

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

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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

This bulletin may be
quoted if credit is given.
Club address is c/o Editor.

NEXT MONTH:

Our May Northeast
Meeting will be
Saturday, the 9th, 1992
at the: 4-H Conference
Center in Ashland, MA

April 1992

Newsletter 158

The next meeting of the MMNE will be Saturday, April 11, 1992 at the Northborough Public Library. This month, we are going to try out the Northborough Library's VCR by playing a tape which appeared on WCVB-TV (Channel 5, Boston), as one of their "Chronicle" programs. It is entitled "Gems of New England" and features the mining operations at the Bennett Mine where the now famous "Rose of Maine" and the "Peach" (morganites) were found, the Palermo Mine, and a number of familiar faces.

Please add the following names to the membership list:

Alfred Charman
571 Forest Road
W. Suffield, CT 06093
(203) 668-5200

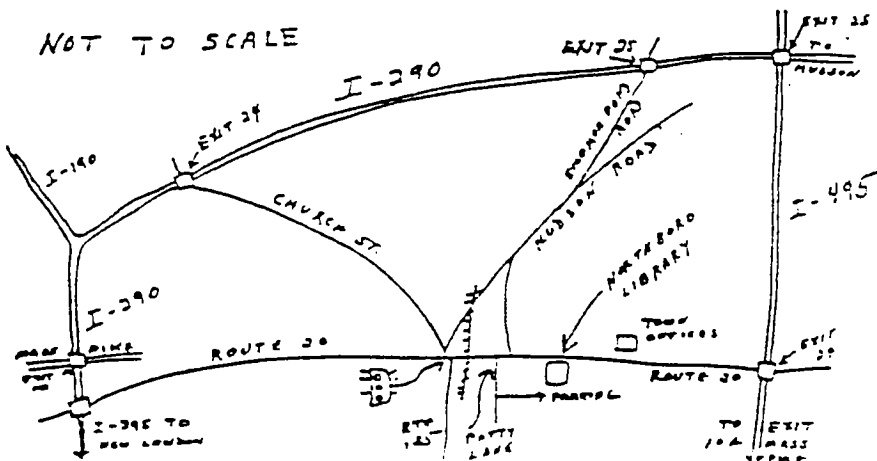
Michael Swanson
29 Chestnut Hill
Greenfield, MA 01301
(413) 774-5066

Also, please correct the following name: William Grohskopf. My apologies for the mis-spelling.

1992 Saint-Hilaire collecting dates:

April 25 (Saturday)
May 23-24 (Saturday and Sunday)
July 4-5 (Saturday and Sunday)
August 8 (Saturday)
September 5 (Saturday)
October 3 (Saturday)

Belated thanks to the Stewarts for Saint-Hilaire material for the Northeast Meeting. Mike Swanson appeared at the March meeting with a large box of quality material for May. Thanks, Mike.



The Nominating Committee has submitted the following slate of officers to the membership: Frances Morrison, President; Angie Teixeira, Vice-President; Janet Cares, Treasurer; Patricia Barker, Secretary; and Shelley Monaghan, Corresponding Secretary and Editor. The voting will take place at the April meeting. Officers will assume their appointments at the end of the May meeting.

From THE GOLDRUSH LEDGER, via many bulletins. Submitted by Ralph Carr:

Radioactive Minerals

This article will differ somewhat from our normal format (if you can find anything normal about our other adventures into the realm of the elements). At the request of one of the more prominent people in the club, I'm going to discuss radioactivity and the radioactive minerals. Investigation of the phenomenon of radioactivity started in 1896 when Antoine Becquerel (a French physicist) became interested in Roentgen's newly discovered X-rays. He knew that uranium salts fluoresced when exposed to light and that this was a similar phenomenon to the fluorescent spot that appeared when electrons hit a target in a vacuum tube and produced X-rays. He placed crystals of a uranium salt on a photographic plate that had been wrapped in opaque black paper. When he developed the plate he saw an image of the crystals on the plate. So far, so good. He was going to conduct further experiments with these crystals, but was called away from his laboratory and didn't have a chance to expose the sample to light. Even though the sample didn't fluoresce, he again found that there was an image formed. something similar to X-rays must have been produced by the uranium salt - even without exposure to light.

Uranium salts had been used for many years to color glass so there was a large amount of waste ore available for investigation into the properties of material that produced the mysterious rays. Marie Sklodowska Curie investigated this phenomenon as a doctoral research project. Using equipment developed by her husband Pierre, she tested many different salts and minerals and found that only uranium and thorium containing compounds gave off this radiation. Neither heat nor any other physical affect influenced the radiation, not did the way thorium or uranium was chemically combined. When the mineral pitchblende was tested, she found that it was several times more radioactive than the same weight of pure uranium. She theorized that the high activity was due to an undiscovered element which she and Pierre decided to isolate. By dissolving the pitchblende ore and going through an exhaustive separation process, they were able, in 1898, to announce the discovery of a new element that Madame Curie named Polonium in honor of her homeland, Poland. Another new element was found that had an activity about 1000 times that of uranium. This element was named Radium, as it glowed in the dark. It took almost four years to do it, but by 1902, the Curies had produced about one three-hundredth of an ounce of a radium salt from several tons of pitchblende residues.

It wasn't until 1899 that it was found that there were three different types of radiation that were produced by uranium. These were named alpha, beta, and gamma. Alpha radiation was easily absorbed while beta and gamma radiation was much more penetrating. Over the next few years, it was determined that alpha particles (they were indeed particles) were identical to helium atoms with their electrons removed. Beta particles, or beta rays (yes, these do have the properties of both particles and waves) were identical to high energy electrons. Gamma radiation was the only part of the radiation produced that had the properties of very short wavelength X-rays. When an atom of uranium undergoes radioactive decay (by the way, the term "radioactivity" was coined by Madame Curie), it initiates a series of decay reactions that eventually ends with the formation of an atom of lead. The time that it takes for an atom to go from one step to the next in this series depends on which atom in the series is doing the decaying. For instance, the half life of uranium is about 4.5 BILLION years, (close to one estimate of the age of the earth). Other elements in the same series have half lives that are as low as days or even minutes.

The fourth edition of Dana's Textbook of Mineralogy lists about a dozen thorium containing minerals and almost 50 uranium minerals. Several of the pioneers in the study of radioactivity have been honored by having minerals named after them. Becquerelite ($\text{UO}_3 \cdot 2\text{H}_2\text{O}$), Rutherfordine ($\text{UO}_2 \cdot \text{CO}_3$), and Soddyite (a hydrated uranyl silicate). Two minerals, Sklodowskite and Curite were named for Marie and Pierre Curie.

Most of the radioactive minerals are found as minute crystals in various shades of yellow brown, or green. Several occur as incrustations or earth aggregates. Torbernite and autunite are found as well-formed crystals that reach quite respectable size. When any of the radioactive minerals find their way into a collection by purchase, trade, or the result of a collecting trip, do they pose a health hazard? The answer is an unequivocal maybe. If the sample ONLY emits alpha particles, then just having it in a display box will afford all the protection that is needed. However, if the sample emits beta particles, it could be producing high enough radiation levels to be dangerous. -- by Larry Littau

Micromounters of New England

11th Annual Northeast Meeting

Saturday, May 9, 1992

4-H Conference Center

Chestnut Street, Ashland, Massachusetts

SCHEDULE:

9:00--4:00	Registration, informal session
12:00--1:00	Lunch
1:00--2:00	Speaker

PROGRAM

Abraham Rosenzweig will speak on the Mineralogy of Uranium

Bring your microscopes, lights, extension cords, and micromounts (for discussion, possible identification, sharing or swapping).

Giveaways will be available as well as some choice micromounts for sale. Door prizes will be awarded.

Registration fee includes light refreshment and lunch, and a program booklet. REgistration is \$16 per person.

Lodging is available on Friday, May 8th in the building where the meeting will be held. Each room has four twin beds and private bath (no TV or maid service). Arrangements may be made for those who wish to stay Saturday, if desired. (Please indicate below.)

MEETING REGISTRATION FORM

MAKE CHECKS PAYABLE TO: MICROMOUNTERS OF NEW ENGLAND. RETURN TO:

VIOLET ROBINSON
15 WALNUT AVENUE
E. ROCHESTER, NH 03868

Meeting Registration: \$16 per person including lunch

NAME: _____ @ \$16 _____

ADDRESS: _____

Persons Per Room	Cost Per Person	Mutliplied by Number of Rooms	Total
1	\$35		\$ _____
2	\$29		\$ _____
3	\$23		\$ _____
4	\$18		\$ _____
TOTAL (MEETING & ROOM)			\$ _____

RETURN BEFORE APRIL 24TH AS SPACE IS LIMITED. 24 HOURS NOTICE REQUIRED FOR REFUND. Room registration will be acknowledged.

Directions to the Conference Center at Ashland

The Conference Center in Ashland is easily accessible from Route 9, the Massachusetts Turnpike, I-495, and Route 128.

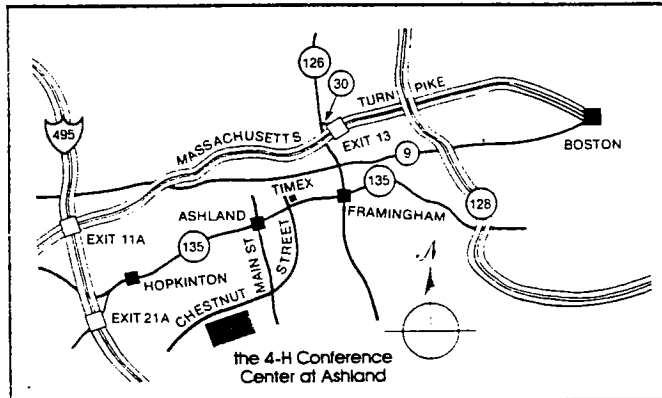
Via Route 9: Follow Route 9 to Route 126 and continue to downtown Framingham. Take Route 135 to Ashland.

Via the Massachusetts Turnpike (eastbound): Take Exit 11A (I-495 South). See Via I-495 below.

Via I-495: Take Exit 21A (Hopkinton) and follow Route 135 into Ashland.

Via Massachusetts Turnpike (westbound): Take Exit 13 (Route 30, Framingham). Follow Route 30 one mile to Route 126 and continue to downtown Framingham. Take Route 135 to Ashland.

In Ashland: From Route 135 at traffic light (telephone company and funeral home on opposite corners), go south on Main Street. Continue about one mile up the hill. Turn right onto Chestnut Street. The 4-H Center is about one mile on the left.



EFMLS Digest

Volume 29 Number 4
March, 1992

Information for the members of the Eastern Federation of Mineralogical Societies, Inc.



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PRESIDENT'S MESSAGE

"DIG IT" Spring has come again, and many of us are ready to head for the mines and backwoods; but before we do, let's STOP! It is wise to check out accessibility as ownership and schedules can change from time to time.

A phone call may be quicker and easier, but it is better to have it in writing just in case we are greeted with "NO ADMITTANCE" once we reach our destination.

Explanation of our EFMLS Liability Insurance, if it is to be a club field trip; and in any event, a copy of the "AFMS Code of Ethics" and an inquiry whether or not holes are to be filled will let the property owner or mine official know that we do respect the regulations and property of others.

Perhaps, Field Trip Chairmen in the different Regions could work together to compile information on collecting sites within their respective Regional bounds. All these are ways of COMMUNICATING.

Now, let's think PARTICIPATION, even in parts of the country where mineral and fossil deposits are few and we have to keep going back to the same old places. Let's not "pass" just because a locality appears to be pretty much cleaned out. There could still be a rare fossil, crystal group that far out-shines anything found there before or a chunk of gem material that would produce a record stone to be dug out.

I recall unearthing my first emerald on the eightieth day of hard digging; then, my prized one came a few weeks later. I had ACCOMPLISHED what I had set out to do.

Imagine the thrill of spotting a "pigeon's blood" ruby in your screen or finding an unnamed mineral or fossil or an archaeological site. Yes, many new ones have been discovered by hobbyists; and most likely, additional ones will be.

In the case of an archaeological find, it is time to STOP digging and to call in professionals. Who knows? we may be allowed to continue working the area, under supervision, of course. That would be excitement to the Nth degree.

Club field trips are usually on weekends, and it is so easy to turn over and go back to sleep when the wake-up alarm sounds if it isn't a work day; but before we do, let's STOP. We will have gotten our exercise and enjoyed the fellowship of other collectors (trusting that no one of us would ever venture into a mine or remote area alone) even if we don't find a lot.

Happy hunting and good luck!

Glenn R. Bolick



WILDACRES

The dates for the EFMLS Wildacres Workshop sessions are July 5 - 11 and September 7 - 13, 1992. The main speaker for the July session will be Ron Bentley, President of the Board of Directors of Mineralogical Record. He is a consultant to four museums; his area of expertise being mineral exhibits. The speaker for September will be announced later.

Courses offered during both sessions and those teaching them, will be as follows:

Silversmithing - Lendall Hill	Bead Stringing - Claudia Hill
Cabochon Cutting - E.T. Pike	Talc Carving - Bill Bowes
Faceting - Reiven Zeleznik	Judging - Roger Barnett
Gem Trees - Margaret & Bruce Stallard	
Wirecraft Jewelry - Rob Morgan	Micromounting - Esther Dunn

Classes and instructors for July only will be:

Crystallography - Jennie Smith	Gem Tree Scenes - Doris McGuin
Gem Identification - Jay Bowman	Filiform Jewelry - Carole Collier

Classes and instructors for September only will be:

Scrimshaw - Jim Newman	Slate Carving - Doris Dollar
Chain Making - Harold Dollar	

A NEW BOOK - A NEW AUTHOR

We are pleased to announce the publication of the long awaited book Understanding Crystallography, by EFMLS Wildacres Instructor and Chairman, Jennie R. Smith. This book, nominally priced at \$20.00, is written expressly for the amateur mineral collector and students of mineralogy explains the six crystal systems in clear concise terms with diagrams and models where needed. To order, send your check or money order to:

Crystallography Dept. A, Box 12; Fairfax, VA 22030. (overseas add \$3.00 surface, \$5.00 airmail)

COMPETITION DEADLINE

A reminder - the deadline for entries for the 1992 AFMS Program Competitions is April 15, 1992. Complete details for this competition can be obtained by writing Jennie Smith, EFMLS Slide and Video Program Librarian, PO Box 12, Fairfax, VA 22030. Completed entries should be sent to Barbara Anderson, 918 13th Av; Green Bay, WI 54304..

Communication is the Key To Our Success

EACH ONE TEACH ONE

Each One Teach One is underway for 1992. As I write this report, I am reflecting back on the successes the Committee has enjoyed in the past years. I would like to thank the Committee — Jennie Smith, Angie Teixeira and E.T. Pike — all members of the staff at the EFMLS Wildacres Workshop. There is no way this Program would have succeeded without their participation.

The program this year will be operated in much the same fashion. The nominations will be analyzed by the Committee and the nominee judged to be willing to share with other club members their experiences and their knowledge. The sharing can be their expertise in field trips, judging, setting up shows, teaching in any of the functions of their rock club.

Look about your club; find that person that devotes their time and talent to teaching, club editor, organizing clubs for the younger members. Submit their name for the Each One Teach One Award.

Use the form enclosed with these Digests, or drop a card requesting an application to:

Bill Bowes, Each One Teach One
324 E. Franklin St
Horseheads, NY 14845



AFMS PUBLIC RELATIONS

#9 - Dealers

Whether we're in a recession or in "boom" times, the importance of dealers throughout this great hobby cannot be overemphasized. We rely on dealers to provide us with the "tools" that we need to work with — and by that I mean more than picks and shovels for field trips, collecting and the like. If you've ever looked through magazines for the hobbyists, you'll find all kinds of items to make the hobby more attractive and interesting — a great majority of these are provided by your local dealers as well as those from coast to coast.

Can you imagine a gemshow without dealers? Fortunately most clubs have seen the importance if for no more than bringing in the public (gate receipts are very important to any show and dealers can draw the public with items used by jewelers, craftpersons, consumers, as well as club members for projects of all types).

Additionally, you may belong to a club/society that is fortunate enough to have club members who own and operate local businesses associated with the hobby of "rockhounding." If so, you have a wealth of experience available to you as well as a local source for the "tools" you'll need to grow in the hobby. Many of these "old timers" can provide you with locations of gems and minerals that they learned about in earlier times and most will be happy to share these with fellow club members. In some cases, they can also provide you with goods and services at "cost-plus" prices.

Are you aware that some clubs are allowing the placement of "dealer" ads in their bulletins from club members who are dealers (business card size)? It appears to provide money that can be used to upgrade the quality of the local newsletters as well as provide sources (and reminders) for members who may need items from time to time. If there are no restrictions, (legal, moral or whatever) you might want to consider it.

Has your club/society ever considered a field trip to club members' homes and lapidary shops? There's a lot of "stuff" laying around for such an outing and the idea is certainly an excellent one for anytime of the year.

H.K. "Hal" O'Leary Chairman, Public Relations (AFMS)

EXECUTIVE BOARD MEETING

President Glenn Bolick has called for an Executive Board Meeting on Saturday, April 4, 1992 in Hickory, NC. Although only members of the Executive Board will be able to vote on any matters which arise, all club members of any EFMLS affiliated club are certainly welcome to attend. The meeting will be held at the Budget Motor Inn in Hickory and will begin at 9:00 A.M.

WELCOME TO A NEW CLUB

We would like to welcome the Presidential Gem & Mineral Society of Berlin, New Hampshire to the EFMLS family. Begun in 1991, this club now has 37 adult members and 7 juniors. Club meetings are held on the 2nd Friday of each month at the Educ. Center, Gorham Hill, Gorham, NH. Complete club information will be included in the 1992 issue of the EFMLS DIRECTORY which will be sent to member clubs shortly.

EFMLS CLUB SHOWS AND SWAPS

To have your show listed here send all pertinent information to Reiven Zeleznik, Show Coordinator, 39 Pepperidge Place, Stamford, CT 06905.

MARCH

- 6 - 8: Aiken Gem & Mineral Society & Augusta Gem & Mineral Society Show. Julian Smith Casino, 2205 Broad St; Augusta, GA Info: Jim Newman (803) 648-5208.
- 7 - 8: Delaware Mineralogical Society, Newark, Delaware 29th Annual Earth Science, Gem & Mineral Show. Brandywine Ter., 3416 Philadelphia Pike, Claymont, DE Hrs: 10-7, 11-5. Info: Donna Brown (215) 255-5365.
- 7 - 8: Manasota Rock & Gem Club 12th Annual Show Nat'l Guard Armory, 2890 Ringling Blvd; Sarasota, FL Hrs: 10-6, 10-5. Info: Tom Ladd, (813) 755-6428
- 14-15: Clifton Mineral & Lapidary Society. 4th Annual Show. Ashland Elementary School, 775 Valley Rd; Clifton, NJ. Hrs: 10-6 & 10-5. Info: Ed Murphy (908) 477-8897.
- 20-22: Catawba Valley Gem & Mineral Club 22nd Annual Show Clement Center (near airport) Hickory, NC Hrs: 9-8, 9-7 & 12:30 - 5. Info: Glenn Bolick (704) 328-9870.
- 21-22: Che-Hanna Rock & Mineral Club 23rd Annual Show Ingersoll-Rand Clubhouse, S. Main St; Athens, PA Hrs: 10-6, 10-5. Info: Gay-Dee Bloss (717) 265-5676.
- 12-22: Gem, Lap. & Mineral Society of Montgomery Co, MD 28th Annual Show. Montgomery County Fairgrounds, 18 Chestnut St, Gaithersburg, MD Hrs: 10-6, 10-5. Info: Stephani Held, (301) 871-1951.
- 28-29: Connecticut Valley Mineral Club Show. Holiday Inn at Ingleside; Exit 15 off I-91; Holyoke, MA Hrs: 10-6, 10-5. Info: Stu Benson (203) 749-3807.
- 28-29: Buffalo Geological Society Annual Show Erie County Fairgrounds, 5600 McKinley Pkwy, Hamburg, NY

APRIL

- 2 - 5: Tar Heel Gem & Mineral Club 10th Annual Show Scott Bldg, State Fairgrounds; Raleigh, NC Hrs: 5-9, 10-7, 10-6. Info: Earl Hines (919) 847-5038

Happy St. Patrick's Day!



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