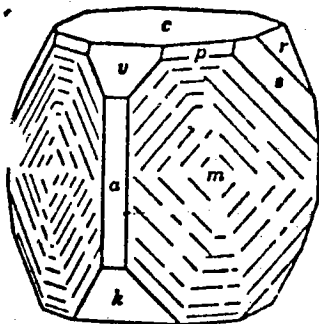


# MICROMOUNTERS OF NEW ENGLAND



CRYOLITE

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NEWSLETTER #46

January 4, 1979

Boston University will be the location of the next regular meeting of the Micromounters to be held on Sunday, January 21, 1979, from 10AM to 4PM (see enclosed map). Arrangements have been made by John Stewart, of the Geology Department.

A special event has been planned - we will hear about micro (microgram or larger) chemical analysis that is both qualitative and semi quantitative with methods, procedures, and examples given and enhanced by 15 slides of the home technique of our guest, Mr. Lawrence Pitman, of Sudbury.

We will also have an identification period for Francon material and a chance to view John Stewart's reference collection from there, many of which have been X - rayed.

In case of bad weather the meeting will be held on January 28, 1979.

*Also held on 2nd date*

For those of you looking for something new to view - try snowflakes under the scope. You will have to bring the microscope outside, but under a roof like a porch or garage (unheated) and capture some of the white stuff on a dark background. I think you will be amazed at what you can see.

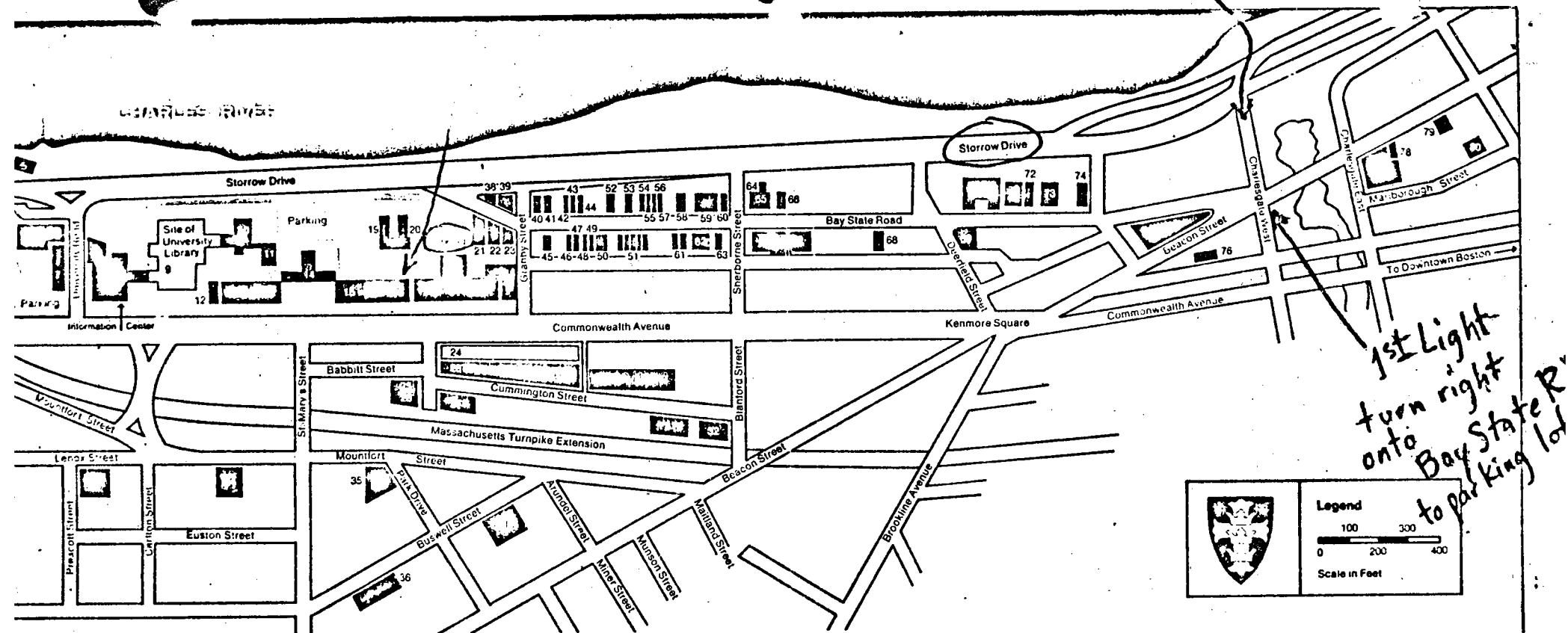
### 1st mtg

John + Margaret Stewart  
Steve + Janet Cares  
Norm Biggart  
Fred Bass  
Carolyn Jacobsen  
Gabrielle Coignet

### 2nd mtg

N. Biggart  
Jim + Betty Tysanousky  
Stew + Janet Cares  
Inez Chick  
Pat Barker  
Palmer Severens  
Robert Churchbait  
Mr + Mrs R. Robert Pearlman  
Ralph + Violet Carr

Margaret Sach  
Ray Desnoourt  
John Anderson



### Libraries and Museums

- 33 African Documents Library
  - 15 Chenery Library and Museum
  - 17 Business and Economics Library
  - 13 Jefferson and Brown Museum
  - 15 Jewish Ritual Silver Collection
  - 15 Lincoln Room
  - 9 Mugar Library (Sept. — 1966)
  - 11 Pappas Law Library
  - 17 Philatelic Literature Collection
- (All other libraries located in individual schools)

### Religious Organizations and Facilities

- Chaplains
- 53 Protestant
- 41 Catholic
- 38 Jewish
- 14 Marsh Chapel
- 14 Dean of the Chapel
- 40 St. Jerome's Chapel
- 53 Danielsens House (University Christian Movement)
- 38 Hillel House
- 41 Newman House

### Faculty and Staff Facilities

- 8 Faculty and Staff Dining Room

### Women

- 35 Audubon Court, 518 Park Drive
- 48 Boyd Hall, 200 Bay State Road
- 77 Charlesgate Hall, 4 Charlesgate East
- 60 French House, 153 Bay State Road
- 52 Harriet E. Richards Co-op House, 191 Bay State Road
- 74 Raleigh House, 2 Raleigh Street
- 70 Shelton Hall, 91 Bay State Road
- 67 The Towers, 140 Bay State Road
- 1 West Campus Residence Halls
- 72 79 Bay State Road
- 71 81 Bay State Road
- 63 154 Bay State Road
- 62 160 Bay State Road
- 59 161 Bay State Road
- 61 166 Bay State Road
- 58 167 Bay State Road
- 57 175 Bay State Road
- 56 177 Bay State Road
- 55 179 Bay State Road
- 54 181 Bay State Road
- 51 186 Bay State Road
- 44 199 Bay State Road
- 43 201 Bay State Road
- 42 203 Bay State Road
- 47 206 Bay State Road
- 46 208 Bay State Road
- 79 519 Beacon Street
- 78 531 Beacon Street

- 7 SAR Cig, Univ Rd
- 8 Sherman Union, 775 Comm Ave
- 9 Mugar Library, 771 Comm Ave
- 10 SED, LAW, 765 Comm Ave
- 11 Pappas Law Library, 765 Comm Ave
- 12 SSW, Bursar, Compl, Data Process, 755 Comm Ave
- 13 STH, Theo Dorm, 745 Comm Ave
- 14 Marsh Chapel, Dean of Chapel, 735 Comm Ave
- 15 CLA, GRS, Chenery Lib, 725 Comm Ave
- 16 Adm Off, 705 Comm Ave
- 17 CBA, DCE, Sum Term, Bus and Econ Lib, Hayden Hall, 685 Comm Ave
- 18 Chem (Stone Sci Bldg), 675 Comm Ave
- 19 Photo Sv, Dean of Women, CLA Fac Off, Human Relations Cntr, 270 Bay St Rd
- 20 SON, Campus Police, 264 Bay St Rd (SSW until fall 1965)
- 21 CLA Fac Off, 236 Bay St Rd
- 22 News Sv, Rgstr, Housing & Food Sv, CBA Fac Off, 232 Bay St Rd
- 23 Chancellor, Finl Aid, Vet and Selective Sv Cntr, Credit Union, 226 Bay St Rd
- 24 Women's Dorm, Garage, 700 Comm Ave (Sept 1966)
- 25 Clinic, 112 Cmgtn St
- 28 ENG, 110 Cmgtn St
- 27 B&G, Prsnl, Prchsng Dept, 100 Cmgtn St
- 28 Counseling Sv, Placement Sv, Phys Sci Cntr, Computing center 700 Comm Ave
- 29 Psych Rsch Lab, 700 Comm Ave
- 30 SPC WRUP-FM WRUP-TV, 640 Comm Ave

- 48 Boyd Hall, 200 Bay St Rd
- 49 Fac Res, 198 Bay St Rd
- 50 Women's Dorm, 196 Bay St Rd
- 51 Women's Dorm, 186 Bay St Rd
- 52 Harriet E. Richards Co-op House, 191 Bay St Rd
- 53 Danielsens House, Chaplain, 185 Bay St Rd
- 54 Women's Dorm, 181 Bay St Rd
- 55 Women's Dorm, 179 Bay St Rd
- 56 Women's Dorm, 177 Bay St Rd
- 57 Women's Dorm, 175 Bay St Rd
- 58 Women's Dorm, 167 Bay St Rd
- 59 Women's Dorm, 161 Bay St Rd
- 60 Women's Dorm, 153 Bay St Rd
- 61 Women's Dorm, 166 Bay St Rd
- 62 Women's Dorm, 160 Bay St Rd
- 63 Women's Dorm, 154 Bay St Rd
- 64 Off of Pres. & V Pres, 147 Bay St Rd
- 65 Alumni House, 145 Bay St Rd
- 66 Law-Med Inst, 141 Bay St Rd
- 67 Towers, 140 Bay St Rd
- 68 Internat'l Stu Cntr, 118 Bay St Rd
- 69 Fac Res, 96 Bay St Rd
- 70 Shelton Hall, 91 Bay St Rd
- 71 Women's Dorm, 81 Bay St Rd
- 72 Women's Dorm, 79 Bay St Rd
- 73 Fac Res, 69, 71 Bay St Rd
- 74 Raleigh House, 2 Raleigh St
- 75 Myles Standish Hall, 30 Bay St Rd
- 76 Women's Dorm, 481 Comm Ave
- 77 Chas'gate Hall, 4 Chas'gate East

## Common Courtesy and Visiting Collectors

Early in the month of December,,I received a phone call from a California mineral collector who was in town locally on business. It is my desire to be as helpful as possible to visitors and with that thought I told him I'd call him back with information he could use. After making a couple of phone calls, I learned that the man was a California mail order dealer. I knew, Fogg & Whitmore of Palermo, also being dealers might also be interested in doing business with another dealer. I obtained confirmation of this and called the visitor back with this information. I made a point of telling the ~~visitor~~ visitor that I was aware of his business dealings and disproved of his approach to local people professing to swap for his personal collection when it is known that most dealers will eventually sell anything they acquire. He maintained his honesty in swapping however I maintain this is misrepresentation. Perhaps if you are called by an out-of-town visitor, the first question might be: "Are you an advertising mineral dealer or do you work for one?". Hopefully an honest answer may lead to another friendship.

Norm Biggart

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MINERALS OF WASHINGTON - written & illustrated by Bart Cannon. Published by Cordillera of Washington in 1975. 184 pages 5 $\frac{1}{2}$ x8 $\frac{1}{2}$  paperback \$5.43 including handling from Bart Cannon, 1041 N.E. 100 Street, Seattle, Wash. 98125. Over 71 pen & ink drawings of minerals including unusual ones such as: leadhillite, forsterite, ferrierite, epistilbite, erionite, anthophyllite, ankerite and thompsonite. Approximately 354 mineral descriptions (reliably done) with locations (site name, town & county) and associated minerals and deposits. There is no comprehensive index so the pages are both numbered and alphabetized in relation to the alphabetical mineral listing. The intent of the book appears to be useful as a field mineral association guide because it has lengthy descriptions of mineral environments, descriptions of mineral occurrences within the provinces of the state, county index of mineral site locations with references to page number also a fairly lengthy explanation of the mineral descriptions used in the book including mineral crystal systems. There is a glossary of mineral & rock terms and a bibliography. The pen & ink drawings are excellent. A good book for anyone interested in the varied mineral occurrences of this country. Norm Biggart Dec.1978

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MINERALS OF COLORADO - A 100 year record: by E.B. Eckel. 1961  
399 pages \$5.00 available from the Branch of Distribution, U.S.  
Geological Survey, 1200 South Eads Street, Arlington, VA 22202.  
This is an excellent reference book for the field and mineral collector  
which has been out of print but is now available. A great buy!!

# THE MINERALS OF MT. ST-HILAIRE

The following is the list of minerals reported to date from Mt. St-Hilaire.

The list was compiled by L. Horvath, 47 Bois Franc, Ste. Julie, Quebec, Canada, JOL 2C0

ABBREVIATIONS: Species underlined Hilairite = First identified from NSH

\* Before species \*Brockite = Confirmation Required

## RARITY:

VC = Very Common

ER = Extremely Rare

C = Common

VR = Very Rare

MC = Moderately Common

R = Rare

MR = Moderately Rare

| MINERAL         | RARITY | MINERAL        | RARITY | MINERAL             | RARITY |
|-----------------|--------|----------------|--------|---------------------|--------|
| ACMITE-AEGIRINE | VC     | DONNAYITE      | VR     | LÖLLINGITE          | ER     |
| ACTINOLITE      | MC     | EKANITE        | VR     | LORENZENITE         | MC     |
| ALBITE          | VC     | ELPIDITE       | MR     |                     |        |
| ALMANDINE       | ER     | EPIDIDYMITE    | VR     | MAGNETITE           | R      |
| ANALCIME        | VC     | EUDIALYTE      | MC     | MALACHITE           |        |
| ANATASE         | VR     | EWALDITE       | ER     | MANGAN-NEPTUNITE    | VR     |
| ANCYLITE        | C      |                |        | MARCASITE           | VR     |
| ANDRADITE       | R      | FLUORITE       | C      | MICROLINE           | VC     |
| ANGLESITE       | ER     |                |        | *MINNESOTAITE       |        |
| ANKERITE        | R      | GAIDONNAYITE   | ER     | MOLYBDENITE 3R & 6H | MC     |
| ANTIGORITE      | R      | GALENA         | MC     | MONTEREGIANITE      | VR     |
| "APATITE"       | MR     | GENTHELVITE    | VR     | *MONTMORILLONITE    |        |
| APOPHYLLITE     | MR     | GIBBSITE       |        | *MOUNTAINITE        |        |
| ARAGONITE       | ER     | GMELINITE      | ER     | MOSANDRITE **       | VR     |
| ARFVEDSONITE    | MC     | GOETHITE       | ER     | MURMANITE           | ER     |
| SENOPYRITE      | VR     | GOTZENITE      | ER     | MUSCOVITE           | C      |
| ASHCROFTINE     | ER     | GROSSULAR      | ER     | MCKELVEYITE         | ER     |
| ASTROPHYLLITE   | C      | GRUNERITE      | VR     |                     |        |
| AUGITE          | MC     | GYPNUM         | ER     | NARSARSUKITE        | R      |
|                 |        |                |        | NATROLITE           | VR     |
| BARYLITE        | ER     | HARMOTOME      | R      | NENADKEVICHITE      | R      |
| BARITE          | VR     | HEDENBERGITE   | VR     | NEPHELINE           |        |
| BASTNAESITE     | VR     | HEMATITE       | VR     | NEPTUNITE           | ER     |
| BEHOITE         | ER     | HELVITE        | ER     | NORDSTRANDITE       | R      |
| BIOTITE         | C      | HEMIMORPHITE   | ER     |                     |        |
| BIRNESSITE      | VR     | HILAIRITE      | ER     | ORTHOCLASE          | C      |
| *BRITHOLITE     |        | DIORTDAHLITE   | ER     |                     |        |
| *BROCKITE       |        | HORNBLende     | C      | *PALYGORSKITE       |        |
| BROOKITE        | MR     | HYDROGROSSULAR |        | PARISITE            | ER     |
| BURBANKITE      | ER     | HYDROTALCITE   | ER     | PECTOLITE           | MC     |
|                 |        |                |        | PHLOGOPITE          | MR     |
| CALCITE         | VC     | ILMENITE       | MC     | POLYLITHIONITE      | MC     |
| CANCRINITE      | R      |                |        | PYRITE              | VC     |
| CARLETONITE     | R      | JOAQUINITE     | ER     | PYROCHLORE          | VR     |
| CATAPLEIITE     | MR     |                |        | PYROLUSITE          | VR     |
| CHALCOPYRITE    | VR     | KAINOSITE      | ER     | PYROPHANITE         | MR     |
| "CHLORITES"     | MC     | KAOLINITE      |        | PYRRHOTITE          | MC     |
| CORDYLITE       | ER     |                |        | PHILLIPSITE         | ER     |
| CHABAZITE       |        | LABUNTISOVITE  | VR     |                     |        |
|                 |        | LAVENITE       | ER     | QUARTZ              | C      |
| CATOLITE        | ER     | LEIFITE        | ER     |                     |        |
| CRAWSONITE      | VR     | LEMOYNITE      | ER     | RAITE               | ER     |
| DELHAYELITE     | ER     | LEUCOPHANITE   | R      | RIEBECKITE          | R      |
| DIOPSIDE        | VR     | LEUCOSPHEENITE | VR     | *RIPIDOLITE         |        |
| DOLOMITE        | MR     | "LIMONITE"     | MC     | RUTILE              | MR     |

## The Minerals of Mt. St. Hilaire continued....

| MINERAL       | RARITY | MINERAL               | RARITY | MINERAL             | RARITY |
|---------------|--------|-----------------------|--------|---------------------|--------|
| RHODOCHROSITE | MC     | TAENIOLITE            | R      | VESUVIANITE         |        |
| TERITE        |        | *TALC                 |        | (IDOCRASE)          | MR     |
|               |        | <u>TETRANATROLITE</u> | MC     | VILLIAUMITE         | ER     |
| SCHEELITE     | ER     | THAUMASITE            | ER     | VINOGRADOVITE       |        |
| SEPIOLITE     |        | THOMSONITE            | ER     |                     |        |
| SERANDITE     | MR     | THORITE               | ER     | WILLEMITE           | VR     |
| SIDERITE      | VC     | THOROGUMMITE          | ER     | WÖHLERITE           | ER     |
| SODALITE      |        | TITANITE (SPHENE)     | MC     | WOLLASTONITE        |        |
| (HACKMANITE)  | VC     | *TOBERMORITE          |        | WURTZITE            | ER     |
| SPHALERITE    | C      | TUNDRITE              | ER     | WULFENITE           | ER     |
| STEENSTRUPINE |        |                       |        |                     |        |
| STILLWELLITE  | ER     |                       |        | <u>YOFORTIERITE</u> | ER     |
| STRONTIANITE  | VR     |                       |        |                     |        |
| SYNCHYSITE    | R      |                       |        | ZIRCON              | C      |

Our sincere thanks to Les for the above information.....a big job well done!  
Its a great place to collect micro minerals and 151 minerals is fantastic!

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### BENITOITE

Benitoite was discovered as a new mineral in San Benito County in 1907. It has been reported as occurring in Belgium in sands in the Owitthe Valley, Anten, and in Southwest Texas in Eocene sands. There is a white Benitoite found in Fresno County and grains of Benitoite have been found in Kern County. San Benito County is where it was first found and it comes in colorless or sapphire blue crystals. The first pieces were thought to be sapphire when discovered in the headwaters of the San Benito River. Later they were found to be new minerals. The crystals occur in a zone of narrow veins of natrolite in serpentine and are associated with neptunite and joaquinite.

(Thanks to Juanita Curtis of the Southern California Micro-Mineralogists.)

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### AUTUNITE

Autunite is a hydrated phosphate of calcium and uranium. A secondary mineral found chiefly in the zone of oxidation and weathering of hydrothermal veins and pegmatites. It is derived by alteration of uranium or other uranium containing minerals. Torbernite is hydrated phosphate of copper and uranium. Although similar in structure to autunite, copper and lime may not substitute for each other. This confirms the conclusion by Hurlbut and the statement in Dana's System, (page 985) that torbernite and autunite are not end members of a series. But barium and magnesium may substitute for calcium. The water content may vary and when doing so may alter to metautunite. This change, under varying conditions, may be reversible or irreversible.

Colour varies from lemon-yellow to sulphur yellow and may be transparent or translucent. It has a green streak and pearly lustre. Fluoresces a yellowish green in ultraviolet light.

(Thanks to the Mineral Mite, bulletin of the Micro Mineralogists of the National Capital Area)

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