

March Newsletter

3/2019 Volume 2019, Number 3

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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

The March meeting will be held at the Aviary 400 Grove Street. See back page for map.

Workshop is the 2nd Saturday of the month at Dave Callahan's.

President's Meanderings:

My apologies to Ross Dempsey for miss spelling his name last month. I shure wish my spell checker had a brain checker as well. Early in my career I was given the job of Route 29 South Bound Lane Bridge over Buffalo Creek, Amherst County. During my meanderings, I discover a granular green rock with metallic black octahedral crystals, outcropping on the northern bank above the proposed bridge. Having read that there were Dunnite deposits in the Piedmont I was concerned. I knew that Dunnites were potentially crumby deposits of Olivine crystals often with metallic black octahedral crystals of Chromite, crumbly because the Olivine crystalto-crystal contacts tend to weather fast. Rock-turning-to-sand, is not a good material to hold the weight of a bridge. What could I do with this information, not knowing if I had discovered a Dunnite? Never at a loss, I lobbied my boss for a Petrographic Microscope. With an understanding of Crystallography, examination with a Petrographic Microscope was the state-of-the-art mineral identification technique evolved from the previous century. I was not proficient in the 200 or so types of tests that this scope is capable. I was reasonably sure I could successfully run the several test that would prove Olivine and Chromite over the other possibility of Epidote and Magnetite. I spent a semester at University of South Florida's geology lab mastering those first few tests. John Cianciulli of the Franklin Mineral Museum in New Jersey took one weekend and a good book to achieve a higher degree of proficiency as he migrated from rock hound status to renowned Mineralogist. It can be done. Request for a microscope denied. I used other methods to make the identification of massive Epidote with Magnetite. The bridge is still standing. More about Petrographic Microscopes and crumbly rock in another Meandering.

Keep looking!

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

Here is an article that Dave Woolley had sent me a while back but I could not figure out how to get it into the newsletter.

https://instituteofappraisal.com/legal-defects-in-major-lab-reports/

On my computer you can press ctrl and click the left mouse button and it should take you to the web site. If not just copy the link as shown above and paste it into your search line at the top of the page of your web browser.

Program for the coming months

We have a new meeting place for our upcoming meetings. We are moving from Fairview to The Miller Center on Grove Street address is on first page in the blue. We were told that we are meeting in the basement in the community room. There is plenty of parking what I call the back of the miller park building and you can enter the door that is almost center of the building which leads straight into that room.

Our March program will be Dave Young (owner of Stones and Bones on 221 (located in the Foodlion shopping center at Graves Mill intersection)) speaking on Virginia minerals and collecting sites including Coast Plain fossils. He will bring samples that he has collected.

April will be "Mineral Identification Techniques" given by members of our club. See Business Minutes for more.

Note from the Editor:

Hi All,

I am still out of town in North Carolina but have moved toward the beach and have not had a chance to do any rock collecting around here. I am sorry that I will not be at the March meeting as I always enjoy Dave Young's presentations. I hope you are having a safe winter and look forward to getting back and attending the meetings and digs if they come available.

Please send me your short story about why you became a rock hound or anything else that others would like to hear about. stevegordon@comcast.net

Field Trip Opportunities



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 Georgia Mineral Society (Norcross, GA) (HOST)

Saturday, April 6, 2019
Meet no later than 8:30 AM EST
Caravan into Quarry at 9:00 AM EST
Bartow County, GA
Registration Required

Sunday, April 7, 2019 9:00 AM EST Summerville, GA Registration Required

An Official Field Trip of the (please enter your associated club's name here)

TRIP: The <u>first</u> location is part of the Corbin Gneiss Complex where porphyroblastic granite gneiss is being mined. The rocks there are some of the oldest in Georgia - approximately 1.2 billion years. The <u>second</u> 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.

BRING: For <u>both</u> locations, bring a 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.

REQUIREMENTS: The <u>first</u> location requires <u>gloves</u>, <u>safety glasses</u>, <u>hard hat</u>, and <u>steel</u> <u>toed or sturdy boots with ankle support</u> (hiking boots). No open toed shoes allowed. The same equipment is recommended for the <u>second</u> location, but not required.

SPECIAL CONDITIONS: <u>Both</u> locations are active quarries. STAY AWAY from all heavy equipment, high walls, ponds, and quarry machinery.

TERRAIN AND ACCESSIBILITY: <u>Both</u> locations have 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 these trips. Collecting areas are within 100 yards from where we park.

REGISTRATION: Participants must **register** no later than **March 30** because property owners need a head count. To register, send email to <u>fieldtrips@gamineral.org</u> with the name(s) of participants and your club name.

CHILDREN (Yes): <u>Both</u> locations allow children, but they must have adult supervision at all times. And, at the **first** location, they must have **all of the required safety equipment**.

PETS (Yes): No pets allowed at either location.

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

ACCOMMODATIONS: There are many hotels in Cartersville, GA, which is less than half an hour away from the first location and approximately an hour away from the second location.

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

DIRECTIONS AND WHERE TO MEET:

To ensure accurate head counts, only registered attendees will receive directions via email.

CONTACT: Charles Carter, 770-998-1127, fieldtrips@gamineral.org



Granite Gneiss with blue quartz



Definitions

By Dave Wooley

Rock

A Rock is a fragment, composed of one or more Minerals.

If you break a rock small enough you may have but one mineral. Some *rock species* are composed of primarily *one kind* of mineral like Quartzite – Quartz, and Dunnite – Olivine. Most rocks species have *more than one kind* of mineral like Granite – Plagioclase, Orthoclase, and Quartz, plus a little Mica or Hornblende.

Rarely, a rock is not a fragment such as a "Herkimer Diamond", a complete Quartz crystal that grew unattached in a hot water filled cavity. [Remember my previous comments about the importance of Water to Geology?] Some rocks have crystal so tiny they cannot be seen; other observations must be used such as with a Microscope or X-Ray Diffraction. Sometimes indirect observations are sufficient: agate is translucent and jasper is opaque, both Quartz rocks composed of microscopic Quartz crystals. In agate the microscopic Quartz crystals are parallel; in Jasper they are randomly oriented trapping other things like clay particles. A few other Rock exceptions have no crystals like obsidian and amber.

Rock types

<u>Igneous Rock</u> Rock that formed from molten materials plus dissolved Water and gases. [Remember the previous comments about Water?]

Intrusive Igneous – crystalized below ground. Extrusive Igneous – flash frozen above ground.

<u>Sedimentary Rock</u> Rock that formed from Sediments and rarely from Residual Soil.

<u>Metamorphic Rock</u> Previous rock that has been altered by *changes* in heat and/or pressure.

Most rocks are composed of the minerals of eight easily identified Mineral Families: Quartz, Olivine, Calcite, Feldspar, Mica, Amphibole and Pyroxene.

Why I became a Rock Hound

By Steve Gordon

When my first son was born and was able to crawl around he would find rocks that he thought were pretty. We thought that this was a little weird but let him keep them. Later he showed interest in rocks buying them when he saw what he liked. So to foster his love of rocks we joined the local rock club. At first we thought that we were in the wrong club because none of our names were Dave. You see when we joined Dave young was president, Dave Callahan was I believe secretary and Dave Woolley was the guy you went to if you had question about geology. After a business trip to New Jersey where I discovered Franklin and Sterling Hill mines my love of rocks surpassed my sons love and that is how I got into rocks.

February Meeting Minutes

Gem & Mineral Society of Lynchburg Meeting – None

March Business Meeting Minutes

Executive Committee Meeting

March 6, 2018 at 7 p.m.

Attendees: Thom Noble, Linda Noble, Dave Woolley, Michael Staton and Steve Broylan

Not present: Steve Gordon and Eric Routon

Dave talked about the programs for the year and will be working to get speakers in place.

March - Dave Young

April - Mineral Identification - need volunteers to help

May - Show and Sell

June - Michael and Kate Staton - Rock Climbing

July -

August -

September -

October - Club Auction

November - Nominations for new club officers and Show and Sell

December – Club Christmas Meal and Dirty Santa

Dave will be contacting PIP Printing or Service Printing about getting new club brochures printed with address of Miller Center 301 Grove Street, meeting to be held in the Community Room 102 – past the Nature Center and parking in the back of building to be added. He will provide a signup sheet for anyone interested in hosting a social get together at their home.

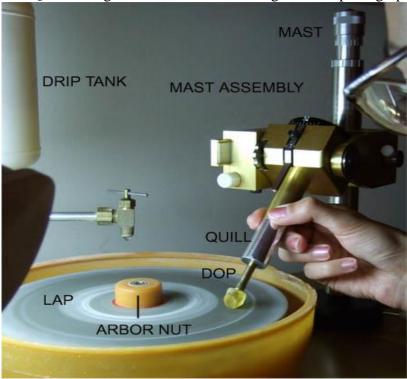
Michael and Kate are working on promoting the Club through Facebook and Instagram. Group will be looking for ways to advertise the Show and Sell meetings to the public. Dave will continue to be in contact with Parks and Recreation on getting the contract signed and enlists their help with advertising the club meetings.

Any suggestions for fieldtrips please contact Dave Woolley or club officer.

Article for this month part # 5 Faceting by Dave Woolley

You Too Can Become a Part of the Story of Faceting Part #4

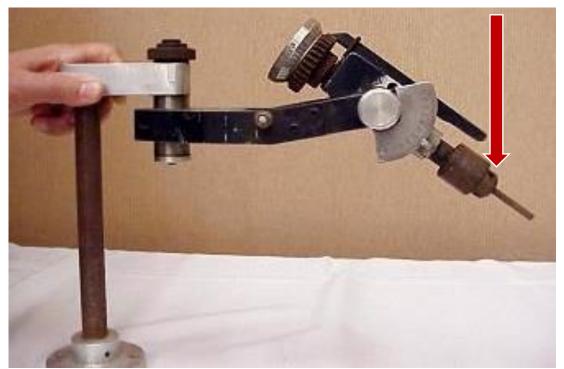
Back to the Tube on Mast Machine: In the Mast Assembly, the Dop is attached to an Index Gear through the Quill. A digital Protractor is out of sight in this photograph.



24. A Mast Type Faceting Machine, a "Facetron" by Jarvi Tool, with some of the parts labeled.



25. "J & P Easy Facet Head". Stone, Dop/Quill, Index Gear, spring - loaded Pawl, Angle Lock (black knob), and Radial Adjuster. The off-centered end of the Pawl can move the Index Gear slightly for Radial Adjustment. Set and lock the Angle with a handheld Protractor.



26. "General Hardware Company". **A Mast Type Faceting Assembly**. This Quill was made from a *Hand-Drill shaft*: it has a Hand-Drill **Chuck**, red arrow, to lock the Dop in the Quill. My hand is on a Coarse Height Adjustment swivel that can keep the stone in the "working area" of the Lap.



27. "Prismatic Instrument". **A Mast Type Faceting Head**. It has a **Set Screw**, red arrow, to lock the Dop in the Quill.

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

This month we are meeting in the Aviary at 400 Grove Street see below. We can still park behind the Miller Center and as you can a short walk to the Aviary.

