October Newsletter

10/2019 Volume 2019, Number 10

In This Issue

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

December Meeting to be in the Aviary

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

President's Meanderings:

Someone Stole My Tantalite

Fellow VDOT Geologist, Howard S. Freeland and I investigated several Pegmatites while I was working on the bridges of the Altavista By Pass; the Pittsylvania Wayside picknick grounds, just south of Hurt on Business Route 29, is the site of a massive outcropping of Granite Pegmatite. Feldspar crystals are up to about a foot in length. I discovered a Garnet the size of an orange. Quartz ranged from milky to smoky, to clear blue. Mica was never mined as I am sure this site was investigated for that strategic mineral in the 1940's; crystals looked like they had exploded within the Feldspars, a poor "Grade C" mica at best. Left of the suspension bridge and up the hill on the south side of Sycamore Creek, I found a Yellow Beryl crystal about half a foot in length and Tantalite crystals coated with small Zircons. Howard and a friend returned and excavated a 600-pound yellow Beryl crystal that resided for a time at Virginia Tech's Mineral Museum. The "Glory Pit" as it has been named has been collected *and back filled* many times; David Young successfully removed several 95-pound yellow Beryl crystals. One is in the club's display case at Easter Island, another at Stones and Bones store. On one of my Sunday morning ventures, I parked my car close by. After collecting a number of Tantalite crystal, I returned to my car and put the packet of crystal out-of-sight under the front seat. An hour or so later I heard what I thought was someone slamming a car door, a church picknick no doubt. I returned to my car just to be sure. There, I found a wine bottle stuck in the windshield and both hoods ripped open; battery and tool box were gone. Someone even stole my stash of Tantalite. City and State Police offered no help in recovering my Tantalite or in finding the culprit. I had the car, a two-cylinder, 56 MPG, 1962 Citroen Ami 6, towed home. The windshield cost $200, the same price I paid for the car. My best rock hunting vehicle was a 1963 Citroen DS Safari that had Nitrogen springs with a hydraulic self-leveling suspension and 8 inches of wheel movement, (4" bumps or pot

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

holes floated over) adjusted up to 11 inches clearance for rough terrain. It had a rated payload of ¾ ton that was *safely* over-loaded to about a ton. It seated 7/8, or 2 + 80 cubic of feet of storage with rear seats folded to a flat floor. It cost me $800. It was the wagon version of the ***most important car ever manufactured***, the 1955-75 Citroen DS 21: the first car with disk brakes, full-power brakes, antilock brakes, full power none deviating steering, and etc. I count 180 novel features in the DS's, 56 of which changed the automotive industry. I've owned 13 used DS's in 50 years.


1963 Safari


1971 DS 21

With two flats, this front-wheel drive car can be safely driven on three wheels. The only addition in 20 years was self-leveling, tuning lights, pivoting with the steering up to 90 digress in *anticipation* of a turn.

What the ride feels like.

Definitions by Dave Woolley

Fossils

A fossil is a trace of life found in a sediment or rock. American Geologist generally considers that a fossil must be about 10,000 years old or older; other material is termed “recent”. At Vesuvius, Virginia, carbonate rich water leaking from a limestone cave is encapsulating Fall leaves and living plants with Calcite Flowstone: recent materials, not fossils. Rarely, fossils are found in Igneous Rock like a tree cast in lava, and in Metamorphic Rock like the back filled burrows, Skolithos, in Quartzite.

Methods of fossilization:

Actual remains: shells, bones, wood, leaves, skin and hair, tree sap.

Burrows, trails, and imprints.

Cavities and casts where the original materials are leached out leaving cavities which might later be fill with new materials like Calcite, Pyrite, Limonite, Malachite, Agate, and Opal making a cast.

Permineralization: organic material is replaced, sometimes a cell at a time, with Agate, Opal, and other minerals.

Carbonization: organic materials reduced to carbon. Shale, a sedimentary rock, may have carbonized leaf imprints. Coal, compressed plant material may eventually metamorphose to Anthracite, “hard coal”. Marble, a metamorphose Limestone, may have graphite crystals from organic materials trapped in the original carbonate sediments and the subsequent Limestone.

Phosphatic fossilization: the phosphate of bones and teeth trapped in sediment may migrate creating phosphate nodules and/or enriching other fossil materials. Phosphate fossils and nodules have been mined for many years in “Bone Valley” of Central Florida, east of Tampa. Phosphate of bones trapped in sediments and subsequently sedimentary rock may be metamorphosed into phosphate new minerals, as in the Apatite and Lazulite of the Willis Mountain, Quartzite. Found in Miocene clay of Virginia’s Coastal Plains, the Phosphate of bones and teeth plus Iron from the sediments form Vivianite that may alter other fossils.

Authingenic fossilization: organic material alters the surrounding sediment turning it into sedimentary rock trapping evidence of life within. Microscopic Siderite may crystalize in the surrounding sediment from trace Iron in original organic material as in the fossil-containing cobbles from Mason Creek near Morris, Illinois.

Bioimmuration: where one organism overgrows another preserving the first or making an impression or cavity, possibly later filling as a cast. Another example: a snail bores a hole in a clam, killing the clam for food, but leaving a trace of its existence as a hole in the clam shell.

Program for the coming months

October – Eric Routon – Fossils – Methods of Fossilization

November – Club Auction and Club Office Nominations

December – Christmas Dinner and Secret Santa

Note from the Editor:

Hi All,

Well, summer has come and gone and we are now into good rock collecting weather. I hope all of you get to go looking as we did at Willis Mountain. There was many people and clubs that were represented and fun was had by all. Here are some pictures supplied by Linda Noble. Also, Mentioned in the "Club Corner" page in an article titled "Inspiring Vistas and Adventures" by Antoinette Rahn in the October edition of "Rock and Gem" magazine:
"The Southern Maryland Rock and Mineral Club's next field trip is an official combined collecting event, hosted by the Gem and Mineral Society of Lynchburg, Va. and Kyanite Mining site, set for Sept. 28 at the Kyanite Mining Corp., located in Dillwyn, Virginia."

I have aerial pictures supplied by Eric Routon that I will send out as a separate document as the pictures end up too small in the newsletter. I will not be at the October meeting as I am out of town for work but will try to have someone bring a copy of these pictures to the meeting.

Please send me your short story stevegordon@comcast.net

Field Trip Opportunities

At the time of the newsletter I had not received the email for the next field trip from the Dixie Mineral Council.

Why I became a Rock Hound

By No One

I did not get a story from anyone this month. So I am including one of the aerial photos from Eric Routon.

September Meeting Minutes

Gem & Mineral Society of Lynchburg
Meeting – September 18, 2019 @ 7:00 PM

Attendance: 38 members
Meeting called to order by Dave Woolley President

On Time Drawing Winners: Kate Staton, Eddie Van Eaton, Kendra Turner, Heather Brooks, Ann Maurice, John Haskins, Quinn Axley, Susan Brogan, Linda Noble, Brandon Coles, Kim Blair, Sydney Tomlin, Lydia Kalyna, James Tomlin, Michael Staton, Dave Callahan, Hans Schubert. Tim Axley, Marsha Engelstad, Alex Brockman, Steve Boylan.

50/50 Drawing – $6 - David Brogan won $3 which he donated back to club.

Hospitality:
James and Holly Tomlin hosted tonight's meeting, will host the October meeting.

New Business:
There is a rock and jewelry show at the Augusta Expo in Fishersville this weekend sponsored by the Shenandoah Club.

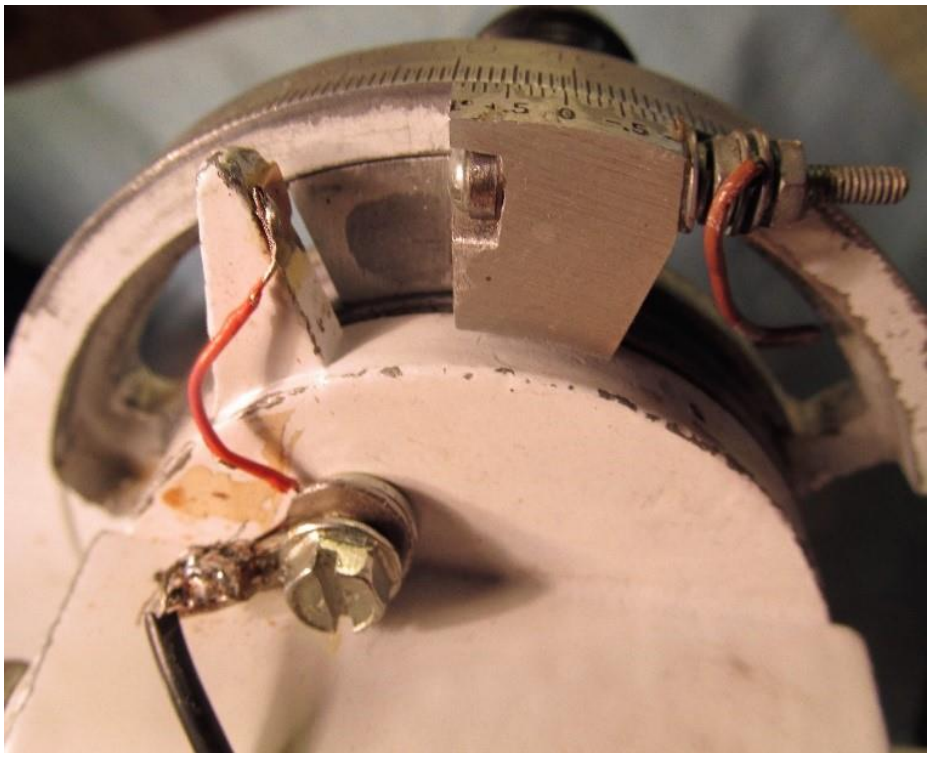
Announcements:
Please send your article of "Why I Became a Rockhound" to Steve Gordon to publish in our Newsletter. It can be a short paragraph.
Workshops continue to take place on the second Saturday of each month at Dave Callahan's

Treasurer's Report- Linda Noble gave the report on current balance of $12,023.66.. Records are available at each club meeting for review by club members.

Program:
Kate Staton: Glacially Expedition in Washington State
Kate gave a nice presentation on her sediment experiment of
Snow fed vs Glacier fed streams.
Dave Callahan: Gave a program on Rock Collecting and Safety at Willis Mountain in preparation of the upcoming fieldtrip.

Article for this month part #12 Faceting by Dave Woolley

42. Marcus Beale's installation on his Raytec Shaw is the first recorded use of an Analogue Ohmmeter, it too ***eliminated* the Mast Flex problem**. His 12-hour signature design now required only 4 hours of work resulting in the dramatically improved quality of his faceting. Marcus insulated the back two Feet from the Table and made an exposed "on/off" switch between the Front Foot and the Table. The Front Foot and the Table were wired to the Ohmmeter. As the Front Foot approached and made increasing contact with the Table, the Ohmmeter needle moved. See: #22 & #23. Marcus later modified an Ultratec. See: #47.



The second documented installation of an **Analog Ohmmeter** as a Depth of Cut Indicator: an exposed "on/off" switch between the Protractor Stop Block and the Protractor Pointer on my Graves. Here the contacts are open. The Stainless-Steel bolt is insulated from the Lock Block; it makes contact with the Protractor Pointer as cutting proceeds to the Locked Angle. A tiny gold plate has since been added to Protractor Pointer to prevent corrosion of the exposed contacts.

Note: ***Digital* Ohmmeters** provide useless fluttering numbers in response to Lap surface irregularities. An Analog Ohmmeter needle appears unsteady because it too follows the Lap's slightly irregular surface. If your laps are not true, and most aren't, aim for the higher flutter number when cutting subsequent Facets of a group of Facets. Electronic gurus have added a needle-dampening circuit to their Analog Ohmmeters and number-averaging circuits to their Digital Ohmmeters to eliminate the flutter. I find them unnecessary; they slightly reduce the accuracy. An Analog Voltmeter and external power supply can be used in the identical fashion as the Ohmmeter which has an internal battery.

43. “Sapphire”. A Mast Type Faceting Machine from Australia.

44. The **Beale/Woolley Depth of Cut Indicator.** This Sapphire Machine has an owner-installed “on/off” switch and an Ohmmeter. Many Faceting Machines have had Ohmmeters installed by their owners. Subsequently, a number of manufactures have added Ohmmeters: many newer machines have incorporated Ohmmeters in their design ***after the Fac-Ette GemMaster patient expired*.** The Beale/Woolley Depth of Cut Indicator, an electronic tool, is one of the three most important advancements to faceting from the end of the last Century. It solved the Mast Flex problem and eliminated many other faceting difficulties, plus it opened the gate for further electronic advancements. The other two advances are static electrically sorted diamond abrasives and the optically-flat-facet polishing lap, the Batt Lap, invented by Jonathian Roulf, a.k.a. “Gearloose”. See: #50.

Upcoming Events

Wed. October 16th – Regular club meeting – meeting starts at 7:00

Oct. 16 - Fossil Open House, 7 pm - 8:30 VT Museum of Geosciences, 2062 Derring Hall, 926 West Campus Dr., Blacksburg, VA 24061 (National Fossil day!) The Paleontology Research Group is offering an evening open house with the Museum. This is a chance for the public to learn about discoveries from field work, tour the preparation lab, help process fossils, and talk with the scientists. All are welcome! (Forwarded to us by Ed Blackford)

October 26, 2019, from 9:00 AM to 4:00 PM, First United Methodist Church, 840 Trenton Rd, Fairless Hills, PA ULTRAVIOLATION is the ULTIMATE annual show for the fluorescent mineral enthusiast, whether a novice or serious collector. The show features many of the world's premier fluorescent mineral COLLECTORS AND DEALERS who strive each year to bring the biggest, brightest and best fluorescent minerals to satisfy the insatiable cravings of the fluorescent collector. ULTRAVIOLATION highlights fluorescent minerals exclusively and is the next best thing to night collecting. Free admission and a fluorescent mineral specimen for each junior mineralogist 12 years and younger when accompanied by an adult.

November 23-24—FAIRFAX, VIRGINIA: Annual show; The Northern Virginia Mineral Club; George Mason University, 4400 University Dr., Dewberry Hall, Johnson Center; Sat. 10-6, Sun. 10-4; Adults $6, seniors $4, teens (13-17) $3, free admission for children 12 and under, scouts in uniform and GMU students; More than 20 dealers offering minerals, fossils, crystals, gems, jewelry, carvings, and meteorites, along with demonstrations, exhibits, and activities for children; contact Tom Taaffe; Email: rockcllctr@gmail.com

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