



Volume 18 Issue 2 February 2009



Presidents Message:

Hello To All,

I feel like the month of January flew by. That's what happens when you stay busy. Speaking of busy. the Field Trip to J.M.U. on Saturday morning the 24th and the afternoon trip to Onyx Hill made for a full day. We had a great turnout for the Geology Lab and Museum tour. There were lots of specimens to be identified by Dr. Lance Kearns with the help of the X-Ray Defractor. He ran three samples for Nona and me and found out we had a new mineral find for the Willis Mt location at Kyanite Mining Corp. It was a small white zeolite crystal called Wagnerite, surrounding a vug in a specimen of kyanite and quartz. Another new location find for Boxley Quarry at Blueridge, VA was a small acicular crystal of Aragonite. Also known as Flos Ferri, meaning Iron

Happy Valentines Day!

Flower. Last but not least we found out that a small bright pink crystal we found at the Martin Marietta Quarry at Haw River in N.C. was a zeolite mineral called Gismondine. I guess it pays to look closely at your specimens, you never know what you may discover.

It was pretty cool that afternoon when we arrived at Onyx Hill. As the small band entered the wooded site at the old mine we started finding some great pieces of interesting looking Travertine, or Cave Onyx. This was the first trip for several in the group so they were busy collecting some specimens for their collections as well as some nice yard rocks. Dave Callahan and Continued on page 3

From the First VP:

February's mineral is cassiterite. Cassiterite is tin oxide and has a compound formula of SnO2. Cassiterite is in the tetragonal crystal system. It is a principle ore of tin. It has occurred as fine sharp crystals in the pegmatites at Amelia, Virginia. Did anyone find some cassiterite at the Morefield Mine?

Thank you Ann Torning for sharing the January's program DVD, Volcano Nature's Inferno. We enjoyed watching it. The take home lesson is to be careful when exploring volcanoes with volcanist. They seemed to have a lot of rocks hit their heads.

ORANGE ALERT. This is not a drill. Orange alert for the Redoubt volcano in Alaska. The aviation color code is orange not yellow. The volcano alert level is WATCH. So watch we will.

On the Alaska Volcano Observatory website (www.avo.alaska.edu) there is a live webcam which shows the Redoubt volcano. It looks kind of dormant right now. It looked kind of dormant an hour ago. Last night the webcam showed a gray screen but I watched it anyway. It looked dormant yesterday also. Something is going to happen so I will continue to watch the webcam. I hope it happens soon. The most probable outcome is scenario number two. Scenario number two is unrest continues to escalate culminating in an eruption. The hazards would be an ash cloud, ash fall, lahars (mudflows) and pyroclastic flows. If we all watch the webcam at the same time, this should count as a field trip. Continued on page 9

2009 ELECTED OFFICERS

John Haskins - PRESIDENT (434) 525-8430 JMHaskins1@netzero.net

> Steve Boylan First Vice President (434) 534-6108 boylansj@yahoo.com

David Callahan Second Vice President (540) 297-1853 DBCALL1@aol.com

Dorothy Rivera- Secretary (434) 237-0673 dlrivera55@gmail.com

Natalie Darling – Editor (434) 941-1899 gmsleditor@comcast.net

Frank Midkiff- Treasurer (434) 239-8329 midkifff@aol.com

Members At Large-JoAnn Mason & Tom Powers

COMMITTEE CHAIR PERSONS:

Field Trips- David Callahan

Hospitality-Anne Torning

News Articles- Natalie Darling

Silent Auction- Warren Darling

Special Events- Dee Tinsley

Swap for Rocks-Warren Darling

Website- Alan Rice

Workshops- Dave Woolley

FRA Adult Liaison- David Murphy

Membership- Ralph Torning

The purpose of the Gem &
Mineral Society of Lynchburg,
VA, INC. is to promote
education in The Earth
Sciences including: Mineralogy,
Geology, Gemology,
Paleontology, and
Crystallography

January Meeting Minutes

Meeting: Wednesday, January 21st, 2009

Attendance: 34 members and 5 auests.

Hospitality: Steve Boylan thanked all who contributed to the refreshments.

On Time Drawing: Nicholas Smith won an amethyst specimen, Alan Rice a pyrite cube, Diane Capobianco an aquamarine pendant and Jean Midkiff: won a geode. Congratulations to the winners, and thank you to the donors of these prizes.

Old Business: President John Haskins reminded everyone that when renewing memberships, to please fill out a renewal form, so that our contact and general membership information can be updated and kept current.

First Vice President: Steve Boylan reported that Will Tinsley from CVCC will be the guest speaker next month. He will be speaking about volcanoes. For this month we will watch a DVD about volcanoes. Steve would like more member participation on his survey. He would also like some suggestions on future programs.

Second Vice President: Dave Callahan reported there would be a field trip to JMU, on Sat.-rocks and books will be for sale

there. For those interested. there will be a collecting trip to Onyx Hill after JMU. On Jan. 31st there is a field trip to Diamond Hill Mine; on 2/21/09 there will be a bus trip to the Smithsonian \$10. a seat. Dave will let us know at next meeting how many seats are available. April will be the annual Franklin NJ collecting trips for fluorescent and other minerals and Geode Collecting in KY in the works for May. Dave also talked about safety on field trips- We are all responsible for ourselves as well as each other, so if you see anyone doing something unsafe, please say something to them or a club officer if necessary. Dave also told us about a rock garden that was being made on an Amherst bike trail. We are still taking orders for club T-Shirts: we need a minimum of 12 to order. Treasures Report: Franklin

\$2459.49 in our account.

New Business: John Haskins: discussed current projects: we are looking for volunteers to coordinate displays at the Nature Zone and Mt. Athos Quarry. Also the possibility of displays at local libraries and

Midkiff reported a balance of

Continued on page 3

The Gem and Mineral Society of Lynchburg VA, Inc.
Meets on the third Wednesday of each month,
From 7:00pm- 9:00pm
In the auditorium of the Parks and Recreation Building
301 Grove St. Lynchburg, VA 24501
Public is invited, Please join us!



Our 10-minute presentation for the January meeting was "Sediments and Sedimentary Rock", by club member, geologist Dave Woolley. Thank you Dave, for your continued interest and for sharing of your knowledge with our club members.

For the January program we enjoyed a National Geographic DVD on volcanoes. We will continue this theme for February with a speaker from Central Virginia Community College, who will further educate us on this subject. Mark Tinsley will speak on a relatively local volcano: Trimble Knob, in Monterey VA. Please join us for this presentation and make our guest feel welcome.

Presidents Message: continued from page 1

were more interested in finding some larger solid pieces for making bookends and candles.

We were successful in getting some fifteen pieces loaded on the truck, with some help from Royce and Chris Whickham and Mark Hodges. We had to park the vehicles some distance from the mine because of crops planted in the adjoining field. Thanks for all your help; you made our day a lot easier. As soon as the weather warms a bit we will have a workshop at Dave Callahan's for making some finished pieces for the upcoming festivals.

If you have been on a field trip and have found something interesting, why don't you share it with the club by writing an article for our monthly newsletter? I know Natalie would be very receptive to a new article and the club will be the better for it. I've heard some good stories from some of you about your collecting experiences; why not share them with the rest of the club through the newsletter. You are probably getting tired of hearing the same old thing from me each month. So get in there and E-mail an article for all of us to share.

We still would like some help getting those displays of minerals filled up at the Nature Zone as well as Boxleys Mt. Athos Quarry. We will have more details at the February meeting. I hope to see you all there on the 18th.

Keep Looking Down, John Haskins

Meeting Minutes... Continued from page 2

schools etc.

JMU donated a lapidary machine, which needs belts and parts- members in attendance approved the purchase. We will also be collecting rocks for bookends if anyone would like to donate. Please keep this project in mind when you are on a field trip.

Dave Woolley gave a 10-minute presentation on Sediments and Sedimentary rocks.

After the presentation, we watched a DVD on volcanoes.

Minutes submitted by Dorothy Rivera, Secretary

From the desk of Dave Woolley...

Zeolites...

For those of you who have interests in zeolites, I found "Zeolites of the World" as a free download from Mindat.org. This may well be the "bible" for zeolites. It is listed under "Mindat News" and "25th December 2008" on their home page as a Christmas Present given by author, Rudy Tschernich. Note that the author is active in the field of zeolites (Tschernichite) and that he is soliciting new authenticated locations to post.

Field Trip Report

PAST COMBINED FIELD TRIPS



Field Trip Report submitted by Dave Callahan, field trip chairman.

James Madison University Geology Department and a collecting adventure at Onyx Hill

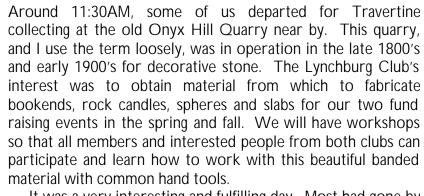
January 24, 2009

What a great field trip, beautiful weather and a tremendous group. Of the 44 that signed up, 31 actually made the trip, and eight took the time to let me know they couldn't attend. That leaves five that did not call to cancel so I guess that they are still wandering around somewhere out there. Please, if you sign up for a trip and some unforeseen circumstance keep you from attending, have the courtesy to let me know. I don't' want to send out search parties to hunt for you. We do go to some remote places at times and people do get lost or have car trouble. I'd hate to leave you stranded in the back hills of Kentucky, North Carolina or even Virginia.

Dr. Kerns was prepared for us at 8:30 so the early arrivals ventured in to have some hot coffee and delicious sweet rolls. He had a big box of books for sale at very reasonable prices as well as many mineral specimens fairly priced and some for any donation you cared to give. All the proceeds of course go the betterment and upkeep of his Mineral Museum at JMU.

We had many minerals to identify and some from our last trip to Boxley's Mt. Athos Quarry in Campbell County had been previously un-reported. A host of Zeolites were identified from the Haw River Quarry in North Carolina, a location we will explore in the spring. There was a lot of interest and many new members. There were many drawers to explore in the lab. Many filled with beautiful specimens and wonderful surprises.





It was a very interesting and fulfilling day. Most had gone by the time John, Nona and I had carried the rock down the hill and to the car. Royce and Chris really helped us by carrying some of the material. The field was planted and was soft so we couldn't drive on it. A big thanks to all that helped and I believe that everyone collected some really unique material and had a memorable experience.





For further information on field trips, contact David Callahan, 540-297-1853
Email dbcall1@aol.com

OUR NEXT FIELD TRIP

If you have signed up for the Smithsonian Trip bring your money to the meeting. Remember that I will only accept checks on the bus, NO CASH. \$10.00 per seat...what a deal!

ROANOKE VALLEY MINERAL & GEM SOCIETY, INC. FIELD TRIP

THE SMITHSONIAN INSTITUTE MUSEUM OF NATURAL HISTORY, WASHINGTON, DC.

THE LYNCHBURG GEM & MINERAL HAS BEEN INVITED TO ATTEND. FEBRUARY 21st 2009

Cost \$10.00 per person for the two way Bus trip.

There will be a final sign-up sheet at the Roanoke Club's February12th meeting. After this cutoff date, the trip will be opened for the Lynchburg Club. The cutoff date for the Lynchburg Club will be at their February 18th meeting. Any unsold seats will be offered to other clubs or individuals. You MUST sign up at the meeting, call me or e-mail me to reserve your seat. The contact information is listed below and you must <u>prepay for this trip</u>. Checks will be accepted at the bus if you can't make the meeting. Make the checks payable to the "Roanoke Valley Mineral and Gem Society Inc." or RVMGS. I will accept cash only at the meeting, not on the Bus. <u>Please have the correct change</u>.

MEETING PLACE: Wal-Mart Supercenter parking lot at the intersection of US 460 and Rt. 220 Alternate in Bonsack VA. At this traffic light there are signs directing you to the I-81 interchange in Cloverdale. Driving from Lynchburg, do not turn right on Rt. 220A but proceed straight thru this traffic light on US 460 W. The entrance to Wal-Mart is on the right immediately after you cross this intersection so stay in the right lane. Turn right up the hill and turn right again into the Wal-Mart parking lot. If you are traveling from Roanoke, there is a turn off just before the traffic light at this intersection. Turn left and proceed up the hill to Wal-Mart on the right. The Abbott Trailways Bus should be there by 5:30AM, parked in the lower part of the lot near the Wal-Mart lawn and garden area. Look for our group and we will leave our cars in the Wal-Mart lot. Park only in the lower end of this lot.

DEPARTING: <u>The Bus will depart</u> from Wal-Mart promptly at **6:00 AM and stragglers will be left.** Be sure to have eaten breakfast before getting on the bus. We expect to arrive at the museum at 10:00 AM. The bus has only a small restroom so be prepared for the four-hour trip.

EQUIPMENT: Cameras are acceptable but tripods are not allowed.

TOURS: There will be no guided tours. You will be on your own. You may venture to other buildings and areas around Washington but it will be your responsibility to be back at the Natural History Museum to board the bus between 4:30 and 5:00PM.

HOURS: 10:00AM to 5:00 PM. Admission is free. Expect to go thru security screening so don't take things that might be confiscated such as weapons.

MEALS: There is a cafe in the building open from 10 to 5. Lunches, snacks and souvenirs can be purchased here. Bag lunches are not allowed in the museum.

RESTRICTIONS: The bus is limited to **54 seats**. This trip is on a first come, first served basis. Over 54 members will be placed on a waiting list. The fee will be refundable **only** if you notify me 24 hours in advance that you can't attend so that someone else can have your seat.

Up Coming Field Trips

Continued from page 5



DEPARTING: The bus will depart from the main entrance at 5:00 PM sharp. It will be your responsibility to make the connection. We should arrive back at Wal-Mart between 10:30 and 11:30 PM. We will be a stop for the evening meal the way home at the Golden Corral Buffet and Grill in Manassas. You are responsible for this cost, and anything you spend at the museum.

INFORMATION: Call or e-mail David Callahan, Field Trip Chairman, at 540-297-1853 (home), 540-874-5201 (cell) or <u>dbcall1@aol.com</u> to sign up, cancel your reservation or if you need additional information. If I'm not there to answer the phone, let it ring until the answer machine picks up and leave a message and your phone number. I will return your call.

Combined Lynchburg and Roanoke Clubs Mineral Collecting Field Trip

Saturday February 28, 2009

Sign-up required. Call me, email me or sign up at the meeting

We will explore an old quarry in Nelson County and will be able to collect some massive rutile, ilmenite, feldspar and blue quartz. This material is hard and will make beautiful specimens and will take a good polish. In addition to personal specimen collecting, please help the Lynchburg Club in its quest to collect hard solid material to make bookends, rock candles and spheres for sale at our two fund raising events.

We will meet in Lynchburg, Saturday morning, at the Jumbo Family Restaurant on US 460 East at 9:00 A.M. and depart from there promptly 9:15A.M. The Jumbo is a very short distance past the US 501 south interchange on the east side of Lynchburg. It should take about 30 to 40 minutes to arrive at the mine. Be sure that you are fueled up and ready to leave by 9:15 A.M.

Dress for the weather that day and be sure to bring food, water and warm clothing. Wear boots, gloves, long pants and safety glasses. Hard hats will not be required.

SAFETY NOTE...DO NOT CLIMB UP OR DOWN THE QUARRY WALL. THIS IS UNSTABLE, UNSAFE AND THE QUARRY IS FULL OF WATER.

Bring a hoe or something to turn rocks and watch where you put your hands. There may be a surprise waiting underneath.

Bring a hammer and chisel to break rocks, buckets and newspaper to wrap any delicate specimens you might find. Digging tools and a sledge may come in handy. We can drive into the quarry if it is dry. A low-slung car or 2-wheel drive may bottom out and get stuck. We will make that decision when we observe the situation that morning. It may be frozen in the morning but will be slick and muddy as things warn up during the day. There is no age limit but children must be supervised. There are NO restroom facilities at this site.

More information will be available at our next meeting as well as samples of what you can expect to find. We must arrive together but you will be free to leave at any time.

Schedule of Events...



SHOWS & TRIPS

February 21st- Tentative date for the annual Smithsonian Bus Trip, sponsored by the Roanoke Valley Mineral and Gem Society (see page 11)

February 21-22, 2009 - Annual James Campbell Memorial "Gem, Mineral & Fossil Show" sponsored by the

Capital District Mineral Club and NY State Academy of Mineralogy. Museum of the Empire state, 4th floor, Empire State Plaza, Albany, NY.

March 28-29, 2009- Western Massachusetts Mineral, Jewelry & Fossil Show sponsored by the Connecticut Valley Mineral Club. Holiday Inn at Ingleside, Holyoke, MA.

<u>April 17th-19th-</u> Treasures of the Earth Gem, Mineral, Fossil, and Beads Show, Charlottesville, VA. <u>www.toteshows.com</u> for details.

<u>April 17th-23rd-</u> First spring session of Wildacres.

www.AMFED.org.EFMLS for details or to download an application.



There was no Executive meeting held in February.

February 2009

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
	1 2	3	4	5	6	7
	8 9	10	11	12	13	14 Valentines Day
1	5 16 Presidents Day	17	18 Meeting 7:00 PM	19	20	21
2	2 23	24	25 Woolley's workshop	26	27	28

UPCOMING PROGRAMS

February will feature "Volcanism ir the Valley: A brief Examination of TrimbleKnob, Monterey Virginia" by Mark Tinsley, Central Virginia Community College



T-Shirt Orders

We are still taking orders for club T-Shirts.

Order sheet and catalog will be available at the February 18th club meeting. Please see Dave Callahan for details.



Rock Raiders

Types of Volcanoes

Reprinted from Zack's Rocks and Minerals, January 2009

For more articles and information on volcanoes, please visit Zack's web site http://www.zacksrocksandminerals.com/volcanoes/



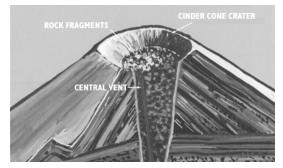
Principal Types of Volcanoes

Geologists generally group volcanoes into four main kinds--cinder cones, composite volcanoes, shield volcanoes, and lava domes.

Cinder cones



Cinder cones are the simplest type of volcano. They are built from particles and blobs of congealed lava ejected from a single vent. As the gas-charged lava is blown violently into the air, it breaks into small fragments that solidify and fall as *cinders* around the vent to form a circular or oval cone. Most cinder cones have a bowl-shaped *crater* at the summit and rarely rise more than a thousand feet or so above their surroundings. Cinder cones are numerous in western North America as well as throughout other volcanic terrains of the world.



Schematic representation of the internal structure of a typical cinder cone.

In 1943 a cinder cone started growing on a farm near the village of Parícutin in Mexico. Explosive eruptions caused by gas rapidly expanding and escaping from molten lava formed cinders that fell back around the vent, building up the cone to a height of 1,200 feet. The last explosive eruption left a funnel-shaped crater at the top of the cone. After the excess gases had largely dissipated, the molten rock quietly poured out on the surrounding surface of the cone and moved downslope as lava flows. This order of events--eruption, formation of cone and crater, lava flow--is a common sequence in the formation of cinder cones.



Parícutin Volcano, Mexico, is a cinder cone rising approximately 1,200 feet above the surrounding plain.

During 9 years of activity, Parícutin built a prominent cone, covered about 100 square miles with ashes, and destroyed the town of San Juan. Geologists from many parts of the world studied Parícutin during its lifetime and learned a great deal about volcanism, its products, and the modification of a volcanic landform by erosion.

Composite volcanoes

Some of the Earth's grandest mountains are *composite* volcanoes-sometimes called *stratovolcanoes*. They are typically steep-sided, symmetrical cones of large dimension built of alternating layers of lava flows, volcanic ash, cinders, blocks, and bombs and may rise as much as 8,000 feet above their bases. Some of the most conspicuous and beautiful mountains in the world are composite volcanoes, including

Continued on page 10

Mission Statement

Future Rockhounds of America is a nationwide nonprofit program within the American Federation of Mineralogical Societies that develops and delivers quality youth activities in the earth sciences and lapidary arts in a fun, family environment. Our underlying goals are to foster science literacy and arts education through structured activities that are engaging and challenging and by which kids- and the adults who mentor them- learn while having fun.

Sunshine News



I am not aware of any illnesses or injuries among our members at this time, and hope this means that all are well! Happy Valentines Day Happy Presidents Day

From the First VP: continued from page 1

I want to thank each of you personally who has filled out the member surveys. You have provided valuable information to guide and direct the planning and programs for the society. And both of you know who you are.

Cheers, Steve

Vinessa Alones of Lynchburg

> James and Brianna Douros of Lynchburg

Lynn, Timothy, Elena, and Stephanie Smith of Lynchburg



Attention Members- The Gem and Mineral Society of Lynchburg has a new Webmaster, club member Alan Rice, and our newly designed web page is up for viewing at www.lynchburgrockclub.org
Please log on when you get a chance, and send your comments on to the Webmaster. Alan would also like to encourage the members to use the forums feature.

Types of Volcanoes ... continued from page 8

Mount Fuji in Japan, Mount Cotopaxi in Ecuador, Mount Shasta in California, Mount Hood in Oregon, and Mount St. Helens and Mount Rainier in Washington.

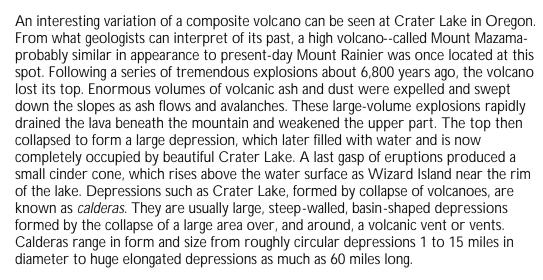
Most composite volcanoes have a crater at the summit, which contains a central vent or a clustered group of vents. Lavas either flow through breaks in the crater wall or issue from fissures on the flanks of the cone. Lava, solidified within the fissures, forms dikes that act as ribs which greatly strengthen the cone.

The essential feature of a composite volcano is a conduit system through which magma from a reservoir deep in the Earth's crust rises to the surface. The volcano is built up by the accumulation of material erupted through the conduit and increases in size as lava, cinders, ash, etc., are added to its slopes.

When a composite volcano becomes dormant, erosion begins to destroy the cone. As the cone is stripped away, the hardened magma filling the conduit (the volcanic plug) and fissures (the dikes) becomes exposed, and it too is slowly reduced by erosion. Finally, all that remains is the plug and dike complex projecting above the land surface--a telltale remnant of the vanished volcano.



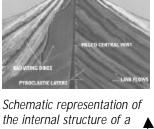
Shishaldin Volcano, an imposing composite cone, towers 9,372 feet above sea level in the Aleutian Islands, Alaska.





A. Magma, rising upward through a conduit, erupts at the Earth's surface to form a volcanic cone. Lava flows spread over the surrounding area.

B. As volcanic activity continues, perhaps over spans of hundreds of years, the cone is built to a great height and lava flows form an extensive plateau around its base. During this period, streams enlarge and deepen their valleys.



typical composite volcano.



Crater Lake, Oregon; Wizard Island, a cinder cone. rises above the lake surface.

C. When volcanic activity ceases, erosion starts to destroy the cone. After thousands of years, the great cone is stripped away to expose the hardened "volcanic plug" in the conduit. During this period of inactivity, streams broaden their valleys and dissect the lava plateau to form isolated lava-capped mesas. **D.** Continued erosion removes all traces of the cone and the land is worn down to a surface of low relief. All that remains is a projecting plug or "volcanic neck," a small lava-capped mesa, and vestiges of the once lofty volcano and its surrounding lava plateau.

> Next month: Shield volcanoes and Lava domes

Sources: ZACK'S ROCKS & MINERALS, U.S. Geological Survey

Can You Dig It?

Yes, you can in Marion Kentucky. Come dig Fluorite and related minerals during the day and fluorescent minerals at night.

Scheduled Digs for 2009

April 25

May 23

*June 6th & 7th

July 25

August 22

September 19

October 17



*Also, dates of the Ben E. Clement Annual Gem and Mineral Show

Pre-registration is required, so register early as space is limited to the first 30 people per date. Registration forms can be found on our website.

We will gladly schedule private digs for groups of 10 or more people.

For More Information Contact:

The Ben E. Clement Mineral Museum
PO Box 391 Marion, KY 42064
Or call (270)965-4263
Or visit our website at clementmineralmuseum.org

Hobby Related Newsletters are available free of charge by emailing the editors below. Both are great sources of information and worth checking out. (Available only via email)

rudybland@worldnet.att.net (Mineral Mouse, editor Rudy Bland)

rockhound_zack@yahoo.com (Zack's Rocks and Minerals, editor Zachary McKinney)









The Gem & Mineral Society of Lynchburg, VA Inc.

Natalie Darling, Editor 211 Chesterfield Rd. Lynchburg, VA 24502 www.lynchburgrockclub.org

The purpose of the Gem & Mineral Society of Lynchburg, INC. is to promote education in The Earth Sciences including: Mineralogy, Geology, Gemology, Paleontology, and Crystallography



Lynchburg Rock Raiders is the official FRA association of The Gem & Mineral Society of Lynchburg, VA INC



