



WAYNE COUNTY GEM AND MINERAL CLUB NEWS

Volume 38 Number 10 October 2010



**2010-2011
OFFICERS
PRESIDENT**
Pat Chapman
607-868-4649

VICE PRESIDENT
Glenn Weiler
315-594-8478

SECRETARY
Eva Jane Weiler
315-594-8478

**TREASURER/
MEMBERSHIP
CHAIR**
Bill Lesniak
315-483-8061

FIELD TRIP CHAIR
/Mini-Miners
Bill Chapman
607-868-4649
batnpill@empacc.net

DIRECTORS
Jerold Donahue
315-548-3200
Ken and Rocky Rowe
315-331-1438
Terry Wilson
315-462-9222



Greetings to all & we hope that you're merry!
The season that's upon us, causes some stress & that's hairy.
Try to relax and let nature take its course.
Enjoy a walk, look for rocks or hitch up your horse.
Release all those endorphins and find calm in your soul.
It's in there, I know it, it's what makes you whole.
Don't put on that face that causes us fright.
Halloween is over and then try if you might
To put down those sissors, that scotch tape too
Come down to our dinner to enjoy a thing or two.
It might surprise you to turn your mind off
Sip down some eggnog to soothe that troubling cough.
Your friends, those crazies, those rockhounds galore
Have set a place at the table for you and what's more...
Ham & potatoes and desserts till you burst...
Chocolates and more in the basement of the church.

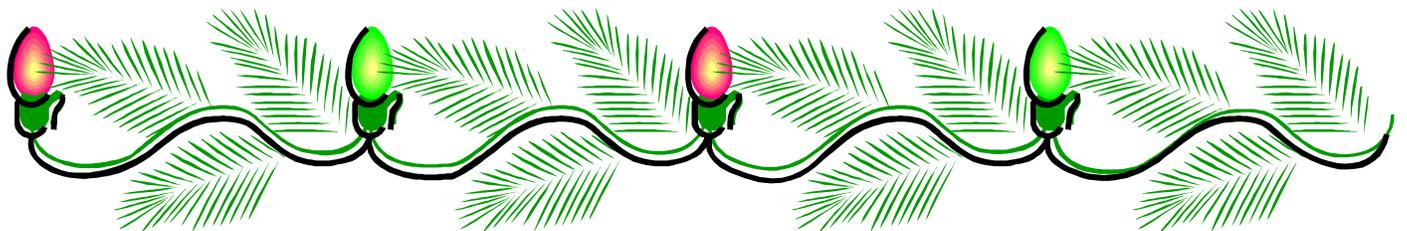
We're looking forward to seeing you soon!
Merry Christmas & Happy New Year!
Pat



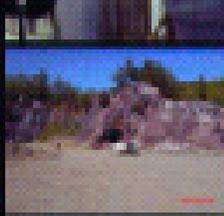
Dec. 10th : Christmas Party

***6 pm Social 6:30 Dinner
Park Presbyterian Church***

The Club will provide a ham this year, as well as drinks and place settings. Please bring a dish to pass (appetizers, vegetable dishes, desserts, & rolls/holiday breads are always welcomed) and **we would appreciate a R.S.V.P.** to Pat at 607-868-4649 or batnpill@empacc.net. We'll exchange "Club Hobby Related" gifts in the \$7-\$10 range. Label yours according to your orientation – lady, man, boy, girl...so gifts will be appropriate, you bring one you get one. And to top it off, Van King, geology textbook author, WCGMC member and friend will present a program for us to enjoy.



2010



Wayne County Gem & Mineral Club

"Captured Lightning" sculptures.

We Captured a Miniature Bolt of Lightning Inside this Block of Acrylic!



The scientific name for the branching pattern captured inside this 2" x 2" x 3/4" polished acrylic block is a Lichtenberg Figure or Electron Tree. We call them "Captured Lightning" sculptures. Lichtenberg Figures are named in honor of Georg Christoph Lichtenberg, the 18th century physicist who first discovered them. Dr. Lichtenberg used high voltage electrostatic discharges and finely powdered sulfur and lead oxide to create 2-dimensional figures.

Using 21st Century technology, we created this modern 3-dimensional version by bombarding a block of polished acrylic with high-speed electrons using a 5 MeV linear accelerator (LINAC). The LINAC creates a beam of fast moving electrons that are moving at 99.5% the speed of light. The energetic beam of electrons are aimed towards the flat surface of the block. As they slam into the acrylic, they easily penetrate the surface, slowing down as they collide with the acrylic molecules, and finally coming to a stop about half way through. The accumulating electrons form a cloudlike layer of excess negative charge, called a space charge, deep inside the specimen. Since acrylic is an excellent electrical insulator, the excess charges can't escape, and tremendous electrical stresses rapidly build as more electrons are being added by the beam.

In a process quite similar to natural lightning, the electrical stress finally overcomes the insulating strength of the acrylic and the electrons suddenly escape as a brilliant electrical spark. Sometimes, as in the photo below, this process is triggered by poking the charged acrylic with a sharp object. Once the acrylic breaks down, the trapped charge quickly rushes out as a miniature bolt of lightning, accompanied by a flash and a bang. And, similar to lightning, the branching, self-similar discharge can be described mathematically as a type of fractal.

http://cgi.ebay.com/Rare-Captured-Lightning-Lichtenberg-Figure-Sculpture-/200380826437?pt=LH_DefaultDomain_0&hash=item2ea7a0c345

11-17-10



Merry Christmas
& Happy New Year,

From Your Friends
at the Wayne County
Gem & Mineral Club.

Wayne County Gem & Mineral Club, Inc.

Meetings held 2nd Friday of each month
Mini-Miner Program at 6:15 P.M.
Regular Program & meeting at 7:00 P.M. at
Park Presbyterian Church
Maple Court, Newark, NY 14513

WEBSITE: www.wcgmc.org

Organized: 1973 Incorporated: 1976

Objective: To stimulate interest in earth sciences, collecting, classification of minerals, & in the art of gem cutting.

Fiscal Year: Oct. 1st to Sept. 30th

Dues: Due Oct. 1st.

Juniors or students [18 yr.> w/o parent in club] \$10.00

Single Adult [over 18 years old] \$15.00

Family Membership [includes 2 adult votes & kids] \$20.00

Send dues to WCGMC, PO Box 4, Newark, NY 14513

Affiliated with:

The American Federation of Mineralogical Societies

[A.F.M.S.] www.amfed.org ,

The Eastern Federation of Mineralogical & Lapidary Societies

[EFMLS] www.amfed.org/efmls &

The Eastern Field Trip Alliance [E.F.T.A.] www.efta.biz

Upcoming Events

December 10, 2010: WCGMC Christmas Party – see article on page 2.

January 4, 2011: Field Trip Committee Meets at Rowes, 580 Rte 88 South, Newark: Everyone invited. Have places you want to visit? Now is the time to get it on the calendar.

January 14, 2011: WCGMC Mini-Miners 6:15 PM

Learn to make some earrings or a necklace.

Bring your favorite rock or fossil.

WCGMC Monthly Meeting: 7PM **Program:** Rocky Rowe teaches "Making Netting Tube Beads".

February 11, 2011: WCGMC Mini-Miners & WCGMC Monthly Meeting: 6:30 PM for program "Best Specimen Contest", Meeting to follow.

February 26 & 27, 2011 - 18th Annual James Campbell Memorial Gem, Mineral & Fossil Show - Albany, New York:



Wayne County Gem and Mineral Club

P.O. Box 4

Newark, New York 14513



The Public is always welcome!

First Class: Dated, Meetings & Time Valued