

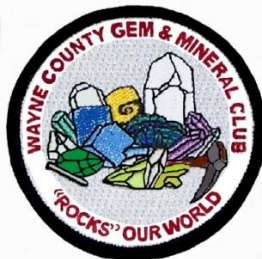
# Wayne County Gem and Mineral Club News

October, 2016

Always Looking for Places to Dig!

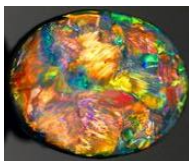


*Now how did that rock get into my garden?  
Find out on page 2.*



<http://www.wcgmc.org/>

**November Birthstones  
Tourmaline and Opal**



*White marble in Gardenscape Inc.'s  
Seavey Road Quarry (see page 4)*

## WCGMC Meetings

**Friday October 14<sup>th</sup>, 7:00 PM**

Park Presbyterian Church,  
Maple Court, Newark, NY

### **PROGRAM: A summer of collecting**

Bring your rocks/minerals/fossils from your summer acquisitions. Bring them to show, bring them to swap, bring them to sell. Come prepared to learn about our overnight trips to Canada, Adirondacks, New Jersey, New Hampshire/Maine, Pennsylvania, and the Cincinnati area, as well as local fossil trips and visits to Penfield and Walworth quarries.

**Club Workshop, Saturday, October 15<sup>th</sup>**

When: 10:00 AM til mid afternoon, Sat. Oct. 15th

Where: The Weiler's Barn and Club Workshop  
6676 E. Port Bay Rd, Wolcott, NY

Rules: BYOR (Bring your own rocks) to saw, grind, polish or even facet. Training on equipment is available. Eye protection is recommended. \$5/adult to offset maintenance costs

## TWO EARLY OCTOBER FIELD TRIPS

### **WALWORTH QUARRY OPEN HOUSE:**

**The Dolomite Products Walworth Quarry Open House is October 8-9<sup>th</sup> (Sat. 7-2, Sun 7-12.).**

Arrive early for safety talk and sign in. Normal quarry PPE (personal protective equipment) required. Hard hat or bicycle helmet to be worn at all times. Sturdy shoes, preferably steel toe, required. No flip flops, sandals, etc. Long sleeves and pants. Safety glasses. Dolomite is hard. Rock hammer & chisel suggested. The office area has a rest room. Coffee & doughnuts for Saturday diggers during sign in. Water, snack, sunscreen, flashlight are some items you might consider. People from many states gather here. Everyone may not find a prize fluorite, but everyone has fun.

### **A TUESDAY FOSSIL TRIP: October 11, 2016**

We will meet at McGee Diner off NY Thruway at Exit 41 in Waterloo. If you want breakfast, arrive by 7:30. We can carpool and depart around 8 AM..

By member request, first stop is Lord's Corner for horn coral. After that we will pick spots based on group interest (Pompey Center, Cole Hill, Morrisville, etc. or YOU tell us).

Contact either Bill Chapman or Fred Haynes for details. (see page 8 for e-mail/phone)



## Mineral Musings

### When Rocks Move

*By Fred Haynes*



Back in the [December 2014 issue](#) of this newsletter we learned about the mysterious “sailing stones” in Death Valley and how they reached their final resting place on the desert playa. There is really no such mystery about how (or why) 4000 cubic meters of rubble and large boulders came to rest in Termeno, Italy destroying a barn and damaging a large estate in the process. Simply put, two unrelenting physical processes can be blamed, erosion and gravity.

It happened on the night of January 21, 2014. Quietly, but relentlessly, the carbonate cliffs behind the Freisingerhof, a large estate owned by the Servite order of the Catholic Church, were dissolving. Carbonate dissolution within the dolomite unit coupled with erosion undermining the talus slope below and beneath the cliff face and the result was inevitable. Gravity always wins and over 10,000 tons of rock came racing down the slope that fateful evening in Termeno.



**Compare this picture with the one of the front page.** It is not like they were not warned of the risk. It had happened before!



**And up the hill, from whence it came!** One of dozens of resistant cliff forming dolomite units that give the Dolomite Mountains of Northern Italy their unique charm and character. Note the hole in the ridge to the left of the recent slide (yellow arrow). Perhaps the source of the large boulder from a previous event?



**A view of the backside of the house** shows an even larger boulder that stopped just short of the large estate. Note the white van for scale. Perhaps there was a bit of divine intervention?

Fortunately no one was hurt in the landslide and the area was cleared of residents as geologists feared that there was a risk of further rock falls.

#### References:

AGU Landslide Blog, 2014,

<http://blogs.agu.org/landslideblog/2014/01/29/trami-n-rockfall/> American Geophysical Union

Woo, M., 2014, Bizzare Landslide: Boulders Roll Onto Farm, Narrowly Missing House, Nat'l Geog, Feb 5.





## FOSSIL FODDER: PREHISTORIC NEWS



Three short fossil notes to report this month!

### A FOSSIL CONUNDRUM

contributed by Stephen Mayer

On our August trip to Green's Landing, Gary Thomas collected an interesting piece consisting of two different gastropods. Gary found the piece in the Sponge-Megastrophia interval of the Jaycox member of the Ludlowville Formation. Careful inspection reveals that the fossil on the left is a *Platyceras* sp. (perhaps *erectum*?), while the gastropod on the right is a *Naticonema lineata*. It appears that these gastropods have conjoined their apertures.



The question for all of us to ponder is: Why would two gastropod species from different Genus be conjoined in this manner? We ask any of you to pass along your ideas during October. The newsletter will publish them along with my thoughts next month. Send thoughts to me at [flexy50@yahoo.com](mailto:flexy50@yahoo.com).



### A Queue of Blind Devonian Trilobites

This one comes all the way from central Poland where researcher Blazej Blazejowski reports that the eyeless trilobite *Trimercephalus chopini* can be found preserved in trains with head to tail (or in trilobite lingo with cephalon to pygidium). He infers that the queues actually represent migratory chains as the ancient arthropods marched across the seafloor, perhaps in an unsuccessful effort to escape near and present danger.

Blazejowski, B., et. al., 2016 Ancient animal migration: a case study of eyeless dimorphic Devonian trilobites from Poland, *Palaeontology*, V. 59, p. 743-751.

### Cincinnati in September

Bill Lesniak and Fred Haynes attended Buffalo Geological Society's 4-day fossil trip to the Cincinnati area in late September. We visited three quarries and two roadcuts on a trip organized by Jerry Bastedo (also a WCGMC member). Check out the photos on page 7 and watch for more on these excellent Ordovician and Silurian sites in future issues.

While in Cincinnati, several of us attended the Cincinnati Fossil Club meeting (called Dry Dredgers) on Friday night. We were treated to an excellent talk on Pennsylvanian plant fossils from the Mazon Creek area of Illinois by Tom Williams. The fossils are found inside siderite nodules and are best "extracted" by freeze thawing the nodules until they crack.



**Bill Lesniak gets lucky again.** There were over 80 folks in attendance at the meeting, but when it came time for door prizes, the first number pulled was Bill's. He promptly marched to the front of the room and selected this *Precopteris* plant nodule from Mazon Creek that had been donated by the evening's speaker. Attend the October WCGMC meeting and perhaps Bill will let you peek at it.



## SITE OF THE MONTH

Seavey Road Quarry by Fred Haynes



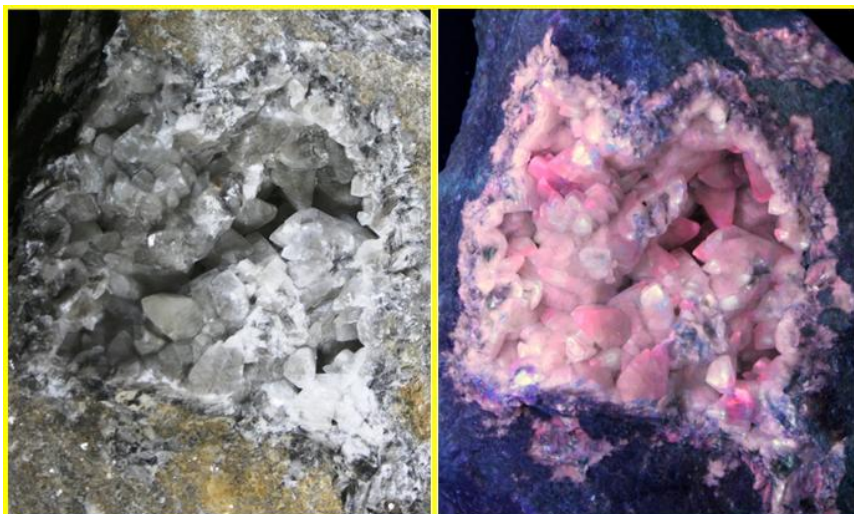
Our popular September Adirondack field trip was another great success. Seven spots in 4 days with the Saturday AM visit to Benson Mines in Star Lake attracting the most collectors with 33 folks convening to enjoy a morning collecting in the dumps of the open-pit iron mine just outside town. Six of the sites visited were repeats for the club (Rose Road, Benson Mines, Talcville, Valentine Mine, Fine roadcut, and Moose River). However, we had never been to the Seavey Road marble quarry north of Gouverneur. Thanks to Ken St. John, who had visited earlier with a small group of fluorescent mineral collectors, and to quarry owner Kevin Dibble, we were able to spend three hours in the large, and very white, quarry. As a new site for us, the Seavey Road location deserves a review.

The quarry is owned by Gardenscape Inc. of Gouverneur and the location has been providing products to professional landscapers and others since 1976. Much of the quarry marble is crushed into powder, bagged, and sold as lime for agricultural use or for lining athletic fields. It is sold both under the company name of Gardenscape or under the brand Quikrete at Lowe's and other retailers. Gardenscape also crushes the brilliantly white marble to several sizes and bags or sells as larger blocks for landscape use. Most of the processing is done onsite.

Our interest in the site was twofold. First, in some regions of the quarry dolomitizing fluids had entered the Precambrian marble. While converting the marble to a tannish or off white dolostone, this process also generated vugs in the host marble. And we all know that vugs are very good. In this location, white dog-tooth calcites up to one inch and often clustered are found lining the vugs. Often they contained aesthetic dark phantoms. Although not always easy to extract, a combination of persistence and proper use of chisels allowed all present to go home with

calcites from a new location to add to their New York collections.

The site is also known for fluorescent norbergite. Norbergite is a magnesium silicate from the humite group (formula –  $\text{Mg}_3(\text{SiO}_4)(\text{F},\text{OH})_2$ ). The orthorhombic mineral is often found in high-grade marble deposits as an accessory mineral. Despite having several black lights and dark tarps this tan, fairly non-descript mineral was elusive and only a few possible grains were found. We did find small green diopside and as the lower right picture notes, there was pyrite scattered throughout the marble in the quarry.



**Fluorescent calcite:** Although fluorescent norbergite was hard to find, we learned that the calcite fluoresces pink in short wave adding to its appeal. This is a picture in both daylight and under strong short wave UV.  
Specimen and photo by Ken St. John



**A boulder with a large streak of pyrite was spotted on the quarry floor.** Naturally Ken St. John (in yellow with the saw) was not about to leave that behind. Bill Chapman and Craig Stephens are busy with their big hammers at a safe distance from Ken.

See page 7 for more pictures from both September Field Trips





## OCTOBER BIRTHSTONES

### Opal and Tourmaline



October is another month with two official birthstones. If you are partial to wondrously terminated hard crystalline faceted gemstones, perhaps tourmaline would be your preferred choice. But, if you like the rainbow play of colors offered by opal, then stones cut to display the remarkable lustrous character of precious opal may touch your fancy. Since we reviewed the tourmaline group of minerals in the [April 2014 WCGMC Newsletter](#), let's focus on opal in this birthstone review.

Opal is a hydrated amorphous form of silica, a hardened gel of silica and water with a chemical composition of  $\text{SiO}_2 \cdot n\text{H}_2\text{O}$ . Water content can range from 3-21%, but most opal carries 6-10% water locked into layers of closely packed spheres comprised of silica. Technically, opal is not a mineral because it does not have a fixed elemental composition or a crystalline structure. It is classified as a mineraloid, similar to pearl. Where pearl involves calcium carbonate (aragonite) interlocking with organic matter (see [June 2016 WCGMC newsletter](#)), opal contains silica spheres and water.

Opal is found in a variety of geological settings, but all of them involve low temperature near surface conditions. The most common occurrence involves simple rain water percolating into silica-rich rocks in generally dry regions. When evaporation occurs silica becomes saturated in the remaining water. Under low temperature and low pressure conditions this produces an opaline form of silica where very small spheres of silica are stacked like ping pong balls in a box with bits of water interlocked into the structure. In similar settings, but at higher temperatures and deeper burial, crystalline quartz would result.

Not all opal contains the internal structure required to diffract light and display the characteristic play-of-color of precious opal. The spheres in common opal are either too large or too irregular in size to permit light to be diffracted. Similar to the play-of-color seen in pearl, it is the regularity of these silica spheres and the thickness of the layers they form that dictate the quality and intensity of the diffraction colors observed. Interestingly, the exact cause of the rainbow colors in opal was not known until the 1960's and the invention of the electron microscope.

Opal can fill fractures or vugs in the shallow underground or it can replace existing rock, mineral, or even fossil material. Silica-rich rocks include sandstone, silicic volcanic or metamorphic rocks, and even petrified wood.



There are not as many varieties of opal as there are agate, but the nature of the occurrence and the color produced have led to several widely accepted types. A. **Fire opal** from Ethiopia displaying a lot of orange and red. B. **Black opal** cabachon from Australia where the host opal is quite opaque. C. **Boulder opal**, often blue and where the matrix material remains. D. **Wood opal**, the texture of the petrified wood is readily apparent. E. **Geyserite**, from Upper Geyser Basin in Yellowstone National Park owes its name to its origin. F. **Hyalite**, a glassy form of opal with low water content (3-6%).

Australia dominates the opal market, with over 80% of historic worldwide production coming from the near desert environs in the state of South Australia. That dominance may be dropping though as high quality opal is being found in Ethiopia and Brazil, and to a lesser extent in eastern Europe, Nevada, Indonesia and Latin America.

#### References:

[Gemological Institute of American webpage](#)

Guide to Gems, 2003, Firefly Books Inc., p. 173-174

[Minerals.net webpage for opal](#)

[Wikipedia webpage for opal](#)



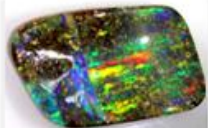
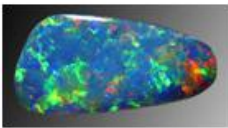


**How would you like your next fossil find to be opalized?** This is a *Peratobelus* belemnite from Australia. Belemnites are extinct cephalopods that roamed the Mesozoic seas. Often called bullet fossils, they are the state fossil of Delaware. But, I doubt they find them like this in Delaware!

*Photo from Amazing Geology Facebook page*

### WGCMC Member October Birthdays

<b>Dakota Duclos</b>	<b>Isaac St. John</b>
<b>Eric Elias</b>	<b>Ken St. John</b>
<b>Luke Elias</b>	<b>Eva Jane Weiler</b>
<b>Sue Hoch</b>	<b>Glenn Weiler</b>
<b>Jan Linderbery</b>	<b>Terry Wilson</b>



A hungry carnivore goes into his favorite restaurant and looks over the menu:

- Broiled Accountant - \$6.95
- Fried Engineer - \$8.95
- Toasted Teacher - \$9.95
- Roasted Rockhound - \$26.95

*All served with your favorite finger food*

The carnivore asks "Hey, why does the roasted rockhound cost so much?"

The waitress replies "Are you kidding? Do you know how hard it is to clean one of them?"

**2016**  
**ROCHESTER GEM, MINERAL, JEWELRY AND FOSSIL SHOW & SALE**  
FEATURING THE EASTERN FEDERATION OF MINERALOGICAL & LAPIDARY SOCIETIES CONVENTION

**AT THE - MAIN STREET ARMORY - 800 EAST MAIN STREET ROCHESTER, NY**

Kid's Activities, Educational Displays, Demonstrations, Raffle,  
Beads, Crystals, Fossils, Minerals, Jewelry, Carvings, Spheres,  
Straw Draw, Hourly Door Prizes & Much More

<b>SATURDAY, OCTOBER 22<sup>ND</sup></b> <b>10:00 A.M TO 6:00 P.M.</b>	<b>SUNDAY, OCTOBER 23<sup>RD</sup></b> <b>10:00 A.M TO 5:00 P.M.</b>
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**ADMISSION \$6.00**  
KIDS 12 & UNDER FREE WITH AN ADULT  
SPECIAL: 2-DAY PASS ONLY \$9.00

### **Sam Ciurca receives International Award**



**Rochesterian Sam Ciurca (at the podium) accepts the Harold L. Strimble Award** at The Paleontology Society's annual meeting held in Denver held in conjunction with the Geological Society of America meeting. The international award is given annually in recognition of outstanding achievement in paleontology by an amateur (someone who does not make a living from paleontology). Sam has spent his adult life studying, searching for, and writing about eurypterids. WGCMC congratulates Sam on his work and his award.

*Photo by John Handley, RAS Fossil Section*



**Always generous, Jerry Curcio** brought some of his Balmat goodies to the Benson Mines field trip to handout to all present. Linda Schmidtgal is helping him arrange the freebies.



## WCGMC 2016 Field Trip Schedule

last update (9/28/2016)

Say it an't so, but the collecting season is winding to a close. We have two trips planned in October and may add another or two before the collecting grounds get covered by that temporary white mineral overburden.

### October 8-9 Walworth Quarry Open House (1200 Atlantic Ave. Walworth)

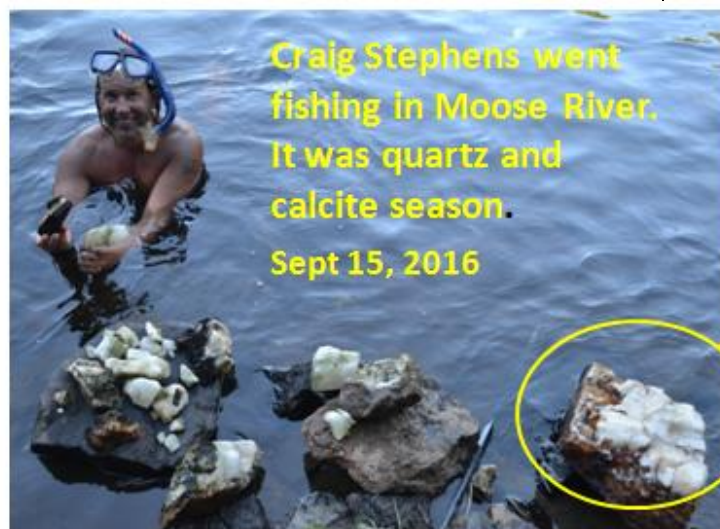
See page 1 for more detail (Trip Leader – Bill Chapman)

### Tuesday October 11 – Multi-site local Fossil trip. To include Lord's Corner, other locations as group decides

See page 1 for more detail. Let Bill Chapman or Fred Haynes know that we should expect you.

## SHOWS and OTHER EVENTS TO KEEP ON YOUR RADAR in the next few months

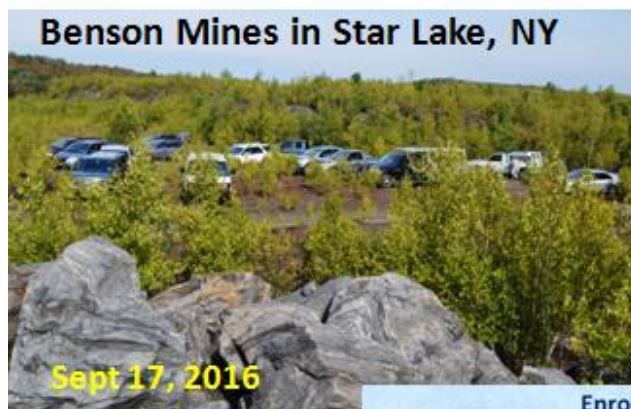
October 22-23 – Rochester Gem, Mineral, Jewelry and Fossil Show and Sale, sponsored by Rochester Lapidary Society, <http://www.rochesterlapidary.org/show/index.htm>



Craig Stephens went fishing in Moose River. It was quartz and calcite season. Sept 15, 2016



Quarter for scale  
Calcite has been dissolved off quartz while in the river. Should the rest of the calcite be removed?

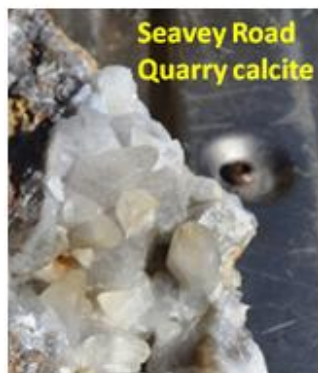


Benson Mines in Star Lake, NY

Sept 17, 2016



Mt. Orab, Ohio – Sept. 24, 2016



Seavey Road Quarry calcite



Enrolled Flexycalymene trilobites, Mt Orab, Ohio



Isotelus Trilobite  
Mt. Orab, OH

## Wayne County Gem & Mineral Contacts

### ELECTED OFFICERS

Glenn Weiler – President [gwexterior@gmail.com](mailto:gwexterior@gmail.com)  
315-594-8478

Jerry Donahue – VP [Chester145322@yahoo.com](mailto:Chester145322@yahoo.com)  
585-548-3200

Eva Jane Weiler – Secretary [gwexterior@gmail.com](mailto:gwexterior@gmail.com)  
315-594-8478

Bill Lesniak – Treasurer/Webmaster  
[Dirtman300@aol.com](mailto:Dirtman300@aol.com) 315-483-8061

### Board of Directors

Ken Rowe [gotrox88@localnet.com](mailto:gotrox88@localnet.com) 315-331-1438

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### APPOINTED POSITIONS

Bill Chapman – Field Trip Chair  
[batnpill@empacc.net](mailto:batnpill@empacc.net) 607-868-4649

Fred Haynes – Newsletter Editor  
[fredmhaynes55@gmail.com](mailto:fredmhaynes55@gmail.com) 585-203-1733

Glenn Weiler – Workshop Coordinator

Linda Schmidtgal – Collection Curator

Club meets 2<sup>nd</sup> Friday of each month starting in Sept.  
Social meeting at 6:30 PM.

Regular meeting at 7:00 PM

Park Presbyterian Church, Maple Court, Newark, NY

**Website –** <http://www.wcgmc.org/>

Dues are only \$15 individual or \$20 family for a full season of fun. Send to:

WCGMC, P. O. Box 4, Newark, NY 14513

Visit us on Facebook:

<https://www.facebook.com/groups/1675855046010058/>

The Public is always welcome  
First Class: Dated, Meetings & Time Values



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