

A newsletter for Gem and Mineral enthusiasts in and around the Raleigh, North Carolina area.

Special Interest Articles:

- Prez Sez
- October Door Prize - Celestite
- November / December Minerals
- Field Trip Report

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Prez Sez

November is election month. I do hope you cast your vote in the general election this year. And you have one more occurring at the final club meeting of 2014. Your Board members are up for election and/or reelection. Nominations will be accepted before voting commences. I have it on good authority that someone new will be nominated.



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October Door Prize - Celestite By Ben Brittingham

The reason I chose the Celestite was because I loved its color of blue and its sparkle off the light. And I like that its home is Madagascar. I also could not believe that I won the door prize the first time I went there in the first place.

When I got home I learned that Celestite is usually white not blue. The blue is only found in Madagascar. Here is what else I learned about Celestite from an internet search:

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Tar Heel Gem & Mineral Club, Inc.

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We're on the Web!

See us at:

www.tarheelclub.org

Program & Refreshments

REFRESHMENT SCHEDULE:

Coordinator: Need Volunteer

November TBD

PROGRAM SCHEDULE:

November Elections & Thank You from The Club

Remember, the club will reimburse you for up to \$75 (bring your receipts to the treasurer).

Field Trip Information

Hanson Quarry, Wake Forest, NC

When: Saturday, November 15, 2014, 9:00 am until 12:00 pm. We must arrive at the quarry no later than 8:45 am. for training and signing of waivers. No Latecomers!!

Where: 10501 Capital Blvd., Wake Forest, NC

Collecting focus: Looking for Calcite; Quartz; Maybe smoky quartz; Epidote;.

Requirements: Ages: 17 and up. Steel Toed Boots; Hard Hat. You must bring your own hard hat with you. Safety Vest Reflective; Bring water or something to drink; Gloves.

Tools: Rock Hammer; Chisel; 3 Lb. Hammer; Newspaper to wrap specimens; Bug Spray; Snacks; Long Screwdriver; 5 Gallon Bucket or backpack; Other tools of your choice;

Who: 15 PEOPLE ARE ALLOWED to go on this trip and all spots are taken. I would appreciate everyone's cooperation in making sure we follow all of the rules given to us by the Quarry Manager. If we do this we can be allowed to return again. Please RSVP to Shirley. 919-848-1085 or Richard60Green@yahoo.com

November B-Day Members

Daniel Cathey
Valerie Eakley
Milissa Ellis
Scott LaBorde
Debbie & Jerry Miller
Richard Ryan
Ron Wheeler
Amber Shelton
Wally & Anne Zapata

December

Michael Annacone
Carolyn Beck
Gerald Cook
Michaela Dillon
Judy Fersch
Sarah Gray
Asha Goodwin
Obsidian Harris
Becky Healy
Janet Jones
Elizabeth Ryan
Barbara Watkins



Membership applications may be mailed to:

Tar Heel Gem & Mineral Club, Inc.
Attention: Treasurer
10609 Chelsea Drive
Raleigh, NC 27603

Tar Heel Gem and Mineral Club, Inc. - October Meeting Minutes

Tuesday, October 21st, 2014

Attendees = 24

Refreshments:

Thanks so much to Cyndy & Corinne for bringing the munchies and filling in for Walt who was not able to make it to the meeting.

Opening of Club Meeting:

Cyndy called the meeting to order..

Visitors

Maureen and Roger Mercer, Benjamin and his mother Kathy

New Business:

Birthday Babble: Gerald Beck said that he became involved with rocks through the passing of his father-in-law who was an avid rock collector. He contacted the THGMC and asked for help in sorting through the collection. He has been coming to meetings ever since.

Cyndy reminded members to wear their name tags in order to get a door prize ticket and that members could purchase additional tickets for one dollar if they wanted to increase their chances of winning.

Cyndy discussed the topic of the first draft of the By-laws and asked if anyone had any comments, questions or concerns. No comments were brought up and the members were encouraged to take a look at the suggested changes and do their "homework" before the next meeting.

Cyndy discussed the nomination of the officers for next year and named the current officers and asked for any

October Door Prize - Celestite

Continued from page 1

Color	Colorless, white, pale blue, pink, pale green, pale brown, black
Crystal habit	Tabular to pyramidal crystals, also fibrous, lamellar, earthy, massive granular
Crystal system	Orthorhombic
Cleavage	Perfect on {001}, good on {210}, poor on {010}
Fracture	Uneven
Tenacity	Brittle
Mohs scalehardness	3 - 3.5
Luster	Vitreous, pearly on cleavages
Streak	white
Diaphaneity	Transparent to translucent

nominations. Walt made a motion to nominate all of the existing officers and the motion was seconded by Mary Harbison. Cyndy said that there is still time to make nominations and to be prepared to vote at the next meeting.

Old Business:

There were no topics brought up

Program:

"Grab Bags"

Cyndy talked about the grab bags and said that the club hopes to prepare 500 bags in the Fall and 500 bags in the Spring. She said that they always run out of bags for the show. She then gave a demonstration on how the grab bags should be assembled and asked for volunteers to do the counting and stapling of the bags as they were filled. Jack agreed to take the bags to the storage unit. The assembling of the bags began with the hopes of making 500 bags.

Door Prize:

The door prize ticket was picked and the winner was the new visitor Kathy and she promptly gave it to her aspiring rockhound son Benjamin. He selected the beautiful Celestite crystal specimen from Madagascar.

Close of Meeting:

Cyndy called the meeting to a close.

Respectfully Submitted

Julie Niederkorn,

Vice President, Tar Heel Gem and Mineral Club, Inc.

Specific gravity	3.95 - 3.97
Optical properties	Biaxial (+)
Refractive index	$n_{\alpha} = 1.619 - 1.622$ $n_{\beta} = 1.622 - 1.624$ $n_{\gamma} = 1.630 - 1.632$
Birefringence	$\delta = 0.011$ Weak
2V angle	Measured: 50° to 51°
Dispersion	Moderate $r < v$
Ultravioletfluorescence	Short UV=yellow, white blue, long UV=yellow, white blue

Now that is what I learned about Celestite. I will come back to another meeting of the Tar Heel Gem and Mineral Club soon to have some more fun. I would love to learn more about other gems and minerals.

Ben Brittingham

Prez Sez

Continued from page 1

I hope you all have done your homework and read over the proposed changes to the By-Laws in the October newsletter. The original can be found on the website if you don't have a paper copy. The changes will have a vote also. If need be, sections can be voted on instead of the complete version.

I have been in contact with the designer of the updated website. It is still in progress. I hope to have positive news by the new year.

Come hungry! If you note in your past newsletters, the program is "Thank You from the Club". This will be revealed at the meeting.

May I remind us all, please wear your nametag. There were more unnamed people at the October meeting than named, myself included.

I look forward to seeing all of you at the meeting.

Cyndy Hummel

President, Tar Heel Gem and Mineral Club, Inc.

Obsidian's Corner

By Obsidian Harris



November Minerals

SMOKY QUARTZ,

the black or brown variety of quartz

Variety Information:

- **VARIETY OF:** [Quartz](#), SiO₂
- **USES:** Gemstone and ornamental stone.
- **COLOR:** various shades of black and brown.
- **INDEX OF REFRACTION:** 1.544-1.553
- **BIREFRINGENCE:** 0.009
- **HARDNESS:** 7
- **CLEAVAGE:** none
- **CRYSTAL SYSTEM:** trigonal

Smoky quartz is a popular variety of quartz. It has an unusual color for a gemstone and is easily recognized and is well known by the general public.

Only a few other brown or black minerals are ever cut for gemstones such as black diamond, smoky topaz, the very rare black beryl, the very common black tourmaline schorl or brown corundum.

Smoky quartz is also popular as an ornamental stone and is carved into spheres, pyramids, obelisks, eggs, figurines and ornate statues.

Smoky quartz, a variety itself of quartz, has a few varieties of its own.

- *Cairngorm* is a variety that comes from the Cairngorm Mountains in Scotland.
- *Morion* is a very dark black opaque variety of smoky quartz.
- *Coon tail quartz* is a smoky quartz with an alternating black and gray banding.
- A *Gwindel* is a smoky quartz cluster of nearly parallel crystals, each rotated slightly relative to the one beside it.

The color of smoky quartz is variable from brown to black and sometimes smoky gray colored specimens are included as smoky quartz. The cause of the color of smoky quartz is in

question but it is almost certainly related to the amount of exposure to radiation that the stone has undergone. Natural smoky quartz often occurs in granitic rocks which have a small but persistent amount of radioactivity. Most smoky quartz that makes its way to rock shops and to some gem cutters has been artificially irradiated to produce a dark black color.

Natural smoky quartz comes from many sources around the world. A few of the more noteworthy locations include Brazil, the world's largest supplier; Pikes Peak area of Colorado, USA, where it is associated with green amazonite; and the Swiss Alps, which has produced many tons of fine specimens.

Smoky Quartz is only one of several quartz varieties. Other varieties that form macroscopic (large enough to see) crystals are as follows:

- [Amethyst](#) is the purple gemstone variety.
- [Citrine](#) is a yellow to orange gemstone variety that is rare in nature but is often created by heating Amethyst.
- [Milky Quartz](#) is the cloudy white variety.
- [Prasiolite](#) is the leek-green variety.
- [Rock Crystal](#) is the clear, colorless variety.
- [Rose quartz](#) is a pink to reddish pink variety.

http://www.galleries.com/Smoky_quartz

A very powerful metaphysical stone, Smokey Quartz emits a high level of energy. Smokey Quartz helps ground the holder with Earth energies and is good for working with the Root and Solar Plexus Chakras. Use Smokey Quartz to absorb and transmute negative energy. Smokey Quartz is also a great stone for pain relief, and helps to prevent healing crises after a strong energy session. Smokey Quartz can help integrate messages and/or spiritual energy received in higher chakras into the lower chakras and anchor expanded consciousness into the physical body.

Smokey Quartz works with all of the Chakras, but can specifically focus its energies with the Root and Solar-Plexus Chakras. While this stone has a slow and steady energy to it,

it is still very powerful in its action. This crystal has a vibe that helps to facilitate the transformation of dreams into reality.



Meditating with Smokey Quartz can bring information from other realms into the physical. Many people who work with Smokey Quartz have reported unusual sightings of spiritual entities. Smokey Quartz is great for manifestation programs and grids, and body layouts, due to its slow and methodical way of pulling higher energies down into third dimensional reality. Protective Smokey Quartz is an important mineral for one's medicine bag.

http://www.healingcrystals.com/Quartz_Smokey_Articles_51.html



December Minerals... THE MINERAL TURQUOISE

Variety Information:

- **Chemistry:** $\text{CuAl}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 5(\text{H}_2\text{O})$, Hydrated Copper Aluminum Phosphate
- **Class:** [Phosphates](#)
- **Uses:** as an ornamental stone for carving and jewelry.

Turquoise is a valuable mineral and is possibly the most valuable, non-transparent, non-metal mineral in the jewelry trade.

It has been mined for eons since at least 6000 BC. by early Egyptians. Its history also includes beautiful ornamental creations by Native Americans and Persians. Its popularity is still quite strong today.

Although crystals of any size are rare, some small crystals have been found in Virginia and elsewhere. Most specimens are cryptocrystalline, meaning that the crystals could only be seen by a microscope.

The finest turquoise comes from Iran but is challenged by some southwestern United States specimens.

Turquoise is often imitated by "fakes", such as the mineral chrysocolla, and poorer turquoise specimens are often dyed or color stabilized with coatings of various resins. The name comes from a French word which means stone of Turkey, from where Persian material passed on its way to Europe.

PHYSICAL CHARACTERISTICS:

- **Color** is of course, turquoise, but this color actually varies from greenish blue to sky blue shades.
- **Luster** is dull to waxy, vitreous in macro-crystals.
- **Transparency** specimens are opaque.
- **Crystal System** is triclinic; bar 1
- **Crystal Habits** include crystals rarely large enough to see, usually massive, cryptocrystalline forms as nodules and veinlets.
- **Cleavage** is perfect in two direction, but is not often seen.
- **Fracture** is conchoidal and smooth.
- **Hardness** is 5 - 6
- **Specific Gravity** is approximately 2.6 - 2.8 (average)
- **Streak** is white with a greenish tint.
- **Associated Minerals** are [pyrite](#), [limonite](#), [quartz](#) and [clays](#).
- **Other Characteristics:** color can change with exposure to skin oils.
- **Notable Occurances** include Arizona and New Mexico, USA; Australia; Iran; Afghanistan and other localities in the Middle East.
- **Best Field Indicators** are crystal habit, hardness, luster, color and associations.

<http://www.galleries.com/Turquoise>

Metaphysically, Turquoise is considered to be a bridge between Heaven/Sky and Earth, grounding us while still remaining open to Spirit. Many Native American cultures believe Turquoise helps to connect the mind to the infinite possibilities of the Universe, and Turquoise is considered sacred in many Chinese cultures as well. Turquoise is a wonderful companion to use when removing and releasing old behaviors such as self-sabotage and self-martyrdom that no longer serves in growth.



Turquoise is great for working with the Throat Chakra, to foster honest and clear communication from the heart, and with Water and Air Elements. Enhancing intuition, Turquoise

also enhances communication between the physical and spiritual realms. Use Turquoise to release old vows, express freely, and ease nerves when speaking in public. Turquoise is a protective stone, often being used for amulets. Turquoise is also a healing stone, providing strength and purification.

Properties for Stone: [Turquoise](#)
Primary Chakra: [Throat-Chakra](#)
Secondary Chakra: [Third-Eye-Chakra](#)
Crystal System: [Triclinic-Crystal-System](#)
Chemical Composition: [CuAl6\(PO4\)4\(OH\)8*5\(H2O\)](#)
[Hydrated Copper Aluminum Phosphate](#)

Astrological Sign: [Pisces](#), [Sagittarius](#), [Scorpio](#)
Numerical Vibration: [Number-1](#)
Rarity: [Common](#)
Pronunciation: TUR-koiz
Mineral Class: [Phosphates](#)
Issues and Ailments (Physical): [Blood-Oxygenation](#), [Breathing-Problems](#), [Cataracts](#), [Eyes](#), [Headaches](#), [Healing](#), [Health-and-Healing](#), [Increase-Nutrient-Absorption](#), [Infection](#), [Lungs](#), [Migraine](#), [Migraines](#), [Muscle-Soreness](#), [Nightmares](#), [Pain](#), [Rheumatism](#)

Issues and Ailments (Emotional): [Empathy](#), [Friendship](#), [Kindness](#), [Night-Terrors](#), [Nightmares](#), [Peace](#)

Issues and Ailments (Spiritual): [Clarity](#), [Healing](#), [mental-clarity](#), [Public-Speaking](#), [Throat-Chakra](#), [Wisdom](#)

Extra Grade: Beautiful sky blue color, partially translucent, < 10% matrix

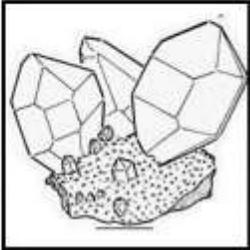
A Grade: Nice sky blue color, opaque, 10% - 25% matrix

B Grade: Poor blue color, opaque, and/or > 25% matrix

http://www.healingcrystals.com/Turquoise_Articles_20.html

A NON-PROFIT EDUCATIONAL ASSOCIATION

2014
Columbia Gem & Mineral Society
47th Annual




Gem Mineral & Jewelry Show

Fri. Nov. 21, 10 - 6
Sat. Nov. 22, 10 - 6
Sun. Nov. 23, 12 - 5

Jamil Temple 206 Jamil Rd.
Columbia SC 29210
 Exit 106A off I-26

Adults \$5.00
Children 16 & Under Free
ALL Military & Dependents FREE with adult

(803) 736-9317.... www.cgams.org

\$1.00 off
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November Treasurer's Report

By Corinne Hummel

November Treasurer's Report

Sep. Ending /	
Oct. Beginning Balance	\$4,052.32

Deposits (+)	
Members	\$155.00

Sub total	\$155.00

Checks Written (-)	
Food	\$75.00
Newsletter	130.93
Gift Cards-Field Trip	390.00

Sub Total	\$595.93

Oct. Ending /	
Nov. Beginning Balance	\$3,611.39

UPCOMING SHOWS

November 22 - 24, 2014: Columbia, SC - The Columbia, SC Gem & Mineral Society will hold its 46th Annual Gem, Mineral, & Jewelry Show 2014. Jamil Temple, 206 Jamil Rd. (Exit 106A off I -26), Columbia, South Carolina 29210. Hours: Friday November 22, 10:00 - 7:00. Saturday November 23, 10:00 - 6:00. Sunday November 24, 12:00 - 5:00. Jewelry, beads, loose stones, fossils, minerals, gold, silver, & tools for sale. Geodes sold & cut. Club member's rock collections on exhibit & lapidary demonstrations. Admission is \$5.00 for adults, children sixteen & under are free with adult. All military & their dependants are free. Contact information is: Sue Shrader...Publicity...803-736-9317 ashrader@mindspring.com Fax 803-736-2578. Sharon Sterrett...Dealers...803-356-1472 ssterrett@sc.rr.com The society website is www.cgams.org



Vugsites The following are some links to Web-Sites that may interest some of our members:

<http://www.amfed.org> / <http://www.amfed.org/sfms> These are the official sites for the organizing body that the Tar Heel Gem & Mineral Club is founded under. I would strongly urge all members to check them out on a regular basis.

http://www.amfed.org/sfms/lodestar_newsletter.html The SFMS Lodestar Newsletter

<http://www.carolinageologicalsociety.org/CGS/Home.html> This site provides numerous downloadable field-trip guide books, maps, and charts of the Carolinas. It will prove to keep any avid rock hound busy for years. Great Site!

http://www.ncminerals.com/ncmineralswebsite_files/page0011.htm And while we are on the subject, try this link. Its titled: Links of Interest to Rock hounds in NC. It will take you to a list of links for North Carolina gems and minerals.

<http://www.rocksforkids.com/> Just like the name says, a nice place to steer the younger members.

Information & photographs of over 6300 specimens from the Glenn & Martha Vargas Gem & Mineral Collection.

<http://www.rockhoundlounge.com> Scott Laborde, a club member maintains his own web site that might be of interest to people collecting in and around Wake County.

http://www.msnbc.msn.com/id/29726500/ns/technology_and_science-science This site highlights a half dozen of the most recent significant fossil finds.

<http://appmodo.com/13971/mole-quest-for-the-terracore-gem-app-review-for-the-iphone-and-ipod-touch/> If you have an iphone or an ipod touch, this rock-hounding may be the game for you.

http://diamonddanpublications.net/index_files/page0009.html Diamond Dan's Mini Miner's Monthly

I would like to encourage all members of the THG&MC that maintain their own presence on the internet to send me a link to their site to be published in future Vugsites so that other club members may learn and enjoy the craft, the art, the interests that many of us have in common.

Park in the Cates Ave. Parking Deck off Jensen Dr. Enter Thompson Building directly across from the parking lot.

**Our Next Meeting is
November 18, 2014 @ 7:30PM
Thompson Building / NCSU Campus.**

About Our Organization...

The Tar Heel Gem and Mineral Club, Inc. was formed in 1974 as a nonprofit educational organization for people who enjoy the lapidary arts, earth sciences, and related subjects. The main objectives of the club are to investigate, preserve, and share knowledge of rocks, minerals, and precious stones, and to promote interest in mineralogy, paleontology, earth sciences, and lapidary techniques, among club members and among the general public. The club pursues these goals through publications, meetings, lectures, field trips, exhibits, demonstrations, and other activities.

Come and be a part of the Fun!



TAR HEEL GEM & MINERAL CLUB
10609 Chelsea Drive
Raleigh, NC 27603

