

## Special Interest Articles:

- Prez Sez
- January Birthstone – Rose Quartz

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

## Prez Sez By Beverly House

Welcome to 2021! I sincerely hope that this newsletter finds all of you and your families well. It's hard to believe that it has been almost a year since we were able to come together in person as a club. But hopefully soon, we will be able to resume in-person meetings and field trips.

The NC State Craft Center is still closed, at least until February. When we can resume our monthly meetings there, we will send out emails and post the information to our website.

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## January Birthstone – Rose Quartz

Rose Quartz is the alternate Birthstone for January

### What is Rose Quartz?

Rose quartz is the name used for pink specimens of the mineral quartz. It is abundant, common, and found in large quantities at numerous locations around the world. It is usually occurs as massive, anhedral occurrences in hydrothermal veins and pegmatites.

The pink color of rose quartz is attributed to microscopic inclusions of a pink variety of the mineral dumortierite. These inclusions are usually abundant enough to make the rose quartz translucent instead of transparent. [1]

Rarely, quartz occurs as transparent euhedral crystals with a pink color. These are usually late-

stage mineralizations in pegmatite pockets. The color of these specimens, especially those that are transparent, is thought to be caused by irradiation-induced color centers. This color is often unstable, fading with

exposure to heat or light. Pink transparent quartz is rare, but found in several locations around the world. Many people believe that pink transparent quartz should be called "pink quartz" instead of "rose quartz" because the cause of the color is different.

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**Tar Heel Gem & Mineral Club, Inc.**

10609 Chelsea Drive  
Raleigh NC 27603

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Renny Young –  
Committee Member

George Harris – Committee  
Member, Newsletter Editor  
GeorgeFHarris@yahoo.com  
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We're on the Web!

See us at:

[www.tarheelclub.org](http://www.tarheelclub.org)

**Program & Refreshments**

REFRESHMENT SCHEDULE:

Coordinator: Open

January TBD

PROGRAM SCHEDULE:

January TBD

Remember, the club will reimburse you for up to \$85 (bring your receipts to the treasurer).

**January B-Day Members**

- Marion Broadway
- Ken Carlson
- Jack Fried
- Ron Helms
- Cyndy Hummel
- Jason Jin
- Suzanne Love
- John Nigro
- Mary Obenchain
- Ryan O'Neal
- Kerry Sappie
- Greg Shay
- Connie Shay
- Jacob Stephens
- Nancy Tuttle
- Laura Wahl
- Diane Willis



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. - November Meeting Minutes

Tuesday, November 17, 2020

Attendees = 17

### Opening of Club Meeting:

George opened the meeting at 7:30pm through Zoom.

Welcome- new members

November Birthdays acknowledged

Minutes from October: Move to approve the minutes. No opposition. Minutes approved

### Treasurer update:

Payments made in November not included in treasurer update: 2-months payment on rental storage unit and one for GoDaddy domain site

### Programs for share

Earth Day -Series of Programs and presentations on YouTube for viewing.

Mineral Talks LIVE – Playlist

[https://www.youtube.com/watch?v=r4FzDmSC5Vg&list=PLYUSEUgiTprl9Vh7ZLXu8x\\_hHp0dN\\_TDJ](https://www.youtube.com/watch?v=r4FzDmSC5Vg&list=PLYUSEUgiTprl9Vh7ZLXu8x_hHp0dN_TDJ)

### Officer Elections for 2021:

President- Beverly House

Vice President-John Guerreo

Treasurer-Linda Searcy

Secretary-Cyndy Hummel

At Large- Renny Young, George Harris

Move to accept officers. Motion granted. Online vote performed: Unanimous decision

### Volunteers for 2021:

Newsletter-George Harris

Membership-Obsidian Harris \* Membership- Karen will train next Membership chairperson, per Cyndy

Treasurer in Training- George Harris, Melissa Whitfield

Show Chairperson-Cyndy Hummel

Dealer Chairperson- Thomas Beach

Field Trip-someone is interested and wants

### Show update:

Tarheel Gem and Mineral Show

Next show- April 7-9, 2021

2020 deposit moved to cover the 2021 show

New chairs:

Emily- Silent Auction chair

John Guerreo - Geo chairperson

Beverly House-Co-chair- Hospitality

Renny Young- Co-chair- Hospitality

Food for the show:

Panera Meal for lunch

Dealer Dinner for Friday night

If allowed to bring food in, Linda would volunteer to help

### Field Trip:

Senter Quarry- Lillington, NC November 29, 2020 11:00-3:00 pm

Sign up through THGMC website.

### Close of Meeting:

Meeting closed at 9:30pm.

Respectfully Submitted

Beverly House,

Secretary, Tar Heel Gem and Mineral Club, Inc.

# January Treasurer's Report

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TGMC Treasurer Report - November 2020		
<b>Beginning Balance:</b>	11/1/20	<b>3,195.40</b>
<b>Income:</b>		
	Membership Dues	85.00
	<b>Total Income:</b>	<b>85.00</b>
<b>Expense:</b>		
	GoDaddy Fee	63.51
	Storage Unit Rental	288.00
	Stripe Fees	3.67
	<b>Total Expenses:</b>	<b>355.18</b>
<b>Ending Balance:</b>	11/30/20	<b>2,925.22</b>
	<b>CDs 91-181 day</b>	<b>5,704.94</b>
		-
	<b>Total CDs</b>	<b>5,704.94</b>

TGMC Treasurer Report - December 2020		
<b>Beginning Balance:</b>	12/1/20	<b>2,925.22</b>
<b>Income:</b>		
	Membership Dues	80.00
	Uncashed Vendor Refund	380.00
	<b>Total Income:</b>	<b>460.00</b>
<b>Expense:</b>		
	Stripe Fees	2.06
	<b>Total Expenses:</b>	<b>2.06</b>
<b>Ending Balance:</b>	12/31/20	<b>3,383.16</b>
	<b>CDs 91-181 day</b>	<b>5,704.94</b>
		-
	<b>Total CDs</b>	<b>5,704.94</b>

**Uncashed Vendor Refunds**

Randy Dixon (\$695) chk returned  
 Jacob Stephens (\$380)  
 Wholesale Rocks (\$380)

Linda Searcy  
 Treasurer, Tar Heel Gem and Mineral Club, Inc.

# Prez Sez

Continued from Page 1

Some important updates include:

\* November elections for 2021 were held and your new board and volunteer positions are as follows:

- Board Members
- President- Beverly House
- Vice President-John Guerreo
- Treasurer-Linda Searcy
- Secretary-Cyndy Hummel
- At Large- Renny Young, George Harris

**Volunteers**

- Newsletter-George Harris
- Membership-Obsidian Harris \* Membership- Karen will train next Membership chairperson, per Cyndy
- Treasurer in Training- George Harris, Melissa Whitfield
- Show Chairperson-Cyndy Hummel
- Dealer Chairperson- Thomas Beach
- Field Trip-Beverly House

\* 2021 THGMC Annual Show is scheduled for April 7-9, 2021 at the NC State Fairgrounds. Please watch for emails and information on our website for registration and volunteer positions for the show.

\* Field trips: As soon as we can- we will resume scheduling field trips. Listed below is the information we have received to date from the quarries we frequent as a club:

o We were able to do a club field trip to Senter Quarry in November and I think it was a success. We were able to open it up to young and old and unlimited club members. It was on a Sunday and the weather was perfect. I am planning on setting another one between now and February 8th, so watch for an email about signing up.

o Martin Marietta has communicated they will not allow field trips until later in the spring. We do not have a date yet but will keep you posted.

o Hanson has not communicated when we will be able to return to their quarries yet.

o Pay for mining-Diamond Hill Mine and Emerald Hollow Mine have continued to be open through the pandemic, as well as some in the mountain region.

So, in closing, I want everyone to know how much we appreciate you as members. I know I speak for the entire board how much we miss seeing you all and we can't wait until we're able to get together again. As your new president, I want to let you know I am available for you- you can email me, text me or call-I welcome the opportunity to hear from you.

Be safe and everyone-Rock On in 2021!

Thank you,  
 Beverly House  
 President  
 Tar Heel Gem and Mineral Club, Inc.

## January Birthstone – Rose Quartz

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### Physical Properties of Rose Quartz

<b>Chemical Classification</b>	Silicate
<b>Color</b>	Pale pink to vivid pink. Sometimes zoned.
<b>Streak</b>	Colorless (harder than the streak plate)
<b>Luster</b>	Vitreous
<b>Diaphaneity</b>	Transparent to translucent
<b>Cleavage</b>	None, breaks with a conchoidal fracture
<b>Mohs Hardness</b>	7
<b>Specific Gravity</b>	2.6 to 2.7
<b>Diagnostic Properties</b>	Conchoidal fracture, glassy luster, hardness, pink color, translucence
<b>Chemical Composition</b>	SiO <sub>2</sub>
<b>Crystal System</b>	Hexagonal
<b>Uses</b>	Cabochons, beads, carvings, spheres

an easy project for lapidarists with minimal experience and popular as pendants, palm stones and tokens. Image by Ra'ike, used here under a GNU Free Document License.

**Tumble-Polished Rose Quartz:** Tumbled stones made from rose quartz mined in Namibia. Rose quartz is one of the most popular tumbled stones because of its attractive pink color. Image provided by RockTumbler.com.

### Uses of Rose Quartz

Rose quartz is one of the most commonly encountered lapidary materials. It is abundant, usually inexpensive, and popular as tumbled stones, beads, and cabochons. These have the richest color when pieces are at least a centimeter in diameter or thickness because of the material's weak color. With a hardness of 7 on the Mohs scale and a lack of cleavage, rose quartz is durable enough for use in any type of jewelry.

**Faceted rose quartz** is rarely seen because transparent pink quartz is rare, and translucent rose quartz does not compete well with other faceted materials. Although rose quartz cabochons are popular in craft jewelry, rose quartz is seen far less often in commercial or designer jewelry. Its pink color does not contrast strongly with metal settings or the skin color of many people. Faceted gems such as pink sapphire, morganite, rhodolite, spinel, and tourmaline are used instead of pink quartz, probably because of their superior clarity and brighter luster.

Pieces of rose quartz up to a few pounds in size with nice color are usually available and relatively inexpensive. For that reason it is commonly used to produce small sculptures, puffed hearts, spheres, and utility items.

### Color and Asterism in Rose Quartz

In the mineralogical literature, the pink color of rose quartz has been attributed to titanium, manganese, and iron by a large number of authors for over 100 years. Tiny needles of rutile have been given credit for forming the six-ray star of rose quartz for the same amount of time.

In the late 1990s, an interesting investigation into the color and asterism of rose quartz was done by George Rossman, Julia Goreva, and Chi Ma at Caltech [2]. They obtained samples of rose quartz from a number of localities throughout the world and gently dissolved

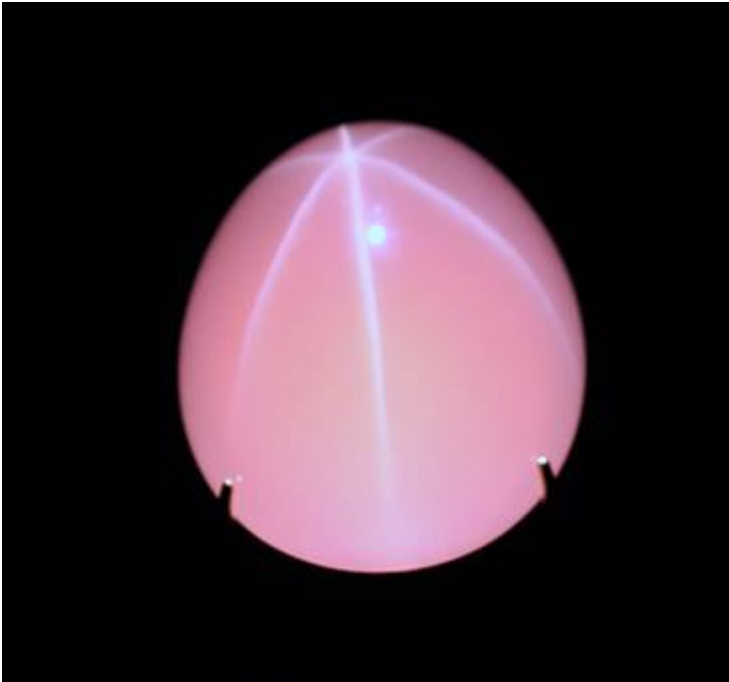
### Physical Properties of Rose Quartz

The pink color of rose quartz ranges from a very light, almost imperceptible pink, to a rich translucent pink. It is usually cut into cabochons, beads, and faceted stones of about eight millimeters in size or larger to display the rich pink color.

Some specimens of rose quartz contain a dense network of fine inclusions that align with the gem's hexagonal crystal structure. If a cabochon is cut so that its base is perpendicular to the c-axis of the quartz crystal, the cabochon might display asterism in the form of a six-ray star. The best star stones have a vivid pink color and a distinct, symmetrical, and well-centered star.

**Rose Quartz Heart:** A favorite lapidary project is making puffed hearts from rose quartz. They are made by starting with a thick slab of rose quartz and cutting it in the outline of a heart. It is then domed, like a cabochon, on both sides. This gives it a three dimensional shape known as a "puffed heart". They are

them in hydrofluoric acid heated to 100 degrees Celsius. This treatment was intended to dissolve away the silicon dioxide of the quartz and any included material soluble in HF at 100 degrees Celsius.



In specimen after specimen, a tangle of extremely thin pink fibers remained after the acid treatment. They examined these fibers using scanning electron microscopy, infrared spectroscopy, Raman spectroscopy, optical absorption spectroscopy, and x-ray diffraction. Through this they determined that the pink fibers are a borosilicate with properties that are very similar to those of dumortierite. These investigators believe that the pink color and asterism of rose quartz is caused by these pink fibers that they have named dididumortierite.

#### **Sources, Treatments, and Synthetics**

Rose quartz is found in abundance in many deposits throughout the world. Much of the rose quartz that is sold today is produced in Brazil, South Africa, India, and Madagascar. Other sources include Namibia, Mozambique, and Sri Lanka. In the United States, a deposit near Custer, South Dakota once produced significant amounts of rose quartz.

Rose quartz has been produced in laboratories, but synthetic rose quartz does not have a significant presence in the gem and jewelry marketplace. Natural

material is too abundant, inexpensive, and only seen in craft jewelry. This removes the incentive to produce synthetic rose quartz instead of other, more highly priced materials.

#### **La Madonna Rosa and The Van Allen Belt**

Rose quartz is not one of the most commonly seen specimens in mineral collections because it rarely occurs in the well-formed crystals preferred by collectors. The exceptions have been a few spectacular specimens of pink quartz with well-formed crystals that have sold for very high prices.



La Madonna Rosa: "The Pink Madonna" is possibly the most famous specimen of rose quartz in the world. It is believed to have been discovered in Minas Gerais, Brazil in the 1950s and was sold by Heritage Auctions in 2013 for \$550,000.

One specimen of note is "La Madonna Rosa" (The Pink Madonna) that was sold for \$550,000 in June, 2013 by Heritage Auctions (see video). This specimen is believed to have been discovered at the Sapucaia Mine in Minas Gerais, Brazil in the 1950s. It consists of a central cluster of smoky quartz crystals surrounded by a halo of quartz crystals with a vivid pink color. It is about 39 centimeters tall and about 20 centimeters wide.

Resources: <https://geology.com/gemstones/rose-quartz/>

## UPCOMING SHOWS

**April 7 - 9, 2021: Raleigh, NC – 45<sup>th</sup> Annual Capital Area Gem & Mineral Show.** Tar Heel Gem and Mineral Club, Inc. Kerr Scott Building, NC State Fairgrounds, Raleigh, NC. The show is sponsored by the Tar Heel Gem & Mineral Club and includes 29 dealers. The Hospitality area sells grab bags with mineral specimens. Buy a rock at the Geode booth and be the first to see what is inside. The on-going Silent Auction has new items every hour. Dealers provide minerals, fossils, finished jewelry, gemstones, findings and beads for sale.. Hours: Fri 3-8; Sat 10-6; Sun 10-5. Admission: Free and Free Parking. Contact: Cyndy Hummel; 919-779-6220; [mchummel@mindspring.com](mailto:mchummel@mindspring.com); [www.tarheelclub.org](http://www.tarheelclub.org);

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

<http://www.tarheelclub.org> / <https://www.facebook.com/tarheelgemandmineralclub/> These are the official sites for the Tar Heel Gem & Mineral Club. I would strongly urge all members to check them out on a regular basis.

<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](http://www.amfed.org/sfms/lodestar_newsletter.html) The SFMS Lodestar Newsletter

<http://www.carolinageologicalsociety.org/CGS/Home.htm> 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](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](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](http://diamonddanpublications.net/index_files/page0009.html) Diamond Dan's Mini Miner's Monthly

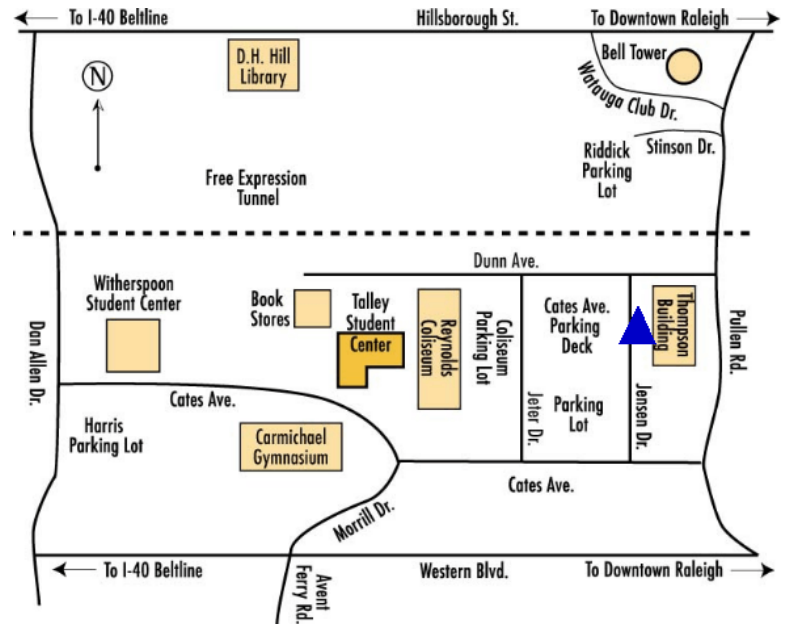
I would like to encourage all members of the THG&MC that maintain their own presence on the internet to send me a link to their site to be published in future Vugsites so that other club members may learn and enjoy the craft, the art, the interests that many of us have in common.

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

# Our Next Meeting is To Be Determined Thompson Building / NCSU Campus.

## About Our Organization...

The Tar Heel Gem and mineralogy, paleontology, Mineral Club, Inc. was earth sciences, and formed in 1974 as a lapidary techniques, nonprofit educational organization for people among club members and the general public. The club pursues these goals through related subjects. The main publications, meetings, objectives of the club are lectures, field trips, to investigate, preserve, exhibits, demonstrations, and other activities. Come and be a part of the Fun!



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

