

TAR HEEL



ROCKHOUND

OCTOBER 2026

Catawba Valley Gem & Mineral Club, Inc.

2026 Officers and Committees

President:	Ben Houston 704-284-2565	Education:	George Max 828-328-9107
Vice President:	Joan Glover 828-446-7633	Show Chairman:	Amanda Redfern 704-450-2273
Treasurer:	Terry Russell 828-303-1563	Scholarship:	George Max 828-328-9107
Secretary:	Dean Russell 828-303-1448	Field Trip:	Cindy Wechter 828-514-2142
Editor:	Tracie Jeffries 828-430-1341		

Club Address: PO Box 2521, Hickory NC 28603-2521
Regular Meetings: Second Tuesday, 7:00 PM
St. Luke's United Methodist Church 52 16th Avenue NW, Hickory NC 28601
In the Family Life Center
Annual Dues: Family, \$25, Individual, \$18

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.

CATAWBA VALLEY GEM AND MINERAL CLUB, INC.

Web Master: Mike Streeter

<http://www.cvgmc.com>

Editor: Tracie Jeffries,
3118 Barus Street, Valdese, NC
botanynerd89@gmail.com

CONTENT

President's Note	2
Sept. Minutes	2 - 3
Oct. Program:	3
Announcements.....	4 - 5
Geology Made Easy:	
Septarian Nodules	5 - 15
Field Trip Opportunities	16
What's Happening in Our Area	17
Club Classifieds.....	17

PRESIDENT'S NOTE

Hello Club Members,

Don't forget this month's meeting presentation is our own adventures this year. Hopefully we'll have continued nice weather for a few more adventures this year. Thank you to everyone who has been able to attend the new meeting location.

Ben

CVGMC MINUTES FOR SEPTEMBER 8, 2026

The September 8, 2026 meeting of the CVGMC was called to order by President Ben H. at 7:00 PM.

Visitors: Steve S., Brian C.

Program: Rick G. discussed his summer travel experiences.

Minutes: A motion was made by . and seconded by . to accept the August 11, 2026 minutes. Motion was passed by the Club membership.

Treasurer Report: Bank balance was reported (68,605.

Education Committee: Done for the summer.

Show Committee:

1. Flyers have been made for the April 9-11, 2026 Show.4
2. Contracts will be sent out in the next couple weeks.
3. Theme will be "Silicates".

Field Trip Report:

1. Herkimer Diamond Trip October 8-10, 2026
2. Diamond Hill October 24, 2026
3. Reel Mine has been sold, possible future field trip.
4. Discussed doing away with the Mini Mine in the exhibit area.

Old Business:**New Business:**

1. We will need to have Club Members to fill the role of President, Vice President and 2 Directors at Large. Contact Dean Russell at 828 303-1448 if you are interested and the description of the office will be given to you.
2. The Club is changing the way we are going to do the monthly raffle. We will have three upgraded pieces available for the raffle. If you would like to bring an item(s) for the raffle, they will be kept for grab bags.

Announcements:

1. Club members are requested to share their summer collection experiences for October's program.
2. Harry P. has a Display/China cabinet for free. You just have to pick it up. If you are interested. Contact Dean R. and he will contact Harry.
3. Keith P. has lapidary oil available for someone if they are interested.
4. Richard B. would like help finding where some minerals are coming from on his property in the Marion area.
5. Camilla won the 3rd quarter attendance and participation prize. (To be given at the next meeting.)

Closing of Business: The meeting was adjourned at 7:44 PM

Respectfully Submitted,
Dean Russell, Secretary

OCTOBER PROGRAM

The October program will be a member sharing event. Everyone is welcome to speak at the meeting and share their summer rock hunting adventures and finds. It is always interesting and informative to see what and where others are finding specimens. Please feel free to bring samples for the club to view.

ANNOUNCEMENTS

1. Our meeting in November will be time for the Club to elect its Officers and Directors for 2027. We have four positions that need to be filled. They are President, Vice President and two Directors at Large to fill the Board of Directors required Nine (9) members. Please seriously consider serving the Club in one of these positions. If you are interested, Please contact Dean Russell (828 303-1448) This way we can have a slate of candidates before the election, instead trying to fill the positions on the night of the election.

CONSTITUTION

ARTICLE II

DUTIES OF OFFICERS AND DIRECTORS

(Amended May 1986)

ARTICLE V

OFFICERS AND DIRECTORS

Section 2 – The number of Directors of the Club shall be nine (9) and shall consist of the Immediate Past President plus eight (8) elected members: the Club Officers (See Section 1), the Show Chairman (or both Co-Chairman), the Bulletin Editor, and the remainder, Members-at-Large. In the event that the Immediate Past President is no longer a member of the Club or in the event that he holds an elective position, the ninth Board Member shall be elected from the membership.

BY-LAWS

OF

CATAWBA VALLEY GEM AND MINERAL CLUB, INC.

Section 1 – The **President** shall preside over all meetings of the Club and Board of Directors and shall be ex-officio member of all committees, except the Nominating Committee. The President shall have the privilege of succeeding himself. His tenure shall be limited to two (2) consecutive terms, in addition to any partial term of that office he might have served, but shall not limit re-election at a later date.

(Amended 1983 & May 1986)

Section 2 – The **Vice President** shall perform the duties of the President in the absence of the President and shall have the added responsibility as Program Committee Chairman. The Vice President shall have the privilege of succeeding himself. His tenure shall be limited to two (2) consecutive terms, in addition to any partial term of that office he might have served, but shall not limit re-election at a later date. (Amended 1983 & May 1986)

2. I lost the tickets for people to sign for the quarterly drawing. Therefore, for the last several meetings I made sure people's names were entered. However, starting in October, we will have new tickets and it will be each individuals responsibility to sign a ticket and put it in the tombola. Also, if you forget, please do not sign two tickets the next meeting.
3. The show theme for 2027 will be 'The Incredibly Diverse World of Silicates'. According to Wikipedia, they are “ the largest and most important class of minerals and make up approximately 90 percent of Earth’s crust.” So there should be something for everyone! You could focus on a specific group of silicates such as Quartz, Feldspar, Tourmaline, Garnets, the Mica Group, etc... Or you could be focus on some more general silicates such as Agates and Jaspers.

GEOLOGY MADE EASY: WHAT ARE SEPTARIAN NODULES?

By T. Jeffries

Septarian Nodules are a favorite among rock collectors due to their colors and bold patterns. The word septarian is from the Latin term septum, a wall or partition that divides an area into discrete spaces and cavities. A common example is the nasal septum that divides the nasal cavity into two nostrils. With Septarian Nodules, it refers to the characteristic cracks and partitions inside the nodule (See Image 1). The second part of the name, nodule, is a misnomer; technically, Septarian Nodules are concretions. Nodules are usually roundish, with a hard outer shell and a softer interior composed of a different material. A classic example is a Moqui Ball, with its hard Hematite shell and soft interior of Sandstone. (See Image 2).



IMAGE 1: This Septarian Concretion clearly demonstrates the septa that give the rocks their characteristic and descriptive name. In this specimen, the white septa are composed of Aragonite surrounded by a dark Limestone matrix.

<https://www.flickr.com/photos/31856336@N03/5622876851/>



IMAGE 2: Moqui Balls are great examples of nodules. Notice the Moqui Ball on the left is cut open, showing the hard outer Hematite shell and softer Sandstone interior. Photo by T. Jeffries

According to the Dictionary of Geological Terms, a concretion is “ A hard compact aggregate of mineral matter, subspherical to irregular in shape, formed by precipitation from water solution around a nucleus. There are many examples of concretions (See Image 3), but this article will focus on Septarian Concretions (See Images 1, 4-11). Septarian Nodules are also known as Septarian Concretions, Septarium, Dragon Stones, Dragon Eggs, Turtle Stones, and Lightning Stones.



IMAGE 3: A Mazon Creek concretion that has been split open to show fossilized fern pinnae from *Neuropteris scheuchzeri* . This sample was collected from the Mazon Creek formation, Illinois. <https://www.flickr.com/photos/vilseskogen/5978533455/in/photostream/>



IMAGE 4: This specimen was collected in Utah. It is approximately 14 cm x 12.5 cm x 5.8 cm. The cracks are filled with yellow Calcite that transitions into darker Aragonite. The exterior and matrix is Limestone.

<http://n2t.net/ark:/65665/3f2bf07ae-4f19-4009-b10b-07817fff5a7a>

Most Septarian Concretions formed in shallow seas between 50 and 75 million years ago, during the late Cretaceous. There are several theories as to how Septarian concretions formed. One major theory is outlined below and illustrated in Diagram 1.

1. All Septarian Concretions formed around a nucleus, usually shells or organic matter, such as a dead crab, crinoid, or Ammonite. Some Septarian Concretions contain well-preserved fossils, especially Ammonites (See Image 5). The rotting organic matter attracted clay, silt, and other fine sediments. Note the dead Ammonite being covered in a layer of fine sediments. The Ammonite is potentially a nucleus for a future Septarian Concretion.
2. Tidal and wave action rolled the forming mud ball back and forth, adding more layers of sediment. The mud ball grew in size and density.
3. Eventually, the mud ball was buried under many layers of sediment, and the outer layer hardened (lithified). The nucleus of organic matter usually decayed, but sometimes it would fossilize.

4. There are several ideas on how the septa formed.
 - A. While the mud ball was buried under many layers of sediments, pressure forced water out of the softer interior. The loss of water caused the interior to shrink and crack. Geologists noticed that the cracks radiate outwards and taper as they near the outer layer of the concretion (See Images 6 and 8). This supports the idea that the cracks formed inside after the outer layer was hardened.
 - B. A second possible scenario is that due to changing water levels, the mud ball was exposed to the air. This would also cause water loss, shrinkage, and cracking.
5. The now lithified and cracked mud ball stayed buried or was reburied under layers of sediments. Over time, mineral-rich waters seeped through the ground and into the cracks of the mud balls. This water eventually evaporated, and secondary minerals precipitated and crystallized, filling the cracks and voids, thus transforming the mud ball into a Septarian Concretion!

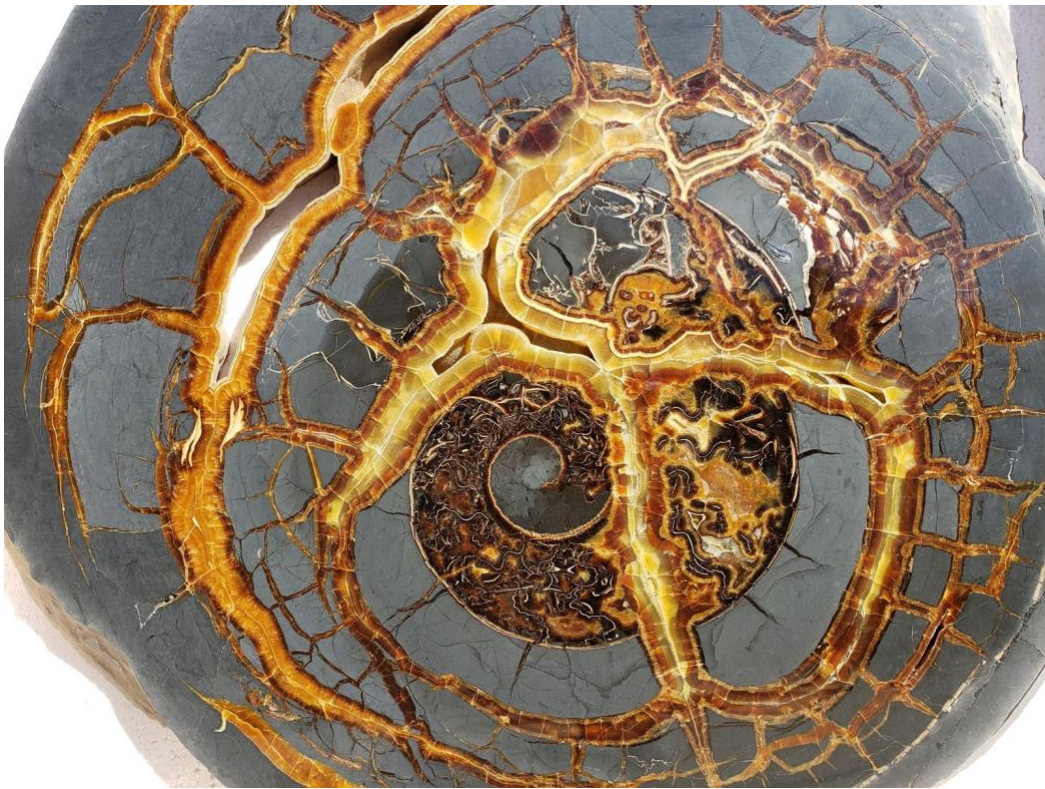


IMAGE 5: An incredible specimen showing a fossilized Ammonite in the center. The Ammonite was the nucleus that started the formation of the Septarian Concretion. This specimen was displayed by Dan Bowen, Chair, VIPS, at the 2020 Tucson Gem and Mineral Show.

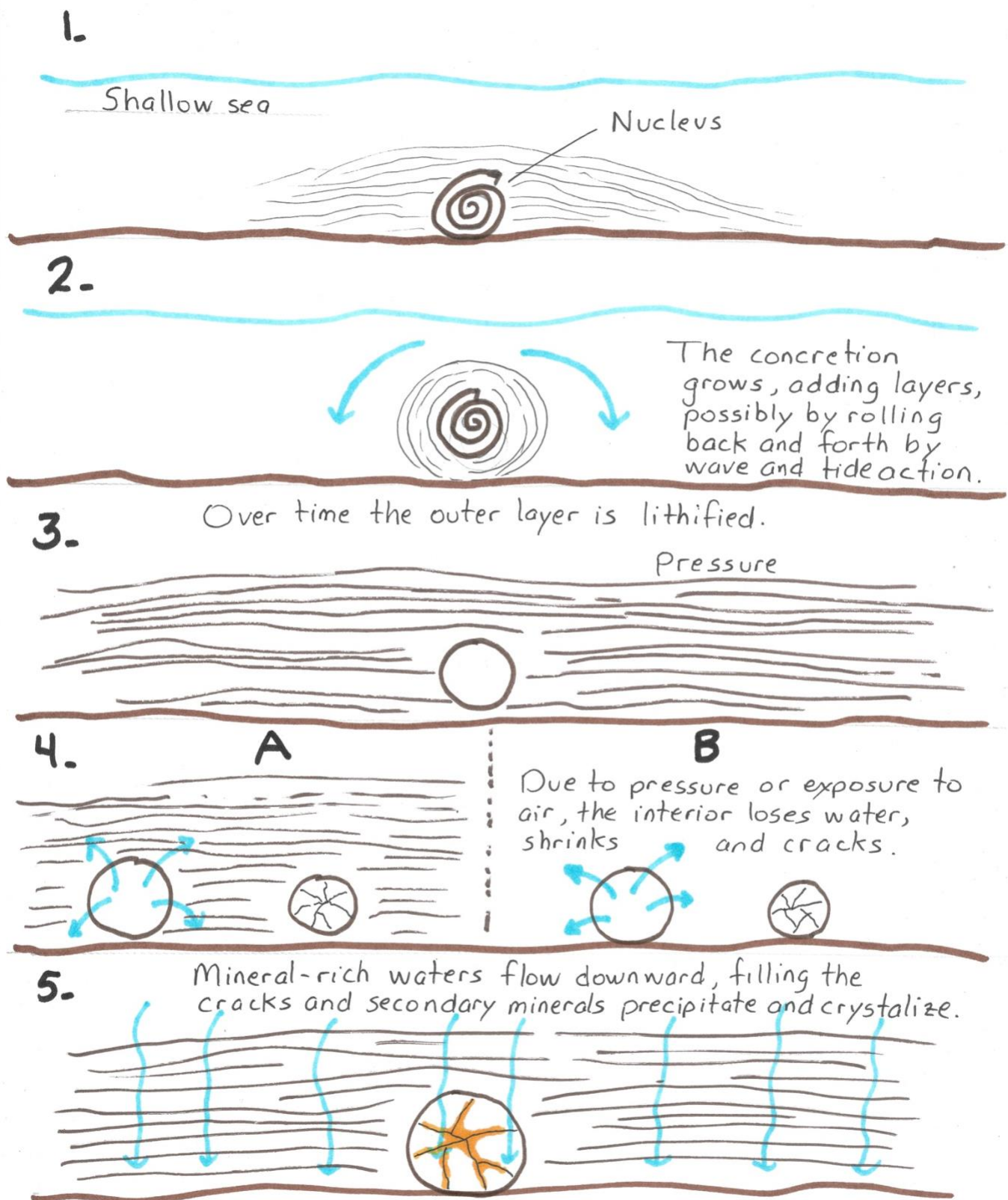


DIAGRAM 1: A visual outline of how Septarian Concretions may form.

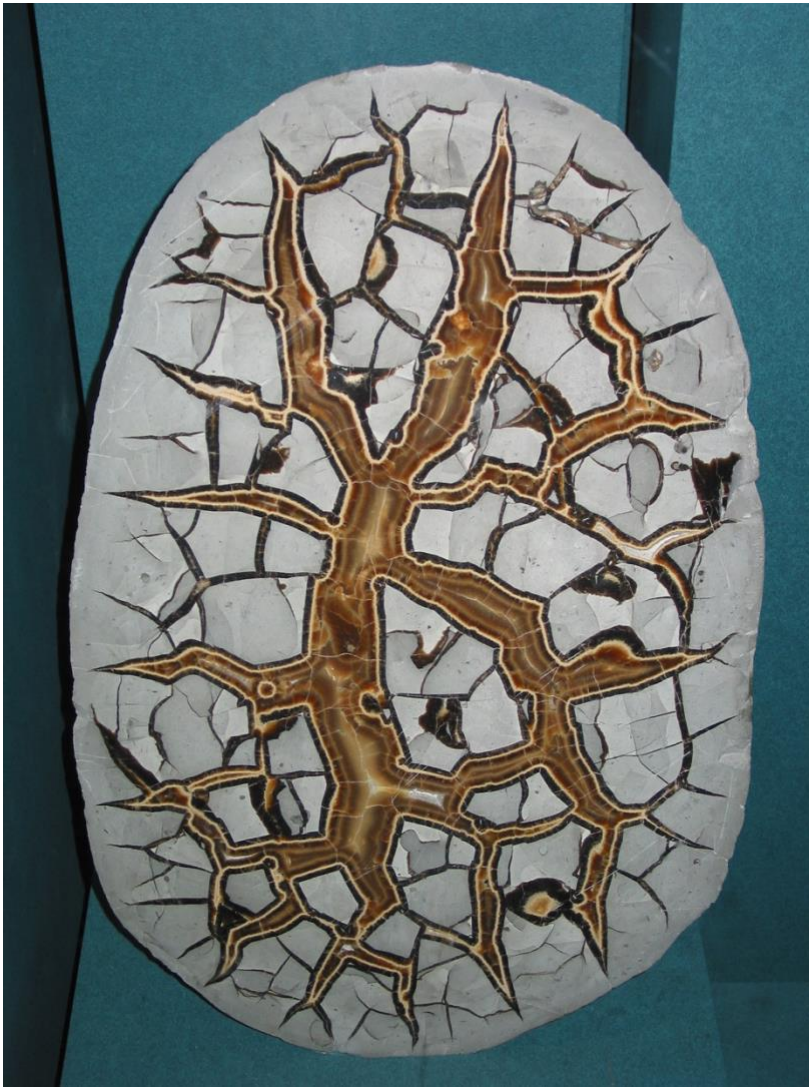


IMAGE 6: This specimen clearly demonstrates how the cracks taper as they spread out from the center. Geologists believe this supports the theory that the outer part of the concretion lithified first and the cracks formed later from the inside. This Septarian Concretion is on display at the Canadian Museum of Nature in Ottawa, Ontario.

By Keith Pomakis - Own work, CC BY-SA 2.5,

<https://commons.wikimedia.org/w/index.php?curid=591109>

Septarian Concretions are usually spherical or flattened ovals (See Images 1, 3, 4, 6-8, and 10) and can range from fist-sized to seven feet or more in diameter (See Images 4, 7, and 8). Mineral composition is usually Limestone or Shale on the exterior, and Calcite and/or Aragonite on the interior (See Images 1, 4, 6 and 8). Other minerals such as Siderite, Quartz, Barite, Pyrite, and Gypsum may also be found. Color depends on the various minerals:

- Calcite - can be colorless, white, black, and various shades of yellow, red, orange, green, blue, or brown
- Aragonite - commonly colorless, white, grey, and red
- Siderite - commonly various shades of grey, brown, and yellow
- Barite - colorless, white, light shades of blue, yellow, grey, brown

- Pyrite - metallic brassy-yellow
- Some Septarian Concretions may even fluoresce!

Each concretion has its own distinctive pattern, colors, and mineral composition and is truly a unique work of natural art!

There are several well-known areas in the United States to look for Septarian Concretions. These include:

- Montana - Bearpaw Shale region
- Utah – In Shale deposits along Muddy Creek, near Orderville, Kane County
- Kansas - Smoky Hills region
- Michigan – Lightning stones can be found along the Lake Michigan shore
- South Dakota – Found in Pierre Shale deposits along Elk Creek in Meade County.
- Ohio – Adena Brooke Ravine, Columbus, Franklin County

Sites, outside the U.S, include:

- The United Kingdom - Jurassic Coast in Dorset England
- Madagascar
- Morocco – Atlas Mountains
- New Zealand – Home of the giant Moeraki Boulders found along the Otago coast.
- Canada - Alberta and Saskatchewan Provinces
- Germany – Various limestone deposits in Germany



IMAGE 7: Moeraki Boulders are unusually large Septarian Nodules along Koekohe Beach, New Zealand. This section of beach is protected as a scientific preserve. These concretions range in size from .5 meters (1.6 ft) to 3 meters or more (9.8 ft).

<https://www.flickr.com/photos/volvob12b/37665998934>



IMAGE 8: These two sets of Septarian Nodules are from Morocco. The specimens are flattened ovals. The largest set is 7 x 8.5 x 4 cm and the smaller set is 4.5 x 5 x 2 cm. Photo by T. Jeffries



IMAGE 9: This is the interior of a Septarian Concretion. All that remains are the pseudo-hexagonal septa. The softer Calcite and other minerals have eroded away. Collection site unknown.

Photo by T. Jeffries



IMAGE 10: A nice example of a Septarian Concretion demonstrating an outer pattern of pseudo-hexagonal septa. It is easy to see how some people could confuse this as a fossilized turtle, hence, the nickname 'Turtle Stones'. This specimen was collected in New York and is dated from the Devonian time period.



IMAGE 11: Along certain areas of Lake Michigan, people can find 'Lightning Stones'. These are eroded Septarian Concretions that have been rounded and polished by wave action. The patterns are created by the septa and remind one of a lightning strike. Common places to look are South Haven, Fennville, Van Buren Park, and western Lake Michigan.

This photo was used with permission from Taylors Rocksmithery,
<https://www.etsy.com/shop/TaylorsRocksmithery>

Hopefully, the reader has enjoyed learning about Septarian Concretions and is inspired to add one of these unique rocks to their collection!

FIELD TRIP OPPORTUNITIES

Our new field trip coordinator, Cindy W. is doing a great job. There are several trips the club may do depending on interest. **If you are interested in any of the trips below or need more information, please contact Cindy at:**

Email - Pastorcindyw@gmail.com

Text – 828-514-2142

OCTOBER:

October 8-10:

NY Herkimer Diamond Trip

Crystal Grove Campground and Mine

County Road 114

Saint Johnsville, NY

(12 hour drive from Hickory)

Mining fee - \$16/day if NOT staying in campground

14/day if staying in campground

Mine hours – 9am – sunset

Camping: tent and RV; cabins (4 people \$115/night)

Other accommodations: several motels close by

October 24 (Sat) / October 25 (Sun) backup date:

Diamond Hill Mine / 100 Diamond Mine Road Abbeville SC

Mining Fees: adults \$18

Mining Hours: 9am-5pm

Overnight accommodations nearby:

Hotels:

- Belmont Inn
- Abbeville Motel

Camping:

- Hickory Knob State Park
- Calhoun Falls State Park
- Greenwood State Park

WHAT'S HAPPENING IN OUR AREA

WHAT	WHEN	WHERE
High Country Gem and Mineral Society Gem and Mineral Show	Oct. 2 - 4 Fri/Sat: 10:00 AM - 6:00 PM Sun: 10:00 AM - 5:00 PM	National Guard Armory 2025 Spartanburg Hwy East Flat Rock, NC 28726
Treasures of the Earth	Nov. 13 - 15 Fri: Noon - 6:00 PM Sat/Sun: 10:00 AM - 5:00PM	North Carolina State Fairgrounds 4285 Trinity Rd Raleigh, NC 27607

CLUB CLASSIFIEDS

If Interested in any item below please contact Harry Polly at 828-244-6651
2821 Blowing Rock Blvd
Lenoir, NC 28645

CHINA CABINET – 50" H, 16"D, 62"L, Lighted, two glass shelves, beveled glass doors. Tan Colored) NEW. You load with help. FREE.
(I have two like it in my museum.)

One (1) 4 Quart CROCK POTS \$15.00 EACH

OAXLIC ACID – (3) 5# bags \$25.00 each

Ten (10) Butane refills \$3.00 each

One (1) OPTIVISOR \$20.00

Three (3) Wooden Display Cases, w/glass tops, unlighted.
OD 21 1/8" L, 18"W, 6 3/4" H in rear, 4 1/2" H in front
ID 19 1/4"L, 16 1/2"W, 4"H in rear, 2"H in front \$20.00 each

One (1) Wooden Display Case w/glass top, unlighted
OD 26 3/4"L, 29 1/2"W, 10 1/2"H in rear, 6 3/4" H in front
ID 24 1/2" L, 28" W, 8" H in rear, 4 1/2"H in front \$30.00

One (1) Wooden Display Case w/glass top, unlighted
OD 27 1/4 L, 29 3/4 W, 10" H in rear, 6 1/2 " H in front
ID 25 1/4"L, 28 1/4"W, 6 1/2" H in rear, 3 1/2" H in front \$30.00

One (1) Wooden Display Case w/glass top, unlighted
OD 27 1/4"L, 33"W, 8 1/2"H in rear, 6 1/4" H in front
ID 25 1/2"L, 21 1/2"W, 6" H in rear, 4"H in front \$30.00

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