

Wayne County Gem and Mineral Club News

November, 2019

Always Looking for Places to Dig!



Inga Wells growing bismuth (see page 4)



<http://www.wcgmc.org>
FACEBOOK link



October workshop (more pictures on page 6)

WCGMC Upcoming Meeting

7:00 PM Park Presbyterian Church,
Maple Court, Newark, NY

Friday November 8th

Program: Ontario in October

This past month's week-long trip to Ontario was one of our most successful. We enjoyed great weather and great minerals and we met new friends. Those who went will bring some rocks to show and we'll look at some pictures. Perhaps more of you will want to join us in 2020.

WCGMC HOLIDAY PARTY

Friday December 13th at 6:30 PM.

**7:00 PM Park Presbyterian Church,
Maple Court, Newark, NY**

It is hard to believe, but it is time to start planning for our Christmas Party and related festivities. **The first thing you need to do is sign up at any November event or you can send an e-mail note to Fred Haynes (fredmhaynes55@gmail.com); include number and names from your party that plan to attend. Just like the August picnic, you bring a dish to pass, club provides meat and potatoes.**

Upcoming WCGMC Workshops November 2nd and 23rd

Yup, that is correct. We will hold two workshops in November! Mark your calendar.

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.

Training on equipment is available.

Eye protection is required.

\$5/adult to offset maintenance costs.

Did we mention that if you need a rock to cut, carve or otherwise mutilate at the workshop you can always get one from the Weiler rock pile out back. Just 50 cents/pound and it will be yours.

New Monthly Contest

WCGMC introduced a new contest last month. Somewhere in this newsletter you will find a statement that reads **"The special mineral/fossil for November is xxxxx"**. Find that statement, remember the mineral or fossil listed, and come prepared to enter a raffle at the November 8th meeting to win a fine prize. I guess we will see how many folks read the newsletter! Don't share the code word or your chances to win will be reduced!



President's Message Linda Schmidt Gall

October was certainly a busy month for WCGMC. It seemed like one activity ended and another began. It has been a bit of a blur these last few weeks.

First, several of us ventured north into Ontario to collect amphiboles, apatites, garnets, titanites, and silver. Of course, Fred collected sands along the way also. We don't think he has gone over the deep end, but we aren't fully sure of that. The weather was superb for all 8 days and we enjoyed fall colors along the way also. Early October seems to be the time to go north. Although the days are shorter, the bugs are few. The rocks seem the same regardless of the season.

It was a great trip for meeting fellow rockhounds. We met a collector at the Beryl Pit who took us to a roadcut near Foymount with zircons that were more than a quarter of an inch across. We enjoyed a day with George Thompson at his wonderful property in Tory Hill (so much apatite and nice titanite also). We shared our day at the River Valley garnet locality with Canadian collector Peter Lickley. When he learned we were headed for Cobalt the following day, he joined us, loaning us his extra metal detector and showing us new places to hunt. It was a great final road trip for 2019, leaving us all with new finds, new memories and new friends.

We thank Inga Wells for her demonstration on growing bismuth crystals (see page 4) and Fred Haynes for his summer trip review at the October meeting. Don Schiltz won a nice Argentina rhodochrosite slab for knowing the key word from the October newsletter. I wonder who will win this month? The special mineral for November is garnet.

I did not manage to get to Walworth this year, but I have heard the fluorite, sphalerite, calcite, and dolomite were there as always. They do such a great job hosting up to 200 people and their vehicles. I hope everyone left happy, healthy, and with all their steel equipment.

The third weekend in October brought us a busy workshop on Saturday (see page 6) and an even busier club rock sale on Sunday. I want to personally thank those who helped with set-up, sales, and take down. This is a great way for us to share our club inventory with club members, but it could not happen without others. Those bins are heavy! And thank you to all the members who purchased stone. We raised enough to pay all the bills from the summer picnic and probably also the big party in December.



October WCGMC Rock Sale

And last, but certainly not least, we ended October as we always do, collecting Herkimers before Ace of Diamonds Mine closes. This year some of us even stayed for a second day. Some pound apart the hard dolostone to open new vugs, others like me sift the dirt and look for the shiny flat surfaces of loose "diamonds". Whatever your method, the hunt among friends is fun.

We have less scheduled in November, but we have added a second workshop, and of course, we will all meet and share stories and rocks at our monthly meeting. If you are attending a November event come prepared to sign up for the December festivities. We need names and a head count for the party!

BONUS: If you attend our November 2nd workshop, you can pick out a raw garnet collected in River Valley, Ontario earlier this month. Glenn Weiler is graciously allowing us to use his grinding wheel to remove all the mica that covers much of the surface of the garnet. Any rust remaining can be removed with Iron-Out.



The WCGMC Sand Page

SAND COLLECTING – A Primer

By Jim Rienhardt

To collect what is technically considered sand, you need to confine your collecting to material between the size of 0.06 mm and 2.0 mm. Most collectors don't worry about being that specific. Many interesting samples fall outside of these limits; however, you may want to limit the upper size. There are pebble beaches with "grains" as large as 6 mm and that may be as high as you want to go. Technically, these are gravels, but who's measuring?

At the other extreme, you may encounter fine, dusty material. This is classified as silt and finer yet as clay. Some glacial till is powdery as are large river deltas. This fine material is often dull in color, shades of gray. There are, however, diversely colored powdery "sands" such as those from the Painted Hills in Oregon.



Painted Hills "sand" samples are highly collectible.

Where you collect can be simple, hazardous or illegal. Some care needs to be taken to be sure about the site where you want to collect. Ocean beaches can look like an easy collection area but can be private or government controlled. Even public beaches can be regulated. The ownership of water front property is not always clear, even to those who think they own it. If someone wants you off their waterfront beach, don't argue. Explain what you are doing. If they are open to discussion, fine, otherwise be gone. It's not worth a confrontation. If you are able to collect, be reasonable. Don't take more than needed for your collection and a bit extra for trading. Your maximum should be a quart size zip-close bag.

Recently it was publicized that a couple was arrested for taking sand from a beach in Sardinia. They might have gotten away with it if they had only taken a sample, but they were caught with nearly 90 pounds of sand and could spend six years in jail! This location is just one of many where it is illegal to remove sand. Be aware! Hawaii recently passed a law forbidding taking any rocks or sand from the islands. Other places have similar laws and more are considering it.

Lake shore collecting may be more difficult than ocean beaches. Finding a lake beach that is not privately owned can be a challenge. Larger lakes typically have public access somewhere, but may still be restricted. Different places on a lake may have different sand, as do different locations on ocean beaches. A few feet in distance can reveal a completely different sand. If possible, record the coordinates and take notes on your collecting for future reference.



Two different sands on the same beach (Hamlin Beach State Park), Red Garnet sand on the lower right and standard beige quartz sand on the upper left ([see August WCGMC 2019 newsletter, p. 4](#))

If you want to collect on private property, get permission, be respectful, and don't overstay your welcome. It can also be an excellent opportunity to introduce the property owner to the hobby. It might be prudent to carry along some interesting samples to show just in case.

There are non-waterfront collection sites, also. Sand and gravel companies have locations where they might let you collect. Many don't allow it, though, mostly due to liability issues. It is not unusual to find an outcrop of sand while just driving around. Sometimes there is recent digging or road cuts that expose sand deposits. Construction sites may also have sand piles, but collecting there may not be desirable. These sands may have been unnaturally processed **or the sand** might have been shipped from some distance away. As always, you should also seek permission.

You might also find sand deposits from ancient ocean or lake shores or deposits left by glaciers. Don't overlook these dry land opportunities. These are often on private land so all the rules apply. People may think you are nuts – but hey, perhaps we are. Wouldn't life be dull otherwise?

COOKING UP SOME BISMUTH

All of us in the WCGMC like minerals. Many of us also like to cook. At our October meeting Inga Wells brought native bismuth and her “cooking” equipment and showed us how to cook up some bismuth crystals. Everybody got a close-up look at bismuth stew and then got to take a piece home.

Bismuth (Bi) is a post-transition metal with an atomic number of 83, directly beside lead on the periodic table and below antimony and arsenic. However, unlike arsenic, bismuth is non-toxic and heating to the melting point does not emit dangerous fumes. That said, the silvery-white metal melts at 530° F so you might want to wear gloves and observers should keep at a distance while the crystals grow. Inga told us that stainless steel pots and silverware and a hot plate seem to be the best tools for heating and handling the molten material. It is further recommended that once pots are used with bismuth that they be retired from primary kitchen use! You can also see that Inga wore safety goggles, although not gloves.



Inga at work in the “kitchen”. She had everyone's attention as she described the process and grew bismuth.

Some comments from Inga while she demonstrated heating, cooling and extracting crystals.

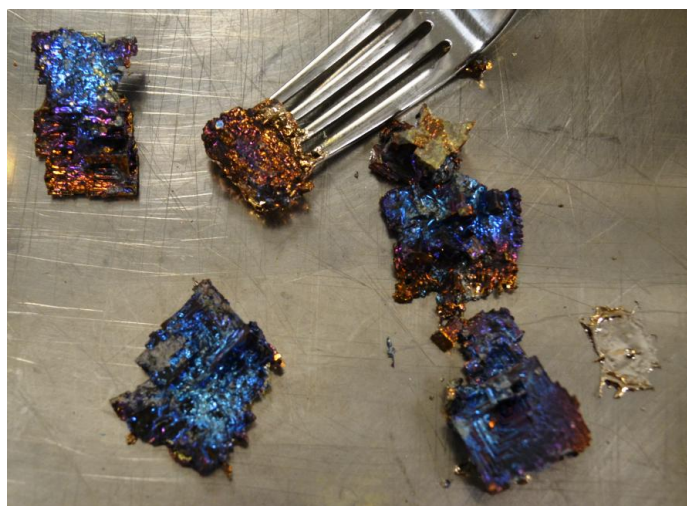
“The best part of working with bismuth is that you can re-melt crystals that you do not like. It is different every time you do it due to room temperature and how fast oxidation happens”

“I like doing it outside on a hot summer day. The slower the crystals cool, the better they seem to be. Once the melted bismuth starts to cool, you need to pay close attention. This is not a good project for multi-tasking.”

“You can knock the cooled crystals off of tools and pry the crystals apart with pliers, or cut with a saw”.

Native bismuth is rare and seldom present in significant amounts. Despite being rare, bismuth was one of the first ten metals discovered, and it held a prominent position in Group V of Dmitri Mendeleev's first Periodic Table 150 years ago ([May 2019 WCGMC newsletter](#)). Most bismuth is recovered as a by-product of mining other metals like lead. The metal is seldom used as pure bismuth but rather as an oxide in pharmaceuticals and chemicals or as an alloy in steel. Because bismuth is inert and non-toxic it is finding new applications as a replacement for lead in plumbing, soldering, and other applications. Unfortunately, this replacement comes at a cost.

For those with aspirations of growing beautiful bismuth crystals, chunks of native bismuth can be purchased online from many suppliers at about \$15/pound. Inga did note that melting 3-5 pounds of bismuth seems to be best for growing large and intricate crystal forms, but remember the material that is not part of the crystal itself can be re-used.



Some of Inga's creations: the brilliant color and iridescence of synthetic bismuth crystals is produced by interference of light within a thin oxide film that forms on the metallic surface when the crystals grow.

FIVE YEARS LATER by Fred Haynes

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Last Sunday, WCGMC held its 3th annual rock sale for club members. The event provides an opportunity to remember the wonderful donation the club received five years ago that made this possible.

In August of 2014, Van King contacted WCGMC on behalf of Elizabeth and Brian Conger of Auburn. The Congers were forced to move to Florida for medical reasons and wished to donate their rather substantial inventory of rocks, minerals and lapidary equipment to the closest rock and mineral club. WCGMC was that fortunate club.



This is what we accepted in August of 2014: two storage units filled with boxes and buckets of minerals and rocks and some very functional equipment. Fortunately for us, we also received a full inventory list from Van King.

At that time, the material was stored in two storage units in Auburn, where it had resided for over a decade. It was an easy decision for WCGMC. Of course, we would love to accept the Conger's generosity. The task was formidable and involved multiple trips with multiple vehicles. We were most

fortunate to have two locations to store most of the material. The rocks and minerals went to the end of Linda Schmidtgal's garage and the equipment went to our growing workshop in Wolcott.

At first, the boxes and buckets of minerals and rocks were simply stashed into the back of Linda's garage. But, we needed better access and in February of 2017, Glenn and Matt Weiler built permanent shelving along the full side of Linda's garage. The shelves are nearly 3' deep permitting both storage and access. In addition, Linda re-organized all the club's possessions and updated the inventory. If you attended our rock sale you saw the fruits of her work (*note the shelving units behind Linda on page 2*).



February, 2017: Glenn and Matt Weiler install shelving units for the WCGMC collection.

If you have attended a workshop, you have used the saws and polishing equipment obtained with the donation. If you attend club meetings you might have won a raffle or accepted club gifts from the collection. We sell a bit at GemFest, but the primary objective with this wonderful donation is to benefit the club's members. We know that was the intent of the Conger's with their donation.



Amanda and Teresa use the polishing unit donated by the Conger's in February, 2019.



Workshop Artisans

October, 2019



The workshop was busy in October with activity displaying the wonderful diversity of our members. There was sawing, polishing, creating musical instruments, fixing stuff, and even making apple cider: all in a day's work.



The rock saw was busy cutting out fluorites collected at Walworth Quarry the preceding weekend.



Fall colors, young cows, and corn fields. What a setting for a fall workshop.

You simply cannot beat the setting of our workshop. Soon those fields will be white with snow and all the equipment will be inside, but in October the scenery was spectacular.



The saws inside were busy also.



Need microscope repair? Call in an expert.



Kathleen

Kathleen was busy tuning drill cores for new xylophones, trimming the core lengths until they produced the proper notes.



Our resident musician was doing her thing.



There is more to a WCGMC workshop than rocks. Bill and Glenn are making apple cider.



Is anyone thirsty?

Wayne County Gem and Mineral Club Schedule

last update Oct 28

The seasons are changing. We may regret the inconvenience of shorter days and winter weather on our collecting schedule, but we can also adjust. The WCGMC workshop will be open twice in November. Come join the fun. Bring a rock you collected this summer or purchased at the club sale last month. Or if you lack either come "collect" on from the Weiler Rock Pile behind the shop. Of course, we will also meet the second Friday of November in Newark.

The Christmas Party is also just 6 weeks away. And our President/Party Planner Linda Schmidtgal is soliciting help with the event this year. We need food shoppers, cooks in the church kitchen, activity plans for kiddos, and more. If you would like to be involved in any of the party planning, please check-in with Linda at any of the November club events, or give her a call (315-365-2448). We do need your help.

November 2nd – Workshop Is Open (10:00 AM until mid-afternoon).

November 8th - monthly meeting 7:00 PM in Newark (Program: Ontario in October)

November 23rd – Workshop Is Open (10:00 AM til mid-afternoon).

December 13th – **WCGMC Annual Holiday Party Extravaganza**

It is never too early to start thinking about next year. We are already seriously considering a two-week trip in September in which we would travel all the way around Lake Superior. Agates in Minnesota, Thunder Bay for amethyst, a return to Copper Country, gold in northern Ontario and a whole lot more. We enjoyed Maine in July and will look into a similar trip. But we'd also like to hear from members who might want to suggest and/or lead a trip. Just let us know where you might like to go and we'll see if it can fit. We did a trip this year every month from April through October, lots of miles and lots of minerals. We'll try to do that again next year.



WCGMC concluded its field trip season this past weekend by spending two days at Ace of Diamonds hunting Herkimers. Early on Friday, the owner dumped a load of fresh rock and WCGMC went after it. Both the large rocks and the dirt yielded nice Herkimers. It was a fine way to end the season. Now, it is time to start planning for 2020!



Photo by
E. Weiler

.. and then another. She took them to the Rochester show on Sunday, had them set in silver, and now she has a gift for her granddaughter!



Wayne County Gem & Mineral Contacts

ELECTED OFFICERS (NEWLY ELECTED)

President - Linda Schmidtgall
lees@tds.net 315-365-2448
 Vice-President - Fred Haynes
fredmhaynes55@gmail.com 585-203-1733
 Secretary - Debbie Breeze
debbiegb55@hotmail.com 585-289-6989
 Treasurer - Bill Lesniak
Dirtman300@aol.com 315-483-8061

Board of Directors

Gary Thomas gftthomas956@gmail.com
 Bob Linderbery bootmanblues@gmail.com
 Heidi Morgenstern morgensternheidi@rocketmail.com
 Holly Ann Woodworth autum14513@yahoo.com

Past President - Glenn Weiler gwexterior@gmail.com

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
gwexterior@gmail.com 315-594-8478
 Linda Schmidtgall – Collection Curator
 Eric Elias: GEMFEST Show Chair
thecrystalnetwork@hotmail.com
 Fred Haynes – Facebook Administrator
 Jim Rienhardt – Sand Chapter siderious@gmail.com

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

The Public is always welcomed



Wayne County Gem and Mineral Club
 P.O. Box 4
 Newark, New York 14513

First Class, Dated, Meetings & Time Values