

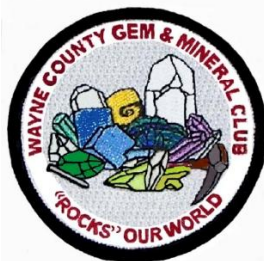
Wayne County Gem and Mineral Club News

November, 2016

Always Looking for Places to Dig!



How about this for a Halloween posting, but what is it? See page 2



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

November Birthstone



TOPAZ



So how many *Vinlandostrophia brachiopods* did Fred Haynes collect at the Napoleon Quarry? Make a guess and go to page 4-5

WCGMC Events

Friday November 11th, 7:00 PM

Park Presbyterian Church,
Maple Court, Newark, NY

PROGRAM: "Rock Olympics"

Games with stones, need I say more?
Oh, there will be prizes. That should get
your attention.

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Friday December 9th, 6:30 PM

WCGMC Christmas Celebration

Party, Buffet, Gifts and More
Details to Follow but mark the date

WCGMC Workshop Saturday, November 5th

When: 10:00 AM til mid afternoon, Sat Nov. 5th

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

WCGMC - NEW OFFICERS ELECTED

A new slate of nominated officers was submitted by the
Nomination Committee at the October meeting and
those present voted unanimously in support of the
proposed slate of officers.

Your newly elected WCGMC officers for the
2016-2017 year are:

President:	Glenn Weiler
Vice-President:	Jerry Donahue
Secretary	Eva Jane Weiler
Treasurer	Bill Lesniak

Board of Directors:	Ken Rowe
	Linda Schmidtgal
	Gary Thomas
	Fred Haynes

Contact information for all is listed on page 8 along with
all of the club's appointed positions. Please feel free to
contact of these people to offer to help with existing club
activities or to propose new ones. The more help the
club receives from its members the more activities we
can pursue and the better we will be.

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***If you have not renewed your dues, it is time. Our
fiscal year runs from October 1 through
September 30. Bring payment to a meeting
or see page 8 for details.***



FOSSIL FODDER:

BY STEPHEN MAYER



Speculation on the Life Habits of two Givetian Gastropods



Another idea is that one gastropod is feeding on the other gastropod. Both were probably grazers and some *Platyloceras* sp. have been found attached to the anal sacs of crinoids presumably getting nourishment from excreted waste byproducts (similar to modern Dung Beetles in Africa). Although some modern species in fact feed unrelated species (humans feed animals in captivity), it is unlikely that gastropods, which are not evolutionarily advanced would have exhibited this behavior. However, could one gastropod be attacking the other for food as do some modern snails?

Another hypothesis could be that the two gastropods were displaying territorial behavior. This is commonly displayed in numerous species, especially when it comes to same species male dominance and mating and that leads to another fact that many snails are hermaphroditic and why would they be fighting?

So as one can conclude there are many hypotheses for the conjoined apertures and many more that could be deduced. I believe the simplest answer to this question is that the two gastropods were merely crawling upon each other when suddenly they were rapidly buried by a storm-induced sediment debris flow that is an obtrusion deposit preserving them exquisitely in-situ.

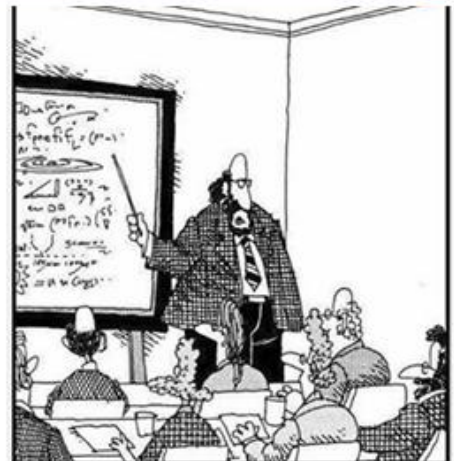
In the October issue of the WCGMC newsletter, I presented this photo of two different species of gastropods conjoined at the apertures, which was found by Gary Thomas. The specimen was found in the Sponge-Megastrophia interval of the Jaycox Shale Member, Upper Ludlowville Formation at Green's Landing on Canandaigua Lake in the central Finger Lakes of New York. The question posed... "Why would the gastropod *Naticonema lineata* be connected in this manner to the gastropod *Platyloceras* sp.?"

Let's propose a few theories. First we know that both species occupied the same marine habitat as evidenced by numerous specimens of each commonly occur on the same bedding planes. We also know from modern analogs that different species cannot sexually reproduce and pass their genes on and foster young, thus the idea of the two different gastropod species mating is improbable.



Happy Halloween: Did you identify the picture on page 1 as a volcanic vent? It is the Pu'u'u'O'o vent on Kilauea volcano in Hawaii. The pictures were taken on a helicopter flyover this past July. The lava flows from the happy vent to the sea where it is quenched into rock. This is often a mechanism to form obsidian.

Pictures are from Lonely Planet website.



"Along with 'Antimatter,' and 'Dark Matter,' we've recently discovered the existence of 'Doesn't Matter,' which appears to have no effect on the universe whatsoever."



SITE OF THE MONTH

Napoleon Quarry by Fred Haynes



In mid-September, Bill Lesniak and I ventured a couple states west and south on a Buffalo Geological Society four-day fossil trip led by Jerry Bastedo. Our first quarry stop on a pleasant sunny Friday morning was in southeast Indiana at the Napoleon Quarry in Ripley County. It was a great site, but for me it might have been all that much better had I done a little research before the trip. But better late than never and here is what I have since learned.



An aerial view of the Napoleon Quarry just ½ mile east of the town center. Image from Google Earth



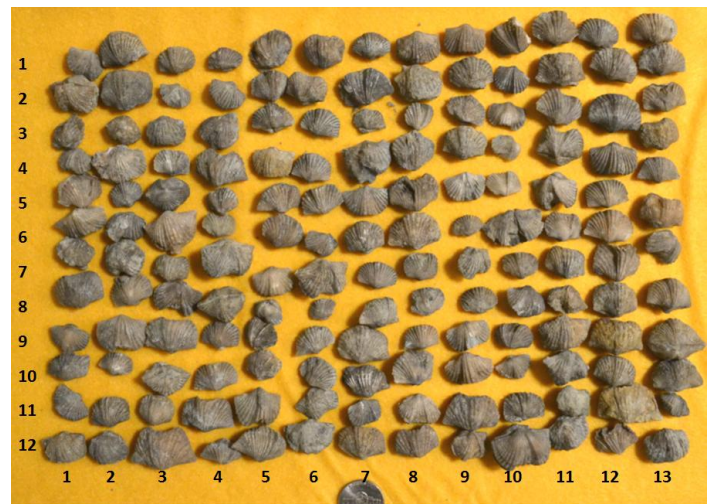
The low piles of gray rock just behind the cars are Ordovician while the larger spoil piles behind are Silurian. The red circle and yellow square show the location on the aerial shot in this SW directed photo.

The Napoleon Quarry, operated by New Point Stone Co., produces aggregate and limestone/dolostone products from the Lower Silurian Brassfield limestone and the overlying Osgood Member of the Salamonie Formation. However, upon arrival, it was pointed out that a drainage ditch had been cut into the uppermost Ordovician Whitewater Formation shale units

beneath the carbonates and that significant fossil material could be found there. I heard that and headed for the piles of excavated shale that were weathering adjacent to the drainage ditch.

Those of us clamoring over the spoil piles in this lowest level were not disappointed. Small, but complete well-formed brachiopods were strewn about. The mineralized brachs were more resistant than the surrounding shale and could be scavenged easily as they lie atop the spoil piles.

Interestingly, these abundant brachiopods were assigned to the genus *Platystrophia* until a definitive study of Silurian brachiopod genus (Zuykov and Harper, 2007) showed that this brachiopod from the Order Orthida deserved a separate genus. They are now reassigned to the genus *Vinlandostrophia* based on differences in shell morphology. We likely collected several different species with the dominant one being *Vinlandostrophia clarksvillensis* ([Views of the Mahantango, 2011](#)).



These are the same *Vinlandostrophia* brachiopods shown on the front page. BUT, now it is a simple math problem to determine how many I collected! You will have to ask Bill how many he collected.

In addition to the ubiquitous brachiopods, rugose corals and very interesting well-formed finger-shaped bryozoa were also abundant in the Ordovician spoil piles. It was a collecting bonanza.

When we reassembled at the cars around noon to move on to a quarry in St. Paul, Indiana, I learned that others who had ventured into the higher spoil

piles of the Silurian Osgood Member of the Salamonie Dolomite had done well also. In fact some had done very well indeed. They had collected numerous cystoids on the larger piles of material from the overlying Silurian carbonates.

Cystoids are a class of extinct echinoderms that attached to the seafloor by stalks. They resemble crinoids, but had an ovoid rather than a cup shaped body. The most distinctive feature of cystoids is the presence of numerous pores on each of the rigid pentagonal plates that comprise the rigid skeleton protecting the body. These pores can be seen on many of specimen in the photos below.



A gaggle of cystoids: When I returned to the cars, Peter Kisselburgh had his crop laid out on the bumper of his car. From all perspectives, this is truly a bumper crop.



Peter has since provided this photo of two of his finds. The specimen on the right is from the more common Genus *Holocystites*. Based on overall morphology and the dimpling detail, Peter believes the more circular specimen on the left in both pictures could be from the Genus *Paulicystis*.



I may have missed out in the field, but I found this *Holocystites scutellatus* from the Napoleon Quarry for sale while at the Rochester Mineral Show on October 22nd. The dimples (or pores) are not evident, but it is nice to see a short portion of the stem. Field of view is 5 cm (2"). Years from now I will probably "forget" that I did not collect it myself!



WCGMC members Bill Lesniak (left) and Jerry Bastedo search in the Ordovician spoil piles.

References:

Frest, T.J., et. al, 2011, The North American *Holocystites* Fauna (Echinodermata: Blastozoa: Diploporiote): Paleobiology and Systematics, Issue 380 of Bull. of Amer. Paleontology, 142 p.

Views of the Mahantango, 2011, [Vinlandostrophia from Napoleon](#), website blog

Wikipedia entry on Cystoids

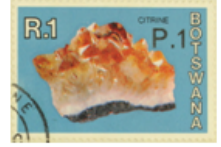
[Zuykov, M. A. and Harper, D. A. T., 2007](#), *Platystrophia* (Orthida) and new related Ordovician and Early Silurian brachiopod genera. Estonian J. Earth Sci., v 56, p 11-34,

Our other visits on this most productive Cincinnati area trip (to Mt. Orab for trilobites, to St. Paul Quarry for crinoids, and to a roadcut in Vevay, Indiana) will be highlighted in future newsletters



NOVEMBER BIRTHSTONES

Topaz and Citrine



November is another month with two birthstones. Topaz and citrine are often mistaken for each other so it is curious that they share the birthstone claim to November. Citrine, yellow quartz, is the astrological gemstone. Topaz was the original November birthstone named in 1912 by the National Association of Jewelers and will be the focus of this report..

In the Middle Ages, topaz was thought to prevent mental disorder and even death. The Greeks believed it had the power to increase strength and make its owner invisible. The Romans believed it improved one's eyesight. Of course, today we know that owning a large topaz crystal or gem only means that you have an excellent eye for quality minerals.

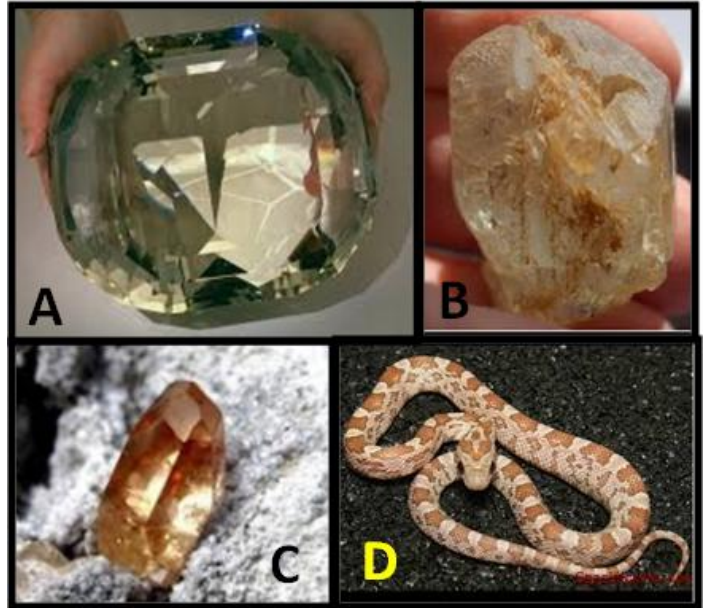


Probably the most sought after naturally colored topaz is **Imperial topaz** with its vibrant orange hue and pink undertones. The name originates from 17th century Russia, where czars claimed exclusive rights to the brilliant orange topaz recovered from the Ural Mountains.

Topaz has the distinction of occupying the number 8 position in the Moh's Hardness scale. It is approximately 50% harder than quartz (#7), but corundum (#9) is 8 times harder to scratch than topaz. Despite being harder than most minerals, topaz has perfect cleavage along the basal plane of its orthorhombic crystals. This means it can break easily despite its overall hardness.

Chemically, topaz is a hydrous aluminum fluoro-silicate with the formula $(\text{Al}_2\text{SiO}_4(\text{OH},\text{F})_2)$. It is the fluorine (F) that makes topaz a rare and unique mineral. Topaz is almost exclusively found in silica-rich igneous rocks, in pegmatites or cavities/vugs in granites or their extrusive equivalents, rhyolite, because F is one of the last elements to differentiate from a magmatic fluid. This also leads to its association with minerals like tourmaline, apatite, and beryl, and with the tin-bearing mineral cassiterite. In fact, explorations looking for tin deposits often look for topaz as an indicator of possible nearby tin ore.

One of the richest areas for topaz are the rhyolite flows in western Utah. However, like so many other minerals and gemstones, some of the world's largest topaz have come from the pegmatites of the Minas Gerais region of Brazil. Gem topaz are found in several New England pegmatites.



A. The largest cut topaz is the *American Golden Topaz*. It is 22,892 carats (5.58 kilograms) and has 172 faces. The Minas Gerais gem came from an 11.8 kg (26 pound) raw piece of topaz. **B.** Raw topaz from Lord Hill, Maine, a site WCGMC visited in June of this year (this is not one of our finds!). **C.** Thomas Mths., Utah **D.** topaz corn snake

References:

Bernardine.com webpage

[Gem Institute of America](http://GemInstituteofAmerica.com) webpage

GemSelect.com webpage

Oldenshaw, C., 2009, *Firefly Guide to Gems*, Fifth Printing, p. 114-116

WGCMC Member November Birthdays

Cheyenne Daniels
Chris Jastrzab
Stephen Mayer
Ray Toyaka





It is once again time to thank The Dolomite Group and their courteous staff for hosting another wonderful Open House at their Walworth Quarry. I can think of no better way to recognize the event than with a photo essay.

WALWORTH QUARRY Saturday October 8, 2016 (7 AM)



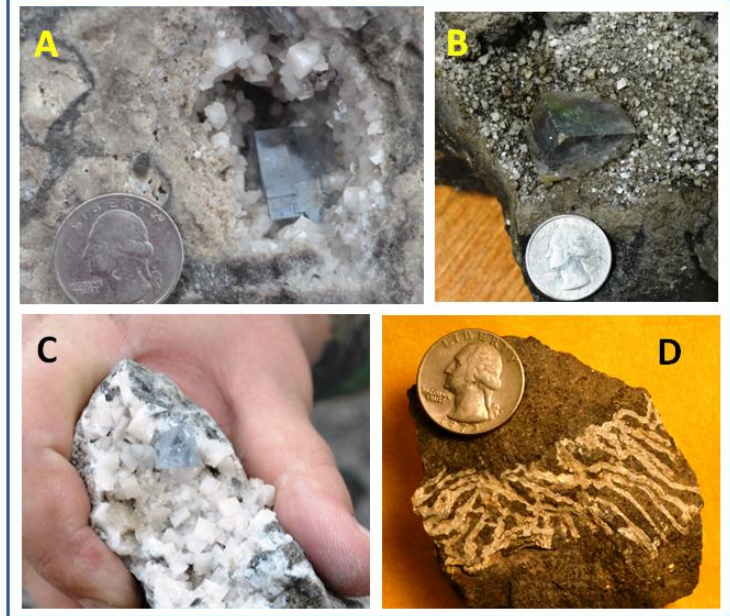
The day started dreary and we drove in with our headlights on at 7 AM, but 166 folks from as many as 7 states and 2 provinces descended into the quarry on Saturday. Another 70 participated Sunday AM during the second day of the annual event.



Yes, it was a bit wet. But where else can grown men and women play in the mud and break things with hammers?



And when the rocks were too big for hammers, The Dolomite Group was there to help with their excavator.



So what was found? Well at least three WCGMC members went home with a prized fluorite. **A.** Brian McGrath's cube in a vug. **B.** Bill Chapman's one inch cubes rests on small dolomites. **C.** Dan Stanton's is on larger bright white dolomites. I know there were many others also. **D.** OK I do not have a fluorite to show, but how about a Silurian Halysites colony (chain coral).



And The Dolomite Group gave youngsters a ride in a big truck. I wonder if they might loan us one of those things for a weekend of collecting?

Photos by F. Haynes

The calendar now says November and the end of the collecting season has arrived. Although we will not formally schedule any outdoor activity for this month do not be surprised if we sneak another local trip should the weather permit. If we do we'll post it on the website and on our [Facebook Public Group](#).

We had a very active season. We participated in 21 field trips from March through October. If you attended them all you would have collected for 43 days! WCGMC planned 15 of the trips and we also held joint trips with several clubs including the Rochester Academy of Science Fossil Section, the Buffalo Geological Society, the Burlington Gem and Mineral Club (Vermont), and the St. Lawrence County Rock and Mineral Club. Of course our extended trip of the year, a ten-day trip highlighted by collecting Thunder Bay amethyst, was shared with the Niagara Peninsula Geological Society of St. Catharine's, Ontario. And yes, we are already planning for a busy 2017 season. Let us know your desires.

SHOWS and OTHER EVENTS TO KEEP ON YOUR RADAR in November

November 12-13 - New York City Fall 2016 Gem and Mineral Show, Holiday Inn Midtown Manhattan
Hosted by [New York Mineralogical Club](#), Inc. (see ad on this page for more detail)

A NICE FIND THIS PAST WEEKEND

by Stephen Mayer

Over the weekend of October 22nd, I took my private jet and flew to Hjoula, Lebanon and searched the 93-97 mya Upper Cretaceous strata. I found the exquisite shrimp fossil pictured below. Well if you actually believe that then perhaps you would like to purchase the fine piece for a mere \$2900 to help offset my airfare. OK, so I did not venture abroad this past weekend. Rather, I acquired the specimen at the Rochester Gem and Mineral Show. Interestingly after purchasing the piece for the bargain price of \$29 I turned it over and was rewarded with a second shrimp! Hard to display both together, but I will certainly know it is there. The seller was unaware that a second shrimp was on the reverse side of the slab.



The front and back side of a Late Cretaceous limestone slab with well preserved fossil shrimps (or prawns) called *Carpopenaeus callirostris*. Photo by S. Mayer

Crustaceans have limited hard body parts and preservation of these critters requires rapid burial and a somewhat unique environment. Excellent fossil preservation can result in many environments such as observed in the well known Solnhofen Limestone of Germany:

<http://www.ucmp.berkeley.edu/mesozoic/jurassic/solnhofen.html>

The fossils in the Cretaceous limestones in Lebanon had a similar origin. These shrimp lived around localized reefs and shorelines that surrounded isolated hypersaline and anoxic lagoons. The lagoons were not conducive, and maybe even toxic, for bottom dwelling organisms that would otherwise scavenge the shrimp carcasses. In addition, the stagnant conditions of the protected basin prevented wave action from disturbing the exoskeleton before it could be buried in the limey mud that precipitated around the dead organism. Any organism that drifted or was gently washed into these lagoons after death had a great chance of being well preserved.

Geologists refer to these deposits as Lagerstätten from the German word meaning strata bearing exceptional fossil preservation. Until next time keep searching.

Minerals

Gems

Meteorites

Gifts

Lectures

Carvings

Publications

Books

Jewelry

Crystals

Minerals for Kids

Supplies

Fossils

Lapidary

Rarities

Fluorescents

Door Prizes

Fall 2016 New York City

Gem, Mineral & Fossil Show

November 12-13, 2016

Holiday Inn Midtown Manhattan

440 West 57th Street, New York City



Sponsored by Excalibur Mineral Corp., Charlottesville, VA

Hosted by the New York Mineralogical Club, New York, NY

Visit [this link](#) for even more input.

Wayne County Gem & Mineral Contacts

ELECTED OFFICERS

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Jerry Donahue – VP Chester145322@yahoo.com
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Linda Schmidtgal lees@tds.net 315-365-2448

Gary Thomas gftthomas956@gmail.com 585-489-2162

Fred Haynes fredmhaynes55@gmail.com 585-203-1733

Visit us on Facebook:

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

APPOINTED POSITIONS

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Fred Haynes – Newsletter Editor
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Bill Lesniak – Website Coordinator

Glenn Weiler – Workshop Coordinator

Linda Schmidtgal – Collection Curator

Eric Elias: GEMFEST Show Chair

thecrystalnetwork@hotmail.com

Fred Haynes – Facebook Administrator

Club meets 2nd 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. Renewal is in October Send to:

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

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



Wayne County Gem and Mineral Club
P.O. Box 4
Newark, New York 14513