GOLDRUSH LEDGER

CHARLOTTE GEM & MINERAL CLUB

JANUARY 2012

Prez Sez ...

Linda and I just returned from a few days in New Orleans. We heard it's a rocking city but could not find one rock shop. So instead we participated in the other available options - sightseeing, eating great food, drinking strange beverages and partying. A tough life but someone has to do it.

And here we are facing a new year with lots of interesting prospects for the Charlotte Gem & Mineral Club. As you probably know by now we will no longer be meeting at the Charlotte Nature Museum – the rent got too high as the room got too small. Our new venue at the Tyvola Senior Center (225 Tyvola Rd.) offers much more space, easier access, a well lighted/larger parking area and much cheaper rent.

We will still be holding our general meetings on the third Thursday of each month and we have some exciting speakers lined up for the beginning of the year so keep an eye out for the forthcoming meeting blasts.

We can look forward in 2012 to repeating our success at Mathews Alive and Mint Hill Madness. If the weather cooperates for both events I believe, based on last year's customer responses, that we will establish new benchmarks for success at both events. I'm counting on all of you to volunteer and help out as you so effectively did in 2011. We presented $750 scholarships to two UNCC students at the Christmas Party and their expressions of gratitude more than repaid the time and effort that went into cutting geodes to raise the funds and provide materials for future events.

I've mentioned this previously but it's important enough to repeat – We have a very unusual speaker for February. Scott Forward is from Atlanta and is a retired geologist who teaches gem and mineral ID at William Holland. He fascinated Linda and me with lunch and dinner conversations at William Holland last fall. His emphasis is on making you more knowledgeable and successful on field trips and we will have a unique opportunity to put his teachings to work. On the first Saturday in April Scott will act as our guide on a dig at

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Diamond Hill Mine In Antreville South Carolina. (near Clemson). This represents an incredible opportunity to learn how to maximize your efforts at a dig and come away with some impressive specimens for your efforts.

Our major focus for 2012 is to locate a new site for our classes . We are truly fortunate to have our current workroom through the generosity of Sarah Lee Boyce. I feel, however, that we need space that is more centrally located, readily accessible during those 6-7 months when Sarah is away teaching at William Holland and will facilitate storage of materials and supplies for other types of classes to be held at the same location. There are options under consideration at the present time but until we have something solid and confirmed, stand by for further input.

At the risk of sounding like a broken record, it's time once again to remind you that we always start a new year with THE COLLECTION OF DUES. The board last year passed a resolution that those who have not paid dues by the end of March will no longer receive the CG&MC newsletter or invitations to club events.

We will have a table set up at the entrance to the meeting room for the next three meetings with Vivian Philson, our new treasurer, ready to accept your check or cash ($20 per individual/$25 per family – such a bargain!) and to once again welcome you to the roles of active membership. If for some reason you can't make it to these meetings, this newsletter has a membership application that can be downloaded and sent with a check to Vivian.

I want to wish you all a wonderful new year full of exciting events and interesting discoveries. See you at the Senior Center.

Murray

Cabochon Class Workshops

For the next two moth's Sarah Lee Boyce will not be teaching at William Holland School (it's closed for the season), and is available to teach cabochon classes. Call her to set up a time for a weekend class while the opportunity exists.

Call between **10 AM and 8 PM** (704) 827 1431

Charlotte Gem & Mineral Club Monthly Meeting

January 19th, 2012
Thursday -- 6:30 pm --

New Location: Tyvola Senior Center
2225 Tyvola Rd.
Charlotte, NC 28210
(704) 522-6222

OLD JEWELRY IN NEW PLACES

We have an exciting program to inaugurate our new meeting place. Two years ago this month we had a wonderful talk on diamonds by **Rick Jennings** of Diamonds Direct. He has agreed to come back to do a presentation on:

Jewelry Making Over the Past 150 Years

Rick will talk about the history and evolution of jewelry design, fabrication, manufacturing and marketing from the Victorian era to the present day. He is a student of the history of jewelry making with an extensive personal library on the subject and will be very happy to answer questions.

PLEASE NOTE – THIS WILL NOT BE A CG&MC "ANTIQUES ROADSHOW". DO NOT BRING OLD JEWELRY FOR IDENTIFICATION OR APPRAISAL!!!

Charlotte Jr. Rockhounds

Saturday Jan 28, 2012
10-11:00 a.m.

Topic: Fossils and the Timeline of the Earth

Matthews Community Center
100 McDowell St. East
Matthews, NC 28105
704-321-7275

Contact Mary Fisher for further information at: mefisher@att.net

Club Christmas Party and Scholarships Awarded

On Friday, December 16th, the club met at the Amity Presbyterian Church for it's annual Christmas Holiday Party. We had plenty of food supplied by both the members and the club. We enjoyed turkey, ham, and Jimmy's famous Chili.

There were enough deserts for even those with a large sweet tooth. Our fearless leader opened the presentation with a welcome and introduced the slate of next years officers. After the introductions. the elections were quickly held and the officers were thanked for their willingness to serve.

He talked a bit about the success of the club this year in it's money raising efforts, and to that end we awarded two scholarships to students in the Earth Science / Geology department of the University of North Carolina Charlotte.

We also awarded two scholarships to club members to attend either William Holland or Wild Acres workshops sponsored by the Southeastern Federation of Mineral Societies. Alternates were also chosen for each scholarship just in case there are scheduling conflicts.

fearless leader - gives a speech

Member socialize during the party - about 40 attended

Welcome Vivian Philson - our new treasurer


The club provided two scholarships to UNC students this year and two 1 week stays at William Holland or Wild Acres

Dues are Due

Just like in previous years, your club dues come up for renewal in January. They are good for one year and run $20 for individuals or $25 for a full family.

Please pay Vivian with a check at our monthly meeting or put a check in the mail to her address. Include a new copy of our membership form, and update any information which has changed. (Like either your e-mail address or your street address.)

Vivian Philson
5601 McCallum St.
Charlotte, NC 28226

The membership form can be obtained from the WEB site. (www.charlottegem.com) or pick up a copy at the monthly meeting.
The dues are used to offset our fixed yearly costs, the meeting location rent (monthly), the WEB site, the newsletter, meeting snacks and food for our annual Christmas and/or summer party. They also aid in costs related to the Jr. program, and maintenance of the club library and tools.

As a reminder the club does maintain a large loaning library with many books on nearly all facets of the lapidary and jewelry making hobby. Those books can be checked out at our meetings and there is a liberal return policy. There are also classes offered before meetings, and the dues help offset those expenses.

Scholarship monies come from our external club events.

Stamp Program Wants Postage!

Just a reminder, the Liberty Bell stamps are no longer acceptable.

SFMS Stamp Program rules: all stamps must be trimmed with no more than 1/4" of paper around the stamp. Stamps torn from envelopes must be trimmed before Pat can turn them in.

If stamps are damaged or the envelope has been torn away under the stamp they will not accept them and they are discarded. Please trim before turning them in.

Please turn in your cancelled postage to our stamp coordinator.

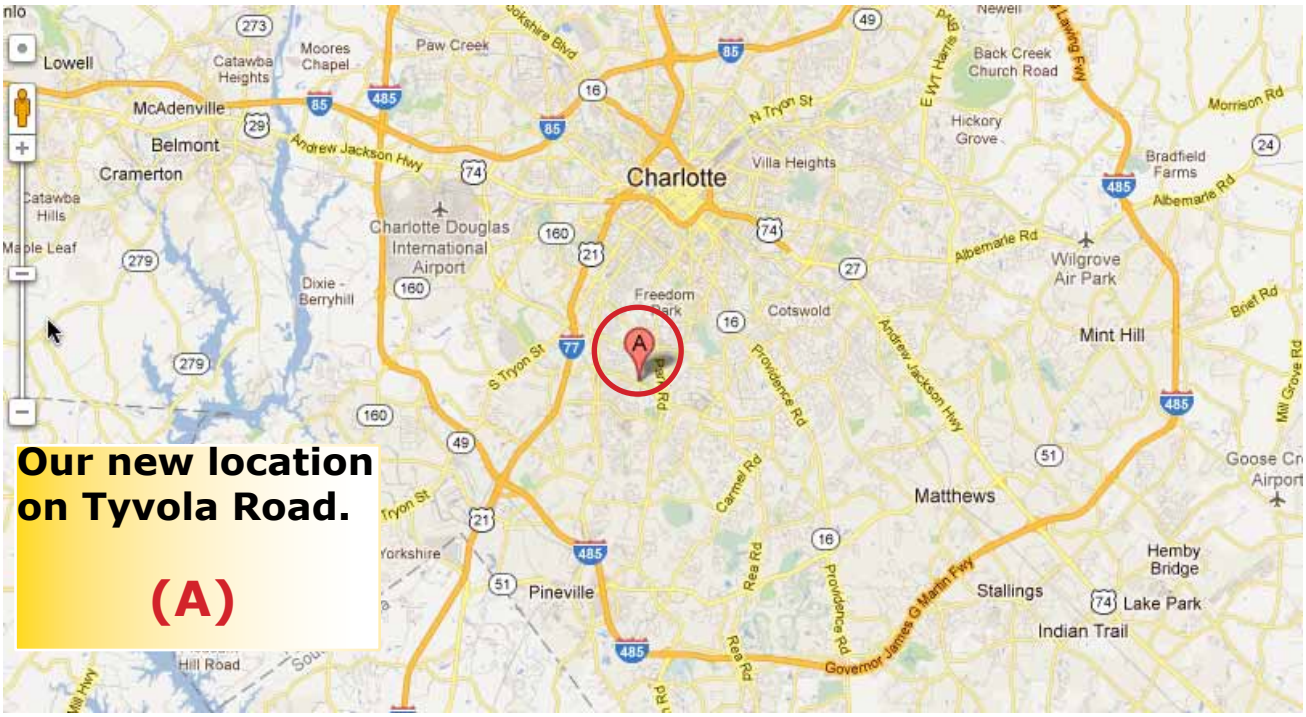
Thank You - Pat Walker

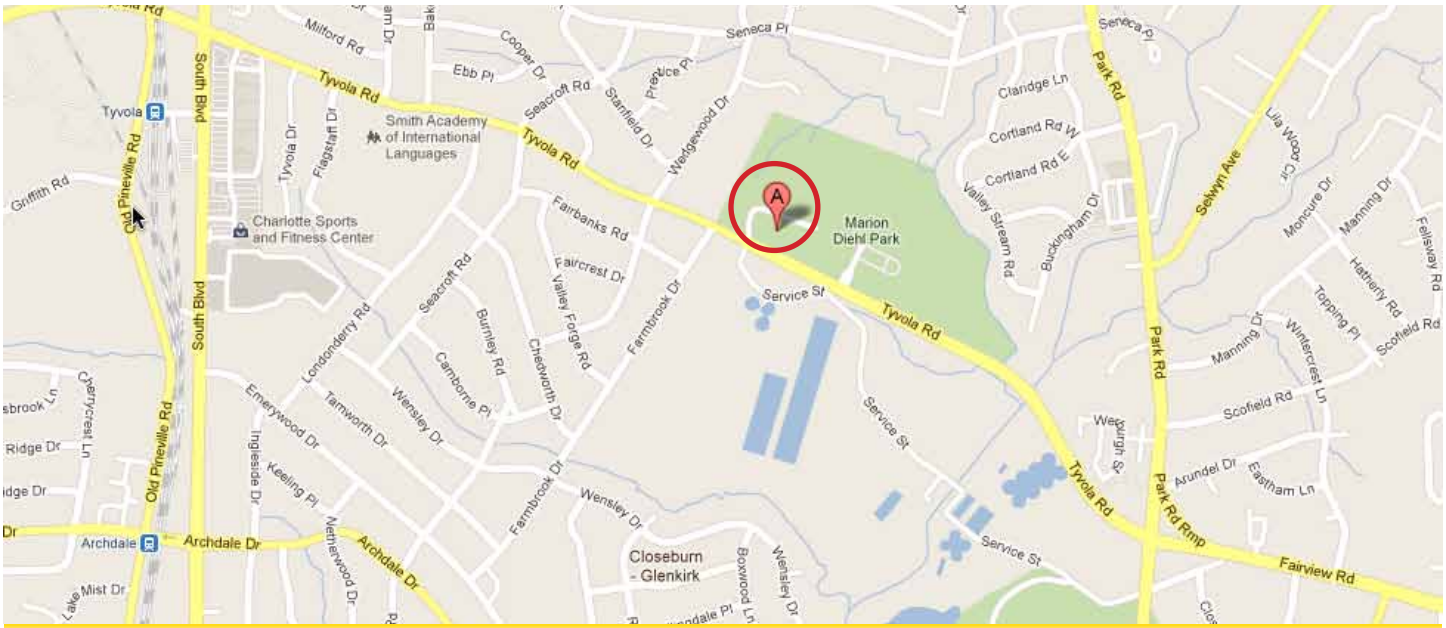
New Meeting Location - Our Monthly Club Meetings Have Moved for 2012!

For many reasons, including financial, size constraints, availability, etc. our regular monthly meeting will now be moving to a ***new location*** at the:

Tyvola Senior Center
2225 Tyvola Road
Charlotte, NC 28210
(704) 522-6222

Our first meeting at the new location begins this month *(January)*. The meeting begins at 6:30 PM with a short time for socializing, with the official business portion starting at 7:00 PM and the presentation following shortly there after.





GOLD!

by James Ho (Pebble Press, March 2005 - Richmond Gem & Mineral Club

Since the beginning of recorded history, gold has been known and prized and it has played a significant role in society. In the ancient world, gold ornaments were used in religious rituals symbolizing power, light and life. Gold has been found in ancient Egyptian tombs, and it was first known to be used in payments as early as 560 B.C, when the first gold coins were minted in Lydia, a kingdom in Asia Minor. Gold has been called the 'Ultimate Currency' as it is the only universally acceped means of exchange over the centuries

On the Periodic Table of Elements, Gold is Au and has an atomic weight of 79. The "Au" is derived from Latin name for gold, aurum, which means 'glowing dawn'. Gold is a soft, dense, bright yellow metallic element. It has been known and highly valued from the earliest times because of its beauty, rarity, and its special characteristics. It has a hardness of 2.5 to 3, its melting point is 1064.41C, and its boiling point is 2807.8 C. It has a high specific gravity of 19.32 at 20C. This means it is 19.32 times heavier than water, or one cubic foot of gold will weight 1203 lbs. Gold is much heavier than the low sp. gr. 8.9 of copper, and it is even heavier than uranium which has a sp. gr. of 19.04). Gold's casting Temperature is 1077C as compared to sterling silver' s 954C.

Gold is widely dispersed throughout the earth's crust. It often exists in association with copper and lead deposits. Gold crystals are commonly distorted, but they can appear in many forms, commonly octahedral, dodecadral, and cubic. They also appear as grains, scales, lumps, also as plates, leaves, and wires. Gold has a characteristic gold-yellow color, high gravity, and malleability, whereas pyrite, a similar species, is lighter in weight than gold. Pyrite is brittle, and it will yield small fragments and powder when hammered.

Gold is the noblest of the noble metals including platinum, palladium and rhodium. Noble metals are so- called because of their inertness to enter into chemical reactions. It will not rust or tarnish or corrode when subject to weather, water and oxygen. Gold will not react or dissolve in any single acids. Only 'royal water' (mixture of nitric and hydrochloric acids), or mercury and cyanide solutions are known to dissolve this metal. It is the third most electrical conductive metal after silver and copper. Since gold has very high specific gravity, it is very dense in volume: All gold ever mined on Earth could be contained in a cube measuring only 62 feet on each side. Gold is completely recyclable. About 97% of all gold ever produced is still in use.

Gold is the most ductile and malleable of all metals. Gold can be beaten to translucent sheets with a thickness of 0.00001 mm. Gold beating can reduce an ounce of gold to a sheet measuring 10 feet by 10 feet. The same amount of gold can be drawn into a fine wire stretching 100 km. long. Small pieces of gold leaf are used in art gilding and lettering, for use in gilding statues and shop signs seen in some Eastern coutries, and for architectural gold detailing, as used for the Altar of Heaven in the capital city of Beijing. China. Gold is the best reflector of long wavelength thermal radiation. It is indispensable in industrial applications, such as electronic circuitry, laser mirrors, infrared scopes, fire- fighter's protective coats, space satellites, aircraft cock- pit windows, and so on. (editor's note– Whereas gold is less conductive than silver or copper, gold's resistance to tarnish and corrosion makes it superior for electronic circuitry)

From the 16th century to mid-19th gold output was 4.6 million kg., mainly in S. America and Mexico. South Africa holds about half of world's gold resources. 1. S. Africa (is world's chief producing country) 2. US 3. Australia, 4. Canada. 5. China 6. Russia 7. Indonesia.

A total of about 148,000 tonnes, or about 4.2 billion ounces of gold was mined in the past 4000 years, of which 15% was lost in shipping and dissipative indutries. Gold in existence today is about 4 billion troy ounces, of which 27% (or 1/4 total) is stored in central banks as the backing for the world's currency, and to settle trade differences between individual countries, and 73% as jewelry, bullion, coins, and bars. (Note: 1 tonne = 32,151 troy ounces; 1,000,000,000 = one billion).

No one can say for sure how much more gold is left to be mined on Earth, but it was generally thought that what we so far have found is only one-tenth of the total gold resources on Earth. The rarest form of gold is a nugget. Nuggets had been found in many places of the world, very often by accident, such as the 130 lbs 'Welcome Stranger" found accidentally in Victoria, Australia in 1869. Another nugget found was as heavy as 630 lbs (Australia's Holterman Nugget).

In gem shows, small gold crystals and nuggets can be bought. Gold nuggets found in rocks usually look very strange and have very

irregular shapes. Those found in rivers are usually smooth- looking, like small beans. The easiest way of gold prospecting is by means of panning. Some people still go to the Fraser River for goldpanning nowadays. They use Gold Pans, which are small circular dishes with a hollow pocket at the bottom to collect bits of gold. Nuggets may weight a mere ounce or as big as a hundred pound or more. The value of a piece of gold nugget may be 3 or more times the price by weight, depending on size, shape and rarity. Canada is one of the leading gold-producing, (and diamond-producing) countries in the world.

Gold is sold in Troy Ounces (1 Troy ounce = 1.109739 Avoirdupois oz = 31.103 grams). The price of gold on January 2005 was US$428. It is also sold as Kilobars, which are 32.1507 troy ounces or 2.204 lbs, worth over US$13,000 at today's prices. Governments may deal gold with the Zurich Gold Pool, for bars between 350 and 450 ounces (over US $170,000) or with Comex, whose bars are 100 troy ounces (3.11 KG) and worth over US$43,000 each. These you will only find in bank vaults or government storage.

Gold Price per troy ounce over the years : US$20 in 1834, $35 in 1934, $42 in 1973, $850 in 1980, $460 in 2004, and $428 in January 2005. The world's largest stock of gold is housed at the Federal Reserve Bank in NY City, USA. It holds 320 mil- lion ounces (or 9,953 tonnes), representing the interest of 40 countries.

The US Gold Depository at Fort Knox is also said to have contained tonnes of US Goverment's gold reserve which worth over 6 billion dollars. (Tons of GOLD, and not IRON ? One could not help thinking at this moment of the x-tons of gold rumored to have amassed by a former Asian President!).

When referring to the fineness of gold, the word "Karat" is used. It equals one part of twenty-four in gold alloys. (Karat should not be confused with Carat which is a unit of weight for gems. One Carat equals 200 milligrams, or one-fifth of a gram).

24 Karat (24K) is 100% or 999.9 Fine Gold. 22K gold alloy contains 91.67% gold, plus 4% silver and 4% cop- per; 18K yellow gold alloy contains 75% gold plus 25% of silver and copper; 14K gold allow contains 58.3% gold plus 25% silver and 17% copper; and 10K yellow gold alloy contains 41.6% gold, and the rest of the 58% may contain much more copper than silver (as much as 48% copper). 18 Karat blue gold contains 25% iron.

Eighty percent (80%) of gold is used in the jewelry industry. Eight percents are used in gold coins, bullions, and bars. India and Italy are the number one countries using gold to manufacture gold products; and the number one gold consumers are India and the U.S - according to a 1996 survey.

Articles which are "gold-filled" must have at least 10K gold bonded by heat and pressure to the base metal. The K-gold must be equal or over 1/20 by weight of the total metal content. Articles with "Rolled Gold" plating on them must have gold alloy of 10K or better, bonded to a base metal. The K-gold must be identified by weight in terms of total metal content. (to equal or be greater than 1/20).

"Gold-Plated" articles means electroplating a coat of gold at least 10K which must be at least 7/ millionth (0.000007") of an inch thick. Electroplating is often used in the electronics and aerospace industry. There are silver casting, and silversmthing facilities in our workshop, but members can do gold casting and goldsmithing as well.

Spring Field Trip Diamond Hill Mine

Look for more information in the near future on our spring field trip, in April, to the Diamond Hill Mine.

This mine has produced an abundance of varieties of quartz including, amethyst, clear, smoky and skeletal quartz.

This will be a fee based trip, but will be guided by someone familiar with the area. Everyone will go home with stash of materials.

William Holland & Wild Acres Classes Fill Fast

The class schedule for William Holland Lapidary School has been published and is available on their WEB site. Many of he classes fill rapidly, so it's a good idea to make you selections soon if you are interested in specific classes.

The SFMS Wild Acres classes will be announced later this month on the SFMS WEB site, and the most popular classes will also quickly fill, so it's a good idea to make your reservations as soon as you can.

Wild Acres: http:// //www.amfed.org/sfms/

William Holland: http://www.lapidaryschool.org/