

NEXT MEETING: JANUARY 17, NORTH SCHOOL

Mineral of the Month: Datolite.

Bring any samples you may have and your tales about collecting in Michigan..

PROGRAM: "Gemstones" a video & display

to be followed by a mini-silent auction.

REFRESHMENTS: J-Q please bring goodies.

SOS to Members from Margaret Green, Education Chair: Help is needed for the Okemos Science Day, **19 January 2002**. We need partners as well as some one to take George Heaton's place please.

CML&MS Program January – Milt Gere

The program this month will be on GEMSTONES and will consist of two parts.

Part one will be the screening of a 46-minute video: "The Colorful World of Gemstones" produced by the Gemological Institute of America. Information and lore is given for numerous precious and semi-precious gemstones.

Part two will be the members' display of their rough and cut gemstones, related books and experiences. All members are encouraged to help with this show-and-tell portion of the program.

I hope many of you will be able to attend and take part in this colorful experience. See you then --- don't forget your gems!

Also, depending upon attendee's interest, a short mini silent auction of members' materials may be held.

DON'T MISS THE JANUARY POTLUCK, JANUARY 27—George Heaton's archives

For our January “field trip” we will be having a potluck at the Alaiedon Township Hall on Sunday **January 27** at 1:00 p.m. Please bring a dish to pass and your own plates, cups and other eating tools. Coffee, tea and punch will be provided. Alaiedon Township Hall is located at 2021 West Holt Road., 1/2 mile east of Okemos Road.

Many of you may recall the fun times we had there in the past enjoying “Rocko,” watching movies or slide shows and eating lots of good food. Jean Ann has a new game for us to try this year, “Musical Rocks.” Don't panic, we won't make you leave your chair, just round them up into a circle. **Do please be sure to bring a wrapped rock gift or two to share, these will still be vital to the game.** This is an event for the whole family, not just members, so bring the crew!

WELCOME TO OUR NEW MEMBERS

Joseph and Dustin Mientkiewicz were visitors at our December meeting and decided to join. Dusting is a student member and is interested in archaeology, fossils, geology and tumbling. His dad, Joseph, is interested in all aspects of our hobby. Their address: 7781 South Clinton Trail, PO Box 155, Eaton Rapids MI 48825

It's dues time! Adults \$5.00, Students under 18 \$1.00. Please get your payment to Wayne Zittel ASAP: 3401 Walker Rd, Lansing MI 48906-3205.

It's YOUR CLUB, it's YOUR TURN (this is YOUR personal invitation) (jawn)

Continuing the push initiated by former Pres Ed, I'm looking to put another new face or two on the board. I'm hope someone out there will step forward and say, “Well, okay. I guess so.” to the following jobs:

Display Chair Grit and Alice Turner have held this responsibility for several years and are ready for a break. According to our constitution the Display Committee shall be responsible for (a) Maintaining the permanent display case, (b) Exhibiting on behalf of the Society at shows, (c) Notifying members of area shows and enlisting members to display at these functions, and (d) The acquisition and care of display specimens belonging to the Society. I'm thinking we might need to do some major sharing of responsibilities to pull this off—one person responsible for setting up a display (usually Thursday evening or Friday morning), another responsible for dismantling the display and bringing it home (usually a Sunday late afternoon.) Heck, maybe a whole bunch of people willing to put up or bring home so the same two folks aren't stuck with the job show after show after show! Think about it.

Show Chair Milt Gere is willing to continue as second fiddle, but is tired of being first string. According to our constitution the Show Committee shall consist of the Chairperson and any committee members appointed by the Chairperson as needed. This committee shall (a) Plan and conduct a Gem and Mineral Show, (b) Submit a budget by the February Board Meeting for approval by the Board of Directors, and (c) Submit a final accounting and report to the Board of Directors and to the Society no later than the second meeting of each, following the Show. We have a strong show board, full of people who know how to get their job done; but, we need a general leader to pull it all together.

Banquet Chair Ed Drown broke the gender barrier a few years back when he took over the banquet project. This is a short-term job, with most of the action coming between March and May. Ed has handed on very precise notes for his replacement...gee you think maybe he's an engineer? So, is there another brave man out there to push away the glass ceiling or a lady to reclaim the post?????

Any willing victims please see Jean Ann at the meeting, phone or e-mail!

CORRESPONDING SECRETARY- Connie Snepp

We arrived home a week before Christmas after a wonderful 6 weeks in Florida where we spent a lot of time collecting with Rich and Lila Stevens. I am grateful for covering for me here. I learned Mary Kay had surgery while I was gone, so I sent a belated get well card to here and also one to Mary Gowans who had surgery right after my return.

The Maninas recently suffered multiple losses of family members and friends; a card of encouragement was sent to them.

We suffered the loss of two club members. Life member Katie Hornbeck died on December 16 and Norma Kelley on December 24. Cards were sent to their families and appropriate memorials will be added to the club library or club display case.

George Heaton was involved in a car accident in Ohio over the holiday. He suffered a broken pinkie and a compression fracture in the lumbar region. A card was sent to his home here, but I'm not sure if he has returned as of this writing. We wish you the best George, wherever you are!

This year Mary Gowans will be our Corresponding Secretary. Please keep her apprised of any one who needs cheer or congratulations.

ATTENTION FOSSIL HUNTERS- Connie Snepp

Each year I make 100 fossil bags with 10 specimens each and educational material to sell at the show. This year I am in desperate need of CRINOID STEM specimens. Also, if anyone would be interested in taking over this project, we could work together this year and it can be yours next year. Call at 339-2863 or see me at the club meeting.

Club Calendar

Jan. 17 Regular Meeting, North School, 7:30

Jan. 27 Club potluck, Alaideon Twp. Hall

Mark That New Calendar with Spring Show Dates!

March 9-10 Roamin Club Auction. Sat. 11-6; Sun. 12-6. Schoolcraft College,

Waterman Campus Center Bldg., 18600 Haggerty Rd, Livonia MI

March 15-17 Jackson Show. Fri & Sat 10-7; Sun. 10-5. Michigan Center Masonic Lodge,

355 Napoleon Rd., Michigan Center MI

May 3-5 Kalamazoo Show. Fri 4-8, Sat. 10-6, Sun 10-5. Kalamazoo Cty. Fairgrounds.

Exit 80 off I 94. Featuring 8,000 lb. copper boulder, 10 ft x 4.5 ft x 1 ft

May 31-June 2 "Dearborn Show." Fri 5-9; Sat. 10-8; Sun. 11-5:30. Allen Park Civic Arena,

15800 White, Allen Park MI

June 21-23 Bedford/Bloomington Show & Swap. Fri. 10-7; Sat. 8-7; Sun 8-4. Monroe Cty.

4-H Fairgrounds, Bloomington IN

June 29-30 MGAGS Rockhound Seminar. Roscommon Middle School. For info contact

Katy Brown 734-421-8159

Greetings from Sunny Florida! Neil & Connie Snapp have returned from Florida, but to the best of our knowledge Lila & Rich Stevens are probably still setting on this pile of shells used for drive-way gravel in the trailer park. Shark's teeth and other treasures are abundant in the pile.

A Gleam In Your Eye AFMS Newsletter Dec. 2001

by Mel Albright, Safety Chair

Looking for rocks? There's a gleam in your eyes. Doing some soldering? There's a gleam in your eye. Driving into the sun? There's a gleam in your eye. Enjoying the scenery? There's gleam in your eye. Boy, look at that fluorescent stuff! There's a gleam in your eye.

Have you thought about what your eyes receive as you follow your hobby? The answer is radiation, of course. Most of that radiation is in the visible light range and gives us no problems if it isn't too strong. But, some is infrared, some ultraviolet A and some ultraviolet B. The infrared is of wavelength longer than we can see. The ultraviolet is of wavelengths shorter than we can see.

But, radiation is all around us as we follow our hobby. The first source is the sun. We all know not to look straight at it. But, sunlight is reflected from any surface other than pure black and pure black radiated infrared when heated.

Infrared energy hurts us by heating tissue. Your eyes are one place. Infrared re-radiates as heat - Dern that tool's hot! Although eye damage is more probable than skin energy, both are possible with visible as well as infrared. These rays can be focused by your eye lens so they cause retinal injury - up to blindness. IR also comes from UV lamps, resistance heaters, and flames (including welding and soldering)

Ultraviolet hurts us causes biological chemical reactions that injure us. A sunburn - eye problems - sensitivity to light - These are some of UV's effects. UV comes from the sun, of course. But it also comes from welding, plasma torches, gas discharge lamps ("black" light, mercury lamps, germicide lamps, welding and soldering torches, and the like). Too much UV can also blind you. Dangerous visible energy may come from the sun, or from welding and soldering flames. The Commission International d'Eclairage (CIE) International Lighting Commission classifies radiation as follows: The numbers are wave lengths in nanometers. 100-280, far UV or UV-b (actinic); 280-315, Middle UV or UV-a (actinic); 315-380, Near UV, black light; 38-780, visible light; 780-1400, Near IR; 1400-3000, intermediate IR; 3000-10,000, far IR; and over 10,000, microwaves.

"Infrared (IR) energy produces harm by heating tissue. Ultraviolet (UV) energy can cause injury by triggering chemical reactions in proteins and other biological molecules. This is termed photochemical injury. UV can also cause harm by heating tissue. Visible light can cause injury by heating, but visible energy with wavelengths below 550 nm can also produce photochemical injury. Although eye injury is more serious than skin injury, the skin and eyes are equally vulnerable to all wavelengths except those between 400 nm and 1400 nm. Energy with wavelengths between 400 and 1400 nm entering the eye can be focused by the lens and reach the retina at the back of the eye; therefore, retinal injury, which

can lead to partial or even total loss of vision, is a serious concern at these wavelengths." Source: <http://www.llnl.gov/es_and_h/hsm/doc_11.02/doc11-02.html#26.8>.

For all radiation - there are safety glasses which will protect your eyes - actinic glasses for UV (see glass-blowing), sunglasses for visible, and darkened glasses for strong visible and IR. IF you are going to have much exposure, be sure to buy and use this safety equipment. Sun-block also protects the skin against UV.

FINALLY, laser light is extremely dangerous to your vision. Avoid being around them if you can. If you must be around lasers, there are safety glasses designed for that. Use them.

Artificial Weathering via AFMS Website

by Chuck Safris
Central Iowa Mineral Society

It is always a thrill to find a cracked concretion that separates cleanly in the field with a light tap of a rock hammer to reveal a beautiful fossil. More often, however, a promising looking concretion is not already cracked and resists being broken. When it finally breaks under the blows of a rock hammer, there is some shattering or uneven breaking which can damage the enclosed fossil. An even then, there is a chance that the enclosed fossil is not exposed. With a little patience, there is another way to expose the enclosed fossil. Artificial weathering is a simple alternative that may lead to the collection of fine, undamaged, fossils if the matrix material is suitable.

Freezing and thawing causes accelerated mechanical weathering of a rock. If water can seep into pores or micro cracks in the rock, the rock will become saturated. When the water expands as ice forms during a freezing cycle, pressure is exerted on the rock, leading to cracking or exfoliation. If the fossil is a carbon film, then the fossil is a natural weak spot in the concretion and with luck the subtle pressure of freezing will open the concretion so that the fossil is perfectly exposed and undamaged.

The process is very simple for any rock that will take up water. A container (other than glass, which might break during the freezing process) suitable for the specimen's size is selected and the concretion is covered with water and allowed to soak for several days. Then a series of freezing and thawing cycles are achieved by using the freezer in the summer or the back porch in the winter. By achieving a freeze thaw cycle every day, the process is accelerated. It is important that loosened residue from each cycle be removed and examined because if there are any fossils revealed, the next freeze cycle could destroy them.

If you live in a northern climate and there is no hurry, the suitable rocks could be placed in container full of water and simply left outdoors all winter where the daily temperature swings would do all the work. It has been reported that thousands of Mazon Creek (IL) fossils have been exposed using accelerated artificial weathering this way.

In Iowa, fossil collectors are on the lookout for blade shaped nodules of limey shale in Pennsylvanian exposures and stream beds. With any luck and some artificial weathering, a well preserved, beautiful fern frond is likely to join your fossil collection.

Reference: "Freezing and Thawing of Fossils"; J. Pojeta and M. Balanc, U. S. Geological Survey, Reston VA, Undated.

The reference material is printed in the book "Paleotechniques". The book is subtitled "The Paleontological Society Special Publication No. 4", 1989 and is edited by Rodney M. Feldmann, Ralph E. Chapman and Joseph T. Hannibal. It is published by the Department of Geological Sciences, The University of Tennessee, Knoxville, TN. Its ISBN number is 0-931377-04-2. The article appears on pages 223-226 and is not dated.

The article goes deeply into the use of various freezing agents, of which tap water is the one I wrote about.

Chuck Safris, Editor
News Nuggets
Central Iowa Mineral Society
Des Moines, Iowa

Submitted: January 1999

SAFETY FIRST by Bill Klose EFMLS Safety Chairman, Nov. 2001 EFMLS News, via AFMS website

By the end of November, most areas will have had their first frost and "Indian Summer" and maybe even their first snow storm of the season, but the undaunted rockhound will continue to venture out until the ground is frozen or snow covered. Chapter 16 of the "American Federation of Mineralogical Societies SAFETY MANUAL" deals with two of winter's knockout punches, frost bite and hypothermia and will be repeated here with a few of my comments in brackets where appropriate.

FROST BITE

"Frost bit" is a condition characterized by the (cutting off of circulation to and possible) destruction of superficial tissues, resulting from exposure to cold-- especially moist cold (Especially in the

extremities, such as hands, feet, ears, nose, and other exposed areas of the body). (The Wind (wind chill factor) can add to the effects of cold temperatures, even when above freezing.) (Symptoms of frost bite begin as a prickly feeling on exposed areas of the skin followed by numbness and waxy looking patches.) Blanching or redness (erthema) of the affected area is prominent initially. Later, edema and superficial blisters develop and may brake down and form superficial ulcers (and the skin dies and falls off) or gangrene. Severe pain is associated with this condition.

"TREATMENT": Prevention is more important by keeping warm and avoiding undue exposure to cold without adequate protection. (The best protection is to keep warm, keep moving, and keep dry. Dress in loose layers of warm, waterproof clothing, that cover exposed areas. Warm gloves and a hat are essential. Up to 80% of the bodies warmth can be lost through an uncovered head.)

"ACTIVE TREATMENT": The affected parts are to be well dried and wrapped in protective cloth or cotton, (or tuck the hands into the armpits) and allowed to gradually come up to normal or room temperature. Application of heat or direct cold is contraindicated. (Do not rub or apply snow to the frost-bitten area. The affected area can be placed in water a little above body temperature (not above 104 degrees F). Do not place hands under running water, as there will not be any feeling initially, so they could become burned. As the frost-bitten area "thaws" it is normal to feel pain or a burning sensation.) If blister formation results (do not break them), or frost bite is severe, medical attention should be sought.

HYPOTHERMIA

"MOUNTAIN SICKNESS": Exposure to cold is the precipitating factor. The main contributory factors may be contact with wetness or inadequate clothing. Predisposing factors may be alcoholism, or an underlying vascular or systemic disease (such as Diabetes or poor circulation. People taking beta blockers to lower blood pressure are especially at risk). The young and the old are especially vulnerable.

"SYMPTOMS" (The symptoms are initially uncontrollable shivering with pale and numb skin) Abnormal behavior, weakness, stumbling and falling, leading eventually to collapse and stupor. (Hypothermia is the loss of body temperature and can be life threatening.) (In severe cases, the person will go unconscious, and will have shallow breath and erratic heartbeat, and then the pulse weakens and slows.) "Watch your companion" on field trips!

"TREATMENT": (At the first signs of hypothermia, take the victim to a warm, dry place and give them hot liquids (not alcohol).) Clear and maintain airway, if patient is unconscious. Prevent further heat loss by blankets, warm rocks, or a companion in bed with the victim. A slow return to normal temperature is advisable. (Get medical attention as soon as possible if the symptoms have gone beyond the shivering stage.)

Do not collect alone in cold weather and carry a cell phone with you if possible for emergencies. Let someone know where you are going and when you will return. Enjoy your cold weather collecting or other activities safely.

