

Wayne County Gem and Mineral Club News

June, 2022

Always Looking for Places to Dig!

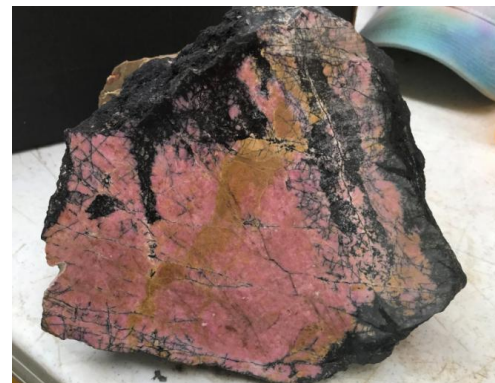


sorting rocks for grab bags



<http://www.wcgmc.org>

FACEBOOK link



You never know what you will see at the workshop. Rhodonite from Betts Mn Mine in Plainfield, MA)

Next Club Meeting

Friday **June 10th**, 7:00 PM.

Park Presbyterian Church,
Maple Court, Newark, NY

Program:

Your GemFest Acquisitions

Everyone is encouraged to bring their new acquisitions from GemFest 2022 and tell us about them. What was their appeal and how they fit into their collection. Come prepared to talk about the show and how we can make it even better in 2023.

Saturday Club Workshop

June 11th

(10:00 AM until mid-afternoon)

**Where: 6676 E. Port Bay Rd,
Wolcott, NY**

Eye protection is required.
Training on equipment
\$5/adult to offset workshop costs.

Other Upcoming WCGMC Events

Sunday, June 12th: A full day members-only field trip is planned to a popular site in central New York. For location and logistical details, ask about it at GemFest or contact Teresa Ferris (860-861-5736) or Teresa.a.ferris@gmail.com.

Wayne County Gem & Mineral Club

**We're
back!**



GemFest 2022

Sat. June 4 10-5

Sun. June 5 10-4

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

\$4 Admission, Kids 12 & under FREE

Soapstone Carving, Wire Wrapping, Sluice,
Vendors, Exhibits, Free Prizes, Scavenger
Hunt, Rock painting, Jerry's Dinosaur, our
famous Rock Grab bags, and much more

Gems, Minerals, Fossils, Beads & Jewelry

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



As we head into June, I find myself excited for a WCGMC-event packed month starting with the return of GemFest! We haven't had a show since 2019 and I'm looking forward to seeing the kids' faces as they discover gems and fossils at the sluice, the groups of curious visitors perusing our club showcases, and all of the members chipping in to make it a wonderful activity-filled show.

Putting on the show is a big deal for us since it's our biggest fundraiser, and truly wouldn't be possible without everyone jumping in to share the workload as so many people have volunteered to do. I'm excited to see the results of this collective effort come to fruition this coming weekend and I hope everyone else is too!

That's only the first weekend of the month - the second weekend is shaping up to be a club event packed one as well. Our general meeting will be on Friday the 10th where we'll have some collective show & tell combined with a debrief on GemFest. Following that is workshop day where everyone can work on slabbing, cabling, and polishing up their goodies acquired the weekend prior (or earlier). To round out the two weekends of packed club activities, Teresa will be leading us on a dig at a gorgeous location. Check out the details on the front page of the newsletter and make sure you get signed up for a great day!

We've got a few other field trips in the works and we'll primarily be using the newsletter to communicate so make sure you keep your eyes on it each issue for sign-up information. Teresa, Jeff, myself, and Stephen are putting together a few trips over the next few months with more details to follow as we get them fleshed out. I know people are antsy to get out on digs and we've usually got a more solid calendar locked in long before this time of year, but I'd encourage anyone who wants to chip in and help out by leading a trip to reach out - I can help get you started with the basics of putting a dig together and would love to add more names to the list of people leading trips.

Speaking of adding names to lists, I want to give a big thanks to Holly for stepping up to orchestrate the summer picnic! Be sure you save the date: August 20th at the Weiler's, dish-to-pass and meat/drinks provided by the club. If you've never made it to the picnic, this is the year to do it - everyone always has a great time and the kids (of all ages) love to ride down to Glenn's pond in his adorable buggy train and see his well fed and happy koi.

I hope all of these activities have everyone as excited about the coming months as I am! See you all this weekend at GemFest!

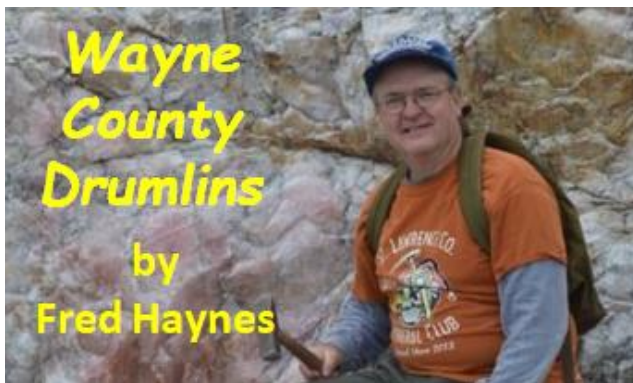
A Couple of Scenes you can expect to see at GemFest:



Try your hand processing some mineral and fossil-laden sand across a working sluice.



If rock craft is more your cup of tea, how about carving some soapstone? Rock painting is available also. Kids can attempt a scavenger hunt with prizes to those who complete the task.



This article was first published in the June 2016 WCGMC newsletter. But your editor has been busy preparing for GemFest, buying a new car, and otherwise goofing off. Besides we have a lot of new members and the drumlins of Wayne County deserve an encore. Perhaps this expanded version will be of interest to members.

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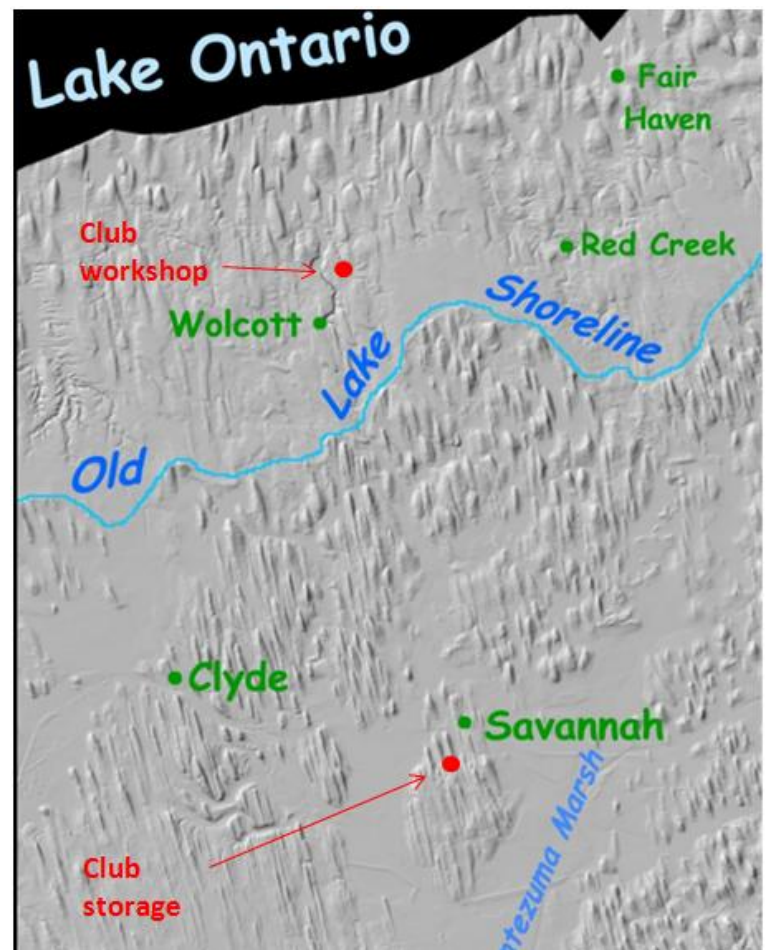
All of us who live or travel in Wayne County know it is easier to travel north-south than east-west. Most of us know that is due to the elongated hills called drumlins that cover much of the region. And we also know that those geomorphological features were formed by the continental glaciation that covered western New York with ice a mile thick until their final retreat 12,000 years ago.

BUT, did you know that until very recently, glacial geologists could not agree on exactly how these elongated parallel hills came into existence? It was known that the drumlin fields were aligned with the glacial flow and retreat, but it was unclear whether they represent debris built up progressively during glacial advance and retreat or whether they were sculpted out of older sediment from previous glacial deposits. The debate has raged for over 150 years.

In 1994, Åland, an autonomous island region of Finland, issued a stamp featuring a forested drumlin in the municipality of Finström. Other stamps in the geology set featured a diabase dike and a boulder field.



Well, a team of scientists from the University of Toronto Scarborough appears to have solved the dilemma (Eyles et. al., 2016). They deployed airborne high resolution ground-penetrating laser technology combined with advances in absolute GPS positioning to map depth to bedrock beneath soils, trees, and water. They found that drumlins are “islands” of sediment left behind as the intervening regions were washed out by rivers and streams coming off the retreating glaciers. The drumlins themselves are rooted in bedrock suggesting that not only was earlier glacial sediment removed, but ice streams with embedded rock and later rivers and streams also cut down into the Paleozoic bedrock. This enhanced the topographic extremes between the drumlin ridges and the valleys.



If you are bored, you can try to count the drumlins in this portion of Wayne County. Our area is so well known for its drumlin fields (often called swarms) that this shaded relief image map (sans the location of the WCGMC sites!) appears as the type example the Wikipedia drumlin entry. I wonder how many of our club members have their homes on this map?

In another paper in the same 2016 issue of Sedimentary Geology, Menzies et. al. further suggest that the rate of sediment influx into the subglacial region relative to water movement and also the movement of the glacier itself play a role in generating conditions conducive to drumlin

formation. The Menzies et.al. paper includes a comprehensive study of what they refer to as the NYDF (the New York Drumlin Field). Measurements at Chimney Bluff and other locations in Wayne County are key to their work. It is not light bedtime reading, but it does speak to the importance of our local geology.

Our Past President and current club collection curator, Linda Schmidtgal knows all about drumlins. She lives on one; you could even say she owns one! Her home is perched partway up the southern end of a mile long, 120' high drumlin within a swarm of several dozen between Savannah and Clyde. The drumlins just to the north of our club workshop at the Weiler home in Wolcott are a bit shorter and a bit wider than those farther south, but they are just as formidable for east-west travel. Most are forested and steep.

Did you ever wonder why East-West Route 104 is located where it is as it passes through the northern portion of Wayne County? Or why that route is so much easier to travel than any other east-west road? Well, route 104 more or less follows an old Lake Ontario shoreline where any drumlins that had existed would have been truncated and then eroded much as those at the current shoreline are today (witness - Chimney Bluffs State Park). It is also not a coincidence that the drumlins south of this old shoreline show a more pronounced and steep morphology than those that were protected below water until more recently.



Truncated drumlins at Chimney Bluffs State Park in Wayne County: When the water level of Lake Ontario is low and the lake is calm walking along the shoreline allows a unique view of the interior of a drumlin. Of course there are rocks to see also!

Photo from NYS Dept. of Environmental Conservation.

Another interesting aspect of living in a region full of drumlins is the valleys that have formed between them. One such location just 8 miles north of Newark on Arcadia Zurich Norris Road is Zurich Bog. There are few rocks, no minerals, and unless there are buried mastodons, there are no fossils there. But Zurich Bog is certainly a neat place for Wayne County outdoor enthusiasts to spend a few hours learning about the influence of geology on the environment around us.

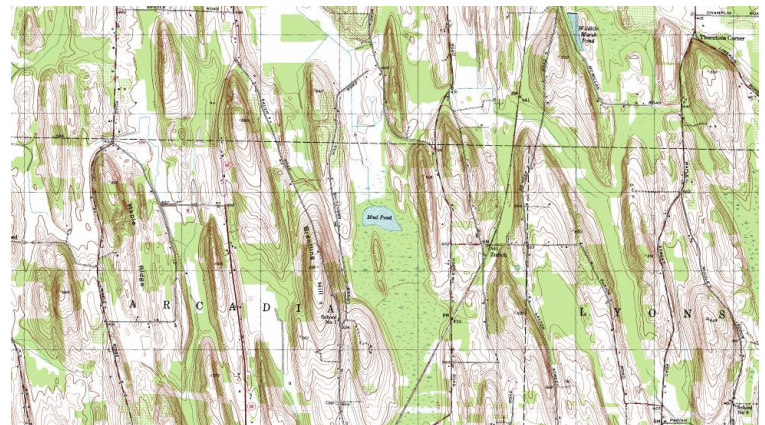
Zurich Bog is trapped between two north-south trending drumlins. The wetlands and central bog are generated where groundwater entering the valley upwells towards the surface from a deep-seated aquifer. However, there is insufficient water influx to form a standing lake or pond and the protected valley conditions combine with the groundwater to permit extensive covering vegetation (mostly sphagnum moss) to develop and flourish. The site is home to many orchids, pitcher plants, and over 600 different species of fungi, all because of the geology, hydrology, and topography of drumlins!

References:

Eyles, N., et. al., 2016, Erosional origin of drumlins and megaridges, *Sedimentary Geology*, volume 338, p. 2-23.

Menzies, J., et. al., 2016, A case study in the New York Drumlin Field, an investigation using microsedimentology, resulting in the refinement of a theory of drumlin formation, *Sedimentary Geology*, volume 338, p. 84-96. *Ask me if you would like a digital copy to read.*

Wikipedia: entry on drumlins



No, this is not the topography on the moon. Rather, this is a 6 mile wide section of Wayne County from the south end of the 7.5 minute USGS Sodus Quadrangle map. The town of Sodus is about 3 miles north of this region. The contour interval separating each of the brown elevation lines on the map is 10 feet. Most of these mile long drumlins are over 120' high, some are almost 200' in elevation.

Splendid Sands Calendar

June, 2022

Elafonisi Beach, Crete, Greece



Photo by Leo Kenney

by Leo Kenney, Kate Clover & Carol Hopper Brill

Elafonisi is actually an island, separated from Crete's southwestern coast by a shallow lagoon and sandbar that is fully submerged at high tide. The beach, including both the mainland shore and exposed parts of the sandbar, is popular with tourists.

Foraminifera dominate this coarse sand sample. These single-celled protists secrete chambered calcium carbonate tests, their cell projections extending out for movement and feeding. Chambers are evident in the porous structure of some specimens. Look for: large flat discs, flat discs, polished seed shapes, nautilus shapes, and chunks of pink *Homotrema*.

A pink spine from a rock-dwelling sea urchin is present at 5 o'clock in the lower right. Urchin skeletal plates (1 and 8 o'clock) have a central boss (ball) that supports each moveable spine. Molluscs include the larger, white bivalve shell along the lower edge, as well as the clear sculptured spiral at 5 o'clock. The tight white spirals at 9 and 10 o'clock and in the bivalve shell along the bottom are from polychaete tubeworms.



My Auntie is a Total Gem

By Kathleen Cappon

My new great niece, Cora Josephine Hanson, was born April 6th. In May, I travelled to the North country above Watertown to visit the family. I was so excited to see her that I did not stop along the way at any road cuts. Among her many new outfits was this cute one that mentioned the word "Gem"! Of course, she is the real Gem in this case.

Her birthstone is the diamond. I am hoping someday she will also be a "rock hound". For now, I will send her a nice Herkimer diamond in matrix! Let this also serve as a reminder for all of our club rock hounds and your friends. Check out the birthstone chart below and attend our show the weekend of June 4th and 5th in Canandaigua. There, you may purchase birthstone rocks and jewelry for all the upcoming birthdays or even for Christmas!

JANUARY GARNET	FEBRUARY AMETHYST	MARCH AQUAMARINE	APRIL DIAMOND
			
MAY EMERALD	JUNE ALEXANDRITE AND PEARL	JULY RUBY	AUGUST SPINEL, PERIDOT, AND SARDONYX
			
SEPTEMBER SAPPHIRE	OCTOBER OPAL AND TOURMALINE	NOVEMBER TOPAZ	DECEMBER BLUE ZIRCON
			

Miocene Fossil Night for WCGMC

All who attended the May club meeting were able to go on a fossil hunt in the basement of the Park Presbyterian Church in Newark. All present were provided a cup or two of gravel from the Aurora

Phosphate Quarry in Aurora, North Carolina, a pair of plastic tweezers, a paper plate, and a small re-sealable baggie for their finds. After Fred Haynes gave a 15-minute presentation on the geology and the microfossils found in the Miocene-aged gravel and on the Aurora Fossil Museum from whom the gravel was obtained, the search began. The rest of the meeting is best documented in pictures. Most took their gravel home for further searching.



President James Keeler "supervises" the search for shark's teeth and other microfossils at one table.



Always at work, Linda Schmidtgall is seeking volunteers for GemFest at another table. The fossil hunters do not appear to be giving her much attention!



Just a random member's plate after a few minutes of work. Can you spot the shark's teeth, skate and ray plates, coral pieces, and small bivalves?



A bit of what Fred Haynes found while digging in the larger pile of material outside the Aurora Fossil museum in early May.

Workshop Day in Wolcott

Our May Workshop was an event with a dual purpose. Yes, there was plenty of lapidary work being done on the saws and polishing wheels, but we were also sorting and organizing rocks, minerals, and fossils (yes we have a few horn corals to give away) for GemFest. Specimens from the club collection were selected in the hopes they can find new homes. We will have lots of grab bags (6 rocks/minerals/fossils) for just \$1 and lots of other goodies to see and enjoy.



Karen and Kathleen are picking out orange calcite from Eganville, Ontario for the sluice.



Teresa works outside while Bob is just getting started on his newest sphere at the coarse grinding well. And there is that Scott guy photobombing yet another of my classic pictures. At least he looks busy this time!



A couple of our younger members, Brodie and Nathan, were caught polishing cabochons and collecting on the rock pile.



When you feel compelled to adopt a new rock, the rock pile in back of the club workshop may have just the right one for you. But before you do decide to adopt a new rock, you must consider the following.

Rocks have a very long lifespan. Often they outlive their owners. Adopting a rock (or worse yet several) is a serious commitment and may require you to have a plan in place after you are gone. Your rocks are destined to outlive you and you will want a nice new home for them after you are gone.

Another thing to point out in this picture is how well trained all our WCGMC members are in the art of rock collecting. All eyes are on the ground (that is where the rocks are!), feet are firmly and stably positioned, and knees are properly bent. Training in such techniques is available at any of our club events.

Wayne County Gem & Mineral Contacts

ELECTED OFFICERS

President – James Keeler

[jamesrocks\(at\)keeler.com](mailto:jamesrocks(at)keeler.com)

Vice-President – Holly Woodworth

[autum14513\(at\)yahoo.com](mailto:autum14513(at)yahoo.com)

Secretary – Beth Webster

Treasurer - Bill Lesniak

Board of Directors

Bob Linderbery

Heidi Morgenstern

Karen Wilkins

Ed Smith

Past President – Linda Schmidtgal

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](mailto:fredmhaynes55(at)gmail.com)

Bill Lesniak – Website Coordinator

Glenn Weiler – Workshop Coordinator

Linda Schmidtgal – 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

