

# FORSYTH GEM AND MINERAL CLUB, INC.

## *Nature's Treasures*

Aug 19, 2017

\*\*\* *Public Version* \*\*\*



**MEETING:** There will not be a program/meeting for August. Instead the club will hold the annual picnic (and grab-bag assembly). See details elsewhere in this newsletter. (Note: The picnic is open to club members and their families only.)



**Refreshments:** Since there is no program meeting, there are no volunteers needed for meeting refreshments for the month. Instead members are encouraged to participate in and contribute to the club picnic.

### **2017 Refreshment List**

January	Sandra & Stephanie Myers, Jim Jones	July	Beards, Sturiks
February	Brent Beck, Charles Whicker	August	Picnic
March	Bakers, Hughes	September	Show
April	McGilvarys, Brouhles	October	Caroline Jones, Daniel Bowles
May	Goodes, Pete Smith	November	Marions, Reeds
June	Gaskills, Schlottmans	December	Holiday/Show Dinner

If you enjoy the refreshments, please be prepared to take a turn in furnishing them. NOTE: if you volunteer to bring refreshments, please do so. If you are unable to attend for any reason, contact Vickie Gaskill or Jeanne Schlottman prior to the meeting so that alternate arrangements can be made.

**Note:** Due to equipment issues in the meeting area kitchen, it will be necessary for the refreshments providers to also bring ice for the drinks, at least for the next couple of months.



### **Dates To Remember:**

**September 8-10, 2017** – Annual Gem, Mineral, Jewelry, and Fossil Show



### **No Program Meeting for August or September**

It's that time of the year to go "off track" with the meetings. There will not be a regular/program meeting for either August or September.

The August meeting is replaced by the annual club picnic.

The September meeting is replaced by the show.

Normal meetings will resume in October.



### **Display Case Coordinator**

Alex McGilvary has agreed to take over responsibility for coordinating the non-contest display cases for this year.

Anyone who is interested in and willing to put in one or more display cases should let him know how many are needed.

As noted before Arvil will still be coordinating the contest cases and anyone who wishes to participate in the contest MUST notify him no later than the picnic.



## Grab Bag Assembly

Due to the fact that the club sold out of grab bags last year on Saturday, the grab bag assembly process will be making up more than the usual 500 bags. Current plan is to aim for 750 bags. So the assembly process will take a bit longer than usual.

In addition, anyone who has some suitable material that they are willing to contribute should bring it to the picnic. Even a few pieces of material can be useful, especially if it is something “different” than the usual quartz, etc.



## Dixie Mineral Council Field Trip

An Official Field Trip of the Gaston Gem Mineral and Faceter's Club (Gastonia, NC) - HOST  
An Official Field Trip of the Forsyth Gem & Mineral Club

**Note:** DMC Field Trips are for club members of DMC-affiliated clubs and their families only. Liability issues mean that these trips cannot be attended by the general public unless otherwise noted.

## **Propst Farm Lincoln County, NC**

**Fee: \$25 per person**

**TRIP:** The property recently reopened after several months following the passing of Mrs. Propst. The property has been producing corundum, since the 1960's. Digging will take place in front and behind the barn as well as other possible areas designated by the current owner, Ronald Lineberger.

**COLLECTING:** Some large and unusual corundum specimens have been coming out of the ground recently including a large Kyanite included specimen and a small clear ruby. Good specimens of magnetite and quartz crystals are occasionally found. The ground is hard packed red clay. Digging can be easy or moderately hard depending on the location and depth of the hole you dig.

**BRING:** Long and short shovels and small or large buckets minimum. 1 inch and half inch classifiers, small picks, tarps and probing tools may come in handy. Bring water or soft drinks and snacks. An extra change of clothes may be needed as the ground is red clay.

**FEE:** \$25 per person

**REQUIREMENTS:** All collectors will be required to sign a permission / liability form and pay \$25 before setting up to dig. Digging is allowed in the designated areas only. All holes **MUST** be filled in before you leave the property.

**SPECIAL CONDITIONS:** Parking is on the grass near the dig area.

**CHILDREN:** Allowed with parental supervision.

**PETS:** Allowed on leash only.

**FACILITIES:** There is no toilet but there is a service station with facilities at the exit of HWY 321 and Startown Road.



## Show Volunteer Sign-Ups

Sign-ups through the signupgenius web site are now closed. The current list has been passed on to Arvil to work on consolidation.

Sign-ups will be accepted (“encouraged”??) at the picnic.

In addition anyone who was indicated a willingness to help and has not yet signed up can be expecting a contact soon.

There are still many open slots available.



## Reviewing: Limonite

From [Geology.com/minerals](http://Geology.com/minerals)

**An amorphous iron oxide used as an ore of iron and as a pigment for thousands of years.**

### **What is Limonite?**

Before modern mineral analysis, the name "limonite" was given to many of the yellowish to yellowish brown iron oxides produced during the weathering of iron-bearing rocks or deposited as bog, lake, and shallow marine sediments.

Researchers who studied "limonite" discovered that it is amorphous and has a variable composition. It often contains significant amounts of iron oxide minerals such as goethite and hematite. This research revealed that the material called "limonite" does not meet the definition of a mineral. Instead, limonite is a mineraloid composed mainly of hydrous iron oxides that are often found in intimate associations with iron minerals.

Today the word "limonite" is used as a field and classroom term for these materials because they cannot be identified in hand specimens and their identity is unknown without laboratory testing. The time and expense required to do this testing is generally not needed, unless the material is going to be used in industry or it is the subject of a detailed study. Thus the name "limonite" is not obsolete; it is still meaningful and useful.

### **Geologic Occurrence**

Limonite usually occurs as a secondary material, formed from the weathering of hematite, magnetite, pyrite, and other iron-bearing materials. Limonite is often stalactitic, reniform, botryoidal, or mammillary in habit rather than crystalline. It also occurs as pseudomorphs and coatings on the walls of fractures and cavities.

Some limonite is found in stratified deposits where hydrous iron oxides form as precipitated sediment on the floor of shallow swamps, lakes, and marine environments. These can be of inorganic or biogenic origin.



**Left:** Limonite pseudomorph: A pseudomorph of limonite after pyrite that preserves the original cubic habit of the pyrite with its striations. Limonite often replaces pyrite crystals and other materials. This specimen is approximately 4.2 x 3.5 x 3.3 centimeters. Specimen and photo by Arkenstone

Limonite often forms as a precipitate at springs and mine openings where acidic, iron-laden waters emerge from the subsurface. Most subsurface waters contain very little oxygen, and when they discharge to the surface, they often encounter oxygenated waters. Dissolved metals in the groundwater rapidly combine with the dissolved oxygen of the surface water to form a precipitate that falls onto the bed of the stream. This precipitate is a characteristic sign of acid mine drainage.

Limonite is very resistant to weathering and often accumulates as a residual deposit. It is often the main form of iron and colorant in lateritic soils.

## Physical Properties of Limonite

Chemical Classification	Amorphous, mineraloid
Color	Yellowish brown to brown to black
Streak	Yellowish brown
Luster	Dull to earthy
Diaphaneity	Opaque
Cleavage	Does not cleave because it has an amorphous structure.
Mohs Hardness	1 to 5 (weathered material can be deceptively soft)
Specific Gravity	2.7 to 4.3 (varies due to impurities)
Diagnostic Properties	Variable - can be yellow-brown, brown, reddish brown
Chemical Composition	A hydrated iron oxide of variable composition
Crystal System	Amorphous to cryptocrystalline
Uses	Ocher pigments, a minor ore of iron

## Uses of Limonite

Limonite has been used by people since prehistoric times. Their first use of limonite was probably as a pigment. It is found in many Neolithic pictographs, and throughout history it has been one of the most important pigments for creating paints in the yellow to brown color range known as ocher. Its use as a pigment continues today. It can sometimes be used directly from the deposit with minimal processing, but it is often heat treated to drive off water, simplify the production of a powder, and improve color.

**Right:** Limonite pigment: Several colors of limonite pigment. They are clockwise from top left: lemon ocher, yellow ocher, orange ocher, and brown ocher. These pigments were prepared by grinding limonite to a fine powder. They are mixed with oil to produce a pigment of the desired consistency and mixed with one another, or other pigments, to produce an infinite number of other hues.



Limonite has been used as a low-quality iron ore for thousands of years. Commercial mining of limonite as a source of iron is no longer done in areas where reasonable deposits of hematite and magnetite are present or readily imported. Limonite deposits are usually too small and too impure for use in modern metallurgy.

Names such as "brown iron," "brown hematite," "bog iron," and "brown ocher" have been used by miners to relate limonite with its potential uses. Their use has declined significantly, and the name "limonite" is now used for these various materials.

Contributor: **Hobart King**



## Club Display Case

Charles Whicker has volunteered to take responsibility for the "club case" for this year. This is the case that is located closest to the club area, and usually is done to coordinate with the yearly theme.

This year's theme is a bit different: "Treasures of the Eastern US" (aka Minerals, Gems, and Fossils from East of the Mississippi River).

Charles may need assistance/contributions from other members for the display. Any member who is willing to lend specimens or other materials should contact Charles.



## Upcoming Shows

**September 2 - 5, 2016 - Hendersonville, NC -Labor Day weekend - Henderson County Gem & Mineral Society 35th Annual Gem & Mineral Spectacular - Colorful World of Jaspers** Friday-Sunday September 2-4: 10 AM to 6 PM Monday September 5: 10 AM to 5 PM -Whitmire Activity Center, 301 Lily Pond Rd, Hendersonville, NC - \*Demonstrations\*Exhibits\*Hourly Prizes\*Refreshments Available\* - \*Raffle\*Grand Prizes\* - For more info check our website: <http://HCGMS.com> - Admission: \$4.00 Adults - Children under 12 accompanied by an adult are free - \$1.00 off admission with coupon on our website!

**OCTOBER 6, 7 AND 8, 2017 (FRI. SAT. SUN.) - DALLAS, NC -GASTON GEM, MINERAL & FACETERS' SHOW** - Presented by the Gaston Gem, Mineral & Faceters Club of Gaston County, NC - Friday & Saturday: 9 AM TO 6 PM, Sunday 9 AM TO 5:00 PM - Gaston County Park, 1303 Leisure Lane (Hwy 279 [Dallas-Cherryville Hwy]), Dallas, NC -FREE ADMISSION - Jewelry, wire wrapping, faceting and rough materials. Minerals from around the world! Hourly raffles and a grand prize awarded Sunday at 5:00PM Grab bags and gem buckets for sluicing DEALERS INTERESTED IN PARTICIPATING, PLEASE CONTACT DAVID LONG, SHOW CHAIRMAN PHONE 704-860-1025. E-MAIL [david28054@att.net](mailto:david28054@att.net)



## Meeting Minutes

The July FGMC meeting was called to order at 7:30 PM on July 20 by club president Jeanne Schlottman. There were 27 members and guests present.

Refreshments were provided by the Beards and Sturiks.

The program was a presentation by Wayne Steinmetz of the Southern Appalachian Mineral Society (SAMS) of Asheville. His program was on identifying mineral specimens.

Door prizes were won by Wade Boone, who chose a book on Minerals, Rocks, and Gemstones, and the speaker, who chose a rhodochrosite from Silverton, CO.

Arvil noted that anyone wishing to have one or more cases in the “favorite case” contest MUST notify him by the end of August.

Alex McGilvary has volunteered to be the display case coordinator.

There was also a reminder that coordinating the Dealer Dinner may need some assistance due to the strong possibility that Vickie will be out of town at that time.

Respectfully Submitted,  
Wayne Ketner, Secretary



## Nature's Treasures

Nature's Treasures is the monthly newsletter of the Forsyth Gem and Mineral Club.

President:	Jeanne Schlottman	336-940-2203
Vice-President:	David Goode	336-761-0326
Secretary:	Wayne Ketner	336-769-3553
Treasurer:	Alex McGilvary	
Hospitality:	Vickie Gaskill	
Editor:	Wayne Ketner	336-769-3553
Directors	Ken Reed      Jeff Schlottman Sherry Marion      Sandra Meyers	
Field Trip Chair	Stephanie Myers	