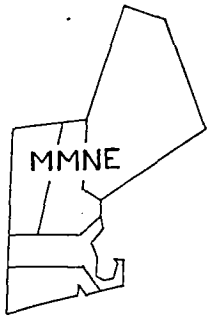

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Dues are $6.00/year and due on January 1st, payable to the treasurer.

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

Upcoming Meetings
May 11, 1996 - Ashland, MA 4-H Conference Center

July 13, 1996 - Fielding's Camp on Lake Winnesquam

MICROMOUNTERS OF NEW ENGLAND NEWSLETTER

April 1996 #190

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

MMNE MEETING ANNOUNCEMENTS

The **APRIL** meeting will be held at the Northboro, MA public library on April 13, 1996. A map is on the back of this page.

The **MAY** meeting will again be held at the Ashland, MA 4-H Center. Our featured speaker will be Dan Behnke, a nationally known photomacrographer and micromounter. Dan will be giving two lectures. The morning talk will be on phosphate minerals from several well known localities including the Tip Top Mine (Custer, SD) and the Palermo Mine (North Groton, NH), and the second, on photomacrography, will begin at about 4pm. ***If you have not registered, please do so now.***

Our **JULY** meeting, which has traditionally been held at the home of John Reiner in Center Harbor, NH, will be held this year on Saturday, July 13 at the summer home of Herb and Julia Fielding on Lake Winnesquam, which is just south of Laconia, NH. Full details and a map will come in a later issue of the Newsletter.

1996 dates for Mont Saint-Hilaire: May 25 & 26 (Saturday/Sunday), June 29, July 27, August 24, September 14, October 12 (all Saturdays).

MEMBERSHIP NEWS

Please welcome new member:
Robert Sproule, 20 Rolling Hills Drive, E. Bridgewater, MA 02333 (508) 378-9061
and returning members:
Jim Cahoon, 31Parker Street, Maynard, MA 01754 (508)897-8221
Richard Champlain, 15 Burr Rd, Old Lyme CT 06371 (203) 434-5092

FROM THE EDITOR

This publication is now officially the "MMNE Newsletter" as voted at the March meeting.

We *still* need sales items and give-aways for the May meeting. Please bring materials to the April meeting if at all possible so that they can be priced and/or prepared ahead of time. Items valued at $5.00 or more will not be reduced to half price after lunch as has been done in the past. Items worth $5.00 or more may be reclaimed at the end of the meeting by the donor if not sold. Please get your items in early and put reasonable prices on them. We can use mineral specimens, books, photographs and any other mineralogically related items for sale or in the silent auction.

At the March meeting, the membership voted to contribute $100 to the Pitman Memorial Fund in memory of Donald McKenna, a member since 1983. Jean McKenna feels that this is a project which Don would have chosen to support. The membership also voted to donate $100 to the same fund in memory of Larry Pitman. Individual donations to the fund may be made out to Harvard University and sent to the Harvard University Mineralogical Museum, 24 Oxford Street, Cambridge, MA 02138. (Indicate that the donation is to be applied to the Pitman Fund.) We are gratified that we may play a small part in the continuation of this project which was so important to Larry and which bears his name.

The following slate of officers was elected at the March meeting. They will take office at the May meeting:
President: Jim Clark; Vice President: Mike Kieron; Secretary: Pat Barker; Treasurer: Janet Cares; Editor: Mike Swanson.

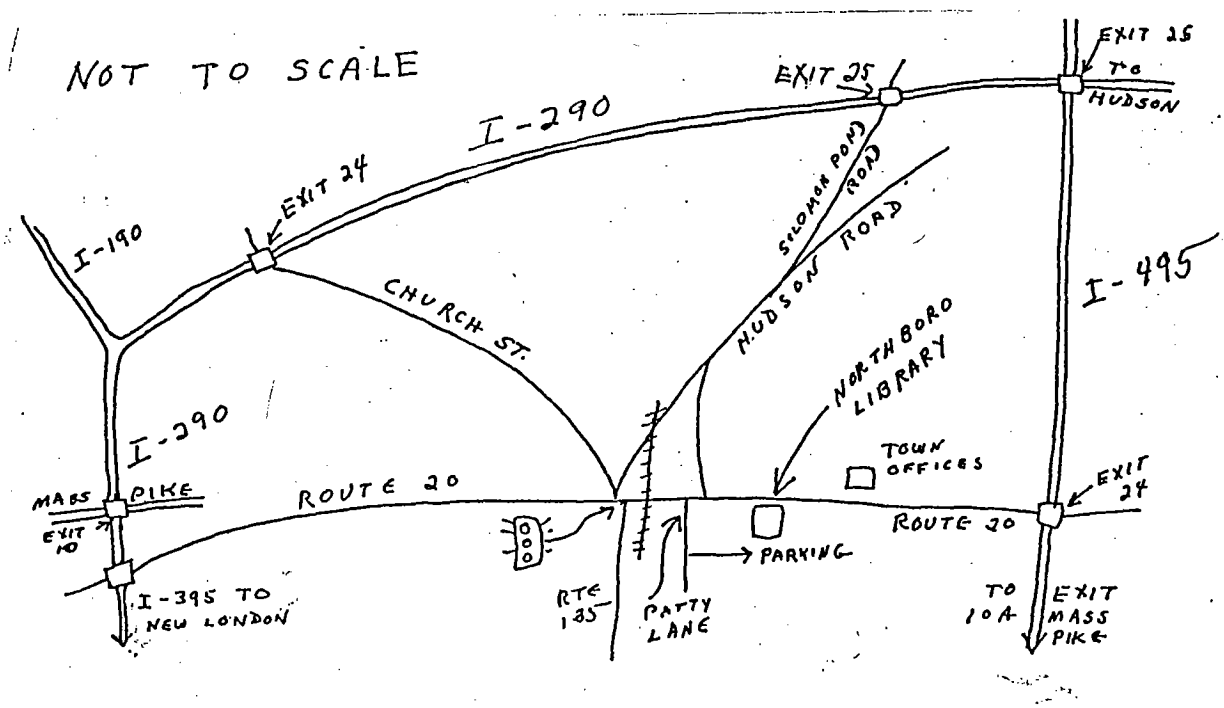
Please contribute to this newsletter. Anything relative to micromounting is fair game, including comments about a collecting site, book or journal reviews, testing techniques, etc.

UPCOMING MEETINGS AND SHOWS

North Shore Rock and Mineral Club Micromounters meet the 2nd Tuesday of each month at the home of John and Margaret Stewart, 244 Mill St., Burlington, MA. For more information call John or Margaret at (617) 272-0854.
April 18-21: Rochester Mineralogical Symposium, Rochester, NY.
April 26-28: Eastern Federation. IBM Country Club & Conference Center, Johnson City, NY. Contact Betty Jones, RR#3, Box 3063,Rome, PA 18837. (717) 247-2613.
April 27-28: Shower of Gems and Minerals. Nashua Mineral Society. Holiday Inn, Rte 3, Exit 4, Nashua. NH.
May 3-5: CMMA 33rd Annual M/M Workshop/Conference. Brock University, St. Catharines, Ontario.
May 3-5: 7th Annual Maine Mineral Symposium. The Senator Inn & Conference Center. Western Ave. & Rte. 95, Augusta, ME. Contact Robert Hinckley, Yarmouth Road, Gray, ME 04039. (207) 657-3732.

CLASSIFIED ANNOUNCEMENTS

This space is avaliable to active members of the MMNE at no cost. Contact your editor with any sale items (no minerals), trades, want items, etc. The announcement will run for 2 issues of the Newsletter.



To Northboro Public Library:
The map shown has been modified to show all approaches, so that compass directions and distances are distorted. The following directions will help:
FROM MASS PIKE WEST: Take exit 10 to I-290 thru Worcester, then exit 24 (Church Street) to Northboro*
FROM I-495 SOUTH: Take exit 24 (route 20) west to Northboro*
FROM I-495 NORTH: Take exit 25 (I-290) to exit 25 (Solomon Pond Road) to Northboro*
*At Northboro follow map to Patty Lane off route 20 between Library and railroad tracks, turn down, then left to Library parking lot. Enter meeting room through rear door at parking lot level.

IN MEMORIAM

LARRY PITMAN

Last month's newsletter reported the death of Larry Pitman with some details of his life and career taken from a newspaper obituary. We would like to add a few word of personal interest from several of our members

Larry became a member of the Micromounters of New England in 1979, but his work and outside activities precluded regular attendance at meetings. In spite of this he could be counted on to present a challenging talk each year when we met in Sudbury, his home of many years.

He was particularly interested in radioactive minerals and in mineral identification. To this end he mastered the art of the ring oven which enabled him to identify not only the elements present in an unknown, but to determine with fair accuracy the amounts present. For this work he often required the use of organic reagents which, if unobtainable, he synthesized himself.

The Raytheon award which he received in 1990 carried with it a grant of $5000 to be applied to a non-profit organization for research. This he chose to be given to Harvard's Mineralogical Museum as the Raytheon-Pitman Fund. On his retirement he joined Harvard as a volunteer research associate where the grant supported his work. During the short time he was at Harvard he was able to publish two papers on his work with minerals, and other papers will bear his name when completed by other members of the group. He was often helpful to a number of our members in identifying their unknowns.

Larry was a unique individual with many varied interests. He was a scientist above all, but was also interested in the arts. He often spoke admiringly of renaissance men, when in fact he was one himself.

Steve and Janet Cares

Larry Pitman was happy to be delving into intricacies of scientific puzzles. His pleasure in turn just dissolved the problems of the world around him. It was not really possible to keep up with Larry because his quick mind would solve the problem of the moment and move on to the next with a smile on his face. He would talk with friends about their interests, but at all times he would seek new information that would cause his listener to realize, either "I'll have to proceed with this new area" or tell Larry, "I cannot move in this direction because of other demands>" I've always been attracted to want to talk with Larry but have frequently come away with a challenge that I could not always fulfill.

N. B. Biggart

(Continued from the Newsletter #189)

SPECIES SPECIFIC CLEANING TIPS

- ***Aurichalcite*** and ***velvet malachite*** are O.K. in an ultrasonic cleaner for a short perior of time. (19)

- ***Carbonates*** can frequently be cleaned using full strength bleach. Sodium dithionate can be used to remove rust stains safely from many carbonates, but since it is a weak acid, test first.. Ascorbic and citric acids are usually safe cleaning solutions but test first.

- ***Calcite*** can often be dissolved using vinegar with little chance of dissolving other species. **Test first!**

- ***Copper (British Museum Method)***. The following formula attacks the black copper oxides but does not attack the copper or the commonly attached cuprite. The solution consists (by weight) of 1 part sodium hydroxide (soda lye), 3 parts rochelle salts (potassium sodium tartrate) and 20 parts H_2O. Soak time may be a few minutes to one hour.

  Copper (calcite removal). A dilute solution of sulfuric acid, 1 part acid by volume to 4 parts H_2O will effectively remove calcite without seriously affecting the copper.

- ***Denture cleaner*** has been advocated as a cleaner. Your editor has not tried this, nor does he know the chemistry of the cleaners, so you are on your own. Test with a sample first.

- ***Fluorite*** is extremely heat sensitive, so be careful with ultrasonic cleaning.

- ***Gypsum, variety selenite,*** has perfect cleavage on {010} which allows the penetration of water. Use of detergents will result in deposition of a soap films on the cleavage planes leaving a cloudy crystal. These same cleavage planes also make it difficult to completely remove residual acid from the crystals.

- ***Hydrocarbon*** deposits on the surface of specimens are part of the natural paragenesis, and removal does alter the mineral suite. If removal is desired, ethyl alcohol, Thin-X™, benzene, and carbon tetrachloride have all been used with varying degrees of success. Benzene and carbon tetrachloride are both dangerous chemicals.

- ***Phosphates***. Do not use a phosphate-based detergent for cleaning as this may well leave a residue on the specimen. (19)

- ***Pyrite, marcasite, and pyrrhotite*** should be cleaned in H_2O if no other cleaning method will remove the foreign material. Marcasite will deteriorate less over the years if water is not used. An overnight soak in vinegar will brighten these minerals as will a soak in dilte oxalic acid.

- ***Silver*** can be cleaned by electrolysis. Place the specimen in an aluminum container along with a solution containing 1/2 oz $NaHCO_3$ and 1/2 oz NaCl per quart of solution. The solution can be gently heated to speed up the reaction. (Pearl)

- ***Zeolites***. Most zeolites can be safely cleaned in some kind of acid. Strong acids will reduce many of them to a silica gel. The acid reactivity is directly related to the mineral's silica content. The low silica zeolites react much more quickly to acid than the high silica ones do. The very high silica zeolites like mordenite are very resistant to acids. (8)