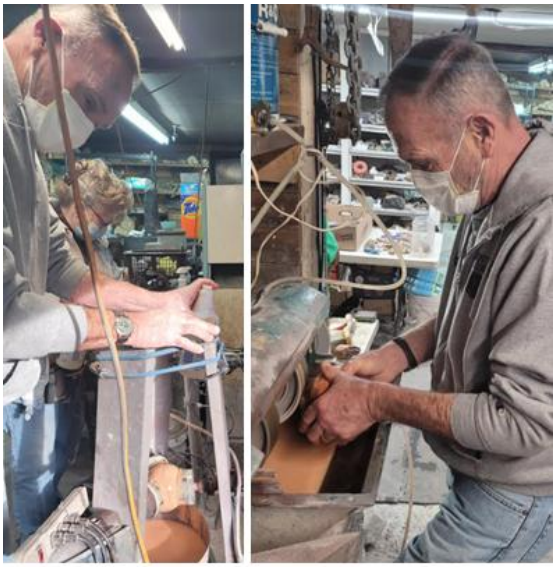
Wayne County Gem and Mineral Club News

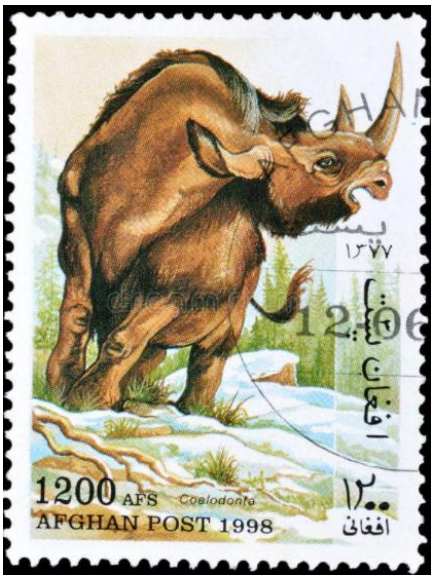
February, 2021 **Always Looking for Places to Dig!**



Bob's new sphere (see page 7)

http://www.wcgmc.org

FACEBOOK link



Woolly rhinoceros (page 4)

Upcoming WCGMC Workshops

February 13th & 27th

We have scheduled two workshops during February. As in the final months of 2020, we will limit attendance to allow for social distancing. Call Linda Schmidtgall to reserve a spot (phone number on page 8).

When: 10:00 AM until mid-afternoon
Where: The Weiler's Barn /Club Workshop
6676 E. Port Bay Rd, Wolcott, NY
Rules: Bring your own rocks.
A mask must be worn when inside the shop.
Training on equipment is available.
Eye protection is required.
$5/adult to offset maintenance costs.

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It remains unclear when we can resume our monthly meetings in Newark. We will not meet in February or March.

Help us stay connected by contributing to the club newsletter or by posting on our club Facebook page.

A "Meeting" that you can attend

We will not meet in February, but I am going to propose a club program and project for any member with a couple hours to spare and a desire to learn. And I am even going to lay it out in 5 easy steps:

1) Read the article on page 3 of this newsletter.
2) Familiarize yourself with the Yellowstone Mantle Hot Spot and the unique geology a hot spot generates by reading this Wikipedia page. Think about the geometry of a continental tectonic plate moving over a hot spot in the mantle.
3) Watch the lecture linked on page 3. Heck, mark your calendar and consider this the month's WCGMC meeting activity and do it Friday night February 12th. Do it with your kids or grandkids if they are in your family bubble. Take a few notes along the way. Consider yourself back in school. Or not!
4) Reflect on what you have learned and send me a brief bullet list of what you liked about the talk or learned that you did not know before. DUE DATE – February 22nd
5) Eat some chocolate. You have earned it.

I will summarize what I get from all of you and report back in the March newsletter. Don't disappoint me, participate and perhaps you will be rewarded!

Fred

President's Message

Linda Schmidtgall

Winter finally arrived in Wayne County this week. Perhaps it can leave as quickly as it arrived when Punxsutawney comes out of his hole on February 2nd and does not see his shadow. Regardless of the weather there are two more long months before April 1st and a date at Ace of Diamonds. I'll find something to do while I wait. Give me a shout if you want to attend a workshop in February. We have a few slots still open.

Last month I dug out a bag of geodes from the club collection. It was a mix of thunder eggs and western US geodes, perhaps with a few Mexican purple geodes. I cut and polished them. When we meet again we'll have a bunch of door prizes and prizes.

Take a moment to tell me what you have been doing. I'd love to hear from each of you.

Geodes from the WCGMC collection.

Linda

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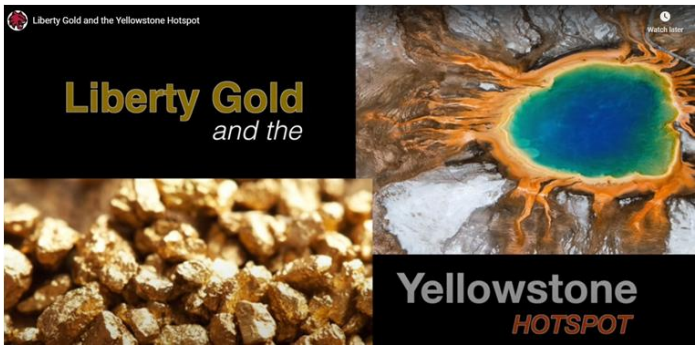
This picture popped up on the club's Facebook Group page as a reminder of where we were on a winter field trip in mid-January 2016. We took a field trip to the Museum of the Earth in Ithaca. If Gary, Glenn, and Ed were not so tall, you could see more of the right whale skeleton behind us.

An Entertaining Online Lecture

By Fred Haynes

We all know a bit about Yellowstone, the geysers not the bears, and many of us have visited the famous park to marvel at the geothermal activity up close and in person. Of course, we have also heard the doomsday statements that it may erupt again at any time (like next month maybe), even though the last major, caldera-style eruption was 630,000 years ago. But how much do we really know? Why is it there? What came before?

We also all like gold and fantasize about finding a giant nugget in an outcrop or when panning in a stream. But why is gold found where it is and how did it get there? Is there a reason or is it "just because" as David Joyce tells in his mining song, "Gold is Where you Find It"?



Presented by Nick Zenter
Central Washington University

Now imagine if someone told you that the origin of the geysers at Yellowstone can be linked to vein gold deposits in central Washington State and that if you gave him an hour of your time he could explain how. And that while doing so he would entertain you with his unique and energetic lecture style. If you are an old bird like me he will bring you back to your school days, when teachers and professors used chalkboards. And if you are young you might even wish your teachers used chalk once in a while.

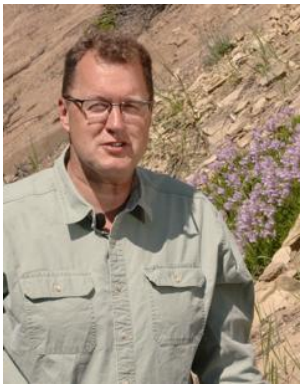
Nick Zentner is a professor of geology at Central Washington State University in Ellensburg, WA. But he is much more than that. His geology lectures are now reaching folks around the globe in all sorts of forums and the best part, most of them are free and accessible to all. I reviewed one in our September 2020 newsletter about the history of the Columbia River. Did anyone watch that one?

This time I select a lecture with two themes that might be even more appealing: Yellowstone and the super volcano that created it, and gold. Dr. Zentner even introduces blue agates in the discussion. And you will also learn about the island of Siletzia. I'm betting few of you know where that island is (or was)! Don't cheat and google it now. Watch Dr. Zentner and learn the full story.

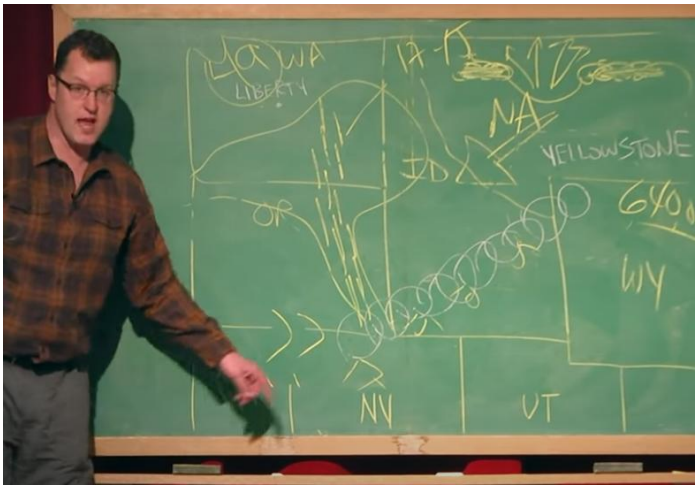
Here is how to find the hour-long lecture:

1) Enter http://www.nickzentner.com/
2) Click on the Downtown Geology Lectures icon (the one with the two chalkboards which should appear in the second row)
3) Scroll down to the icon for the Liberty Gold and Yellowstone Hot Spot (the picture to the left and hit enter).

If you want to save a step right click directly on the picture to the left and then use Open Hyperlink to get to step 3 above



The beauty of Dr. Zentner's lectures are that they appeal to all ages and all backgrounds. All you need is an interest in learning a bit more geology than you currently know. He does the rest. I hope you give him a chance and then I hope you tell me what you thought about it and perhaps what you learned.



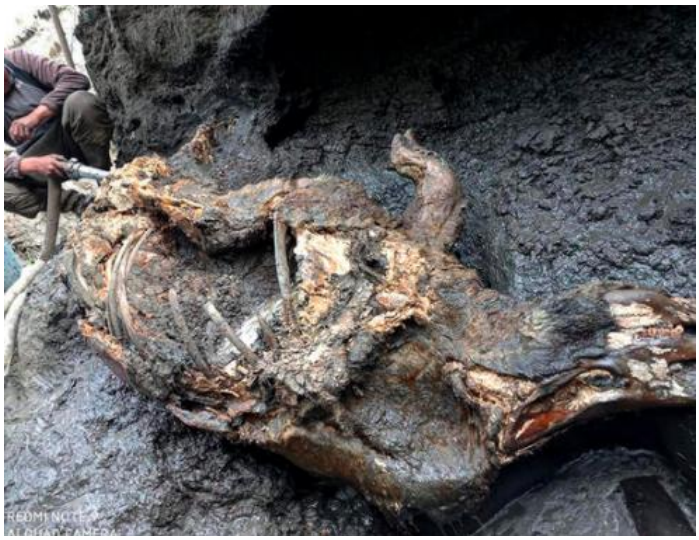
When is the last time you saw a lecturer use a chalkboard like this?

Woolly Rhinoceros

by Fred Haynes

Many of you know about the Pirello mastodon from Newark and how its discovery in 1974 led to the formation of our club. You may even know the difference between mastodons and woolly mammoths as so eloquently described by Stephen Mayer in the March 2016 WCGMC newsletter. But how many of you knew there was also a woolly rhinoceros running about in the early and mid-Pleistocene Epoch?

The woolly rhinoceras (*Coelodonta antiquitatis* to those interested in scientific names*)* was actually quite common in Europe and northern Asia. Like the other Pleistocene behemoths, the woolly rhino survived until the end of the final glacial advance about 10,000 years ago. Images of woolly rhinoceros can be found in cave paintings in Europe and Asia and their bones are often found in these same caves. Human hunting, combined with the changing climate associated with glacial retreat likely doomed them just as it did the mastodons that once roamed our region.



A partially exposed mummified woolly rhino: photo is from August, 2020 in Yakutia, Siberia *CBS News*

The retreating permafrost regions of Siberia are apparently offering up significant new complete mummified examples of woolly rhinos that coud teach us a lot more about these Ice Age creatures. One such example reportedly discovered in the Yakutia region of northern Siberia last August has even made the mainstream science media (CBS News, 2020). The specimen is said to be the best preserved specimen of the woolly rhino ever found. Soft tissue and hair is preserved and internal organs remain intact, including part of the animal's intestines. Its horns were found laying beside the mummified carcass.

As of mid-December, scientists in Russia were still waiting for the ice roads in the Arctic to fully freeze before the specimen could be delivered to the laboratories for study. Perhaps that has happened and more will be forthcoming from this discovery.

Woolly rhinos were about the same size as the largest of today's rhinoceros species, the white rhinoceros of central and southern Africa. They stood about 2m high, measured almost 4m from head to tail and could weigh as much as 6,000 pounds. Their longest front horn was about a meter long and weighed more than 30 pounds. They probably looked dangerous, but woolly rhinos were herbivores, whose only known predators were likely humans.

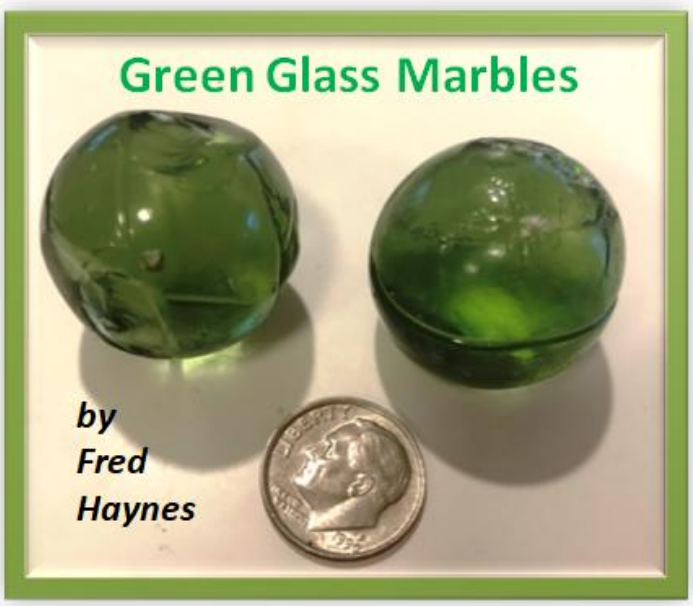
We may not have heard much about these extinct behemoths because there is no evidence that they crossed the Bering Sea land bridge from Asia into North America. This is thought to reflect the low grass density that existed in the regions immediately adjacent to the bridge during the time when that land area was accessible (Boeskorov, G., 2001). But they are well known in Europe and Eurasia, even to the point of being the subject of numerous postage stamps including those of Sweden, Jersey, and Kazakhstan that are featured in the title box or the one from Afghanistan featured on page 1.

References:

Boeskorov, G., 2001, Woolly Rhino *(Coelodonta antiquitatis)* distribution in Northeast Europe, Deinsea, Vol. 8, p. 15-20.

CBS News, 2020, Well-Preserved Ice Age woolly rhino found in melting Siberia permafrost, Dec. 31, 2010.

Wikipedia, Woolly rhinoceros entry



OK. OK. They are not minerals, nor are they even crystalline. They are not fossils. They are not even natural so you cannot call them rocks. But I know that some of our members collect slag and others hunt for glass on Lake Ontario's beaches. And when I heard the story on these little puppies I thought they deserved a little love.

But apparently not too much! You see I had acquired the pair more than a year ago from a stamp collector friend. Although she told me a bit about them, they ended up languishing in a box of uncatalogued and more or less forgotten rocks and minerals behind or under other stuff in my "office".

But one day this past month I uncovered that box. Hmmm. Trouble was, I could no longer remember much of the story behind the glass marbles except that they came from somewhere in Pennsylvania and when I acquired them I had thought they were neat. Always, always make labels when you acquire anything!

Fortunately Ada Prill was only an e-mail note away in Rochester so I asked my benefactor if she could remind me where these came from and why they had been so interesting at the time. She did so and included a wonderful link that made them even more interesting. In fact, so interesting that I decided to dedicate a full page of this month's newsletter to them.

They are from Huntingdon, Pennsylvania. Superior Huntingdon Composites is a fiberglass company that is able to convert a pound or so of those green glass balls into over 50 miles of very thin, very useful fiberglass. The high quality material they make will be incorporated into car fenders, into the components of a mobile phone, or any number of high-tech applications.

This process of using small glass marbles about ¾" in diameter in the production of fiberglass is not unique to the Superior Huntingdon plant. The consistent size and the marble shape allow material to be added to the glass melt at a controlled rate, while the temperature is held constant. As this occurs the marbles can be inspected for impurities and consistenlty high quality fiberglass can be produced.

BUT, not all the glass marbles that reach the Hunntingdon factory are of sufficient quality for use in fibergalss creation. Some have physical flaws, others are apparently chemically contaminated. These waste marbles are set aside and I guess they can be found outside the plant in barrels. Town folks use them in aquariums, plant containers, perhaps as toys for children, or, in one instance as gifts for a university president. You will have to read the link in the final sentence of this paragraph to learn more about that. And I encourage you to do so. Daniel Gray's 2014 commencement address to the graduating class of Juniata College is a masterpiece.

Digging a bit deeper I learned that just as we had collected taconite along railroad tracks in Marquette, Michigan during our 2019 trip to the Upper Peninsula, folks scour the railroad lines in parts of Pennsylvania and Ohio looking for various vintages of these glass marbles, which they simply call Railroad Marbles. In fact, they can be found as far away as Texas and California along railroad lines connecting glass manufacturers with factories specializing in fiberglass production.

I am not certain what I plan to do with my marbles. They are clearly too big for earrings. But I do know that I will generate a label and find a place to put them where they will not be forgotten. After all, I never want anyone to be able to accuse me of having lost my marbles!

References:

Gray, Daniel, 2014. Overlooked Marbles, 136th Juniata College Commencement, May 17, 2014

Railroad Marbles, in Ohio Metal Detecting webpage

The WCGMC Sand Page

Splendid Sands Calendar
February 2021
Malcapuya Island, Palawan Province
PHILLIPPINES

by Leo Kenney, Kate Clover & Carol Hopper Brill

Declared a Biosphere Reserve by UNESCO in 1990, the islands of Palawan Province stretch for nearly 400 miles west of the Phillipine Archipelago. Some of the country's most pristine environment includes small Malcapuya Island and its fringing coral reef.

Splendid Sands – February 2021

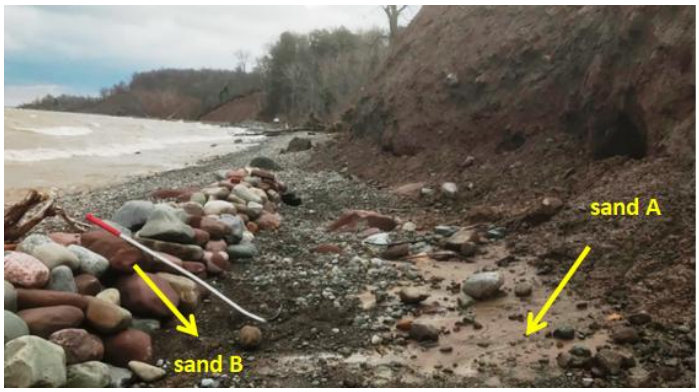
This reef-derived sand included large disc-shaped foraminifera *(Marginipora),* smaller rams-horn and seed-shaped species, plus red *Homotrema*. A bit of coral at the lower center shows internal chambers and charactristic glossy finish. A chunk of corraline algae near the top center has a duller finish. Micromullusc gastropods include a transparent coiled variety in the lower left, a ribbed Caecum tube in the uppermost right and a knobby *Bittium* shell towards the upper left.

Echinoderms are also represented: including bits of purple urchin spines, the remains of at least two burrowing urchins, a broken sand dollar (largest grain in lower right), and an angular piece of a biscuit urchin at about 2 o'clock.

Two Lake Ontario Sands

by Fred Haynes

It was a dreary December day, but I wanted one more look at Lake Ontario before winter set in. I decided to visit Whistlewood Park, off Dutch St. in Wolcott. Yes, lots of rocks of all sizes and lithology, but it was the juxtaposition of two interesting sands that captured my imagination that day.



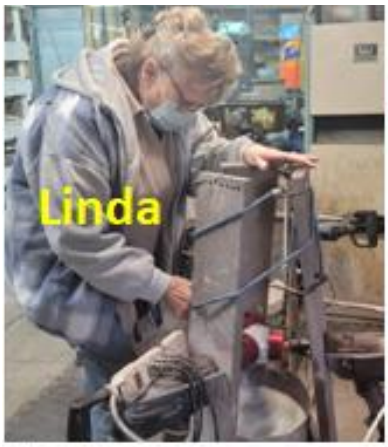
Lake Ontario shoreline at Whistlewood Park

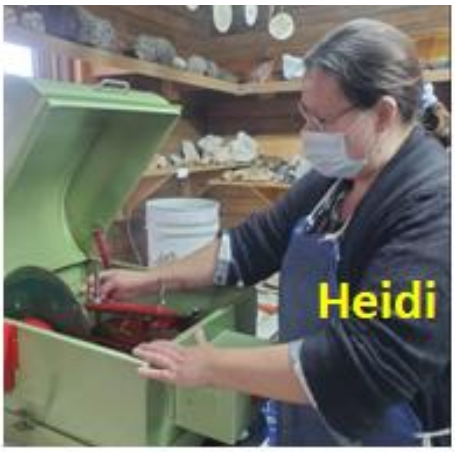
Sand A isn't truly a sand. It is the glacial rock flour that comprises the matrix of the drumlin being cut into by wave action on the lake. A small triangular-shaped accumulation had formed at the base of the cliff. Between the cliff and the lake a long large log had prevented larger boulders eroding from the face to be carried lakeward. Behind that was Sand B.

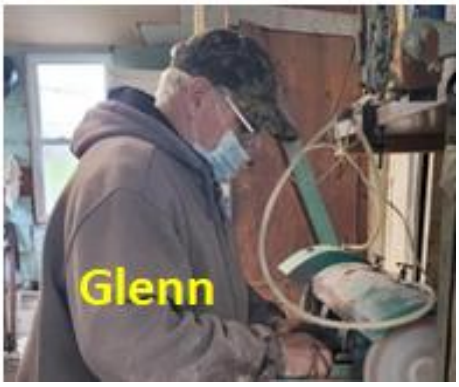
Sand B was coarse-grained and consisted of rock fragments (shale and sandstone) and bits of broken shells, including invasive zebra mussels and native gastropods. The grains were immature and somewhat angular, but the wave action combined with the log/rock barrier had permitted surprisingly good sorting. Fines were absent and there were few cobbles. Both sands are clearly ephemeral, here this season and gone the next. But I was able to capture a small sample of each on this late autumn day.

WCGMC Holds January Workshop

Everyone wore a mask and practiced social distancing while cutting and polishing their favorite rocks at our workshop in January. Heidi Morgenstern and Teresa Ferris took a few pictures of the artisans at work.







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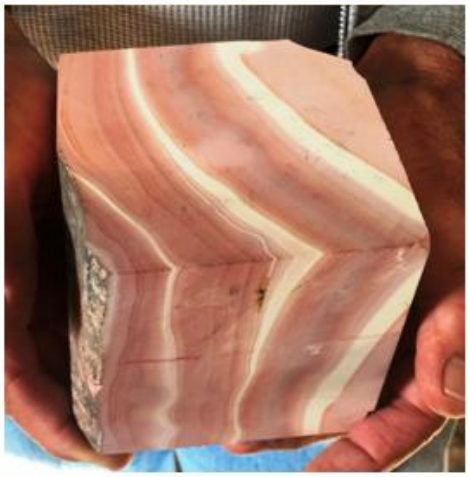

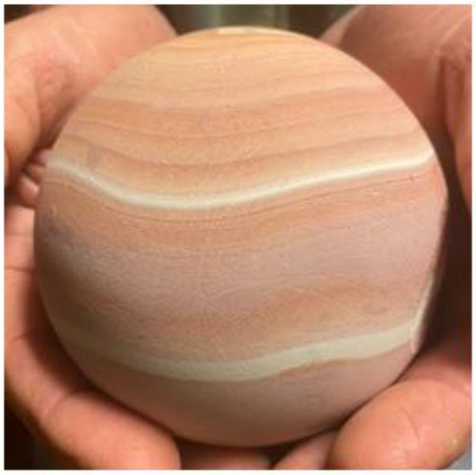

Bob Linderbery's winter project started with a large boulder of Utah wonderstone from the club collection. At the October workshop he squared it off and started cutting off the corners (left). By January it was a red sphere. In the dry specimen in the center you can still see scratches that polishing should removed. Bob will bring the sphere to the February workshop to polish. The picture on the right has been wetted in an attempt to show what it should look like when Bob is done, a 4" diameter version of Jupiter.

Wonderstone is actually a volcanic rock of rhyolitic composition. It is composed primarily of volcanic glass particles that were welded together by heat and compacted by the weight of overlying volcanic material. The bands are caused by circulating ground water and variable amounts of iron oxide.

Wayne County Gem & Mineral Contacts

ELECTED OFFICERS

President - Linda Schmidtgall
lees(at)tds.net 315-365-2448
Vice-President - Fred Haynes
fredmhaynes55(at)gmail.com 585-203-1733
Secretary - Debbie Breeze
Treasurer - Bill Lesniak

Board of Directors
Gary Thomas
Bob Linderbery
Heidi Morgenstern
James Keeler

Past President - Glenn Weiler

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

APPOINTED POSITIONS

Bill Chapman – Field Trip Chair

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

Bill Lesniak – Website Coordinator
Glenn Weiler – Workshop Coordinator

Linda Schmidtgall – Collection Curator
Eric Elias: GEMFEST Show Chair

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