

August Newsletter

8/2019 Volume 2019, Number 8

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Meeting at Miller Center 301 Grove Street Lynchburg, VA 24501 3rd Wed of the month 7:00 pm until 9:00 pm

Dec. meeting will be in the Aviary again.

Workshop is the 2nd Saturday of the month.

President's Meanderings:

Past Meanderings - High School Science Fairs

My freshman year high school Science Fair entry was titled "Methods of Fossilization, a project I completed on the third floor of the Smithsonian Museum of Natural History. Subsequently refined, it is now on display at the Lynchburg Gem and Mineral Society's display case at the Easter Island store in Lynchburg.

My sophomore high school Science Fair project was a self-designed Gem Refractometer. I used the girdle cutting attachment of my Lee Faceting Machine to cut and polish a short cylinder of an unknown transparent mineral. I cut the cylinder in half, lengthwise, to become the test sample and the core of the Refractometer. This is the equivalent of the half cylinder in a conventional Refractometer. My Refractometer worked in a similar fashion, without the reading-limiting refractometer oil of conventional refractometers, reading only the Index of the prepared sample. My very supportive dad helped with the construction of the base. I made it to the State Science Fair held at the University of Virginia where I received an Honorable Mention award. Across the street was the Geology Building of University of Virginia (UVA). I found their dump pile and collected many nice specimens of discarded rock.

Next year I made a Spectroscope with the same results, this time being invited inside the building by UVA's newest Geology Professor. He graciously gave me an hour tour of the building, the collection, the labs, and introduced me to what a college classroom looked like. Years later, after spending 4 years sharing my geologic finds with his students for presentation papers in Dr. Robert S. (Dick) Mitchell's lab, we realized that he and I had met some 25 years earlier when he had given me that one-hour tour. After he passed, UVA invited me back to help clear the lab; there were so many samples with my name on them scatter about. I found parts of damaged student Petrographic Microscopes that Dick and I were reassembling. UVA gave me the best pieces to complete a scope along with a universal stage, plus they gave me Dick's research Refractometer. Kind of full circle.

2019 Officers

PRESIDENT - Dave Woolley (434)

woolley.dave@gmail.com

First Vice President Vacant

Second Vice President Vacant

Secretary & Treasurer Linda Noble (434) 332-4869 linda-noble@hughes.net

Editor – Steve Gordon (434) 942-1836 stevegordon@comcast.net

Members At Large - Michael Staton & Eric Routon

Youth Out Reach Jennifer Staton

Definitions: Breccia

by Dave Woolley:

Another source of rock fragmentation is found at the crushing that take place when the earth ruptures in an earthquake. Any rock – Igneous, Sedimentary, and Metamorphic - can be brecciated. These fault-zone broken rocks particles can be of the same sizes as the sediment particle sizes described earlier. Breccia particles can be loose; fused together by the heat and pressure generated along the fault; or cemented together by minerals that crystalized from fluids that later travelled through the broken rock. Calcite is a common "cement" in brecciated limestone and marble.

The microcrystalline Quartz minerals, Jasper and Agate, are other possibilities often with crystal quartz druses in the remaining open cavities. Western Breccias sometimes have Malachite, Azurite, and Turquoise or Chrysocolla if Copper is nearby. Eastern Breccia often have Limonite, sometimes Hematite. The Great Valley of Virginia limestone formations occasionally have Calcite seen as white streaks easily spotted when driving past rock cuts along Interstate 81 and Route 11 and elsewhere: historic earthquakes!

Greenstone is a rock typically found after Basaltic rock has been metamorphosed. The Basaltic rock minerals, Olivine and Pyroxene, metamorphosed at depth from the heat and pressure are also formed by the heat and pressure at faults. These two minerals often recrystallize as the often-green-colored minerals Serpentine, Willamsite - if the Basalt contained Chromite, Chlorite, Actinolite, Jade, and Talc, hence the name "Greenstone". Talc seems to be a slippery lubricant helping some deep West Coast faults to periodically move. *Exposed* West Coast deep faults in metamorphosed Basalt are often fused producing massive patterned Serpentine and sometimes jade, both used as ornamental rock, carvings, and gems.

Program for the coming months

August - Dave Woolley - Quartz

September – Dave Callahan – Fieldtrip requirements- Dave Woolley will bring examples of what to look for on Willis Mountain.

October- Eric Routon – Fossils – Methods of Fossilization

November - Club Auction and Club Officer Nominations

December - Christmas Dinner and Secret Santa

Note from the Editor:

Hi All,



Luis Alberto Gonzalez passed away on Friday July 19th, 2019 in Lynchburg at the age of 68. Luis was a self-taught jeweler who open the store Easter Island in 1987. Luis was the founder of the Gem and Mineral Society and first president.

Please send me your short story stevegordon@comcast.net

Field Trip Opportunities

The club has a field trip to Willis Mt. coming up on Saturday September 28th



Dixie Mineral Council Field Trips



The Southeast Federation of Mineralogical Societies, Inc

The Friendly Federation - Founded in 1976 to serve DMC Program of the SFMS Field Trip Committee Copyright © All rights reserved.

An Official Field Trip of the Rome Georgia Mineral Society (Rome, GA) (HOST)

Sunday, September 22, 2019 9:00 AM EST Summerville, GA

TRIP: This location is a small, family owned quarry that has been a popular location for local clubs for many years. There will also be an optional side trip to a location close by where a variety of cutting material will be for sale.

COLLECTING: This location is known for its colorful lace banded chert/agate. Most of the material is loose and ranges in size from pebbles to boulders. Some of the material is good for lapidary use and some of it is more suitable for specimens.

BRING: Rock hammer, small sledge, chisel, scratching tools, buckets, and a spray bottle with water to wet the rocks so you can see the color better. You may also need sunscreen and gloves, plus a dolly is recommended for hauling out large rocks and heavy buckets.

SPECIAL CONDITIONS: This is an active quarry. STAY AWAY from all heavy equipment, high walls, ponds, and quarry machinery.

TERRAIN AND ACCESSIBILITY: There are flat areas and areas with loose rock. People with mobility issues may have some difficulty navigating over and around boulders. There may also be soft, muddy areas if it rains before or during the trip. Collecting area is within 100 yards from where we park.

CHILDREN (Yes): Children are allowed but they must have adult supervision at all times.

PETS (Yes): No pets allowed.

FACILITIES: There are **NO** facilities at either location. Food and restrooms are several miles away.

ACCOMMODATIONS: There are many hotels in Rome, GA, which is approximately half an hour away from the collecting site.

ADDITIONAL INFORMATION: Rome Georgia Mineral Society members will be available to answer questions about the location. There will also be a table with examples of collecting material, water, and snacks.

DIRECTIONS AND WHERE TO MEET:

Mount Berry Mall, Rome, GA Mall Parking Lot near Zaxby's

CONTACT: Dori Madden 706-767-5759 Bob Madden 706-853-1748



Why I became a Rock Hound

By Mary and Bob McIntire

For us it would be "Why we became Rock Hound's? Bob's Mom and Dad used to go all out Cross-Country including Virginia looking for rock's while they were alive. Bob's dad past 8 months before I met him and when his sisters long with him had to sell his parent's house, they had to get all the rocks out of his Mom and Dad they had collected. At the time they had no interest at all in them. Bob's Dad told him he would look for rocks and Bob could make jewelry Bob said he told him he had been out in the sun to long so years later. Our son had asked if he could take some back to Virginia with us and they sat in our shed for a while. We had met a wire wrapper at The Peanut, Pork and Pine Festival in Surry VA that summer whom did wire wrapping along with a few other things his name was Friday Nelson from Maryland "Go Ahead and Make my Ring. A few months after meeting went to a local Mall in Chesterfield VA and met another couple making the same style jewelry that were taught by Friday. Bob had asked the lady price on a goldstone Pendant in Sterling Silver and she said \$135.00, he had several in the same size in the stuff our son brought back. So we called Friday and he agreed to teach us if we would go to Maryland get a hotel he would provide the tools, wire, cab's and teach us everything about how to do the same business he was doing, with agreement that we would not do the same show he was doing. It has this year been 21 years.

After that we decided since Bob's Dad was President of the Connecticut Valley Gem & Mineral Club in Massachusetts and Mom learned so much about rocks that it would help us also. We joined our local Richmond Gem and Mineral Club which I was Newsletter Editor for a few years with the help of Bob and Evan (our son). Went to their meetings and learned lots from very knowledgeable members along with starting to cut and polish rocks etc. We decided to sell our house in Chesterfield VA in 2008 and moved to the Shenandoah Valley and our little business has gotten lots bigger and we have learned so much from locals and all the Gem & Mineral Clubs we belong. Currently we belong to Richmond Gem & Mineral Club, Shenandoah Gem & Mineral, Lynchburg Gem & Mineral, Hawaii Gem & Mineral Club, and Connecticut Gem & Mineral Club. Have also volunteer to display at club's events, Lynchburg Club volunteered for Boy Scouts of American event, along with Apple Day's etc. We love going on field trips and learning as much as we can from others. Last year went to Main to a Rock Hound Convention and spent Mother's Day in Havey Tourmaline Quarry. Going end of July on Field trip 16th Annual Western North Carolina Rockhound Roundup and looking forward to it.

We have also learned lots from attending William Holland Lapidary School of Arts to include: Cabochons 5/15/11 both, Faceting I 5/20/12 Bob, Cutting Polishing Appraising opals 5/20/12 Mary, Wire Wrapping II 4/14/13 both, We have a love to learn along with teach others what we do along with presentations for schools to include: Chesterfield County School, Rockbridge County School and last year honored to do Augusta County School. When we set up at schools, we show and tell the people what we do and how we do it not only educating them in what we do but telling them about how they also can do it. Along with joining Gem & Mineral Clubs in the area, giving out rack cards for William Holland Lapidary School for arts. Love what we do for the past 22 years.





Thanks so much, Mary & Bob McIntire

July Meeting Minutes

Gem & Mineral Society of Lynchburg Meeting – July 17, 2019 @ 7:00 PM

Attendance: 24 members

Meeting called to order by Steve Gordon

On Time Drawing Winners: David Brogan, James Tomlin, Cindy Mitchell, Bob McIntire, Susan Brogan, Mary McIntire, Holly Tomlin, Nancy Linkenhoker, Abegale DeFord, Rodger Linkenhoker, Brenda Finch, Marsha Engelstad, Hans Schubert.

50/50 Drawing – \$5 - David Brogan won \$2.50 which he donated back to club.

Hospitality:

Rodger and Nancy Linkenhoker hosted tonight's meeting, James and Holly Tomlin will host the August meeting.

Old Business:

If you have a suggestion of a speaker or club program, please contact Dave Woolley or one of the club officers. David Brogran suggested Donation Auction program. Where club members could donate items and bring to meeting for sale with proceeds going to club. Kim Blair would like a beginner's mineral ID program. Bill Livingston suggested the club needs to advertise by attending a festival.

A board meeting will be planned and announced.

Announcements:

Please send your article of "Why I Became a Rock hound" to Steve Gordon to publish in our Newsletter. It can be a short paragraph.

Workshops continue to take place on the second Saturday of each month at Dave Callahan's

Treasurer's Report- Linda Noble gave the report on current balance of \$12,066.71 which matches current bank statement. Records are available at each club meeting for review by club members. Club members were ask to think about suggestions of how to use club funds.

Program: Steve Lenhart gave a nice presentation on The Geology of Virginia by Callan Bentley. He will offer a fieldtrip in the fall to KY for Lynchburg club members only if enough are interested. More information to come.

Thanks to Warren Darling for bringing items for Silent Auction which earned \$40.

Thanks to Abegale DeFord for her help with greeting, collecting sign in sheet and selling the 50/50 raffle tickets.

Executive Board Meeting

August 2, 2019 at 7 p.m. at Dave Woolley home

Attendees: Dave Woolley, Noel Woolley, Michael Staton, Eric Routon, Thom Noble, Linda Noble

Topics of discussion included:

Programs for balance of the year:

August – Dave Woolley – Quartz

September – Dave Callahan – Fieldtrip requirements- Dave Woolley will bring examples of what to look for on Willis Mountain.

October- Eric Routon – Fossils – Methods of Fossilization

November – Club Auction and Club Officer Nominations

December - Christmas Dinner and Secret Santa

New Business:

Dave Woolley will make contact with Central Virginia Community College Geology Department to inquire about speaker and discuss partnership with possible scholarship.

Group discussed activity to offer club members a bucket of mine ore from Rio Doce. Will discuss arrangements at later date.

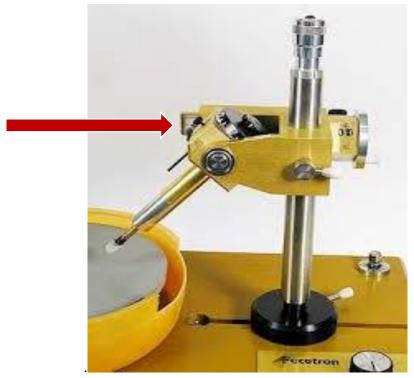
Michael Staton will contact Boxley Quarry to inquire about possible fieldtrips. He will also arrange to provide club with information to do online T-shirt orders.

Dave Woolley will ask for volunteers to help with the Willis Mountain fieldtrip in September. Volunteers needed to help with check-in and getting signatures on safety agreement. Thom Noble will follow up with Dave Callahan and Joan Moore to discuss possibly getting the Willis Mountain Safety Agreement in advance. Will also talk to them about communications with other invited clubs to make sure everyone is in compliance with requirements. Eric Routon will be the Emergency Safety Coordinator and bring his wagon with first aid supplies.

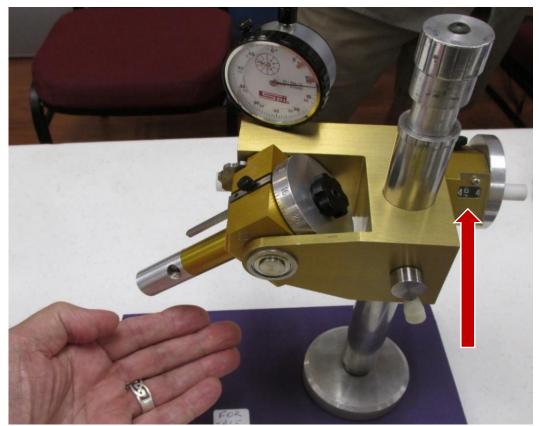
Article for this month part # 10 Faceting by Dave Woolley



36. A "Graves" Faceting Head with an aftermarket Dial Indicator to minimize the Mast Flex problem. In many applications, a *Non-Spring-Loaded Dial Indicator* will release all of the Flex of the Mast but may still allow any loose bearings to wobble.



37. "Facetron" by the Jarvi family. A Mast Type Faceting Machine. This early Facetron has a spring touching the Protractor Lock Stop to minimize the Flex problem. The end of the spring-wire is the Pointer in a meter, left square box, an early Angle and Depth of Cut Indicator to help in the reproduction of hand pressure and the cutting of "duplicate" facets. See: #24. The year the ohmmeter was introduced, 18 of the top 20 winners of the international Australian Facetors Guild competition cut their wining gems with Facetrons.



38. Improved "Facetron" Mast Assembly. This Facetron has a Spring-Loaded Dial Indicator, an improvement over the previous spring-wire Pointer allowing greater sensitivity and a visual scale to estimate the *speed of cutting* of a facet. Testing an early Facetron with an Ohmmeter [see #44] established that there is Bearing Wobble in the *grease* of the Tube-on-Mast designs. In use, the compression of the spring in the Dial Indicator keeps the movement pretty much to one side, reducing the problem of Bearing Wobble. Note the hand cranked *gear-driven* **Mechanical Digital Protractor** reading to a tenth of a degree.

Other Links that you may want to check out:

A Guide to Ethical and Conflict-Free Jewelry

https://www.77diamonds.com/engagement-rings/ethical-jewellery/introduction

Insurance Institute of Jewelry Appraisal

https://instituteofappraisal.com/Investigation_of_Artificial_Color_Infusion_of_Gemstones.pdf https://instituteofappraisal.com/Exposing_the_GIA_Juggernaut.pdf

"WIENER DOG MINERS! (A short YouTube video of Dachshunds Mining) https://youtu.be/pYrOty3N2-4

If you need to renew your club membership you can let me or Thom Noble know and we can email you the form. You can make checks out to GMSL.

Our Mailing address is:

The Gem and Mineral Society of Lynchburg, VA, INC.

PO Box 11975

Lynchburg, VA 24506-1975