

TAR HEEL



ROCKHOUND

OCTOBER 2017

Catawba Valley Gem & Mineral Club, Inc.

2017 Officers and Committees

President:	Harry Polly 828-244-6651	Editor:	Slade Harvin 252-702-7299	Show Chairman:	Dean Russell 828- 303-1448
Vice President:	Joan Glover 828-446-7633	Field Trip:	OPEN	Scholarship:	George Max 828-328-9107
Treasurer:	Terry Russell 828- 303-1563	Education:	George Max 828-328-9107	Eastern Federation Liaison:	Larry Huffman 828-612-4469
Secretary:	Dean Russell 828- 303-1448				

Club Address: PO Box 2521, Hickory, NC 28603-2521
 Regular Meetings: Second Tuesday, 7:00 PM
 St Aloysius Catholic Church
 921 2nd St NE Hickory, NC
 Annual Dues: Family, \$18; Individual, \$12; Junior, \$6

The purpose of the Club is to increase the individual’s knowledge of the earth sciences and to aid in the development of lapidary and related arts and skills; to promote fellowship and exchange of ideas; to hold exhibitions, contests, lectures and demonstrations for educational purposes; to help interest more people in the gem and mineral hobby; and to capture and preserve the beauty of nature, the arts, and the works of man.



Photo: S. Harvin Fluorite and Barite (Kentucky)

INSIDE

October Field Trip	2
Program	2
President’s Message	2
Meeting Minutes	2
Annual Club Auction	3
Membership Updates	3
Caldwell Quarry	3
The Pebbles’ Corner	3

CATAWBA VALLEY GEM & MINERAL CLUB, INC.

<http://www.cvgmc.com>

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Program

The October program will be a presentation by Ron Ruschman about the Tuscon Show titled, "It is a Colorful Goodbye Tucson.

We look forward to seeing everyone.

October Field Trip

The October field trip will be discussed at the meeting.

Also, everyone is asked to please consider taking the Field Trip Coordinator position for the Club.

President's Message

Well, another month has rolled around. We need to start looking at who our officers will be for the coming year. Elections are coming up the month of November. Please consider serving if you are asked. Positions include President, Vice President, Secretary, and Treasurer. Other positions needed to be filled are Field Trip Chair and Board members at large. All offices are important. Holding office is a great way to get involved in your club, and new faces help the club grow as new ideas are brought to the table.

We also need a theme for our show in March. If you have an idea, please talk with one of the officers. While we are on the subject of shows, I will remind all that the EFMLS convention and show will be held in Bristol, CT on October 20-22, and at the same time the SEMFS will be holding their convention and show in Knoxville, TN. Larry Huffman is going to the EFMLS convention, while I will be attending the one in Knoxville. If anyone else would like to attend either, please contact Larry or myself for forms.

Harry

Catawba Valley Gem and Mineral Club, Inc.

The September 12, 2017 meeting of the CVGMC was called to order by President Harry Polly at 7:00 PM.

Minutes: Motion by Rick G., seconded by Norma R. to accept the minutes for the August 8, 2017 minutes. The motion was passed by the Club membership.

Treasurer Report:

Bank balance was not reported because bank statement had not arrived in time for the meeting.

Field Trip Report:

- 1) None scheduled for September.
- 2) The Club **NEEDS** a Field Trip Chairperson.
- 3) Harry P. is looking into a Hiddenite trip and a Jackson Crossroads trip.

Education Committee: George M. was to do a talk at the Adult Life Center.

Show Committee: Contracts are coming in.

Old Business: Dan S. will take over the Club rock tumbling.

New Business:

- 1) It was noted that Danny J. passed away.
- 2) Motion by Harry P., and seconded by George B. to donate \$100.00 to the EFMLS Scholarship Fund in memory of Danny J. The motion was passed by the Club membership.
- 3) EFMLS Convention is in Bristol, CT. October 20-22, 2017.
- 4) SFMS Convention is in Knoxville, TN October 20-22, 2017

Closing of Business: The meeting was adjourned at 7:25 PM

Program: CVGMC member, Slade Harvin did an interesting talk on "The Kentucky Labor Day Field Trip – An overview of the trip."

**Respectfully submitted,
Dean Russell, Secretary**

ANNUAL CLUB AUCTION

Mark your calendars for the December meeting. The will be the Annual Club Auction. More details will follow next month so start thinking about what you may want to sell at the auction. Remember that 90% of the proceeds goes to the seller and 10% goes to the club.



MEMBERSHIP INFORMATION UPDATES

If any of your membership information changes (address, phone number, email address, etc.) please notify the treasurer, Terry Russell, as soon as possible so she can update the Club roster.

EFMLS Auction

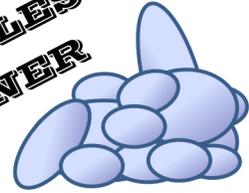
If anyone would be interested in donating an item to be included in the EFMLS auction, please bring it to the October meeting for Larry to bring with him to the convention. Any items need to be able to be packed in luggage and related to the hobby.

Caldwell Stone Quarry and the Walker Vein of Boyle County By: Cheryl Neary

So to continue with our Kentucky field trip.... the group, which consisted of at least 30 vehicles, caravanned to our first day of collecting at the Caldwell Stone Quarry in Danville, Boyle County. The Quarry is an active business and we were fortunate to be able to have access to the site, thanks to James (and maybe Onyx?) I understand the site was closed to collectors for many years because some person abused the privilege of collecting and defaced the owner's property. There is a valuable lesson to be learned and that is the action of one can affect negatively others. Therefore; pay respect to the collecting guidelines set forth by the American Federation of Mineralogical Societies (AFMS) - Code of Ethics. If you are unaware of them, you can either check with your field trip director or go on-line (<http://www.amfed.org/ethics.htm>).

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THE PEBBLES' CORNER



This section of the newsletter is being started to help generate more interest and interaction with younger rockhounds and to have fun in the process.

As indicated, this year's series will focus on each month's birthstone. I realize that several minerals may be associated with a particular month, but I am trying to select the most commonly accepted one for this series.

I welcome any information a member may wish to provide to be included in the upcoming newsletters each month corresponding to the particular month's birthstone.

October's Birthstones are the tourmaline and opal.

Mohs Hardness: 7-7.5 (Tourmaline); 5.5-6 (Opal)

Tourmaline obtains its color depending upon the trace elements present in the stone. Opals obtain their "colors" from microscopic spheres of silica that generate the various colors by diffracting light. Australia is the country primarily associated with opals, while tourmaline comes from many sources, but primarily Maine and California for US Sources.(Source: American Gem Society)

Some North Carolina locations where tourmaline and opals have been found:

Mitchell County (Halite Opal) (Tourmaline)
Catawba County
Other Counties



Photos: Clip Art

Until next time.....

Slade

(Continued from Page 3)

The quarry, which is located a few miles southeast of Danville on old Highway 150, produces and delivers crushed stone. There is a modern crushing on-site allowing for the stone to be over a dozen sizes, and used for the various applications, such as aggregate for concrete; construction aggregate for uses in infrastructures, erosion control and asphalt pavement; and aglime used to neutralize the acidity in soils.

The Quarry is in the Middle Ordovician Lexington Limestone, a major rock unit exposed in the Inner Bluegrass region of east-central Kentucky surrounding Lexington. The Lexington Limestone is mostly fossiliferous limestone with minor amounts of shale. The rocks of the Lexington Limestone were deposited in tropical latitudes in shallow marine water on a shelf that sloped gently northward. Many found numerous fossils at the quarry. The Lexington Limestone ranges in thickness from 200 feet to over 320 feet. In the area of Danville the Lexington Limestone is approximately 220 feet. The Lexington Limestone is composed of twelve (12) members, which are limestone lithofacies (the rock record of any particular sedimentary environment , including physical and organic characteristics), within the overall thickness; however, in the vicinity of the quarry the Perryville Member is prevalent. This member ranges from 0-50 feet thick and contains silicified mollusks and brachiopods. The Perryville Limestone Member is present in the southwestern portion of the Inner Bluegrass region forming a wedge that thickens from the area approximately 5 miles northeast of Harrodsburg to Danville with the thickness of 50 feet. The Perryville in turn consists of two major rock types: a brownish-gray calcisiltite (A fine-grained limestone consisting of silt-sized (but not clay-sized) carbonate particles) in rough-surfaced beds, with mollusks, tabulate corals and stromatoporoids dominating the fauna; and a light gray calsilutite (mud-grade limestone), containing tubiform burrows. The Perryville member was deposited in quiet, restricted water in the lee of a bank of calcarenite bars (a type of limestone composed predominately of more than 50% of detrital (transported) sand-size carbonate grains. The grains consist of corals, shells ,oids, intraclasts (irregular grained sediment formed by the re-deposition of material eroded from an original deposit) and pellets, fragments of older limestones and dolomites).

There was a report that I found on the website by Kentucky Paleontological Society (KPS) on one of their field trips to the quarry. The following is an excerpt from the report: (<http://www.uky.edu/OtherOrgs/KPS/pages/danville.html>)

“The KPS trip to Danville provides some of the best fossil collecting around. The Caldwell Stone Quarry in Danville has provided some spectacular fossils. The KPS has had field trips there (with permission) to explore the upper Ordovician Lexington Limestone (Sulphur Well member) and the lowest layers of the Clays Ferry formation. A crinoid garden (Ectenocrinus) was found, but has since been destroyed by the quarry. Whole trilobites (Isotelus), both stretched out and enrolled, have been found in the Clays Ferry. Perfectly preserved Rafinesquina brachiopods covered with Cornulites worm tubes have been found. In the Sulphur Well, hundreds of well preserved (some perfect) edrioasteroids (Cystaster stellatus) have been found in one layer. The Sulphur Well also yields bryozoans with borings in them. On Rt. 127, a roadcut exposing Ordovician Lexington Limestone (Perryville Member) yields many well preserved silicified clams, 4 different gastropods, and several brachiopods. The clams even show the muscle scar attachment sites.”

I am sure that if we ask Richard Aultman he would have no problem identifying any of the fossils found at the quarry or on the trip!

Associated within the limestone of the quarry is the Walker Vein. The vein is a low temperature hydrothermal vein. It is associated with the Kentucky River fault zone in central Kentucky, also known as the central Kentucky mineral (Fluorspar) district, which is different from the fluorspar district in the western part of the state – the Illinois-Kentucky fluorspar district.

What is a low temperature hydrothermal vein you ask? Veins are mineral deposits which occur in preexisting fractures or fissures within the host rock. Typically, the deposition of minerals is performed by circulating aqueous solutions, which carry various elements migrating through the fissures in the rock and precipitating onto the fissure walls. Hydrothermal deposits are categorized according to the depth and temperature at which they were formed: hypothermal deposits are formed at great depths and high pressures; mesothermal deposits at intermediate depths and pressures; and epithermal deposits at the shallowest of depths and relatively low temperatures. Hence the Walker vein is a epithermal deposit formed at shallow depths under relatively low temperatures and pressures. Some of the minerals found in this type of deposit include quartz, opal, calcite, aragonite, dolomite, fluorite and barite.

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(Continued from page 4)

The rather large rock in front of the office at Caldwell Stone Quarry is a magnificent example of the barite and fluorite that were deposited.

It is important to remember that the mineralogy of the vein deposits is based on the chemistry of the fluid and physical conditions, such as, temperature and pressure at the time of mineralization. The chemistry of the fluid is dependent on its source (for example: magmatic waters, meteoric water or connate waters) and the chemistry of the rocks through which the waters travelled through. In a later article, mineralization will be discussed in more detail.

There are approximately 120 vein deposits associated within the area of Central Kentucky, which range from less than a foot to a maximum of 12 feet in width and approximately 100-1,000 feet in length.

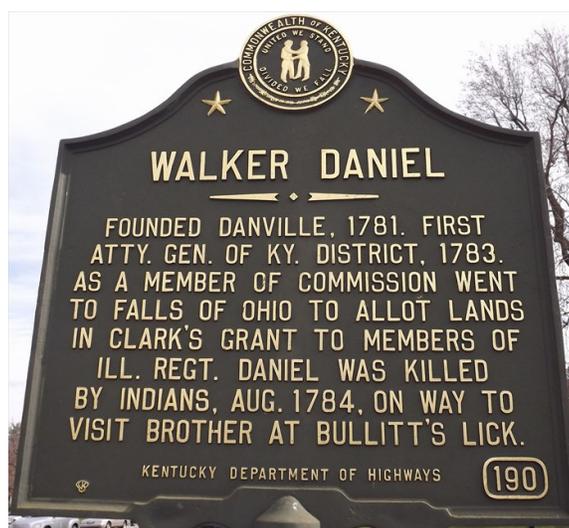
Although the Walker vein is found in the quarry, Caldwell Stone quarry does not mine the minerals and fortunate for us, we were allowed an opportunity to collect!

So I was wondering why the vein in this quarry was named Walker. Since I stated reading various material about Kentucky for this series of articles, I was wondering which Walker it may have been named after. In my research I found two notable Walkers – Walker Daniel and Dr. Thomas Walker.

Dr. Thomas Walker is noted as the first white man to see Kentucky and the first to write his account of his travel through what is now known as the Cumberland Gap. There will be more about Dr. Walker in a future article.

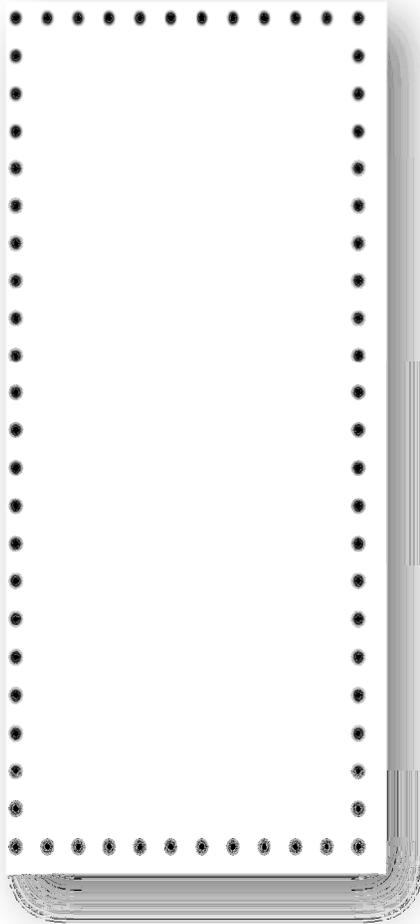
Walker Daniel, a native of Virginia and an attorney, moved to Kentucky in 1781. Three years later he was slaughtered and scalped, a casualty of the frontier. A year prior to his untimely death, he was appointed attorney general for the newly-created District of Kentucky. As attorney general, he oversaw the construction of a log courthouse and jail on the land he had personally acquired. He also informed the Virginia Governor Benjamin Harrison that the District of Kentucky was interested in forming a separate state from Virginia, noting that the casualties on the frontier from the Indian tribes made the pioneers wish for separation because they then expected everyone in power would be equally interested in securing a friendly intercourse with the Indians.

In 1787, Walker Daniel was commemorated and the act establishing the village noted “ whereas Walker Daniel in his lifetime, laid off part of seventy-six acres of his land, in the county of Mercer (now Boyle), into lots and streets, and sold and conveyed them to the purchasers...and thus the town was named Danville in his honor. (<http://explorekyhistory.ky.gov/items/show/114>)



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Club Meeting

Tuesday
October 10, 2017
7:00 PM

St Aloysius Catholic Church
921 2nd St NE
Hickory, NC