



Southern Maryland Rock and Mineral Club



ROCK TALK

JUNE 2024

25 JUNE 2024 at 1900 (7 PM)
Meeting at OLD WALDORF SCHOOL
(next to the Waldorf JayCees Hall)
North of the RT 301 / RT 5 Intersection

JUNE PROGRAM

" Maryland Geologic Provinces by Diane "

Eye opening brief on the geological history of our state. This will show why certain minerals and fossils that could be found in Maryland.

IN THIS EDITION

Calcite Crystals and More
Cleaning Hints for Your Samples

SMRMC 2024 MINUTES

Old Waldorf School, Waldorf, MD
Date: May 28, 2024

May Minutes submitted by Sue
Knower: Meeting was called to order at 7:03 pm by Tim.

27 Members in attendance. Had two (2) visitors; Bobby Magruder and Nicolas Disandro. New Member was Patrick Pannella from Ellicott City MD who came with Gary.

SECRETARY'S REPORT: April minutes were published in the May newsletter. Paul motioned to accept minutes and Carole seconded. Minutes approved.

TREASURER'S REPORT: Greta briefed the club's current finances and account details. A \$50 deposit for the room for the show has been paid. 16 tables have been sold so far for the show. The club received a thank you letter from AMFS for the \$140 donation to the scholarship fund in Betty Kitzmiller's name. The scholarships are given to Earth Science majors and this year 12 recipients got \$4000 each. Dave suggested we also make a contribution in the memory of Lorna's husband, Mel, who recently died and the club agreed.

MEMBERSHIP: VP of Membership duties have transitioned to Carole and Paul. Dave requested an updated membership list so that he knows who are paid members for field trip purposes. Carole and Paul will work on getting that to him as soon as possible.

FACEBOOK: 589 members to date.

WEBSITE: No change/no report.
SMRMC.ORG

NEWSLETTER: Rich is going to be sending the June newsletter out early as he has a busy June. He shared a MD fossils book that is

now out of print and will place some source information in the June newsletter.

PROGRAMS: Jill reported that there are still openings for July, September, October, and November. She has a few leads for speakers outside the club but wants to give club members first choice at months. This month's program is Maria Nopo – Minerals of Peru

FIELD TRIP REPORT: Dave provided a written report to the secretary as follows:

PAST FIELD TRIPS

April 27---Mt. Pleasant, Quarryville, PA---amethyst/quartz crystals---12 attendees (max allowed)

April 26, 27, 28 ---Go-On-Your-Own-Trip ---Graves Mountain, Lincolnton, GA "Swap and Dig" 8 am to 6 PM daily --rutile Crystals, lazulite, quartz xls, and iridescent hematite plus many more minerals. Free trip, Open to the public ---donations accepted -just show up .--- For more info, Google "Graves Mountain, GA Swap and Dig 2024" - (unknown if any SMRMC members attended)

May 11 ---National Limestone quarries in Middleburg + Mount Pleasant Mills, PA --- Calcite Crystals, Celestite, Strontianite, Purple Fluorite, fossil snails, wavellite ---Note: Great trip but disappointed that only 10 attendees because we had both quarries and the wavellite Pit to ourselves.

UPCOMING FIELD TRIPS

June 1 ---U.S. Silica Quarry, Montpelier, VA --- andesine (gray flash moonstone), enstatite (bronzite), massive rutile, weathered almandine garnets ---Limited to 15 attendees maximum.

July 27 ---Trip (not firm yet) to learn various ways to sluice, pan and dredge for gold. Host is the Central Virginia Gold Prospectors. \$10 fee per person. Dillwyn, VA (all day)

TBD July ---"Possible" Fairfax Trap Rock Quarry. Very limited (8 adults over 18 yrs old) attendees allowed ---considering a Lottery of "qualified members" for those who sign up. Based on several factors --- experience level, reliability (Always arrive on time, Never sign up then cancel late.), GMM quarried, good natured, team player, helpful, safety conscious at all times.

TBD ---Unakite, cryptomelane, rockbridgeite, pink/white/gray quartzite with black skitithos tracks (lapidary material] near Vesuvius, VA.

TBD -Point of Rocks, MD for Potomac Marble (lapidary) and blue quartz/jasper/native American artifacts. (NOTE: Water level in upper Potomac River needs to recede to 2 feet. Currently 4.2 feet. Best guess is August.)

TBD August -Contrary Creek, Mineral County, VA for garnet crystals, magnetite, and gold.

TBD -HK Penn-MD quarry for green colored minerals -Williamsite, MCGuinnessite, Serpentine

TBD September --Willis Mountain - -Kyanite crystals, Rutile, iridescent hematite, at Kyanite Corp Mine in Dillwyn. VA

GENERAL NOTE: Dues must be paid up to date in order to attend trips (Due to Insurance Rules).

OLD BUSINESS:

Rock Show – Tim noted that Kenny may have another committee call next Tuesday. Carole had a get well card for Kenny that was passed around to sign. Greta reminded members that the cost for a table for club members goes to \$30 (from 25) on June 1. \$30 is the actual cost to the club for renting the table. No other old business discussed



Aquamarine

NEW BUSINESS:

Dave mentioned the funeral for Lorna's husband and suggested doing a donation to the scholarship fund in his memory. Sue seconded, club voted to do this. Greta will send check.

ADJOURNMENT:

There being no further business, a motion was made and seconded to adjourn the business meeting. After the door prize drawing (thanks, Dave) and a brief break, the program was presented by Maria Nopo. Topic was "Minerals from Peru".



Aquamarine Tower

Editor Notes:

Thanks to Steve Gordon, Editor of the Gem and Mineral Society of Lynchburg's Newsletter for sharing the Cleaning tips (pages 15 and 16) for us to use smartly and truly enjoy their results!!

ALSO - Remember **AUGUST** is the traditional **CLUB AUCTION**. Next month promises to be the start of discussions on the event concluding with the final details to be hashed out in July. Stay tuned for the details!!!



Laplata Library Display

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2024 PROGRAMS/REFRESHMENTS SCHEDULE		
MONTH	PROGRAM	REFRESHMENTS
25 JUN 2024	Maryland Geologic Provinces by Diane	Kenny S.
23 JUL 2024	TBD	Kurt and Sue
27 AUG 2024	CLUB AUCTION	POT LUCK
24 SEP 2024	TBD	Jill
22 OCT 2024	TBD	Polly, Al, & Carole
26 NOV 2024	TBD	TBD
TBA DEC 2024	HOLIDAY PARTY	POT LUCK

Program Volunteers, Dates TBD:

1. Kenny Jameson – Local Rocks and Minerals, i.e Patuxent River Stones
2. Kenny Sams – Opals
3. 4. Jill Lee – Summer Astronomy

Dates are tentative. Changes are possible due to a multitude of reasons that are always beyond our control.

ODDS AND ENDS

EDITORS NOTE: *I may forward an email from ROCKCHASING.COM if the article(s) are worthy for sharing with the club members. IF anyone gets to their "FULL POINT" with too much information - PLEASE tell me and I will stop it's dissemination to those members not wanting the email.*

Inside the world's largest crystal 'cave'

Discovered in 1999 inside an abandoned mine in Southern Spain, Pulpí Geode is the largest crystal 'cave' of its kind in the world. But what exactly is a geode and how do crystals form inside them? Discover and be amazed by this wonder of nature.

<https://www.bbc.com/reel/video/p0c05x26/inside-the-world-s-largest-crystal-cave>

Pennsylvania is sitting on major untapped lithium 'white gold mine' that could generate new billion-dollar industry, government study finds

<https://www.dailymail.co.uk/sciencetech/article-13465025/Pennsylvania-sitting-major-untapped-lithium-white-gold-generate-new-billion-dollar-industry-government-study-finds.html>

Ancient tools found in Maryland show the first humans came to America 7,000 YEARS earlier than previously thought, scientist claims

<https://www.dailymail.co.uk/sciencetech/article-13443805/Ancient-tools-Maryland-shows-humans-came-America.html>

Scientists GROW diamonds in just 150 minutes that could cost \$2,000 less than the real thing ... Can YOU spot the difference between lab-made and natural gems?

<https://www.dailymail.co.uk/sciencetech/article-13350507/scientists-grow-lab-diamonds.html>

Maryland's Official State Fossil Shell

http://www.mgs.md.gov/geology/fossils/maryland_state_fossil_shell_fs.html

Fossil Collecting Sites at Calvert Cliffs

http://www.mgs.md.gov/geology/fossils/fossil_collecting.html

Maryland's State Dinosaur (*Astrodon johnstoni*)

http://www.mgs.md.gov/geology/fossils/maryland_state_dinosaur.html

Gold in Maryland

http://www.mgs.md.gov/geology/minerals_energy_resources/gold.html

Miocene Sharks Teeth of Calvert County

http://www.mgs.md.gov/geology/fossils/miocene_shark_teeth_fs.html

Calvert Cliffs Fossils

http://www.mgs.md.gov/geology/fossils/calvert_cliffs_fs.html

Characteristic Maryland Fossils

http://www.mgs.md.gov/geology/fossils/characteristic_fossils.html

Miocene Fossil Teeth

http://www.mgs.md.gov/geology/fossils/miocene_tooth_fossils.html

Panning for Gold on the Internet

http://www.mgs.md.gov/geology/minerals_energy_resources/gold_resources.html

Educational Publications

Dinosaurs in Maryland

http://www.mgs.md.gov/publications/report_pages/ES_6.html

Maryland's ancient sea creatures; Coloring and Activities Book

http://www.mgs.md.gov/publications/report_pages/ES_8.html

Man discovers prehistoric monster off the coast of Florida - and it could be 10 million years old

<https://www.dailymail.co.uk/sciencetech/article-13480361/fossil-hunter-discovery-coast-florida.html>

CALENDAR OF EVENTS

JUNE 07-09, 2024 RALEIGH, NC ;Hours: Fri: Noon-6pm Sat: 10am-6pm Sun: 10am-5pm Venue: NC State Fairgrounds, Kerr Scott Bldg Address: 4285 Trinity Road, NC State Fairgrounds, Kerr Scott Bldg Raleigh, NC 27606 Website: <https://jewelpassageshows.com/home>

JUNE 8-9, 2024 - WEST FRIENDSHIP, MD Retail & Wholesale Vendors with Wholesale Only Trade area. Hourly Door Prizes and Grand Prize Drawing. \$6 Admission Children under 12 Free. Howard County Fairgrounds, 2210 Fairgrounds Road, West Friendship, MD 21794. The Gem Miner's Spring Show is an exhibition of beads, fine jewelry, gems, minerals, fossils, gift and craft items. New Wholesale section. Hourly and grand door prizes. In its 3rd year. Free and handicapped parking; contact Teresa Schwab, (301) 807-9745; Email: eventcoordinator@gem-show.com www.gem-show.com. Website will have updates. 301-807-9745



JULY 12-14, 2024—RALEIGH, NORTH CAROLINA: Retail show; Treasures of the Earth, Inc; North Carolina State Fairgrounds, 4285 Trinity Rd; Fri. 12-6, Sat. 10-5, Sun. 10-5; Adults \$8, sixteen and under free; There will be jewelry of all types, custom faceted-gemstones, beads, crystals, minerals, and fossils. A wire-wrapper will be present to design jewelry and wrap stones on site; contact Ellen White, (804) 642-2011; Email: Ellen.White@TreasuresOfTheEarth.com;

AUGUST 02-04, 2024 VIRGINIA BEACH, VA Treasures of the Earth -_Hours: Fri Noon-6:00 Sat/Sun 10:00-5:00 Venue: Virginia Beach Convention Center Address: 1000 19th St., Virginia Beach Convention Center, Virginia Beach, VA Website: <http://treasuresoftheearth.com/>

AUGUST 16-18, 2024 LEBANON, PA Gem Miner's Jubilee Gem & Jewelry Show; Hours: Fri/Sat 10:00-6:00 Sun 10:00-4:00, Venue: Lebanon Valley Fairgrounds and Expo; Address: 80 Rocherty Road, Lebanon Valley Fairgrounds and Expo, Lebanon, PA 17042 Website: <https://www.gem-show.com/>



AUGUST 20-22, 2024 RICHMOND, VA

Treasures of the Earth - Hours: Fri Noon-6:00 Sat/Sun 10:00-5:00 Venue: Richmond Raceway Complex Address: 600 E Laburnum Ave, Richmond Raceway Complex, Richmond, VA 23222
 Website:
<http://www.treasuresoftheearth.com/>
 Facebook:
<https://www.facebook.com/treasuresofearth>
 Twitter:
<https://twitter.com/gemsandjewelry1>

AUGUST 24-25 2024 - CANTON, NY; St.

Lawrence Rock & Mineral Club's 57th Annual Show August 24th & 25th, Canton, NY @ the Pavilion, 90 Lincoln St., Canton, NY 13617 ADMISSION: \$4.00 Adults, 12 and under free Sat. 9-4:30 PM; Sunday 9-3:00 PM Friday the 23rd at dusk, there's a free fluorescent mineral hunt for kids, lights provided. Contact William deLorraine, President: wdellie@gmail.com, 315-287-2560 visit us @ www.stlawrencecountyminealclub.org

AUGUST 28-29, 2024 HARRISBURG, PA ,

Central PA Rock, Mineral, Gem & Jewelry Show - Hours: Sat 10:00 - 6:00 Sun 10:00 - 4:00, Venue: The Zembo Shrine Auditorium, Address: 2801 N 3rd St, The Zembo Shrine Auditorium, Harrisburg, PA 17110
 Website: <http://www.rockandmineral.org/>

SEPTEMBER 28 - 29, 2024 HARRISBURG, PA The Central Pennsylvania Rock and Mineral Club's 58th Annual Gem, Mineral and Jewelry Show! Saturday, September 28, 2024 10 AM – 6 PM Sunday, September 29, 2024 10 AM – 4 PM. NEW Location at The Zembo Shrine Auditorium 2801 N. 3rd

Street, Harrisburg, PA 17110 Admission \$6 PER PERSON (\$5 with postcard or ad) CHILDREN 12 & UNDER FREE. Free off-street parking!

**OCTOBER 04-06, 2024 VIRGINIA BEACH, VA**

Hours: Fri Noon-6:00 Sat/Sun 10:00-5:00 Venue: Virginia Beach Convention Center Address: 1000 19th Sober Virginia Beach Convention Center, Virginia Beach, VA 23451
 Website: <http://treasuresoftheearth.com/>

OCTOBER 05, 2024 WALDORF, MD

Southern Maryland Rock and Mineral Club 28th Annual Rock, Mineral & Fossil Show. 9AM to 4 PM. Located at the Old Waldorf School, 3074 Crain Highway, Waldorf, MD 20601. Adults \$5.00, Seniors (65+) \$4.00, Juniors (13-17) \$3.00, Children (12 and under) free with an Adult. Free Parking. Free door prizes every 30 minutes. Over 45 tables. Perfect polished stones of every description; rock slabs, uncut rocks, crystals, fossils, handcrafted jewelry, lapidary rocks, fluorescent tent with glow in the dark rocks, spectacular mineral specimens to suit all tastes and budgets. Free rocks for every kid. Website: SMRMC.ORG

OCTOBER 18-20, 2024 HICKORY, NC

Catawba Valley Gem & Mineral Club Show

Hours: Fri/Sat 10:00-6:00 Sun 10:00-5:00

Venue: Hickory Metro Convention Center;

Address: 1960 13th Ave Dr S, Hickory Metro Convention Center, Hickory, NC 28602

Website: <http://cvgmc.com/>

OCTOBER 19-20, 2024 SOUTH

CHARLESTON, WV- Kanawha Rock & Gem Club presents their 50th Annual Jewelry, Gems, Mineral & Fossil Show & Sale.

Located at South Charleston Community Center 601 Jefferson Road, South Charleston, WV, United States. Saturday and Sunday, - 10 a.m. to 4 p.m. Grand Door Prizes \$150.00 in Gift Certificates good at next year's show and \$75.00 in Gift Certificates good at next year's show with additional Hourly Drawings Admission \$3.50 PER PERSON \$2.00 with Coupon, CHILDREN 12 & UNDER FREE. Free Parking

OCTOBER 19-20, 2024 MT BETHEL, PA;

Mount Bethel Gem Mineral & Fossil Show -

Hours: Sat 9:00-5:00 Sun 9:00-4:00; Venue:

Mount Bethel Fire Hall; Address: 2341 N Delaware Dr. (AKA RT. 611) Mount Bethel Fire Hall, Mt Bethel, PA 18343

Website:

<https://www.facebook.com/groups/574701857546267/?ref=share>

Facebook:

<https://www.facebook.com/groups/574701857546267/?ref=share>

OCTOBER 26-27, 2024 – EAST ROCHESTER, NY;

Rochester Gem, Mineral, Jewelry and Fossil Show. 10am-5pm Saturday, 10am to 5pm Sunday. Total Sports Experience. 435 West Commercial Street, East Rochester, NY. Children's activities, hourly drawings, about 28 dealers.

NOVEMBER 15-17, 2024 LEBANON, PA

Gem Miner's Jubilee Gem & Jewelry Show;

Hours: Fri/Sat 10:00-6:00 Sun 11:00-4:00,

Venue: Lebanon Valley Fairgrounds and

Expo; Address: 80 Rocherty Road, Lebanon Valley Fairgrounds and Expo, Lebanon, PA

17042 Website: <https://www.gem-show.com/>



February 2015 SMRMC Rock, Mineral, and Fossil Show

“Calcite Crystals and More” (Field Trip Report 11 May 2024)

by Dave Lines

We met at the Middleburg office of National Limestone at 9:30 am on May 11th and were cheerfully greeted by owner Eric Stahl. Eric is unique in that he gives his Christian testimony to every group that comes to his quarries. He asks that you look him in the eye as he boldly explains in a straightforward manner: --- “I believe that Jesus Christ is the son of God. If you believe that, you will have eternal life in Heaven and not go to hell.” Wow! Then we held a safety brief, signed waivers, and took a group picture (he asked for a copy). Since a few of our 10-person group (Renee, Bernie, Tim and Lorna S., Gary, John W., Margie, Diane E., Rich, and Dave) had never been in a quarry and some others had never been to these quarries, we took the time to review the basics like what a “berm” was and why it is important --- “a berm is a safety barrier of rock/dirt designed to keep people and vehicles away from danger areas (highwalls and cliffs). Do not climb on or cross a berm.” We emphasized always wearing proper safety gear (hardhat, safety glasses, steel toed boots, gloves, and a bright colored safety vest) while on the quarry property.

Our plan for the day was to spend about 2 hours in each location --- Middleburg quarry, Mount Pleasant Mills quarry, and the wavellite pit. Since we were the only club collecting that day, we had the entire place to ourselves!



National Limestone mines limestone to make crushed rock, rip rap and related products. Limestone itself is basically old sea bottom and seashells composed of calcium, carbon, and oxygen --- CaCO_3 is the chemical formula. Over eons of time, rainwater (which absorbs CO_2 and becomes acidic) seeps down through cracks (caused by earthquakes) in the limestone while dissolving the limestone and creating holes. These holes (or “vugs”) become the perfect

environment for the redeposition of the dissolved minerals from the limestone. So, the key to our collecting success is searching for limestone rocks with “vugs” in them. These vugs contain crystals of calcite, strontianite, massive fluorite, celestite, pink dolomite, and many minor minerals such as pyrite. Also, cave formations of flowstone (travertine) have been uncovered in both quarries and some of the material has been set aside for collectors.



At 10:00 am, we left the office and caravanned into the Middleburg Quarry. Since it had been raining a lot in the days preceding our trip, the rocks were clean and well washed off. The downside was muddy roads. All vehicles would need a thorough cleaning after this trip. We led the group to the area where the travertine had been stockpiled so everyone could collect some.

Nearby were several large piles of limestone stockpiled by size. I took some of the newbies and walked around one of these piles looking for vuggy rocks --- but we could not find any. We did find some nice clusters of calcite crystals that someone had previously left on a rock. I also showed them some massive white calcite with beautiful purple fluorite embedded. I reemphasized the safety precautions --- stay off the rock piles --- and left them to search further on their own.

I then made a long scouting trip around the edges of all the quarry roads in the central part of the quarry that were not blocked off. Tim S. also helped with this by searching the area at the far end of the quarry. He reported that he only found a small amount of fluorite there. I found and left a relatively small area in the lowest part of the quarry that had some calcite crystals, but not enough material for the whole group. On my return to the group, I discovered an interesting, but truly dangerous safety issue --- a crack in the quarry floor in the road about 6 feet out from a berm. The fresh horizontal crack was 1” to 2” wide and was exposed for at least 15 feet. I proceeded along the road around a curve to the left and looked back. The berm was on the edge of a tall cliff which dropped at least 30 feet to the level below. The cliff below the crack was clearly cracked vertically and was bulging out at least a foot beyond the rest of the cliff face. The whole section was ready to fall. The weight of a vehicle could have caused a disastrous cliff-fall. Later, I showed our group, then placed a red plastic safety cone

in front of the crack, and then called Eric and reported the problem. He thanked me.

Back where I had left our group, everyone had located several excellent vuggy rocks with calcite crystals clearly showing. Within a few minutes, I used a 6-foot-long steel bar to move some large, relatively thin (1 foot x 3 foot x 3 foot) rocks out from the stockpiles onto to the quarry floor. Since the rocks were large, it was time to put my sledgehammers --- a 10 pounder and an extra-large 20 pounder (affectionately called "Bertha") --- into action. With some well-placed whacks, I reduced the large rocks to more manageable sizes containing very nice clusters of calcite crystals which allowed everyone to collect some nice specimens. It is great when you have the right tools.

A few minutes before noon, we all caravanned about 5 miles to the next quarry at Mount Pleasant Mills where we all parked beyond the big mud puddle. We ate our lunch on the go while we spread out looking for calcite and strontianite crystals. We eventually fought some calcite scattered here and there, but the strontianite was more elusive. Only Bernie found some and that was just one specimen.

At 1:45 pm, we moved as a group to the wavellite pit on the backside of the ridge behind the Mount Pleasant Mills quarry. The pit itself is at the very end of a narrow, one-way woods road, so I queried each driver to make sure they were able and willing to back their vehicle out if necessary because we did not know whether we would have room near the pit



to turn around. Then we drove in. The pit itself looked entirely different and was significantly enlarged since our last visit a year ago. The pit faces toward the south. The "spoils" were piled against the back (north) side of the pit right up to the woods. There was a depression about 10 feet deep in the right (east) half of the pit which may have been the result of a caved-in trench

there. Above the depression along the very edge of the road was a long pile of rocks and orange dirt about 2 feet high. Since the rocks in the entire pit had been thoroughly washed off from the recent rains, simple surface collecting immediately yielded specimens of wavellite as well as fossil shells and agatized gastropods. Rich found a $\frac{3}{4}$ " wavellite ball in the bottom of the depression on the east end, but after washing it off, it was covered with hard brown rock that could not be removed.



In the May issue of "EFMLS News", EFMLS President Bill Stephens explained in his President's Message that when they did the machine dig in the wavellite pit this past winter, they had left several excavator scoops of virgin material in the area along the road edge "for the clubs" to search for wavellite. That intel, along with similar advice from our club member Tom Z. (who had attended the April 6th field trip there with Friends of Mineralogy of Pennsylvania), pointed to the long rock pile along the road as the best place to search for wavellite. I tried to explain all this to our group several times, but everyone seemed was happy finding wavellite and

fossils on the surface.



The only person to begin digging there was Gary L. He found several small, but excellent quality, clusters of green wavellite balls in a few minutes. He showed me, and I then began digging into the ridge of rocks about 4 or 5 feet to his left (east of him). I found 3 excellent specimens of wavellite in a 2-foot diameter hole in 20 minutes. I tried to closely examine every side of every rock and then scrub it off with a stiff brush in a bucket of water that I had brought from the quarry. Several times, I was able to scrub off the orange clay and uncover nice wavellite. I showed my finds to our group and continued to encourage everyone to join us. But only a few (Rich and Tim S. and his wife Lorna) started digging with us. My spot continued to be productive as I dug out several smaller clusters of wavellite. I gave some of my finds to others as I was becoming a bit

embarrassed by my good fortune. I used Rich's 6-foot steel bar to remove large rocks (one in Gary's hole and two in mine).



It was great fun to find such nice quality wavellite so relatively easily. I remember on past trips, taking hours to dig down as much as 4 feet and being very happy to find a couple of small clusters of wavellite. But today far surpassed any previous trips as far as quality of specimens. My best specimen contains over 100 undamaged yellow-green colored wavellite balls covering an area of about 7" by 3". It is a find-of-a-lifetime.



Around 3:30 pm the sky began to darken in the west. A check of the weather radar by Tim showed an area of rain headed our way. By 3:45 pm it began to sprinkle, so we packed up and began to drive back out the narrow road. Some backed all the way, and some were able to turn around and drive out headfirst. We all started home by 4:00 pm. It was another great trip --- I just wish that more of our club members had participated.



A special word of THANKS to EFMLS President Bill Stephens who left those virgin scoops of unsearched material for other rock clubs to find wavellite in. We salute you for your generosity (and leadership by example)!

**Southern Maryland Rock and Mineral Club's
28th Annual**

Rock, Mineral & Fossil Show

October 5, 2024

9:00 am to 4:00 pm

Old Waldorf School

3074 Crain Highway, Waldorf, Md. 20601

(On the access road near Checkers - next to Jaycee's Hall)

This Rock Show is indoors, so come rain or shine!

Adults \$5.00, Seniors (65+) \$4.00,

Juniors (13-17) \$3.00, Children (12 and under) free with an Adult

FREE PARKING * FREE DOOR PRIZES EVERY 30 MINUTES

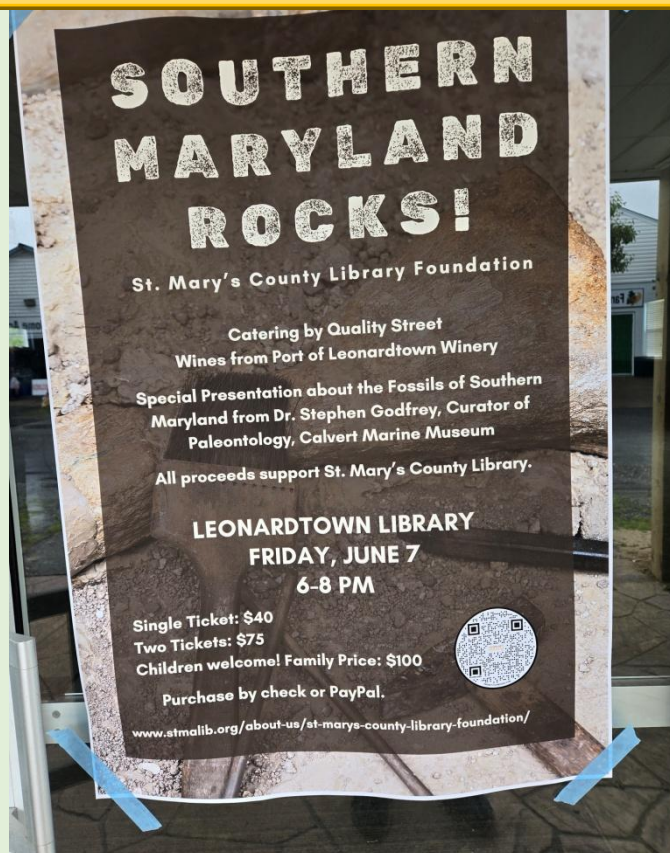
OVER 45 TABLES * PERFECT POLISHED STONES OF EVERY DESCRIPTION

ROCK SLABS * UNCUT ROCKS * CRYSTALS * FOSSILS * HANDCRAFTED JEWELRY * LAPIDARY

ROCKS * FLUORESCENT TENT WITH GLOW IN THE DARK ROCKS * SPECTACULAR MINERAL

SPECIMENS TO SUIT ALL TASTES AND BUDGETS

FREE ROCKS FOR EVERY KID



HOW TO CLEAN ROCKS
Household Products That Can Be Used As Rock Cleaners
by Betsy Martin

Safety: Always use plastic containers, rubber or nitrile gloves, eye protection, good ventilation, and great care when handling these products.

- 1. Zud or Barkeeper's Friend cleansers (contains oxalic acid)** – Warm or hot solutions will remove iron stains and are helpful with clay deposits. These cleaners can be used with a toothbrush on sturdy surfaces.
- 2. Toilet Cleaner (the hydrochloric acid type)** dissolves calcite rapidly. After treating anything with an acid, rinse very carefully and soak in ample fresh or distilled water for a while to leach out any acid remaining in crystal seams and fractures. You can then follow up with a final soak in dilute Windex to neutralize remaining traces of acid.
- 3. Lime Away (dilute hydrochloric acid)** dissolves calcite more slowly. Rinse as you would for other acid treatments (see above).
- 4. Calgon** – Dissolve this powdered water softener in water. Use for clay removal.
- 5. Vinegar (Acetic acid), soda water, colas (carbonic and phosphoric acids)** – Will slowly etch out very delicate fossils in limestone. Rinse as you would for other acids (see above)
- 6. Iron Out (iron stain and clay remover)** – Mix with warm water and use with good ventilation. It will lose strength if stored. Rinse with plain water.
- 7. Bleach** – Dilute solutions of bleach can remove organic deposits and disinfect minerals collected in areas used by livestock. Rinse with plain water.
- 8. Hydrogen peroxide** – Use to remove manganese stains. Rinse with plain water.
- 9. Citric acid** – Use to remove manganese stains. Rinse as above for acids.
- 10. Windex (with ammonia)** – A good clay deposit remover and final surface cleanup. Works well in ultrasonic cleaners. Rinse with plain water.
- 11. Distilled Water** – Use to clean sensitive species and as a final soak after acid treatment.

Removing Thin Coatings:

On moderately hard minerals – use toothpaste (a feldspar abrasive) and a toothbrush.

On hard minerals – use toothbrush with pumice powder and water.

On calcite (including bruised places) – quickly dip in vinegar or Lime Away and rinse thoroughly. Repeat. Soak in plain water afterwards to leach any acid from cracks.

The following tools can be used for cleaning minerals and tools:

Toothpicks, seam ripper, bamboo sticks, sewing needles in a pin vise, old dental tools, old toothbrushes, periodontal brushes, canned air, Exacto knife, single edge razor blades, cheap small stiff bristle brushes.

Acid and their uses

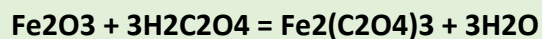
Citric Acid – easy to use and can be made up into various dilution concentrations. You can buy it on Amazon in 2 and 5 pound bags \$10 & \$20

☒ Used to remove inorganic material from your specimen

☒ **Example is: Iron out.**

Oxalic Acid – Used to remove iron stains. When Oxalic Acid comes in contact with rust, a chemical reaction known as a double displacement reaction occurs. This changes the rust (a.k.a. iron oxide) into iron oxalate. Since iron oxalate is a water-soluble salt, it dissolves in water and easily rinses away. You can buy it on line at Amazon in 2 and 5 pound bags \$16 & \$23

Basically, the iron in the rust attaches itself to the oxidized carbon in the acid to create iron oxalate, leaving the hydrogen and oxygen to get together to make some more.... water. It looks like this:



Iron Oxide (Rust) + Oxalic Acid = Iron(II) Oxalate + Water

Examples are: CLR, Bar Keepers Friend, Oxi-clean

Some tips that I have come across:

Use a crock pot to heat your acid in with your specimens to help the process move along. One note is that you need to leave the specimens in the solution until you have cut it off and the water temp in back to around ambient temperature.

The use of brushes but there are many types of brushes from a tooth brush to cleaning brushes with nylon, brass, steel, stainless steel bristles. You need to know the hardness of your specimen before going all in with a brush so that you know that your brush is less hard than your specimen.

MINERALS THAT CAN BE FOUND IN NEW YORK (STATE)

By Rich Simcsak

H E R K I M E R D I A M O N D
 U E E S X O E T I V O C S U M
 S N S T A M F C O R U N D U M
 A I E R I P E T I D O R O C S
 E L B T Y S P Y R I T E E B T
 R A C R I E E H G G E T T L E
 O M I A U R N N I R F I I O T
 L R P C L C A I G R F H R O I
 H U S P X C I B T A E T U D R
 C O Q U R R I T H N M R Z S E
 O T A P A T I T E A E E A T L
 N S T I L B I T E N L P L O A
 I E T I B M U L O C R I R N H
 L A B R A D O R I T E A T E P
 C H O N D R O D I T E D G E S

Some of the interesting minerals that can be found in New York State.

Apatite
 Barite
 Bloodstone
 Brucite
 Calcite
 Chondrodite
 Clinocllore
 Columbite
 Corundum
 Garnet
 Halite
 Herkimer Diamond
 Labradorite
 Lazurite
 Magnesite

Muscovite
 Perthite
 Pyrite
 Sapphire
 Scorodite
 Serpentine
 Sphalerite
 Stilbite
 Tourmaline

Minerals not included

Albite
 Bronzite
 Celestine
 Diopside
 Flourite
 Galena
 Hematite
 Magnetite
 Quartz
 Scapolite
 Sunstone
 Tremolite
 Uvite



The Southern Maryland Rock and Mineral Club
Meetings take place on the 4th Tuesday of each month at
7:00pm
Held at the OLD WALDORF SCHOOL
Next to the Waldorf JayCees Hall
3074 Crain Highway, Waldorf, MD 20601
North of the RT 301 / RT 5 intersection
We're on the web: SMRMC.ORG

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Rock Talk Editor Rich Simcsak	FACEBOOK Coordinator Kurt Knower

ITEMS WANTED/FOR SALE

For Sale – Virginia Unakite slabs (approx ¼ inch thick) – \$0.50 per square inch (this is half off regular price). Call Dave (240) 427-7062

