

TAR HEEL



ROCKHOUND

AUGUST 2017

Catawba Valley Gem & Mineral Club, Inc.

2017 Officers and Committees

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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.



Quartz Geode (Kentucky)
Photo: S. Harvin

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CATAWBA VALLEY GEM & MINERAL CLUB, INC.

<http://www.cvgmc.com>

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August Program

The August program will be a presentation by Harry Polly about cracking geodes.

We look forward to seeing everyone.

August Field Trip

The July field trip will be the Kentucky trip. As of last meeting, space was still available.

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

President's Message

SUMMERTIME and the living is easy. SUMMERTIME and the season is HOT. Please take care if you are outside during this time of year. Use common sense; make sure you have enough fluids to keep you hydrated, put on that sunscreen and hat to keep those UV rays off of you, and if you are going to view the eclipse, please take extra safety precautions to protect your eyes.

There is still time to make reservations in KY for the trip on August 18-22. See details at the end of the newsletter. It is promising to be a really good trip. We have two fluorite locations, an agate location, a geode location, plus we will view the eclipse.

We are still in need of a field trip chair. Please consider this important position. Without field trips, our club can suffer.

Harry

Catawba Valley Gem and Mineral Club, Inc.

The July meeting of the Catawba Valley Gem & Mineral Club was held on July 11th at St. Aloysius Catholic Church in Hickory, NC.

President Harry Polly called the meeting to order at 7:00 pm. He called for the introduction of any visitors. Ms. Chris Huffman was welcomed, and Tammy was welcomed back after an absence of several months.

A motion was made by Larry Huffman and seconded by Jimmy Strickland to accept the minutes as printed in the bulletin. Motion approved.

President Harry P. mentioned that Dean Russell had suffered a concussion recently, and asked all to keep in in their prayers.

There was no treasurer's report in the absence of the treasurer. There was no show report in the absence of the show chairman.

The Education chair, George Max, reported there was no activity to report on. Jackie G. asked George to do a program for the Adult Life Center next month.

Field trip report: July 22, the club is invited to join the Raleigh club at the Hiddenite dig. Meet at the Dollar General in Hiddenite at 8:15 am.

There are still rooms available in KY for the geode trip. Make reservations soon.

We are still looking for a Field Trip Chair.

There was no old business.

New Business: President Harry P. brought up the fact that long time member; Kenny Arnold passed away a couple of weeks ago. Her made a motion to donate \$100.00 to the Eastern Foundation Scholarship Fund in his memory. Norma R. made a second and the motion passed.

President Harry P., presented a proposal to the club to purchase a microscope to be used in the Kiddy Korner at the show. The microscope is on sale new for \$999.00, with an accessory light for \$80.00, and accessory lenses for \$70.00. We can purchase all for \$150.00. Becky Strickland made a second and the motion passed. Harry will write the lady a check and be reimbursed by the club.

Larry Huffman reported that he had found several buildings for the club, but they had no parking. He discussed what we need in a building.

Larry Huffman made an announcement that the fall session of Wildacres is in danger of being closed due to low registration. Phyllis Bridgeman reported that the Southeastern Federation will be having classes at Wildacres the week of August 21, and again sometime in September.

Being no further business the meeting was closed for the program. Joan introduced our speaker, Jeff Schlottman, who presented a program on the Guibault claim in Hiddenite.

The meeting was adjourned at 8:05 pm.

Norma Ridenhour
Acting Secretary

New Hampshire – Tripp Mine
By: Cheryl Neary

Ding, dong, bang, clang.....

Oh the sound of the hammers striking the pegmatite rocks at the mine was music to the field collectors! The rhythm provided a source of direction for the few who ventured on the wild side and were temporarily lost on their way out of the open pit mine in the overgrown brush!

So when and where did we get to hear the hard rock music? It was the weekend of June 24-25th, in New Hampshire at the Tripp Mine located in Alstead, New Hampshire, in the county of Cheshire, just a few miles north of Gilsum and Keene. The mine, now closed, is owned by Jim Tovey of Toveco.

The field trip was in conjunction with the 53rd Annual Gilsum Rock Swap & Show.

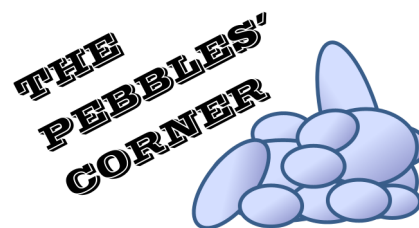
The majority of the collectors lodged at the Best Western Plus in Keene. This group included from Long Island Mineral and Geology Society (LIMAGS)- Roseann and Ray Giese, new member –Elizabeth Wiesemann and myself. From the south of the Mason Dixon line were members of the Catawba Valley Gem & Mineral Club – Shelda & Richard and Laura Altman, Larry Huffman and Yankee member Dave Russell.

On Saturday morning, after a heavy rain fall the evening prior, the day was a bit gloomy. However, it was if the sun shone through when I saw so many familiar faces at breakfast – Shelda, Richard, Laura, Larry, Dave, Roseann and Ray.

Roseann and Ray shared information about the town of Keene and where they ate on Friday evening. Shelda informed me that on the Aultman's trip north, they stopped at the Dinosaur State Park & Arboretum in Rocky Hill, Ct. We all got a kick out of Laura's story – the guide was pronouncing one of the minerals of the site as meeca. It took a bit of time to realize they were talking about that shiny substance we call mica!

Dinosaur State Park, with one of the largest dinosaur track sites in North America, has approximately 500 tracks enclosed with the geodesic dome. The remaining 1,500 tracks are buried for preservation. The tracks were accidentally discovered in 1966 during an excavation for a new state building. The dinosaur believed to have the tracks is the Dilophosaurus, a three-toed theropod, which lived during the late Jurassic Age. There is a Track Casing area in which the Aultmans' did partake in.

(Continued on next page)



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.

August's Birthstone is Peridot.

Mohs Hardness: 6.5 – 7.0

Peridot is an olive green silicate mineral. Fine traces of iron are responsible for the green color. Peridot is a variety of olivine, which is a quite abundant. Gem quality peridot is rare. The largest cut peridot olivine is located in the Smithsonian Museum in Washington, D.C. and is 310 carats. (Source: Wikipedia.com) Peridot occurs as a constituent of peridotites throughout North Carolina. Some of the locations are listed below.

North Carolina locations where peridot has been found:

Yancey County
Jackson County



Photos: Clip Art

Until next time.....

Slade

Laura discovered another site to visit, which I never heard of – Nash Dinosaur Track Quarry and Rock Shop. It is a very small site to visit – but worth it if you are in the area. It is located in the Connecticut River Valley, in Granby, MA, near South Hadley in MA. The place has some very interesting story which you can view on the website- <http://www.nashdinosaurtracks.com/nash-dinosaur-story.php>. Shelda was fascinated by the fact that you could place your footprint in the footprint of a dinosaur!

After breakfast we all met near the motel lobby to travel to Gilsum to meet with the more adventurous Natalie Alenski, who camped with her dog and Ron Russ, who ventured south where he was staying in NH. The meeting place was the Gilsum Village Store, where we met with members of the Connecticut Valley Mineral Club and our trip leader, Wayne Corwin. While outside the store we signed waivers and made plans to caravan to the mine, with the lower chaise cars in the beginning of the parade. Prior to making memories at the mine, several of us had to utilize the facilities – a port-a-potty located in the back/side yard of the Congregational Church, conveniently located near the waters of a local creek. Across from the store is the Post Office and a monument dedicated to the many veterans of the area who served in WWI, WWII and the Vietnam War. The monument is comprised of the local minerals, such as beryl and tourmaline donated by a local collector. (More about Gilsum a bit later)

So we travelled only a few miles north and took a left at an unrecognizable road. Only a few feet from the entrance many of the cars, mine included, found a spot to park. We all loaded our gear into higher chaise vehicles that parked closer to the open-pit mine.

And so the adventures began as Wayne described briefly the history of the mine and described what might be found in the various areas of the Tripp Mine #2. We were also informed that there still was collecting opportunities at the Clark Mine, which was located in the overgrown area we drove through to get to #2. Also mentioned was that the road was graded with material from the mine and that there was a possibility or two of finding a find! There were rules and regulations to be followed and then off we all went with a dream of finding that big crystal (did not matter what the crystal was!) Wayne did advise us of the areas of the mine where there was a greater probability of finding the beryl, rose quartz and the pegmatic minerals.



Gilsum General Store: Picture from Worcester Mineral Club Field Trip Report (On-line)



Gilsum Post Office and Veterans Monument (to the left)



Congregational Church – Diagonally Across from General Store



Mineral Laden Veterans Memorial at Gilsum NH
(Photo from Mindat.org)

Many of the collectors ventured to the other side from the entrance way. There was a hike through the woods to western side of the mine. It was Elizabeth's first dig and she worked earnestly and was rewarded with a gem quality garnet. A few of us worked the tailings. Many found beryl, tourmaline and mica; green manganapatite. Ray was walking in the dump pile and found a nice beryl.

How did these minerals grow in the area? I will explain this all in later paragraphs.

The area, quite overgrown was home to ticks this year, the first time Jim or Wayne had heard of ticks being at the mine.

Natalie was the first to leave the mine in hopes of listening to Jim speak at 1:00pm at the Gilsum Rock Swap. Besides, she did not want her pooch becoming home to any ticks. Natalie also participated in an old fashioned New England ham and bean dinner with home-made pies held at the Congregational Church on Main Street, which she informed me was excellent.

Roseann, Ray and Ron left an hour prior to the majority of us - they passed me as I walked the road back from moving my car so one of the collectors from Connecticut could leave. He was excited with his finding especially since it was his first collecting trip. I did keep looking down to see if a beryl or two wanted to jump out at me – but no such luck! I did find a waterfall and stream and a salamander! – a golden one!

At one point, the majority of us were collecting at the dump site. It was productive, for many found beryls, tourmalines and books of mica. Dave I believe ventured home with some large garden rocks too! One of the possibilities was just too heavy – we tried though!

Since I was parked near the road, Laura offered a ride to my car. Her vehicle is a truck and she was able to park at the mine. Richard and Larry sat on the tailgate and with the truck laden with rocks and gears - what a ride they had! Dave followed with his truck – in case he had to pick one of them up! Needless to say, they made it safely.

The majority of the collectors from LIMAGS and CVGMC left the mine around 3:30. Elizabeth and a couple from Connecticut were the last to leave. We heard that the couple made some great finds – double terminated crystals.

After returning to the Best Western, all the participants ventured to a restaurant in town across from the college that Roseann and Ray discovered on Friday evening. We all enjoyed our meals with such a great selection! Elizabeth shared her findings with us!

Sunday, everyone was on their own. I ran into many at the Gilsum show. It was there that many of us had the opportunity to thank Jim personally to allow us to collect on his property.

So that describes our weekend in a nutshell. Now I want to share information with you that I find interesting and hope you do as well!

Main Street Gilsum is basically the general store, post office and Congregational Church- a quaint town and according to 2010 census home to 813 people.

The quaint town is home to renowned Gilsum Rock Swap and Mineral Show, held every year since 1964. The event is held in June at the elementary school. Entrance to the show is via a donation. All proceeds go to the youth recreation and community programs.

Gilsum is home to Stone Arch Bridge, which I noted as I drove past it on my return trip to Keene. The Stone Arch Bridge is considered an engineering marvel, created in the late 1800's by dry-stacking stones, spanning the Ashuelot River. The Ashuelot River is 64 miles long. It is the longest tributary of the Connecticut River in New Hampshire. The stretch of Ashuelot River in Cheshire County is approximately 5 miles, offering whitewater kayaking, rafting and paddling. The headwaters of the river is in Pillsbury State Park at an elevation of 1,600 feet. The water flows to the south and west and drops approximately 37 feet per mile creating a steep gorge in Gilsum, creating numerous waterfalls.

The southern portion of the Ashuelot River Valley was inhabited by the Squakheag Indians. In the 1700's pioneers settled in the area.

In 1752, the land was granted as the town of Boyle, However, due to fear of attacks by Indians the land was never settled and the charter thus was forfeited. In 1761, 18,000 acres were sold to five men from Connecticut. The name was changed from Boyle to Gilsum - a compromise between the names of two of the five men – the Gilberts and Sumners, who were related by marriage.

At one time, New Hampshire was completely covered by the sea. In early Devonian time, sand and mud were deposited, thousands of feet, in alternating layers, forming the Littleton formation. As the deposits continued to accumulate the bottom layers were compressed by continually increasing weight and were changed into the sedimentary rocks called sandstone, siltstone, and shale. Eventually these layers of rock grew to be several miles in thickness.

Near the end of the Devonian period, the area which for millions of years had been a sea began to be uplifted, with crustal unrest as intense compressions of the earth's crust created folds and molten rock (igneous) intruded into the sedimentary rocks. The intense heat and pressure changed the mineralogical character of the rocks entirely, into metamorphic rocks characterized by mica schists. The schists consist of mica and quartz. Mica formed from the pre-existing clay particles.

Large areas in New England are underlain by metamorphic rocks such as schists, quartzites, and gneisses. Quartz-mica schist is probably the most abundant metasediment. The igneous rocks found widely in New England include granodiorites, quartz monzonites, and granites that form stocks, domes, sheets, and dikes intruded into the metamorphic rocks. There is evidence that there are four series of granitic rocks of different ages distinguished in New Hampshire. Associated with some of these granitic rocks are numerous pegmatites. The pegmatites of New England were formed at considerable depths beneath the surface of the earth and are exposed only because thousands of feet of rock has been eroded.

The coarse grain of the pegmatites resulted from the presence of volatiles during the crystallization, thus permitting large crystals to grow. Pegmatites are light colored due to its composition of the light colored minerals-plagioclase and perthite feldspars, quartz and muscovite mica.

Pegmatites are especially abundant in New Hampshire in two northeast-trending belts. The western belt, extending from Keene and Gilsum to Groton and Wentworth, contains most of the feldspar, mica, and beryl-bearing pegmatites. Much of the western belt is underlain by quartz-mica schist, quartzite and amphibolite, middle- and high grade metamorphic rocks. A pegmatite containing one (1) percent beryl is unusually rich; most contain less than a tenth (0.1) percent of the mineral.

Beryl occurs in igneous and metamorphic rocks such as granite, rhyolite and granite pegmatites. Beryl is a relatively rare silicate mineral that contains a significant amount of beryllium.

Today, the major economic interest in beryl is its use as a gemstone. Beryl gemstones are named by their color: emerald - green, aquamarine-greenish blue to blue, morganite-pink to orange, red beryl -red, heliodor -yellow to greenish yellow) maxixe- bright or deep blue, goshenite -colorless, and green beryl -light green. Emerald and aquamarine are the most popular beryl gemstones.

Beryl is commonly recovered as a byproduct of operations for feldspar, lithium minerals, and mica. The beryl is commonly yellowish green, green, or blue green, although some is white or golden.

The country rock (geological term meaning the rock native to an area) for the area of Tripp Mine is a biotite gneiss. Gneiss is a metamorphic rock comprised mainly of quartz and feldspar, showing distinct banding or layering. The gneiss is part of the Bethlehem Granodiorite, of early Devonian age (age ranging from 410 to 365 Ma). It is interbedded with micaceous quartzite and quartz & mica schist of Littleton Formation. Near the pegmatite outcrop (pegmatite is a coarsely grained intrusive igneous rock usually granitic in composition with crystals several centimeters to several meters in length) is a zone of minerals consisting of quartz, plagioclase, perthite, muscovite, black tourmaline, garnet, apatite and beryl. Much of the beryl occurs as green or yellowish green crystals.

According to Pegmatite Investigation, 1942—1945 in New England, by Eugene N. Cameron and others; Geological Survey Professional Paper 255 (US Government Printing Office): "The pegmatite is of diverse texture some showing coarse crystallization with large feldspar crystal and large quartz segregations, such as Graphic granite, rich in mica. Mica working at the Victory Mine, formerly known as Tripp No. 2 or Rhonda Mica Mine, a large open-cut, consisted of several tunnels and narrow stopes along the footwall of the pegmatite, prior to 1942. The most abundant mineral is perthite. Perthite is a feldspar rock consisting of orthoclase or microcline in which is interlaminated albite. Quartz occurs as graphic intergrowths in the perthite. Small quartz bodies commonly have gray rims that grade into milky, rose or clear centers. Occasionally, pockets of beryl are present adjacent to the mica and quartz bodies. Small green beryl crystals, approaching aquamarine in color, are found in gray quartz, and crystals as much as 2" by 4 feet occur between quartz and perthite."

Pegmatite mining began in New England in 1803 with the opening of the Ruggles mine in Grafton, New Hampshire, located approximately 50 miles north of Gilsum. The mine was opened when Samuel Ruggles discovered books of mica and realized the monetary value of the mineral versus the value of farming. After 175 years of mining, the Ruggles Mine is now closed. It was the oldest and largest mine of its kind in the US. The mine is part of the Littleton Formation, with a variety of minerals such as mica, feldspar, beryl, and uranium mined.

Other mines, including those of Gilsum, opened in New Hampshire which for many years produced nearly all the mica utilized in the US. In the late 1860's, mica mining commenced in North Carolina causing the New Hampshire production to decline. In the late 1880's, mica was imported from India and duty-free from Canada, causing for New Hampshire's greatest decline in production. In 1825, feldspar mining was started in Connecticut and spread to other New England areas. The value of the feldspar produced has outweighed the value of micas since the early 1900s.

The majority of pegmatite mines in New England have been worked by open-pit methods, with some underground workings.



Larry with his beryl discovery! Working in the tailings. Photo: C. Neary



Dave Russell had at work!
Photo: C. Neary



Tripp Mine #2 – water in pit caused collectors to travel through the overgrown brush
Photo: C. Neary

August Field Trip to Kentucky From Harry

I have made reservations at the Days Inn, Harrodsburg, KY for our August field trip. I have blocked off twenty rooms. The rate is \$68.00 per night. YOU MUST TELL THEM YOU ARE WITH THE "CATAWBA VALLEY GEM & MINERAL CLUB" IN ORDER TO GET THE ROOM AND RATE.

Days Inn, 1680 Danville Road, Harrodsburg, KY 40330

Phone: 859-734-9431

Check in - August 18th

Check out - August 22nd

Room rate - \$68.00, two double beds, or one queen bed, non-smoking

Confirmation #091617585

This is one week earlier than our normal Labor Day dig, but it coincides with the eclipse that takes place on Monday, August 21st. This area is supposed to be one of the prime viewing spots. Tentative plans are to go to the Caldwell Stone Quarry, in Danville, KY on Saturday morning, the HWY 150 road cut on Saturday afternoon, to the McLure farm on Sunday, and the Phillips farm on Monday. It should be a very productive weekend.

The Caldwell Stone Quarry produced some killer fluorite and calcite last year. This quarry has been closed to rock clubs for several years, but we were able to get in last year with the help of our friend James Johnson from MO. (THANKS, JAMES)

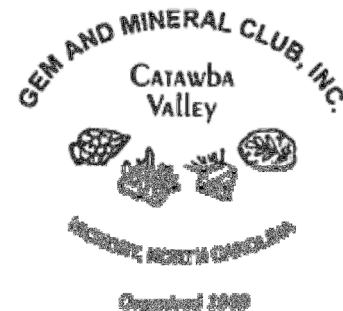
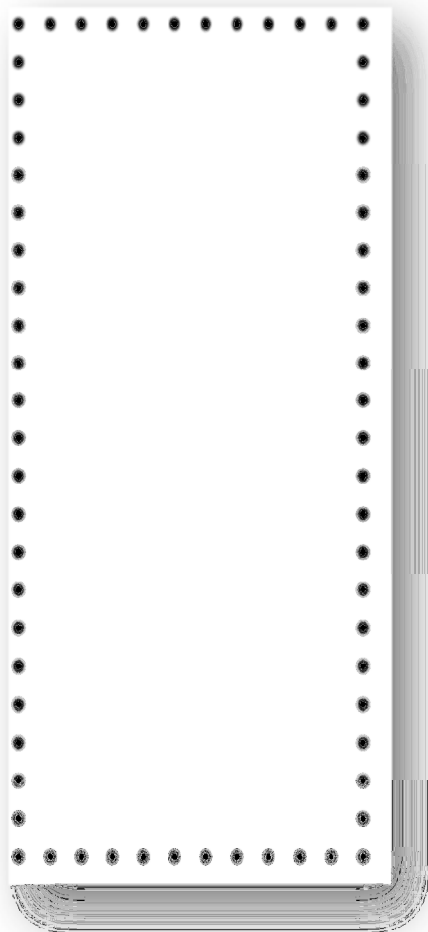
You will need to bring crack hammers, chisels, safety glasses, steel toe shoes, and hard hats in order to get into the quarry. A long handle four prong rake (tator digger) is good to pull out geodes from the creek and creek bank. Bring collecting buckets and tubs to put your prizes in, as well as something to wrap them in. Duct tape or electrical tape is good to wrap around the geodes.

Bring your food and drinks for each day as there is no place close to get anything.

All of the geode collecting will be in the creek beds, so come prepared to wade in the creeks. I prefer wool socks and tennis shoes, as the creek beds are sometimes slippery, and the wool socks will keep your feet warm, wet or dry.

First Class Mail

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Club Meeting

Tuesday

August 8, 2017

7:00 PM

St Aloysius Catholic Church

921 2nd St NE

Hickory, NC