



# September Newsletter

9/2021

Volume 2021, Number 9

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[Meeting at Miller Center](#)  
301 Grove Street  
Lynchburg, VA 24501  
3<sup>rd</sup> Wed of the month  
7:00 pm until 9:00 pm. It  
will be in the Aviary through  
the rest of the year

[Wintery weather meetings](#)  
schedule is if the Lynchburg  
schools are down for  
weather then the meeting is  
cancelled

[Workshop is the 2<sup>nd</sup> Saturday](#)  
of the month.

## President's Meanderings:

By James Tomlin

I wanted to say that I consider myself very fortunate to be a part of this community and I am proud of its people. I have witnessed so many acts of kindness towards one another. People sharing their knowledge, craftsmanship, time and wisdom. I believe we are a very strong club with our common love and passion for the hobby. I always look forward to our meetings, workshops, shows and field trips. I would like to thank you all for being such a wonderful group to spend time with.

This month is our field trip to Willis Mountain and if you would like to attend please send an email to [lynchburgrockclub@yahoo.com](mailto:lynchburgrockclub@yahoo.com) if you have not already signed up. Keep in mind that it is advised to attend this month's meeting to go over some of the safety precautions we will need to abide by. If you need help finding any of the safety items please ask a board member and we will point you in the right direction. I am really looking forward to this trip and I'm hoping to see you all out there!

I am still working out a meeting location for October. I will let everyone know in next month's newsletter so please be patient. The remainder of the year's meetings will be in the Aviary. Thank you for your understanding and patience with the situation.

Your Fellow Rockhound,  
James Tomlin  
President GMSL

## 2020 Officers

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Eric Routon**

**Youth Out Reach**

## September Meeting Presentation

DRONES AND ROCKHOOUNDING: AN INTRODUCTION TO DRONES, THEIR USE IN GEOLOGY/ROCKHOOUNDING AND HOW THEY WILL FOREVER CHANGE OUR UNDERSTANDING OF EARTH

By Zachary McKinney



Welcome to Zachary McKinney Photography Aerial Imaging and Video. I am your full-service provider for drone-based aerial imaging and video in Virginia and the Mid-Atlantic region. I am able to handle just about anything at a fraction of the cost compared to traditional manned airplane and helicopter fees.

Zachary holds a valid FAA issued Remote Pilot Certificate with a Small Unmanned Aircraft endorsement and is legal to operate and conduct commercial drone activities as outlined in FAA Part 107 rules.

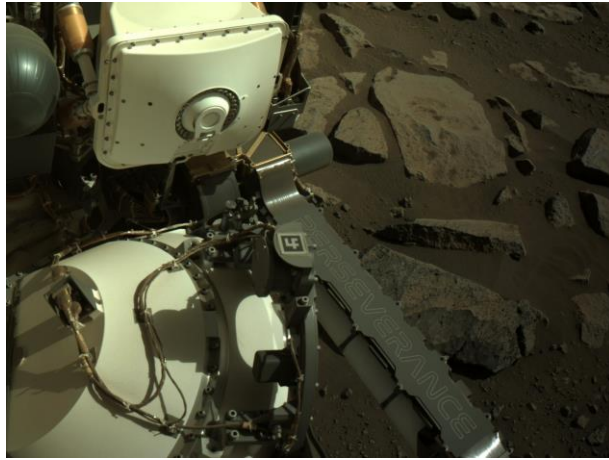
I use a Yuneec Typhoon H 6-prop sUAS. The Yuneec Typhoon H's camera has a max resolution of 4K, with a 12 MP still image sensor. Unless requested, your videos will be shot in 1920x1080 (full HD), and still images will be taken at their max size.

All operations must take place in daytime Visual Flight Rule conditions. For safety, we will not fly during rain, snow, thunderstorms, high winds, low visibility, etc. even if VFR conditions are present. We will not fly if wind speeds are greater than the max conditions listed in the aircraft's operating limits manual. Wind speed will be taken at the site using a handheld Kestrel anemometer.

We are based in Victoria, Virginia, but travel often and are willing to travel to you! Let's talk about your photography needs today. Drop us a message via the form below. If you like doing things old-school, you can mail us at: Zachary McKinney Photography PO BOX 6 Victoria, VA 23974

In addition to my aerial imaging services, also check out [zackmckinney.com](http://zackmckinney.com) to see my additional services such as ground based photography, web design and DJ'ing.

Collecting on Earth First and Now Collecting on Mars - Picture of Mars surface taken by Mars Perseverance Rover Sol 178: Right Navigation Camera (Navcam) and NASA's Mars Perseverance rover acquired this image using its onboard [Left Navigation Camera \(Navcam\)](#). The camera is located high on the rover's mast and aids in driving. This image was acquired on Aug. 22, 2021 (Sol 180) at the local mean solar time of 14:23:11.sjb



## Program for the rest of the year\*

### **OCTOBER MEETING**

Research of the Historic Rutherford Mine Pegmatite No. 2 - You don't want to miss this meeting. Scott Duresky will present a report on the minerals found in the pegmatites at the Rutherford Mine, Learn details about mineral identification and the unique minerals found at the Rutherford mine. A professional level study. See <https://www.mindat.org/loc-4201.html>

**See below for presentation preview.**

### **NOVEMBER MEETING**

Happy Thanksgiving. We will have the annual club fundraising auction

### **DECEMBER MEETING**

Merry Christmas. Potluck dinner with a dirty Santa gift exchange.

## First Vice President

Virginia is the very best commonwealth to find rocks and minerals. Rocks are all over Virginia, you just have to pick them up.

A warm thank you goes to Dr. John Morrissey of Sweet Briar College for the August presentation of Shark Night. Very interesting.

Did you know elofjall is Icelandic for volcano? The Geldingadalir volcano in Iceland is having a fissure eruption this year. We can watch igneous rock being made. Maybe the Icelandic volcanoes will make enough new land to replace the land lost to sea level rise.

If you would like to present a program or suggest a program for a meeting, please talk to an officer or send an email.

The September meeting presentation will feature Zachary McKinney speaking about flying drones and rockhounding. Drone technology is providing a new perspective to exploring geology. Imagine a drone carrying your specimens from the Farber mine. You may remember a younger Zack when he was a member of our rock club. Come by to catch up and hear the latest. Let's give Zack a big welcome.

Cheers,

Steve Boylan



## Field Trips (Yes I said Field Trips)

September 25<sup>th</sup> from 9 am to 1 pm at Willis Mountain (more information coming soon)

Pictures from Linda Noble:



[Willis Mountain Mine, Sprouses Corner, Farmville Mining District, Buckingham Co., Virginia, USA \(mindat.org\)](http://mindat.org)

## Note from the Editor

Hi All,

Well, we have our first field trip in a long while coming up, are you ready? I am looking forward to getting out, even if I do not find anything it will be a great day. Remember to sign up.

I would love some pictures from any of you and about anything to put in the newsletter. I am giving out of my own pictures so please send me some of yours. Or give me something else to put in the place. That would give me some other inspiration and maybe bring joy to others also.

That is all for now,  
Steve

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## Note from the Membership Chair-person

Debbie Wade

Hi GMSL,

I am hoping one of you would be willing to take over being Membership Chairperson from me. Primary duties include the following:

- Getting mail from PO Box at Odd Fellows Rd
- Inputting new members on Excel spreadsheet and keeping it maintained
- Mailing new members badges, welcome letters and such
- Checking Facebook to approve qualifying membership requests and Instant Message others with a "please join us" script
- Forwarding any membership payments to the Treasurer
- Keeping Steve and Dave apprised of new members for workshops and newsletter
- Attend Board Meetings

I would gladly sit down with you at my home and show you what I do and pass on all of the equipment and supplies I have here for the club. Of course, I still want to be an active member, just not Membership Chairperson.

Thank you,

Debbie Wade [debbie5227@yahoo.com](mailto:debbie5227@yahoo.com)

**P.S.: We have 134 members currently in the club**

## **The Gem & Mineral Society of Lynchburg Meeting Minutes:**

August 18, 2021 @ 7:00

**Attendance:** 28 Members & 3 guests

Meeting called to order by James Tomlin

### **Message from the Secretary:**

Unfortunately I do not have any minutes recorded for our August meeting. Due to our membership chair and treasurer not being able to attend, I took on the roles of membership, treasurer and secretary. As many of you noticed at the meeting I was completely overwhelmed and busy trying to accomplish all of these tasks at once. I greatly appreciate everyone's patience with me at the meeting. I am proud of all that I did accomplish, but I sincerely apologize that I was unable to record minutes for the August meeting. So, please bear with me as I attempt to remember at least some of what took place at the meeting with the help of my husband.

**On Time Drawing Winners:** □□♀□

**50/50:** Linda Noble won \$4.50 and donated it back to the club

**Old Business:** None that I'm aware of.

### **New Business:**

-We have locked in a date for our Show and Sell next year. That date is July 23, 2022. It will be open to the general public for attendance, but vendors must be vendors of a club. At this time tables will be the same price as this year: \$30 for the first table and \$20 for each additional table.

-The Willis Mountain field trip is coming up on September 25, 2021. You must be signed up to attend the trip by September 15, 2021 in order to attend. Signup sheets are by the door at each meeting and you may also send an email to: [Lynchburgrockclub@yahoo.com](mailto:Lynchburgrockclub@yahoo.com) to sign up as well. This trip is opened up for other clubs to join and there is a cap of 150 people to attend. So please sign up as soon as possible.

-The 3rd Saturday of every month Dave Callahan has a sale at his house from his personal collection.

-We have decided not to the Apple Harvest Festival this year due to lack of volunteers signing up to help out. We will try again next year.

-We will need volunteers to start signing up to help out for the Roanoke show in November. You can sign up at the meetings starting in September as well as email [lynchburgrockclub@yahoo.com](mailto:lynchburgrockclub@yahoo.com)

-We are working with Parks and rec on finding another meeting place for the month of October as well as for 2022 due to renovations being done.

**Presentation:** Dr. John Morrissey Ph.D., Professor of Biology at Sweetbriar College gave a fascinating presentation on sharks and rays.

## October meeting preview

### The Historic Rutherford Mine Pegmatite #2, Amelia Courthouse, Virginia by Scott Duresky

Until its permanent closure in 1998, the Rutherford Mine was one of the most important locations in the United States for the collectors of rare-earth and Niobium and Tantalum-bearing minerals. It was also known for some of the finest gem-quality Spessartine garnets in the world, beautiful crystalline masses of Albite var. Cleavelandite and a number of other rare mineral species.

Although I had collected in the Mine many times during the 1960's and 1970's, after unexpectedly acquiring a very large quantity of virtually unexamined mineral specimens 10 years ago, and aware that the last of many research papers was written at the time of the Mine's closure, I made the decision to re-examine the mineral species that occurred in the pegmatite, using modern research tools such as Electron Dispersive Spectroscopy (EDS).

The Rutherford Mine was particularly noted for the world-class Microlites, which in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries found their way into the collections of major natural history museums in the United States and Europe. The Microlites had been a particular interest of mine as well, and I was aware that in 2010, the IMA had organized the Microlite Group as a member of the larger Pyrochlore Supergroup,

This became my primary area of research – to determine that in addition to **Fluorcalciomicrolite** ( $(\text{Ca},\text{Na})_2(\text{Ta},\text{Nb})_2\text{O}_6\text{F}$ ), which had been confirmed as the dominant member of the Microlite Group in the pegmatite, if other members of the group may have occurred as well. I can now confirm that while one species, **Oxycalciomicrolite** ( $\text{Ca}_2\text{Ta}_2\text{O}_6\text{O}$ ), has been tentatively identified, two others have been confirmed: **Kenoplumbomicrolite** ( $\text{Pb},\square)_2\text{Ta}_2\text{O}_6(\square,\text{OH},\text{O})$  and **Oxystannomicrolite** ( $\text{Sn}_2\text{Ta}_2\text{O}_6\text{Oto}$ ).

**Kenoplumbomicrolite** is the only lead-bearing member of the group, and **Oxystannomicrolite** is the only tin-bearing member, and each of these to date has only been identified from a single other worldwide pegmatite.

**Oxycalciopyrochlore** ( $\text{Ca}_2\text{Nb}_2\text{O}_6\text{O}$ ), a rare member of the Pyrochlore Group, was also tentatively identified. Three other species have been confirmed that have not been reported in Mindat:

**Brockite** ( $\text{Ca},\text{Th},\text{Ce}$ ) $\text{PO}_4 \cdot \text{H}_2\text{O}$ )

**Columbite** –( $\text{Mn}$ ) ( $\text{Mn}^{2+}\text{Nb}_2\text{O}_6$ )

**Phlogopite** ( $\text{KMg}_3(\text{AlSi}_3\text{O}_{10})(\text{OH})_2$ )

After seven years of intensive research, what has been assembled is likely the most complete collection, including the newly identified rare species, of the minerals that occurred in the pegmatite.

#### The Rutherford Mine Research Collection

It is very rare that a complete collection from a historic locality is preserved for future generations of collectors and researchers. With this in mind, and beginning in the late Fall of 2021, this entire collection will be photographed and then stored as part of the Virginia Mineral Project, an entirely separate entity associated with the Friends of Mineralogy, Virginia Chapter.

Protocols and procedures have been developed for the purpose of making this collection available to others, but right now, I am making this request:

If you collected at the Rutherford Mine, you may have specimens which have been some of the stars of your personal collection. If you're thinking of what to do with these special memories of your collecting days, we're asking you to consider donating some of your specimens to the Rutherford Mine Research Collection. We're always looking to upgrade what we have in order to make it more essential and valuable for all.

If you're interested in discussing this further, please email me at [scott\\_duresky@yahoo.com](mailto:scott_duresky@yahoo.com), or call me at 434-882-3863.

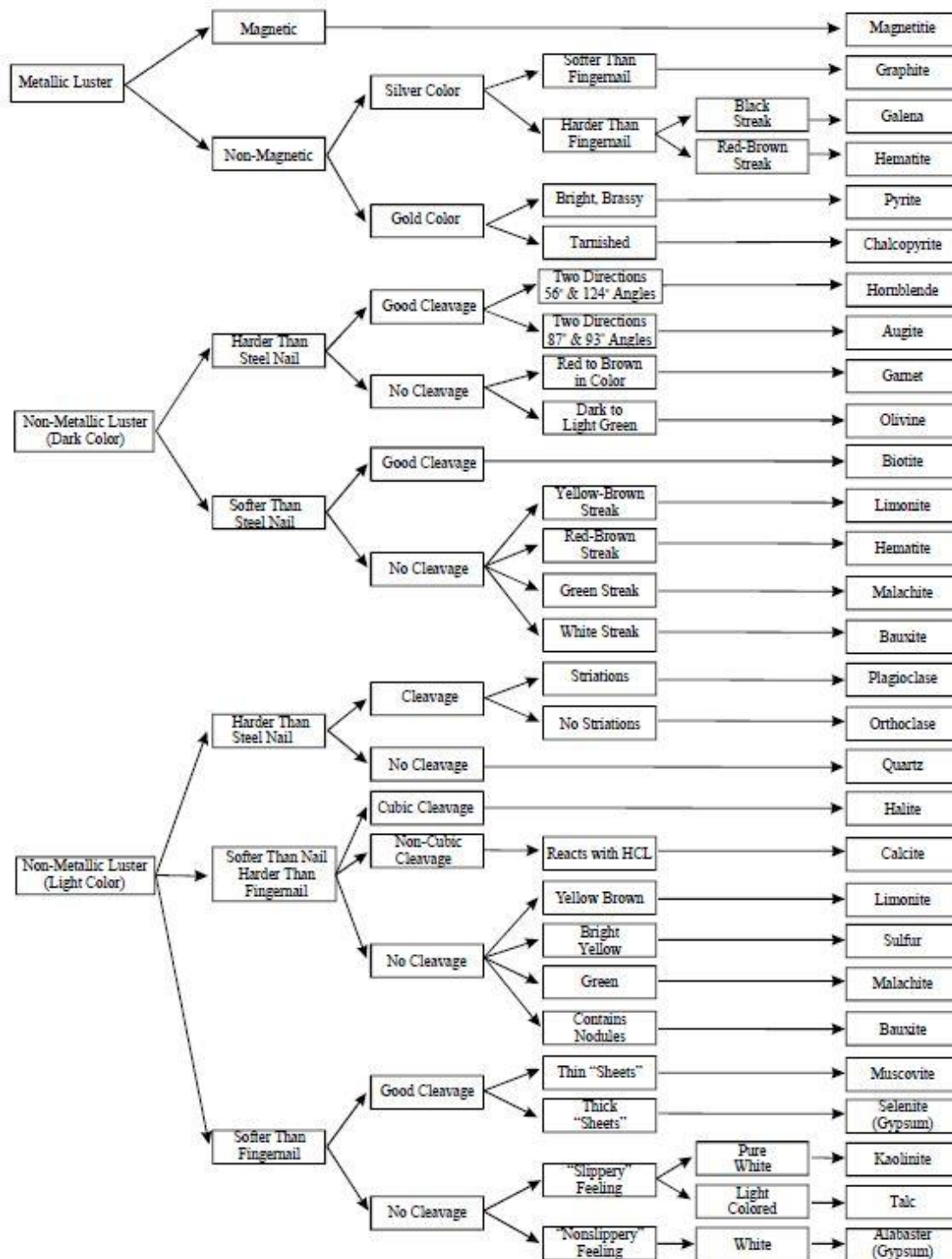
I'm looking forward to your call!  
Scott Duresky

## I found this chart in another club's newsletter

I thought that someone would find it helpful in identifying their mineral (rock)

# Steve Howe's Mineral Identification Flowchart

(Provided by Steve to assist in your participation in the mineral identification exercise that will be part of the February 25, 2021 Virtual Meeting)





## [Other Links that you may want to check out:](#)

### **International Gem Society**

<https://www.gemsociety.org/reference-library/>

### **Mineral Cleaning for Amateurs**

John's website is full of information that all mineral collectors will find useful and interesting.

<http://www.johnbetts-fineminerals.com/>

### **Morefield Mine Tour:**

<https://www.youtube.com/watch?v=u5aQp57HMso>

### **Impromptu lecture on crystallography:**

The crystallography talk can be found in the You Tube videos at [https://youtu.be/sTtxMrh9\\_QI](https://youtu.be/sTtxMrh9_QI), or copy and paste in your browser: [Crystallography by Dave Woolley](#).

### **A Guide to Ethical and Conflict-Free Jewelry**

<https://ethicaljewellery.org/introduction>.

### **Insurance Institute of Jewelry Appraisal**

[https://instituteofappraisal.com/Investigation\\_of\\_Artificial\\_Color\\_Infusion\\_of\\_Gemstones.pdf](https://instituteofappraisal.com/Investigation_of_Artificial_Color_Infusion_of_Gemstones.pdf)

[https://instituteofappraisal.com/Exposing\\_the\\_GIA\\_Juggernaut.pdf](https://instituteofappraisal.com/Exposing_the_GIA_Juggernaut.pdf)

### **Rock collecting guide for geology beginners**

<https://www.basementguides.com/rock-collecting-and-geology-basics/>

### **Facebook Link for the club**

<https://www.facebook.com/groups/432839874271992/?ref=share>

### **Link to Mindat web page for Willis Mountain**

[Willis Mountain Mine, Sprouses Corner, Farmville Mining District, Buckingham Co., Virginia, USA \(mindat.org\)](http://Willis Mountain Mine, Sprouses Corner, Farmville Mining District, Buckingham Co., Virginia, USA (mindat.org))

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**If you need to renew your club membership you can let me or Debbie Wade 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.**

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**Lynchburg, VA 24506-1975**

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