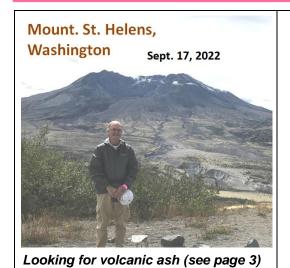
Wayne County Gem and Mineral Club News

February, 2023

Always Looking for Places to Dig!













Owyhee Picture Jasper (see page 6

February Meeting

Friday, February 10th , 7:00 PM.
Park Presbyterian Church,
Maple Court, Newark, NY

Program: Species Diversity and Symbiosis in Living and Extinct Marine Organisms

By Stephen Mayer

The program will provide an overview of the five types of symbiotic relationships between organisms. There will be examples from the modern world and the fossil record. We'll conclude with a few questions and possible scenarios intended to generate discussion.



March meeting Friday March 10th

You can start planning for the March meeting when we will hold our annual best of the year competitions in several categories. All of the categories will be listed in the next issue, but expect best from New York, best lapidary creation, best fossil, best "leaverite", etc.

Also for March: If you plan to participate in club field trips this coming season, please help our Field Trip Coordinator (Teresa Ferris) plan an event-filled year by responding to the questionnaire on page 7.

Saturday Workshop: February 18th (10:00 AM until mid-afternoon)

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

Eye protection is required.

Training on equipment is available.

\$5/adult to offset maintenance costs





WCGMC News



Not all WCGMC members are spending their winters in western New York and a couple of members checked in from the sunny south.



Kathleen Cappon is in Florida for the month of February. She reports that she collected massive quartz (some is hematite stained) in North Carolina on the way down and a bunch of coquina from Cocoa Beach where it is exposed offshore. She is sure she will find more to share with all of us when she returns in March.





Yes, that is Nancy Guilfoyle reporting in from Quartzite, Arizona. She says field trips, multiple workshops, silver smithing, pastilite and even a camel parade have kept her busy. I just checked; it will be sunny and 70-75 degrees in Quartzite the first weekend in February. I'm sure she misses Wayne County.



There was a bit of potch (common opal) for everyone at the January meeting thanks to Linda visting the club container prior to the meeting. There is no flash to common opal, but it is opal and members took their time picking out a favorite piece or two to take home.

Wayne County Gem & Mineral Club

Gem Fest 2023



Sat. June 3 10-5 Sun. June 4 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

Volcanic Ash From Mount St. Helens by Fred Haynes





A bit more than 40 years ago Mount St. Helens in southwest Washington State erupted spewing 540 million tons of ash over an area of more than 22,000 square miles in just nine hours of vigorous eruption. Before being compacted by rainfall, this total volume of ash (0.3 cubic miles) would have been enough to cover a football field with 150 **mile** high pile of fluffy gray ash.

While this ash fell upon unsuspecting folks across large parts of Washington, much of the light volcanic material found its way into the raging creeks and rivers of melting snow and later rainfall that flowed west towards the Pacific Ocean via the Toutle River, then Cowlitz River and eventually the Columbia River. Ash deposited across much of the region has now been buried or otherwise assimilated into a rich surface soil. It is now supporting the rebirth of the ecology of a region the size of western New York that was obliterated in the space of one fateful day.

The ash is not as easy to find now, but there are locations where ash from the 1980 eruption can be located and sampled legally (i.e. outside Mt. St. Helens National Park). One of these is along the south fork of the Toutle River near the town of Toutle. Thick sequences of ash deposited into the Toutle River Valley are now being exposed by the action of the river which has actually eroded through them into older volcanic sediments below.

National Geographic's website tells us that volcanic ash is "a mixture of rock, mineral, and glass particles



Satellite view of The Toutle River valley heading west from Mount St. Helens: The road to the National Park Visitor Center follows the north side of the north fork The site I was able to sample is along the south fork just before the two rivers merge (inside the yellow circle).

expelled from a volcano during a volcanic eruption." These particles can be sand-sized (0.06 to 2.0 mm in diameter), but are often even smaller, the size of silt (0.002 to 0.06 mm). Ash particles are typically pitted and full of holes giving them a low density and allowing ash-filled plumes to remain airborne for significant distances.



It is these finer particles that I sought and sampled in the banks of the Toutle River.

Mt. St. Helens is part of a chain of active and dormant volcanoes on the western edge of the North American tectonic plate (from California to British Columbia) as it rides across the subducting Juan de Fuca oceanic plate. As the denser ocean slab sinks deeper below the continental plate and into the mantle, rising temperatures permit water vapor to escape. The presence of water in the mantle and lower crustal rocks cause them to melt. Continued tectonic action along the plate boundary generates fissures which allow the magma to rise, eventually escaping to the earth's surface

continued on next page

Over time, Mt. St. Helens magmas have varied in their composition and chemistry, but most, including the 1980 eruption, spew magma, rocks, and ash that is dacitic in composition. This means that the ash contains plagioclase feldspar, quartz and pumice as its dominant components. A larger amount of potassium would lead to rhyolite, the more common western United States extrusive volcanic rock. Minor amounts of iron and magnesium get incorporated into darker pyroxene and amphibole minerals.



Mt. St. Helens ash is compositionally dacite.

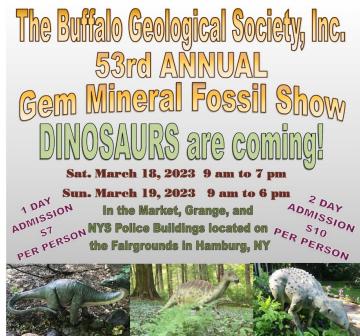
Those who attended the January WCGMC were offered the opportunity to add a small sample of Mt. St. Helens ash to their mineral/rock collections. The 30ml (~two teaspoon) bags I put together are the standard size for sand trading.



References:

https://www.usgs.gov/faqs/how-much-ash-was-there-may-18-1980-eruption-mount-st-helens

https://education.nationalgeographic.org/resource/volcanic-ash



See: :https://bgsny.org/annual-show



NY Rocks! Ancient Life of the Empire States is scheduled to open March 13, 2023 and be on display for the rest of the year at the Museum of the Earth in Ithaca.

The exhibit will offer an opportunity to learn about New York's rich fossil record for the Devonian Period.
Visitor's can explore why rocks are different across our state and how geologists can learn about ancient environments from the fossils we all like to collect.

The exhibits will tell stories about geology and fossils through a combination of specimens, dioramas, videos and hands-on interactives. It is designed to be informative and educational for folks or all ages.

How to cook kale: place it in a pot with two dozen almandine garnets, add 4 cups of water, a pinch of halite, and bring to a boil.





When the garnets are tender, the kale is edible.

They say a picture is worth 1000 words. Here are 15,000 words from our January Workshop



Splendid Sands Calendar

February, 2023 Cala Tirant, Isle Menorca, Baleares, SPAIN



Photo by Leo Kenney

by Leo Kenney, Kate Clover & Carol Hopper Brill

Railing off Spain's southern coastline, the Balearic Islands extend east within the Mediterranean Sea. Formed of limestone, the archipelago sits on the Balearic promontory. Isla Menorca is last in a chain of 151 islands, and Cala Tirant lies tucked between two prominent headlands on its northern shore. The deep embayment ends in a horseshoe-shaped cove sheltering a sandy beach with grains reflecting the limestone shores and Mediterranean life.

Chucks of the benthic foraminifera *Miniacina* are red, pale pink and lavender; other forams are coin-like disks, spiral swirls, lens and seed shapes. Around 3 o'clock, molluscs include a miniature clam, a yellow-brown fragment of a larger bivalve and a flat spiral snail shell in pink and white.

Highly spired gastropods can be found at both the top and bottom right edges. Multiple purple and green seas urchin spines are recognizable and at 9 o'clock, a white upside down test of a burrowing sea urchin reveals its central mouth and smaller anal opening. Elsewhere are remnants of tubeworms, bryozoans, and calcareous algae.

And to think, all of this can be found in less than one square centimeter of biogenic sand!

Owyhee Picture Jasper



There was a lot of anticipation when Linda Schmidtgall brought out the raffle rocks at the January workshop: Owyhee Picture Jasper from Oregon. There were enough very nice pieces for everyone, but everyone was still excited when their number was called.

Jasper is microgranular quartz or cryptocrystalline chalcedony that is typically produced by the circulation of silica-rich aqueous solutions through volcanic rocks. Because these waters often contain iron, jasper is generally red, however in the case of the Owyhee Mountain mid-Miocene age jasper, the darker iron-colored zones are restricted to cracks and swirls within the silicified rhyolitic volcanic rock.

The Owyhee Mountains are in southeastern Oregon and a bit of Idaho and are one of the most remote regions of the United States. An area of 266,000 acres (about one-third of the size of Wayne County) was designated as a wilderness area in 2009. There is no "new" Owyhee picture jasper entering the market. Treasure the piece you "won" last month.





WCGMC: Always Looking for Places to Dig!



Most aspects of our club (meetings, workshop, general interest, GemFest, etc.) have recovered well from the pandemic, but we have not yet returned to conducting regular field trips. Over that same time period, we have grown with many new members and it seems wise that we ask our current membership what interest they have in field trips (both local and overnight) while at the same time asking who might be willing to lead a trip or two. At our March meeting we plan to hold our Best Specimen of the Year honors (more on that next issue). That seems like an excellent time to also discuss the field trip interests of club members for the coming season. Please send me your answers to the following questions (to the e-mail listed below) and I can compile your thoughts before our March meeting. Or if you prefer: print this page, answer the questions on the backside, and bring it to the February meeting. Heck, don't procrastinate. Do it now!

Teresa Ferris (WCGMC Field Trip Coordinator) rockhoundingft(at)gmail.com

- 1. Are you interested in Rockhounding Field Trips?
- 2. If you do not really want to collect for yourself, are you interested in coming to collect for the club? Many of the places are beautiful, great places to hike, and spend a day or few outside. This would be on your own dime.
- 3. Are you interested in & able to go for long weekend trips?
- 4. Are you interested in & able to go on longer trips?
- 5. Are you interested in & able to go on day trips?
- 6. Would you like to see more day trips? These can be early morning to late nights.
- 7. Would you be interested in just beach rockhounding trips? Most likely just to Lake Erie or Lake Ontario. We stopped doing these a while back due to people weren't going. I think they are good for getting to talk to fellow members and find maybe a special rock or few.
- 8. Would you be interested in leading a Field Trip? I am not able to lead every trip, but I am 100% willing to help as much as I can. Please note a leader doesn't mean you cannot collect and that you are responsible for everyone's everything.
- 9. Are you willing to carpool?
- 10. Are you willing to stay with someone else in a hotel, motel, tent...?
- 11. Do you know of any sites we can use as Field Trips?
- 12. What sites, locations, rocks, fossils would you like to rockhound for? No promises but would love to know and try.
- 13. The Museum of the Earth is adding a new Devonian exhibit in March. Would you be interested in a Saturday group visit to Ithaca in April? If we get a group to go it would be Adults \$7, Student/Senior \$4, & Youth (4 to 17) \$3. If you would like to go another time the regular cost is Adults \$12.50, Seniors (65+) & College Students \$9.50, Youth \$7.50 (4 to 17yrs.) & Children (3 & under) are Free

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 Open position

Past President - Linda Schmidtgall

Visit us on Facebook:

https://www.facebook.com/groups/1675855046010058/

APPOINTED POSITIONS

Field Trip Coordinator – Teresa Ferris, *help wanted* rockhoundingft(at)gmail.com

Fossil Field Trip Leader - Stephen Mayer

Fred Haynes – Newsletter Editor <u>fredmhaynes55(at)gmail.com</u>

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

