TAR HEEL ROCKHOUND

AUGUST 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

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PRESIDENT'S NOTE

Hello Club Members,

Thanks to everyone who was able to make it to the first meeting at our new location! It is a very nice facility, I am glad we are able to use it. Don't forget to start accumulating material for the show grab bags. Stay cool!

Thanks,

Ben

CVGMC MINUTES FOR JULY 14, 2026

The July 14, 2026 meeting of the CVGMC was called to order by President Ben H. at 7:00 PM.

Visitors – Mark R., Bruce B.

Program: "Collecting at Diamond Hill" by Jeff S.

Minutes: A motion was made by Harry P. and seconded by Rusty H. to accept the June 9, 2026 minutes. Motion was passed by the Club membership.

Treasurer Report: Bank balance was reported.

Education Committee:

1. Newton-Conover Library: A presentation was presented to 15 adults by Tracie J.
2. There are more possible dates for presentations for the Catawba County Library System, if you would like to help, please contact Tracie J.

Show Committee:

1. The CVGMC Annual Show for next year is April 9-11, 2027. We will be using the Hickory Room again.
2. The Show Chairperson, Amanda R., moved to SC and will need extra help, please step up to assist.

Field Trip Report:

1. Raleigh Museum of Science on July 18th (see newsletter for more information)
2. August 1st Black Light Tour $22 per person (see newsletter for more information)
3. Annual KY trip, look for more information in August newsletter.
4. Oct. 24 and/or 25 Diamond Hill Mine, look for more information in August newsletter.
5. Oct 9-10 Herkimer diamond mine (possible)

Old Business: none

New Business: none

Announcements: Brenna R. won the Q2 quarterly door prize, to be given out at August meeting.

Closing of Business: The meeting was adjourned at 8:00 PM

Respectfully submitted,

Dean Russell, Secretary

AUGUST PROGRAM

Member Norma R. will give a presentation about her recent experience at Wild Acres.

GEOLOGY MADE EASY: WHAT IS LUSTER?

Luster is the quality of light reflected from a mineral. Luster can be affected by chemical composition, crystal structure, grain size, weathering, surface smoothness, impurities, inclusions, and other factors.

Some general facts:

- It is the reflected light that accounts for luster.
- Flat smooth planes have a higher luster than rough/irregular surfaces.
- Some minerals may have several lusters depending on the variety and/or other factors.

Luster is not a definitive trait. It occurs along a continuum and is open to personal interpretation. Furthermore, depending on the variety, some minerals may have several lusters. Rutile may be described as both submetallic and silky, while sphalerite may be submetallic or resinous. However, luster is still a useful diagnostic tool for mineral identification. When determining luster, be sure to look at a fresh, clean surface, and if possible, view the specimen under bright natural light. Additionally, try to learn about luster from actual specimens, pictures can be deceiving.

Before we explore the different types of luster, let's review some basic optical and light concepts. Minerals may be opaque, transparent, or translucent (See Table 1), and when light hits an object, it may be reflected (A), refracted (B), or absorbed (C) (See Diagram 1).

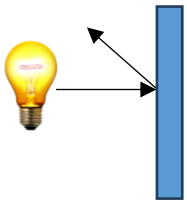
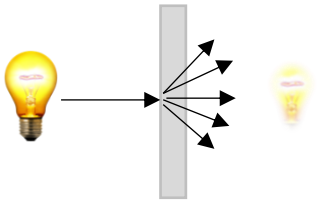
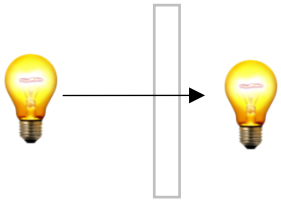
TRAIT	OPAQUE	TRANSLUCENT	TRANSPARENT
Light Passage	No light can pass through, it is reflected and/or absorbed	Some light passes through but it is scattered	All light passes directly through
			
Visibility	You cannot see through the object	You can make out vague shapes on the other side of the object	You can clearly see images on the other side of the object
Example	You cannot see through a brick wall	Frosted glass	Looking through a pane of glass

TABLE 1: Review and comparison of the terms, opaque, translucent, and transparent.

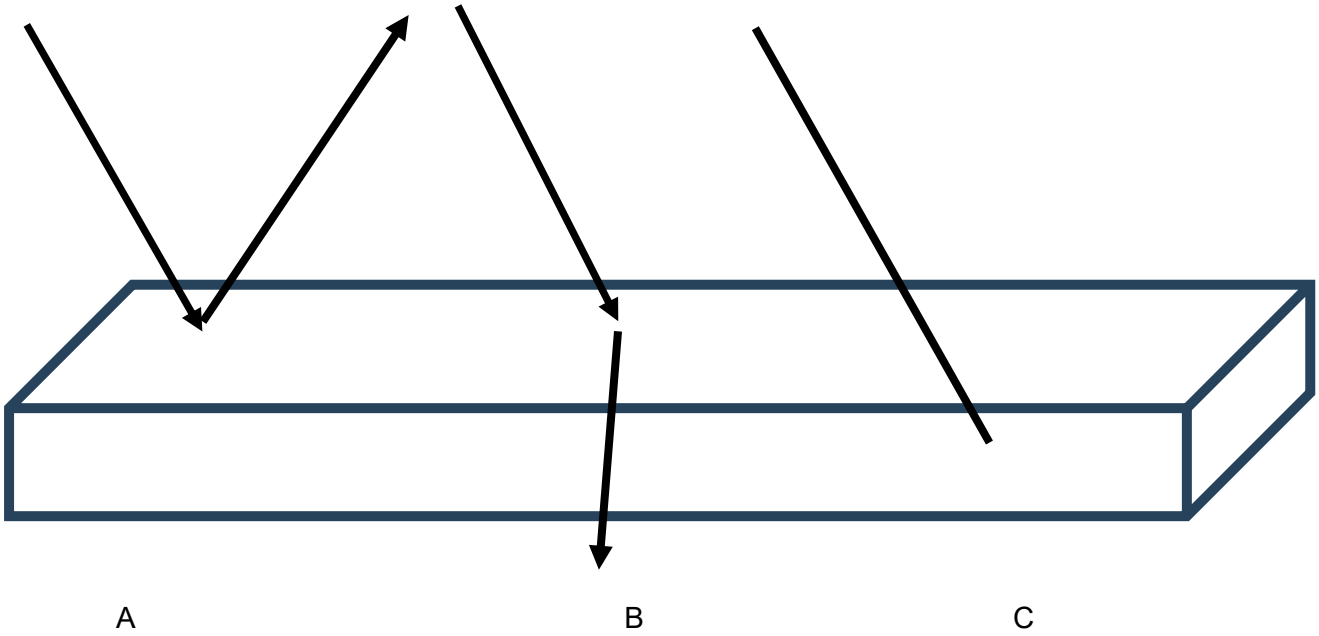


DIAGRAM 1: The diagram above shows the basic differences between light rays that are reflected, refracted, and absorbed. In ‘A’ the light is reflected. When light rays hit a surface they bounce back off the surface. In ‘B’ the light is refracted. Light rays can travel through some objects/matter. As light travels through different materials the light will change speed and bend. In ‘C’ the light ray is absorbed. The light rays do not bounce off the surface nor do they pass through the object/matter. As the light enters it is ‘absorbed’ and converted to heat.

When using luster to identify a specimen, the first step is to decide if the luster is metallic or non-metallic. As the name implies, a **metallic** luster is very bright and reflective, similar to polished aluminum or a mirror. Approximately 15% of minerals have a metallic luster. Minerals with a metallic luster are opaque and include native metals such as Chromite, Copper, Galena, Gold, Pyrite, and Silver (See Image 1).

Some minerals that are slightly duller than metallic are said to have a **submetallic luster**. These tend to be metals that are black/darker in color, may have rougher and/or grainier surfaces, and/or have some corrosion that makes them look less shiny. Examples of minerals with a submetallic luster include Cinnabar, Hematite, Magnetite, and Sphalerite.

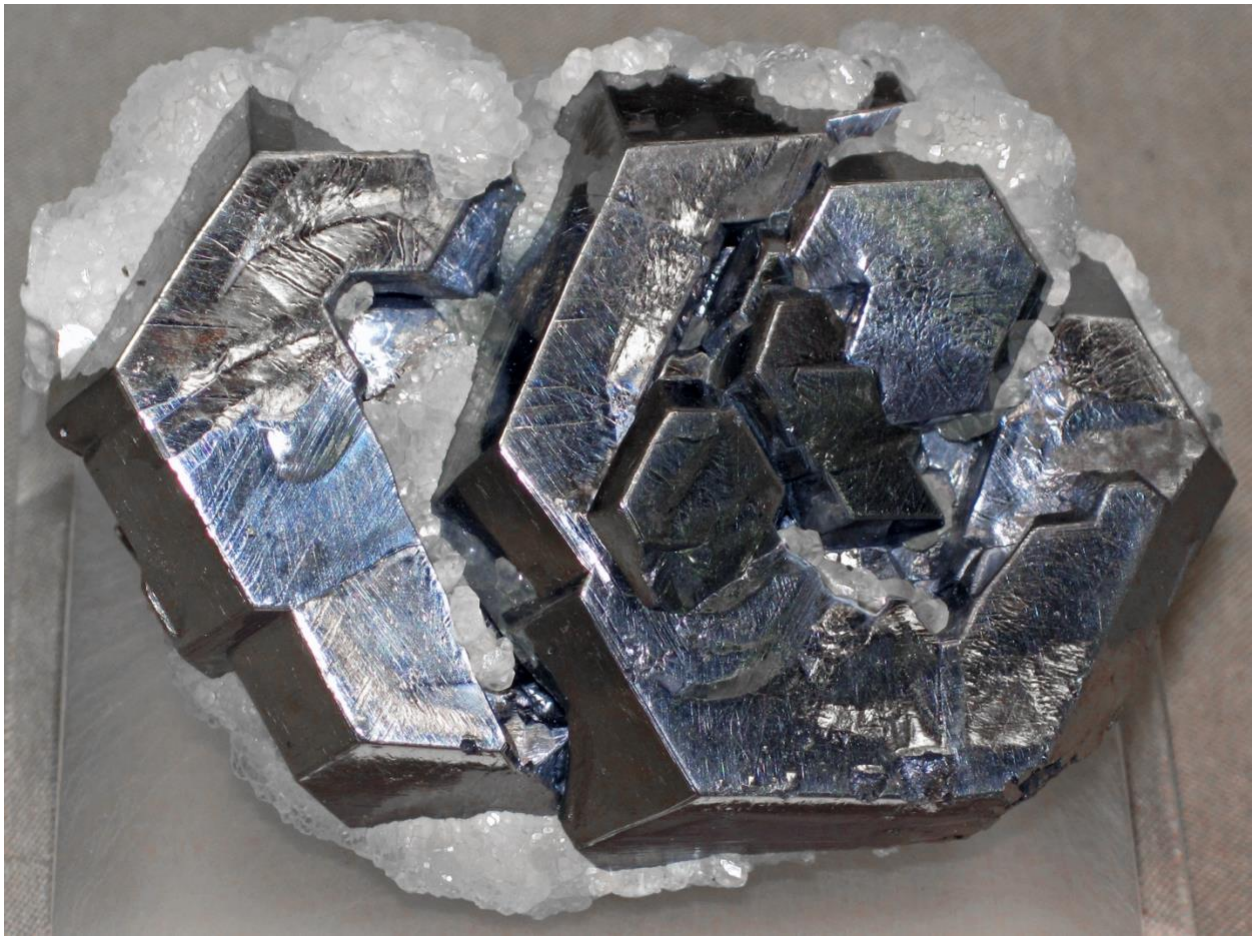


IMAGE 1: This is an amazing sample of Galena on Calcite from Peru. Note the mirror-like shine that is characteristic of a metallic luster.
https://www.flickr.com/photos/jsjgeology/18287586042/in/photostream/

If a mineral does not have a metallic luster, it is said to be **nonmetallic**. There are many subcategories of nonmetallic luster.

Adamantine luster is the most reflective of the nonmetallic lusters. Minerals with an adamantine luster tend to be translucent to transparent. They also tend to be both highly reflective at the surface and highly refractive as the light travels through the mineral. This creates a two-fold effect: brilliance/brightness and a sparkly effect (See Image 2). Examples of adamantine luster include Cerussite, Diamonds, and Herkimer Diamonds.

IMAGE 2: The diamond rings above are a great example of adamantine luster. Note the shine and sparkle.

https://img-s-msncom.akamaized.net/tenant/amp/entityid/AA1Rns1u.img?w=4000&h=2666&m=4&q=98

A **vitreous** luster is glass-like. The minerals are highly reflective, and as specimens are rotated, flashes of white light can be seen. Minerals with a vitreous luster tend to be high in silica oxide (SiO_2) and transparent to translucent (See Image 3). Approximately 70% of minerals exhibit vitreous luster, making it the most common type of luster. Examples include Calcite, Feldspars, Fluorite, Obsidian, Quartz, Topaz, Tourmaline, and many others.

Adamantine and vitreous lusters are considered the most reflective of the nonmetallic luster types.

IMAGE 3: The clear piece of quartz above exhibits classic vitreous, glass-like luster. Also note that like many vitreous minerals it is a silicate and transparent.

https://www.flickr.com/photos/jsjgeology/50903626746/in/photostream/

A **resinous** luster looks like coniferous tree resin. It has also been described as looking like chewed gum or smooth plastic. Minerals with a resinous luster tend to be transparent to translucent and red, orange, yellow, or brown in color (See Image 4). The latter is unusual because color normally does not affect a mineral's luster. Minerals with a resinous luster include Amber (fossilized tree sap), Almandine Garnet, Sphalerite, and Sulfur.

IMAGE 4: A lovely piece of raw amber from the Baltics. Note the plastic-like appearance common to many specimens with a resinous luster.

https://www.flickr.com/photos/jsjgeology/50721731638/in/photostream/

A **silky** luster is comparable to silk or satin cloth. Minerals with a silky luster tend to be composed of many fine, parallel fibers. Examples include Malachite, Satin Spar (Gypsum), Tiger Eye, Tremolite, and Ulexite.

Minerals with a **waxy** luster tend to be translucent and have a soft glow similar to beeswax or paraffin (See Image 5). Sometimes they are described as having a matte-like finish. Examples include, Agates, Brucite, Carnelian, Jade, Opal, and Turquoise.

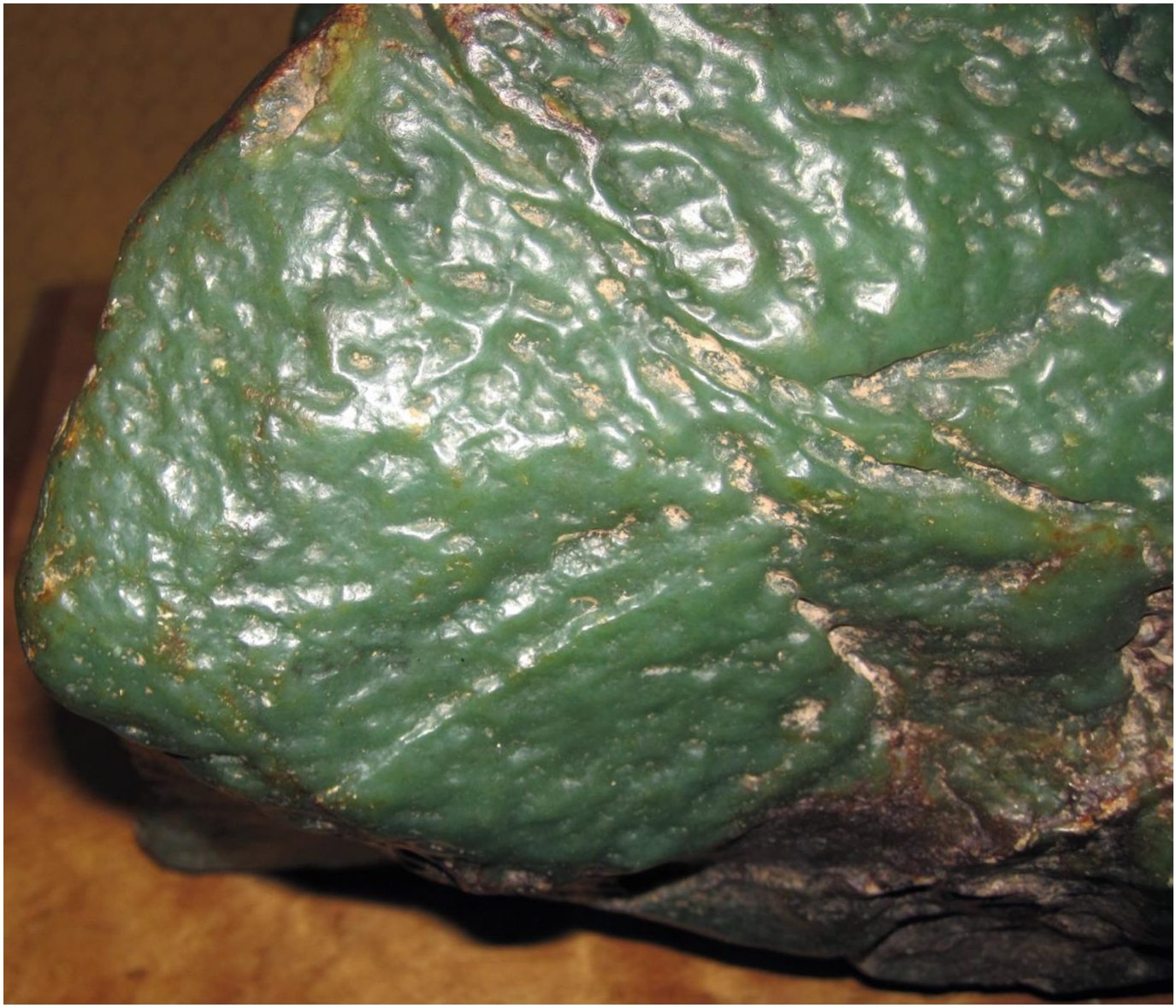


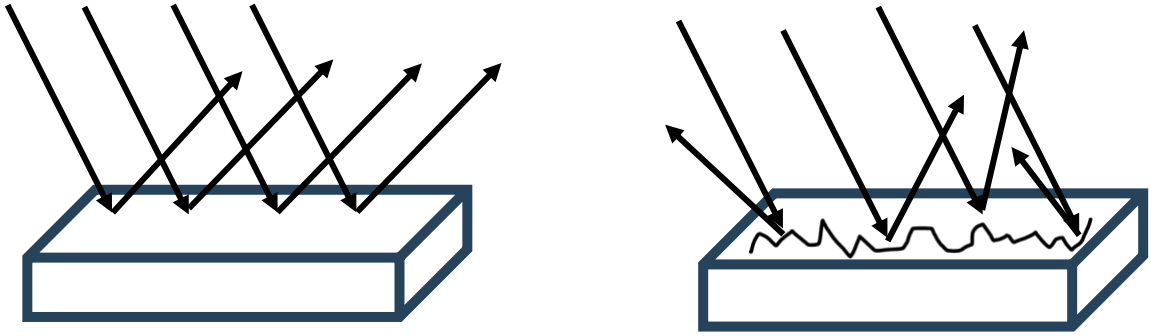
IMAGE 5: Note the waxy, luster on the green nephrite jade shown above. This specimen was collected in Fremont County, Wyoming.
https://www.flickr.com/photos/jsjgeology/24651308445/in/album-72177720311388016/

As the name implies, minerals with a pearly luster reflect light similar to pearls. Natural pearls have many thin layers around a central nucleus. A pearl forms when an oyster lays down smooth, soothing layers of nacre (the material that forms the inner iridescent layer of an oyster) around an irritant, such as a grain of sand. Light entering the pearl reflects off the multiple layers, producing a soft, out-of-focus glow. Specimens with a pearly luster tend to be transparent and composed of thin layered sheets that reflect light off multiple layers similar to pearls (See Image 6). Minerals with a pearly luster include Calcite, some Feldspars, Muscovite Mica, Stilbite, and Talc.

IMAGE 6: A beautiful apple green specimen of Talc from the Argonaut Quarry in Windsor County, Vermont. Note the foliated appearance and pearly luster. Photo by T Jeffries

Specimens with a greasy luster have a distinct sheen, similar to an object coated in a thin layer of oil or grease. Minerals with a greasy luster tend to have lots of minute inclusions and/or a microscopically roughened surface that modifies the light. They may also feel greasy to the touch. Classic examples include Carnallite, Jade, Nephelite, Opal, and Serpentine.

A dull (or earthy) luster is on the lowest end of the reflectivity spectrum, and these minerals are basically non-reflective. Minerals with a dull luster tend to be opaque, with rough surfaces, and porous or granular textures (See Image 7). The latter traits tend to scatter rather than reflect light (See Diagram 2); therefore, the light is diffuse, and the mineral appears dull. This type of luster is common in minerals such as Limonite, Kaolinite, and Hematite.



A B

DIAGRAM 2: In ‘A’ the mineral has a flat smooth surface that efficiently reflects the light off the surface. Note that rays reflect in the same direction. In ‘B’ the mineral has a rough surface that causes the light rays to reflect off at many different angles. This is diffusion and the reflected light is softer/duller.

IMAGE 7: The Hematite ore shown above is a great example of a dull luster. This specimen was collected from the Pioneer Mine in Ely, Minnesota.

https://www.flickr.com/photos/jsjgeology/50542570402/in/photostream/

In summary, luster is a helpful trait when identifying an unknown specimen. Just remember:

- Look at clean, fresh surfaces,
- Luster occurs along a continuum, and

- Some minerals may have several lusters depending on the variety and/or other factors.

Luster types are recapped below. Note: Not all resources acknowledge all luster types listed below, while others include subtypes, such as submetallic and subvitreous.

I. Metallic

II. Nonmetallic

A. Adamantine

B. Vitreous

C. Resinous

D. Silky

E. Pearly

F. Greasy

G. Waxy

H. Dull

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

SEPTEMBER:

September 4 - 7

Annual Labor Day Weekend Kentucky Trip

Note: There was not a lot of material found this past year and the amount of material will be determined to the extent and location (bench and location within quarry) of blasting that has occurred at each quarry.

- Friday - Travel to Hotel; Meet for Dinner (Elizabethtown, KY)
- Saturday - Collect in Quarry 1
- Sunday - Collect in Quarry 1 (Travel to Danville at end of Day)
- Monday - Collect in Quarry 2 (Half-Day)
-

Tools: Collecting is in a quarry and most specimens require breaking rock to remove specimens. Terrain can be uneven and potential walking greater than 100 yards is likely.

- **Hardhats, Steel-Toed Boots, and Long Pants (These items are required)**
- Safety glasses
- Gloves
- Buckets
- 3 lb. Hammer ("Crack" Hammer)
- Cooler w/ Drinks and Snacks
- Chisels (Recommended)
- Other assorted items/tools that may be needed

Please let Slade know if you plan on attending. He will need a head count prior to leaving for trip. Please also feel free to contact Slade regarding any questions regarding tools and conditions.

Hotel Information: (There are no rooms blocked at either location.)

- Greenfield Inn and Suites in Elizabethtown, KY
- Quality Inn in Danville, KY

The following are possible to collect at the quarries:

Quarry 1:

- Calcite (Some will Fluoresce)
- Dolomite
- Fluorite - Possible, but not very likely

Quarry 2:

- Calcite
- Fluorite - Possible
- Fossils - Possible (Brachiopods)
- Pyrite - Possible
- Strontianite - Possible, but not likely

OCTOBER:

October 8-10:

NY Herkimer Diamond Trip (if we get enough interest)

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
- Abbevilla Motel

Camping:

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

WHAT'S HAPPENING IN OUR AREA

WHAT	WHEN	WHERE
Jewel Passage Rocks, Minerals, Fossils, Gems, Jewelry & Beads Show -	Aug. 29 – 30 Sat 10 AM - 6 PM Sun 10 AM - 5 PM	Venue: Mebane Arts and Community Center 633 Corregidor St Mebane , NC 27302
Treasures of the Earth	Sept. 4 – 7 Fri Noon - 6:00 Sat/Sun 10:00 - 5:00 Mon 10:00 - 4:00	North Carolina State Fairgrounds 4285 Trinity Rd Raleigh , NC 27607

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Volume 56 Number 8

Club Meetings

2nd Tuesday of Month, 7:00PM

St Luke's United Methodist Church

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