Wayne County Gem and Mineral Club News

June, 2017

Always Looking for Places to Dig!









Collecting Blastoids in Kentucky (see pg.3)

Next Club Meeting Friday June 9th, 7:00 PM Presbyterian Church, Maple Court, Newark, NY

PROGRAM: **Spring Collecting**

Members are asked to bring:

- Material collected so far this year
- Your purchases from GemFest
- Your Lapidary work from the workshop

We'll swap stories about early 2017 collecting AND plan for a full summer of collecting

Next WCGMC Workshop Saturday, June 10th

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

facet. Training on equipment is available.

Eye protection recommended. \$5/adult to offset maintenance costs



For current schedule of club activities, see page 7

Wayne County Gem & Mineral Club

Sat. June 3 10-5, Sun. June 4 10-4

Greater Canandaigua Civic Center 250 N. Bloomfield Rd, Canandaigua \$3 Admission, Kids 12 & under FREE

FAMILY FUN with Soapstone Carving, Wire Wrapping, Sluice, Vendors, Exhibits, Free Prizes, UVBob Fluorescent Mineral Show, and much much more

Bring a friend or pass this to a neighbor Gems, Minerals, Fossils, Beads & Jewelry visit http://www.wcgmc.org/ for details

Membership Offer Too Good to Overlook

Club membership runs from Oct. 1 to Sept. 30: (\$15/year for individual, \$20 for family). At GemFest we offer prospective new members a bonus for joining. For \$5 extra (i.e. \$20/individual or \$25/family), they get the rest of this membership year with all the summer events+ the following But what about current active year. members: this year we have something for you too. If you pay for the upcoming year (i.e. Oct 2017 thru Sept 2018) at either GemFest or at the June 9th meeting, we will reduce your renewal fees by \$5, to \$10/individual or \$15/family. What a deal! Remember to take advantage of this offer, you must renew at, or before, the June 9th deadline.

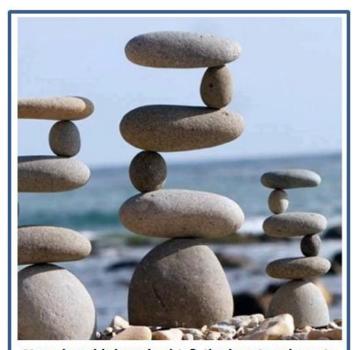


MINERAL MUSINGS By Fred Haynes



I'd like to thank WCGMC member Julie Daniels for providing my name to the Seneca County 4-H Cornell Cooperative Extension for their Outdoor Education Field Day. When they called a couple months ago, it was with some trepidation that I accepted visiting with over 300 sixth graders rotating through ten 18 minute sessions at Sampson State Park on May 17th. The big yellow buses rolled in about 9:30 and by 9:48 AM the rotations began: five sessions in sequence, a 30 minute lunch period, and then five more sessions. Incredibly, the whole thing went like clockwork.

My overall topic was Geology and I chose to focus the short session on Rocks and Minerals, including a discussion of the three major rock types and showing them how the Rock Cycle works. I had lots of rocks to show and share, as many as possible from New York State. Oh, I had a few other interesting things to show: a piece of pumice that floats, a big amethyst piece from Thunder Bay, some acid and some calcite, and some magnetite and a magnet.



Now, how'd they do this? I'm betting there is some glue involved. No one would cheat and photoshop this, would they?

I was pleasantly surprised that many students could name the major rock types (although not too many rock names within them) and I was also pleased by the interest most students showed in the subject and also in telling me what they knew. Perhaps it was the environment, after all what sixth grader would object to spending a wonderful spring day outdoors, but right through the tenth session the students remained attentive.

I was asked a number of questions during the event, but one in particular struck me as thoughtful. After discussing the Rock Cycle (you know erosion, transport, sedimentation. lithification, burial, metamorphism, melting, crystallization, uplift, erosion, ...rinse and repeat), one student asked me how long this cycle takes. Think about how you answer that for a sixth grader. It is not sufficient to simply say "a really long time" or "it depends", even though both those answers are certainly accurate.



So what do you do with several hundred horn corals collected over several trips to Lord's Corner, NY? Well, I "released" some 300 of them by giving each teacher at the Seneca County Outdoor Field Day a large bag full of smaller bags, one for each student. Each smaller bag contained a horn coral from the prolific location in Onondaga County, a label for the specimen, and a small business card sized ad for GemFest. I'm hoping they all take the fossils home to show their parents, perhaps with a message that they would like to attend GemFest to learn more about the fascinating rocks that make up the wonderful planet we all call our home.





The June newsletter of the Eastern Federation of Mineralogical and Lapidary Societies is linked <u>here.</u>



SITE OF THE MONTH

Blastoids in Wax, Kentucky by Fred Haynes



In late April, six members of WCGMC joined a Buffalo Geological Society fossil collecting trip to the Cincinnati area led by Jerry Bastedo. We visited several productive sites, but I thought I would direct this month's site of the month to the southernmost collecting spot we visited. Most of the trip focused on quarries and roadcuts that expose Ordovician and Silurian strata in the Cincinnati Arch. However, on Saturday, we climbed all the way up to the Mississippian by driving several hours south to a modest roadcut in Wax, Kentucky where we collected blastoids in the Glen Dean Formation.

Blastoids are an extinct form of stemmed echinoderm. They first appeared in the Ordovician, but reached their greatest abundance and diversity in the Mississippian. The entire class of echinoderms referred to as Blastoidea went extinct 250 million years ago during the Great Extinction Event marking the end of the Permian Period and the Paleozoic Era.

It was the blastoid body (or theca) that we sought and found in the Mississippian roadcuts just south of the small town of Wax (see photo on page 1). They are not large (smaller than dimes), but are distinctive resembling small hickory nuts and could be found either loose in the drainage or protruding from the eroding shale.



WCGMC member Peter Kisselburgh was along on the trip and has subsequently researched our blastoid finds and sends this photo. Peter reports that we recovered at least two species from the Genus *Pentremites*. The larger more elongate blastoid on the right is *Pentremites gemmiformis*. The squatter/squarer species (left and center showing two orientations) is likely *Pentremites gondoni*. But there are subtle variations among all of our finds and we may have some *P. welleri* as well.

Much like crinoids, blastoid bodies were attached to a stalk comprised of disc-shaped plates, all of which was attached to the seafloor by a holdfast. The animal waved in the current. Long thin arms called brachioles extended from the body trapping food particles and bringing them to the animal's mouth at the top of the theca. The *Pentremites* on the left in the preceding photo is oriented to display the mouth at the top. Notice the 5-fold symmetry also.

Our fossil finds there were not restricted to echinoderms. Several small brachiopods were present with both valves preserved. But perhaps the most interesting find for many of us was the unique screw shaped bryozoan aptly named *Archimedes*. These were found both loose and in matrix, both of which are shown below on either side of a small brachiopod.



Specimen and photo by P. Kisselburgh





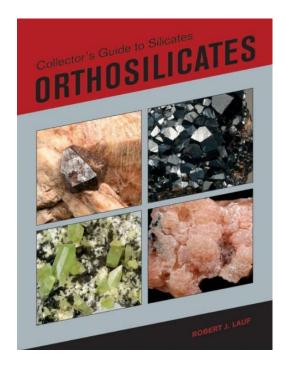


BOOKREVIEW: ORTHOSILICATES





What do you call chemical compounds that are comprised of isolated silica tetrahedron: that is, where tetrahedrons do not share any corner oxygens with other tetrahedron, but rather are connected by cations in configurations? various Why, orthosilicates, of course. Olivine, garnets, zircon, staurolite, and topaz are orthosilicates, to name a few. titanite, one of our favorite Bancroft, Ontario minerals.



When **Dr. Robert Lauf** arrived at the Rochester Mineralogy Symposium in April he was carting several boxes of his newly minted book entitled "Collector's Guide to the Silicates: Orthosilicates". After his Friday morning talk on the topic, the line to obtain signed copies was predictably long. I got there early to secure mine, but I do believe Robert was prepared and everyone who desired a signed copy at the symposium was rewarded.

The 238 page treatise is the first of what is planned to be a six volume set Dr. Lauf is writing on silicate mineralogy. But this series of books is different from

most mineralogy texts you will find. The books are written for collectors and not for professional mineralogists. That does not mean that they are skimpy on supportive detail or mineralogy input, quite the contrary. But it does mean that reading and understanding the text does not require a degree in mineralogy.

The book is organized by mineral group. Starting with olivine and carrying through humite, zircon, garnet, and much more, each section naturally discusses mineralogy (structure, morphology, and chemistry), but also contains input on formation and occurrence, and a section on alteration and pseudomorphs. Lauf acknowledges that the book is not comprehensive in its coverage of all known minerals in each group, but it is unlikely most collectors will run into an orthosilicate that is not included.

One section that particularly appealed to me was on the alumino-silicate group of kyanite-andalusite-sillimanite. We all love the unique blue kyanite from North Carolina or Brazil and WCGMC members who have collected at Benson Mines in Star Lake all have some sillimanite from the magnetite-rich gneiss there. We may even have andalusite in schists from Connecticut in our collections. But did you know these three metamorphic minerals (polymorphs with formula Al₂SiO₅) are of paramount importance to metamorphic geologists? If not, you might find Lauf's succinct explanation of the temperature and pressure controls on the occurrence of these three minerals enlightening.

Perhaps even better than the text are the supportive illustrations. There are 467 figures sprinkled through the volume. Aside form the forward pages, I could not find a page lacking a figure or photograph. Some are diagrams depicting chemical composition or crystal structure, but most are exquisite photographs of orthosilicate minerals carefully selected to illustrate specific features. They are nice specimens, wonderfully photographed, but this is not a catalog of best of species museum specimens. It is a volume designed to teach and illustrate and it does both remarkably well. Each caption contains scale information and clearly states the location where the specimen originated. For reference geeks, the book has 16 pages full of them!

The full size hardcover book is published by Schiffer Publishing Ltd. and lists for \$45.00, but it can be obtained for about \$30 by judicious online shopping. I am certain it will be one of the first books I refer to when seeking input on "anything orthosilicate" and I will probably also spend time simply perusing the fine specimen photographs. I cannot wait for Robert to publish volumes 2-6.

FULL REFERENCE:

Lauf, Robert, J., 2017, Collector's Guide to Silicates: Orthosilicates, Schiffer Publishing LTD., 249 p.

Review by Fred Haynes

A Complete Pterygotid Eurypterid from Ridgemount

In last month's newsletter, Wayne Davey and Stephen Mayer detailed eurypterids the Although several Ridgemount. species of eurypterids can be recovered in complete form at the Ontario quarry, they noted that to the best of their knowledge "no complete specimen of a pterygotid eurypterid" had been found at Ridgemount".

Rochesterian Sam Ciurca, who has collected Eurypterids for the better part of five decades, responded that he had found a nearly complete one at the Ridgemount site. The Pterygotid eurypterid Sam found (pictured to the right) is identified as Acutiramus cummingsi. The claws are folded back towards the body when the animal molted.

Sam donated this specimen, along with 15,000 others that he had collected, to the Yale Peabody Museum in New Haven, CT.



Yale Peabody Museum photo.

The Ciurca collection included large slabs from over 100 collecting localities in New York, Pennsylvania, Indiana, Ohio and Ontario. The donation included over 60,000 pounds of rock! For more on this donation and the Ciurca/Yale eurypterids visit thttp://peabody.yale.edu/exhibits/curators-choice/eurypterid-fossils

For his work with eurypterids, Sam Circua awarded the was prestigious 2016 Harold L. Strimple Award by the Paleontological Society. The annual award is for aiven outstanding lifetime contributions paleontology by а professional. Much of Sam's work eurypterids with is also documented website on his dedicated to the extinct sea scorpion that is now New York's official State Fossil.

http://www.eurypterid.net/











There is more to Herkimer hunting than those perfect terminated quartz crystals. Small terminated calcite clusters can also be found and they are fluorescent. Ken St. John shares these two April finds with calcite both in plane light (left) and under Short Wave UV (right). The calcite cluster in the upper two photos is 3/8" across. A single calcite crystal shares a vug with a 5/8" Herkimer in the lower photos. The Herk is perfectly clear. The matrix shows through in plane light and the crystal is reflecting UV short wave light on the right.





Wow, was May ever a busy month for WCGMC. By the time the clock strikes midnight on the 31st of May, club members will have been involved in seven collecting trips in addition to the monthly Friday meeting in Newark and the Saturday workshop. From Penfield and the 4-day trip to central PA trip early in the month, until the Paradise Falls Herkimer dig on May 31st, the club will have been all over New York "looking for places to dig", and finding them! This newsletter is not long enough to permit full detail of the fun all had on all these trips, but Teresa Ferris and Christine VanNeel helped me out by carrying their cameras to some of the events. And we all know pictures are worth a thousand words. To see even more pictures, check out our <u>Facebook Page</u>.



Penfield: May 6th



Photo credits: TF – Teresa Ferris, CV: Christine VanNeel, FH: Fred Haynes of the Middleburg Quarry? You will have to ask them.

Are the two Bills drilling for oil in the floor

Wayne County Gem and Mineral Club Field Trip Schedule - last update May 27, 2017

Items listed in bold print are pretty much set, those not in bold print are considered tentative. We have multiple leaders and a busy schedule. Inquire if information here is not complete.

May 27-29 Penn Dixie Dig With Experts https://penndixie.org/dig-with-the-experts/
May 31 (Wednesday) - Paradise Falls for Herkimers Leader - Linda Schmidtgall [\$100/person!]

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

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

June 17 (Sat.) -- Jaycox Creek (fossils) (joint with RAS) – limited to 12 of us (contact Fred Haynes)

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 (at Weiler's in Wolcott, workshop will be open)

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.

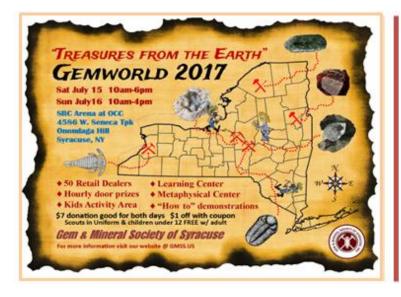
FOUR UPCOMING SHOW OPPORTUNITIES IN ADDITION TO WCGMC GEMFEST

July 8-9: Gem City Mineral Show, Erie, PA (JMC Ice Area) Sat. 10-6, Sunday 1-5 visit http://www.gemcityrockclub.org/ for details

July 15-16: Gemworld 2017 Hosted by Gem and Mineral Society of Syracuse, SRC Arena and Events Center, 4585 W. Seneca Tpke., Syracuse, Sat. 10-6, Sun 10-5, <u>visit this link for details</u>

July 22-23: Herkimer Diamond Gem Show & Festival, Herkimer County Fairgrounds, Frankfort, NY visit http://www.herkgemshow.com/ for details

August 25-27 – St. Lawrence County Rock & Mineral Club Annual Show, Canton Pavilion (90 Lincoln St.), visit http://stlawrencecountymineralclub.org/show_1.html for details





Grab bags for GemFest: Some members are making grab bags from their collecting trips before the show. But if you have extra minerals or fossils to donate, bring them along and we'll make bags up right at the show. Last year these things were a big hit.

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 gwexterior@gmail.com

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

m 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 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





Wayne County Gem and Mineral Club P.O. Box 4 Hewark, Hew York 14513