NEXT MEETING: March 21, North School

Mineral of the Month: Beryl

PROGRAM: Silent Auction

REFRESHMENTS: A-I please bring goodies.

CML&MS March 2002 Meeting Program

The March program is the Club's traditional 'Member's Silent Auction.' Dig through your piles of rocks and rock hobby items and bring your excess to the March meeting for others to buy from you. Let them build their rock piles up with your former stuff, you do the same with theirs.

Jean Ann has placed a blank bid form in the newsletter. Copy it and fill out the seller's portion. Remember to bring change and small bills for purchases and wrapping materials for taking your new treasures home. See you then. Milt

Field Trip to Huntsville, Ohio March 23 – George Heaton

The field trip for March will be to the Duff Quarry at Huntsville Ohio on Saturday, March 23. We will meet at the quarry office at 10:00 am on Saturday morning. All filed trippers must wear a hard hat, hard toed boots, and safety glasses or goggles. Tools needed are: chisels in both large and small sizes, crack hammers of 2-3 lb. size, and a pry bar and sledge hammer of 8-10 lb. size are often useful. The sledgehammer and a long pry bar can also be used as a cane to help you back to your car should you happen to injure your foot or ankle. Also don't forget wrapping paper and boxes for packing specimens. Minerals to be found include bright, lustrous pyrite crystals of unusual crystal habits, dolomite, sphalerite, calcite and fluorite.

The November-September 1987 issue of the Mineralogical Record has an article about Duff Quarry and it's minerals, with photos and line drawings of the various crystal habits of pyrite found there. If you do not have this issue, you might check our club library.

To get to Duff Quarry, take I-75 south in Ohio to Rt. 235. Go south on Rt. 235 through Ada, Alger and Roundhead. Then South on Rt. 117 to Duff Quarry on your left, just before coming into Huntsville. Allow about 4 hours driving time from Lansing to Huntsville Ohio.

A Message from Bettie Patterson

After much deliberation, I have concluded that it is time for me to step down from the office of Permanent Liaison Officer. I have thoroughly enjoyed the 32 years I have held this office and have felt privileged to have been appointed year after year by each incoming president.

Therefore, effective March 22, 2002, I will resign from my office of Permanent Liaison Officer of the Central Michigan Lapidary & Mineral Society...I shall be glad to cooperate in any way I can with this transition, and shall continue to work for the Society whenever I am able.

Thank you Bettie, for so many years of service to the Club!!!

Corresponding Secretary Report – Mary Gowans

A get well card was sent to Margaret Kimball who injured her shoulder.

Cards of sympathy were sent to the families of Marie McElmurray and Lucille Roggow.

Membership News – Ernie Aughenbach

Welcome back to Sharon Bacigal who is rejoining the club in celebration of her retirement! Sharon's address: 2535 Varsity Ln,. Holt MI 48842. bacigal@aol.com 655-3743

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Welcome to new member David Klopfenstein. David's interests include archaelogy, geology, metalcraft, mineralogy, minerals and gold/silver. His address: 730 Eagle Pt., Lake Odessa MI 48849 djklop@voyager.net (616) 374-8014

Please also note these changes of address:

Albert W. McCort Brenda Freeman

4471 S. Calle Agaada 68888 Illinois St.

Bullhead City AZ 46426-9100 Ludington MI 49431-9503

CML&MS Membership Meeting February 21, 2002

The February general membership meeting was called to order by President Jean Ann Wahl-Piotrowski at 7:43 p.m. at the North Elementary School.

Guests/Visitors: Welcome back to two club members, Barb Smith, and Sharon Bacigal.

Vice President Milt Gere will announce the program following the business meeting.

Recording Secretary: Last month's minutes published in the February newsletter.

Corresponding Secretary: Bettie Patterson gave report in Mary Gowan's absence.

Treasurer: Alan Hukill provided transaction activity and balance of funds in club account.

Roster Secretary: Wayne Zittel, reminder to pay dues for 2002 (also membership card available for Mike Livingston which Mike picked up).

Liaison Officer: Bettie Patterson announced that the American Federation newsletter was available if anyone was interested in looking at it. Bettie also shared some "healthy" lines of humor.

Education: Margaret Green announced that the Mineral of the Month was Epidote and there was a display set up for folks to look at; and Bettie Patterson had a variety of Epidote specimens for folks to look at.

Community Outreach: Elaine Angstman - No Report

Display: Ed Drown (in place of Grit Turner) announced that show flyers were on the front table. Door prizes were won by 1) Melvin Lehner; 2) George Heaton; 3) Elaine Angstman and 4) Gordon Lewis.

Finance: Gordon Lewis – No Report

Old Business: Jean Ann is asking for volunteers for the following: Display; Show Chair; Liaison (club's records keeper and official club mailing address); and Banquet Chair Person.

ALAN HUKILL volunteered for LIAISON; AND CONNIE SNEPP/SHARON BACIGAL volunteered to Co-Chair the BANQUET. [Person(s) still needed for Display, and Show Chair.]

New Business: None

Roger Laylin moved to adjourn the meeting, supported by Gordon Lewis; meeting adjourned.

PROGRAM: Vice President, Milt Gere introduced Dr. Alan Arbogast, professor at Michigan State University. Dr. Arbogast spoke on his research of sand dune evolution along the southeastern shore of Lake Michigan.

Respectfully submitted,

Sue Casler, Recording Secretary

The club banquet is coming up May 16. Dan Behnke, nationally known micro specialist, will speak on the "Mines and Minerals of Cornwall, England." Dan is a great storyteller & superb photographer, you won't want to miss this club event!!!

Worth visiting:

The **Midland Center for the Arts**, 1801 W. St. Andrews Rd, Midland MI www.mcfta.org has an exhibit "**Mine to Market**" through Saturday, March 23, 10 am to 6 pm daily. Free admission. "Current and past technology of the iron and copper mining industry of northern Michigan is the focus."

The MSU Planetarium. Adults \$3.00, seniors & students \$2.50, 12 & under \$2.00.

Friday & Saturday nights at 8 pm, Sunday at 4:00 pm enjoy "Voyage to Orion—a Star Trek Voyage of Discovery." Sunday afternoon at 2:30pm "Zubenelgenubi's Magical Sky" a special program for children up to 5 years old. After every show a sky talk is given by one of the planetarium staff, focusing on the current sky.

Spring/Summer Show Dates

- March 15-17 Jackson Show. Fri & Sat 10-7; Sun. 10-5. Michigan Center Masonic Lodge,
- 355 Napoleon Rd., Michigan Center MI
- March 16-17 Cedar Rapids Iowa Show. Sat. 8:30-6. Sun. 9:30-5:00. Teamsters Union Local No. 238, 5000 J St. SW., Cedar Rapids Iowa
- March 23 "Dearborn Swap" Sat. 10am-5pm. Democratic Club of Taylor, 23400 Wick Rd, Taylor MI (just East of Telegraph). Free admission & parking.
- April 4-6 Grand Rapids Indian Mounds Show. Thurs & Fri. 9:30-9, Sat. 9:30-6. Breton Village Mall, take Breton north of 28th St. to Burton SE.
- April 6-7 Central Ohio Show. Sat. 10-7, Sun. 11-5. Veterans Memorial, 300 W. Broad St. Columbus OH.
- April 12-15 Mt. Clemens Show. Mt. Clemens Community Center, 300 N. Grosbeck Hwy, Mt. Clemens
- April 20-21 Cincinnati Show. Sat. 10-7, Sun. 11-5. Cincinnati Convention Center 525 Elm St. (5th & Elm Sts.) Cincinnati OH. \$1 off admission coupon available at club mtgs.
- 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
- May 31-June2 "State Line" Club Show, Fulton County Fairgrounds, Wauseon Ohio
- 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

Aug. 4-11 "Keweenaw Week" Copper Country Club. Field trips, speakers, swap, show. For

info: Steve Whelan (906)337-2599, swhelan@up.net or www.ccrmc.info

August 16-18 Midwest Faceters Guild Seminar. Mott Community College, Flint MI. Class size

limited, register early. Contact Harold "Arizona" Rice (810) 463-5972 azrice@wwdb.org

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How To Be An Authentic Wizard In Dealing With Lapidary Mathematics

Via American Federation Newsletter Feb. 2002

You can get along in lapidary - even faceting - without a math degree. Still, its also nice if you can solve the complex optical and crystallographic challenges that only advanced math knowledge will allow. Now, there's an easy solution for all faceters and gemcutters. Dr. Gerald L. Wykoff GG CSM, has contributed his famous FACMATH UTILITIES programs for PC computers FREE to the gemcutting community. Now retired in Florida after ill health forced him out of the former American Society of Gemcutters, Wykoff programmed these sixteen amazing software utilities so they'd solve - for non-math types - merely from a few simple typed in parameters. The programs include:

YIELD—this utility will ask for the dimensions of a piece of rough, compare them to your intended cut and then tell you what kind of yield percentage for that particular cut you might expect

TANGENT—ever see written instructions for quartz and you want to change the angles so you can cut for topaz? This utility calculates answers using the well-known Tangent Ratio method and does it quickly and simply.

SNELL—When a light ray enters a gem material, the ray bends according to the type of gemstone material. This program calculates how much entering and exiting rays bend.

SPEED—You have a certain diameter pulley turning at a certain RPM (or SFPM) and you want to know the effect on a different diameter and how fast it'll turn. This utility solves that question.

ANIMATION - This short animated utility visualizes the changing side view silhouette of a round brilliant as the angles for the crown and pavilion are changed.

GOLDEN—You've heard of the Golden Ratio developed in Ancient Greece, a ratio often described as the most pleasing, esthetic proportions in design. This utility solves for any dimensions.

NEWCUT—Want to draw your own design on a computer. This paint program, faster and easier (it really isn't all that easy!) than GEMCAD, enables you to design and draw precise, accurate drawings of your work.

TEMP—Need to convert Celsius temperature to Fahrenheit temperature or vice versa? This program does the job in a fraction of a second.

FRESNEL—when light rays strike a gem surface, Fresnels Law dictates how many rays are reflected. This utility will give you the precise percentage reflectivity of every popular gem type.

RESHAPE—Unexpectedly, you've run out of material thickness for the crown. This utility does the correct math for refiguring new crown angles that salvage the original plan design.

WEIGHT—a carat weight scale is nice but this utility will carefully and quickly calculate the carat weight (and almost all other kinds of weight) of a cut gem just from the measurements that you provide.

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CA—if you know the Refractive Index for any gem type, feed it to this utility and you'll immediately get the Critical Angle, helpful for figuring out angles.

ANGLES—what's the best combination of angles for any gem type? This utility offers you the results of a whole series of sophisticated math approaches for computing best angle.

GEARS — if you encounter faceting instructions written for a certain index gear and want to convert to an index gear of another symmetry, this utility will do it instantly.

APEXES—when you want more than a flat table, try apex crown facets. This formula will figure out the math for producing the optimum angle for those famous apex facets.

CONVERT—this utility will convert accurately all weights and measures from one scale or reference into another.

All of these utilities - and each opens with a mere mouse click — can be downloaded FREE from Dr. Wykoff's website, www.mbawiz.com. Once copied to your computer - or to a handy floppy disk - you merely mouse click on the program you want and it goes to work for you, solving difficult lapidary math problems. With these utilities, even if you have no math background at all you can still compute answers with the brainiest—and you'll never be wrong!