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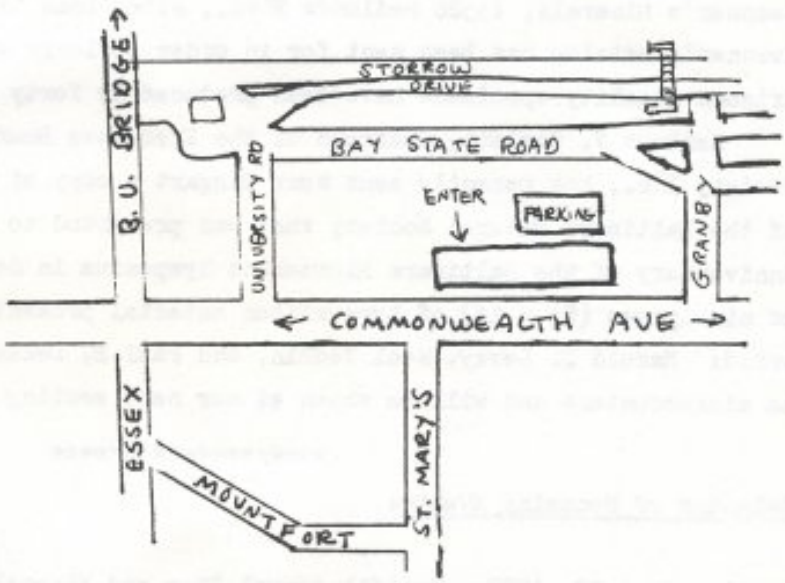
MICROMOUNTERS OF NEW ENGLAND

October 5, 1983 Newsletter #83

The next regular meeting of the Micromounters of New England will be Sunday, October 16th at Boston University, in the Geology Building off of Bay State Road. (See map.) Please bring your lunches as well as your usual equipment. Next month, our club will meet on Saturday, November 20th at the Cares.



It was voted at our last meeting that the club dues will be increased by 50¢ (from $3.00 to $3.50 per person) for 1984. Dues are due by January 1st, but Janet will, of course, accept payment earlier (as there is no December meeting of MMNE).

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We regret to announce that the Warren Brother quarry (owned by Tilcon, Inc.), located in Acushnet Mass., is closed for collecting purposes. It seems even more regrettable as recent reports confirmed that the quarry was beginning to uncover even more alpine vugs due to recent blasting.

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Dues are $3.00 per year and are due on January 1, payable to the treasurer.

Contributions of news items for the Bulletin are welcome and should be sent to the Bulletin Editor.

MICROMOUNTERS NOTES

Two of our members have already contributed specimens for the micro-specimen sale to be held at our next Northeast Meeting. A little later on a list of these will be published....

Frank Leighton has checked out a location for one of our future meetings...

A postcard has arrived from Ray Denicourt, our former president, who is now living at 1837 Pebble Beach Blvd., Sun City Center, Florida, 33570. The postmark was Tampa, so Sun City must be near there. His card was a contribution to the Bibliography that Norm is working on, but Ray had the nerve to close with: "Hope all is well in sweltering New England." Now everybody knows that it is the people who live in Florida that are sweltering and not the people that live in "cool" New England in the fall.....

From California comes an offer to sell micro-minerals at a $25 minimum from Swanner's Minerals, 25526 Redlands Blvd., #166, Loma Linda, CA 92354. Rex Swanner's catalog has been sent for in order to learn what kinds of California and Arizona locality specimens have been produced by forty years of collecting.....

Herbert V. Corbett, Chairman of the Executive Board of the Baltimore Mineral Society Inc., has recently sent Norm Biggart a copy of an out-of-print publication of the Baltimore Mineral Society that was presented to the attendees of the 25th Anniversary of the Baltimore Micromount Symposium in September, 1981. It consists of nine pages (8½ x 11) of typewritten material presented by notables of the mineral world: Harold D. Levey, Neal Yedlin, and Paul E. Desautels. It is of interest to micromounters and will be shown at our next meeting.....

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Calendar of Upcoming Events:

October 29 & 30, 1983. Twelfth Annual "Gem and Mineral Show", sponsored by the Rhode Island Mineral Hunters, to be held at the Schofield Armory (R.I. National Guard), 705 New London Avenue (Rte. 2), Cranston, RI. Hours: Sat.: 10AM to 6PM, Sun.: 10AM to 6PM. Admission $1.25. Featured speakers will be Dr. Stephen Chamberlain, and Vandell T. King.

November 12 & 13 1983. Twenty-first Annual "Long Island Gem & Mineral Festival", sponsored by the Nassau Mineral Club, to be held at St. Paul's School (new location), Stewart Avenue, Garden City, Long Island, NY. Hours: Sat: 10AM to 8PM. Sun.: Noon to 7PM. Admission $1.50 adults, 50¢ children to age 12.

SOME NOTES ON FRANCON MINERALS

Excerpts from a slide presentation by Violet Anderson given at the Northeast Symposium

The difficulty of describing Francon minerals:

It is very difficult to give a talk on descriptions of the Francon Minerals. While a few species are well-formed such as dawsonite, weloganite, cryolite (and the strontianite, calcite and quartz found here do some interesting things), and a few species show color, it is basically a white on white world. All the new minerals, the recent discoveries, are white. And all the new finds coming along (those being worked on by Ann Sabina) are white crusts or coatings.

Francon Quarry:

The minerals are found in a silicocarbonatite sill found in the Ordivician limestone. There are two levels: the upper and the lower. These sills were tied to the same upheaval as the Monteregian Hills and are part of the same disturbances which formed Mt. St. Hilaire. The sills are heavy in dawsonite, zirconium and niobium (more than is normal, anyway.) It is in the upper sill (which Ann Sabina refers to as A) that all the new discoveries have been found. Although weloganite is found in both the A and B (lower) sills. There are some 60 species alltogether. And it is by association (such as in the list drawn up by Janet Cares) that one may best identify the species.

The Slides:

The first three slides are the dresserites:

1. an open sphere of dresserite showing the blunted ends of the orthorhombic xls
2. same as above but more loosely bundled
3. Strontiodresserite-which is more ovoid (elipsoidal) than dresserite. Ann Sabina refers to strontiodresserite as waxy. It is often associated with calcite/halloysite. It is distinguished from dresserite by the strontium-calcium replacing the barium. It was formerly referred to as UK #6. It appears to be more transluscent than dresserite. The round half-sphere located next to it is UK #12-a bumpy sphere, almost pimply in appearance.
4. the next slide shows Hydrodresserite which contains three water molecules (Dresserite/Strontiodresserite has only one), which it loses rapidly on exposure. However the triclinic shape of the crystals remains. (Formerly UK#2)
5. a bumpy sphere of UK #12 located between two lumps of Strontiodresserite

6. Synchysite-found as little plates usually white (but carbonate-stained in this slide). Much smaller than the Synchysite found at St. Hilaire.
7. Kaolinite-always has a silky glitter to it, but can also be flaky. Often resembles dawsonite, and is therefore difficult to distinguish from other minerals. It can be found anywhere. It can also be confused with the fluorite/dawsonite blebs, but kaolinite has a more blebby (sic) look, while the fluorite is more bubbly in appearamce.
8. Sabinaite-formerly UK#5. It is not quite as loosely formed as Kaolinite.
9. UK#11-usually colorless but can be white. (Dr. Chao is still working on this mineral.)
10. UK#3-often a chalky white coating on weloganite. To distinguish UK#3 from Kaolinite, draw a needle across the material. If the needle tip is waxy, it is Kaolinite; if it is chalky, it is UK#3.
11. Halloysite is often confused with UK#3, but Halloysite is associated with very fancy shapes and formations. It is an aluminum silicate associated with Kaolinite. It is one of the chalk minerals found at Francon.
12. Montmorillonite-occurs sometimes as green-tinged needles. More often as white fibers. The easiest way to test for Montmorillonite is to drop a small amount in water on a slide. It will swell and turn into a gel.
13. four specimens of Franconite (UK#10). A description of this mineral will be appearing in the Canadian Minerologist very soon. It contains Sodium and Niobium. In UK#3 the Sodium is replaced by Calcium. In appearance, Franconite can be distinguished from UK#3 in that the spheres are larger, more separate, more discreet from one another. It is often covered by Hydrocarbonate or has Hydrocarbonate in the vicinity.
14. Cristobalite-long, roll shapes, with a quartz grouping. Slighly more blue than Halloysite.
15. Dachiardite-Embedded in rock; colorless, sometimes in sprays. Uninteresting to look at.
16. plagioclase feldspar (Albite)-parallel platy growth with sawtooth, upright edges. Lines many vugs.
17.-19. Calcites a.) Almost campylite in habit. b.) cone-shaped. c.) with marcasite.
20.-23. Quartz-in comparison to the calcite, the calcite has a broader shape. The quartz has a blue tone, and the bluish tone in cavities identifies it as such. a.) Quartz, b.) Fluorite on Quartz, c.) Artichoke Quartz, d.) Quartz group.
24. Dawsonite-is striated vertically, appears in needles or fat crystals
25. Dawsonite with Fluorite. Dawsonite is growing out of the Fluorite; it indicates that they crystalized at the same time. Since cubic Fluorite is a late-forming mineral it gives an approximate timing to the combination of Dawsonite-Fluorite.

26. Dawsonite needles with Hematite

27. Small wheels of short, prismatic, Dawsonite. The many prisms lead one to believe that the striations found in the elongated dawsonite xls are in actuality suppressed prisms.

28. Dawsonite, Fluorite with Pyrite(tarnished blue).

29. Elpidite-not very much found at Francon. Rather rare compared to St. Hilaire.

30.-33. Strontianite. Strontianite takes on very many different habits. Possibly some twinning is occuring, but it is difficult to tell. Some can look like tumbleweeds,- others ressemble aragonite. It is not unusual to find a different habit of Strontianite with each collecting trip to Francon. a.) feathery habit. b.) with Hematite. c.) Strontianite with four directions of crystal growth. Some appear to be growing out of the .001 face. d.) Strontianite with a ball of UK#12.

34. Cryolite-most often a pseudo-cubic shape.

35. Cryolite with Weloganite. Cryolite showing multiple growth with smaller yellow crystals forming on the corners. Cryolite often displays this "hen and chicks" style of growth.

36. Smythite-looks very much like molybdenite or graphite. This specimen was identified by Ann Sabina. Usually brownish, very fragile, very brittle.

37. Baddeleyite-a coating, yellowish cream in color, associated with Hematite. Often forms a shell enclosing a xl that has subsequently dissolved away.

38. another Baddeleyeite

39. Celestite-commonly elongated, very thin plates forming sprays of crystals. It is often associated with Fluorite.

40. Celestite-larger blades. Celestite is often overlooked on Francon specimens

41.-43. Three slides of Barite, the last one appearing on the same rock as th Synchysite.

44. Hematite

45. Ilmenorutile-xls are very small

46. Pyrrhotite-identified only by x-ray diffraction (by R.O.M.)

47. Siderite-epitaxial growth on calcite

48. Marcasite

49. Galena-not too many found at Francon

50. Viitaniemiite-named after type locality, Viitaniemi, Finland. A new mineral specie from Francon, only recognized a few months ago. Differs from type material in that it has no manganese, but not enough to distinguish it as a completely new mineral. Seems to have diagonal, herringbone striations. Similar in appearance to Celestite, often arranged in sprays. Viitaniemiite is broader in shape than Celestite. Also arranges in more random sprays.

51. Sphalerite

52+.- Remainder of slides show the amazing variety of Weloganite. Many odd shapes, some flat-topped, some pointed, colors ranging from colorless to white to yellow. Some have coating, but others seem to gain a more chalky appearance on exposure.

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