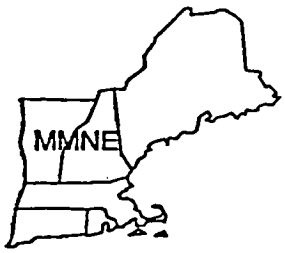

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Dues are $7.00/year and due on January 1st, payable to the Treasurer.

News items for the *Newsletter* are welcome and should be submitted to the Editor.
The *Newsletter* may be quoted if credit is given.
The Club address is c/o Editor.

Upcoming Meetings
July 17th, Herb & Julia Fielding, Lake Winnisquam, NH.

MICROMOUNTERS OF NEW ENGLAND NEWSLETTER

#215 April, 1999

The MMNE was organized on November 8, 1966, for the purpose of promoting the study of minerals that require a microscope.

Next meetings

The next MMNE meeting will be held on Saturday, May 15th at the Moose Lodge, 67 Fitchburg St., Marlborough, MA. Doors open at 9:00 AM. This meeting requires pre-registration.

An informal summer meeting will be held on July 17th, at Herb and Julia Fieldings, on Lake Winnisquam, NH. Meeting time and directions will be presented in a future bulletin.

May meeting directions

The map to the May meeting has been reproduced in this bulletin with a clarification. Pleasant Street, about 1 mile along the Rte. 85 Connector east of I-495, should have been depicted as an underpass. The next intersection, about a half-mile east of Pleasant Street, is with Fitchburg Street. Take a right at this intersection. Now heading south on Fitchburg Street, proceed past the vocational school on the left. The Moose Lodge, at 67 Fitchburg Street, will be on the left after a half-mile or so. The building is beige-brown in color and sits somewhat down from the road.

MMNE member Frank Leighton

I was informed earlier this month that MMNE member Frank Leighton has passed away after a period of illness. We extend our condolences to Phyllis Leighton and other family members.

Mont Saint-Hilaire collecting dates

Dates when Mont Saint-Hilaire will be open for collecting this year are presented in the Calendar of Upcoming Events (next page). The entry fee is ten dollars per person. Gates open at 9 AM sharp and close at 4 PM. Hard hats are mandatory; eye goggles, gloves and boots are highly recommended. Working on or near the quarry walls is strictly forbidden; repeated offenses may lead to expulsion. Heavy mallets or sledgehammers are useful for some of the harder rock types.

Faujasite-Na: Another Species for the Mont Saint-Hilaire List by Modris Baum

From *MICRONEWS*, bulletin of the Canadian Micro Mineral Association, v. 33, no. 3 – May, 1999.

Three previous notes in *MICRONEWS*, (v. 31, no. 8, Les Horvath, Oct. 1997; v. 32, no. 2, Tony Steele; April, 1998, Conference Issue, Les Horvath) described a very interesting suite of minerals found in the pegmatite-hornfels contact (the so-called "zebra rock") exposed in the south corner of the Poudrette quarry in April of 1997.

Among the species listed, three - ferrocolumbite, hercynite, and schorl – were reported for the first time from Mont Saint-Hilaire. Recently, Malcolm Back of the ROM and Robert Gault of the Canadian Museum of Nature, using XRD and semi-quantitative microprobe analysis respectively, have confirmed yet another first-time occurrence, faujasite-Na, a zeolite, from the same exposure. The faujasite-Na reported here was collected May 24, 1997. It came from a small boulder that was somewhat removed from the bulk of the same material being collected.

Calendar of upcoming events

May 7-9, Augusta, ME. 10th Annual Maine Mineral Symposium. Senator Inn, Augusta, ME. Info: Woodrow Thompson, Maine Geological Survey, 22 State House Station, Augusta, ME 04333-0022; phone (207) 287-7178. Registration by email: woodrow.b.thompson@state.me.us

May 8-9, Topsfield, MA. North Shore Rock & Mineral Club Show. Topsfield Fairgrounds. Info (781) 592-4148.

May 15, Marlborough, MA. MMNE 18th Annual Symposium. 67 Fitchburg St., Moose Lodge, Marlborough, MA. See registration form this newsletter.

May 29-30, Portland, ME. 16th Annual Rock & Mineral Show, sponsored by the Maine Mineralogical & Geological Society. Univ. of New England, Westbrook College Campus Gym, 716 Stevens Ave., Portland, ME. Info: Winston Gandy (207) 933-4163.

May 29-30, Mont Saint-Hilaire. Sat., Sun. Open for collecting.

July 3, Mont Saint-Hilaire. Sat. Open for collecting.

July 4, Varenne, Quebec quarry. Sun. Open for collecting.

July 24-25, Burlington, VT. 20th Annual Champlain Valley Gem, Mineral and Fossil Show, sponsored by the Burlington Gem & Mineral Club. F. Tuttle Middle School, 560 Dorset St., South Burlington VT.

July 24, Mont Saint-Hilaire. Sat. Open for collecting.

August 13-15, Springfield, MA. East Coast Gem, Mineral & Fossil Show. Eastern Exposition Center, Springfield, MA.

August 21, Mont Saint-Hilaire. Sat. Open for collecting.

Sept. 18, Mont Saint-Hilaire. Sat. Open for collecting.

Oct. 23, Mont Saint-Hilaire. Sat. Open for collecting.

Prior to the recent changes in zeolite nomenclature which divided faujasite into three distinct species, Coombs et al (1997) and Mandarino (1999), and Tschernich (1992), listed about a dozen occurrences of "faujasite" from 5 countries: Canada, Germany, Italy, Switzerland, and the United States. Tschernich references Van Velthuizen (1991), giving the Canadian occurrence as "near Davis Hill and Khartoum" in Ontario and "near Laurel; Hincks Bridge; and Notre Dame de la Salette" in Quebec. A "Na-rich faujasite" was reported from the Daisy Mica mine, Ottawa Co. The US occurrences are in California, Hawaii, and Michigan. Under the heading "Chemical Composition", he reports that faujasite-Na has been found at Sasback, Kaiserstuhl, Germany; Valley Wells, San Bernadino, California; Salt Lake Crater, Honolulu, Oahu, Hawaii; and Aci Reale, Sicily. Faujasite-Ca was reported from two localities, Annerod, Hessen and Grossen-Buseck, Germany.

Tschernich (1992) reports that "faujasite" is cubic, colorless to white, with a vitreous luster. The hardness is 5, with a conchoidal to uneven fracture and a perfect {111} fracture. Optically it is isotropic with a refractive index of 1.43. The most common form is {111}, with rare {556} and {100} reported. Spinel law twins, contact on {111}, are also reported.

To date only 4 specimens are known from Mont Saint-Hilaire but the crystals are inconspicuous and could, at first sight, be mistaken for fluorite. The crystals are colorless, translucent to nearly transparent octahedrons, always twinned or in clusters of a few individuals. On some specimens the faces appear slightly "frosted". Other crystals are water clear. The most characteristic associated mineral is phillipsite in lustrous "crystal balls" which could be mistaken for gobbinsite. The phillipsite was identified by William Henderson (private communication, 1997) using optical methods on a different specimen from the same occurrence, and was later confirmed by XRD at the ROM. A peculiarity of this phillipsite is weak greenish white fluorescence under SW ultraviolet. Some of the specimens also have phillipsite in clusters of distinct, fairly well formed, individuals. Both specimens examined at the ROM had white, pearly, radiating balls of gmelinite associated with the faujasite-Na.

For those interested, good pictures of Kaiserstuhl "faujasite" can be seen on the CD-ROM "The Photo-Atlas of Minerals", The Gem & Mineral Council, Los Angeles County Museum of Natural History. 1998. This source describes the coating on this" faujasite" as "opal". whereas Tschernich states that it is a "blue-gray, amorphous, hydrated aluminosilicate".

References

Coombs et al (1997) Recommended nomenclature for zeolite minerals: Report of the Subcommittee on Zeolites of the International Mineralogical Association, Commission on New Minerals and Minerals Names. Many journals, for example, Canadian Mineralogist 35, pp1571-1606.

Mandarin, J.A. (1999) The Zeolite Group. Min. Rec. v. 31, no. 1, pp5-6.

Tschernich, R.W. (1992) Zeolites of the World. Geoscience Press, Inc. Phoenix, AZ.

Van Velthuizen, J. (1991) The Occurrence of Zeolites in the Central Metasedimentary Belt of the Grenville Province. Rocks and Minerals, v. 66, pp44-45.

Moose Lodge, Marlborough, MA

The map shown has been modified to show all approaches, so that compass directions and distances are distorted.