February 2022 Volume 50, Issue 02

Tar Heel Tailings

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

Articles:

Prez Sez

Rockhounding Ray Mica Mine

4

Upcoming Events 2

February Birthdays 2

January Door Prize Winner

Monthly Meeting Minutes

Treasurer's Report 3

Annual Show Information

It's Show Time!

Upcoming Shows 6

Field Trips

Vugsites: 7

February's Business Meeting Information

Prez Sez By Beverly House

I am so excited- THGMC has so many things happening now, so make sure you are involved! WE need YOU to volunteer for the upcoming events:

- Annual Show April
- Rock Swaps- April and August
- Field Trip to Emerald Hollow Mine-Spring 2022
- Facilitate presentations monthly at MRCC

Thank you all in advance for your support. Rock on!



Explore rockhounding opportunities in Western NC with Ben Z. in this edition of the THGMC Newsletter!

Rockhounding Ray Mica Mine

https://www.mcrocks.com/ftr08/StreeterFeb08.html

The mountains of North Carolina are famous worldwide for the amazing geological complexity that gives them their dramatic size, mix of rocky and forested features, and picturesque waterfalls. For those of us who are more geologically inclined than the general public (and if you are reading this that probably means you are in this group), the mere sight of these mountains in the distance is enough to get our rockhounding sense tingling. And it's not for no reason!

Western NC is just as famous for its mineralogical treasures as it is its sweeping landscapes, and whether you are a novice rockhound like myself or

a seasoned veteran there is probably something new to try and find in this gemhunting paradise.

Last month, I got a serious rockhounding itch, and so packed up my hiking gear and hopped on I-40 West to pay a much-needed visit to

this part of our state. The weather was calling for chilly air temperatures and rain, which to me meant perfect conditions for surface collecting for one of my favorite minerals of all time at a legendary location: the Ray Mica Mine.



The find of the day: a gorgeous specimen of NC aquamarine. Photo by Ben Zino.

Continued on Page 4

Tar Heel Gem & Mineral Club, Inc.

P.O. Box 33783 Raleigh, NC 27536

Beverly House – President, Fieldtrip Coordinator beverlylhouse@yahoo.com 919-389-1821

Renny Young – V-President rennydyoung@gmail.com (203) 297-1664

George Harris – Treasurer GeorgeFHarris@yahoo.com (252) 937-9337

Cyndy Hummel – Secretary mchummel@mindspring.com (919) 779-6220

Anthony Andreoli – Member At Large

Becky Healy - Member At Large

Ben Zino – Newsletter Editor <u>bbzino@ncsu.edu</u> (704) 754-9786

We're on the Web! See us at: www.tarheelclub.org

Membership applications may be mailed to:

Tar Heel Gem & Mineral Club, Inc. Attention: Treasurer P. O. Box 33783 Raleigh, NC 27536-3783

Program & Refreshments

REFRESHMENT SCHEDULE:

Coordinator: Open

February TBD

PROGRAM SCHEDULE:

February TBD

January's door prize winner!



Steven Nohren

Upcoming Events

- The Annual Show is April 1-3, 2022
- Rock Swap-April 2022
- Ice Cream Social in the summer
- Rock Swap- August 2022
- Field trip- Emerald Hollow Mine- Spring 2022

February B-Day Members

Kristy Wilke Joseph Rochelle Mark Miller Jeffrey Haggins Victor Krynicki







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

Tuesday, January 18, 2022

Opening of Club Meeting:

Beverly House opened the meeting at 7:07 pm

Program: None

Discussion: New in-meeting location established for 2022

- Method Road Community Center (MRCC)- Pioneer Building
- Memo of Understanding (MOU) created between MRCC and THGMC
- THGMC will pay bill every month during meetingcost is \$1.00 per person, out of club funds.
- THGMC will provide present to the CAPS afterschool program once a month, 1.5-hours long, as part of MOU
- Volunteers needed to facilitate the presentations
- Each volunteer must pass background check prior to facilitating
- Children range 6-12 years old, and approx. 10-16 in each session
- Possible presentations: python and turtle, geode cracking with field trip to the show in April information, JC Raulston Arboretum field trips, butterfly/caterpillar programs, and a program on mushrooms.

Membership renewal: Forms and badges were available

SHOW:

- Show Dates are April 1-3, set-up on Thursday, March 31.
- There will be one person dedicated to assembly and take down of display cases. Steven Nohren volunteered as this chairperson.
- The club areas at the show were discussed.
- Sign-up sheets will be available at February's meeting.
- Club program for February will be making grab bags.
 Bring cardboard flats to hold the grab bags to February's meeting.
- New members who work the show will be given a free T-shirt.
- There will be signs made announcing that we have a \$10 minimum for credit card transactions.
- We will need extra volunteers to take money if we sell tickets. An alternative to this is a donation container, which would need to be watched.
- We need a Facebook media person to advertise the show every day for the month of March

Close of Meeting:

Closed meeting at 8:45 pm.

Respectfully Submitted:

Cyndy Hummel, Secretary, Tar Heel Gem and Mineral Club, Inc

January Treasurer's Report

TGMC Treasurer Report - January 2022			
Beginning Balance	: 12/1/2021		14,106.47
Income	:		
	Membership Dues	280.00	
	Show Dealer Fees	2,120.00	
Total Income:		2,400.00	
Expense	:		
	Club Meetings	14.00	
	Office Supplies	62.56	
	Postage	361.60	
	Storage Rental	858.00	
	Licenses/Permits	43.90	
	Stripe/Heroku Fees	182.79	
Total Expenses:		1,522.85	
Ending Balance	: 12/31/2021		14,983.62
CD	201_191 day		5,706.34
CDS	s 91-181 day		5,706.34
Total CDs		5,706.34	

Submitted by:

George Harris, Treasurer Tar Heel Gem and Mineral Club, Inc.

Tar Heel Tailings

THGMC Show Volunteer Information

We are excited for all who wish to volunteer for the show, and we want to take this opportunity to share important information about the show.

Show Dates and Times (General Public)

Friday, April 1 3PM-7 PM Saturday, April 2 10AM-6PM Sunday, April 3 10AM-5PM

Admission and Parking are free to the public.

THGMC Name Badges

- Name badges are required to enter the building before the show begins each day and while working as a volunteer at any THGMC booth.
- If you do not have your THGMC name tag, please pick it up at the Hospitality booth prior to your first volunteer session.

Volunteer Information

- Set-up time is 4:00 PM on Thursday at the NC State Fairgrounds, Kerr Scott building.
- Tables and chairs should already be in place.
- Assist with paper tables for each club booth area: Silent Auction, Geode, Hospitality, Demonstration and Display Case tables, haul boxes and assemble display cases.
- We are usually finished by 8PM. The more helping hands we have, the sooner we can finish!

- Friday morning: Set up begins no earlier than 8:00 am- this includes dealers, and volunteers. Each club booth area will remove items from boxes and organize the areas to their preference.
- Sunday evening: pack-up and takedown for dealers and the club. Display cases disassembled, wrapped in the table paper. Each booth inventories and boxes their items. Everything is then carefully placed in the storage trailer or rental unit.

Meals for the Show

- Breakfast: snacks and coffee will be available all three mornings.
- Lunch: Free for volunteers on Saturday & Sunday for club members (no dealers)
- Panera Bread Lunch: Friday, April 1. Order form available through Cyndy Hummel. This is preordered and delivered to the show at 12:30 pm. There is a cost associated with the meal.
- Water, soda, and coffee will be provided for both dealers and club members throughout the three-day period.

If you are unable make a meeting before the show and complete the sign-up sheet and would like to volunteer, or need a Panera meal form for Friday, contact the Show Chair-Cyndy Hummel-email mchummel@mindspring.com

Remember, ENJOY the show. This is a rewarding and exciting time!!!

Rockhounding Ray Mica Mine

Continued from Page 1

The Ray Mica Mine is actually a series of cuts, shafts and stopes that extend in a granite pegmatite approximately 1,200 feet along a northwest to southeast strike. Garrett Ray first worked the mine for mica in 1869. In those early days, mica was used as windows for houses and heaters. Muscovite is still used today as insulating material in electrical equipment, in paints to increase weatherability and to reduce running, in the manufacture of wallpapers to give them a silky or shiny luster, in the manufacture of lubricants and in dry-powder fire extinguishers.

The Ray mine was closed and reopened many times throughout the years until the Wray mining company abandoned it as unprofitable in May 1944 after the U.S. Geological Survey mapped the mine as part of the Strategic Minerals Investigation Program. What remain today in the heavily forested area of Yancey County are extensive spoil piles that extend down a steep slope from the crest of a

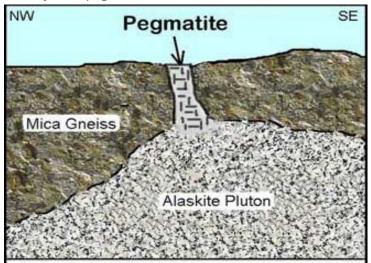
divide to an unnamed creek that flows over and under jagged pegmatite rocks.

The geologic history of the Ray Mine pegmatite has been traced back to about 390 million years ago when the last major mountain building events to affect the southern Appalachians began(when the African tectonic plate collided with the North America plat). The energy from this collision, that would eventually form a super continent called Pangaea, was so great the Appalachian Mountains were folded and thrust up to an elevation greater than the present-day Himalayas.

Why is Ray Mica Mine so Mineral Rich?

Sometime between 390 to 320 million years ago, a feldspar-rich igneous body called alaskite intruded pre-existing metamorphic rocks. Alaskite is a local term that refers to a medium to coarse-grained, light colored, non-foliated to weakly foliated, massive igneous rock composed of oligoclase feldspar, quartz, microcline feldspar and

muscovite mica and other minor accessory minerals. Slow cooling and/or high pressures exerted on magma derived from the alaskite bodies allowed crystallization of unusually large and exotic minerals forming pegmatite dikes, including the Ray Mine pegmatite.



Ray Mine Pegmatite Generalized Cross Section

The major minerals making up the Ray Mine pegmatite include plagioclase (albite-oligoclase), muscovite, microcline and quartz. Accessory minerals include almandine garnet, apatite, beryl, biotite, ferrocolumbite, goethite, amazonite, and schorl. There are numerous trace minerals that include autunite, thulite, elbaite, ferberite, ferrotapiolite, fluorite, kyanite, lepidolite, microcline, molybdenite, monazite, hyalite, pollucite, pyrite, rutile, spessartine, sphalerite, tobernite, and zircon.



A large plutonic extrusion reveals the subterranean geology common in the Ray Mica Mine area. Photo by Ben Zino.



The piece of aquamarine shown on page 1, cleaned up and mounted on a piece of acrylic. Photo by Ben Zino.

The Ray mine is arguably the best place in North Carolina to find facet-grade aquamarine, a greenish-blue gem variety of beryl. The largest beryl crystals are reported to be about 4 inches in diameter and 5 to 6 inches long, although facet-grade crystals of this size are extremely rare. I've heard tales about much larger crystals but have yet to see one of these myself. The cuts, shafts and stopes are not accessible and should be avoided. All collecting must be done in the spoil piles that extend along a steep slope to beyond the creek that flows through the area. To find minerals, you can dig up and screen spoil pile materials in the creek or simply dig into the slope or creek area while keeping a sharp eye out for minerals as you do. Many collectors find crystals by breaking larger rocks. Mica, feldspar, and tourmaline are plentiful but the other minerals, including beryl, are more difficult to find.

Upon arriving at the mine, you must first complete a short hike to the tailings area, which was slippery and wet when I was there but should not be difficult in fairer weather. Once you start on the trail, you'll quickly come upon a small creek. Cross this creek, and once you reach the next crossing you have reached the mine tailing area! A quick glance up the hillside will reveal soil glittering with mica and littered with white-colored pegmatite rocks, sure signs that you are in the right area.

In only a few hours of surface hunting, I was lucky enough to recover this specimen of aquamarine in the sediment beside the creek, freshly uncovered by the rain showers. Just a glimmer of green shone through the mica-saturated soil, and I almost couldn't believe my eyes when it turned out to be nearly gem-quality all the way through despite some severe fracturing. While that was the nicest piece that I found

Tar Heel Tailings

on the trip, I was also able to uncover this interesting colorless beryl specimen with very clear facing:

Colorless beryl specimen uncovered in the fresh rain.

Photo by Ben Zino.

Resources:

https://www.minerals.net/mineral/beryl.aspx https://www.mcrocks.com/ftr08/StreeterFeb08.html



It's Show Time!

Hello There,

I see we have a lot of new club members. Welcome to the group. You may have heard about the annual Rock & Gem show. If not, sit back and I will tell you all about it.

The annual show at the Fairgrounds has free parking and free admission. As you enter the double set of doors of the Kerr Scott building, you approach the **Hospitality Booth**. This area is responsible for the daily door prize tickets, grab bag sales, club membership forms, free magazines, and other literature. Knowledgeable club members identify items in the grab bags and answer general questions about the show and club. This is a good place for new members to learn and share their enthusiasm for the hobby with the general public.

Directly behind the Hospitality area are **Display Cases** for club members to spotlight their talents and discoveries. Minerals, fossils, silver, gold and wire wrapped jewelry, cut and polished gems, and slabs of rock that all combine to create our fascinating hobby are reflected behind glass.

As you move around the room, listen for the dulcet tones of saws cutting through hard rock. The **Geode Booth** along the right-hand wall is very popular with customers. Indeed, the same people purchase geodes year after year. One never knows what is inside each hollow or solid sphere until it is sliced open. In this area, there is a display of beautiful geodes that have been cut over the years. Knowledgeable club members operate the saws, clean, wrap and bag the geodes. Be sure to quiz them on how geodes are formed.

The **Silent Auction** is located on the back wall to the right. This is where children and adults alike can find treasures at bargain prices. Items such as jewelry, minerals, fossils,

faceted gemstones and slabs of rock are put up for auction for an undisclosed amount of time. Each item has a paper listing the name of the item and location of origin in the case of a mineral or fossil. The bidder places their name and a dollar amount on a blank line and steps away from the bidding table. The next person places a higher bid on the next line. When time is called, the last person on the list is the lucky winner.

Along the left back wall is where our club's talent shines, literally. This is the **Demonstration/Sales area_**where club members showcase their hobby/addiction. At any given time, you will see faceting, cabbing, wire wrapping, gold and silver smithing and gem tree creating. Be sure to come view our specialties and ask plenty of questions about how we do what we do.

Upstairs is where we keep the goodies to eat. Hot coffee, soft drinks and snacks can be found at differing times throughout the weekend. Club members are greatly encouraged to bring homemade tasty treats. This area is for current club members and dealers ONLY. Current nametags must be worn.

Set up for the show is Thursday night. Set up involves papering the club area tables, unloading boxes of merchandise for the Hospitality, Geode and Silent Auction areas and assembling the display cases. <u>Club members set up their own space in the demonstration area and fill their display case on Friday morning.</u>

As you can see there are many areas that club members can participate in during the show. I hope you will join us in April.

-Cyndy Hummel, Show Chair and Club Secretary

Upcoming Shows:

April 1 - 3, 2022: Raleigh, NC – 46th 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 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 ongoing Silent Auction has new items every hour. Dealers provide minerals, fossils, finished jewelry, gemstones, findings, and beads for sale. Hours: Fri 3-7; Sat 10-6; Sun 10-5. FREE Admission and Parking. Contact: Cyndy Hummel; 919-779-6220 mchummel@mindspring.com; www.tarheelclub.org; or check us out on Facebook at https://www.facebook.com/tarheelgemandmineralclub/

North Carolina Rock and Mineral Shows-

This link will take you to an updated website of rock and mineral shows in North Carolina: https://www.rockandmineralshows.com/location/mineral-shows/north%20carolina

Field Trips:

Hopefully, in later Spring 2022, we will be able to return to the quarries, through formal field trips. There are some places you can explore on your own:

Aurora Fossil Museum and Fossil Park Aurora, NC. Free. 2 3/4 hours from Raleigh, NC. Sharks Teeth, fossilized coral, etc. See their website at: https://aurorafossilmuseum.org/

Emerald Hollow Mine, Hiddenite, NC 2.5 hours from Raleigh, NC. Pay for mining. Native Emeralds, quartz, rutile, Hiddenite and more. Buckets available for sluicing. See their website at: https://www.emeraldhollowmine.com/

Treasure Quest Mining, Apex, NC .1/2 hour from Raleigh, NC. Pay for mining. All-indoor gem mining, gold panning & geode-cracking experience. See their website at:http://treasurequestmining.com/

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

Tar Heel Gem and Mineral Club- These are the official sites for the Tar Heel Gem & Mineral Club. https://www.facebook.com/tarheelgemandmineralclub/

The Southeastern Federal Mineral Society (SFMS) Lodestar Newsletter- The Southeast Federation includes clubs and societies mostly in the region east of the Mississippi River and South of a line following the northern boarders of Tennessee and North Carolina. https://www.southeastfed.org/newsletter

Carolina Geological Society- This site provides numerous downloadable fieldtrip guidebooks, maps, and charts of the Carolinas. It will prove to keep any avid rockhound busy for years. https://www.carolinageologicalsociety.org/

North Carolina Rockhounding Location Guide & Map-This site provides information about rocks and minerals, especially those found in Western NC. https://rockhoundresource.com/north-carolina-rockhounding-location-guide-map/

Rock and Gem Magazine -Leading magazine for lapidary and mineral hobbyist. https://www.rockngem.com/

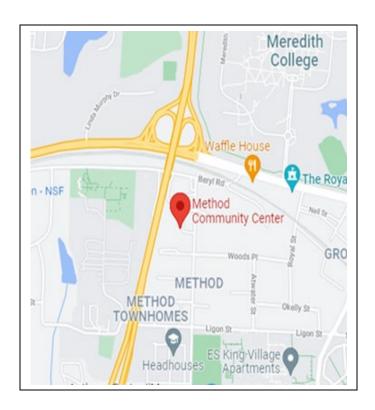
I would like to encourage all members of the THG&MC that maintain their own presence on the internet to send me a link to their site to be published in future Vugsites so that other club members may learn and enjoy the craft, the art, the interests that many of us have in common.

Our Next Meeting is February 15, 2022 7:00 pm-8:45 pm Method Road Community Center Pioneer Building 514 Method Road, Raleigh, NC 27607

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

P. O. Box 33783 Raleigh, NC 27536-3783