MICROMOUNTERS OF NEW ENGLAND

The MMNE was organized on November 5, 1966 for the purpose of promoting the study of minerals that require a microscope.

October 1991 Newsletter #153

Dues are $6.00 per year and are due on January 1st, payable to the Treasurer

Contributions of news items for the Bulletin are welcome and should be sent to the Editor.

NEXT MONTH

Our November meeting will be Saturday the 16th at the Auburn Public Library.

Our next regular meeting of the MMNE will be Saturday, October 5, 1991, at the home of Forrest at Vera Fogg, in Goffstown, New Hampshire.

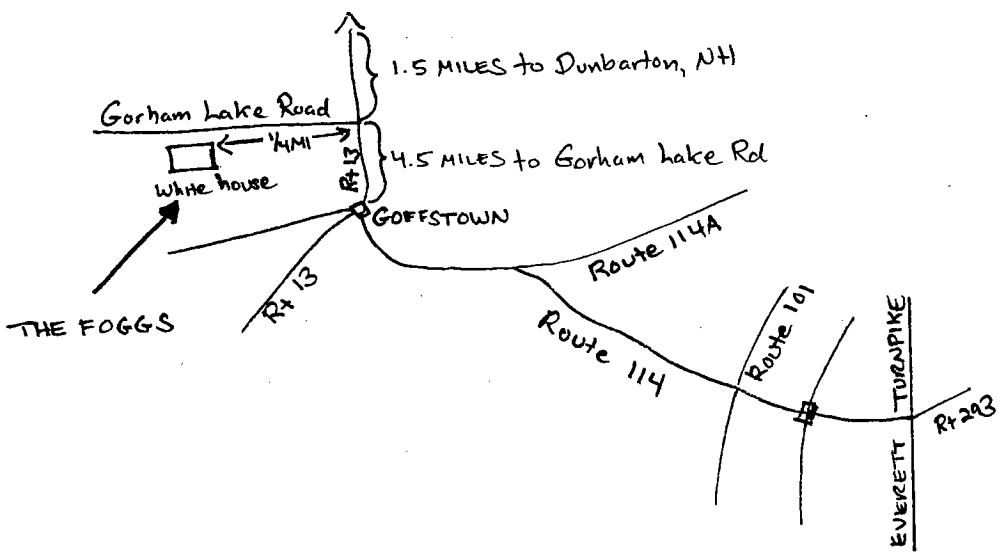
Frank Leighton will present a program on "Stereo-Prints of Minerals". Frank will discuss how he makes stereo prints, and he will also have a viewer available.

Rhode Island Mineral Hunters Extend Invitation:
The RIMH have invited the MMNE to participate in their annual show, October 26-27, at the RI Community College, Knight Campus, in Warwick, RI. We hope that many member will plan on attending this event.

From the President:
At the September meeting at Northborough*, Mass., our club donated "The Audubon Society Field Guide to North American Rocks and Minerals" to the Northborough Public Library. (Ed note: Our President had a set of crystal "flowers" which he showed to our members at that meeting.)

***From the Editor:**
Some members have been curious why I use the "borough" spelling as opposed to "boro" which appears in many city and town names in Massachusetts. After some research, I discovered that only the town of South Attleboro is officially spelled with the latter ending. All other towns in the state are officially spelled with the "borough" ending, even though many municipal and interstate signs use the shorter (colloquial) form.

MAP TO THE FOGG'S



Mineralogical Terms We Sometimes Use (And Are Sometimes Fuzzy On)

As we "rockhounds" go about our hobby of rocks, minerals, gemstones, and the lapidary arts, we occasionally come across some technological terms that are not perfectly clear--due principally to infrequent use.

The list that follows covers many of these terms. The terms are all listed as nouns. However, it should be noted that they are frequently used as adjectives. For example, ORBICULE, a noun, is frequently used as an adjective, such as in orbicular jasper.

Mineralogical and Scientific Terms

Allogene	A constituent of a rock; the constituent having originated earlier or elsewhere. Example: a pebble in a conglomerate.
Allotrope	One of two or more existing forms of an element. Example: 1. red and yellow phosphorous 2. diamond and graphite 3. oxygen (O_2) and ozone (O_3)
Amorphous (adj.)	Noncrystalline. Used only as an adjective. Example: Glass as a supercooled liquid, establishes itself as an amorphous solid.
Amygdule	A nodule in an igneous rock formed by a secondary material filling a rounded cavity originating by expanding gas or steam. Example: Thomsonites are amygdules in amygdaloidal basalt.
Analogue	One of a group of chemical compounds similar in structure, but different in respect to composition.
Dimorph	A mineral existing in two crystalline forms. Example: marcasite and pyrite.
Enantiomorph	A crystal that is a mirror image of another otherwise identical crystal.
Enantiotrope	A polymorph that can convert to another crystalline form at a certain critical temperature.
Endomorph	A mineral enclosed within another mineral.
Hemimorph	A crystal characterized by a different termination at each end.
Hydrolith	A mineral that is chemically precipitated from water.
Hydrophil	A material having a strong affinity for water.
Hydrophobe	A material that rejects water.
Isomer (chemistry)	A chemical compound that has the same kinds and numbers of atoms as another chemical compound but differs in structure. Example: CH_3OCH_3 - dimethyl ether CH_3CH_2OH - ethyl alcohol
Isomer (physics)	A radioisotope having the same atomic number and mass number as another radioisotope, but having a different energy level and half-life.
Isomorph	A mineral capable of crystallizing in a form almost identical to another mineral.
Isotope	A variety of a chemical element. Each isotope of a given element has the same number of protons in the nucleus but a different number of neutrons. Amazingly, gold has 26 isotopes. The element hydrogen is receiving much publicity these days because of its application to nuclear fusion. Hydrogen has three isotopes, as follows:

Hydrogen Isotope	Protons in Nucleus	Neutrons in Nucleus
Protium (ordinary hydrogen)	1	0
Deuterium	1	1
Tritium	1	2

Metamorphyte	A rock that has become harder and more crystalline as a result of heat and pressure.
Monomorph	A mineral existing in only one crystalline form.
Orbicule	A spherical body contained in a rock or mineral.
Paramorph	A pseudomorph with the same chemical composition as the original crystal, but with a different crystalline structure. Example: calcite after aragonite.
Phanerite	An igneous rock having the grains of its essential minerals large enough to be seen by the naked eye.
Polymorph	A chemical compound existing in more than one crystalline form.
Pseudomorph	A mineral having the outward appearance of another mineral which it has replaced by chemical action. Example: Tigereye is a pseudomorph (silica after crocidolite).
Thixotrope	A substance (usually a colloid) having the interesting property of fluidizing when agitated and solidifying when left undisturbed.
Trimorph	A mineral (chemical compound) existing in three crystalline forms.
Vesicle	A cavity in a rock, usually formed by a gas bubble.
Vug	An opening in a rock or mineral, frequently lined with crystals.

Via The Mineralogical Society of the District of Columbia, and via "The Mineral Mite", bulletin of the Micromineralogists of the National Capital Area, April, 1991.

Paul E. Desautels 1920 - 1991

It was with a great deal of sorrow that we learned of the passing of Paul Desautels. A mineral collector, Paul was converted to micromounting in 1944 through associations with Paul Seel while both were studying at the University of Pennsylvania. Paul was a chemistry professor at Towson State College in Baltimore when in 1951 he founded the Baltimore Mineral Society. Later, in 1957, he organized the annual Baltimore Micromount Symposia - the world's first micromount symposium. He had been a perennial lecturer on mineralogical themes at the Baltimore Micromount Symposia, Pacific Coast Micromount Conferences, Tucson Gem and Mineral Shows and at uncounted other mineral shows, symposia and mineralogical events. He developed a series of slide programs on subjects that include twinning, pseudomorphs and micromounting which were made available to mineral clubs by the Eastern Federation of Mineralogical and Lapidary Societies. Paul has imparted more mineralogical knowledge to micromounters than any other person. He changed careers in 1958 when he accepted a position at the Smithsonian Institution where he became Curator of Gems and Minerals for the National Museum of Natural History. His micromount collection, noted for the perfection of each mount, was given to the Smithsonian, where it formed the nucleus of the micromount collection of the National Museum of Natural History.

Because of his great influence on the Baltimore Mineral Society and its symposium, the Society has decided to name its annual Micromount Symposia in memory of Paul, beginning with this year. Also in Paul's honor, a fund has been established at the Smithsonian Institution. Any of you who wish to make a contribution to that fund in Paul's memory are encouraged to send it to:

The Paul Desautels Fund for the Acquisition of Minerals
National Museum of Natural History
Smithsonian Institution
Washington, DC 20560
ATTN: Jeffrey Post

Those wishing to convey their condolences to Paul's family can do so at the following address:

Nora Desautels
9077 134th Way North
Seminole, FL 35542

Information from the Baltimore Mineral Society and September 1991 "The Mineral Mite"

EFMLS Digest

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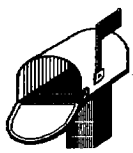
PRESIDENT'S MESSAGE

YOUR POST OFFICE OR MINE?.....



A fabulous fringe benefit of being EFMLS President is getting monthly newsletters from about half of our EFMLS clubs. I often answer requests for information by referring to a club bulletin that has included an article dealing with the very question I've been asked.

Sometimes a newsletter does not make it through the postal system intact, in which case, a sealed plastic bag is delivered with the bits and pieces of a newsletter pulled from inside postal machinery. The plastic bag bears a message of apology addressed to "Dear Postal Customer." The message from my local post office has 193 words of apology. The Miami post office sent me the remains of "The Coral Geode" with an even longer apology!

If you receive only fragments of your club newsletter - *report this to your editor.* A change of mailing format may be needed if many copies are being damaged. Your editor may need a new stapler (one of my staplers always leaves a little bump at one end of an otherwise flat staple.) I note that several editors have switched to tape instead of staples. "The Comglomerate" arrives from Kentucky quite safely after being folded in half and mailed in a 9" x 6" envelope. Club letters that have been folded in thirds and mailed in a regular business letter size envelope usually arrive in mint condition. Thin newsletters without envelopes survive their hazardous journey through the mails better if they are folded in thirds instead of halves.

Newsletters are meant to be read....not fed to postal machines!

Shirley Greenberg

SLIDE AND VIDEO PROGRAM NEWS

The winning entries in the 1991 AFMS slide/video contest have been announced as follows:

1st place - club entry is from the Lincoln Orbit Earth Science Society, Springfield, Illinois and is entitled: "The Mastodon Factory' (EFMLS library #87). This program contains 80 slides and is a good basic paleontology program as well as an eye-opener about how a huge fossil critter is put on display.

1st place - individual entry is by Dean and Jagielo of Macomb, Illinois and is entitled "The Illinois Fluorite Story, Part 2". (EFMLS library # 88). This program contains 133 slides and is an informative story about the present conditions in the famous Illinois fluorite mining area.

1st place - juniors is by Carol Anderson of Green Bay, Wisconsin. Her program "Creepy Critters, Part 2, Shells" (EFMLS library #J-4) contains 46 slides. Adults will want to make these cuties too.

The winning video was made by Jim Berends of Great Bend, Texas and is entitled "Cabochon Making" (EFMLS library # VHS 104). This program runs 30 minutes.

A special award was made to a commercial film made in conjunction with the Smithsonian Institute and entitled "Gemstones of America" (EFMLS library # VHS 105). The film is 60 minutes in length and takes a spectacular look at material available in the United States. A complete write up of this film was given in the June, 1991 AFMS Newsletter.

In addition to the above programs, all of which are available for loan from the EFMLS Slide Program Librarian, Jennie Smith, PO Box 12, Fairfax, VA 22030,

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