

# GOLDRUSH LEDGER



CHARLOTTE GEM & MINERAL CLUB

APRIL, 2009

## *The Prez Sez ...*

Time to go rock hunting again. Be sure to look for the trip which Mary Fisher has arranged for our club to go dig for Limonite crystals in Porter, NC which is near Albemarle and about an hour from here.

I have been to this location several times and it is loads of fun. If you do not like getting muddy digging for the bigger crystals, you can always find smaller crystals right on the top of the ground.

Mary set this trip up for the benefit of our junior rockhounds and their parents and I would encourage all member who can come to do just so and help these young folks have some fun and find some crystals.

Limonite, in this form is a pseudo-morph after pyrite. This means that before, the crystals were shiny pyrite, "fool's gold" and they weathered or rusted might be a better term to become the brown crystals that they are now. Local folk lore called them "Indian money."

Mary's junior program is growing and her last class was overflowing to the point that she had to hold two classes. We all owe her a big thanks.

On another note, our club has committed for two tables at the Art of Craft which will be held at Historic Rosedale on N. Tryon St. on Saturday, May 9th. There will be many types of craftsmen in attendance.

I already have some volunteers and we will go with our club posters and hand-outs as well as have Genie set up doing cabochon demonstrations. This is a selling show and if you have jewelry or crafts related to what our club does we would love to have you join us. We ask that any member selling items donate 20% back to the club to help with our booth cost. I would love to have a wire wrapper in attendance actually wrapping stones.

Because of Murray Simon's shoulder surgery, I do not know if Linda will be able to come and wrap, so please let me hear from you. Overall, this is just another effort to expose our community to what we do.

Finally, I am in the final stages of sorting all that had to be done to close down my business and I am ready to resume cabochon classes. I have several of my students as well as some of Murray's ready

to begin again. Also, if you would like to use the machines at other times, it is necessary that you come to a class and learn the proper procedures and rules for using the machines and the clubhouse.

At all times, for the safety of those there as well as for the liability of the club and the property owner should be done with a minimum of two people.

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You will soon be learning that our club has a very great honor in that our dedicated newsletter editor, Ron Gibbs is soon to receive the printed copies of his new and beautiful book on agates. Ron is one of the foremost photographers in our field and I cannot wait to get my own copy of this long awaited book.

If there is a job within our club which you feel that you can volunteer for, I, or any of our board members would love to hear from you.

There will be no May meeting due to a problem or conflict at The Nature Museum. Let's use the time together at Rosedale or on the field trip to network rocks together. We had very light attendance at our last rainy night meeting, and I will tell those that did not attend that you missed one terrific program put on by Ron, Eric, Gigi and Scott who shared their experiences of attending the Tucson and Quartzite shows. I think that it calls for a repeat!

Jack King, President, Charlotte Gem and Mineral Club.



**Due to a scheduling conflict with the  
Charlotte Nature Museum  
there will be no MAY meeting**

**(That is *NEXT* month NOT this month!)**

**This month's meeting,  
April, 2009 is wrongly described  
on page 5. Due to a last minute topic  
change it will be on Thundereggs in-  
stead of Agates.**

## Charlotte Gem and Mineral Club And Charlotte Junior Rockhounds Field Trip

**WHERE:** Bowers Limonite Prospect Field at Aquadale, NC

**WHEN:** Saturday, April 25, 2009 at 9:00 AM (*About one hour from Charlotte*)

**COLLECTING:** Various size limonite pseudomorphs after pyrite cubes. The larger cubes, possibly up to 2 and 1/2 inches, are still in matrix. You can surface collect and find smaller cubes up to an inch or more. You can also dig down several feet and find the larger cubes and some bigger clusters.

**FEE:** The fee is \$5.00 per person for adults and children. Pay Mary Fisher as you enter since this is a fee-based site. You must be a club member to join this field trip.

**BRING:** Bring picks, shovels, and other tools that you would use to dig into the ground. Bring a bucket or heavy cloth bag to carry your limonite. It is not rocky until you hit the matrix rock. Then you will need your picks. Gloves are recommended if you are digging. There are smaller cubes on the ground if you do not want to dig.

You will have to walk about a 0.5 mile into the mining area park following a clear cut gas line which is usually well maintained. Pine trees now grow on the once open field.

Bring water and food with you. There are no places to purchase food and drink near by the mining site. There are no bathrooms but there are trees etc. Also, you may want to bring a change of clothes and shoes/boots since you will be working in red clay soil.

*You must fill in your holes before leaving and pick up all your trash.*

**DIRECTIONS:** If you're using a navigational device, the closest street address is 40589 S Stanly School Rd. The town name may show up as either Norwood NC or Aquadale NC.

From Charlotte (I-485) take Highway 24/27 toward Albemarle – go about 20 miles.

Turn right on NC 205/Oak Ridge Rd. – go about 3.6 miles toward Oakboro.

In Oakboro, keep going straight – NC 205 changes to NC 742 (Main Street) for about 0.1 mile.

At the Railroad Museum, turn left on to NC 138 - go about 6.2 miles.

NC 138 comes to a stop at a T-intersection. Turn left (Plank Rd/still NC 138) for about 0.2 mile.

Just after you cross over the railroad tracks, turn right onto South Stanly School Road/NC1922 – then go 3.5 miles. You will come to a traffic circle – go straight through the intersection – toward the water tower. You will see South Stanly High School on the right. The road directly across the street is the Michelin Tire Plant – West Entrance. It says Employees only, but drive to the end of this short street, and park in the right of way area to the left of the chain link fence (a short stretch of unpaved road). Do not park in front of the Michelin Gate, or in the No Parking Zones.

We will meet there at 9:00 AM and walk back to the dig site, about a half-mile. I will check back at the parking area in 30-45 minutes in case you arrive late.

For Questions/Info: Contact Mary Fisher [HYPERLINK “mailto:mefisher@att.net”](mailto:mefisher@att.net) mefisher@att.net, or 704-786-6621. (*If you get lost, contact Mary Fisher at 704-564-1594. I will have my cell phone on that morning, but cell phone reception is weak there.*)

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## ***Upcoming Rock & Gem shows in nearby states***

*(Those with **RED** are club shows with the Southeastern Federation.)*

### ***April***

**24-25--IRVINE, KENTUCKY:** 46th annual show; Bluegrass Gem & Mineral Club; Mountain Mushroom Festival/Agate Hunt; Estill County School System Central Office, 253 Main St.; Sat. 10-5, Sun. 10-5; free admission; agate hunting in local creeks for \$10 per person, flint knapping demonstration; contact Phillip Daly, 10330 Forkland Rd., Parksville, KY 40464, (859) 854-0418; e-mail: phillipdaly@bellsouth.net; Web site: www.orgsites.com/ky/bggamc/

**25 -26 Memphis, TN.** Memphis Mineral, Fossil, Jewelry Show Memphis Archaeological and Geological Society "The Earth Wide Open" New Location- Memphis International Agricenter, Expo Center, West Pavilion A-wing 7777 Walnut Grove Rd. Memphis, Tn Saturday, April 25 9-6:00 and Sunday, April 26 10-5, Dealers, Exhibits, Kids Area. Adults \$5.00, Children 12 and under \$2.00. Scouts free. Portion of admission benefits the Ronald McDonald House of Memphis web: www.TheEarthWideOpen.com, email info@theearthwideopen.com. Show/dealer info.W.C. McDaniel 901 274-7706

**24-26--ROME, GEORGIA:** Show, "Valley and Ridge Gem & Mineral Show"; Rome Georgia Mineral Society; The Forum, Tribune St. at Third St., downtown; Fri. 10-6, Sat. 10-6, Sun. 11-5; free admission; minerals, gems, fossils, jewelry, crystals, exhibits, demonstrations, door prizes; contact Tim Biggart, (706) 232-7143; e-mail: tbiggart@berry.edu

### ***May***

**2-3--NORTH CHARLESTON, SOUTH CAROLINA:** Show, "Art by Nature"; Lowcountry Gem & Mineral Society; North Charleston Area Convention Center, 5000 Coliseum Dr.; Sat. 10-5, Sun. 10-5; free admission; part of the North Charleston Arts Festival; contact Karen Havenstein, (843) 795-2956; e-mail: fossils@comcast.net

**8-10--ATLANTA, GEORGIA:** Show, "Mothers Day Gem and Mineral Show"; Georgia Mineral Society; Cobb County Civic Center, P.O. Box 15011; Fri. 10-6, Sat. 10-6, Sun. 12-5; free admission; demonstrations, exhibits, auction 2 p.m. Sat.; contact Kim Cochran, P.O. Box 15011, Atlanta, GA 30333, (770) 979-8331; e-mail: Mayshow@gamineral.org; Web site: www.gamineral.org

**8-10--FRANKLIN, NORTH CAROLINA:** 8th annual show, "Mother's Day Gemboree"; Franklin Area Chamber of Commerce; Macon County Community Bldg., US Hwy. 441S; Fri. 10-6, Sat. 10-6, Sun. 12-5; adults \$2, children 12 and under free; minerals, beads, handcrafted jewelry, rough and cut stones, lapidary equipment, demonstrations, door prizes, gold and silver jewelry, findings, jewelry repairs and mounting; contact Linda Harbuck, 425 Porter St., Franklin, NC 28734, (800) 336-7829; e-mail: lindah@franklin-chamber.com; Web site: franklin-chamber.com

**8-10--MARIETTA, GEORGIA:** Show; Georgia Mineral Society, Cobb County Civic Center, 548 Marietta Pkwy.; Fri. 10-6, Sat. 10-6, Sun. 12-5; free admission; more than 30 dealers, door prizes, auction Sat.; contact Kim Cochran, 1695 Van Court, Snellville, GA 30278; (770) 979-8331; e-mail: mayshow@gamineral.org; Web site: www.gamineral.org

**22-24--SALEM, VIRGINIA:** 18th annual spring show; Treasures of the Earth Gem & Jewelry Shows; Salem Civic Center, 1001 Boulevard; Fri. 10-6, Sat. 10-6, Sun. 11-6; adults \$4 (good all 3 days), children under age 16 free; jewelry makers, goldsmiths, silversmiths, gem trees, wire wrap, wire sculpture, pearls, stone beads, stone

setting, dealers, amber, opal, minerals, fossils, door prizes, classes; contact Van Wimmer, Show Director, 5273 Bradshaw Rd., Salem, VA 24153, (540) 384-6047; e-mail: van@toteshows.com; Web site: www.toteshows.com

## **June**

**6 - 7, 2009 Birmingham, AL** 36th Annual Tannehill Gem, Mineral, Fossil, & Jewelry Show Alabama Lapidary & Mineral Society Sat: 9 am to 5 pm; Sun: 9 am to 5 pm Tannehill Ironworks Historical State Park  
From Birmingham, take I-20/59 S. to Exit #100, or take Exit#1 off I-459 and follow signs. Show is FREE with paid admission to state park. Hourly door prizes & children's activities! Educational exhibits & demos! Outdoor show! Show contact: Gene Blackerby, 205-807-6777 Email contact: gene@lapidaryclub.com <http://lapidaryclub.com>

**6-7--MARION, KENTUCKY:** Show, "Ben E. Clement Gem, Mineral, Fossil, and Jewelry Show"; Ben E. Clement Mineral Museum, Fohs Hall, N. Walker St.; Sat. 9-5, Sun. 11-5; free admission; dealers, silent auction, door prizes, children's activities, museum tour, fluorescent mineral display, guest speakers, KY Geological Society booth, digs at old mine sites; contact Tina Walker, P.O. Box 391, Marion, KY 42064, (270) 965-4263; e-mail: becllement@kynet.biz; Web site: clementmineralmuseum.org

**12-14--RALEIGH, NORTH CAROLINA:** Show; Frank Cox Productions; state fairgrounds, Blue Ridge at Hillsborough St.; Fri. 10-5, Sat. 10-5, Sun. 10-5; gems, jewelry, beads; contact Frank Cox Productions, 755 S. Palm Ave. #203, Sarasota, FL 34236, (941) 954-0202; frankcox@comcast.net; www.frankcoxproductions.com

**19-21, 2009, Asheville, NC-** Colburn Earth Science Museum. Asheville GemFest, 2 South Pack Square at Pack Place. Hours: 19th & 20th, 10:00 A.M.-6:00 P.M.; 21st, 11:00 A.M.-5:00 P.M. Contact: Felicity Green at 828.254.7162 or museum.colburn@gmail.com.



## **Next General Meeting, Thursday, April 16th, 2009**

**Where:** Charlotte Nature Museum (*1658 Sterling Road, Charlotte, NC 28209*)

**Time:** 7:00 pm

**Topic:** *Sedimentary and Vein Agates*

by Doug Moore, Heart of Wisconsin Gem & Mineral Society  
(*Winner of the 2005 AFMS Presentation Contest*)

DVD/Slide Show by Maury Simon

This program takes you on a field trip adventure to look for sedimentary and vein agates in the Black Hills of Western South Dakota, in an area north of Jewel Cave national monument, called Agate Valley. Some agates of other locations around the world are also included.

## What's in them Quartz Crystals?

by ron gibbs

In the world of gemstones purity is highly sought, and premium prices are paid for stones without any internal inclusions.

There have been maybe two general exceptions to this rule with rutilated quartz, and tourmalated quartz. Rutilated Quartz is a clear quartz crystal with golden, silver or reddish rutile crystals imbedded. And tourmalated is again a clear quartz with small tourmaline crystals running through the Quartz. The most common tourmalated quartz contains black shoal tourma-

line, but the most desired has more colorful lithio-tourmalines in green or pink. (These are far more rare.)

In the past several years the demand for this type of oddity has grown and the market now looks for quartz with all types of internal secondary materials.

A wide array of marketing names have also followed. For instance, quartz crystals containing pieces of the cavity wall where they grew were once called "garden quartz". In the last year or two cut stones,

both cabochons and faceted stones made from this material are now sold as "Iodalite". The variety of inclusions is amazing.

Miners now segregate these oddities for a select number of dealers and more and more are arriving in the gemstone market. What follows are a number of items I purchased from several dealers in Tucson. I will provide some general descriptions and some microscope images showing some of the wonderful internal structures.

Each year more and more quartz crystals and even other clear minerals are being collected as included stones that bring a new look to the gemstone market.



Two Rutilated Quartz cabochons. The rutile was first oriented by the hexagonal Hematite crystal (black in the photos)

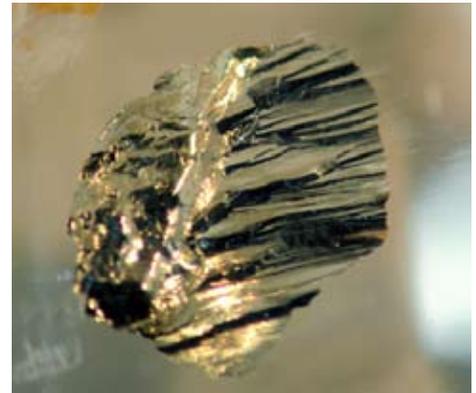
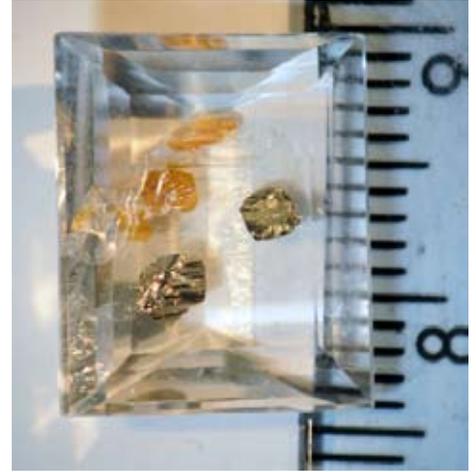


(Above) The golden rutile forms a star like pattern as it runs out of the face of each of the 6 sides of the hexagonal hematite.

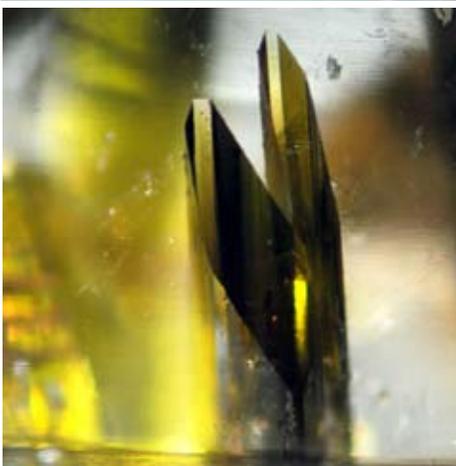


(Right) Manganese and/or iron dendrites formed in a thin crack in a quartz crystal. Dendrites are thought to be formed by Brownian motion as a soluble material precipitates from solution.





(Above ) a “Lodalite” cabochon with much of the cavity matrix included (sandy material) and a “negative” quartz crystal. What appears to be a quartz crystal in the top- center of the left image is actually a cavity shaped like a crystal.



(Above) Epidote crystals in quartz. The image above shows where the epidote actually comes out of the quartz surface.

(Below) another round “lodalite” cabochon with wall matrix (Sandy material), thin long crystals (rutile?), and many flat plate-like crystals all inter grown.

(Above) Pyrite crystals floating in a quartz crystal. This usually means that the pyrite actually grew at the same time as the quartz, it formed on an exterior growing crystal face and was encased by the quartz over time.



## *The Kaali Meteorite Catastrophe* by Bill Cordura,, U.W. - River Falls, Geology

We have evidence that past asteroid or comet impacts have caused mass extinctions such as that of the dinosaurs 65 million years ago. We have also seen movies and read articles about possible catastrophic effects to future civilization from such impacts. These events are hard to grasp, perhaps because we have no record of great human suffering due to such impacts in our history. Some see passages in the Bible or in other traditions (such as the Scandinavian Ragnarok) as indications of past catastrophic events (Gribbin and Gribbin, 1996).

One would expect, however, hard scientific evidence that those parts of ancient history were associated with a comet or asteroid impact. Recently, however, researchers in Estonia and Sweden have turned up evidence of a meteorite causing havoc in an Estonian island community (Veski, et. al., 2001).

Scientists studying the geology of an island of Saaremaa, off the coast of Estonia, found evidence that a large iron meteorite, perhaps weighing 1000 tons, fell on this island between 800 and 400 B.C.. Such an impact would unleash a force slightly greater than that of the Hiroshima A-bomb. Archeological records show that at that time the island was densely populated. Little is know of these people as they left no written record.

The evidence for meteorite impact at this time is certain. An impact crater, 350 feet across, called the Kaali Crater, was found. It now forms a shallow lake. At least 8 satellite craters surround the main

one. Crater morphology indicate the impact released the energy equivalent to 20 kilotons of TNT. Fragments of meteoritic nickel-iron are associated with the crater, as are beads of glass formed by shock melting of rocks upon impact. High iridium concentrations in the lake sediments are also evidence of meteorite impact. Carbon 14 dating of the peat deposited in the lake and nearby bogs pin-point the impact as occurring between 800 and 400 years BC.

Saaremaa was densely inhabited then, as it had been for thousands of years before the impact. Many Bronze Age artifacts are found there, as are the remains of towns, fields and fortresses. Cattle and crops formed the basis for the economy. Pollen deposited in nearby fens and bogs allow a detailed re-creation of the vegetation before, during and after impact. Before impact, a number of pollen grains from a variety of cultivated cereals were present, along with tree and herb pollen. At the time of impact, a unique deposit formed. This was a layer of glass spherules, meteorite

fragments, rock dust, charcoal and burned stumps. Sediment deposited for the 100 years following impact was quite different from what went before. There was no cereal pollen and little tree pollen found, only an increase of dwarf shrubs. Eventually pollen populations return to their pre-impact character.

Veski et. al.'s interpretations of this data paint a stark picture. The people were hit suddenly with the force of a Hiroshima-size explosion. By comparison with Hiroshima, no living thing likely survived within a mile. of the crater. Flash burning of vegetation would occur up to 2 miles away, setting the stage for still wider wild fires. All structures up to 6 miles. away would have collapsed. That the culture itself collapsed is indicated by the fact that there was no sign of crop cultivation for 100 years after the impact, although there are signs that survivors used the edge of crater in a fortification soon after impact.

One wonders what the survivors must have thought had happened to them, or how they would have described it to others. What influences might this have on stories and legends down to this day?

