# Wayne County Gem and Mineral Club News

April, 2017

# Always Looking for Places to Dig!





Sun. June 4 10-4

Greater Canandaigua Civic Center 250 N. Bloomfield Rd, Canandaigua, NY

\$3 Admission, Kids 12 & under FREE

Soapstone Carving, Wire Wrapping, Sluice Vendors, Exhibits, Free Prizes, Scavenger Hunt

UV Bob's Ultraviolet Show

Gems, Minerals, Fossils, Beads & Jewelry

visit http://www.wcgmc.org/for details



http://www.wcgmc.org/

## **FACEBOOK link**





A new book on a favorite New York tourmaline location (see page 5) Fred Haynes specimens

# Next Club Meeting Friday April 14<sup>th</sup>, 7:00 PM Presbyterian Church, Maple Court, Newark, NY

#### PROGRAM: **TOURMALINE**

- Bring your tourmalines to show
- New York Tourmaline locations discussion
- Come see some of Eric Elias' (Sonic **Evolution**) tourmalines







- See page 5 for Tourmaline Book Review
- Door Prizes: Yup tourmaline!

# Saturday, April 15<sup>th</sup>

# WCGMC April Workshop

When: 10:00 AM til mid afternoon

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 late April Field Trips**

Sterling Hills Super Dig - Saturday April 28th WCGMC will make a weekend of this with stops at other sites on Friday and a visit to the Franklin Gem and Mineral Show Sunday morning. Pre-registration for Saturday is required. Contact Linda Schmidtgall for details.

## Cincinnati for Fossils - April 27-April 30 -

Several of us will join Jerry Bastedo and the Buffalo Geological Society for 3-4 days of collecting Ordovician and Silurian fossils in the Cincinnati Arch area Contact Fred Haynes for details.

See page 7 for an updated list of the club's spring and summer plans.

# Mineral Musings

# by Fred Haynes

We all should have known better. A mild February with only modest snowfall and a glorious first weekend in March did not mean that winter was over for western New York. For yours truly the March 9<sup>th</sup> windstorm in Monroe County meant almost four days without power and a home whose temperature dipped below 40° before power was restored. Hmmm, maybe snowstorms are not so bad after all!

Twelve hours after power was restored the furnace quit after getting us back to 62°. Fortunately, 8 hours and \$700 later we had a new inducer installed into the tired furnace and the home quickly warmed a second time. Good thing because we know what came next. Yes, 26" of snow and the lawns and driveways were no longer bare. Those poor early sprouting spring flowers are being put to the test. Hmmm, maybe snowstorms are not so great either.

But all of this did not deter your club's field trip leaders from thinking ahead. It is now nearly April and the club has big plans. Those present at our March meeting saw a presentation of what we did last year and a preview of 2017. If you turn to page 7 you will see the current outline for a busy spring/summer. We are so busy that on a couple of occasions we may be involved in multiple events on the same day. Some are tentative and subject to change should conditions require or alternative opportunities surface on those dates. But regardless, we will be busy and there will be at least a score of collecting opportunities again this year.

Trip leaders (Bill Chapman, Linda Schmidtgall, Stephen Mayer, Fred Haynes and anyone else who wants to step forward and announce/lead a trip) have scheduled at least as many field trips this year as last. And last year WCGMC participated in 21 field trips. We will join with the Rochester Academy of Science again for local fossil trips. Some of us will join the Niagara Peninsular Geological Society for their 9 day camping/collecting trip in north central Ontario. Five of us currently plan to join the Buffalo Geological Society to dig fossils around Cincinnati in late April. And, of course you will see the dates for the Super Dig in New Jersey, for our annual trek to central Pennsylvania quarry sites, and for day trips to several Finger Lakes area Devonian fossil sites.

Most of our activities are on the weekend, but the retired among us have decided that in the better parts

of spring-summer five days without a field adventure is too long. You will see Tuesday trips to Hooper Mine for garnet and Ilion for travertine. The Ridgemount Eurypterid locality in Ontario just west of Buffalo is only open on Friday and has been scheduled in June. Seneca Stone Quarry will likely necessitate a week day trip also.

But above all, park June 2-3-4 and August 5<sup>th</sup> on your calendars in permanent ink. GEMFEST will be in Canandaigua for the third consecutive year on June 3-4 and we are hoping it can grow once again. We will need all the help we can get to make it a success. Set-up is Friday June 2<sup>nd</sup>. When I distribute this newsletter I will attach copies of our flyer for this event. Anyone and anywhere that you can help us disseminate this information to friends, neighbors, workplaces, etc. would be appreciated.

August 5<sup>th</sup> is PICNIC time at the Weiler home and club workshop in Wolcott. Along with the Christmas party at the December meeting, this is a club highlight every year. The workshop is of course open. The field season is not over by then, but we will all have new finds to show and new stories to share. You don't want to miss the picnic!



A busy winter workshop Saturday in Wolcott



A door prize winner in March: Linda had them all tied together. You picked a ribbon to snag your prize. What will she think of next?



# FOSSIL FODDER: PHYLUM BRYOZOA

## BY FRED HAYNES

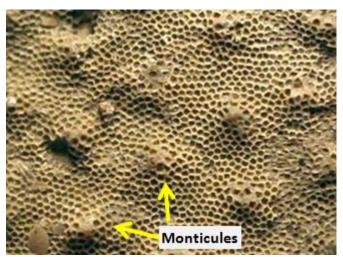
Fossil collectors will travel hours and brave cold temperatures and rain for a chance to collect trilobites. Heck, we will settle for trilobite parts. Most of us will pick up a complete brachiopod and even try to identify it by Genus. Check our garages and you will find hundreds, no thousands, of solitary rugose corals such as Heliophyllum halli and probably almost as many colonial tabulates such as Favosites or Pleurodictyum corals. We'll jump for a gastropod and drool when a orthonic (straight-backed) cephalopod pops out in outcrop or shows himself (herself?) in a stone on the beach. And need I say more than Eurypterid to get you excited? BUT, who among us loves Bryozoans enough to even take a branching colony or a fan-like species home. And if you do take one home does it end up identified and in your collection? My guess is it does not. Perhaps I can change that.

Bryozoans are filter feeding sessile marine animals. They first appeared in the Early Ordovician Period and over 5000 species can still be found today, mostly in warm, shallow, marine water. In that sense they are not unlike corals. They too are not plants, although they are often called "moss animals". Bryozoans feed and live like colonial corals and secrete a hard limy skeleton, but their living chambers do not contain septa and bryozoans have much more rudimentary and smaller tentacles than corals to deploy for filter feeding. You will often find bryozoan colonies encrusting other invertebrates.

I was also guilty of generally neglecting this major phylum of invertebrates until last September's trip to Cincinnati. The Ordovician bryozoans at two sites on that trip were "huge"; they could be measured in multiple centimeters and they had character! The individual chambers, called zooecium, where individual bryozoan organisms, called zooids, lived were visible to the eye. Upon inspection with a loop additional interesting character was evident. In addition to variability in their branching morphology, there were evenly spaced small bumps on some species, sometimes the raised regions seemed to be linear. Zooecium atop the bumps appeared a bit larger than others.

These bump-like features are called monticules. They are larger than the zooecium that cover both

the monticules and the intervening depressions. For a long time, researchers were not certain about the purpose of the raised and often uniformally distributed monticules. They were just there and could be used to distinguish genus and species. But paleontologists studying bryozoans have an advantage that those working on trilobites or eurypterids or even dinosaurs do not have. Bryozoans similar to the Paleozoic species we collect thrive today. Note, in the title above, that the modern bryozoa *Reteporella beaniana* (Neptune's lace) was immortalized when Croatia placed it on a postage stamp issue in June, 2015.



Individual zooecium (living chambers) and monticules of a *Monticulipora* bryozoa. Field of view is just 5 mm across. Photo from <u>louisvillefossils.blogspot.com</u>.

By studying modern bryozoans it has been surmised that the monticules or "chimneys" on the surfaces of many bryozoans facilitated water flow through the colony (Grunbaum, 1997). The integrated surface morphology such as that shown above improved the hydrodynamics that brought nutrient charged waters to the colony and discharged waste water back to the sea. Some zooids lived in the high rise portion of the colony while others settled in the valleys!

Identifying bryozoan genus is not easy. Perhaps that is why many of us typically refrain from filling our buckets with the darn things. But I believe I have been able to determine that I collected both branching *Parvohallopra ramose* and *Monticulipora sp.* (perhaps *mammulata*) in the Upper Ordovician at the Napoleon Quarry and at a roadcut in Vevay, Indiana (Hartshorn, et. al., 2016).



Monticulipora bryozoa from the Grant Lake Formation of southeastern Indiana, I collected from a roadcut on State Route 129 (N38.7620, W85.1368) in Vevay, IN.

Now, back home in pseudo hibernation I am trying to rediscover the bryozoan I have collected in the Middle Devonian Hamilton Formation, the specimens I threw into the box because they were small or because I wasn't finding much else that day. It is proving to be quite a challenge. Sometimes they are hard to distinguish from each other and I have little to report on that front yet.

There are over 20 species identified by Wilson (2014) in the Middle Devonian of New York alone

and I probably have many of then hiding in my collection. They are classified by their size and morphology, their branching, fan-like or funnel shaped character and by the style of their zooecium and monticules. Often times they occur fossilized as epibonts encrusting other organisms, commonly corals and brachiopods, destroying or obscuring the features of the larger host. It will be a challenge to know what I have.

So, have I convinced you? Or will I be the only one paying attention to bryozoans this field season?

#### References:

Dry Dredger's website: Bryozoa entry

Grünbaum, 1997, Hydromechanical mechanisms of colony organization and cost of defense in an encrusting bryozoans, Limnology and Oceanography, v 42(4),p. 7452.

Hartshorn, K.R., Kallmeyer, J.W., and Brett, C.E., 2016, Dry Dredging the Cincinnati Arch, Field Trip Guidebook for The Fossil Project, 40 p.

Wilson, K. A., 2014, Field Guide to the Devonian Fossils of New York, Paleontological Research Institution, Ithaca, NY, 160 p.

Ilion in February
Winter Collecting
by Ed Smith





Linda and Bob have crossed Ilion Creek.



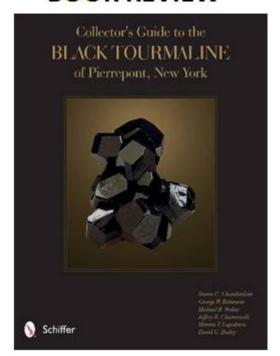
Bob Linderbery, Linda Schmidtgall, Donna Smith and I went on a winter exhibition to Ilion Gorge on February 24<sup>th</sup>. It was raining a bit as we left Wayne County, but none once there. However, the snow pack, over a foot in some places, was indeed a surprise and the hike up the trail required a bit more effort than usual. But as you know nothing can stop Wayne County rock hounds. I cannot think of a more beautiful place to spend a day, whether it be winter or summer. And we were nicely rewarded with some nice specimens too.

This fine slab of travertine was just waiting for us in the gorge. It must have been exposed by this winter's weathering. The piece is over 7" long, 5" wide, and in places it is over 2" thick. Think of how many polished cabachons can be cut from this piece!

Photos by Ed Smith



# **BOOK REVIEW**



Another wonderful book on a classic New York State mineral location is available. Many of us have ventured to the Bower Powers Farm in Pierrepont to collect black tourmaline. We have driven Post Road to the washed out bridge over Leonard Brook, hiked along the brook to the tourmaline laden pits, and collected what we could carry. But did you ever want to know more about the rich history of the location, the multiple collecting sites, the varied geology, or the complete mineralogy of this classic site?

Well, Steve Chamberlain, along with a host of co-authors (see Full Reference), has produced a comprehensive review of the location and its treasures that will answer these questions and more that you had not even thought to ask. The collecting history, which dates to 1859, is detailed in a full chapter complete with the names of the primary discoverers and collectors from nine specific sites/veins scattered on the property. The complex regional geology relative to the Carthage-Colton Shear Zone that focused mineralizing fluids for a number of our favorite sites is presented at a very understandable level. The detailed geologic discussion of the tourmaline-rich veins and pods which intrude calc-silicate gneiss and marble host rock truly distinguishes this

book from previous descriptions available on this famous St. Lawrence County collecting site.

The black tourmaline and its complex chemistry has led to labels of dravite, uvite, and fluor-uvite and continued confusion about how these wonderfully lustrous terminated crystals should be labeled. Crystals that have been analyzed typically have a fluor-uvite core and a dravite surface, but a comprehensive evaluation across the many locations on the property has not been undertaken. After presenting much of the known data, these authors conclude their discussion of this labeling issue with the following sensible suggestion:

"We therefore recommend that unanalyzed specimens of black tourmaline from Pierrepont simply be labeled 'tourmaline' as we have done in this volume"





**Powers tourmaline**: The multi-crystal piece on the left was collected by Mike Walter in 2004 (Figure 199 and also Geologicdesires webpage). The 30mm by 27mm by 13mm crystal on the right is No. 60019 in John Best's online museum.

But tourmaline is not all one can collect at the Powers site. And I would be remiss not to acknowledge the full accounting of mineralogy that Chamberlain et. al. have provided. I count 33 different minerals included in the text descriptions among the nine separate locations on the property. In addition to the ubiquitous tourmaline, terminated quartz, large and wellformed phlogopite biotite, diopside and marialite can all be collected. Calcite, fluorapatite, titanite, magnetite, and tremolite are available to the informed collector. There are sulfides (pyrite, chalcopyrite, bornite, sphalerite) and their oxidized products (goethite, malachite). The authors include a section for pseudomorph collectors; uralite (tremolite ps. after diopside) is particularly interesting. With this book, a collector will know everything that each of the nine sites has yielded. It is now possible to work towards a full suite of Powers Farm mineralogy on your next visit.

Of course, as a full size Schiffer publication, two other standout features deserve to be mentioned. First, the text is exquisitely supported by world class photography comparable to the fine cover photo. There are 223 figures dispersed across 128 pages and most of them depict the tourmaline or other minerals found at the location or field pictures of the

locations. The figures alone are worth the price of the book. Which brings us to the second feature: The book is very reasonably priced at \$24.95, but with careful online shopping that price can be reduced.

Chamberlain did not write this alone. The author list includes museum curators, mineralogy/geology professors, and field collectors. The diversity and knowledge of this experienced group of authors shows in every chapter. New York mineral collectors will want this book. Mineral site history buffs will want this book. Tourmaline collectors will want this book. Every library in the state would be remiss to pass on this one. How about you?

# Book review by Fred Haynes

#### Full reference:

Chamberlain, S. C., Robinson, G. W., Walter, M. R., Chiarenzelli, J. R., Lupulescu, M. V., and Bailey, D. G., 2016, Collector's Guide to the Black Tourmaline of Pierrepont, New York, Schiffer Publishing Ltd., 128 p.



# **FAKE TURTLE FOSSILS**



Kathleen Cappon likes turtles. So, when she saw these very complete "Cretaceous" turtle fossils online she decided to add a couple to her collection. Only later did she learn that these were reproductions and not true fossils. They may resemble marsh inhabiting Cretaceous *Manchurochelys liaoxiensis* turtles from China, but these particular fellows probably only date back to last year! Kathleen brought them to the March WCGMC meeting along with an equally "fake" trilobite reproduction for an interesting discussion of "fake" fossils.



Of course, this inspired Kathleen to try her own hand at fake material. She had received a nice green uvarovite garnet piece from Russia at the WCGMC Christmas party. She decided she could create here own **New York Christmas** uvarovite. Lo and behold, her specimen is even brighter than the real thing, perfect for a meeting just before St. Patrick's Day.

Ask her, perhaps she will pass along the "recipe".

## Wayne County Gem and Mineral Club Field Trip Schedule - last update March 22, 2017

**Items listed in bold print are pretty much set**, those not in bold print are considered tentative. April, May and June are pretty full if we can make it all work, but we will add other trips after GEMFEST

April 1 (Sat.) – Ace of Diamonds Mine (Meet at Location at 9 AM)

April 20-23 (Rochester Mineralogy Symposium), contact Fred Haynes for info

April 28-29-30 (Trip to New Jersey (Super Dig on 29<sup>th</sup>, etc.) Info: <a href="http://sterlinghillsuperdig.org/">http://sterlinghillsuperdig.org/</a>
Leader - Linda Schmidtgall

April 27-April 30 (BGS trip to Cincinnati) (Fred, Stephen and Gary are going) Leader – Jerry Bastedo

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May 5-6-7 (Mt. Pleasant Mills Quarries, Carbondale, Jermyn for coal fossils) Leader – Bill Chapman

May 6 or May 13 ?- Penfield Quarry Open House has not yet been scheduled

May 9 (Tuesday) – Ilion – details to follow

May 23 (Tuesday) – Hooper Mine for Garnet Leader – Fred Haynes

May 27-28 Penn Dixie Dig With Experts https://penndixie.org/dig-with-the-experts/

May 31 (Wednesday) - Paradise Falls for Herkimers Leader - Linda Schmidtgall [\$100/person!]

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#### June 2-3-4 GEMFEST 2017 in Canandaigua (Mark these dates and offer to help)

June 10 or June 17 (Sat.) -- Jaycox Creek (fossils) (joint with RAS who will pick date)

June 16 (Friday) - Ridgemount, Ontario (Eurpyterids) Leader – Stephen Mayer

June 23-25 (Fri-Sun) – St. Lawrence County #1 (Rose Road, Selleck Road, Gardenscape?, etc)

July 15 (Sat.) Indian Creek followed by Potluck Picnic at Mayer's home on Seneca Lake (details to come)

July 17-22 (Monday-Saturday) - CANADA #1 (Bancroft, etc.) Leaders - Fred and Linda

We will likely schedule some summer day trips to places like Deep Run, Lake Ontario, etc.

#### August 5 - CLUB PICNIC

August 6 (Sunday)- Green's Landing fossil site (with RAS) - Leader – Stephen Mayer

August 12 -20 CANADA #2 (Sudbury, Cobalt, Manitoulin Island, etc.) Led by Niagara Peninsula Geological Society, St. Catherine's, Ontario. for info contact Fred Haynes

**August 26-27 St. Lawrence County Show** (Field Trip Opportunities to Powers and Bush Farm)

We are working to plan a day trip to Seneca Stone Quarry and will also work in a trip to Deep Run and likely other area fossil sites. If you know of a site you would like to visit or cannot make a trip on this list and would like us to schedule a second visit contact any of us. **WCGMC** is always looking for a place to dig.





The March workshop treat platter featured Girl Scout cookies, jelly beans and St. Patrick's Day pretzelites that resemble tremolite. All set on Kathleen's Mexican onyx platter and surrounded by GemFest propaganda.

# **Wayne County Gem & Mineral Contacts**

### **ELECTED OFFICERS**

Glenn Weiler – President <u>gwexterior@gmail.com</u> 315-594-8478

Jerry Donahue – VP <u>Chester145322@yahoo.com</u> 585-548-3200

Eva Jane Weiler – Secretary <a href="mailto:gwexterior@gmail.com">gwexterior@gmail.com</a> 315-594-8478

Bill Lesniak – Treasurer/Webmaster

Dirtman300@aol.com 315-483-8061

#### **Board of Directors**

Ken Rowe gotrox88@twc.com 315-331-1438 Linda Schmidtgall lees@tds.net 315-365-2448 Gary Thomas gfthomas956@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**

Bill Chapman – Field Trip Chair

batnpill@empacc.net 607-868-4649

Fred Haynes – Newsletter Editor

fredmhaynes55@gmail.com 585-203-1733

Bill Lesniak – Website Coordinator Glenn Weiler – Workshop Coordinator Linda Schmidtgall – Collection Curator Eric Elias: GEMFEST Show Chair thecrystalnetwork@hotmail.com

Fred Haynes – Facebook Administrator

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. Renewal is in October Send to:

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





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