. Thanks to Jack Baum and John Cianciulli (cianciulliite) I was steered to those things they felt were significant and should not be missed. There was the antlerite on rhodonite, the charlesite with willemite on loan from the Haucks, the corundum which had been part of the Standfast collection, the cuspidine with glaucocroite, the descloizite specimen, the platy larsenite, the leucophoenicite with vesuvianite, the Gouger walkkilldellite, the Gouger villyaenite, and a huge gemmy willemite crystal, to name only a few.

Obviously, a rambling such as I have done above always and inadvertently leaves out important persons and events. Likewise, there are some who wouldn't want to be included for their own reasons. My apologies to those who feel they should have been included and weren't, and to those who were included but wouldn't have wanted to be if they had known about it beforehand. The purpose of this article is to stress the importance of people in our hobby. The minerals are beautiful, always a challenge to find or acquire, but it is the people who share this interest with us who make it come alive and be dynamic. That's the essence of what we FOMS members are celebrating this year—our 40th anniversary as a group with a fabulous common interest. Let us work together to keep the FOMS alive and healthy with our *Picking Table* continuing to be the informative and interesting production that it always has been.

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Alfred Standfast, M.D. admires a glacial boulder of Franklin ore in the gravel pit on Cork Hill Rd., Ogdensburg, just north of the "wrong way tunnel."

1983 photo courtesy of Lee Lowell

50+ YEARS OF FRANKLIN MEMORIES

Herb Dick

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I got my first Franklin ore specimen in about 1947 from a school chum of mine. We were in 5th grade and living in Bridgeton NJ. I didn't get to Franklin until we moved to NYC in about 1950 and my dad drove me over. Bevan French had written an article about Franklin and I wrote him for directions.

I remember buying specimens from Ralph Walters, out of the back of his green Hudson Hornet at the Buckwheat Dump. Specimens also came from behind Nick Zipco's furnace in his basement, and from Ewald Gerstmann, Mike Petro, Mrs. Palsulich, and Stan Hocking. I remember dad driving me to Franklin once in winter; the dumps were covered with snow, so I broke every rock loose (frozen, you know) and dusted the snow off to inspect it.

I remember in later years digging up a cache of carbide cap lamps on the Trotter Dump. I've bought Franklin specimens and memorabilia all over the country and in Europe. About 20 years ago Dick Bostwick and I became friends. We were both in California at that time and I got many fine pieces from him, but the best part was his letters, filled with neat information and enthusiasm. I still have his letters and the original ore specimen, circa 1947, that started it all.

CHASING RAINBOWS

Sandra Downs

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It started with a '65 Cadillac.

Dad picked up the convertible, used, off a friend in Upper Greenwood Lake, and pulled into the driveway to our "oohs" and "ahhs." We kids thought we'd have some fun times ahead, cruising around in that shiny blue machine. And when he popped the trunk open, he found a bonus to the deal — a load of salmon-colored calcite!

A phone call reassured us that we could keep the rocks, and they became part of my budding collection. Dad's friend had taken his family to the Franklin Mineral Museum a few weeks before and they'd left their bounty in the trunk. Thus Franklin calcite took a place of honor next to my puddingstone, quartz, pig iron, and other chunks of calcite I'd found around West Milford. I asked about visiting the museum, but somehow or another, it always got put off. And put off. Until one day we moved away from New Jersey to Florida, to a place where limestone and fossils were the chief ingredients of the landscape, and my pretty New Jersey minerals sat lonely on their shelf, eventually ending up in a box in the closet.

Twenty-five years later in Pittsburgh, I was reading an article about the Franklin Mineral Museum and its "glowing" calcite, activated by ultraviolet rays. So I convinced my husband Dave to drag out his low-wattage Raytech shortwave UV lamp, which he used for identifying fluorescent tagging on stamps, and we looked at my bounty from the Cadillac's trunk. Bingo! It glowed!

Within the year, during a Thanksgiving weekend visit to family on Long Island, we made the trip to Franklin, carrying the Raytech. Sure enough, that calcite glowed! Indiscriminately, like kids in a candy store, we dug through the Buckwheat Dump and found plenty of colorful stuff to take home and show our friends. I posted a trip report to some rockhounding folks on the Internet. And thus was an obsession born.

The books followed. Guidebooks to long-lost collecting sites, thirty years out of date but still fun to chase down. All of the classics on fluorescence. Information on and then a visit to the Sterling Hill Mining Museum. We were hooked. Every significant chunk of vacation time we spent tromping through Eastern meccas of fluorescent minerals — the hills around Franklin, the mosquito-ridden woods of Bancroft, the ancient mica mines of North Carolina, the quarries of Mt. St. Hilare. And I found a voice, writing about these adventures for club journals and ultimately for *Rock & Gem*. How could we resist a SuperBright, after watching one in action? How could we avoid joining FOMS and the FMS? Fluorescence — and Franklin — spurred us on. Dick Hauck hit it on the head one day during one of our visits to the newly opened Noble Pit, joking, "Your marriage is on the rocks!" Yes, "the rocks" often kept us together when the going got tough — when you get involved in a hobby as crazy as breaking up and carrying off pounds of rocks, it helps if your spouse is interested in it too.

The opportunity arose for me to write children's books on geology, and of course, my first book *had* to have significant mention of fluorescent minerals, Franklin, and Sterling Hill. *Earth's Hidden Treasures* debuts this fall, and I hope it draws many a young reader to explore the northwestern corner of New Jersey, my home and favorite stomping ground, the most exciting mineral collecting region on the planet — whether their parents take them or not!

HAPPY 40TH ANNIVERSARY, FOMS

John Ebner

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I wasn't with you the whole time—just partially associated for three quarters of it. My first collecting trip after becoming exposed to the mineral hobby in 1969 was at the Trotter Dump. I went for fluorescents, but not knowing anything about minerals, collected everything and all sizes. I was even collecting micros, as I examined every piece with my loupe. Anything that looked interesting, I took.

Over the years I have noticed how dedicated, almost fanatical, a large proportion of FOMS members were and still are. As time has passed, and I have become more and more involved with "Franklin," I almost feel as though I'm joining the fringes of that dedicated group. I guess having 15 F/O species in my collection mounted by the persons after whom they are named is a good start.

Keep up the good work, FOMS. Hope I can be with you ALL of the next forty.

THE FRANCIS J. FURTAK, SR. COLLECTION

Richard L. Eisenman
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Sometimes it seems rockhounds are a lot like fishermen. We brag about 'the one that got away' or the great catch we made. This is a story of finding a pearl where you least expect it; it is the story of one 'great catch'.

Francis Furtak was a machinist, a big strong man who lived in Mahwah, NJ. Back in the late 1950s he caught the bug, and began rock collecting. He was an ambitious field collector, going out regularly any weekend the weather was good for over 25 years. As New Jersey built and grew, so did his collection. By the 1990s he had a basement full of rock, pretty much all self-collected. Mostly he dug Paterson area zeolites. Back then, before India zeolites hit, those from around Paterson were among the best zeolites in the world, and good swapping material. Sometimes he went into the Franklin area seeking fluorescent minerals. He had a pretty poor set of lamps, even for that era, so how he ever found anything is somewhat of a mystery. Nevertheless, most of his specimens were characteristic of the Parker and Trotter dumps, and showed typical weathering as well. He did some swapping too; he could afford to trade buckets of zeolites for a nice specimen. According to his son, the family was comfortable but never wealthy, and Dad did not like to spend cash for rocks. Then again, most families think that rockhounds spend less than they really do, so it's hard to be certain.

Francis belonged to a couple of north Jersey rock clubs, but was not that involved with meetings or the Franklin show scene. He did sell some minerals, or at least he tried to, because he had flats with prices on them, laid out for sale. But generally, he was pretty private about his collection, especially in his later years. His house was robbed once, and he had problems with his health aides, so he was pretty quiet about what he had. As far as I can tell, his collection was never exhibited during his lifetime.

Early last winter, I got a phone call from his son, Francis Jr.. It was one of those lucky things; he got my name from an old lapidary magazine lying in the basement. When I came to see the collection, the basement was badly lit, moldy and dusty. Mostly I was impressed by the zeolites. There were thousands of them, laid out shelf after shelf, crate upon crate, barrel upon barrel. The fluorescent minerals were in a small curtained-off area, and seemed pretty unimpressive. I found a couple of small *esperites*, but what I saw otherwise was pretty much all red and green, and fairly dull and patchy too. I made a bid on the overall collection, but in my calculations the fluorescent minerals got short shift. It looked like any of a hundred other collections, a few showy pieces to impress an amateur, but no real value. With all that volume of zeolites, I wasn't even that sure I wanted to buy the collection at all: too much work with no quick return.

When my bid was accepted, and I showed up to complete the transaction, the surprises began. I brought better lighting, and my first surprises were pretty unpleasant ones. First off, almost half of the collection was covered in soot! Apparently the furnace had died a smoky death, and left its mark on the minerals. It was impossible to tell this before in the shadows. Secondly, amongst all the zeolites, there were very few of the unusual or rare types, and a lot of them were poorly trimmed, or damaged. The entire collection needed sorting badly, or I was going to be moving thousands of pounds of unwanted junk. What I had thought was

thousands of dollars in value was actually going to be mostly a noose around my neck!

In desperation, I turned to the fluorescent collection, checking it out with a better lamp, hoping somehow I had missed something. It did not look too promising but I found a few things, principally a large bright hardystonite three color-specimen. When I brought them home, suddenly I discovered that these too had been hit by the soot cloud! Some of them were decent pieces; maybe they weren't as bad as I first thought! Eagerly, I went back, bringing my friend Hugh Ronemus to search the fluorescent corner with me. Gradually we realized that virtually every piece there was covered either with soot, or with dump weathering. Instead of all junk, nearly every piece was actually pretty good. Francis, with his weak lamps, had obviously only collected the brightest and nicest pieces he could find. As we went deeper, we found more and more. Soon we realized he must have thought about theft a lot. Every one of his best pieces was concealed, hidden underneath or behind other more prosaic material. If there was a bright, interesting patch of something unusual, consistently this side was turned under, hidden from sight. This mound of seeming red and green, from a practically unknown collector, was actually a considerable find. It was my rescue from an untenable commitment.

I hope, if you get a chance, that you will check out my 'great catch' exhibit at the Franklin show. This is the last time it will be shown as a collection. Let me know if you agree that maybe there are still great collections hiding unknown and unheralded. And if you have any stories about the mysterious Francis Furtak, I would love to hear them.

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COLLECTING STORIES

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At the tender age of seven I was encouraged by my grandmother to collect minerals. She would place her collection of New York State and Mexican minerals on the table every time I came to visit with the family. As I became more and more fascinated with the minerals she would give me one or two. By the time I was ten years old, I was collecting every piece of old colored stream rock in the Virginia and Maryland area. We would picnic in the Shenandoah Valley next to the Shenandoah River and I would search the shore for rocks while the family was swimming... I was hooked.

After reading every rock-collecting book in the public library I noticed a common theme: mines produced waste rock and it was usually dumped where collectors could visit and collect samples. I discovered that the most important mining area within reach was the Franklin and Sterling Hill, New Jersey, district, then just called the Franklin Mine by most sources. My Uncle Tom lived in Mine Hill outside of Dover, New Jersey. I showed my father and mother how close we would be to the mines when we visited Uncle Tom and they agreed to take a side trip to Franklin. My father was a metallurgical engineer and Uncle Tom an electrical engineer, and both appreciated my interest in minerals. My first visit to Franklin was the start of a fascination for Franklin and Sterling Hill that has not relented even today. We made it to the Buckwheat Dump and I collected a trunkload of red-and-green-speckled fluorescent rocks. I met Nick Zipco for the first time and became amazed by the red zincite and green

willemite that he was selling for \$2, \$3, and \$4 a specimen from his trunk. Dad bought a piece of green willemite that became the start of my permanent Franklin mineral collection. Years later when I had studied Palache, Frondel, and Kushner, I pulled a specimen from my first dig at the Buckwheat and recognized a blaze of sheet copper on the surface of a lean willemite-and-calcite specimen. I had been lucky that day and I was ten.

In 1966 I spent a few months with my Uncle Tom and his family in Mine Hill. There was not very much to do in Mine Hill unless you were interested in collecting magnetite and quartz crystals from the closed iron mines. I was very interested and explored the mines as if they were my own personal mining preserve. The mines were about a block down the street. Across the street from the house was undeveloped land that had overgrown with scrub trees. I had set up targets in amongst the trash piles, old refrigerators, and abandoned car frames. A bunch of us kids got together and had bow-and-arrow target practice on the crude cardboard targets. The fun was finding the errant arrows. It was during one such competitive target practice that I made a discovery. Turning over some debris to recover one of my arrows that went through the target, I found "Franklin rock". To be more specific, I found massive red willemites, green willemites, hardystonites, sussexites, jeffersonites, garnets, leucophoenicites, tephroites, zincites, and franklinites. Every kid gathered around me as I let out whoops and hollers about what I had found. We split up about 50 or 60 specimens of top-grade showy massives, and every kid became a Franklin mineral collector that day. I never have found out who originally collected the Franklin minerals or why they were pitched, but I am thankful that I found them in that unlikely spot.

One of my chores at Uncle Tom's was cutting the grass. I had just finished and was standing in the front yard looking for tall grass that I had missed when a car pulled up with out-of-state tags. The lady driver asked if I knew the way to Franklin because her son (a couple of years younger than me) wanted to collect there. I told her I knew exactly where it was and gave her directions. She was certain that she would get lost again, and offered to take me as a guide if I was interested in going. I fairly jumped at the chance and got my Aunt to agree (something that parents would not do today). We drove right to the Buckwheat Dump and spent the rest of day collecting. I made friends with her son Danny, and shared tools. We split up the runs to the black-light shed to see if we had anything worth keeping. Later I introduced Danny and his mother to Mr. Zipco. As a reward, I received my pick of any one specimen from Mr. Zipco's trunk. I picked a nice 1.5" franklinite crystal on matrix that cost all of \$5. I was very pleased with my adventure, which became the talk of the family when Uncle Tom saw the franklinite crystal specimen. After that I could not wait to graduate from High School and buy a car to go to Franklin whenever I wanted.

Some of my fondest collecting memories are of the icons of the Franklin collecting community. One such memory is of Ewald Gerstmann and the Gerstmann Mineral Museum. When I was old enough to drive I bought a motorcycle and enrolled at the University of Maryland. On weekends when all of my friends were going to concerts or out on dates, I drove up to Franklin and visited Ewald at his museum. I spent hours studying his collection. It was on these weekend jaunts to Ewald's that I was introduced to Dave Cook and Dr. Frondel. I would show up in my helmet and leather jacket, knowing the last thing anyone expected was that I was interested in or knew anything about minerals. Dr. Frondel always took time to talk and listen to my identification observations. Before the evening was over we

would be sitting at Ewald's round table discussing finds and species. It was a rare time for me when I had few obligations and a burning desire to know more about mineralogy and mining. I looked forward to the drive to Franklin and Ewald's museum like kids look forward to Disney World.

As a result of the weekends spent driving to Ewald's I decided to be a miner and signed on for the summer at Sterling Hill. In spite of all my reading, and collecting at the Buckwheat, I still had illusions about what I would find underground. I worked on the 1600', 2250', 2350', and 2450' levels during my days as a miner. While I was there the foreman loved to play practical jokes on rookies. I worked with "Big John" MacDonald and later with "Pretty Boy". One shift with MacDonald's crew I afforded all a good laugh. I was directed to the other side of a stope to pick up some tools. It should have been easy, but I was not used to keeping my eyes on where the light was shining, and totally missed a raise directly in front of me. Fortunately, Big John grabbed the collar jacket and taught me a valuable lesson. I learned other lessons working with Pretty Boy. We were drilling a set on 1600' and had some Russian immigrant miners along with us. None of the Russians spoke English, but swore they knew mining and proved it with robust attitude and a lot of humor. The jack-leg or hydraulic leg drill was new to them and no matter how many times Pretty Boy showed them the correct way to drill, they just laughed and straddled the drill. In this case I learned from the Russians how *not* to drill with a jack-leg.

I learned to grab a pry-bar and scale the ceiling before trusting anyone else had done so, especially after a 4-ton piece of loose fell behind me, scraping my helmet. After I survived my rookie mishaps I started to get time to pick up a rock or two. Unfortunately, management did not approve of collecting and a crack-down was in force. However, I did collect some great golden sphalerite from the North Ore Body that I carried out under my jacket. The old timers just laughed at the rock I brought out.

In 1972 The Pond was a very busy swap-and-purchase area for Franklin and Sterling Hill minerals. This year was special because Bill Lewis set up his tables behind his cream-colored Cadillac and offered some of the best specimens I ever saw at any Pond sale. I reserved two great gemmy green willemites that measured over 8" across and purchased several other specimens. I had to reserve them since I had ridden up on my motorcycle and had to figure out how to get them home. When I went back to the Pond site where Bill had been, I was told he had gone to Gerstmann's. As I walked into Ewald's I noticed those great gemmy green willemites in the case. Bill parted company saying that I should talk to Ewald. I could have been upset, but I was not. Both Ewald and Bill were pillars of the Franklin collecting community and had amassed far more significant collections than I.

Ewald took me aside and said that he had paid Bill more money than was originally asked. He went on to say that since I had reserved them I could pick a specimen from his case at no charge. He pointed to the amphibole and pyroxene case. Being quick to see that I had lost the advantage and was being offered a way for all parties to stay friends, I picked a large well-crystallized augite with microcline that is still in my collection today. Over the years I purchased a number of fine specimens from Ewald, but the augite specimen holds a special place in my collection as my only Gerstmann specimen that I am certain was once on display in his collection. The gemmy green willemites remained in Ewald's collection and were on display at the

Franklin Mineral Museum when his collection became the Spex-Gerstmann collection.

In the early 1970's I stopped into Ewald's and was surprised by a flurry of activity and about 20 collectors milling around picking up specimens from an A-frame shelf stand. I had not met the collector who had consigned the specimens but I was in specimen heaven. I picked out a franklinite crystal group and a rhodonite crystal group that is a Number One in my collection. I carefully wrapped my treasures and loaded them in my motorcycle saddlebags. Unfortunately, that was all I could carry or I would have gotten more. Almost 15 years later I was reminiscing over the uniqueness of that unpublicized event with friends. I described the rhodonite specimen and the fact that Ewald would not disclose the origin of the specimens. To my surprise Peter Chin confirmed that it was part of his collection that was being sold.

On my weekend visit to Franklin I frequently visited Stan Hocking to share a cup of coffee and listen to his stories of working at Franklin. I spent many hours helping him move rock in his garage, which was dedicated to selling Franklin minerals. He had a horseshoe shape of tables set up, on which were strewn many different massive species. I had just noticed a couple of specimens, a fibrous wollastonite (then called pectolite) and a clinohedrite-hardystonite combination, when a car full of New York collectors drove up. Stan had spoken to them earlier in the day and given them directions to his house. He was holding two flats of green willemite for them. Stan asked me to help load the car with the flats. As I carried them from the back of the garage I tripped over a peach basket full of rock. I did not quite go down but skinned my shin pretty well. After the New York collectors left I went to the peach basket to see what was I had tripped over. It turned out to be Franklin 1st and 2nd find wollastonites, and barite specimens. Not being a fluorescent collector specifically and only having a few bucks to spend, I left the massives behind. That is one peach basket I wish I had not passed on – the one that got away.

Every now and then I would stop in to visit with Mr. Ralph Walters, and more often than not I would miss him. He had a lighted rotating watchcase full of miniatures and small hand-specimens of Franklin minerals. He used to revel in showing me his "ruby" zincite and telling me how valuable it was. Whenever I asked him how much it would cost he would say that I did not have enough money since it was so rare. I never did get a "ruby" zincite from him.

I had many hours of great conversation and identification fun at Mrs. Palsulich's house. Every time I came up I made it a point to stop in and visit. When I first came up to work in the Sterling Hill Mine, Mrs. Palsulich put me up until I could get a room at the Quarry bar and restaurant. In return, I identified every specimen she had for sale. Mrs. Palsulich found it difficult to keep up with the new species and asked for my help whenever I was up. I used to comment how plentiful certain species should have been, based on Palache's writings in USGS PP 180, and she would tell me if she or her late husband had found the scarcity to be artificial or real. For instance, I had no luck in finding or buying an average-to-good esperite for over 10 years of visiting. Mrs. Palsulich recalled that it was never as readily available to the collectors as green willemite, but that she came across a specimen every now and then. The prices for esperite were always high. Perseverance paid off, Mrs. Palsulich got and held an esperite specimen for me that later became one of the best esperites in my collection.

My first FOMS field trip was with then-president Phil Betancourt and Van King. Both were standing on the curb of the old Armory on "Show" day as I happened to pass by, wondering if anyone was interested in going to the Munson Quarry. I commented that in all of the years of coming up to Franklin I had never been on a club field trip. Phil answered that by all means I should come on this one. So we drove over and looked at a partially rubble-filled, debris-laden, 60/70-yard-wide limestone quarry that had long since been abandoned. The ironic part of the collecting story is that Phil and I came away with what we hoped was a mineral new to the deposit, lepidocrocite (or rust on a rock as Phil called it, because that is what it looks like). I still have not heard if Phil ever verified the lepidocrocite. Only three members went on the field trip that day and still we managed to find what may have been a species new to the deposit.



Munson Quarry, Franklin, looking east, August 18, 1963.
"Sunny" Cook Archives

Some of the most enduring images of the Franklin area include those of the Sterling Hill headframe and mill, and the water-filled Buckwheat Mine at Franklin. But some of the most enduring people include Dick Hauck, Jack Baum, and Nick Zipco. I have seen Nick in front of the Franklin Mineral Museum for so many years that I think there ought to be a bronze statue of him for those rainy days he is not on station (which are very few). As I was passing him to go into the Franklin Mineral Museum one day a few years back he gave me a big smile and motioned me to come over saying, "I have got something for you." I followed him to the rear of his red car where he produced a large crystallized rhodonite specimen and a large dark brown diopside crystallized specimen. Both of these specimens he offered to me for sale, saying no else had seen them. I was amazed at my good fortune

since this event had never happened before. Without a word I gave him his price and added two significant specimens to my collection. Later that weekend I met Steve Kuitens who asked if I had picked up a couple of specimens from Nick Zipco. I was happy to relay the story of my success, and my surprise at Nick remembering me. I was then surprised to learn that Nick had confused me for Steve and the specimens were to be offered to him... Oh well, that was one that did not get away, but the case of mistaken collector identity continues to this day between Dr. Steve, Jim Chenard, and me.

Hope these remembrances help... There are so many stories and so little time to write them down, let alone determine which ones will be thought funny or significant a generation from now.

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I REMEMBER WHEN

Richard Hauck
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Sometimes I feel like the last of the ten little Indians. 40 years have gone by since the founding of the FOMS and I think I'm one of the few old-timers left.

An early photo of the FOMS Board of Trustees (Oct. 64) shows a group of the club's officers and committee members, 15 in all; only three are still around. I always point out the importance of standing when a photo is taken for an obvious reason. Everyone seated is gone but half the standees are still with us (Gerstmann, Hauck, & Baum).

Four years before this photo was taken, our club was born. The faces and names of these people are not well-known now.



Meeting of the FOMS Board of Trustees in the N.J. Zinc Co. offices, Franklin, N.J., on October 10, 1964. Standing, from left: Paul Chorney, Ewald Gerstmann, Perry Armagnac, William Spencer, Richard Hauck, John L. Baum. Seated, from left: Clifford Anthes, Vice-President Dr. Harry Montero, Frank Edwards, E. Packard "Sunny" Cook, President Frederick Kraissl, Alice Kraissl, Treasurer John Butler, Alexander Knoll, Secretary Henry Althoen.

Harri-Anne Studios photo, courtesy of Richard Hauck

The spark that started a mineral society in the Franklin area was generated by Gerald Navratil in 1958. Gerry, like many, was mesmerized by the unique minerals of the Sussex County zinc mines. He started to reprint Palache's PP180 in serial form and he asked his friend, Sunny Cook, to help find officers who would serve the new society, The Franklin Mineralogical Association.

Gerry's well-intended efforts soon ran into serious problems. First, Gene Vitali was able to get his congressman to inspire the U.S Government Printing Office to reissue PP 180 in its entirety, photos and all. This made the serial printing of Palache totally impractical. The next complication was Sunny Cook's successful recruitment of club officers, including John Hendricks.

John worked for National Lead Corporation as a production manager and was by all accounts brilliant, an obsessive collector, and a take-charge, take-control person. In some ways he was harder to get along with than Pete Dunn. John was the type of person who could be the best friend you ever had, but you were very pleased not to have him as an enemy.

Gerald Navratil soon realized that with John on board he would lose control of the society he had worked so hard to create. Gerald's next and biggest mistake was to send a postcard to every member of the FMA stating that the upcoming election was to be null and void. That was the beginning of FOMS. All the officers that were fired by Gerald simply started a new and independent society. The two groups did co-exist for a short time but the stronger FOMS prevailed.

A question: did anyone save a copy of the postcard that Gerald sent? Perhaps the club historian (Perry Armagnac) saved one, but when he became ill and had to leave his New York City apartment it was cleaned, and everything thrown out. So much has disappeared in 40 years: stories of people and events, friends lost through death or misunderstanding, wonderful minerals destroyed because a Trofimuk or Kolic was not working in that stope that day, and countless memories of marvelous events neither recorded nor preserved.

Perhaps in future *Picking Table* issues the stories of our first Symposium, run by Frank Edwards after John Hendricks resigned, could be told. Our society has reached its 40th birthday because of them and other FOMS pioneers like Sunny Cook, Jack Baum, Henry Althoen, Fred and Alice Kraissl, Paul Chorney, and many more.

I think our members should get to know these people.

.....

THE POSSESSED!!

Tema J. Hecht

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Everyone likes to think of their boyfriends, husbands, girlfriends, or wives as considerate and sensitive people who will look out for them in certain situations in life. I am no different.

In 1990, at what was then called the Sterling Hill Mining Company, there was the "Great Wollastonite Find" on the 340 level. Buckets of it were brought out and put in the furnace room next to the change house for those interested in looking it over.

I remember my boyfriend at the time having to go and see what was at Sterling Hill, with me accompanying him. It was an hour's drive from New York City, and I thought we would have a fun time looking at minerals.

When we arrived at Sterling Hill we were shown to the furnace room and the wollastonite. From what I could see, the pile of rocks was huge, a veritable mountain! There were about four people already there, pawing through it and making their own private piles. Without saying much to anyone, my boyfriend jumped right on the mountain and started going through what was there, leaving me to make my way up to where he and the other collectors were.

(continued on page 62)

Dear Sunny:

7/9/59

More food for thought. It is just highly possible that in hunting around for nominees for the FMA election, that you also find candidates for both the secretary and, the treasurer position. Naturally, the latter would have to be a completely honest person. The former would have to be a WORKER. It would not be necessary to consider me for either or both of those positions. Thus, the Association would have complete freedom in deciding its own future. I would prefer to be kept on as editor of Digest until that obligation is consummated at least. See you the evening of July 15th-either Leiceste or Boston.

Gerry



This is *not* Gerry Navratil's postcard cancelling the FMA election, but a different one sent to "Sunny" Cook some months before, outlining his qualifications for future FMA officers. He hopes the FMA will "have complete freedom in deciding its own future." Sunny's recruitment of John Hendricks led to the founding of the FOMS, as described above.

"Sunny" Cook Archives

Let me tell you, I took my bleeping life in my hands just being on that pile close to these crazed collectors! It was as if I didn't exist; nobody seemed to see me. If I hadn't jumped out of the way each time someone came barreling in my direction for a specimen, I'm convinced I would have been knocked down and trampled upon without anyone noticing. Every one of these collectors, my boyfriend included, had blinders on. Their heads were down, their eyes were wide open, and they were seeing, feeling, and breathing ONLY minerals. Each knew that *the* perfect specimen was in that pile, just waiting to be triumphantly snatched up.

After witnessing such hysteria I came away calling it "the feeding frenzy," and since then I have heard people use that phrase time and time again. Now I know why!

When I described this scene to my boyfriend, and told him that he was a part of it, he just shrugged his shoulders and didn't have much recollection of what went on except that *he* got his wollastonite.

Luckily for him I have a sense of humor—I married him in spite of it all!

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A WESTERNER'S PERCEPTIONS OF FRANKLIN AND STERLING HILL

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When one is asked to write an "experiences" sort of piece like this, it is always tempting to relate some funny story. But funny stories always seem to embarrass somebody, and most of mine wouldn't be quite suited for polite company, so I decided to do something a little different.

Many readers of the *PT* know me. I collect minerals, I peddle a few. I am also a professional mining geologist. While the selling is a relatively recent aberration, both the profession and the hobby originated together during my early childhood in a mining-ranching family in Idaho's Coeur d'Alene mining district. The point of this historical digression is not only to mention the "rock bug" itself, but also to tell you that I am a rural westerner, and for the first 30-odd years of my life, all I ever expected to be was a rural westerner.

Even out there in the Idaho woods and the Nevada deserts Franklin and Sterling Hill are pretty famous among our collecting fraternity. I had heard about them, read about them voraciously in fact. I had probably dreamed about them. Fascinating places—why so many species? Why all the fluorescent minerals? Why were so many crystals so large? But of course, I was never going to see the places, nor get the chance to answer any of my questions.

But things change. Following a job, I came east in 1982. I soon acquainted myself with the Buckwheat and Trotter dumps. The pickings were slim for an ignorant westerner of course, but still, I was collecting at Franklin! There was something a little magical about that. There was more to come, however. Joining the FOMS and later collecting at the Franklin mill site led to friendship with Steve Misiur, and that to meeting Dick Hauck, and eventually to an invitation to go underground at Sterling Hill.

I treasure many memories of that first trip down in the hole on a Saturday in January of 1991, not the least of which are the friendships which have grown over the years with the people of Sterling Hill. But anyhow, the best of that day's sights were in

what all of us used to call the "Franklinite Room." Some of you remember them too: the "ore mylonite" where a fault, perhaps the Nason, had reduced the East Limb to a striped mass of red, black, and white ribbons; six square feet of stope face stained with bright canary-yellow greenockite; and most important, a twenty-foot section of white calcite studded with black franklinite crystals. This last is the one which really sticks with me. Some of these buggers were two inches across! I could put my hands on them, feel their sharp edges and smooth faces! I could pick loose crystals from the muck pile, actually heft them! The darn things were big enough to have weight I could feel!

So much for day one. There were of course, many other trips underground at Sterling Hill. I got to see lots more big crystals, lots more unusual minerals. I was fortunate enough to study some of these minerals occurrences in situ, something few had ever been allowed to do before, and I was able to answer some of my questions in small ways. I was able to share some of this new knowledge with you readers. It sounds trite, but it is the literal truth that all of this has been a dream come true for this Idaho country boy. Just as it is a dream come true for everyone that so much of the geologic, mineralogic, and historical heritage of Franklin and Sterling Hill has been and is being preserved.

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GOOD ROCKS AND GOOD FRIENDS

Joseph Kaiser
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My rock collecting has given me many enjoyable experiences but more importantly, I have made many acquaintances and friends over this time period.

One of my early acquaintances was John Sebastian who was FOMS field trip leader. He had given me directions on where the sites were and what to be looking for. As I got to know him, it was fun helping him out at the various sites. Then as he started reducing some of this activity, he wanted to sell more Franklin material. It turned out to be about twenty wooden ammo boxes full of rocks that I bought.

Another individual who I knew through some dealings was Jim Kaufman of Jim's Gems out on Route 23. I had bought some stuff from him over a period of time. But right after I had bought the material from John Sebastian, Jim told me of an interesting collecting area that had just been found in Franklin – the Mill Site. There was a lot of work involved in working as part of the Mill Site Team. I got to know some of the people real well and still count them as good friends. In addition to some real good mineral specimens, there also were old oil lamps and old mule shoes which were collected. Steve Misiur and I worked almost every weekend together at our hole on the trestle.

Going to the FOMS meetings, I got to know Dick and Elna Hauck, and went to their house to buy material. After the Mill Site closed, it was only a short time later that the Sterling Mine property was put on tax sale by the town of Ogdensburg. I remember going to the meeting in the Ogdensburg town hall concerning the property sale and how the Haucks worked out a deal for acquiring that property.

I have been in old abandoned mines out west but never to any lower levels. Being able to go down to the 1100' level and see how the mine had been left when the company closed was truly an enlightening experience.

These are only a few of my many enjoyable experiences in my more than twenty years associated with FOMS and the wonderful bunch of people I have become acquainted with.

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FUN AT FRANKLIN

Helen Klitsch
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In every mineral display in every museum in every country in the world sits at least one specimen from Franklin, NJ, USA. As the really-not-too-interested-in-minerals spouse of a man who spends every free moment rockhounding or bent over a microscope or organizing his mini-quarries in our cellar and barn, I have to admit that being in a foreign country and seeing that little identifying label in the showcase is thrilling.

Because we hoped to get at least some of our grandchildren interested in—or at least aware of—the excitement that mineral collecting can generate over a lifetime, we planned a day of prospecting at world-famous Franklin. Joe and I plus three of our grandchildren, and my sister and two of hers, piled into two cars at 8 A.M. on Wednesday in August and headed for New Jersey.

The drive from Easton was an experience in itself. We were blessed with sunny (but not hot) weather, and the three boys and two girls, ages 8 to 12, had been lectured on safety and outfitted with goggles, sturdy shoes, gloves, hats, hammers, and tote bags. The two cars were filled to the roof with equipment, a food-filled cooler, bags of snacks, cameras, etc., but growing children need lots of nourishment and harried adults a cup of coffee. So before we crossed the Delaware we hit Dunkin' Donuts for bagels for the 1½ hour trip and donuts for our arrival snack. Rockhounding is touted as an inexpensive hobby, but no one counts the expenses of maintaining the energy level of always-starving adolescents. (Does that sound as though we adults passed up the bagels and donuts? NOT!)

We arrived around 9:30 A.M. and started our day with the museum tour, the black light display, and a walk through the mine replica. It had been at least six years since my last visit and I was really impressed with what had been done to the museum in the intervening years. The black light display is so spectacular we had trouble convincing the kids that yes, we would hunt our own fluorescents, but first we would take the museum tour. So in spite of deep sighs and rolling eyes (being a grandparent has definite advantages: grandchildren don't whine or give us any lip as our own children used to!), we stuck to our schedule and took the tour. Each one found something in the museum that they found exciting (thank goodness).

Nothing makes or breaks a tour of any kind quicker than the tour guide. There are mumblers, impatient ones, and those who do their job but are really not interested. Then there is that special breed that speaks clearly, loves their subject, and avoids speaking down to the group, but still makes it a learning experience for both children and adults. Our college student guide was knowledgeable, humorous, and definitely in love with the subject of Franklin, New Jersey.

Now we had just one more chore before going down to the Buckwheat Dump—lunch at the picnic tables behind the Museum. Getting the kids to eat was no problem, but getting them to help clean up our picnic area was another matter. "No princes or princesses today," we announced. "Rockhounding has rules, and Rule #1 is always leave an area better than you found it." I'd

like to say they did their assignments with enthusiasm, but we didn't expect miracles! Hopefully they'll remember the lesson we were trying to teach next time they get an opportunity to go prospecting.

And now, finally, the trek into the dump. What I foresaw as the day's biggest problem was convincing Joe that he had to stop when the kids had enough, and that the kids would have had enough within an hour. I was wrong on both counts. Up in the picnic area there is a shed with a black light for examining the specimens. Between finding rocks, getting Joe to identify them, and then running up the stairs out of the dump to the black light shed, the kids were so busy I got tired just watching them. The afternoon flew, even from the perspective of my comfortable folding chair. Every time one of our darlings came near me, I was sure it was to say, "I'm tired of rockhounding," but each time it was for a water bottle or a snack or for admiration for one of their rocks. The greatest find of the day was magnesioriebeckite. One of the boys refused to seek or carry anything but calcite, and the girls were ecstatic when they found amethyst crystals under the picnic tables, scraps that had been chipped off a large specimen for the museum. Each child developed his own interest.

Suddenly we heard the announcement that the dump would be closing in 15 minutes! The moans and groans warmed me through and through. I had survived the day, Joe had had an opportunity to share his knowledge with his grandchildren, my sister was thrilled that her grandchildren had developed a new hobby, and the children, both boys and girls, had had a wonderful time and a different learning experience.

Am I now a convert? Not really. Would I do this again? Absolutely. Just give me my folding chair, a good book and plenty of food, and I will eagerly participate in the next expedition.

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SUMMER 1967: MY FIRST TRIP TO FRANKLIN, N.J.

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Due to the kind indulgence of my father, I was granted an excursion to the wonderful, mythic land of Franklin, NJ, where all the rocks held mysterious properties when viewed under ultraviolet light in the dark. In almost every book on geology and mineral identification there were references to the plethora of exotic mineral species and fluorescent rocks that came out of the two zinc mines located in Sussex County, NJ. Both the pictures and the commentary on these rocks proved a most irresistible lure to this young collector. You see, I had been fatally bitten by the collecting bug when I was nine years old, living in Colombia with my medical missionary parents.

Now I finally got to go collecting in the USA, and what better place to start than in Franklin, NJ? After what seemed like an interminably long trip we finally arrived to view a very substantial mountain of rocks, at least to an eleven year old. Determined to partake of these amazing rocks, I dug into the dump. After exhausting my parents' endurance for summer heat and humidity, I returned home with my box of self-collected goodies. There was no talk of buying rocks; this was a do-it-yourself start to the hobby.



Steve Kuitens, FOMS President 1999-2000.
Tema Hecht photo

Over the next several months came the challenge of identifying my specimens. I was very confident of calcite with its peculiar rhombic cleavages, and the masses of brown andradite garnet. My favorite colored mineral was "salmon calcite," but what intrigued me most were the various crystals discretely scattered about in the calcite. I even excavated some out of the calcite, to find out they were lustrous eight-sided pyramid-like crystals, totally black and nonfluorescent, so they had to be the well described and famous franklinite crystals. I knew I had found willemite because I had checked it out with someone's ultraviolet lamp at the dump, but because I could not afford one of my own I used a homemade black light unit that gave a mediocre response when viewing the calcite and willemite. I was later to learn that this poor response was due to the fact that my homemade device was only a long-wave ultraviolet lamp, not a short-wave lamp. One other significant specimen I collected was a nice piece of bluish-gray graphite that I was to discover years later was not graphite, but molybdenite!

Thirty-two years later I can still look at some of these specimens, and can thank my father for indulging my early desires to learn more about the wonders of God's creation revealed in the rocks at Franklin, NJ.

FRANKLIN WAS THE CAUSE OF IT ALL

Audray Lapham
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Franklin was the cause of it all! Our local school took our son Don's 4th grade class on a field trip to the Franklin Museum and the Buckwheat Dump. Don's interest in minerals was cemented by 8th grade when he saw the collection of a buddy whose uncle lived in Brazil. Meanwhile, the four of us (Donald

and I, and our sons Don and Ken) had joined the Rockland County, NY, Mineral & Gem Society where we learned a considerable amount about field collecting. As a family we spent many weekends and summer vacations collecting from Florida to Ontario.

Our son Don's interest led him to a B.S. in geology, though he currently works as a chemist and will complete that degree this year. As "Quarry Enterprises" we grew from a 4' table space at the old Rockland County show to becoming full-fledged dealers. Most of our stock is purchased for resale, but we do sometimes sell something self-collected. We are still avid field collectors.

Three things led Don to his addiction to Franklin/Sterling Hill minerals. First, part of an old collection purchased some years back consisted of NJ fluorescents. Second was the opening of the Sterling Hill Mine, where Don was one of the helper-volunteers whenever he was available—something he loved to do. And last, but not least, was the willingness of the more established Franklin collectors to share their knowledge and help a newcomer identify the specimens he acquired. Franklin material is a whole other ballgame—it takes more knowledge and detective work than does, say, identifying prehnite or amethyst.

So in the end, we probably wouldn't be doing what we are today had not Franklin started it all.

MILL SITE SILVER

Mark Leger
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OK, so you want a story, I'll give you a story. Once upon a time, a long time ago, my friend Dave and I were in the Franklin area, up to no good, and decided to go field collecting at the Mill Site one afternoon. For me this was something new because being a fluorescent collector, I and the boys usually go at night. There I was beating the big boulders into pea gravel when I decided to take a break, being in the union and all! I started looking at some of the rock I had broken, and spotted some wires protruding out of a piece of ore. At the time I thought it was copper, and that was good enough for me!

So a few months later I was in the garage, went in my collecting bag, and remembered that piece. I struck it with a hammer, and boy was I in shock to find it wasn't copper but silver! I had to beat everyone off me: "I want some I want some!!" It had rammelsbergite, nickeline, and other stuff in it that I knew was good. I went over to Jack Baum's house because I knew he was the only one who might have seen a specimen like this before. He tested for calcite with acid and wasn't convinced the piece was from Franklin even though it had Mill Site grunge (willemite dust) all over it. He explained that NJZ once had a lab at Franklin, and the silver may have been from another property NJZ had an interest in, but was discarded on the Mill Site years later when no one knew what it was. I broke the original two-pound piece into two large pieces and two smaller ones. The larger pieces went to a collector of silver and the smaller ones went to two good friends.

A lot of good material has come from the Mill Site!

[Editors' Note: Mill Site photo on opposite page]

GETTING STARTED AT THE BUCKWHEAT

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My first field-collecting trip was to the Buckwheat Dump with my parents and two younger brothers in the summer of 1961. It seemed like the 75-mile trip from our Long Island home would take forever. Within minutes of spotting the Franklin Diner and making the turn, we were on the dump. Back then, parking was right alongside the dump.

Collecting was fairly easy because there were plenty of small chunks of rock that could be broken with a regular rock hammer and stone chisel. A sledgehammer would have been handy for the largest pieces. Calcite cleavages were plentiful in shades of salmon-pink, brown, and gray. Most contained small sprinklings of franklinite. I did not find any of the nice green gemmy "picture-book" willemite, but was pleasantly surprised to find ordinary-looking willemite which fluoresced green, along with red-fluorescent calcite.

My first lamp was homemade. It consisted of a long-wave bulb mounted in a small wooden box with no filter. Some of the material I collected was traded with others across the United States. Also found on the Buckwheat Dump was zincite, andradite, and microcline. When I first picked up green microcline, I thought it was willemite and could not understand why it did not fluoresce.

I was able to collect here a few more times during the early 60s and remember hearing other collectors say that this area is getting pretty well picked over and that better material could be found on the Trotter Dump and at Sterling Hill. I guess people have been saying the same thing for years. One of these days it



Franklin Mill Site, 1985. Mark Dietz in foreground. Dr. Alfred Standfast photo, Franklin Mineral Museum Archives

will be true, when there is no more material on the Buckwheat to collect.

COLLECTOR STORIES

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COLLECTOR STORY #1

My first significant purchase of F/SH rocks occurred in early 1981 when my collecting mentor Ewald Gerstmann had a deal for me. He showed me stacks of 4"x8" boxes filled with F/SH rocks stored under an overhang of his house. This was a lifetime's collection he purchased from an old-timer. What a bonanza, and for only \$125. With the help of my two kids, four trips later the rocks found a "user friendly" home. Most of these small rocks had numbers attached but there was no identifying index. So over the next several months I spent time trying to identify this material using my trusty *Kushner Guide* which Ewald said was his best-selling reference book. I found a few small specimens of esperite, franklinite, and rhodonite, but none of these found their way into my "official" collection index. This was a great learning experience. But the greatest lesson learned was the fact that I had no interest in spending a lifetime accumulating a lot of low quality dump-collected rocks. Yes, I wanted to get some of the things Ewald had in his collection. As Ewald later confided in me, "Junk is junk now and will always be. Buy the best you can afford." This transaction initiated a long association with Ewald and he became an excellent collecting mentor: without a doubt, the greatest mentor a beginner F/SH collector ever had.

COLLECTOR STORY #2

Sometime during the mid-80s I accompanied Ewald Gerstmann to the Rochester Symposium. We saw another F/SH collector there by the name of John Kuzma. During one of the symposium breaks, John mentioned to Ewald that he had some specimens in the trunk of his car that Ewald might be interested in seeing. When John opened the trunk he showed us three



Ewald Gerstmann in his prime. Lee Lowell photo

Harvard-verified specimens of barylite from Franklin. Ewald's eyes nearly popped out of his head. A negotiating session commenced and John said that he would talk to Ewald about a deal when he returned home. Ewald knew I needed one of these specimens and promised to get me one. A week or so later we met John in Ewald's museum and they discussed a deal while I stood by anxiously awaiting the outcome. Ewald didn't like John's offer. I believe he wanted \$400 each, while Ewald was thinking that \$200 to \$300 each was about right. We continued the negotiations over coffee at the Dunkin' Donuts shop in Franklin. While Ewald was away from the counter John asked if I would accept his \$400 price and I said that I would, but I wouldn't interfere with Ewald's dealings. For Ewald taught me that you never attempt to go between him and someone working a deal with him. If you did and Ewald got wind of it you were banned from the Gerstmann museum for life. The negotiations broke off and Ewald assured me that he would get me a barylite from John for less than \$400. Shortly after this time John Kuzma sold his collection and neither Ewald nor I know where the barylites ended up. Needless to say I was disappointed but my allegiance to Ewald was more important than getting a barylite and losing a great mentor.

COLLECTOR STORY #3

In June of 1983 I stopped at Jim's Gems to see what he had available from F/SH. Maureen Woods welcomed me in her pleasant manner. I asked her if Jim had anything good and she showed several specimens, one of which was a fine cubic-parting hematite from Franklin. A real classic. I needed it, but for \$125 I wasn't sure. Maureen noticed that I was lovingly caressing this specimen and said that she thought Jim might let it go for around \$75. Jim wasn't there to substantiate this offer so I purchased it. On my way out of the shop Jim returned and asked me what I bought. I showed him the hematite and he noticed what I paid for it. He looked at Maureen with an expression of disbelief but didn't say anything to me. I wonder if Maureen got a lecture. Nevertheless, she continued to work for Jim for years after this incident. This story pales in comparison to that of the unpriced kolicite that Maureen sold years later for **way less** than Jim wanted. Thanks, Maureen, for looking out for the collector's interests.

TOMORROW

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Like several other individuals involved in the Franklin/Ogdensburg (FrOg) scene, I received a letter from Tema requesting I write something for the 40th anniversary issue of *The Picking Table*. As I thought about this, the challenge given to us by Dr. Carl Francis at the 1997 Franklin Show banquet came to mind: think outside the box. I anticipated everyone else would write about something in the past, so I decided to look into the future. Besides, me do what everyone else does? That's not me. Like Frank Sinatra, I gotta be me, and when I'm done, I wanna be able to say contently that I did it my way. Who else do you know who collects FrOg mineral specimens that fluoresce at -320° Fahrenheit but not at room temperature? And was that not me who ordered a parfait at the 1997 dinner at the Fone Booth while everyone else ate prime rib? What follows are not forecasts (hey,

I work in the National Weather Service Headquarters building; you don't really want me forecasting, do you?); these are hopes and dreams. Note that some of these are not originally mine, and some are not mine alone. Enough introductory comments; come now with me into the third millennium....or fantasyland...

RESEARCH

There is much opportunity and need for research on FrOg and its minerals. A good place to start is mineral identification. I dream of there being a mineral identification lab in at least one of the FrOg museums. The Franklin Mineral Museum already has the equipment to do optics on chips taken from specimens, and someone expert at using the equipment. But more is needed: X-ray diffraction equipment, a scanning electron microprobe, and the ability to do chemical analysis. Next a good spectrofluorometer is needed. Together with chemical analysis, fluorescence spectra may help determine the activators in fluorescent minerals. With the ability to cool specimens to temperatures well below home freezer levels, some chilling research could be undertaken. The fluorescence of some minerals is temperature-dependent. For example, some bustamites and feldspars fluoresce much more brightly at around -300° F than at room temperature, while some margarosanites fluoresce a very different color at -300° F than at room temperature. This research promises some cool results. Not only will beautiful fluorescences be seen that could not be observed at room temperature, but combined with fluorescence spectra and chemical analysis, cold temperature fluorescence could give us a valuable though much under-recognized analytical tool.

Though I have no formal training or experience in geology and mineralogy, I have seen that an ultraviolet lamp can shed some good light on specimens. The willemite on this part of a specimen phosphoresces, but the willemite in that part does not. Yet both parts fluoresce in a visually identical manner, and look the same in daylight. Two large grains of scheelite appear identical in common room lighting, but one fluoresces blue-white and the other pale yellow. Simple direct visual observation of fluorescence and phosphorescence can enlighten us about what in a specimen should be more thoroughly studied. Such further study in turn could prove valuable in the study of mineral paragenesis, and the detailed chemistry and geologic history of the FrOg orebodies.

STERLING HILL MINING MUSEUM

The Sterling Hill Mining Museum has thus far done beautifully. The mine, buildings, grounds, and collection have a lot of potential. Those developing the site have excellent vision and plans for the future, and a great common-sense approach in bringing their vision to reality.

I look forward to the facilities at the top of Sterling Hill being developed into interesting and valuable exhibits on aspects of mine operation that cannot for practical reasons be exhibited at adit level. I also look forward to the development of the old East Vein stope into an exhibit of mining techniques before the days of power equipment.

Another vision I have is the production of a Sterling Hill Mining Museum tourbook. Due to time constraints, there is much information that cannot be presented during the tours. A tourbook would give abundant information on everything seen on the tour, much more than a tourguide has time for, plus information about many features of the museum which are not part of the

tour. The book would also include plenty of color photos. I also foresee a video along the same lines.

Some good collecting sites have been developed at Sterling Hill. I hope this will continue. Much unstudied and undeveloped geology and mineralogy remain above the water table, and therefore accessible. If the facilities on top of Sterling Hill do get developed, then I dream of restoring the hoist, and running the man-cage between adit level and the top of the hill. This would add an interesting real-mine experience to the tour.

Thinking even further outside the box, I dream of the mine being pumped out and explored once again.....just a dream, just a dream. Well, it *could* happen.

FRANKLIN MINERAL MUSEUM

Though this museum has been around a lot longer than the Sterling Hill Mining Museum, I am less familiar with it. I know little of the plans and vision of those in charge. I myself have one primary vision, and one wild dream.

I envision a fluorescent mineral display in which each specimen can be seen close up, and in both white light and ultraviolet. This display would include both short wave and long wave UV. Each specimen would have a label giving both the fluorescent response and the species name of each easily visible fluorescent mineral in the specimen.

I also have this chilling dream of a cold-temperature fluorescence display. I have seen several times how beautifully some minerals fluoresce when chilled much below home freezer temperatures. It would be great for this beauty to be viewable by everyone. Such a display would, however, be a difficult technical challenge.

HOBBY

One hope I have is to see a book published on FrOg fluorescent minerals. Each variety of each mineral should be covered. So, for example, both common willemite and "beta-willemite" should be covered, as should the pale blue and red fluorescences of margarosanite. This book should include numerous color photos.

I dream of the Trotter Dump being routinely open for collecting. While it should not be made *too* easy, it would help if *some* of the overburden were removed.

My greater hope and dream is to see the Franklin Mill Site re-opened to collectors. A lot of interesting specimens have come out of the Mill Site, and there are likely to be yet more surprises there. Here, too, while collecting there should not be made *too* easy, it would help if *some* of the unwanted stuff on top were taken away.

And who knows, as Franklin grows, maybe, *just maybe*, the town will build a new fire station at a different location, and the old one will be torn down, and all the paving will be removed, and once again the Parker Dump will be a collecting site.

Could I dream an even wilder dream? You bet. The Franklin Mine could be reopened, and explored, and studied, and could be a collecting site. Hey, a collector can dream, can't he? But there *is* almost a half a million tons of *very* rich iron ore down there [Dunn, P.J (1995) *Franklin and Sterling Hill, New Jersey: the world's most magnificent mineral deposits*, p. 96].

SHOWS

Both the fall Franklin Show and the spring NJESA Show are excellent shows. I believe that the only serious long-term

constraint on these shows is the lack of good, economical hotel accommodations in the FrOg area. This problem *is* solvable, though as far as I know not by any of us. Apart from this limitation, these shows have the potential to be the best this side of the Mississippi.

I dream of these shows having more display area, both for fluorescent displays and for nonfluorescent displays. I dream of different people displaying each year, and of repeat displayers varying their displays from year to year. I dream of a "Dark Pond" (I did not originate this term, or even this idea) at each show for fluorescent mineral dealers, large and small. I dream of these shows being spread out over a few locations, with important aspects of the shows at each museum site, and buses shuttling people among the sites.

With some creative out-of-the-box thinking and wise risk-taking, it could well be "Look out, Tucson" someday.

ETC.

The Franklin Mill Site has some historical potential. I think it would be neat to see that developed. I can envision a building or two restored, with a real, full-size, working picking table (complete with ultraviolet lamps) in one of them.

Now here's a wild thought: suppose the Franklin Mineral Museum were relocated to the Mill Site... More room (for more exhibits, for a good lab, for ???); historical preservation; Mill Site collecting; great setting... It will take time; it will take research and effort; it will take money; but I think the idea has great long-term potential.

CONCLUSION

The FrOg scene is what it is because many people over the years have given much money, time, and effort; they gave of themselves. The future? We need a continuation of that same kind of investment: not just of money, but of ourselves. We need wisdom, common sense, creativity, and out-of-the-box thinking. We need to be willing to take wise risks. We need selflessness and humility, faith and faithfulness, patience and perseverance. We need to work together. With these things, the FrOg scene has a glowing future. Otherwise, FrOg will croak. It's up to us.

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MINERAL COLLECTING: AN ARTIST'S RETROSPECT

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Born and reared in the hills of Pennsylvania, I seem to have had instilled deep within me the urge to dig things out of the ground. These things, otherwise known as rocks and minerals, have to be cleaned, inspected, saved, nurtured, and sometimes revered! To this day, I have sworn myself to secrecy as to the location of my childhood "Diamond Mine." I still have some of the nice quartz crystals that I dug out of the mountainside many years ago.

"The apple does not fall far from the tree." My son, Dan, had an early interest in dinosaurs and fossils. When I took him to a coal bank only a few blocks from my mother's home, he was like the proverbial kid in a candy store as he eagerly gathered fern fossils. This led to Dan's introduction to the mineral world. He

wrote to the geology departments of various universities and traded Pennsylvania fossils for minerals.

By now, we both were members of several mineralogical clubs, and spending many enjoyable winter nights listening to lectures and rubbing shoulders with fellow collectors. Part of the fun was bringing in your favorite specimens and allowing members to see, feel, and hear about your prizes. I never had any particularly great minerals, but I got the idea of using my artistic expertise to join in the exhibitions. I painted, on a 14 x 20 canvas, a crystal of phosgenite. The translucent property of this specimen intrigued me, and my work was rewarded by someone asking "who brought in the photograph of phosgenite?" When I explained it was an oil painting, members immediately went up to the front to examine the likeness.

I painted a series of six minerals that I exhibited at the N.J. Earth Science Shows and the Morris Museum. While doing these works I realized how few minerals, though beautiful in themselves, qualify for an oil painting. Dan and I enjoyed a lecture and slide presentation by Joel Arem. Joel told us all that only about one specimen in ten is qualified to be photographed. I immediately realized that only about one specimen in a hundred qualifies to be painted.

Those that do qualify I call "Minerals of Character." When I exhibited a painting of rhodonite at the Garden State Art Center, a reporter from the *Star Ledger*, Eileen Watkins, was intrigued, never having seen a painting of a "rock" before. I explained to her that I consider this a "portrait," and the subject must show all the properties of a good sitting subject: strength, character, inner beauty and uniqueness. She was impressed, and wrote a beautiful story in the *Ledger*.

At an early age, young Dan realized the importance and the availability of a treasure of minerals located only an hour away, and zeroed in on Franklin and Sterling Hill as his prime collecting area. Through the years, between collecting and silver picking, Dan has accumulated what can be considered as a "nice" Franklin collection.

Along the way, he prodded me to paint the prominent area minerals, since no one had taken the opportunity to put them on canvas. Along with the aforementioned rhodonite I did the "big three," namely franklinite, zincite, and willemite.

The franklinite challenged me because an artist sees nothing as black; the beautiful purplish mauve color sheen across the crystal has to be sensed more than seen.

The zincite, a specimen owned by George Elling and photographed by Gary Grenier, was another effort in painting the translucency and the beautiful combination of red and orange.

The willemite, of course, was a mixture of many different shades of red, and the large photo, again by Grenier, sits alongside the painting, showing the difference between a flat picture and the richness of portraying anything with oils.

Having painted the major minerals, I now turned to selected favorite species. I told Dick Hauck that my next selection was roeblingite, and Dick said, "Why don't you just paint a piece of broken china?" I know his perception, but my idea of roeblingite is the nodule in matrix, showing the white, coconut-like texture. Painting this property was the task, and I really enjoyed it.

The last mineral to be painted was one that most collectors not only show no interest in, but consider as the ugly duckling of the species. I speak of the large, chunky crystals of "jeffersonite" (augite).

My effort in the painting of jeffersonite can be considered the epitome of collecting/painting. During one of the digs in the Sterling pits, I was fortunate to have unearthed a black blob

which appeared to have a few crystals within the gook. Taking it home and hitting it with a garden hose gave me a very pleasant surprise as the clunky crystals appeared with the black stuff's disappearance. I then spent several days with a toothbrush and cleaned it meticulously. My finished product, when placed in the sun, exuded rich, umber colors of rose, greens, shining little faces, and cast a rich earthy appearance.

My next job was posing my prize for a suitable photograph. After selecting a proper background, and taking two rolls of shots at different settings, I finally had the photo I wanted.

Now, transferring the product to a canvas was my next task, and, having the proper mood and feeling for my subject matter, I knew it would only be a matter of time until success. All of the mineral paintings are hung in the gift shop at Sterling Hill.

I then turned from minerals to landscape. The long horizontal metal structure sitting high above the mine and leading into the huge ore-containing elevators always impressed me as being the signature of Sterling Hill. I sat down alongside the dumps with the huge metal structure in the background, and photographed, sketched, and painted "Sterling Hill." The only "artistic license" I used in this work was to add a few minerals to the dump, which looked a little depleted at this particular time. The painting hangs on the front wall of the museum.

By now I was feeling a little pride in documenting the Franklin-Sterling experience. My thoughts turned to the personal characters who have enriched the area's history. Thinking "old miners" I pulled out a photo I had taken of Nick Zipco during the Franklin Show which dedicated its booklet to Nick. It was a natural for an oil painting, with him sitting on his favorite rock looking relaxed, and the statue of "The Franklin Miner" over his left shoulder. With the locks of white hair protruding from his shade hat contrasting with his tan face, I had what I needed.

The first person to see the finished painting was Nick himself, and his eyes welled up with tears when he fully realized that this was a piece of recognition. Just to see Nick at this moment was my own reward for my effort.

I took the painting to Westfield High School, where I teach. The art department showed it to several classes studying portrait painting, and several students in each class immediately recognized him as the little man who sells minerals outside the Franklin Museum. Multiply Westfield by the thousands of students who have paraded in front of Nick, and by the people from all over the country and world who have known him and done business with him, and you know why he is a Franklin icon.

The painting hangs in the Heritage Museum in Franklin in the miners' room.

My last painting of personal characters was a "Twofer"—I got two characters in one rendition. Who could make a more pronounced attribute than the miracle workers themselves, namely, Dick and Bob Hauck? As a volunteer tour guide I always tell my people of the modern miracle they are about to see, and after the tour I reaffirm the magnitude of the Hauck effort and the legacy they are both trying to leave.

I remember an old photo of Dick and Bob, both in their tour guide garb, with their hands on an old drill, a rusted big chain in the foreground. I pointed the drill right into the Sterling Hill adit for effect and painted the Haucks in their rugged work clothes.

The painting now hangs at Sterling Hill. Once again, I am developing a feeling of pride in being able to capture a moment in the history of a great mining area by immortalizing its objects, its faces, and its people.

COLLECTING EXPERIENCES AT FRANKLIN

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So Tema asked if there was anything in my collecting experience which "crystallized" the Franklin experience for me. Most definitely, yes! And I am sure others who are smitten by the Franklin "bug" can commiserate with me. It was when as a new collector, recently enrolled in a geology program and paying off college expenses through employment in an oil company's chemical laboratory, that I learned those many Franklin rocks I had purchased were really not what the labels said.

Being responsible for operation of a powder diffraction X-ray machine, I began systematically confirming the identities of my Franklin minerals. To my surprise, those many "schallerites" I had purchased were not. Rather, I had frielites, mangancalcites, rhodonites and two pyroxmangites!

Now, the search for a true schallerite began. It took me to club meetings, mineral shows and the homes of notable collectors. I was introduced to many who other Franklin aficionados will recognize: Ewald Gerstmann, Dick Hauck, Neal Yedlin, Fred Parker, Pat Gross and others. They were more than willing to share their experiences, knowledge and enthusiasm for schallerite and other Franklin minerals with this new collector. Many even graciously gave me chips of their "schallerites" for identification. Needless to say...many more frielites and rhodonites were begat in their collections. This experience also led to Frank Edwards – a longtime editor of *The Picking Table* – persuading this new collector to document his schallerite and pyroxmangite "findings" with two short *Picking Table* articles which were published. [Eds. note: *PT*, 17, 2: p. 4; 18, 2: p. 6]

Recently, I found Neal Yedlin's letter which he wrote to me on January 1, 1975. Neal responded to my Christmas-day letter in which I asked him about schallerites in his collection, and for general advice on how to pursue and obtain Franklin minerals. I quote a few small parts of his lengthy three-page letter:

"The first bit of advice I can give you is one you cannot possibly accomplish – begin collecting some fifty years ago when minerals were available (tho money wasn't). I was able to get to the picking table at Franklin in 1931, to the operating quarries (Lower New Street) in Paterson in 1928...this situation no longer exists.

"Franklin is impossible. I have good friends in the region – Alice Kriassl of Hackensack, who does Franklin micros, Lee Areson of Middletown, N.Y., who collects and sells Franklin duplicates (you should contact him) and Ewald Gerstmann – museum and sometimes dealer.

"Collecting locally is a forgotten thing. With exceptions, here and there. But keep going and let me know from time to time how you fare. Good luck and have a good collecting year. And do not let your mineral hobby interfere with your work at school. You have a long life ahead of you during which you can ride the hobby. What you do at Rutgers now will control that life."

Neal's letter remains an inspiration each time I read it. It shows the character of those who collect at Franklin. Knowledgeable people, with integrity and willing to help young collectors. I have found these traits continue today in the Franklin community and I hope we all strive to perpetuate them. Neal's postscript to his letter also shows another admirable trait –

honesty – and a willingness to bluntly admit that he was no different than this young collector. In closing Neal states:

"I haven't been able to get new Franklin stuff either. The rare arsenates available last year went to a select few, and cost about as much as rough diamonds of the same weight."

Has anything in Franklin really changed over these past 25 years? Some "mcgovernites" turn into kraisslites, some "clinohedrites" into cuspidines, and some dark, nondescript pyroxenes into "petedunnites." I still don't have a true schallerite. And as Neal succinctly said way back then, still it's hard to get any of this "Franklin stuff."

(Buy and use a good mineral book!)

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THE GOLDEN AGE OF FLUORESCENT MINERAL COLLECTING

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In recent years I have all too frequently heard lazy field collectors and sideline pontificators lament the loss of collectable mineral localities in the United States and the impossibility, therefore, of acquiring top-quality material in the field. While this might be true to some extent for crystallized minerals, it is absolutely false as regards fluorescent minerals. In point of fact, this is the golden age of fluorescent mineral collecting. There has never been a time when more world-class specimens have been available to the diligent field collector or the aggressive buyer willing to wield the silver pick.

During the last six years or so, my collecting partner and good friend Claude Poli and I have been able to build world-class fluorescent mineral collections by using these two methods to acquire specimens from a number of accessible United States and Canadian localities. Let me say right off that attaining this lofty goal has been a lot easier due to my partner being one of the better field collectors in the country. There are many attributes that make a great field collector: (1) the willingness to do the necessary research to identify the names and precise locations of mineral localities capable of producing fluorescent mineral specimens, (2) the perceptual ability to recognize potentially great specimens in the larger rock masses containing them, (3) the willingness and physical capacity to use the tools of the trade to liberate such specimens from those rock masses, and, finally, (4) the ability to convert good specimens into great, displayable ones by expert trimming techniques using the appropriate hammers and chisels. Claude has all these skills in great abundance. The result has been the production of the best fluorescent specimens we have ever seen from every locality we have visited.

One locality, however, stands out head and shoulders above all others in the production of great specimens, namely, the world-famous Sterling Hill Mine in Ogdensburg, New Jersey. All fluorescent mineral collectors owe a huge debt of gratitude to Dick Hauck, Bob Hauck, and John Kolic for their never-ending hard work and recognition of the importance of preserving as many top-quality specimens as possible from this great mine. During the last ten years, as the water rose in the mine from the 1400' level to just below the surface, the tireless efforts of these dedicated men (and many other associates who work with them) created and saved many of the best fluorescent specimens ever seen from the mine. The very finest of these specimens have been

made available to collectors for purchase at extremely reasonable prices. The remaining specimens, or at least the rocks that contained them, were used to create the "Mine Run Dump," which is open to public collecting on a regular basis. In addition, twice a year, collectors have been allowed access to the Noble and Passaic Pits where additional top-quality materials have been collected, both fluorescent and nonfluorescent.

I am amazed at how few of the top fluorescent mineral collectors and "heavy hitters" have actually taken advantage of this unique opportunity to add world-class specimens to their collections for, I might add, a very nominal fee. Claude and I have never had a collecting trip at Sterling Hill when we did not acquire one or more specimens that would be considered worthy of any collection.



Claude Poli trimming a specimen of scapolite. Saddle, Noble Pit, Sterling Hill, September 12, 1998.

Richard Bostwick photo

The following alphabetical listing includes what we consider to be all the significant finds of fluorescent minerals at Sterling Hill since 1989, as individual species and species combinations, along with brief descriptions of what makes them so special. All these finds are well-represented in our own collections. We also include in the list some of our favorite nonfluorescent crystal classics, which can still be collected and should not be ignored. Of the various finds enumerated, some have come from the mine, and others from the East Vein surface outcrop or the Passaic and Noble Pits; portions of many of these finds have made their way onto the Mine Run Dump.

Note: where fluorescent minerals are listed but their fluorescences are not described, assume the fluorescence to be typical, e.g. willemite = green, calcite = orange-red, barite = pale yellow, etc.

- 1) **albite & calcite**: FL turquoise blue and orange SW; rare.
- 2) **andradite** xls to 2": nonfluorescent.

- 3) **aragonite, calcite, & willemite**: aragonite FL blue SW, bright cream LW.
- 4) **augite** ("jeffersonite") xls up to 10": nonfluorescent.
- 5) **barite & calcite**: from the 600', 700', and 900' levels of the mine.
- 6) **biotite** xls to 2": nonfluorescent.
- 7) **calcite & willemite**: calcite FL 2 colors, bright orange-red and burgundy-red SW.
- 8) **calcite** (FL red SW and blue mid-range) plus **willemite** (massive FL green, or radiating xls FL & PH bright pale green), with **sphalerite** (FL orange and lavender LW), **barite** (FL yellow-white LW), **hydrozincite** (FL dark blue SW), **zincite** (FL yellow to greenish white LW), & **fluorite** (FL purple-blue LW): spectacular specimens, often with 8 to 10 FL hues in one specimen, unequaled at any other locality in the world; never before available.
- 9) **cerussite** in xls, masses, and coatings, with **hydrozincite**: FL yellow LW and bright blue-white SW, respectively.
- 10) **chabazite & calcite**: FL green and dull red SW, respectively.
- 11) **fluoborite**: FL cream SW; very uncommon in collectable specimens.
- 12) **fluorapatite**: FL pink SW; rare color, never before available.
- 13) **fluorapatite** in xls and masses to 4", with **calcite** and **microcline**: FL grayish brown, orange-red, and blue respectively; rare combination of species, seldom available.
- 14) **fluorapatite**: FL distinct orange SW, rare at Sterling Hill.
- 15) **fluorite** (var. **chlorophane**) & **calcite**: two different finds of fluorite that FL different shades of blue-green w/ bright PH.
- 16) **fluorite** (var. **chlorophane**), **calcite**, & **willemite**: 3rd type and association for FL fluorite.
- 17) **franklinite** xls up to 4": nonfluorescent.
- 18) **hemimorphite**, botryoidal and in xls: FL cream and/or green SW.
- 19) **hendricksite** xls up to 2": nonfluorescent.
- 20) **hydrozincite & calcite**: FL bright blue-white and deep red SW, respectively.
- 21) **hydrozincite, calcite, willemite, & zincite**: good specimens are uncommon and spectacular with hydrozincite FL electric blue SW in masses or tutti-frutti mixes with other species; never before available.
- 22) **meionite** (scapolite) xls in **calcite**: FL cherry red and bright orange-red SW, respectively.
- 23) **meionite** (scapolite), **calcite, albite, & hydrozincite**: rare and spectacular 4-color FL specimens; never before available.
- 24) **meionite** (scapolite) with two unidentified minerals: FL cherry red, yellow-orange, and greenish white SW, respectively; rare and never before available.
- 25) **meionite** (scapolite), **fluorapatite, calcite, albite, & barite**: very rare and spectacular 4-5 color FL specimens; never before available.
- 26) **microcline & calcite**: rare specimens FL bright blue and orange-red SW, respectively.
- 27) **norbergite & diopside**: rare specimens FL bright yellow and blue-green SW, respectively.
- 28) **phlogopite** xls to 2": very uncommon in collectable specimens.
- 29) **powellite & calcite**: powellite FL yellow to yellow-white SW, LW.
- 30) **sphalerite & willemite**: rare coatings FL yellowish orange LW, with green FL willemite.

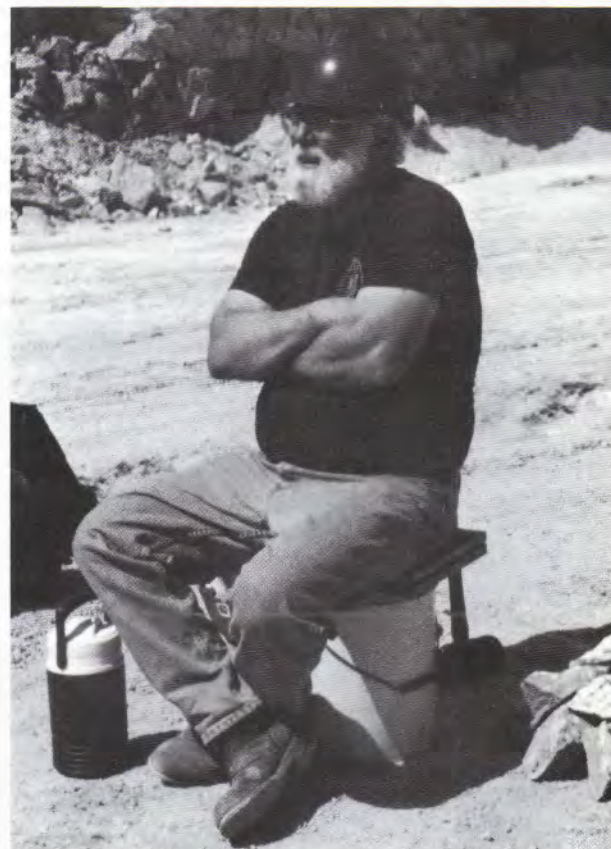
- 31) **sphalerite** & **black willemite**: FL bright lavender LW and green SW, respectively.
- 32) **sphalerite**, **calcite**, & **willemite**: beautiful 4-5 color FL specimens with sphalerite FL orange, pink, reddish orange, and/or lavender SW, LW.
- 33) **talc**: uncommon; FL cream SW, LW.
- 34) **tremolite** xls: uncommon in collectable specimens.
- 35) **willemite** xls up to 3" in **calcite**.
- 36) **willemite** bands in **calcite**: best specimens are spectacular.
- 37) **willemite** (*exsolution* in tirodite or tephroite) & **calcite**: uncommon, with beautiful FL parallel veins of willemite.
- 38) **willemite** (gemmy) & **calcite**: willemite occurs in yellow, orange, and green daylight colors.
- 39) **willemite** (fibrous) & **calcite**.
- 40) **willemite** (secondary): very brightly PH.
- 41) **willemite**: FL varying shades of green, in daylight colors of white, tan, pink, red, yellow, orange, green, brown, gray, and black.
- 42) **wollastonite**: grains FL bright orange to orange-yellow SW, in nonfluorescent calcite.
- 43) **wollastonite**: solid masses which FL orange SW; rare and seldom available.
- 44) **wollastonite**: dense masses of crystal laths which FL bright yellow SW; uncommon.
- 45) **wollastonite** & **calcite**: beautiful and uncommon 2-color FL specimens that FL bright orange and red SW, respectively.
- 46) **wollastonite**, **calcite**, & **aragonite**: beautiful 3-4 color FL specimens with wollastonite FL bright orange SW and calcite FL pink & yellow SW, plus FL aragonite.
- 47) **wollastonite** (FL pink SW, PH) with **aragonite** and unidentified green FL coating; rare combination of species with unusual FL color plus PH of wollastonite; never before available.
- 48) **zincite**, **sphalerite**, **calcite**, & **willemite**: multicolored FL specimens with zincite in bands FL greenish white, and in grains FL yellow.
- 49) Two **unidentified** coatings on calcite: very rare 2-color FL specimens that FL bright green SW and bright blue under mid-range UV.

Hopefully, the comprehensiveness of this listing will clearly demonstrate to fluorescent mineral collectors everywhere just how extensive, varied, and spectacular are the fluorescent minerals currently or recently available from the Sterling Hill Mine. Finding them will require, as always, hard work, perseverance, good collecting techniques, and even a little luck. But all serious collectors, whether beginner or advanced, should make the effort and avail themselves of this once-in-a-lifetime collecting opportunity while it still exists. Soon enough it will be gone, and we will be reminiscing about the "good ole days," when museum-quality fluorescent mineral specimens could still be collected in the field.

SOME NEW SPHALERITES FROM THE BUCKWHEAT DUMP

During the 1990s the collecting on the Franklin Mine's Buckwheat Dump had gradually become unproductive, as vast numbers of collectors had removed almost everything of value from the surface. In June of 1997, however, this situation was to change dramatically. Due to the efforts of Assistant Curator John Cianciulli and his staff at the Franklin Mineral Museum, the dump was "turned over" with heavy machinery for the first time in ten years.

On that long-anticipated day in June, armed with multiple collecting buckets, an assortment of appropriate hammers and chisels, and visions of multicolored fluorescent specimens dancing in our heads, a horde of collectors, including Claude Poli, Ronny Delia, and myself, hurriedly descended the walkway into the dump. After a brief period of time, during which our eyes were becoming acclimated to the necessary scrutinizing of the surface rocks, visible for the first time in a decade, Ronny excitedly identified a potentially interesting silver-gray vein in a medium-sized boulder of white calcite. Using our chisels to split the rock on the vein, we exposed a large surface of magnificently fluorescent sphalerite. Our enthusiasm now at fever pitch, we hurriedly scamped over the rest of the dump, looking for and finding other similar boulders.



Gerry McLoughlin at the Lime Crest Quarry, May 23, 1999.
Richard Bostwick photo

These specimens turned out to be some of the most spectacular fluorescent sphalerites ever found at Franklin. The sphalerite itself fluoresces both a rich orange color and a beautiful shade of lavender. The fluorescence is best under a mid-range UV lamp. In addition, the sphalerite occurs in an attractive two-tone fluorescent calcite that ranges from bright orange-red to burgundy red under SW light, depending on its proximity to the sphalerite veins. By splitting some boulders along the veins of sphalerite and others across the veins we were able to create two very different-looking types of specimen, both equally desirable. Some of the specimens were made even more extraordinary by including large eyes of gemmy willemite, fluorescing an unusual lime green SW, or areas of hydrozincite fluorescing bright blue-white SW. Here, more than ever, Claude's exceptional "sculpt-

ing” skills turned naturally good specimens into great display pieces.

By the time the collecting season ended in the late fall of 1997, Claude and I had managed to find several additional types of fluorescent sphalerite very different from our initial discovery. These specimens consist of blue-FL sphalerite, black willemite, and calcite in various combinations and exhibiting various fluorescent colors. The fluorescence of the sphalerite ranges from the usual orange to a beautiful pink to bright lavender SW and LW, which makes for gorgeous fluorescent specimens. In addition, in some of the specimens the calcite fluoresces a very unusual creamy yellow LW. As always, John Cianciulli served as a constant resource in identifying any unknown nonfluorescent minerals found in our fluorescent specimens, including talc and serpentine among many other species.

Since that “turning of the dump” in the summer of 1997 many other interesting and top-quality finds have been made by collectors of both fluorescent and nonfluorescent minerals. The most important include hydrozincite and calcite, powellite, brucite, magnesioriebeckite, calcite and willemite combinations, ‘crazy’ calcite, fluorite var. chlorophane with black willemite and sphalerite, uraninite, johnbaumite, fluorapatite, radiating willemite, petedunnite, lennilenapeite, and even an as-yet-unidentified mineral resembling novacekite.

Samples of the various types of fluorescent sphalerite specimens found during the last two years by Claude, Ronnie Delia, and myself will be exhibited at the 1999 Franklin-Sterling Gem & Mineral Show in late September. Hopefully, that display and this written account will motivate other mineral collectors to once again turn their attentions to the famous Buckwheat Dump, a valuable resource which over the last sixty years has provided Franklin aficionados with some of the most spectacular and exotic fluorescent and nonfluorescent minerals ever discovered.

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INTRO TO FRANKLIN 101

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I grew up in Hellertown, Pa. home of Lost River Caverns, and was a cave guide there into my late ‘teens. My tours, of which I presented over 2,500, featured “something for everyone.” If you were a speleologist, or showed above-average interest, you received the “Chock Full O’ Info” tour. The general public got a watered-down version for their admission fee, and people who tried to make my life miserable received version number three. Exaggerations and outright lies ran rampant in version three. Example: “You’ve all noticed how pleasant and comfortable Lost River Caverns is? That’s because it’s cooled by alluvial fans.” It was a fun job, cool in the summer, and afforded opportunities to interact with Hellertown’s civic leaders. Such as the time I bumper-stickered the borough police cruiser when officer Smith stopped into the cave for cigarettes. The sticker was on the rear bumper, and provided Lost Cave free advertisement for some time.

Early October brought a flurry of activity to Lost Cave, as Bob Gilman prepared for the Franklin Show. It was my duty to cram cabbings rough, combination grinder-sander-polisher units, and burlap sacks of Mexican geodes into Bob’s VW minivan, an early model not built for the abuse we gave it. Franklin meant little to me at the time, outside of the commercial aspects. But

in the late ‘60s, my wife and I began making regular trips to Franklin, about 65 miles away. We became interested in fluorescent minerals and bought our first lamp, a Mineralight M-15. I remember buying a platy margarosanite for \$30 from a local dealer, known for his above-average prices, and wondering how badly I’d been taken. I can also recall driving to Franklin in an ice storm one evening and turning back only when flagged down by a Lafayette University student. His car was upside down in a field, and as we drove back to the dorms we speculated on what sort of craziness would draw a person out on a night so foul. His girlfriend sounded charming, but explaining the pursuit of a coveted esperite as a bit more difficult. (To be accurate, at that time esperite was calcium larsenite.)

The early ‘70s found my wife and myself manning a booth in the Franklin Armory. We’d met a mineral dealer from Arlington, Massachusetts, named Dan Edelman, who went by the name of “Dan’s Diggings,” and we were paid in specimens for our efforts. We carried a general line of worldwide specimens, along with lucite tabletops in which slabs were embedded. Dan’s Chevy sedan had to be packed in a certain way, or nothing fit. So we were always the last dealer out of every show, and Franklin was no exception. Otherwise our tenure at the armory might have lasted more than two years. One year my wife and I stayed at the Four Seasons motel at the end of town, marveling at the ingenuity of the owner, who had installed mirrors on planes that we were not accustomed to dealing with.

In the mid ‘70s I sold my Franklin collection and became a bicycle tourist, traveling the globe and making friends for the good old USA (except in Wales, where I was stoned by hooligans who obviously mistook me for a British subject). At any rate, twenty years quickly passed, and my return to Franklin, in 1996, went unnoticed, as it should have. I wanted to rebuild my collection of fluorescents, especially now that there were so many more of them. I spent a lot of time in the show’s fluorescent display area, noticeably drooling. I attended the FOMS banquet and had a wonderful time. I’ve had membership in a number of societies, and could not imagine a more academically active group than FOMS, much due to Dr. Dunn’s efforts, but not overlooking the contributions made by many others over the years.

My hope is that Franklin and FOMS continue to attract new collectors and members. The day of the hand-sized, \$30 platy margarosanite may be long gone, but I can’t ever envision Franklin as a place I’d be uninterested in.

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CHRONICLE OF AN ERA

George and Ruth Nelson
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Forty years – time has flown fast, very fast, and has left in our midst – *The Picking Table* – not just another club notice. Ever since our first trip to the Buckwheat Dump, where we found our “traffic light,” yes, a pure willemite and calcite specimen, we have enjoyed an outstanding periodical, *The Picking Table*, and the pleasant contacts with other rockhounds nationally and internationally. Our congratulations to the editors for an outstanding product of their labors.

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28 YEARS WITH FOMS AND FMS

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I joined the FOMS (I'm not sure of the exact date) about the same time that I started the Fluorescent Mineral Society 28 years ago. In all those years I was able to get back to the Franklin area about 15 to 20 times, and in all those visits I have only been able to attend one FOMS meeting, and one organized field trip. That field trip was not even an FOMS event, but one of the first night hunts on the Sterling Hill Mining Museum dump, where I got an 86-pound specimen of wollastonite. Still, with all my visits, *The Picking Table* was the prime benefit I got from the FOMS. From the very first I wanted *The Journal of the Fluorescent Mineral Society* to be equal in quality to *The Picking Table*. My opinion, in hindsight, is that the FMS *Journal* at any give time has never been quite as good as *The Picking Table*, but that's okay. It isn't that the *Journal* has not improved; it's that *The Picking Table* has improved as well, always staying just out of reach. In my opinion the FOMS is a model of how a successful mineral society should be run. Keep up the good work!

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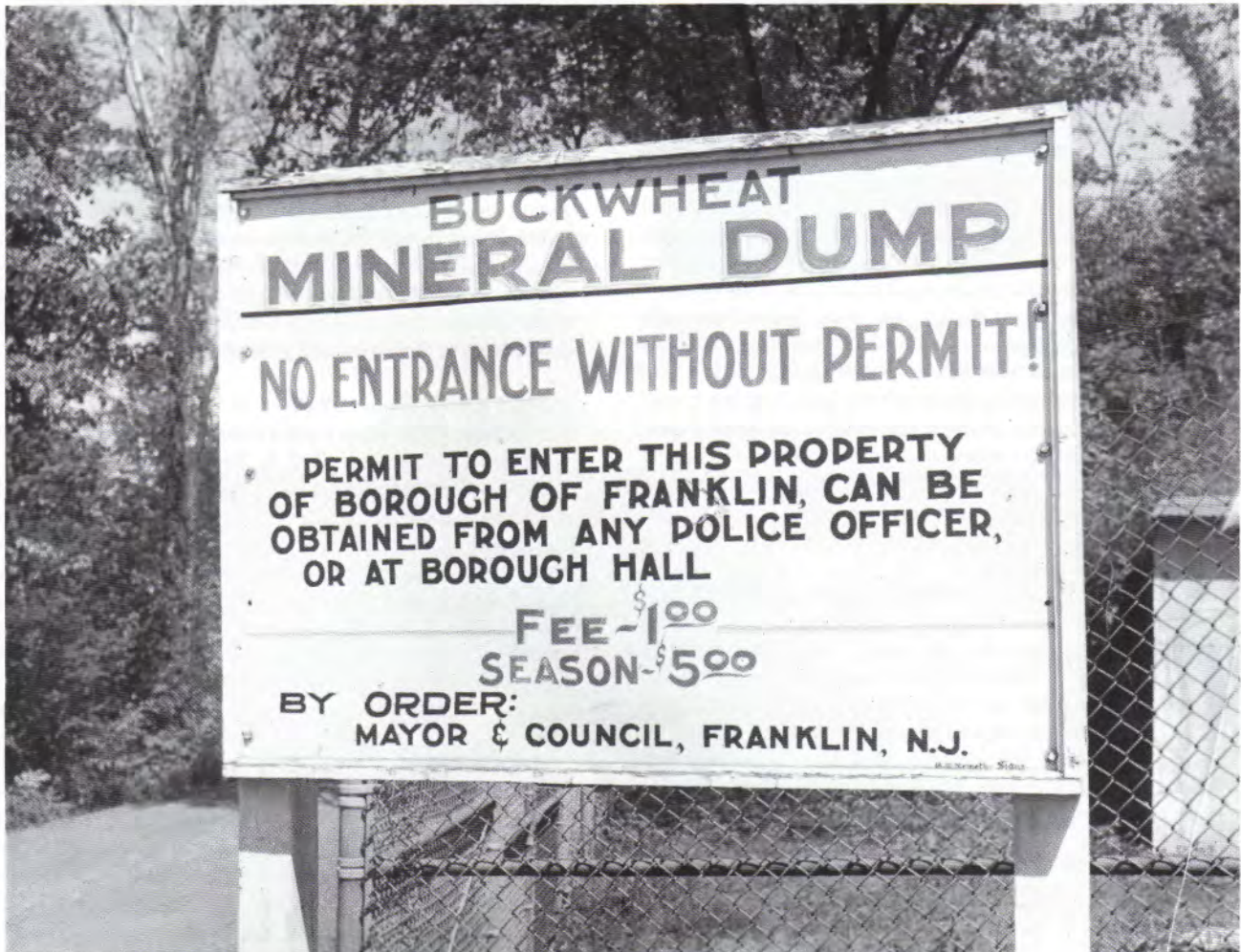
HOW I LOST MY VIRGINITY AT FRANKLIN

Tony Nikischer
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It was a major coup for a fourteen-year-old kid to land a union job in the sheet metal business in 1963, but I had been careful about getting legitimate working papers from the NYC Board of Health that spring in anticipation of "full time employment" during my summer layover from school. Braynack Sheet Metal was firmly entrenched in a tough south Bronx neighborhood, and it was a quick 20-minute walk from home to the shop each day, punctuated by my new-found appreciation of ventilating ducts, exhaust fans and other galvanized icons spotted along the way.

With my first paychecks, I frequented Walker's Minerals on Lexington Avenue in Manhattan, riding the subway each Saturday morning and carefully selecting a new specimen from the money that didn't go into the kitty back home. The old man was retiring, and his son Alan was just taking over the business. It was Alan who sold me the refurbished Mineralight, a nifty black metal box that had a leather handle and ran on a lantern battery.

(continued on page 74)



The Buckwheat Dump sign in the early 1960s, when you could drive your car into the dump and fill up your trunk with "red-and-green." "Sunny" Cook Archives

He threw in a small Franklin willemite/calcite specimen to clinch the deal, and I was hooked.

George Braynack, a burly man in his early thirties, was also assuming control over the family business, although his irrepressible father always seemed to be around to convince George there were better ways to do everything. George was affable and had a good sense of humor, and he was genuinely curious about "this rock collecting business" I was so excited about. Although he was merciless in his ribbing, it was he who first hit upon the idea of "field collecting".

I'd never set foot "in the field," my entire collection to that point had been carefully assembled with a silver pick and an occasional pleasant surprise from my older brother. But George was no fool, and he could spot an opportunity lurking in my youthful enthusiasm. As it turned out, he had just moved to Mahwah, New Jersey with his wife and newborn child, and the house really needed a paint job. So George proposed to take me collecting to Franklin, New Jersey on a Friday after work, in exchange for helping him paint the house on Saturday. Did Tom Sawyer have it any better? Who could resist?

George had a Mexican brother-in-law who lived in Franklin and had actually worked at the mine some years before. It was he, apparently, who gave George directions to the Buckwheat for our much-anticipated collecting trip. That Friday dawned overcast and threatening, and I secretly hoped we would leave right after lunch and beat the weather. But George was a businessman first, patron second, so we didn't leave the shop until after 6:00 P.M. Friday evening. It was raining; it was raining so hard we could barely follow the center line on Route 23. And it was getting dark....very dark, as we crawled along the bewildering route the brother-in-law had laid out for us.

After becoming hopelessly lost in and around Franklin we stumbled upon the small access road, just off the pond behind the Franklin Diner, that led to the foot of the then mountainous Buckwheat dump. I vaguely recollect a chain link fence and gate, but the utter blackness and relentless rain are more vivid in memory. Somehow George managed to get us in. Alan Walker's refurbished Mineralight blazed, and there was a seemingly unending supply of calcite-willemite-franklinite ore everywhere I turned! I was drunk with the euphoria of having struck it rich! And it continued to pour as I scurried feverishly from one mound to the next, picking and choosing one treasure and then another.

George ended up carrying a lot of that stuff into the back of his Jeep. He was thoroughly soaked, but actually seemed to enjoy himself. We probably spent no more than half an hour there, but I was exhausted and fell asleep before we ever reached his place in Mahwah.

I painted his dining room for that load of rock, and I still have the small wooden barrel George gave me the following Monday at work so I could unload all the fluorescent material from the back of his vehicle. There are even a few specimens still in that barrel, but I've moved on to other things. The lamp is still here somewhere, too, but I haven't seen it in years. I worked for George for another six summers, past high school and into college, before losing touch with him. We never went collecting again, but I'll bet he remembers that night and the lousy paint job he got in return.

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THREE COLLECTOR'S TALES

Fred J. Parker

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THE FIRST TIME IS THE MOST MEMORABLE

One of my fondest memories is my first FOMS field trip to the Sterling Hill Open Cuts. Dad and I had been seriously infected with the Franklin bug a few years earlier (I was 11 or 12 at the time) by Ewald Gerstmann, and we joined FOMS to learn and attend field trips. However, I could not attend the crown jewel of field trips – the Sterling Hill Open Cuts – because of the minimum age limit set by the mine owners. Finally, in 1967, I was eligible, and I recall the excitement of that May morning when Dad and I signed in and climbed the hill into the Open Cuts with the club as a group. What a rush! Dad volunteered to help John Sebastian on the Safety Committee (remember the whistles?) but I worked diligently with him and beside friends such as Ken Sproson, Alice Kraissl, and others. We dug in the "mud zone" for todorokite and chalcophanite, chipped apatite and secondary copper carbonates with galena and zincite from outcrops, all of which provided incredible joy and satisfaction sadly missed by many collectors today. However, the greatest memory was when Dad and a couple of other FOMS officials were permitted to dig in a deep pit in the Mud Zone for "jeffersonite" and franklinite crystals in a manganese mud, which were then hoisted out of the pit and dumped onto the ground above into the waiting hands of eager FOMS collectors (I still have a chunk of that crystal-bearing mud). This was the only way specimen material could be safely distributed to club members from that pit. The highlight, however, was a large matrix containing sharp jeffersonite crystals which it was decided was so good that it should be given to a museum. Funny thing, though. We later asked around to find out which museum it landed at, but while the specimen was remembered, its ultimate home remained an unknown. Over thirty years later, Dad and I still reminisce fondly about that May day, and always speculate and wonder...just what did become of that wonderful jeffersonite!

TIMES HAVE CHANGED!

In June, 1972, when I was a college sophomore, I attended the Sears Outdoor Swap-Sell in Bergen County. Always a treasure trove of local material, that year was especially memorable for Franklin minerals. A gentleman named Carl Holl cleaned out his basement, and among his excess was a wooden box of Franklin fluorescents priced \$1-\$20 or so. I was impressed by the way the sun reflected off the micaceous surfaces of one particular 2x3x5" specimen so I bought it. While the \$9 price tag has long worn off due to repeated washings, it still remains as one of my best fluorescent platy margarosanite specimens. Luckily, time has also faded recollections as to what the \$20 pieces were like!

THE BELSKY YEATMANITE

I had the privilege of being a dealer in many shows with Howard Minerals, and also being a friend of the late Howard Belsky. In 1975, I sold Howard a specimen labeled "altered bannisterite" for \$12. Little did either of us know that this homely little specimen was, in fact, a very significant Franklin yeatmanite. Howard had the piece analyzed, and it eventually was described in 1980 by Dunn and Leavens (*American Mineralogist*, 65, pages 196-199). Since Parker Minerals' policy is to

buy back mislabeled specimens at full price, Howard and I began a series of humorous quips over several years about the mislabeled bannisterite. I persistently offered to buy it back because I made an error and he persistently refused to have me make good on my error, all in perfect jest of course. Sadly, Howard died in 1987, but my memory of that little piece always remained. It could not be located, and it was assumed the piece found its home in a museum or another collection.

In April 1990, Mr. George Elling of Wyckoff, NJ, purchased a part of the Belsky collection, at which time I bought several boxes of material for resale. The boxes of wrapped specimens were partly sight-unseen but since they were salable, that was fine with me. As the last box was being emptied, a sheet of newspaper unwrapping two or three little pieces was opened, and into my hand fell...the mislabeled "altered bannisterite," a.k.a. the Belsky Franklin yeatmanite. With great excitement and satisfaction, I cleaned and cataloged the specimen, and it remains to this day at the front of my glass case of my favorite Franklin minerals as a treasured memory.

Happy 40th, FOMS!

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MARGAROSANITE FROM THE TROTTER

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In March of 1997 my family and I sponsored an exploration of the Trotter Mineral Dump in Franklin, New Jersey, which was attended by several local collectors. We began digging that Saturday morning at 9 a.m. Holes all around the property were dug by hand and machine, and rocks were cracking open left and right due to the hammering. Any of you who are familiar with Franklin material know how much work is involved in breaking those hard rocks, as well as how sore you are at the end of the day.

When the sun began to set, we stopped working and looked over what we had done, and all the material we had moved that day. We decided to break for dinner and regroup once it got dark. When everyone got back we geared up and began to explore the area with shortwave ultraviolet lamps. Within moments my son Scott came to me and asked, "Is this anything?" With a gulp and

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Passaic Pit, Sterling Hill, from above, looking southeast. FOMS field trip, May 16, 1964.
"Sunny" Cook Archives

a gasp I asked him, "Where did you find *that*??", as I looked down at the blue-fluorescing mineral he held in his hand. I regained my composure and asked Scott to show me where he had found the rock. To our amazement we realized that the fist-sized piece my son had found was the smallest of three broken-off chunks.

The irony to all of this, however, is that we had dug all day long and cracked open rock after rock with our hammers in hopes of finding something special, only to find that the best piece of the day was found at the very first hole we had dug. This beautiful margarosanite had sat there all day long, undiscovered.

This was one of my most memorable experiences that involved digging in Franklin, not only because my son had found a remarkable margarosanite to add to the collection, but also because my whole family was there to enjoy the day with me. Now if only we could have this much luck all the time. . .

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THE THRILL OF THE 'HILL'

Martin Pitts

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I thought it was an ambitious start ... to meet my friend, Harold Moritz, at the starting gate promptly at 8 a.m. (He was going to drive from Connecticut and meet me in the morning for a wondrous day of collecting at the Passaic and Noble Pits.)

He and I had been very lucky in the past while hunting for franklinite at Sterling Hill. The plan was to make a run for our "old spot" before anyone else had a chance to drag up their sledges or shovels. After making a slight detour to pick up Paulus Moore, there we all were at 8 a.m. – according to plan! At the sound of the gun, off we flew – up through the Passaic Pit and over the saddle into the Noble Pit. Wheezing and coughing, the three of us stumbled around – throwing and draping as many items as possible amongst the rubble to "mark our spot," and gain claim to as much potential real estate as seemed acceptable.

Harold decided to dig in the dirt to search for franklinites/magnetites (the debate still roars among the novice and uneducated – as well as a few know-it-alls). I chose to try my luck with the garnets and apatite assemblages. Paulus Moore was content to lie down a few feet from Harold – and engage the hapless Kraut in robust conversation.

Within five minutes Paulus unearthed a 5-inch "jeffersonite" crystal. Harold had dug about 1 foot into the ground, and I had accomplished little more than to work myself into complete indecision as to where to begin.

Eventually I did settle down, zeroed in on a high-potential zone on a VW-sized boulder, and proceeded to dig for myself my own grave. I was basically burrowing underneath the boulder. I had found this vug-like cavity on the bottom side of the stone, and tried furiously to get my hammer and chisel into this tight spot. Best part was that I had a white shirt on, and I was lying on my back in the manganiferous clay.

Hellish angles, black cloying dust sifting into my face with each clank of the hammer, sweat pouring, crystals smashing, arms aching, success unlikely!

I reassessed my plan, and realized I needed a better angle for swinging the hammer. So I dug myself deeper into the ground. The only thing showing on the surface was the soles of my boots. Only two things got better: the distance to swing the 8 lb. hammer upward was greater, and my success in marring crystals was improved!

I did come up out of my cubbyhole with a faboo* ¾-inch crystal of garnet – with a splendid apatite crystal lying across and extending ½ inch to either side of the garnet. The calcite had garnet clusters and apatite crystals all mixed together and separately. Around these boulders one could see single garnet crystals with clearly defined edges and glassy faces. Absolute beauties!

Upon surfacing, two newcomers spied me crawling out of my hole. The shocked look on their faces did not register with me yet.

I sallied back to where I left my friends, to check on their progress. Paulus had gone off to chat it up with anyone else, and



Martin Pitts (on left) and Harold Moritz "in the hole" at the Noble Pit with their freshly scrubbed augite crystal group.

Richard Bostwick photo

Harold was still digging slowly into the earth. He was not having much luck, and he also complained that there was a large rock that was between him and where Paulus was digging. He complained that it was "in the way."

By now, the sun had risen into the sky – bathing our spot in direct sunlight. This baking effect had driven off the old and weak at heart. Harold and I had our entire "spot" to ourselves. This was the same area where he and I had uncovered a whole treasure of gorgeous franklinite/magnetite specimens the year before.

Harold commented that he was dismayed at his luck, and we traded locations. I would get to dig for franklinites and he would go sifting in the black manganese dust for garnets. I then surveyed our area and decided to widen the hole my friend had started – I dug about six feet around and away from the rock that was in the way. One and a half hours later, I had the makings of a small inground pool. Positively nothing – each blade full of clay-like dirt was devoid of a stone larger than a thimble. Exhausted and frustrated, I sat down on the rock in the way. Harold came by and we agreed to continue our quest after lunch!

We came back to our private pit, and with renewed vigor, I began to dig, while Harold washed clumps of dirt in the buckets of water. These "clumps" were sometimes massive clusters of tremendous scapolite or augite crystals. At one point, after Harold finished splashing around in the bucket of dirty water, I picked up the brush and began to wash the rock that was forever in the way.

Slowly, with each dunk of the brush into the bucket, and back onto the rock, the water and brush revealed faint traces of a familiar geometrical shape in the rock. With these telltale signs, I literally turned into a scrubbing bubble, and I frothed the rock with water and brush. Soon the clear and distinct shapes of franklinite crystals grew up out of the black muck that I was washing away.

One, two, three, four crystals at least an inch on edge, then more and more, holy moly! We had been standing on this bloody rock and digging around and away from it all day. It was a great seat at one point too! We asked Paulus to come and witness this event, for we had to use a sledge hammer to begin to break up this rock. It was too big, and the crystals too beautiful to simply attempt to high-grade individually. Also, they were clustered too closely, and sledging from the far side in the hopes of splitting the rock down the middle was our best chance at removing the crystals in one piece.

We sledged for twenty five minutes. Now it was about 1:30 and time was running out!

Harold took a chisel to one side of the rock and three bangs later he quartered the rock. The inside of the piece that came off was full of ½ - 1 inch crystals of franklinite. The rock that was still there had the remainder of a football-sized vug full of crystals. The next time we attempted to break the stone with a chisel, we drove the chisel into another vug. The chisel just sank into the rock.

This vug proved to be as spectacular as the first. The crystals in this vug were deeply etched. The largest was 1½ inches on edge. We spent the remainder of the last hour highgrading. As we were finishing the day at the weigh-out, another collector showed us his palm-sized franklinite. He mentioned he found it in a rubble pile five minutes before checkout time. Hmm..... So much for grave digging.....

* Editors' note: "faboo" = fashionable slang for "fabulous."

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MY FRANKLIN EXPERIENCE

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My interest in minerals started at around age 8. I was born in the anthracite coal mining Region of Pennsylvania where there was no shortage of exposed rock. Unfortunately, most of the rock was shale, with less frequent sandstone and limestone. I saw a lot of fossils and an occasional seam of quartz crystals and massive pyrite. In spite of their lack of rarity, the minerals I found were my treasures. My family did not travel much (my dad was unable to drive because of health reasons, although he worked as a carpenter until he was 75); fortunately one Sunday afternoon my Uncle Paul took me on a trip to Crystal Cave near Reading, PA. That trip sealed it for me! I was hooked on the mineral bug! I purchased a jar of mixed rocks at the cave and knew I was in heaven. I instantly became one of the most popular boys in the fourth grade because everyone was equally fascinated, including the Bernadine nun who taught my class.

After that trip to Crystal Cave my mineral interests were put on the back burner. They were rekindled in 1967 when a roommate of mine at the Coast Guard Base on Governor's Island, New York told me about a visit he had made one weekend to the American Museum of Natural History in Manhattan. After listening to his stories about gems, diamonds, minerals and ores, I made it a point to visit the museum the following weekend. I purchased an Edsco guidebook and a small mineral handbook and instantly was rehooked. I noticed drawings of rhodonite from Franklin, New Jersey and made the connection to the field trip information in the Edsco guidebook.

The following weekend I was on my way to Franklin convinced that I would find specimens like those pictured in the guidebook. Of course I did not find any six-inch rhodonites; I found some massive calcite and other things on the Buckwheat Dump and still have those specimens. No, I did not find the specimens of my dreams that day, but I did start a lifelong friendship with a family I met. Fred Parker Sr., his wife Elsie, and their young son Fred took the time to show me where to dig and what to look for, and loaned me their UV lamp so I could examine my finds. They even told me that the "crystal" I found was actually a piece of rock embedded in concrete. When they heard I was in the military they invited me back to their home for supper. Before I left Franklin I bought an UV lamp from Nick Zipco, the only lamp I ever purchased. My daughter Renee has used that lamp for school science fairs and it sits, still functional, on my workbench. Yes, it was over 30 years ago, but I still remember my first day at Franklin as if it were yesterday.

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RAINY DAYS, SERENDIPITY, AND SQUEAKY WHEELS

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COLLECTING FOR A RAINY DAY

Franklin and Sterling Hill. When you hear or read those names, what first comes to mind? Fluorescent minerals? You bet, and for good reason. After all, we're discussing the

"Fluorescent Mineral Capital of the World!" Those people under the black tarps at mineral hunts aren't just saying their prayers. Well, then again, they may be praying for margarosanite, but that's another story.

Almost everyone else is searching for crystals, the bigger the better. The era of finding monster crystals is pretty much past except for the Noble Pit at Sterling Hill. Sure, they're there if you're willing to shed blood, sweat and tears. Those intrepid collectors that extract them bring a whole new meaning to "glutton for punishment."

There is also that minority that look for micros and minor minerals, in which group I can be included. Is your house ready to collapse under the load of your collection? This may be the way to go. Two tools that are an absolute necessity for this type of collecting are a good microscope and a decent trimmer. This finally brings me to that part of this article that relates to the meaning of its title.

When I find a vuggy rock and make the determination that it may have potential for containing various micro minerals, I will break it into softball-size pieces, and carry out as much as possible. At home they are put in flats and labeled where and when found, then stored in the cellar. By now you're probably saying to yourself, what the hell good is that? The answer is plenty of good; let me explain.

On a rainy day or a cold winter day when there is not much to do, I will break some pieces of this vuggy material into smaller pieces, then down to thumbnail-size pieces in the trimmer. A softball-sized chunk can yield dozens of pieces, each with mineral-containing potential that may eventually be revealed under the microscope. This activity is in effect an extension of the original collection trip. Much enjoyment is experienced while contemplating what goodies the next piece will reveal. What a wonderful way to spend a rainy day!

The dolomite at the Buckwheat Dump has the best potential for this kind of collecting. Sphalerite, quartz, pyrite, hemimorphite, talc, clinochlore, brookeite, rutile, goethite, and various carbonates plus many other rarities can be found in it. In massive vuggy augite from the Noble Pit, I've found malachite, azurite, hemimorphite, cerussite, epidote, chrysocolla, and zinalsite, among others. Galena-bearing material from the Passaic Pit can contain cerussite, actinolite, andradite, hemimorphite, aurichalcite, and much more. Any kind of rock with vugs may have unsuspected potential.

So whenever you collect at Franklin and Sterling Hill, by all means collect what you enjoy; that's what it's all about. But once in a while, how about collecting for a rainy day? You may be glad you did when the rains finally come.

SERENDIPITY AT LIME CREST QUARRY

Serendipity: an apparent aptitude for making fortunate discoveries accidentally. So states the dictionary. Unfortunately, in this story it applies to others rather than myself. Anyone who knows me is aware of my perverse interest in minor minerals and my habit of picking up the ugliest stuff imaginable. They will also observe me checking various rocks with my radiation monitor as I prowls. That said, this tale of lament is as follows:

It was about 3 years ago on an FOMS field trip to the Lime Crest Quarry. It should be known that I have from time to time been very successful finding thorite and to a much lesser extent uraninite at this location. I had spent a good part of the day searching for those minerals, but to no avail. I came across a friend heading for the exit; Tom Whittemore is his name and he

happens presently to be Vice President of the Morris Museum Mineralogical Society. Tom said, "I've got something to show you." (You, the reader, are probably ahead of me on this one, and you're right.) It happened to be a specimen with a large amount of thorite. But that wasn't enough: oh, no! Deposits of some unknown yellow secondary uranium mineral surrounded it. Wow!

Tom's was a serendipitous find, made without a radiation monitor. Can you imagine how that made me feel? Me, with my fancy equipment and storied past experience collecting this material? Thankfully, when Tom came across it, he recognized that it was something important. I do think I put up a good front and hid my envy well.

You think that's the end of the story? Oh no, it just keeps getting better! It was during a more recent field trip to Lime Crest on 5/16/99. I had again gone through the day having no luck finding radioactive minerals with my radiation monitor, when I ran into a young man by the name of George Hanna. We are old acquaintances from Sterling Hill collecting trips, where I have often helped him identify some of his finds. George walked over with a rock. "Jim, take a look at this for me." (Reader, you're getting ahead of me again.) Yes it was dark red deposits of thorite! Another serendipitous find.

I couldn't believe it. "How did you find it?" I asked incredulously. "I broke open a rock and recognized it from what you taught me," he answered. Wow, that boosted my ego, and at that point it needed boosting. It was fortunate that George had the ability to recognize what he found as something important. Believe me, many people would not. He led me to where he had found it and together we found many more deposits in the rock. He was good enough to give me some samples for study.

My identification of these dark red deposits as thorite was tentative. The luster did not look right. When I showed it to Dr. Paul Moore later on at the entrance table, he was not able to characterize it either. When I studied it at home under the microscope, I saw the problem. It was thorite all right, but the dark red color matched the matrix immediately surrounding it, and furthermore the mineral grains were fractured into many smaller ones that had not been apparent at lower magnification.

So that's my run-in with serendipity at Lime Crest Quarry. Please, if you're ever out there somewhere collecting and see me scouting around with my radiation monitor, don't come over and show me your serendipitous radioactive find. I might "lose it" and start trying to crack rocks with my head. It wouldn't be a pretty sight!

MINES AND QUARRIES WITH SQUEAKY WHEELS

There's no question about it; the squeaky wheel will always receive immediate attention. When it comes to mines and quarries, this old saying is easily applied and surprisingly apropos. However, in this case attractive mineral specimens substitute for the wheel, and provide the squeak. All mines and quarries can be placed into one of three different categories; no squeaky wheel, one squeaky wheel, and many squeaky wheels.

No squeaky wheel. Mines and quarries that produce no well-differentiated minerals are of little interest to collectors. There is no squeaky wheel in the way of specimens to attract them. We can leave places like these for geologists whose interests go beyond those typical of mineral collectors.

Another type of mine or quarry in this category is a place that may be rich in species but does not produce enough showy material to act as a squeaky wheel. Laurel Hill in Secaucus, NJ is a good example of this type. Most of its minerals are found as

microcrystals which occur in diabase joints. The much more showy and abundant specimens from the amygdaloidal basalt of the nearby Watchungs left Laurel Hill outmatched. Still, Nicholas W. Facciolla discusses some 56 species in his book, *Minerals of Laurel Hill*, including one unique to that locality, petersite-(Y). In the little that is left of Laurel Hill I have found over a dozen mineral species (tentatively identified by X-ray microanalysis) missing from that book. Imagine what additional discoveries a squeaky wheel might have produced at such a locality.

One squeaky wheel. Mines or quarries that produce fine mineral specimens attract amateurs and professionals alike. Once again it's that squeaky wheel syndrome. A perfect example of this type is the Sweet Home Mine, in Park Co., Colorado. The beautiful world-class specimens of rhodochrosite found there, along with several attractive accessory minerals, have made this mine world-famous. These specimens are the squeaky wheel that will eventually lead to even further intensive species investigation in the mine. That being said, the mineralogy of this mine is not exciting, with less than forty species (none unique) in its list. This is one case where the squeaky wheel has attracted considerably more interest to the mine's mineralogy than is probably warranted. What is certainly warranted is interest in the mine's magnificent specimens.

Many squeaky wheels. Here we come to world-class mines and quarries. What could be a better example than Franklin and Sterling Hill? You want squeaky wheels?

Large crystal specimens, squeak-squeak.

Hundreds of species, squeak-squeak.

Many unique species, squeak-squeak.

Unique assemblages, squeak-squeak.

Spectacular fluorescences, squeak-squeak.

These mines have attracted legions of mineralogists and geologists, both professional and amateur. The original squeaky wheel in the early days was probably the large crystal specimens. As more diverse species were discovered along with spectacular fluorescence, interest mushroomed and the squeaky wheels became many and loud.

All these years after the mines have been closed, the squeaky wheels can still be heard. You don't believe me? Attend a FOMS meeting and you will find many professionals and dedicated amateurs who never waver in their enthusiasm. Believe me, they still hear those squeaky wheels.

Consider the improbability of Mother Nature endowing a small state like New Jersey with two orebodies of world-class status. It seems like a strange place to find what Pete Dunn aptly refers to as "the world's most magnificent mineral deposits." Franklin and Sterling Hill: may their wheels squeak on forever!

RANDOM MEMORIES OF MY FIRST YEARS UP AT FRANKLIN

John Sanfaçon
Delbarton School
Morristown NJ 07960-4899

In retrospect it seems like it was the early Jurassic, but it really was in the mid-60s. Although I was a geology major in college for a year or so, I didn't actually become a rockhound until I began teaching in 1963. Remembering the fluorescent mineral display in my hometown's museum (Paterson), I decided to go to the source one day, armed with Bob Jones's *Nature's Hidden*

Rainbows. After collecting several flats of choice specimens of leaverite, I literally tripped over a chunk of material outside the little UV shack at the Buckwheat. With my trusty \$9.95 pocket shortwave lamp, I soon discovered that the unknown specimen glowed a vivid light blue. I thought at first that it might be a massive chunk of hydrozincite or even margarosanite. I asked the fellow in charge of the Dump—was it Nick Zipco?—what it could be. After a moment's reflection, he said: "You know what you got there, kid? Cementite." Chagrined, I tiptoed out of the Dump, and left the piece of curbstone where I found it. So much for beginners luck!

Later on, when I began taking some of my students up to Franklin for FOMS field trips, I came to admire two men in particular who whetted our appetites for mineralogy with their enthusiasm, patience and encyclopedic knowledge of the local minerals. Jack Baum was our field trip coordinator in those days, and I remember fondly his kindness and forbearance when asked, for the umpteenth time, to identify a calcite or zincite for one of us. Dave Wellbrock was one of those students, and, I'm happy to report, most of them, like Dave, are still interested in mineralogy. Ewald Gerstmann also was very helpful in identifying our Buckwheat "treasures," and regaled us with all kinds of stories on how he acquired his great collection. He identified the first "keeper" I ever found at the Buckwheat: a nice thumbnail of cleiophane, the light green variety of sphalerite. Ewald looked at it closely, and declared, "Beginner's luck, kid!" I'll bet that Jack Baum and Ewald Gerstmann don't realize how many beginners they have encouraged to keep looking and learning. They got me happily hooked on a hobby that has given me many new friends and many pleasant hours.

ADVENTURES AT FRANKLIN AND STERLING HILL

Richard Stagl
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The first time I went to Franklin, New Jersey was in 1956 or 1957. My parents took my brother and me for a ride there when I was in high school. We didn't know where to collect specimens, so my father bought a couple of rocks from some kids along the road. I still have those specimens.

I collected on the Trotter Dump in the early 80s. Theresa and I joined the FOMS in 1982. The first field trip was to Trilobite Ridge in Port Jervis, New York. We also went to "the Pond" and the Franklin Museum, met Nick Zipco, and later went to the Armory and swap area.

Theresa and I enjoyed collecting at the Lime Crest and Franklin Quarries with all the minerals you could find in the marble. We found nice specimens of fluorite, tourmaline, garnet, etc.

We collected at the Mill Site in Franklin, and took the kids along with us. Richard, my older son, liked finding minerals that were colorful. He was 3 years old when Tommy was born in February, 1985.

We took the kids collecting at the Buckwheat Dump. We usually tried to go a couple of times a year.

Gary Danzer had been helping at Sterling Hill in 1990. He had asked me if I would be interested in helping also. I had always wanted to see what mining was like. I had read a lot about

it. I went to Sterling Hill in November 1990 and met everyone there—Bob, Dick, Elna, Patti, etc. Gary and I went whenever we had the chance. I enjoyed collecting underground and seeing the ore in place. We hauled out specimens from each level as the mine was slowly flooding. We helped out until the 180 level of the mine flooded in December 1992. I still get there with the family and help out when possible.

My older son Richard, now 17, has been joining us on field trips for several years. Tommy, now 14, has collected with us at other dumps and old mines. This month, June 1999, was his first field trip with the FOMS to the Franklin Quarry.

When my daughter, Theresa, gets old enough I hope she enjoys the field trips as much as the boys and I do.

It has been an enjoyable experience, Franklin and Sterling Hill.

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MEANDERING THOUGHTS AND REMINISCENCES

Robert H. Stephens
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In the summer of 1958 my father arranged for me to have a summer job as a laborer at the place where he worked. This was between my sophomore and senior years in high school. One of my tasks was to go with another worker to the mini-estate of the company president to mow his lawn once a week. On the second or third week, during our lunch break, I noticed the other worker down by the edge of the lawn at the lake, washing something. Curious, I went over to see, as it appeared to be a rock. His actions piqued my curiosity even more. It was a rock and he was washing it off because it had a "vug" in it and he wanted to see if there was anything in the vug. It was the first time I heard the term "vug." The other worker was Nick Zipco.

In the fall of 1961, having heard of the Franklin Mineral Show, I first found out about the Franklin-Ogdensburg Mineralogical Society and became a member. There was one remaining field trip and meeting that year, the trip being at the old quarry behind the Franklin school where we had FOMS meetings for many years. Not knowing much of Franklin limestone minerals or anything about the quarry, I "attached" myself to one young member who seemed to live in the area and knew what to look for. He went up on a rim overlooking the quarry where a lot of chunks and pieces of the county rock from the quarry had been thrown. As we began digging and moving the chunks aside, specimens were uncovered, and I got the ones he regarded as "common." Then he found and discarded a graphite ball. I asked him, not knowing any better, if it was worth keeping. He said, "no, that's common" (I now think he meant graphite, not the graphite ball), so I left it and dug on. Later I overheard another member say he was looking for a graphite ball and couldn't find any, so I went back, dug it up, and gave it to him. I have regretted this ever since. Shortly after, I received my draft notice, volunteered, and didn't attend another FOMS meeting or field trip for the next three years.

In the summer of 1965 Donald Quick opened a mineral shop in Franklin. I stopped by whenever I was in the area. One day when I was there, Donald's partner Chester picked up a large specimen and took it in the back to wash off the dirt. Suddenly

we heard a "What?!", then loud laughter. The specimen was from the Sterling Hill mud zone and dissolved down the drain!

In the same year, Nick Zipco told me of the NJZ labs at Sterling Hill being cleaned out and the contents dumped at the edge of the tailings on the Trotter Dump near Double Rock (more of this shortly). Slipping in, I found this spot, but did not do much searching as it was late in the afternoon. I saw an unusual "box" that I could have taken at that time but decided not to. The "box" was the lab's iron-arc lamp, and Donald Quick got it. For the rest of the summer, I spent one day per weekend combing through the lab material, finding mostly labware, a few specimens, and some badly corroded Bunsen burners (all but one of which I left behind). Of the labware I retrieved, I gave most of the specimen sample bottles and a vibrator-separator to the Sterling Hill Mining Museum.

As for Double Rock, I'd been told that it no longer existed. During the 1960s and 70s, before access to local properties became restricted, I did quite a bit of exploring in and between Franklin and Ogdensburg. Using primarily the maps in the Franklin Furnace Folio, I spent much time finding and seeing for myself what these locations were like. Most of Double Rock is still there. Part of it was blasted away during the expansion of the Trotter Mine into a cut extending along the west leg of the ore vein northward from the Buckwheat Open Pit, but most of what remains lies buried under the Trotter Mine tailings on the west side of the cut. Part of Double Rock is still exposed in the open area of the cut on the right as you face south, and the minerals that are described as coming from Double Rock can still be seen there. I have long wished that someone would remove the mass of tailings that cover the rest of Double Rock, but that seems unlikely.

At the Lime Crest Quarry in the mid-to-late 70's I found an altered vein exposed on the sides of two large boulders. The altered material included mica and spinel, among other minerals of lesser size and quantity. Most of what I found I gave away. The one that I kept was an altered spinel crystal group. When I got the time to examine the group closely I noted the three spinel crystals were 90° apart. That left an area where there should have been a fourth crystal. There had been – where I had struck the vein to break apart!

Exploring near Sterling Hill, along the base of the Susquehanna Railroad's Wallkill embankment, I started to look at a pile of rocks. Somebody else had been there before, smacked at one of the micaceous rocks, then left. I hit it again, cracking it open. I was about to strike it again when I decided to take a closer look. The rock and the mica had weathered to a similar color from exposure over the years, and I found a hand-shaped grouping of phlogopite mica crystals. I often wonder who that other person was – and that I did not strike it again!

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MY COLLECTING EXPERIENCES AT FRANKLIN

Christian R. Thorsten
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I don't remember what it was that kindled my initial fascination with mineral collecting. I used to pick up interesting-looking rocks in my backyard when I was a very young child. I was about five when I first went to the Franklin Mineral

Museum, so that would have been around 1977. At that age I had no clue about the F.O.M.S. or *The Picking Table*; all I knew was that “those rocks” in the museum and on the Buckwheat Dump were so amazing that I *had* to see them again... and again... so much that I even had dreams about going back there.

It was tough to get my mother to take me up there, but when we did go it was even tougher to get me to go home again. When I was eight or nine we had a school trip to the Buckwheat. I didn’t get much collecting done since all the other kids were asking me to identify what they were finding... not that I was some kind of expert, but they knew mineral collecting was my favorite hobby! I guess I must have been a peculiar sight back then: manifesting the initial signs of a lifelong obsession with mineral collecting, using a vocabulary acquired largely from Pough’s *Field Guide to Rocks and Minerals*, and spending just about every free moment thinking about how I could get my hands on more Franklin rocks.

Sometimes my mom would buy me specimens from Nick Zipco. He always had great stuff and a lot of interesting tales. I’d say it was Nick who really got me into serious Franklin collecting. It was he who supplied me with my first svabite specimen—thanks, of course, to fifteen dollars from my mom. Nick also took us to the Trotter (!), which was open back then. I still have the memories—happy, fleeting, almost surreal—of picking up garnet-rich rocks with purplish-black flakes of hendricksite and feeling as if I was on the surface of some other world.

There’s a certain collecting trip to the Buckwheat which I’ll never forget; I think it was around 1985. I was hammering ineffectually on some rocks with the smallest of Estwing picks when I happened upon a boulder of ore which looked somewhat promising. After pounding on it and pounding on it I managed to spall a 4-inch fragment off the boulder. I just had this feeling it was something good. Unfortunately it was time to go home...



Christian Thorsten and his pet “jeffersonite” crystal at the Noble Pit, Sterling Hill. Richard Bostwick photo

Once home, I lamped the piece with my Raytech LS-88 (which I still use). The color was a real surprise. *Bright yellow-orange!* It was unlike anything I’d ever found, seen, or read about from Franklin. It became specimen F42, “UNKNOWN”, and I kept it in a box with some other finds from that trip.

Years later (summer 1998, actually), I took it up to the museum. John Cianciulli identified it as johnbaumite! Mr. Baum himself said it was “one of the arsenic-bearing apatites”; perhaps he was just being modest in the presence of the mineral named after him. Even Nick Zipco came inside to see the piece and believed it to be johnbaumite. He was impressed, too.

Somewhere out there, maybe someone has the rest of that boulder. I never did get back there in time to collect more of it. Still, in dreams and on actual trips to the Buckwheat I find myself searching for that rock, knowing that it’s probably gone forever. It haunts me.

Really, the whole place haunts me. The lure of the Franklin-Sterling Hill district... and those speckled ore rocks... is enough to draw me back there every time I get the chance. In my mind, those ore piles have a power unmatched by any place I’ve seen.

P.S.: to read more stuff I’ve written about Franklin and Sterling Hill collecting, check out <http://members.xoom.com/njminerals/>.

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A CELEBRATED FRANKLIN PERSONALITY

Ralph E. Thomas
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One of the most extraordinary pleasures I have had at one of the greatest mineral localities in the world was the time I spent at Franklin with Stanley Hocking.

Bill Trost and I made it a tradition to lunch with Stanley every FOMS meeting-day in between the field trip in the morning and the lecture that afternoon.

In the beginning we would go out to his two sheds where we would search through piles of rock until we found those he would sell us at his always reasonable prices.

When Stan’s wife died the rocks came inside—on and under the kitchen table, on and under the dining room table, and then in the living room.

Stanley had a wonderful sense of humor. He used to kid and tease us. He would always say that we showed him the poor side of the specimen when we asked for a price. One time I asked him if he guaranteed clinohedrite went all the way through the specimen and he said that I could bring it back if it didn’t. (“Clino” as you know is usually a thin layer or crust.)

His Cornish accent was enchanting and some of his colloquialisms I can remember were “leucosphoenicite” for leucophoenicite, “ardystonite” for hardystonite, and “speidel” for spinel.

Stan’s recollections of his days in the mine were fascinating. He was one of the colorful “characters” of Franklin — a true legend.

He was and is terribly missed by us and all his friends after he passed on a few years ago.

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MINE HILL – STERLING HILL: THE LUSTER NEVER DULLS!

Franklin J. Tobey II
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My direct association with the Franklin and Sterling Hill localities has been spotty and was interrupted by World War II and subsequent civilian employment. Not until retirement was I able to re-establish contact with an area which, like a magnet, has drawn many of us. The immediate stimulus for this item was Dunn's five-part monograph: *Franklin and Sterling Hill, New Jersey: the world's most magnificent mineral deposits* (1995). I have read it through, but not yet finished it; numerous Post-it® notes mark pages to which I will return with mineral samples in hand. I once calculated I had collected, or purchased, about a third of the mineral species found in the two mining areas, but that figure has retreated to 25 percent as a result of the naming of new mineral species.

In fall 1932, my parents let me choose the 'pot of gold' at the end of a Sunday afternoon drive. Without hesitation I said "Franklin Furnace." That afternoon I collected franklinite, willemite, calcite, and a furnace clinker in a ditch alongside a dirt road on Mine Hill. This early interest in metal ores gave me a 'leg-up' in high school chemistry, six years later. A fan of metals at 13, I already had specimens of copper minerals from the mines north of the Delaware Water Gap in Warren County, New Jersey.

My first 'boss' (1931, 1933), the naturalist at summer camp, was Joseph C. Rintelen, Jr., B.S. Brooklyn Polytechnic Institute; M.S. Cornell University; and on his way to a Ph.D. in chemistry and metallurgy from Duke University in Durham, North Carolina. Before retirement he was chairman of mining and metallurgy at Texas Western University in El Paso, now the University of Texas at El Paso.

Between fall 1932 and spring 1933, I had corresponded with Messrs. R.L. McCann and W. Evans of the N.J. Zinc Company office at Franklin. It was a device for obtaining ore samples I wasn't lucky enough to find on the dump, and for good reason. I was seeking "pay dirt." By parcel post, in response to my letters, I received run-of-the-mine samples of good ore: zincite, willemite, and some franklinite. A later package brought a small cache of fluorite, possibly from the Buckwheat Open Cut, with quartz, dolomite, and a trace of yellow sphalerite.

The N.J. Zinc Company representatives (McCann & Evans) were out to encourage young collectors. On subsequent visits to their office I was given a fist-sized sample of red willemite and, later, just a slightly smaller sample of hemimorphite from the Passaic Pit at Sterling Hill. A spring 1933 foray to Sussex County's zinc mines was organized by a small group of mineral collectors from urban Essex County. We hit the Parker Mine Dump at the "T" where Buckwheat Road met High Street, parked the car, and collected in earnest. We carried as much as we could manage back to Newark. I located the site of our prospecting pit in Dunn's Fig. 3-5, on page 115, in the monograph cited above.

In summer 1934 two mineral-collecting expeditions were launched from Camp Mohican on Catfish Pond, above Blairstown, Warren County, N.J. (This facility is now the Appalachian Mountain Club's Mohican Outdoor Center.) The destination was, of course, the Sussex County zinc mines. These Parker Dump forays added garnet, hancockite, and two or three kinds of mica to the collection. In those days the mineral names were

different. They did carry a magic quality: "Caswellite" "Manganophyllite" and "Polyadelphite." Hancockite, alone, retains its name.

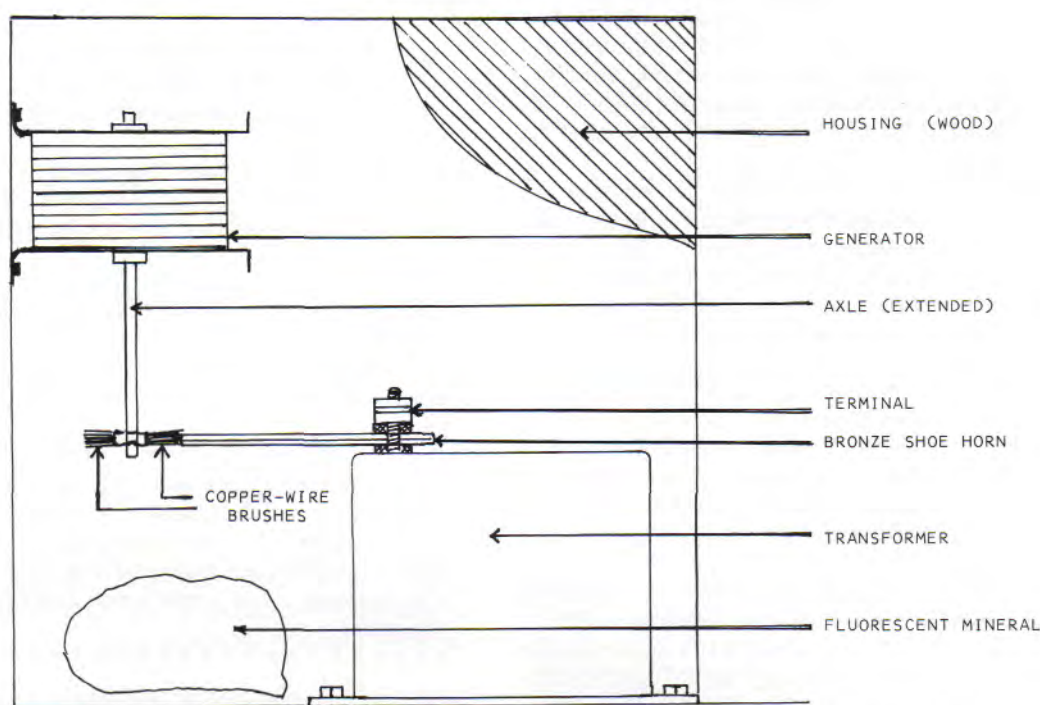
In those early decades of the 20th century (1920s-1930s), only seven scout leaders in the Newark-Belleville-Irvington region of Essex County had qualified for the award concerned with mining. That award required an elementary knowledge of mining methods and mining terms, plus a scanty bit on terms used in geology. The award was considered more suited to 'western scouts' (Arizona, California, and Nevada). It was eventually retired in favor of one called "minerals and rocks." The requirements for this new award were more in line with mineral collecting and identification, plus some basic geology. Undoubtedly it recognized the then growing interest in mineral collecting as a hobby or an avocation.

In spring 1934, a scout fair was held in the old Sussex Avenue National Guard Armory in Newark. The armory is gone now, and the site of post-World War Two garden apartments. Our group's booth was given over to "Mining." It featured a large museum exhibit case of ores and associated minerals which, for the time, were accurately labeled. Many of these were from Franklin or Sterling Hill, but the case also included ores from other New Jersey iron and copper mines and zeolites from First Watchung Mountain, especially Great Notch and West Paterson, New Jersey.

The two-star exhibit proved to be a working model of a crusher building, headframe with sheave wheel, a timbered mine adit, and inclined shaft. A hand crank activated a small-scale ore cart (authentic design). On backing it into the mine tunnel it hit a trigger and was gravity-filled with ore. The ore was real franklinite and calcite from a weathered and friable sample sacrificed for the sake of authenticity. Reversing the handle brought the filled ore-cart up the inclined shaft, out of the mine, and took it up to the tippie atop the crusher building. There, the cart was automatically tilted and its contents went down a chute into an (unseen) collecting box within the crusher. A little bit of re-arranging permitted the process to be repeated for a new group of 'mining supervisors.' A hidden, well camouflaged hole, in the top of the hill above the mine shaft permitted restocking the ore in the bin next to the mine tunnel. No mucking up necessary!

The three-star attraction was a peep show. It was a windowed, black construction-paper-lined cardboard carton in which minerals that respond to ultraviolet radiation were artfully arranged. These were intermittently under a 30-watt incandescent light bulb and, for a longer period, an argon gas-filled bulb purchased from Ward's Natural Science Establishment, Rochester, New York. Most of the minerals in the chamber came from the New Jersey zinc mines. It was a real attraction.

An auxiliary feature, tolerated at the time, was an experimental spark-gap device that produced a higher grade of fluorescence than the argon bulb. Since an iron-arc was not available for the show, we contrived a lamentable substitute. It was a contraption made from old toys. To call it a "Rube Goldberg invention" would be putting too tall a hat on it. Domestic current fed an ancient LIONEL® model train set transformer on which a bronze shoehorn was bolted down on one of the terminals. A GILBERT'S ERECTOR SET® electric motor was fitted with a longer axle and flaring copper-wire brushes. The result somewhat resembled an early soda-fountain milk-shake blender. The motor was attached by wire to two other terminals on the LIONEL transformer. When the rotating brushes (frayed radio aerial wire) were in contact with the bronze shoehorn, an elegant spark (short-circuit) was produced (see diagram).



Schematic view of the rotary spark-gap ultraviolet source at the 1934 scout fair in Newark.

Drawing by Franklin J. Tobey II

This homemade apparatus, for public exhibit purposes, was boxed-in to permit operator and viewers to see the effect, on a piece of fluorescent mineral, without exposing their eyes to the bright spark. Needless to say, that device would be most unwelcome in today's world. And, for all we know, it may have created havoc within a block or two of the armory even at the time. It was a simple form of static generator. Its late evolution paralleled a rotary spark-gap invented by Guglielmo Marconi a decade or two earlier. The rotary spark-gap is credited as the fore-runner of the machines used in the former Soviet Union and on the island of Cuba for jamming foreign radio/TV reception.

A spin-off of the mineral part of the exhibit toured the seven branch libraries of the Newark Public Library system, staying about a month in each branch library. The ore samples exhibited were placed next to photos of the mines from which they had come. Next to the zinc ore specimens was a picture of the Franklin area which had been taken from the rotogravure section of *The Newark Sunday Call* in 1934.

The Newark Mineralogical Society's meetings were advertised in the daily papers. Many NMS sessions were devoted to the Franklin or Sterling Hill minerals, and additional meetings were on the subject of mineral fluorescence. In the mid-1930s most of the society's founding members were still highly active in the proceedings: William H. Broadwell (commercial photographer and an NMS founder), William Clement Casperson (curator of the Paterson Museum), and many others were knowledgeable, enthusiastic, and helpful. Well, in their way. In 1935 at age 16, I was accepted as a member. All went well for some time. I listened and learned. I was unaware, however, of an unwritten rule when approaching identification of an unknown mineral species. If you brought a puzzling mineral specimen into a meeting for identification by a senior member, you should be prepared to name it, and support with some logical reasoning why you thought it was such-and-such. And, if your first educated

guess was shot down, you'd best have a back-up name as a possibility. The older members were not into the business of supplying identifications for lazy students who hadn't done their homework; that became clear!

A piece that had been found at Franklin, N.J., was bothering me. Foolishly unprepared, or tongue-tied at the moment, I showed it to William H. Broadwell (NMS member No. 1). He was cordial. He made a close examination with a hand lens (magnifier) then he simply said: "That's a fine specimen! Look at those nicely formed crystals!" Then he handed the specimen back. (I looked perplexed.) He said: "Son, I won't tell you its name, but I'll give you a hint: '1066'!" This was more of a puzzle than I had started with.

Days later, at the central library and museum science department I tackled all the large mineral texts that might have better than 1000 pages. *Dana's Textbook*, 4th ed. W.E. Ford—not that long! *Dana's System of Mineralogy*, third volume not then available, etc. I gave up, frustrated. I chucked the specimen into a box I'd always kept for any 'unidentifieds.' That's where it stayed until my retirement in the 1980s. More on that later.

Carl C. Dautermann, an NMS member, was moderator of the Newark Museum's mineral club for high-school students. The club met on the science floor of the museum in an alcove formed by storage drawers filled with mineral specimens from around the nation. It was heavy with samples from Franklin, Sterling Hill, and the Sussex County quarries. The club folded in 1933 or early 1934, a victim of reduced municipal budgets during the Great Depression, just as your correspondent entered high school and became eligible to join. My early interest in metal ores and minerals proved of benefit in high school science classes. I knew the symbols for most of the elements and the Periodic Table of Chemical Elements was no stranger. But, current events in Asia and Eastern Europe and Africa were taking some attention away from avocational interests.

I confess that Franklin and Sterling Hill had been such focal points of interest that I had little knowledge of out-of-state mineral localities. Thus it was that I stumbled, unexpectedly and quite by accident, on Amelia, Virginia. It was during army basic training on a hike out of Camp Pickett, Blackstone, Virginia. The giveaway was a fresh piece of microcline (amazonite) at the roadside on Patrick Henry Highway.

With the U.S. Third Army in Europe, the only mineral I brought home was a specimen of pyrite twins from a quarry near Traben-Trarbach on the Mosel. It was the gift of a Luxembourg friend who was said to be the local 'Chef-de-Résistance' during the war. My C.O., a Kansan with a wry sense of humor, but no French language abilities, wanted to know: "Yes, but which side is he resisting?"

Immediately post-war, working on the business side of Washington, D.C.'s Pennsylvania Avenue, I reconnected with the Sussex County, New Jersey, mineral localities by spending my lunch hours at the Smithsonian's U.S. National Museum of Natural History. Jim Benn, legendary figure at the old division of mineralogy, invited me to witness the uncrating of the museum's half of the Bauer Collection in late 1955 or early 1956. It was an undeserved privilege reflecting how often I had spoken of "collecting at the New Jersey Zinc mines before the war."

As a general naturalist, part-time, I was a charter member of the Smithsonian's 'Naturalist Center' and dropped in lunch-times when close to The Mall. In 1979 or 1980 a naturalist center staff member or volunteer introduced me to Dr. Pete Dunn, and we got talking of Franklin, New Jersey minerals. I dared to ask: "Who will update Dr. Charles Palache's *Professional Paper No. 180*?" Obviously, it was not the first time the question had been raised!

Retiring in mid-1981, I renewed visits to Warren and Sussex Counties, joined FOMS, re-read Charles Palache (1935), and began adding to my mineral collection, realizing that I was far behind. Now, I'm happy to have Dunn's five-part monograph to study. It was just a few years after my retirement that I had a chance to visit the Sparta, New Jersey Library and Museum. One of my purposes was to see more examples of what had been found, and where. Subconsciously, I was out to reduce the number of 'unidentifieds' that had accumulated over the war and working years. Yes, the box had survived both periods!

There in the basement of the Sparta Library was a wall case. In it an upright specimen perhaps two or three feet tall, and a foot or so in girth, looked surprisingly familiar! Of course, it was from the Franklin or Sterling Hill zinc mines – but it was more than that fact which drew me to it. It recalled a small specimen I had back in 1935-1936, before European History in my junior year in high school. I read the label on the exhibit case: "HASTINGSITE!" This is why I look at collections wherever I am. Here was the answer to one of my 'unidentifieds.' Then suddenly William H. Broadwell's words came back: "Son, I'm not going to tell you its name, but I'll give you a hint – '1066!'" (It wasn't a page number in a text; it was an historical date!) There, in front of me, was "Old 1066." The earlier (1936) frustration was, at last, resolved. The old fragment I had at home could have been chipped from the big block in the exhibit case in front of me. At home, a day or so later, I was glad to add a new label to an old specimen and put it in a tray with other specimens from Sussex County, New Jersey.

The above reminiscences were written, in part, to encourage others – with more to tell – to write up their experiences and collecting forays. I hope it may work that way. Others 'out here' are interested.

GREEN WITH ENVY

William Trost

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About 15 years ago, I purchased from a Franklin dealer two specimens with small red zincite crystals. After looking them over at home, I noticed each specimen had a small green crystal in the matrix.

The next time Ralph Thomas and I went to Franklin, I took one of these specimens to Ewald Gerstman for identification. He looked it over and said, "This is a green zincite crystal—what do you want for it?" I nonchalantly said, "One hundred dollars," expecting Ewald to jump back. Instead, he said, "I'll be right back."

A few minutes later, Ewald returned with a \$100 bill in hand. At this point, it was too late for me to back out of the deal. After handing him the specimen, Ralph and I ran back to the Franklin dealer in the hope of finding additional green zincite crystals. Unfortunately, none were to be found. All was not lost – the specimen Ewald bought is now displayed in the Franklin Mineral Museum!

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A LETTER TO THE FOMS

Charles B. Ward

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Norwalk CT 06851

Dear Tema,

Thank you for inviting me to express my thoughts of the FOMS. I first became aware of the FOMS in 1991 when I was involved with the preservation efforts of the Sterling Hill Mining Museum. In the fund raising project "SAVE THE MINE" the outpouring of support from FOMS members nationwide was unbelievably generous. After formation of the nonprofit SHMM I once again went to FOMS members for help with a museum membership program. They responded from all corners of the world. Their only concern was that the memory of Franklin and Sterling Hill be preserved.

Since becoming an active mineral dealer in 1995 I have done shows in Denver and Tucson. I took trips to the far west and at every place I visited I was met by FOMS members who wanted to know what the Franklin and Sterling Hill museums were doing, expressed their hope to visit NJ, and asked how could they support the efforts of the FOMS.

Every year I have been a dealer at the Franklin Show the FOMS was there to help the dealers bring in minerals and, in my case, set up my UV Lamps. For several of those years I was the last to pack up after the show, and all of a sudden the same FOMS members who had set up the show were there to help me complete my packing.

In summing up the FOMS that I know, it is a service group in NJ and a supportive group for those unable to visit the state. Overall it is a group of mineral collectors interested in the preservation of the heritage of the old New Jersey zinc mines. The extent of their support is limited only by one's imagination. I am proud to be a member of the FOMS.

Charlie Ward

.....

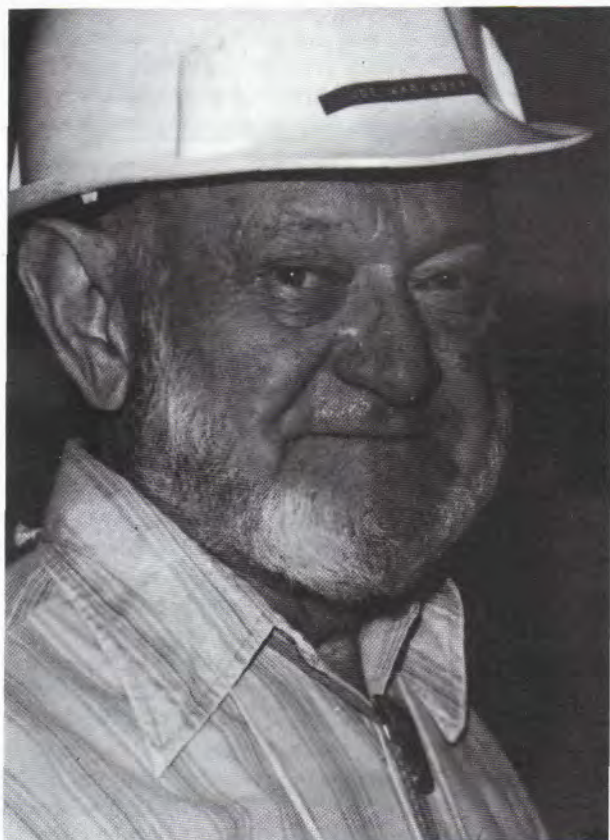
IT SHOULD HAPPEN MORE OFTEN

Joseph Warinsky
422 Chatham Ct. #C
Lakewood NJ 08701

I don't remember the date, but it was an FOMS field trip to the Lime Crest Quarry in Sparta, NJ. I walked to the far side of the quarry onto a ledge that was being prepared for blasting. At this time it was permissible to do this as the charges were not set. There in the middle of this step was a four foot boulder, and on one side of it I found a beautiful pyrite crystal. One face of it measured about one inch by one and a quarter inches (1" x 1 1/4").

By careful use of my diamond-point chisel and crack hammer I was finally able to remove this pyrite with a good piece of the limestone matrix, and the pyrite crystal was not broken or fractured. As I removed the pyrite my friend Fred Parker and his dad came by and said, "WOW!! That's some size crystal! Would it be okay if we broke the boulder to see if there are any other crystals?" I said, "Go ahead!" So Fred Parker and his dad with a twenty-pound sledgehammer broke the boulder. We examined the new surfaces that were exposed. Would you believe it? There was no other pyrite, not even a tiny one, in the whole boulder. I was very lucky to get this one.

After my wife died on November 4, 1994, I contacted Dick Hauck to help me sell our mineral collection. Dick made arrangements that were satisfactory to both of us.



Joe Warinsky
Dr. Alfred Standfast photo

Since I sold our Teaneck house and moved to Original Leisure Village in Lakewood I have not seen that pyrite crystal. However, I have been told that it is in the permanent collection of the Sterling Hill Mining Museum as part of a Lime Crest exhibit still in preparation. I hope to see that crystal again.

What a fond memory of a wonderful mineral field trip!

MEMORIES OF EARLY DAYS AT FRANKLIN

Thomas S. Warren
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Pasadena CA 91101

A few 60-year-old memories for *The Picking Table*.

In 1938 I wrote a friend of mine in New York that I was putting a new UV lamp on the market for the fluorescence of scheelite and other minerals. He wrote back that the president of the New Jersey Zinc Company had been a college classmate of his. He would ask him to send me some zinc minerals that were fluorescent. A few weeks later I received a 100 lb. barrel of willemite and calcite.

Shortly afterwards I contacted John Obert in New Jersey and we made a deal. He would send me minerals and I would send him lamps. He would trade the lamps to the miners for specimens. This agreement lasted for more than 10 years.

A few years later, around 1942, I made my first trip to Franklin. I remember climbing the ladder to the picking table. It was a long way to the top. The man there was very friendly and handed me several specimens that I treasured for years. One of them was a specimen of calcium larsenite.



Thomas S. Warren, 1980. Courtesy Warren Family

I continued to supply John Obert with lamps, and at one time we made a small special lamp that was never sold anywhere else. It was so small it could be carried in a man's pocket.

As the years went by I became acquainted with members of the Kiwanis Club. I worked very closely with them as they promoted the idea of starting a museum in Franklin. I remember when the Buckwheat Dump was level with the road. I also furnished the UV display lamps when Franklin Mineral Museum was built, and I made a very special deal to make it possible for them to buy the right number of lamps for their displays. [Editors' note: the Franklin Mineral Museum's 32-foot-long display of fluorescent minerals is still illuminated by UVP shortwave lamps.]

I have never been in either mine, but I have had opportunities to collect in a number of places in Franklin where old material could be found. I have also made many trips to Ogdensburg and collected a limited amount from that location. At the first Franklin mineral show in 1957, sponsored by the Kiwanis Club, I displayed fluorescent minerals in my booth. Then and for several years after I was the only one who did. As long as I was active in the business I made many trips to Franklin. It still holds many memories that I cherish.

My last trip to Franklin and Ogdensburg will be this October. I hope to see many of the old timers there, although I have macular degeneration which is a serious visual problem.

My trip will bring back many happy memories.

HOOKED ON FRANKLIN

Chuck Weed
R.D. 6, 832 Church
Moscow PA 18444

Two friends and I were looking over some Herkimer diamonds I had dug the previous Sunday when Julius said "Wait till you see this," and he handed me a rock about half-fist-size. He would not explain except to say that he and his family had taken a ride the Sunday before. He did say I would need a UV lamp.

On Saturday we went to a rock shop in Hellertown PA and I bought a small SW/LW UV lamp for \$32.00.

And when we got home — you've heard the saying "A star was born" — well, when I saw that calcite and willemite under SW — a fluorescent collector was born **right** there. I had not seen fluorescence before.

Eventually I joined the Fluorescent Mineral Society and when they came out with a decal as an emblem, I sent for one and put it on my hard hat.

Later, on a field trip with the FOMS down in one of the quarries near Franklin, Dick Bostwick glanced my way and recognized the decal on my hat, and we became acquainted right there. I have never been sorry for this and he is a good guy to know. I think I can truthfully say, "He is an unwritten book on Franklin Minerals."

One time I was in Nick Zipco's office on the Trotter Dump and he showed me some rocks he had for sale. When done, he laid his lamp across a cardboard box, and that box turned blue. We were finished so I went home. I couldn't forget the blue, so next time there I asked Nick what he did with those rocks. He had four pieces and told me I could choose between three of them — for \$100.00. It was not hard to pick the one I did, and I was never sorry for that either. It was a Shuster Park margarosanite. Nick never

forgot me and most times at the Franklin show he would say something special to me because of that rock.

ZACHARY'S MARGAROSANITE

David Wellbrock
18 Shunpike Rd.
Summit N 07901

When the FOMS sponsored weekend field trips to the Franklin Mill Site in the mid-eighties, I was a member of a crew including Charlie Puzio, Ron DeBlois, Mark Deitz, and Jim Chenard. In April 1985, my wife was pregnant and because her time was near I carried a beeper. Around noon one day, we unearthed a boulder in a hole that had already proved to be fruitful and so we knocked a corner off it. We were looking at a boulder of andradite and feldspar but what caught our attention was the pink and gray veining at the feldspar/andradite contact. As you've probably guessed, at this moment the beeper went off. I was so into the rock I didn't hear the beeper but my partners, especially Ron, started jumping up and down, yelling, "The baby's coming!" They thought I should leave and answer the page but I was going nowhere until we divided the rock up. "We'll save you a piece," they told me, but I wasn't going to settle for a thumbnail specimen of this rock. So we broke the boulder up and divided it among ourselves. The pink vein of course was grossular and when the gray vein fluoresced bright blue our suspicion of margarosanite was confirmed. After all of this I had forgotten about the beeper and was psyched for more, but my partners quickly refreshed my memory by refusing to work any more until I answered the page. I may sell the rest of my collection someday but the best piece of this find belongs to my son Zachary, the Margarosanite Kid.

MEMORIES

Wilfred Welsh
67 Lilline Lane
Upper Saddle River NJ 07458

My earliest record of a collecting trip to the Franklin area was 6/14/35, a field trip of the Science Museum Club which I organized among Montclair S.T.C. science majors. That same year I acquired U.S.G.S. Professional Paper #180, Charles Palache's *Minerals of Franklin and Sterling Hill, Sussex County, New Jersey*.

About 1937 Ward's Mineral Bulletin led me to my first purchase of Franklin Minerals, with fine crystals of zincite, willemite, franklinite, polyadelphite andradite, and amazonite microcline; the rhodonite was admired by Paul Moore and Peter Leavens. Dave Jensen was the mineralogist for Ward's.

My photo album shows the Parker Dump and Buckwheat open pit, with Mary Bohm and myself picnicing, on 5/30/38; Mary was to become my wife and fellow collector. On December 3, 1938, my Madison H.S. Mineral Club had a field trip there. 1939 photos show the Newark Mineralogical Society collecting on a field trip. On 4/28/41 my Ridgewood H.S. Mineral Club was there.

I joined FOMS in 1960, having already served as president of the Newark and North Jersey clubs.



Mineral collecting in Franklin on May 30, 1938. From left: Bill Welsh, Mary Bohm (later Mary Welsh), and Bob Brown.
Photo courtesy of Bill Welsh

FRANKLIN MINERALS : TERRORIST WEAPONS?

Anne Wronka
23 High Point Circle
Franklin NJ 07416

Throughout 1970 there was increased tension when flying, due to the numerous skyjackings occurring. To help secure America's flying public, the Federal government stationed Sky Marshalls at airports. As those times were before the prevalence of electronic monitoring, it was these marshalls' duty to check both people and their baggage as flights were boarded.

In September 1970 I was part of an exchange program between Montclair State College, NJ and Hatfield Polytechnic, a school in England which specialized in scientific areas. My father, who grew up in Franklin, NJ and had once worked for the New Jersey Zinc Company, thought such a school might appreciate some specimens from "The Fluorescent Mineral Capital of the World."

The amount of baggage to be stored in the cargo hold was limited by both number of pieces and weight. However, carry-on baggage was not subject to weight restrictions. Anyone who's ever handled Franklin's zinc-bearing minerals knows how heavy they can be! As a result, my father and I decided to pack the

several large specimens in the carry-on. They were placed on top, right behind the zipper so they could easily be retrieved and given to the school's representative on arrival at the London airport. The carry-on was very heavy. In fact, it was heavier than either suitcase!

In the airport near departure time, a gentleman offered to carry the suitcases. I replied, "Oh, that's okay. Thank you. I can manage the suitcases, but if you don't mind - would you take the carry-on?" Little did he know....

After the suitcases were checked in, it was soon time to board the plane. After the Sky Marshalls checked each person, they would examine any carry-on baggage on a table. When it was my turn, the marshall noticed I was struggling with the carry-on. He said, "Here, let me put that up on the table for you." As he began to lift it and found out how unusually heavy it was, he exclaimed, "My God! What do you have in here? Rocks?"

I meekly replied, "Yes."

He looked strangely at me as he began to unzipper the carry-on. He had only gone about six inches when he saw the large mineral specimens. He was speechless for a moment. Then, instead of continuing to open the carry-on and examine its contents, he rezippered it shut and began shaking his head. "Go," he said, "Just go."

That was the day Franklin Minerals were nearly considered "terrorist weapons"!



FROM THE EDITORS' DESK (continued from page 5)

and Marie Huizing, Carl Kanoff, Joseph Klitsch, Bernie Kozykowski, Steve Kuitens, Chester and Mary Bridget Lemanski, George Loud, Lee Lowell, Keith Luzzi, Ron Martin, Dan McHugh, Dan Mikletz, Warren Miller, Steve Misiur, Paulus Moore, Tony Nikischer, Steve Phillips, Claude Poli, Richard Stagl, Arpad Szabo, Ralph Thomas, Bill Trost, Earl and Maureen Verbeek, Bob Vojack, Charles Ward, Doris White, Richard Willis, and Joseph Vajdak.

EFMLS BULLETIN EDITORS' AWARDS

This year, for the first time, the prior year's *Picking Tables* were entered in the Bulletin Editors' Contests of the

American Federation of Mineralogical Societies (AFMS) and its regional division, the Eastern Federation of Mineralogical and Lapidary Societies (EFMLS), of which FOMS is a member club. We are pleased to report that at the regional level, Peter Chin's and Gary Grenier's article, "Roebingite and the 'Parker Shaft Minerals,'" took the Trophy Award. Co-editor Tema Hecht received a Third Place Award in the Original Non-Educational Articles category for "Seek and Ye Shall Find: A Mineralogical Journey, and then Some, Through the Internet." *The Picking Table* itself got the Second Place Award for Large Bulletins. As we expected,

the *PT* lost points for being too narrowly focused in its subject matter and audience, and for failing to include news and event information from other EFMLS clubs. Guilty as charged. Two of the three judges began their critiques with "Your publication is excellent but..." and "This is a really great publication, but..." Perhaps the *PT* will learn to become more politically correct.

WEBSITE UPDATE

Since co-editor Hecht's article cited in the prior paragraph, the Internet has grown and changed rapidly. Many websites important for FOMS members have changed, and the key ones follow. Please note that there are often links between these websites.

Franklin Mineral Museum:

www.geocities.com/CapeCanaveral/Lab/6347/

Sterling Hill Mining Museum:

www.sterlinghill.org

Franklin Historical Society:

www.zinctown.org

Herb Yeates' revised and enlarged website:

www.SimpleThinking.com/franklinminerals/

Fluorescent Mineral Society:

www.uvminerals.org

NECROLOGY

We sadly report the death of Mary T. Bohm Welsh, wife of Wilfred Welsh, on Oct. 8, 1998. She and Bill had known each other for over 60 years and had been married almost that long; on page 87 is a photo of them collecting on the Parker Dump in 1938. Mary was Bill's companion in every one of his hobbies except motorcycling, and she is said to have encouraged him even in that. Together they built the mineral collection now housed in Welsh Hall at the Franklin Mineral Museum. For years Mary cut the cake on Miners Day; in this and in many other things she will be greatly missed.

Warren Langill, FOMS trustee, died on Feb. 10, 1999. From 1991 to 1998 he was the editor of *Rock Chatter*, the newsletter of the Rock and Mineral Club of Lower Bucks County, and was an enthusiastic member of the Fluorescent Mineral Society, as well as a stamp collector, an amateur magician, and an incorrigible punster.

Michael Fleischer, the original author of what is now known as *Fleischer's Glossary of Mineral Species*, died on Sept. 5, 1998, at age 90. A geologist and geochemist with the USGS from 1939 to 1986, he also was president of the Mineralogical Society of America, and was for 15 years the president of the International Mineralogical Association's Commission on New Minerals and Mineral Names. Among other honors, he received the MSA's Roebling Medal in 1975. Fleischerite, a hydrated lead germanium sulfate, was named for him in 1960.

Richard Gaines died on January 21, 1999, four days short of his 82nd birthday. In his long career as a mining engineer and economic geologist he had worked briefly at Sterling Hill in 1940-41, where he found and identified the

mineral brandtite. An authority on beryllium minerals and an avid collector of them, he tried in vain to acquire a specimen of wawayandaite, an extremely rare beryllium mineral known only from Franklin. However, Gaines did achieve a larger goal, accomplished with the help of four coauthors: revising the legendary 7th edition of "Dana." The 8th edition, *Dana's New Mineralogy*, was published in the fall of 1997. Gaines was honored in 1983 by the naming of gainesite, a sodium zirconium beryllophosphate.

SIC TRANSIT...

Your co-editors Dick Bostwick and Tema Hecht, worn to a frazzle after five years of wrestling with *The Picking Table*, are pleased to announce a "friendly takeover." When no one could be found to swallow the entire publication, it was hoped that carving it into bite-sized chunks might prove more agreeable, and so it has proved. Peter Chin has volunteered to be the new managing editor, responsible for coordinating the various editorial activities, and all *Picking Table* articles, correspondence, criticism, and condolences should now be addressed to him: Peter Chin, 900 N. Howard St., Alexandria VA 22304.

The new associate editors are Paulus Moore, Earl Verbeek, Gary Grenier, and Dan Mikletz. Together with Peter they will variously write articles or recruit or edit them, or all three. As the aggregate intelligence of this group is at least an order of magnitude higher than that of the current staff, great things are expected. Steve Kuitens will cover FOMS events and field trips, and Lee Lowell will provide historical materials and perspective. Wellington Chin, Peter's brother, will be production manager. Your current co-editors are being kept on as "senior co-editors" to smooth the transition, and provide the sense of security one gets from a tattered teddy bear in the closet, or a rusty fire extinguisher under the sink.

It's been a wild ride. "The Picnic Table," it isn't. Your outgoing co-editors have marveled more every year at the stamina and dedication of previous editors, who among their many accomplishments got *The Picking Table* out on time. We tried to make up in quality what we lacked in scheduling, and are confident that Peter Chin & Co. can improve on all aspects of our editorship.

Although duty and honor and responsibility should have been enough to keep us going, frankly it was support from our friends in FOMS that kept us from jumping off the Brooklyn Bridge with the club's 486 computer tied around our necks. You know who you are, and we thank you! Don't forget to drop by now and then, trade gossip, and have a beer and some chili with us.

We remain firm in our belief that *The Picking Table* is an extremely important amateur mineral publication, and one inextricably tied to the present and future fate of what Pete Dunn calls "the world's most magnificent mineral deposits." Members of FOMS, support your publication and its editors and staff. As for the new and improved *TEAM PT*: gentlemen, your destiny awaits.



The last word on Franklin and Sterling Hill in books by Dr. Pete J. Dunn, available from FOMS: ♦ *Franklin and Sterling Hill: The World's Most Magnificent Mineral Deposits*, a monograph in 5 volumes and 2 supplements, \$200 complete. ♦ *The Story of Franklin and Sterling Hill*, a one-volume popular account, \$15. ♦ *Magnificent Rocks* (with Susan Cooper), for grades 4-8, \$15.





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Add \$0.75 postage for each issue through vol. 23, #2, and \$1.00 postage for each issue beginning with vol. 24, #1.

Note: All issues of *The Picking Table* prior to volume 23 are available only as photocopies.

Books and other publications

Cooper, Susan B., and Dunn, Pete J. (1997) **Magnificent Rocks: The Story of Mining, Men, and Minerals at Franklin and Sterling Hill, New Jersey.** Privately printed. **\$15.00** (+ \$3.00 postage)

Dunn, Pete J. (1997) **The Story of Franklin and Sterling Hill.** Privately printed. **\$15.00** (+ \$4.00 postage)

Dunn, Pete J. (1995) **Franklin and Sterling Hill, New Jersey: the world's most magnificent mineral deposits.** Privately printed. Part One, bibliography and chapters 1-3; Part Two, chapters 4-12; Part Three, chapters 13-17; Part Four, chapters 18-23; Part Five, chapters 24-26, appendices, and indices; First Supplement, chapters S1-S5; and Second Supplement, chapters S6-S10.

\$30.00 each (+ \$5.00 postage) for Parts One through Five, **\$25.00 each** (+ \$5.00 postage) for the First and Second Supplements, or **\$200.00** (+ \$15.00 postage) for the complete set of seven.

Fronde, Clifford and Baum, John L. (1974) **Structure and Mineralogy of the Franklin Zinc-Iron- Manganese Deposit, New Jersey.** *Economic Geology*, 69, 2, pp. 157-180. Photocopies only are available. **\$2.50** (+\$1.25 postage)

Horuzy, Paul (editor) (1990) **The Odyssey of Ogdensburg and the Sterling Zinc Mine.** Privately printed, Sterling Hill Mining Company. **\$6.50** (+\$1.75 postage)

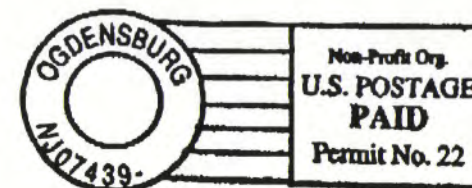
Shuster, Elwood D. (1927) **Historical Notes of the Iron and Zinc Mining Industry in Sussex County, New Jersey.** Privately printed. Franklin Mineral Museum reprint. **\$3.00** (+\$0.75 postage)

Most publications are made available at Society meetings. However, if ordering by mail, make check or money order payable to **FOMS**, and address your order to:

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