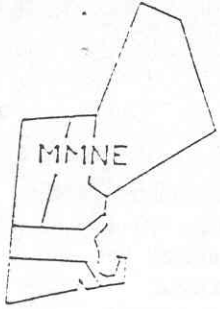

MICROMOUNTERS OF NEW ENGLAND NEWSLETTER

#208 September, 1998

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

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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
Oct. 9th, 1998 – Forrest and Vera Fogg, Dunbarton, NH

Nov. 14th, 1998 – Burlington, MA Public Library

No meeting in December

Next meeting
The next meeting of the Micromounters of New England will be held on Sept. 12th, 1998 at the Hudson, MA Public Library. The space will be available at 9 AM. Other confirmed meeting places and dates are as follows:

Oct. 9th, 1998 – Forrest and Vera Fogg, Dunbarton, NH
Nov. 14th, 1998 – Burlington, MA Public Library

MMNE club notes

Positions of MMNE Vice President and Treasurer
As indicated in the newsletter masthead, the positions of MMNE Vice President and Treasurer are currently vacant. Our previous VP, D. James Warner graciously accepted the position of President in an uncontested nomination/election held in April, 1998. Please consider donating some time and energy to the MMNE as a club officer!

New meeting places
As you may remember, our annual symposium will need to find a new location for the May, 1999 meeting. The 4-H Center in Ashland, MA has increased the cost to make this location too expensive for our use. We need people to search out or at least suggest a new meeting place. Requirements include (but aren't limited to):

- a central location in New England
- adequate parking
- locally available lodging for those of us who wish to spend the night before
- enough room for 50 to 75 attendees (I'm basing this on attendance at two or three symposiums)
- lunch for 50 to 75 hungry attendees
- enough tables and chairs for attendees, including tables for sales and giveaways
- ability to darken the space for audio-visual presentation (microphone or PA?)
- enough wall sockets to power 'scope lighting sources (we'll need to supply extension cords & power strips)
- moderate cost

This search should start as soon as possible, as suitable institutions will probably require bookings and other arrangements well in advance of the meeting date. I recommend this be a primary point of discussion at the upcoming September, 1998 MMNE meeting. If you have any ideas, please come prepared with location names and, if possible, telephone numbers and the name of a contact person. Please keep in mind that new monthly meeting places may also be needed in the not-too-distant future.

Symposium sales table items
For those of us fortunate enough to attend a MMNE symposium, the sales table is always a big attraction. Material on the sales table comes entirely from donations by MMNE members. There has been some talk at past meetings about cultivating other sources of sales material, including trading and outright purchase, in the latter case, using club funds. Both avenues have merit. In the

Summer, 1998 issue of the MMNE newsletter, I published a letter from Julia Curtis-Steele, editor of the Southern California Micro Mineralogists bulletin *MicroBits*. In the letter, she evinced interest in trading material between our two clubs. For instance, this might consist of a one-for-one trade of California evaporite or supergene minerals for Palermo phosphates or Mont St-Hilairerarities. As Julia noted, "We have many members that have collected at locations you wish you could go to and vice versa, I'm sure.We don't have basements, but we do have garages with walls that we hold up with our overabundance of material". The annual Pacific Micromineral Conference is held in January, so if we decide to do this, we need to begin attacking those basement (andgarage) stockpiles as soon as possible

A Message from our President
(*The following is a piece sent to me some months ago by MMNE President D. James Warner- ed*)

I'd like to use this as an informal forum to share newsy skuttlebutt or air a thought or two. In this edition I'd like to accomplish a few things – thank everyone; note the MMNE club officer positions open; and introduce (for your approval) three new columns for the newsletter.

First, I would like to thank you all for my nomination as president. I want to work with our members to keep the club fun and educational. I would also like to communicate the pride of our organization, showing the mineralogical community that we ARE the Micemounters of New England!

Secondly, I would like to inform the members that two MMNE officer positions are open – vice president and treasurer. Please do not nominate others. These positions are strictly volunteer positions and you will be elected into office. It is imperative that these positions be filled as soon as possible. Please understand that it doesn't matter if you are a new member or have been one since the clubs' inception – we will consider any and all applicants. Also be aware that other tasks need addressing in the near future (see need for new meeting places, above). If you volunteer, it will be less painful than being 'volunteered'!

Finally, there are three new columns I'm offering for your enjoyment. If members' response is favorable, I'd like to see them continued in the future.

The People's View
This column is for you, the members. Let us know what you like or dislike about the club. Give us any changes or suggestions you might have. Please don't let this column remain empty, as this space lets us know what you want. Don't be shy!

This For That
This column is a space for trading. Give a brief but specifc description of what you have to offer. List no monetary values – this should be kept between the parties involved. Limit: 5 items each. (*And then Jim offers the following – ed*):

1) nice single xls of whitlockite, some gemmy – Palermo mine, N. Groton, NH
2) choice prismatic xls of whitmoreite – Palermo mine, N. Groton, NH
3) several habits of rockbridgeite – Palermo mine, N. Groton, NH:
   a) radiating spheres
   b) blocky xls
   c) needles
   d) compact/massive
4) anatase – mostly clear blue xls with quartz and albite xls on diorite – Mystic River quarry, Somerville, MA

Wanted in trade – foggite, samuelsonite, wardite, bjarebyite from Palermo, NH

Do You Know Me?

This column is for fun. In May, I mentioned that I remember faces, but names are not so easy. I also want to get to know you all. Here we give hints about ourselves and the rest of us try to guess who the person is. This could be more fun than a mineral crossword puzzle. Submit a paragraph or two, giving noteworthy facts as well as something obscure. What is your profession? Where are you from? What about other hobbies or family? Keep it light and not too hard. It may make it easier if a photo (perhaps one out in the field?) is submitted with the bio. The following month the photo could be published with a name or two of the people who guessed correctly. (*The first submission follows – ed*)

> I just turned forty. The Palermo mine and West Paris, ME are my passions. Green 1" x 1.5" crystals of apophyllite from Poona stat\rted my interest in minerals. Anatase from around the world are my favorite collectible. Anatase from the Mystic River quarry in Somerville, MA was my first self-collected mineral, collected in 1992 (Dana wrote several articles on this locale). I am taking the Massachusetts state exam for my Second Class Fireman's license (Boiler Technician). Two of my kids – Beth and Nick are in the Special Olympics. I watch the night sky with a small telescope. Do you know me?

Some ramblings from the editor

The Gilsum, NH Rock Swap

I hope everyone attended at least one or two gem and mineral shows this summer. The support we give to the organizations putting on the shows is important and the minerals are always beautiful and enlightening. Although few dealers offer micromounts per se, careful searching usually turns up something interesting.

The rock swap at Gilsum, NH in June is probably my favorite show, as it feels very informal. The fact that it's held outside in a field may have something to do with this. We experienced some torrential rains on Saturday, but having attended the show a number of times, I can say that a Gilsum weekend without at least one downpour just wouldn't seem…right. A number of MMNE members were spotted braving the waters, including Bob Janules, Dana Morong, Scott Whittemore, and Bob and Anna Wilkens.

New England material is prevalent at this show, including beryls from NH and ME pegmatites; smoky quartz and microcline from the Conway granite; the beautiful sea-green Westmoreland fluorite; prehnite and associated calcite and zeolites from the MA and CT trap rock quarries, etc. Unfortunately, little, if any, of this material is suitable for micromounting. Some thumbnail cabinets and perky boxes displayed by a few dealers afforded the following micro-suitable specimens: dull black enargite from California; bright yellow sprays of boltwoodite from Namibia; crystallized silver from the Northwest Territories, Canada; Kentucky millerite with impaled pyrite; pale green English boracite; clear colorless plates of barite from Connecticut; green grossularite from Asbestos, Quebec; and the real prize, a very pretty little crystallized gold from Transylvania, Romania.

At least one dealer was offering material from Mont St-Hilaire, mostly small cardboard boxes with pieces of matrix containing minerals such as aegirine, polylithionite, rhodochrosite, elpidite, fluorite, etc. Who knows what a diligent search with a hand lens may have turned up?

Another fellow was carrying back issues of the *Mineralogical Record* and MATRIX, the latter a 'journal of the history of minerals'. I picked up a few copies of MATRIX, as I always like a good-looking journal about anything mineralogical. MATRIX concerns itself with the history of mines and mining districts and the personalities involved; important historical figures in the science of mineralogy and the collecting fraternity; changing philosophies behind the building of collections, private and public; as well as the tracking down of lost or obscure mineral occurrences. I especially enjoyed an article about the Bristol, CT copper mines, about which I knew nothing. I recommend this journal!

MATRIX Publishing Company
PO Box 129
Dillsburg, PA 17019-0129
($24 per year, comes out quarterly)

Other journals

A Russian journal, *World of Stones*, has apparently gone defunct, or so I was told by the Webers at the Springfield Gem and Mineral Show. This beautiful journal appears to be patterned on the Mineralogical Record, with the same attention to scholarly articles and mouthwatering photos. Back issues are still available, but will probably soon become very scarce – this journal seems destined to become a collector's item. I highly recommend the Kola issue (*Kola! a special issue*), as the mineralogy of some of the Kola deposits – Lovozero, Khibiny – has many parallels with that of Mont St-Hilaire. This issue is written in English and contains an insert in Russian.

Back up those hard drives!

Imagine my dismay when the hard drive in our home computer refused to come up several weeks ago. After having a few of the technical people at work look the thing over with no results, I brought it in to the computer store. They apparently took the drive out, gave it a good shaking,and brought it back to life – it had been frozen! I hadn't made a backup for several issues of the newsletter, so I could have lost a number of new members' addresses as well as the templates I use to create the newsletter each month. Please back up those important documents regularly – you'll save yourself a lot of work and heartache.

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July 18, 1998 Micro. Meeting

July 18th was a memorable day for the Micromounters. Julie and Herb Fielding had arranged a perfect weather day, and we enjoyed it to the fullest. As usual the buffet lunch, provided by everyone, was outstanding, the vistas of the Belnap Mountains across Winnisquam Lake were lovely, and the mineral discussion and viewing was interesting.

Besides lots of 1998 Mont. St. Hilaire and Varennes specimens provided by members present, Gene Bearss had brought a dozen or so lovely mounted specimens from Art Smith in Texas. Dana Jewell and Ed Hakesley donated interesting give-aways. New member Phil Partington was generous with treasures from his home State of Arizona as well as from Northern Vermont and New Hampshire. Rare minerals schulenbergite and posnjakite were a revelation to your Secretary. These were from the Mascot Lead Mine in Gorham, N.H. Phil's rhubarb pie was sensational, too.

We welcomed an enthusiastic prospective new member, Josephine Mac Indewar, who dazzled us in the cooking department. Forrest Fogg was looking very fit after his recent illness, and it was so good to have him and Vera present. Betty and Palmer Sevrens seemed fully recovered from a recent wedding in the family. Margaret Stewart, besides providing us with some Varennes specimens, also had brought her popular Three Bean Baked Beans, and then topped the day off with a "mushroom" walk. Our "bird man" Dana opined that it was something else.

So many thanks go to Julie and Herb for providing us with a lovely setting; unfortunately because of a death in their family, it was a real scramble for them this year. Also special thanks to Margaret, John, and Norm for the set-up before the meeting and their work helping Herb put everything back afterwards.

Pat Barker, Secretary

March 4, 1998 Dana M. Morong

RADIOACTIVITY AND THE RUSSIAN CLICKER

A lecture on radioactivity and its detectors was presented February 11, 1998 at the Southeast N.H. Mineral Club meeting, by Martin Kippley of Dover, N.H. It was an interesting and educational presentation. Some main points are as follows:

Radioactivity is the spontaneous emission of radiation, of several types. Alpha particles are helium atoms stripped of their electrons, they travel about 2-3 cm in air, and are stopped by a sheet of paper. They deliver a large amount of energy but only close up, such as in decaying radon next to cells in lungs. Beta radiation are high-speed electrons and positrons, which travel through the air about 6 feet; aluminum foil stops them. Gamma rays are a form of energy similar to x-rays but of shorter wavelength and much higher energy, can travel many meters through air, can be shielded partly by steel but much more so by lead. Neutrons are extremely powerful, but not generally emitted by natural sources (except in tiny amounts by U-235, but surrounding U-238 in its natural occurrences usually absorbs them); neutron radiation is found mainly in atomic reactors. Mineral collectors mainly use instruments which detect beta and gamma rays.

The amount of radiation one may detect depends upon time, distance, and shielding. Time is important as if one passes a detector through an area of radiation quickly he won't get as many counts as if he slowed down to catch more per unit of time. Distance is important as the closer you get to the source, the greater intensity (probably related to the inverse square law). Shielding slows or stops radiation. As a foot of soil shields beta particles, a beta detector won't be much use in mine dumps.

There are several types of instruments. Kippley's opinion is that ion chambers are useless for mineral collecting as they are not very sensitive, only detecting extremely high levels of radioactivity. On the other hand, scintillation detectors are extremely sensitive to radioactivity, but are also sensitive to mechanical and thermal shock, and extremely expensive. The most useful sensitive instrument is the Geiger counter, which detects down to o.1 milliRoentgen, using a Geiger-Mueller tube. There are certain procedures for its proper use and storage which are not discussed here (an article by Ronald L. Ives on Portable Geiger Counter Problems in the May-June 1954 issue of *Rocks and Minerals* magazine, volume 29, pages 227-235 may be helpful). The Geiger counter is popular and convenient, but costs a lot.

A fairly recent development, which may useful to the collector who cannot afford a Geiger counter, is the Russian clicker, or chirper (both are colloquial terms). This detects mainly gamma radiation. It was developed in the Soviet Union in the wake of the Chernobyl holocaust, as a qualitative or semi-quantitative instrument that could be cheaply mass produced and used by anyone

to determine a rough idea of radioactivity, to detect its levels in foods. There are different varieties but the smallest one is 2½" long in a plastic case with a handle for a string to loop it around the neck, an internal beeper, a red light, and a switch. Its label has printing in Russian referring to impulses per minute measured (helpful if you have a watch with a second hand but for those who don't, there are about 180 to 200 clicks per minute; it can be timed for these). The table is printed in three colors corresponding to the varying degrees of safety or hazard:

	impulses/minute	μR/h (microRoentgens/hour)
green:	<12	standard radiation
yellow:	12-24	60-120
red:	24-60	120-300
red:	constant	>3000 μR/h (= >3mR/h)

It comes with a Russian battery charger which cannot be used in the U.S., but the detector runs well on two watch batteries. Mine uses Eveready 357. For the 2½" one, Kippley listed Duracell D303/357, and Radio Shack MS76, and hearing aid batteries E675HPX and 65HP. Some batteries are smaller than their holders and so may not quite fit (are a bit loose) but are fine electrically, so if one is bothered by looseness, wrap a thin strip of tape on their edges. It is important to place the + side against the + in the holder, and - against the - in the holder. Remove batteries if stored for extended periods. Keep out of humidity (such a small device could be stored in a Tupperware container with a dry-gel packet). Keep in your pocket if it's below freezing.

To use it, one pushes the switch. The red light should flash and the beeper beep at the start to show that it is running right and that the batteries are in correctly. The ticking is normal (about 3 ticks per second). In use it is held with its bottom end against whatever is to be tested (the closer the better), and the number of beeps counted. I found the rate at my desk to be 2 to 3 beeps per minute, which may be normal background radiation.

I tested some specimens. Uraninite, samarskite, and 'gummite' each gave high readings. Autunite readings depended upon amount present. Monazites and cyrtolite zircons gave moderate to weak readings, depending upon locality of specimens. One columbite gave a faint reading, and a micromount of a suspected kahlerite gave a reading of twice the local background count. However, several extremely tiny single crystals of torbernite (identified by vivid green color, morphology, platey structure, and positive micro tests for copper and for uranium) each gave readings hardly above background count, so it is not perfect for all micromounts.

This little device is handy as it is inexpensive (the 2½" one goes for $16 to $20 here; fancier models go for more, up to $40 to $60). The small ones can have a string looped around their handles to be worn in a pocket with the string around the neck, to test small specimens in the field or at home. I like it as a qualitative tool for "up-close" detecting.

Ω