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.

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Dues are $ 4.00per 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.

This bulletin may be quoted if credit is given. --- Club Address is c/o Editor.

→ NEXT MONTH

There will be no December meeting. The next meeting will be Sunday, January 10, 1988 at Boston University.

NOVEMBER 1987 NEWSLETTER #119

The next regular meeting of the Micromounters of New England will take place at the Merriam Room at the Auburn Public Library, on Saturday, November 14, 1987. The room has been reserved for the hours between 9:30 a.m. and 3:30 p.m. (See map below)

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NORTHEAST MEETING

Our 1988 Northeast Meeting is scheduled for Saturday, May 14, 1988. The well-known micromounter and photographer Lou Perloff has accepted our invitation to speak on the microminerals of the Black Hills of South Dakota. Mark your calendar, and give some thought as to a contribution of a mineral or mineral-related book for the sales table. It is the profit from donated material which helps pay for distinguished speakers, as well as our accommodations, and keeps our registration fee down. Please do your part.

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MEMBERSHIP

Membership dues will remain at $4.00 per person in 1988. Plan to bring a check to the next meeting or mail it to the Treasurer.

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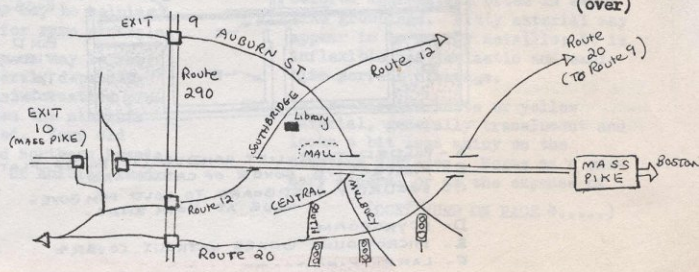
ROCKS AND MINERALS INDEX

In case you hadn't heard, Ron Bentley is putting out a 60-year index of Rocks and Minerals Magazine which will be available after January 1st, 1988. However if you order prior to publication, you can pay at the pre-publication price of $35. This is a considerable savings over the $60 price the book will have if you fail to order before the January 1st deadline. To save even further, I am coordinating a group order of the index with several members of the North Shore club with an arrangement that the books be left at Harvard and distributed by myself, thus eliminating postage costs. If you are interested in this opportunity, send a check or money

(over)



(ROCKS & MINERALS INDEX, CONT.)

order payable to me(Shelley Monaghan) at 12 Conant Drive, Brockton, MA 02401. My deadline for taking orders(prepaid only) is December 16, 1987. You of course, can make your own arrangements by writing directly to Ron Bentley, at P.O. Box 305, Enfield, CT 06082, if you wish a copy but do not want to be part of the group order. Remember, however, that copies of the index will not be available from the publisher until after the first of the year.

AFRICAN SWAP

Those of you who participated in the swap of micromaterial with the South African club will be pleased to note that the material will be available at the November meeting. If you are one of the 10 persons who participated in but cannot get to the next meeting, please contact me about arrangements concerning this material.-Ed.

CLUB NEWS

At the last meeting of our club, it was voted to donate a subscription to Rocks & Minerals magazine to the Auburn Public Library at the special rate ($23) as advertised in the September-October issue, page 316.

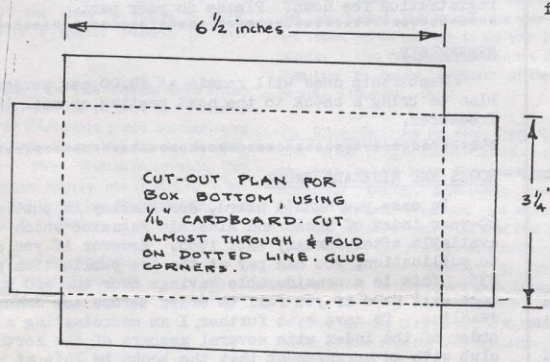
HELPFUL HINT

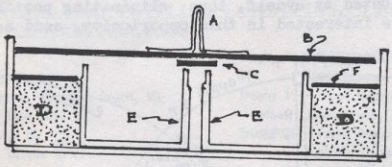
If you have miserite associated with calcite from Mont Saint-Hilaire, Steve Cares suggests a short soak in dilute hydrochloric acid to remove calcite and expose the miserite crystals, which are otherwise embedded in the calcite.

(Most of our club members found mostly miserite on the September trip to Mont Saint-Hilaire, but they now tend to pronounce it "mihz-er-ite" due to the"miserable"weather encountered on that trip.)

CONSTRUCTION OF BOX TO SAFELY DISPLAY SPECIMENS.

from CMMA "MICRONEWS"
February, 1987





MAKE A BOX COVER AS FOR THE BOTTOM BUT OF SLIGHTLY LARGER DIMENSIONS. SECURE WITH RUBBER BANDS.

END VIEW, TO SCALE

A - FOLDED TAPE LIFT HANDLE (IT FOLDS FLAT)
B - PROTECTIVE COVER OF CARDBOARD
C - SECURITY CARDBOARD TO HOLD M/M BOXES GLUE AT BOTH ENDS.
D - STYROFOAM
E - MICROMOUNT BOXES WITHOUT COVERS
F - LABEL CARDBOARD

THE KOLA PENINSULA

By William Shelton

One of the most remote and possibly coldest place that is known to produce large numbers of minerals, the Kola Peninsula, is a classic locality within the Soviet Union. Using a world map you will find this region between 67°N and 70°N, and between 30°E and 40°E, bordering both Finland and Norway. Some references refer to Lapland, an area including ~~both~~ Norway, Sweden, Finland and the Kola Region.

Some names are important in the mineralogy and labeling of Kola specimens. On the map, you will find a town labeled Kola (32°E, 68°N) which provides the name for this peninsula. This entire region is the Murmansk Oblast (for the city Murmansk), which is part of the Karelian A.S.S.R. This is similar to our system of counties and states, where an oblast is the county. Many references refer to the Lovozero Massif (named for Lovozero) and the Khibiny Mountains (named for Khibinogrsk, which is now called the Kirovsk); they are the mineral-rich mountainous areas in the center of the Kola Peninsula which are of interest to many collectors.

Many important products come from this region. Nepheline, which is used to produce aluminum, is processed at Kandalaksha. Apatite is used to produce superphosphates. Other products include copper, nickel, uranium, granite and marble. The Lovorzero-Khibiny region lies within the confines of a military base and no mining or collecting occurs here most of the time. Materials available today come from the extensive collections made by the Soviet mineralogist, Alexander Fersman, in the 1930s. It is thought that some very restricted collecting may be occurring today and this may be helping to supply the demand for rare minerals.

Labels for specimens may be very precise or rather general, depending on the source and the information provided or available when the minerals were originally secured. Very old samples may be labeled Northern Russia, Russian Lapland, Kola or Khibian Tundra. More precise labels, of more recent vintage, may give the name of a mountain and the massif, such as Mt. Rasvumchorr, Khibiny massif or Mt. Karnasurt, Lovozero massif. It is generally agreed that the Khibiny area has more different minerals than the Lovozero area.

The rocks which compose this region are syenites, intrusive igneous rocks, where feldspars and amphiboles are essential components. Typical accessory species include pyroxenes, biotite, magnetite, titanite and others. This area also has pegmatites with important mineral deposits of rare metals - the nepheline syenite pegmatites which are similar to those found at Mont Saint-Hilaire in Canada. Elements such as beryllium, titanium, zirconium, strontium, etc. have contributed to the diversity of rare species. Several common minerals occur - many are really rare elsewhere; for example eudialyte, nepheline, ussingite and polylithionite are common in the Lovozero pegmatites. Over 165 mineral species are known from the region; more are still being discovered as work proceeds on the rare species found here.

A look at the minerals would be instructive at this point. Listed below, you will find some descriptive data for some of the species.

Aegerine(also called Acmite)--rather common as dark green to black; very elongated prisms; often embedded in lighter colored materials. Steep. pointed terminations and radial aggregates occur.

Astrophyllite--golden yellow to bronze colored aggregates, often in star-like groupings. Platy material may appear to be nearly metallic; it is inflexible and inelastic and exhibits perfect cleavage.

Cancrinite--massive white or yellow material, generally translucent and looks a bit less shiny on the cleavage surfaces. Forms as a primary mineral or at the expense of

(CONTINUED ON PAGE 4.....)

(THE KOLA PENINSULA, CONT.)

nepheline (metasomatic).

Eudialyte--reddish-orange to red-brown massive material occurs with other silicates intergrown in various combinations. Generally glassy to dull depending, in part, on grain size. Translucent, one obvious cleavage; late crystallizing primary mineral in nepheline.

Hackmanite--a variety of sodalite (well-known from Kola) with a pink shade noticed on fresh fracture that fades upon exposure to light but returns if kept in the dark for several days. Much material is light gray and massive.

Lorenzenite--as the variety ramsayite; dark brown doubly-terminated crystals embedded in dark green, fibrous matrix with eudialyte grains. It looks like some of the amphiboles, i.e., hornblende with a large "a", small "m", and small "b" prism faces.

Nepheline--large masses may be white, yellow or gray. Usually translucent; exhibits poor cleavage; crystals very rare. This may be compact or granular.

Plumbomicrolite--little data published; the ones I observed were crude octahedral crystals sans matrix. Dull luster, greenish-yellow color; West Kievy given as the location (in Kola).

Raite--very faint to colorless needles nested in small cavities. Often associated with pink zeolite. An extremely attractive micromineral; however, it is rare and hard to come by.

Ussingite--deep pink-gray, massive material. Shiny cleavage surfaces are often found. A common mineral at Lovozero and elsewhere.

This (following) list includes species, varieties, etc., not described in the earlier part of this article.

aenigmatite
amazonite(see microcline)
apatite
arfvedsonite
barytolamporphyllite
beryl
burbankite
delhayelite
denisovite
elpidite
epididymite
fenaksite
fersmanite
fluorapatite
gerasimovskite
kyanite
labontsovite
lamprophyllite
lithiophosphate
lomonosovite
loparite
lovchorrite (see mosandrite)
lovozerite
magnesium astrophyllite
mangan-neptunite
microcline
mosandrite
narsarsukite
natrolite
nenadkevichite
nordite
phlogopite
platinum
pollucite
polylithionite
pyrrhotite
ramsayite(see lorenzenite)
rinkolite(see mosandrite)
schizolite*
shcherbakov
sodalite
taeniolite
tikhvinite
titanite
villiaumite
vinogradovite
wadeite
yuksporite
zorite

This article should have provided some idea of the variety of minerals found on the Kola Peninsula. Perhaps the descriptions will be useful in your study of minerals. In case you are wondering, this area is similar to Mont St. Hilaire in many respects. As always, I appreciate your comments on this subject.

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From The Danburite, March 1987

(*manganoan pectolite--Ed.)