Wayne County Gem and Mineral Club News

August, 2022

Always Looking for Places to Dig!

Middleburg Quarry, July 30th (see page 2)

http://www.wcgmc.org

FACEBOOK link

What is it? (see page 5)

Annual Summer Picnic

Saturday August 20th

10:00 AM until mid-afteroon

Weiler Yard, Club Workshop,

6676 E. Port Bay Rd, Wolcott, NY

This is the August newsletter so we know what that means: last call (or almost last call) to sign up the big summer picnic. We seek a head count so the club can order chicken and potatoes and provide drinks. About 60 have signed up so far, but we know there are others who we have not heard from yet.

SIGN-UP: There are two ways to sign-up. Use the online survey here (just scroll to the bottom of the list of those signed up and select the sign-up box). Or send an e-mail to Holly Woodworth at autum14513@yahoo.com.

A DISH TO PASS: All you need to bring is a dish to pass. If you are undecided we suggest a salad or vegetable dish as we always seem to be overloaded by desserts. But if desserts are your thing, that is OK too.

DUES: You can save $5 on your 2022-2023 dues season by paying dues at the picnic. This is a big assist to our treasurer Bill Lesniak who does not have to chase everyone down all fall. For those of you who joined or renewed at GemFest your payment covers next year.

PROGRAM: Besides eating around noon, there will be morning activities including geode cutting with Dave Millis. In the afternoon we'll play Rock Bingo, and hold an abbreviated auction. There will be free rocks to take and inexpensive ones to purchase. Kiddos of all ages will have an opportunity to take a barrel ride to the fish pond.

We'll need help on either Thursday or Friday to set up the big tent (a weather dependent decision) and we hope that others can stay late on Saturday to help take it down.

Come join the fun.

Central PA Field Trip

by Teresa Ferris

The last weekend of July was my first overnight trip as leader to locations I had not been to. Sixteen WCGMC rockhounds had signed up and trusted my leadership skills. Four members were on their first rockhounding trip. What could possibly go wrong? Well, now that it is over I can report that all went well. Yes it was hot, but not too hot and we had plenty of liquid. I am not one to be late and I panic when I am, but everyone arrived on time. It was also great that everyone left with lots of rocks, minerals, and for those who stayed Sunday, fossils.

Saturday we visited Eric Stahl's quarries in Mt. Pleasant Mills and in Middleburg. I want to thank all who attended for bringing some nice rocks to give to the owner. Eric distributes them to children throughout the year. We especially thank Eric for opening his quarries to us and taking time on his weekend to greet us.

Fred could not go, so he asked me to report on the trip, and, of course, he wanted that report, immediately, like while we were still in the field, so he could include it in the August newsletter which I presume you are now reading. I took pictures and at Sunday breakfast asked the participants to write a few words. Here is what they wrote, interspersed with some of my pictures. I plan to do this on all my field trips going forward and put together a field trip scrapbook for the club.

"Thank you for our first experience rock hounding and the thrill of finding my first fluorite crystals and wavellite" **Sandy Federico**

"James and I hit the mother lode" **Rob Bancroft**

And I guess James and Linda agreed with Rob.
"Great trip, I hit my biggest vug ever, and found two more while extracting gorgeous intact calcite crystals from the first one, and with such great company" **James Keeler**

"I enjoyed collecting with new members, but I think my biggest thrill was seeing how happy James was after breaking into a large vug that was full of perfect calcite crystals. I don't know how many plates of calcite he pulled out and hauled away" **Linda Schmidtgall**

"Nice collecting site with enough for everyone: nice calcite crystals, very purple fluorite and wavellite" **Herbert Petschelt**

Great fun, great people, always love being with WCGMC on a field trip" **Sarah Bancroft**

Rob, Sandy, and Joe hunt for that special rock at Middleburg Quarry.

"Hot! But it was hardly noticeable while digging. Fun and enjoyable for first time digging under gorgeous deep blue sky with a nice breeze. Found some pretty rocks and got to know lots of nice rock diggers" **Joe Federico**

"Hat's off to Teresa and Eric Stahl (quarry owner) *for setting up a great trip. I found great calcite crystal pieces with a great group of rock hounds"* **Eva Jane Weiler**

"My first big rock hunting trip with the club: I found a rock with multiple colors, pink, coral, and gold that sparkled like pyrite. Once others saw it they wanted to know where I found it. That made me feel good since I am new at what to look for. Great group of people Fun!" **Aimee Cooper**

"It was hot, it was sunny, it was dirty, it was fun"
Scott Jones

One of the calcite pieces James dug out.

Field Trip Report continues on page 3

Looking for plant fossils in Centralia

On Sunday, most of us moved on to Centralia, the ghost town where somewhere beneath us a coal fire still burns. There, we searched for plant fossils while trying not to slide down the steep slope.

This way to the fossils!

It does not look too steep here, but ….

… **how about this? And remember this is all slippery shale. Fortunately it was dry** … .

… **and there were fern fossils to be found.**

And finally, there was more than minerals to observe in Pennsylvania. This is a colorful species of lichen, commonly known as British soldiers, scientifically known as *Caldonia bellidiflora*.

A Lithophone Performs at "Tunes by the Tracks"

by Kathleen Cappon

Twice a month on Wednesday evenings, folk musicians meet at the Clifton Springs Library. They go there to listen to concerts and performances of local and out-of-town singers and bands.

The library is a beautifully restored brick train depot. There is a large section for the library and a second part for gatherings where performances can take place in off-season weather.

I have played music there and gone to many folk music events so I thought I would try to play some tunes on the "rock" lithophone made completely from drill cores. On June 15th I played a few tunes with the Maria Gillard Trio: players of old time music and many originals.

Kathleen Capppon and her drill core lithophone performs with the Maria Gillard Trio on June 15th in Clifton Springs.

My lithophone was set up on the lawn beside the band. To the side there were posters and pictures that told about mining in Cobalt, Ontario and also some of the the mines in northern St. Lawrence County. I spoke about how drill cores are musical and can be tuned by cutting them on a rock saw. Each time a half an inch is cut off the end of a piece of core the note goes up one step!! I wrote more about the process of making musical xylophones from drill cores in the September 2020 WCGMC newsletter.

Kathleen's display on Ontario mining and lithophones.

We played the tune: " Home Sweet Home" which has all the notes of the complete octave. It was played in old-time string band fashion. The audience was quite surprised and amazed by the music that can be played with just a set of carefully tuned drill cores!

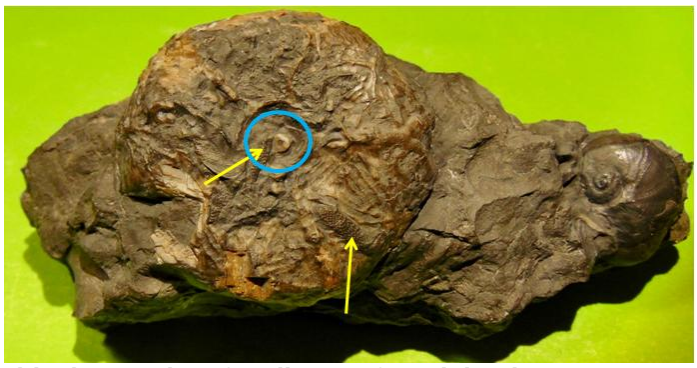
During the intermission several folks came up to see the rock cores and ask questions. Most everyone went home with a little section of rock core material that was at the display.

WCGMC members have been to Cobalt, Ontario several times seeking silver mineral specimens. On each trip, they have brought back many musical drill cores from the piles of abandoned core left behind by the early 20th century miners.

Photo by F. Haynes

An Interesting Fossil Assemblage

by Stephen Mayer

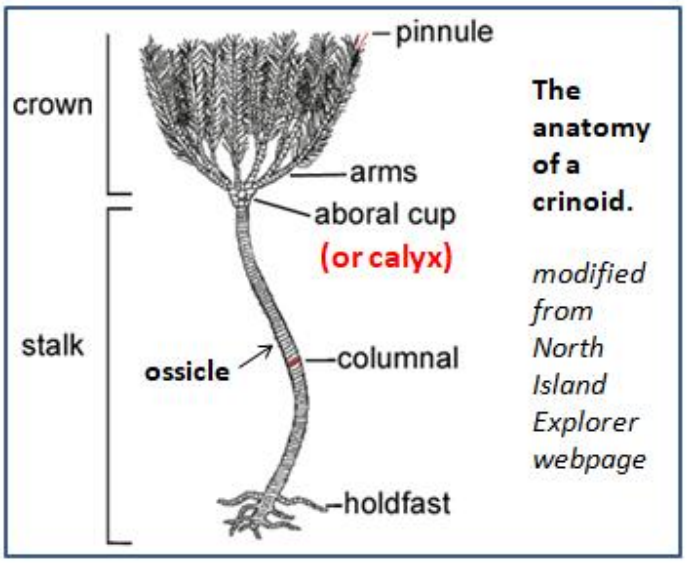


This interesting fossil was found in the Deep Run Shale Member of the Middle Devonian Moscow Formation in Kashong Glen, Geneva, New York. It is interesting to me for a number of reasons, but I will highlight two here.

First, there are two fossils present. Was it just an accident that a crinoid calyx (circular feature on the left) and a Platyceratid gastropod (snail) on the far right were smothered together during a rapid burial episode? Perhaps it is that simple. But, the fossil on the right is a *Natioconema lineata* gastropod. Platycerid gastropods are known to exhibit coprophagus behavior (translation: they eat poop!). A more exciting explanation to their proximity in this 380 million year old shale is that the gastropod was dining on the fecal matter of the crinoids when disaster struck and both became entombed.

The second reason is the crinoid itself, as this is the calyx of a *Dolatocrinus liratus*. Crinoid calyxes are far less common than stems, and in all my years of collecting, I have never found a *Dolatocrinus* calyx with the arms and pinnules still attached. The arms and pinnules are fragile and easily disarticulated, rarely if ever preserved.

This calyx is about 4.7 cm across and is composed of calcite. Surface ornamentation consists of interlocking plates with raised ridges and radial cross-ridges. The scattered tiny circular columnals or ossicles are most likely not from this organism and instead just settled there during the rapid burial depositional event. The blue circle is the attachment point of this crinoid's stem.



Dolatocrinus had very robust stems often reaching 1/2 inch in diameter and up to a couple of feet long. This is what we often find when fossil hunting in the Middle Devonian (see photo below). Dr. Gordon Baird and Dr. Carlton Brett often referred to these rhizome-like features as "runners" as they are ubiquitous in the Jaycox-Tichenor-Deep Run succession. However, the point of attachment between the calyx and the stem must have been extremely weak as they are rarely found connected. It is interesting to imagine that during the Middle Devonian time, crinoids must have formed vast and beautiful underwater "gardens".

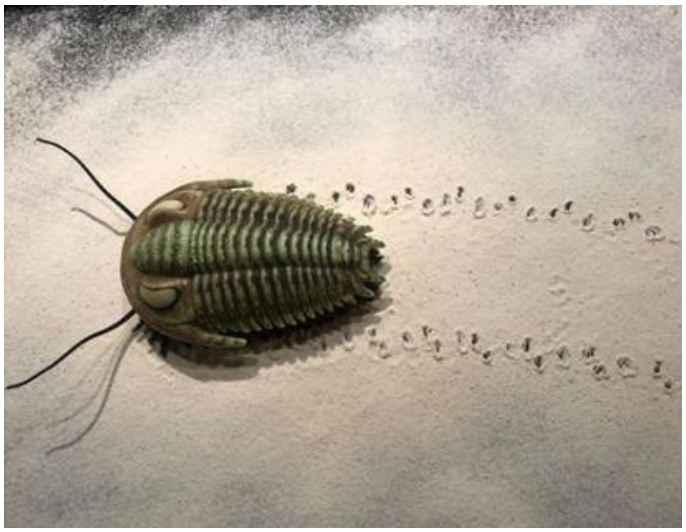
Long, curved Dolatocrinus stem embedded in Middle Devomnian shale in western New York State.

There is actually a third fossil in the original assemblage. The yellow arrows point to bryozoan epibionts on top of the crinoid calyx. They may be *Sulcoretipora incisurata*. Imagine that, three invertebrate species from three distinct Phyla in this one small piece. The crinoid is an Echinoderm, the gastropod is a mollusk, and the bryozoan is, well, a bryozoa.

Who Made Diplichinites Traces?

by Fred Haynes

Have you ever heard of Diplichnites or perhaps the term Diplichnites traces? I had not until a paleontologist Facebook friend of mine from Germany posted an interesting note in early July. Uwe Troppenz shared a reconstruction of another paleontologist (Peter Haines), who suggested that so-called Diplichnites traces might actually be left by trilobites. I decided to learn more.



Were Diplichnites traces made by trilobites? Reconstruction by Peter Haines.

Back in the late 19th century, these sort of tracks had been observed by J.W. Dawson in Pennsylvanian-age strata in Nova Scotia and he had proposed that they were made by fish "walking" in shallow water, perhaps on their pectoral or ventral fin spines (Wikipedia). Dawson assigned the name Diplichnites. Others believe they were produced by large crustaceans or by annelid worms or even by giant myriapods (such as a millipede). But more recently, Uwe notes that the term Diplichnites has been extended to traces left by several other extinct arthropods, most notably, at least for us, trilobites.

So, the next time you are out and about looking for whole trilobites, or even trilobite parts, you might want to keep you eye out for tracks like this. After all, who wouldn't want to own some trilobite tracks!

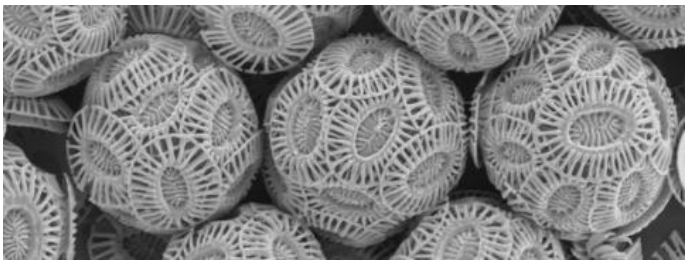
Naming a Geologic Period

from Delaware Mineralogical Society Facebook page

These are the chalk cliffs at Old Henry Rocks in Dorset, England. They were deposited 66 million years ago right near the end of the Cretaceous Period.

We all know that the Cretaceous Period which ran from 145 million years ago to 65.5 million years ago ended with a series of very bad days for most life on earth including the final dinosaurs. BUT, did you know that chalk, which is essentially billions and billions of tiny compacted sea fossils, is the reason we call this Period of geologic time the Cretaceous?

'Creta' is Latin for chalk, and there is a whole lot of chalk like that in the cliffs in Dorset in both France and England. As it happens, the folks who first started recognizing sedimentary tocks and stratigraphy and starting charting geologic time were from Britain and France. Bingo, the Cretaceous Period was born.



Chalk microfossils, the armored husks of single-celled plankton, each ~2 microns in diameter under a scanning electron microscope. There are 25,400 microns in an inch!

A GemFest Exhibit: Mammoths and Mastodons

If you attended GemFest and wandered to the back of the hall to check out the exhibits, it is likely that you stopped for a few minutes to check out the Mammoths and Mastodons exhibit that Kathleen Cappon had put together. Kathleen was our 2021 Rockhound of the Year and one reason was her passion to educate. Her GemFest exhibit this year exemplified her ability to do so creativity

Kathleen Cappon's exhibit on mammoths and mastodons at GemFest 2022.

Kathleen's exhibit included teeth from both of the extinct ice age mammals and a discussion of how and why they differed and lots of other information. It is hard to imagine that these behemoths roamed around Wayne County just 12,000 years ago. It is rare to find evidence of this, but long-timers in our club know that it was the 1973 discovery of a mastodon just north of Newark, New York that led to the creation of our club the following year.

You can read more about the Pirrello mastodon that led to the formation of our club in the September, 2020 WCGMC newsletter. As a tribute to Marion Wheaton, one of the club's co-founders, we re-published an article from a 2008 newsletter which detailed the discovery. Those new to WCGMC might find it interesting to know how the club got started. After all, in a year or two, WCGMC will celebrate its 50th anniversary!

Splendid Sands Calendar

August, 2022
Taga'chang Beach, Yona, Guam

Photo by Leo Kenney

by Leo Kenney, Kate Clover & Carol Hopper Brill

During higher Pleistocene sea level stands, limestone terraces formed around Guam's Eocene volcanic base. Today, active coral reefs thrive along most shorelines, including at the southeastern end of the island. This beach, situated between limestone cliffs and a fringing reef, is part of a coastal park, and was once an ancient Chamorro settlement site.

This sample allows comparison of similar-looking biotic remains. Chunks of coralline algae (at 11 and 1 o'clock) have a chalky, dull finish and little visible internal structure. In contrast, reef building coral skeleton (left edge at 10 o'clock) is denser and weathers to a shiny finish with internal chambers reflecting the polyps' skeletal growth.

Compare the chalky white polychaete tubeworm at 10 o'clock with the brown vermetid snail shell at 6 o'clock. The oval break of the snail shell also exposes multiple layers. Next, compare the ribbed exterior of the purple sea urchin spine at 8 o'clock with the interior cross-section of another at 3 o'clock. This rich sample also includes bivalves, micromolluscs and a red *Homotrema* foraminifera.

Wayne County Gem & Mineral Contacts

ELECTED OFFICERS

President – James Keeler
jamesrocks(at)jkeeler.com
Vice-President – Holly Woodworth
autum14513(at)yahoo.com
Secretary – Beth Webster
Treasurer - Bill Lesniak

Board of Directors
Bob Linderbery
Heidi Morgenstern
Karen Wilkins
Ed Smith

Past President – Linda Schmidtgall

Visit us on Facebook:
https://www.facebook.com/groups/1675855046010058/

APPOINTED POSITIONS

TBA – Field Trip Leader
Stephen Mayer - Fossil Field Trip Leader

Fred Haynes – Newsletter Editor
fredmhaynes55(at)gmail.com

Bill Lesniak – Website Coordinator
Glenn Weiler – Workshop Coordinator

Linda Schmidtgall – Collection Curator

Fred Haynes – Facebook Administrator
Jim Rienhardt – Sand Chapter

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