

MICROMOUNTERS OF NEW ENGLAND

NEWSLETTER #72

July 1, 1982

The next meeting will be our annual journey to the Reiner's, in New Hampshire, on July 17, 1982. We hope to be able to collect at Palermo the next day if the beavers have released control of the road along the pond. In any event come and enjoy yourself at the Reiner's with a refreshing dip in the lake and a cookout. We ask everyone to bring a little goodie that will be enjoyed by others at the cookout.

For those who did not make the May 1 meeting you missed a good time. There were about 60 micromounters in attendance to listen to Bill Henderson's lecture part, of which is summarized in this bulletin. We obtained six new members at the meeting. They are:

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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.

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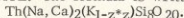
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Since I drew the map to the Babingtonite locality enclosed in this Newsletter, I have heard that the site is posted and collectors are being asked to leave. Perhaps someone can verify this at the Reiner's.

According to the February, 1982 issue of the Canadian Mineralogist EKANITE from St. Hilaire has been identified as STEACYITE. The formula is written as:



The * indicates a vacancy.

There are still a few copies of the May 1 program booklet available from Janet Cares at a cost of \$2.00 by mail or \$1.50 if picked up.

NON PEGMATITE PHOSPHATES

This summary, prepared by John Anderson, is of the lecture given by Dr. William (Bill) A. Henderson, Jr. at the Micromounters of New England meeting held in Springfield, Mass. on May 1, 1982. Portions of this summary will be included in each newsletter until the entire lecture has been covered.

The largest group of non pegmatite phosphates are the phosphatic iron ores which are widespread throughout the world with a large variety of iron phosphate minerals being found. Four typical locations are Indian Mountain, Alabama; Hellertown, Pennsylvania; Iron Knob, South Australia; and Rotlaufchen, West Germany.

Indian Mountain itself is not entirely a phosphatic iron ore deposit. There are iron ores in the area but some of the phosphate minerals are collected well away from the area. The minerals found there are typical of the lot so we will lump these four locations together. A favorite of the group is the Iron Monarch Quarry at Iron Knob in South Australia. A number of rare minerals occur here as well as some that are seldom, if ever, found in pegmatite phosphates.

The Iron Monarch Quarry is over a mile long and many hundreds of feet deep and is quickly being converted from a knob or hill into a depression. The benches are 50-100 feet high. It consists of a very high grade iron ore which is being shipped to Japan, made into automobiles and sold in this country. The phosphate minerals here are not necessarily found in the iron ore but in the nearby rock formations.

Slides of minerals from this quarry were:

1. A group of gorcelixite tabs, gorcelixite being a barium aluminum phosphate, after apatite. The gorcelixite grew over the apatite crystals and the apatite dissolved away leaving the tabs.
2. Cyrilovite pseudomorph after strengite showing the tabular pseudo tetragonal shape of some strengite crystals. The strengite was chemically altered to cyrilovite which is a sodium iron phosphate.
3. Cyrilovite crystals which grew originally as cyrilovite. These crystals are the best found anywhere in the world.
4. Green paravauxite on pale pink strengite. Perhaps the only place green paravauxite is found.
5. Turquoise, a copper aluminum phosphate, in nice blue crystals but not with the fine form found on those from Lynch Station, Virginia.
6. Thin, hard to photograph, transparent blades of montgomeryite, a calcium magnesium aluminum phosphate.
7. Colorless crystals of wardite, a sodium aluminum phosphate, coated with very small crandallite, a calcium aluminum phosphate. The crandallite doesn't completely coat the wardite. It grows on the dipyrmaid faces but not on the terminal faces. Anywhere you see dark opaque areas you are looking through an interrupted skin of crandallite into the wardite, much like a little eye. The transparent colorless wardite inside looks darker than the light scattering white crandallite on the outside.
8. Ferrian variscite, a controversial mineral because micro probe analysis shows no iron content but it's color is indicative of iron. Bill has found that the iron is present as tiny crystals of hematite.
9. White tabular apatite with true red colored hematite, an iron oxide.

To be continued.....

NEW BABINGTONITE LOCALITY - PEABODY, MASS.



Babingtonite crystals up to one-eighth inch and smaller micro babingtonite and micro prehnite are found. Also, some epidote, calcite, and pyrite has been noted. The collecting area is the rock excavation next to the tennis courts at the end of Bourbon Street, which is off Lowell Street, in Peabody. This is just north of the intersection of route 128 and I-95. The nicest babingtonite has been found by acid etching the calcite seams. Take the Lowell St. exit from Route One not I-95.