FORSYTH GEM AND MINERAL CLUB, INC.

Nature's Treasures

May 18, 2017

****** Public Version ******

MEETING: The next meeting of the Forsyth Gem and Mineral Club will be held at **7:30 PM, May 18, 2017**, the third Thursday of the Month, at **Vulcan Materials Company's Training Center, 4401 N. Patterson Ave., Winston-Salem, NC.**

PROGRAM: The program for May is a demonstration of the informational materials that we use for shows like Earth Day. Alex McGilvary and Sandra Myers, and myself will discuss our experiences. I hope that this will interest more members to participate. It is a very enjoyable experience.

Refreshments: Refreshments for the May meeting will be provided by **the Goodes and Pete Smith**. The Club will provide cups and napkins and ice for the refreshments. Those volunteering to provide refreshments need only provide sufficient drinks and snacks, such as, cookies, cakes, crackers, or donuts.

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.

Dates To Remember:

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

DON'T FORGET YOUR NAME TAGS

FGMC May Field Trip

There is a tentative field trip for May to Propst Farm if arrangements can be confirmed. Details will be available at the meeting.

Upcoming Shows

June 3—COLFAX , NORTH CAROLINA: Annual show; **Greensboro Gem & Mineral Club**, Piedmont Triad Farmers Market; 2914 Sandy Ridge Road; Sat. 10-10; Free Admission; Minerals, fine specimens, hand crafted jewelry, lapidary demos, wire wrapping, beads, geode cutting. Free admission. Free small geode for kids 10 and under. Fun for the young, the old, the curious and the collector. ; contact Gary Parker, 6601 Lismore Drive, Brown Summit, NC 27214, (336)-402-5252; e-mail: ggmc.rocks@gmail.com ; Web site: ggmc-rockhounds.com

6th ANNUAL

PIEDMONT OPEN AIR
GEM, MINERAL & JEWELRY
SHOW AND SALE

Sponsored by the Greensboro Gem & Mineral Club

Saturday, June 3, 2017
9 a.m. to 5 p.m.

PIEDMONT TRIAD FARMERS MARKET

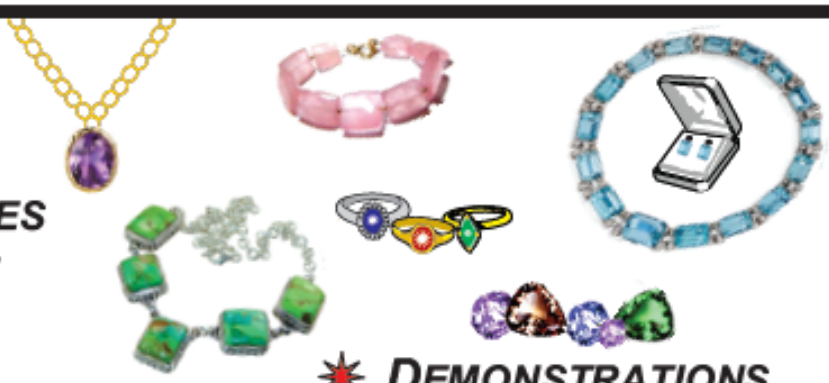
2914 Sandy Ridge Road
Colfax, NC

I-40 to Exit 208 Sandy Ridge Road

FREE ADMISSION FREE PARKING

FREE MINI GEODE TO FIRST 100 KIDS (AGE 12 & UNDER)

- *GEM STONES*
- *MINERALS*
- *JEWELRY*
- *HOURLY PRIZES*
- *GRAND PRIZE*
- *GEODES*



- *DEMONSTRATIONS*
- *CRYSTALS*
- *BOOKS*
- *BEADS*
- *CONCESSIONS*

Visit our website www.ggmc-rockhounds.com

The Greensboro Gem and Mineral Club is a non-profit organization.

Reviewing: Rhodochrosite

From Geology.com/minerals

A pink manganese carbonate mineral used as an ore, a gemstone, and a crystal specimen

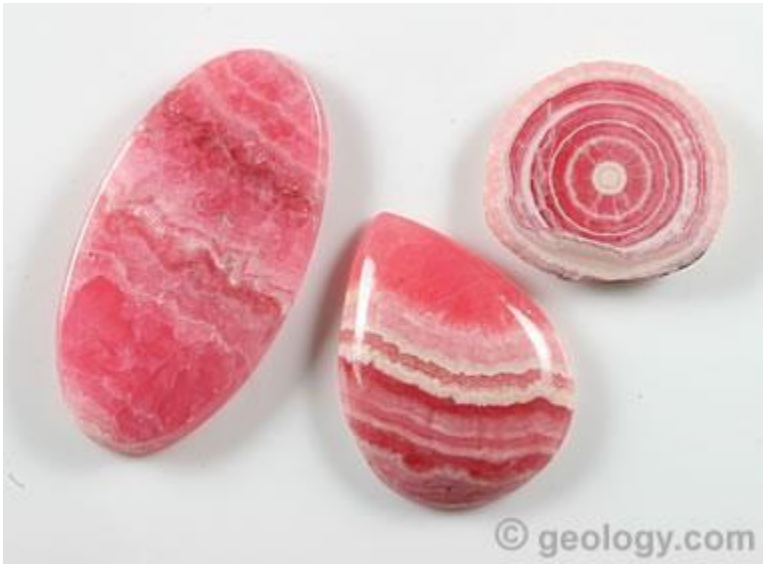
What is Rhodochrosite?

Rhodochrosite is a manganese carbonate mineral that ranges in color from light pink to bright red. It is found in a small number of locations worldwide where other manganese minerals are usually present. Rhodochrosite is sometimes used as an ore of manganese but is rarely found in economic quantities. Specimens with a wonderful pink color are used to produce highly desirable gemstones. Rhodochrosite is rarely found as well-formed crystals, so crystals can be extremely valuable as mineral specimens.

Physical and Chemical Properties

Rhodochrosite has a variable chemical composition. It is a manganese carbonate, but the manganese is frequently replaced by iron, magnesium and/or calcium as shown in this formula: (Mn,Fe,Mg,Ca)CO3. These substitutions of other elements for manganese change the composition and alter the specific gravity, hardness, and color of the mineral. The bright pink color can become grayish, yellowish, or brownish in response to this chemical variability. A complete solid solution series exists between rhodochrosite and siderite (FeCO3).

Rhodochrosite is generally easy to identify and is rarely confused with other minerals. Its pink color, perfect cleavage in three directions, low hardness, and weak effervescence with cold dilute hydrochloric acid are rarely seen in other minerals. The most common confusion is between the names "rhodochrosite" and "rhodonite" -- both are pink, manganese-rich minerals with very similar names that people have a hard time remembering.



Geologic Occurrence

The formation of rhodochrosite usually occurs in fractures and cavities of metamorphic and sedimentary rocks. It is often associated with silver deposits, and a few silver mines produce rhodochrosite as a byproduct. Some of the common modes of occurrence and their lapidary uses are described below.

In metamorphic rocks, rhodochrosite is found as a vein and fracture-filling mineral where it precipitates from ascending hydrothermal solutions. Repeated episodes of crystallization allow it to build up in layers on the walls of the fracture. Each layer can be a unique precipitation event and produce material with a slightly different pink color. This gives character to the material for lapidary use. Miners usually remove the rhodochrosite from the wall rock of these veins and cut it into thin slabs with a diamond saw. The slabs can then be used to make cabochons, small boxes, or other lapidary projects.

Some rhodochrosite forms in cavities in sedimentary and metamorphic rocks when descending solutions deliver a supply of dissolved materials. In these deposits, the rhodochrosite accumulates in layers on the walls of the cavity and may form stalactites and stalagmites on the roof and floor of the cavity - just like speleothems in a cavern. These formations are often removed and slabbed to produce material with concentric pink banding. Some of the best examples of this form of rhodochrosite are found at the Capillitas and Catamarca deposits in Argentina.

Rhodochrosite is extremely rare as well-formed crystals. One of the few locations in the world where they are found is the Sweet Home Mine, near Alma, Colorado. Originally opened as a silver mine in 1873, the rhodochrosite was disregarded at that time. Then, as the popularity of mineral collecting increased, the well-formed crystals found at the Sweet Home Mine became many times more valuable than the lapidary material. Excellent, small, hand-size specimens currently sell for five-digit numbers. Broken or damaged crystals are sometimes used as faceting rough.

Rhodochrosite for lapidary and mineral specimen use is only found in a few locations worldwide. These include Argentina, South Africa, Peru, Montana, Colorado, Russia, Romania, Gabon, Mexico, and Japan.

Rhodochrosite as a Gemstone

Rhodochrosite is a favorite gemstone of many people. It is often slabbed to show off its banded or concentric patterns. Most of the slabs are used to cut cabochons. Cutting rhodochrosite is a difficult job because the material has perfect cleavage, and it is so soft that it is hard to polish. Nice, stable, slabbed material is sometimes used to make small boxes and other ornaments. The rare transparent material that is not suitable as a mineral specimen is sometimes faceted into attractive pink and red gems. The beautiful stones produced are mainly for collectors because faceted rhodochrosite is too fragile for most jewelry use.

Rhodochrosite has a hardness of only 3.5 to 4 and has perfect cleavage in three directions. This eliminates it as a good choice as a ring or bracelet stone which might be subject to abrasion or impact. It does well in earrings, pins, and pendants, which are generally not subject to as much abuse as a ring.

Physical Properties of Rhodochrosite

Chemical Classification	Carbonate
Color	Pink, red, yellow, gray, brown
Streak	White
Luster	Vitreous to pearly
Diaphaneity	Transparent to translucent
Cleavage	Perfect, rhombohedral, in three directions
Mohs Hardness	3.5 to 4
Specific Gravity	3.5 to 3.7
Diagnostic Properties	Pink color, cleavage, hardness, effervescence in cold dilute hydrochloric acid
Chemical Composition	(Mn,Fe,Mg,Ca)CO3
Crystal System	Hexagonal
Uses	Ore of manganese, gemstone, ornamental stone

Contributor: Hobart King

Basic Rockhounding Gear

With a number of new members interested in participating in field trips combined with the upcoming prime field trip season, it is time for a periodic review of basic rockhounding gear.

Safety Gear

The reason that safety gear is listed first is that it is the most important part of a rockhound's equipment. In fact, in many locations a collector will not be allowed into the site without the appropriate gear. The good news is that an investment in safety gear will usually be good for many years and many trips.

All quarries will require all of this gear. It is also useful on many other locations, even if not absolutely required.

Hard Hat: This is the typical light-colored hard plastic helmet often seen on construction workers. In fact the easiest place to find these is in hardware stores/home improvement stores.

Safety Glasses/Goggles: A good set of safety glasses or goggles is always required when working around rocks, particularly when hammering on them. Small shards of rock chips can quickly destroy your eyesight. These should be used any time when someone nearby is hammering or otherwise working on cracking rocks, whether in a quarry or any other location.

Steel-toed Shoes: This is often the most costly component of safety gear, and frequently the hardest to find. Most often these come in various "boot" forms, though they can sometimes be found in other modes. In addition to the steel toes, which keep falling rocks from smashing your feet, most of these will also have enhanced soles to allow for better footing in treacherous surfaces.

Carrying Equipment

It doesn't do much good to go rock hunting unless you take along something to bring the samples back in.

The most common equipment is the simple plastic bucket of various sizes. Buckets in the three to five-gallon range are usually the most useful. Care must be taken to avoid overloading them or their usefulness will be reduced. For trips where vehicle access is fairly close it is common to take several buckets to bring back more "stuff".

The next most common carrying equipment is a backpack. These range from relatively small, simple units to large heavy framed units. Again the limiting factor is often how much the user can carry.

In some locations small carts, wagons, or other wheeled devices can be used. This usually allows for larger or heavier samples. But use of these can be difficult in many sites.

Tools

And now we move on to what many were expecting – the tools.

Rock Hammer: The basic simple rock hammer is the core tool for most work. With a (usually square) hammer head on one end and a wedge on the other end, they can be used to both beat on rocks and to use as a lever to split samples. Rock hammers come in a wide variety of styles and features, but the basic hammers are often good enough for most users.

Chisel / Star Chisel: When trying to split rocks to get samples, it is often useful to have one or more chisels. While not absolutely necessary, they can make the work easier. In fact a selection of a few chisels of different sizes (widths and thicknesses) is often useful, though not necessary. A star chisel is often useful for breaking a large rock where there is not a natural seam for using a regular chisel. However use of this tool is often an advanced technique.

Shovel: A small shovel is often useful when digging in softer areas. These can be anything from a small camp shovel to a garden shovel, or even just a garden spade. Larger shovels are generally only useful when it is know that it will be necessary to dig more than a few inches into the ground to find the samples.

Other equipment: Once you get beyond the basic equipment listed above there is a wide variety of supplemental tools that can prove useful. These include things like sledge hammers (hand or full size) for more power in pounding, crowbars/prybars for more leverage in splitting rocks, picks or mattocks for digging deeper in the dirt, full-size shovels, etc. One thing to keep in mind of course is that the more gear that you take, the more you have to carry into and out of the site, often limiting the weight of the samples that you can bring back out.

Grab Bag Samples

Yeah, nag, nag nag. Yet another reminder that as you go through field trips this summer be on the lookout for samples that can be used in the grab bags this fall.

It is likely that the club will make up twice as many bags as we normally do, so we're going to need a LOT of samples. In particular we need samples of things other than quartz and calcite. Although we can always use more of these, we have plenty. But we need a wider variety of things to round out a mixture for each bag.

Samples should be roughly dime-sized to quarter-sized. Larger samples can be brought if they are such that they can be broken down to smaller pieces (by a rock hammer).

DMC Field Trips

The May DMC field trip was early in the month (May 6).

The June field trip will be sponsored by FGMC. Details will be in the June newsletter. This trip will be to Earthen Paradise for kyanite and other samples. http://earthenparadiseinc.com/

Meeting Minutes

The April FGMC meeting was called to order at 7:30 PM on April 20 by club president Jeanne Schlottman. There were 25 members and guests present.

The program was a video presentation from the Dallas Mineral Conference on how crystals form.

Field trips were discussed with details on the April 29 field trip to Hiddenite discussed, and plans to try to arrange a May trip to the Propst Farm.

Door prizes were won by Sherry Marion, who chose a calcites sample from Washington, and Paul Burton, who chose a fossil necklace made by former member Marie Sack.

Arvil Marion reported that there would be a new dealer in the show this year, coming from Arizona.

There was also discussion about possibly extending the clubs outreach/educational activities to other organizations, such as the scouts, etc.

Respectfully Submitted,
Wayne Ketner, Secretary

Nature's Treasures

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

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