

MICROMOUNTERS OF NEW ENGLAND NEWSLETTER

February 1997

#196

The MMNE was organized on January 14, 1967, for the purpose of promoting the study of minerals that require a microscope.

PRESIDENT

James Clark
18 Central Street
Topsfield, MA 01983-1802
(508) 887-5881

VICE-PRESIDENT

Mike Kieron
38 Merritt Road
East Providence, RI 02915
(401) 434-0281

SECRETARY

Patricia Barker
P.O. Box 810
Campton, NH 03223
(603) 536-2401

TREASURER

Janet Cares
18 Singletary Lane
Sudbury, MA 01776
(508) 443-9180

EDITOR

Mike Swanson
29 Chestnut Hill
Greenfield, MA 01301-3003
(413) 773-3867

Dues are \$6.00/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 quoted if credit is given. The Club address is c/o Editor

Upcoming Meetings

March 15. Burlington, MA public library

MMNE MEETING ANNOUNCEMENTS

The next MMNE meeting will be held February 8, 1997 (Saturday), at the Auburn, MA public library. Doors will open at 9:00 AM..

MEETING REPORTS - OCTOBER/NOVEMBER, 1996

The MMNE donated \$100 to the Rocks and Minerals color fund in memory of Doris Doller who passed away in 1996.

The January meeting was held in the Mineralogy Department at Harvard University and hosted by curator Carl Francis. Vice-President Mike Kieron convened the meeting in the absence of President Jim Clark. (Jim has been ill and would appreciate cards and contact from other members of the club.)

The meeting was held in the same room as the Harvard Micromount collection. Carl spent some time discussing the make-up of the collection which includes mounts by old-timers Fisk, Rakestraw, Bement, Cahn, Hancock and Holden and more recent collectors Gilbert George, Lee Wyman and John Reiner. Steve Cares is curating the micromount collection and mounting the new arrivals. The bulk of the collection is arranged alphabetically, with several special interest sites arranged by location (Mont Saint-Hilaire, Franklin, NJ, the Palermo Mine, NH, and the Tip Top Mine, SD.) The micromounts constitute a working collection and are available for viewing when the museum is open (Monday - Friday, 8:00AM to 4:00PM.)

The Harvard Mineralogical Museum, along with the Botanical Museum, the Museum of Comparative Zoology and the Peabody Museum of Archaeology and Ethnology are being merged into a new Harvard Museum of Cultural and Natural History. Carl Francis and Bill Metropolis will be staff members and MMNE Shelley Monaghan will be a part-time staff person. Carl indicated that there would be push to maintain and improve the great systematic mineral collection at Harvard rather than turning it into a typical glamour exhibit.

MEMBERSHIP NEWS

LAST CALL! Send your dues payment to Janet Cares or see her at the February meeting. Any member whose dues are not paid by February 17, 1997 will not be listed on the annual membership roster.

FROM THE EDITOR

Please give either your editor or the treasurer your full Zip + 4. It is needed for any bulk mailings, and will speed up delivery of regular mailings. We can also print fax numbers and e-mail addresses on the yearly membership roster if you supply them.

For those members with computers - The AMFS Newsletter can be accessed via computer up to one month earlier than the hard copy is available. The Mail Group address is: frsias@eng.clemson.edu.

From the AFMS Newsletter, February, 1996

We recently received (notification of) from the French Association of Micromineral Collectors a copy of a very fine publication entitled "Le Règne Minéral" (The Mineral Kingdom). This first issue is devoted to microminerals. Its 62 pages describe the microminerals of France and are profusely illustrated with beautiful color photographs. The cost of this issue is 100 French francs (about \$21 US). The text is in French of course. (From the CMMA Micronews, May 1996.)

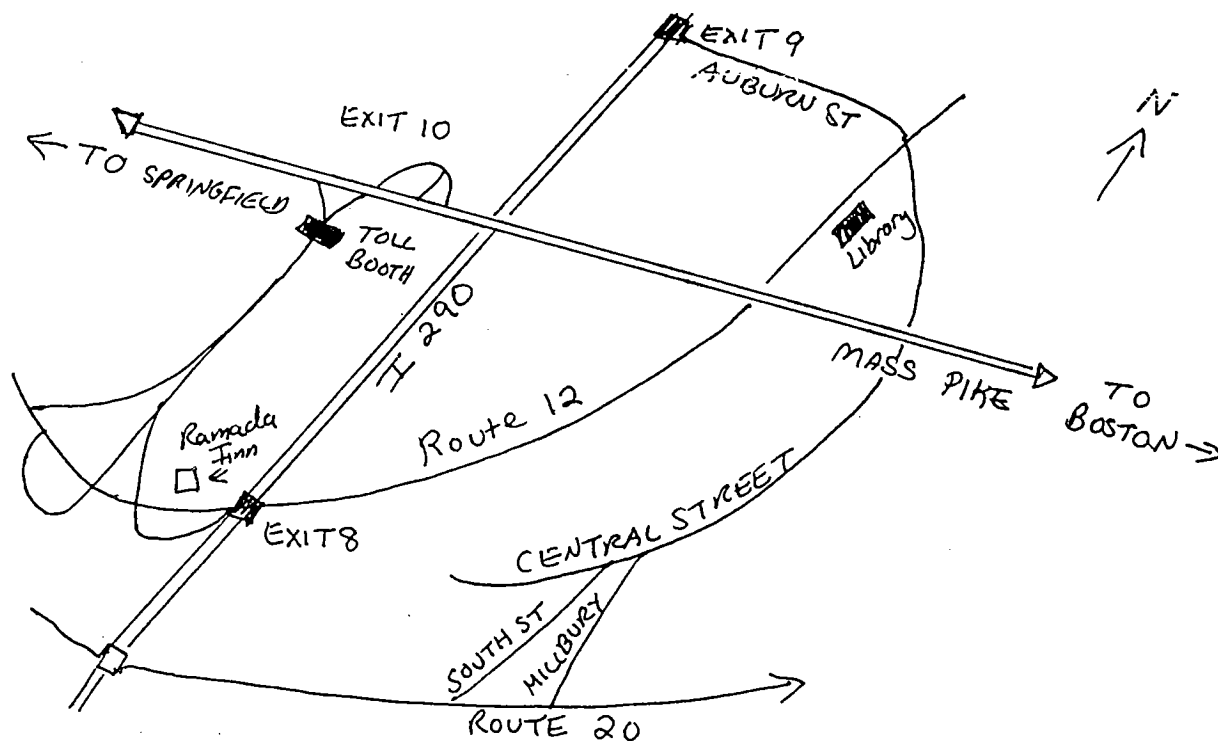
WARNING! by Paul Smith. The Mineral Mite. January, 1997.

Those of you who consider collecting **Road Kill Whiskers** for use as **M/M pedestals**, I have been advised that one should be careful when handling the whiskers because the **Rabies virus** can be contained in the whiskers. A **veterinarian friend** of mine notes that **whiskers are often used to test for rabies** as they are usually readily available and testing them will determine whether the animal had rabies.

UPCOMING MEETINGS AND SHOWS FOR 1997

- North Shore Rock and Mineral Club Micromounters meet the 2nd Wednesday of each month at the home of John and Margaret Stewart, 244 Mill St., Burlington, MA. Guests are welcome. For more information call John or Margaret at (617) 272-0854.)
- March 8: 21st Annual Micromount Swap-Sell-Learn sponsored by the Rocks and Mineral Club of Lower Bucks Co. United Methodist Church, 840 Trenton Rd., Fairless Hills, PA.
- March 15: **MMNE**: (Saturday), Burlington, MA public library. Doors open at 10:00 AM.
- April 10-13: 24th Annual Rochester (NY) Mineral Symposium.
- April 12: **MMNE**: (Saturday), Northboro, MA public library. Doors open at 9:30 AM.
- April 25-27: 25th Annual Atlantic Micromounters Conference sponsored by the Micromounters of the National Capital Area. University of Maryland, College Park, MD.
- April 26-27: Shower of Gems and Minerals sponsored by the Nashua Mineral Society. Rte. 3, Exit 4, Nashua, NH.
- May 10, 1997: **MMNE**: (Saturday), Ashland, MA 4-H Club Center. Doors open at 9:00 AM.

DIRECTIONS TO THE AUBURN PUBLIC LIBRARY



Insuring the Long-term Viability of Our Micromount Societies

As I get on in years, the thoughts that cross my mind are what the future holds for us micromounters. Have you ever thought where your Micromount Group/Club/Society will be in 10, 20, or 30 years from today? Many of us will no longer be around, but I believe the present generation of micromounters is duty bound to uphold the continuance of our groups, which have been put in place by our predecessors and ourselves and which have been built up over the years.

Consider a typical set-up today. Looking at a hypothetical case, it has been decided that the group is planning to go on a field trip to say, Lone Acres (fictitious name) to collect some lead minerals. Joe Bloggs knows the road, has the name and telephone number of the owner of the property and makes the necessary arrangements to obtain permission, etc. The members at large are notified by phone, newsletter or notice of the forthcoming event and a successful outing results.

The following year, it is decided to repeat the field trip, but in the meantime Joe Bloggs has been killed in a car accident. Nobody knows the name or telephone number of the owner of the property. What now? One solution, of course, is to drive out to the site and re-establish contacts with the owner. However, there must be an easier way! (Or am I over-dramatizing events?)

The above hypothetical example has been worrying me for some years now. In every society there are a few "shakers and movers". The rest of the crowd just wants to enjoy themselves. Ask any typical micromounter, he/she is a hundred times more interested in identifying, trimming, and mounting his/her latest finds than to be bothered with the "mechanics" of how we all got out to Lone Acres to find some exquisite specimens of cerussite!

For the past few years, I have been working at (on and off, when time permits and I am in the mood!) compiling a guide on the functioning of our Micromount Society. Here I am really talking about the "nuts and bolts." I do not intend listing all the subjects I have identified thus far (38 to date), but here are a few:

Various address lists for Newsletter members (complimentary and exchange members ... who are able to attend our meetings and outings - we do have members residing 1000 miles from here and also a host of overseas members);

Standard forms (membership application, notice of meetings and outings);

Standard letter to prospective members;

MASS SWAP procedures;

Field trip localities (map, address from where permission must be obtained, minerals likely to be found), etc.

Some of these documents are updated annually, others at greater intervals, so this becomes a set of "living" documents. This guide will be available to the office bearers of the future, with the request that it be updated from time to time, to ensure the long-term viability of the organization. It will also make it easier for future generations and ensure a certain amount of continuity in the group's activities.

It should, however, be stressed that new ideas and programs should be critically evaluated (and not turned down out of hand) and, if feasible, become part and parcel of your group's activities. Stagnation of activities are the first danger signal of the demise of an organization, so beware the symptom.

I would appreciate the office bearers of other Micromount Clubs/Societies contacting me, so that ideas can be exchanged on the functioning of our groups. I am also willing to supply a full list of subjects I intend covering for our South African Micromount Society.

*Horst Windisch
South African Micromount Society
P.O. Box 17273
Groenkloof, South Africa 0027*

(Reprinted from Hound's Howl June/July 1996 via The Mineral Mite, November, 1996)

Editors Note (from The Mineral Mite): Horst Windisch makes some particularly timely observations that we should seriously reflect on and take action on. We must all admit that this is a fascinating and pleasureable hobby which also can and does make contributions to the body of mineralogical knowledge.

From your editor: One of the major concerns which I have for the MMNE is the advancing average age of our membership. We have pulled in some new members over the past few years, but for the most part we have not been able to attract the younger group of mineral collectors to micromounting. Is it because mineral collecting is not longer a hobby of the younger generation? I do not believe that after seeing the age range of attendees at various mineral shows over the past year including the Sunapee and Springfield shows. Is it because micromounting is perceived as being a hobby which is too expensive for the average collector because of the cost of a microscope and light? Or is it just because we have not effectively marketed ourselves to the mineral collecting fraternity and shown them the unknown and fascinating world which exists under the microscope. Having been drawn into collecting and micromounting as a young teenager by Paul Desautels, I tend to believe that exposure to the hobby will draw both novices and existing collectors into micromounting

We all know that micromounts have many advantages over a collection of macro specimens. All of these attractions can be used to market the hobby:

- Micro crystals are generally of finer quality and better preserved than macro crystals;

- A collection of micromounts can be stored in a much smaller area than an equivalent collection of hand specimens;

- Many species occur only as microscopic crystals;

- Many species crystallize only as microscopic crystals;

- If you choose to use the silver pick for collecting micromount material, there is a much broader selection of material available, and usually at a much more reasonable price;

We need, as a club, to give some thought about ways we can promote micromounting as a hobby to the mineral collecting fraternity and to the general public as well.

Reliable Micro Test for Carbonate Minerals

There are a number of pitfalls in testing for carbonate minerals using acids. First, many amateurs use vinegar, a source of acetic acid. While it may work for highly reactive species such as calcite or strontianite, it is rather iffy for slowly dissolving species. There is no reason why every collector cannot use hydrochloric acid, which is much more reactive and reliable. It sells under the name muriatic acid for a couple of bucks a quart at most hardware stores. A quart will do for a lifetime of tests, or will be sufficient for 20-50 members of a club.

The acid should be diluted to about 1/5 its original concentration by adding one part of it to four parts of water (do not add the water to the acid). I store mine in a small (about 1/4 cup) glass bottle with a plastic closure. The lid should not have a metal liner, as metal ones may be attacked by the acid, even vapors of the acid. I have found that the acid can be used in small amounts and observed under the scope for up to a minute or so without any effect on the optics or body of the scope. This is in part because hydrochloric acid is a non-oxidizing acid; nitric acid would be another story. Immediately after a test, I dispose of the sample in my waste basket. During tests taking a minute or more, I move the test sample a couple of feet away from the scope and observe it only at intervals.

For hand specimen collectors, the next step is easy; slosh acid onto a fragment of the unknown, or drop a chunk into a teaspoon of acid. If the unknown is calcite, fine; the result is like an opened can of soda after shaking. For micromineral collectors, chunks are unknown, and more delicate methods are called for.

In most cases, it is sufficient to remove a tiny crystal or crystal fragment from a specimen using a needle mounted point outwards in a 4 inch long piece of 1/4 inch square balsa wood handle. Rubbing the needle on the side of one's nose (not in one's eye) greases the needle end, and makes the fragment

adhere to it temporarily. Next, the sample is put in a tiny drop of acid previously placed on an unreactive substrate; a microscope slide or a shard from a black or dark colored piece of porcelain will do. Note that we refer here to a micro drop, not one applied using a medicine dropper. The amount picked up on a thin glass rod or similar implement is sufficient, and even this can be subdivided using the needle. The fragment will fall into the acid, and significant effervescence can be easily observed.

Note the word significant. If the mineral is a quite unreactive carbonate, the slowly evolved carbon dioxide can diffuse from the tiny acid drop fast enough so no bubbles can be observed. Further, the acid drop can itself evaporate if the test takes on the order of several minutes. Alternatively, with a very small or highly reactive sample, especially a small number of very fine crystal fragments or fibers, the sample can dissolve so quickly and with such rapidly rising bubbles that they can easily be missed.

In these cases, the test can still be done in a very sensitive and definitive manner. The procedure is to transfer the sample to a microscope slide. Next, place a cover slip (a tiny, circular, very thin piece of glass designed for covering specimens on microscope slides) over the specimen. Then, place a drop of acid near, not on the cover slip. Under the microscope, using the needle, drag tiny increments of the acid drop to the edge of the cover slip, where capillary action will pull the acid to the specimen. The tiniest, very reactive samples will dissolve like a flash, but will leave a large, flattened bubble or bubbles trapped under the cover slip. A small bubble, if dealing with micro fibers, may only be trapped air. Real carbon dioxide bubbles will have a total volume larger than that of a fibrous sample. Unreactive samples may sit without the appearance of a bubble for minutes, but a bubble will slowly form after some time since the carbon dioxide is trapped under the cover slip. This is the surest and best way to test for effervescence on a micro scale.

It's really not fair to ask a professional or even a more knowledgeable friend what a mineral unknown is unless one has at least determined whether it is a carbonate. Carbonates occur in most colors of the rainbow, and in a bewildering variety of forms, so USE THE ACID TEST REGULARLY, AND DO IT RIGHT.

Bill Henderson

47 Robin Ridge Drive
Madison, CT 06443
1/10/97