MICROMOUNTERS OF NEW ENGLAND

The MMNE was organized on November 5, 1966 for the purpose of promoting the study of minerals that require a microscope.

March 1990 Newsletter #139

Dues are $5.00 per year and are due on January 1st, payable to the Treasurer

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

NEXT MONTH

The next meeting of the MMNE will be Saturday, April 7 1990, at the Auburn Public Library.

The next meeting of the Micromounters of New England will be **Saturday, March 10, 1990,** at the Northborough Public Library. **NOTE: MAP ON PAGE 4**

IMPORTANT!!!! -- This is your last opportunity to pay your dues before you are dropped from the mailing list. Only a few persons have yet to remit their dues. If you are one of these people, you will have a large red **"D"** on your address label. This will be the last bulletin you will receive if you do not send in your dues.
Next month we will include our annual membership list.

MESSAGE FROM THE PRESIDENT: As you know, we have started a series of mini-lectures at our monthly meetings. Gene Bearss gave us a great one in November on collecting at Franklin, NJ. Then Shelley Monaghan filled us in about the man who contributed much to our knowledge of snow and ice and whom local people considered a nut because he photomicrographed snowflakes in sub-zero weather. She had a portfolio of his snowflake photos. Our third speaker was to have been Dennis Coskren, but due to a misunderstanding, we will have to reserve his talk for a later date. Bob Janules has accepted a speaking engagement for March, and Scott Whittemore is going to bring this year's season to a close with his lecture in April. We are looking forward to the two upcoming lectures, so please plan to attend. -- Margaret Stewart

NOTICE: Our Annual May Meeting is scheduled for May 12, 1990. Our speaker will be Steve Chamberlain talking about micros from northern New York collecting sites. Details appear inside this bulletin.
Information regarding ordering a copy of the Encyclopedia of Minerals is also inside this issue.

Member Jean McKenna wishes to invite members to the Rhode Island Mineral Hunters' April 10th meeting, when their guest speaker will be Frederick Pough. (Jean was sending me more info by mail, but the postal service, as usual, has impeded her effort.)

ENCYCLOPEDIA OF MINERALS

Those of you who reserved a copy of the encyclopedia should send a check for the amount of $75 directly to James Grandy, at **524 Brooksvale Avenue, Hamden, CT 06518.** At this remarkable price, we have placed the restriction of one copy per member. Jim plans to place the order on March 12th. Remember, your reservation form does not guarantee your copy of the book unless you send in your check; however, persons who have reserved copies and sent in their checks will receive priority ordering over those sending checks without previous registration.

Mark the Date! Saturday, May 12, 1990 will be our annual Northeast Meeting in Ashland. Our Speaker will be Steve Chamberlain on the topic of Micros in Northern New York Collecting Sites. Steve is not only informative, but entertaining, and we're sure to enjoy his startling 3-D slides. (Registration forms will be included in the April Newsletter.)

Make our Day! The speaker's necessary expenses of travel, meals, and accommodations, plus an honorarium are borne by the proceeds of the Sales Table. Without it we would have to increase our registration fee by about $5.00. Unless you are contributing in some other way, each member should feel responsible for donating at least one item for the Sale Table which can be realistically sold for that amount. You get some great bargains at this meeting, so consider your donation as insuring its continued success.

Help the Hassled! As always, there are a few who bear the large part of the burden. Make their task lighten by mounting donated specimens the way you'd like to see them if you were buying them. Please include a hand-printed (or typed) label with species name, locality, suggested price, and your name, so that the purchaser can obtain further information if desired. An illegibly scribbled locality may be destined for the scrap pile, if the donor can't be found to decipher it.

Giveaways should also include the donor's name, but of course they do not need to be individually labelled. Card-mounted specimens are preferred, but if you must bring loose material, please have it in a box with a cover so it can be transported without scattering over someone's car or truck floor.

Sales Table items (may include: books, reprints, tools, etc., as well as micromounts) and Giveaways will be accepted at the coming meeting as well as in May.

Feed the Hungry (Micromounter, that is)! Donations of Food for the Northeast Meeting morning's brunch will be coordinated by Pat Barker.

Great News -- John Ebner's slide of a sceptered quartz crystal from Calamity wash, Yavapai County, Arizona, received first place at the 1990 Tucson Gem & Mineral Show Photography Seminar. Jeff Scovill, the chairman, picked the ten semi-finalists and then submitted them to the seminar audience for judging. Congratulations, John.

Emmons Quarry (continued)
from Gene Bearss

Prior to the publication in 1988 of A Collector's Guide to the Maine Mineral Localities the minerals listed as being found at the Emmons Quarry were:

** Amblygonite
** Apatite
** Beryl
** Cassiterite
** Herderite
** Lepidolite

** Petalite

** Pollucite

** Quartz

** Spodumene

** Tourmaline

* Feldspar

* Muscovite

** Morrill, P., 1958, Maine Mines and Minerals, Volume 1 and Federation of Maine Mineral and Gem Clubs, 1978, Guidebook I.

* Guidebook I, only.

Perhamite was added to the list in 1980 when Vandal King, writing in the "World News on Mineral Occurrences" column, Rocks and Minerals, Volume 55, pages 209--213, described its occurrence at the Emmons Quarry. The Collector's Guide greatly expanded this list, but new minerals are still being found, new to the Emmons that is, and they will be described herein.

Before describing various minerals found at the Emmons Quarry, I would like to briefly described the phosphate nodules that occur there. Palermo #1 Mine has pods, but the Emmons Quarry has nodules. While Palermo #1 Mine has phosphate pods up to ten feet in size, the largest phosphate nodule that I have encountered at Emmons was less than one foot in diameter. The average nodule at Emmons runs three to four inches in greatest dimension. Thus, nodule not pods.

The phosphate nodules at Emmons can be broken down into three types: unaltered, totally altered, and partially altered. Unaltered nodules consist of triphylite/lithiophilite with minor surface alterations. Totally altered nodules are of two types. One type consists of Fe/Mn oxides and siderite, much of which has been altered to Fe oxides. The other type of totally altered nodule consists of herterosite/purpurite. The partially altered nodules are the ones of interest to the mineral collector, and the micromounter in particular. A typical partially altered nodule consists of the following: one end of the nodule consists of Fe/Mn oxides or hererosite/purpurite; this grades into a massive area of rhodochrosite and phosphoferrite/reddingite, which grades into an area consisting primarily of unaltered triphylite/lithiophilite. The largest nodule I have seen was found on the dumps. This particular nodule consisted of Fe/Mn oxides grading into a mixture of rhodochrosite and phosphoferrite/reddingite, with this abutting a mass of amblygonite/montebrasite. Vugs, if found in the nodules at all, are minute. These vugs are found in both the Fe/Mn oxides area and in the rhodochrosite and phosphoferrite/reddingite area. The major problem for collectors at the Emmons Quarry is not what is in the nodules, but where to find them. I have found them in both the quarry proper and on the dumps, but nowhere have I found them in abundance. If you find one good nodule during a collecting trip, consider yourself fortunate.

Minerals (as found by the author)

Albite	occurs as typical pegmatite crystals. Also found as bladed crystals (variety cleavelandite). The vuggy albite is the host matrix for perhamite, apatites, cassiterite, columbite, elbaite, hydroxyl-herderite, muscovite, and quartz crystals.
Almandine	typical Maine pegmatite occurrence. Crystals usually frozen in matrix and extremely friable.
Amblygonite /Montebrasite	as large masses and crude primary crystals that are frozen in matrix of feldspar, quartz, and muscovite. At one time there was an area near the bottom of the quarry cut where "amblygonite" had been stock-piled. In this pile you could find pieces showing crude faces and an occasional complete crystal. The author has one piece of massive "amblygonite" abutting quartz that has several, not very impressive, micro crystals.

Arsenopyrite — probably loellingite. See that mineral for a description.

Beraunite — the author has two specimens with beraunite on them. On both the beraunite is found as minute tufts of matted, green needles which look like typical unoxidized beraunite as found at Palermo #1 Mine. They are associated with laueite, siderite, and a botryoidal undetermined mineral. Beraunite is found in the partially altered phosphate nodules.

Bertrandite — as typical tabular crystals, usually on a matrix of quartz. The best bertrandite the author found was from the quarry proper. In the Fall of 1987, a pocket was exposed in the upper portion of the quarry. The pocket was full of water, "limonite" (which coated everything), and crude etched quartz crystals. In fact, the pocket looked so bad that whoever had opened the pocket hadn't even bothered to excavate it. At the lower end and abutting the pocket was a large mass of beryl. The portion of the beryl exposed to the pocket showed severe etching. On some of the quartz adjacent to the etched beryl were found bertrandite crystals up to 6mm in size. The author also has one piece with bertrandite associated with tabular apatite.

Beryl — as green, greenish-blue, and pink masses and crystals. The author has found one piece of gem stock aquamarine that probably would have cut a couple of one carat stones. Also, found by the author was one piece of a crude crystal that showed some pink coloration. That is as near to the pink beryl as I have found. I dwell on pink beryl because this was the mineral that in the 1950's attracted so many collectors to the Emmons.

Beryllonite — as etched "crystals" identical to the material from the Dunton Mine. On the basis of this morphology and several tests ran by the author (specific gravity, solubility in HCL, etc..), a tentative identification of beryllonite has been assigned to this material.

Brazilianite — In 1988 the author found a large amount of apatite on quartz while collecting on the dumps. On one piece of this, I found several minute, colorless crystals associated with tabular, opaque, white apatite, botryoidal muscovite, and quartz crystals. Based on several tests run by the author, and crystal morphology, they were tentatively identified as brazilianite. In November of 1988 a piece of this, plus several other minerals, was sent off for identification. So far, no response.

.. to be continued next Month