

Tar Heel Tailings

Special Interest Articles:

- Prez Sez
- History of Beryl in North Carolina
- Massive Emerald found in Zambia
- Barn Doorstop is Actually Meteorite Worth \$100,000

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

Prez Sez

By Anthony Andreoli

Happy New Year Everyone!!!
Please welcome this year's club officers and committee members:

President- Anthony Andreoli
Vice President- George Harris
Treasurer- Linda Searcy
Secretary- Beverly House
Newsletter and Member at large #1- Lindsey Bradsher
Member at large #2- Cyndy Hummel
Field trip coordinator- Katelyn Hennessey



<https://www.vecteezy.com>

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History of Beryl in North Carolina and Where It Can Be Found

North Carolina is widely considered one of the best states for rock hounds, with a wide variety of gemstones and minerals present throughout the state, and the only significant emerald deposits in North America. Emerald is a type of beryl, along with aquamarine and golden beryl, or heliodor.

Emerald was first discovered in North Carolina in 1874 in Alexander County. The formations they were found in are described as "gem

bearing pockets" ranging from a few inches to several feet in size. There was much excitement about the find, and the media buzzed about the

"Green Bolts of North Carolina," referring to the long, well-formed crystals. Many outside interests, including Tiffany's of New York, claimed mines in the area.

Around 1890, another find was made on Big Crabtree Mountain, in Mitchell County near Spruce Pine. This time, emerald was found in pegmatite (a granite composed of quartz, feldspar and mica) veins and dikes. The American Gem and Pearl Company cut the material into cabochons and sold it as "emerald matrix," **Continued on page 4**



Emerald and Beryl.
From the North Carolina Geological Survey Bulletin #12, 1907 (Google Books)

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We're on the Web!

See us at:

www.tarheelclub.org

Program & Refreshments

REFRESHMENT SCHEDULE:

Coordinator: Open

January Beverly House
Beverages-Renny Young

PROGRAM SCHEDULE:

January - Tom Todaro- Safety Briefing

February - TBA

March - Grab Bags / Postcards

April - Post-show Discussion

May - Jeff Schlottman

June - TBA

July - TBA

August - Cathy Young

September - Paul Byrne

October - Grab Bags

November - Election

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

January Treasurer's Report

Beginning Balance \$10,474.71
6,602.50 Deposit Dealers
75.00 Deposit Members

\$17,152.21 Sub total

Outgoing checks
40.34 Go-Daddy Web site
48.25 Club Expenses

\$88.59 sub total

Ending Balance \$17,063.62

January B-Day Members

Connie Shay
Cyndy Hummel
Greg Shay
Jacob Stephens
James Markarian
Jason Jin
John Nigro
John Sheuring
Ken Carlson
Marion Broadway
Suzanne Love



Membership applications may be mailed to:

Tar Heel Gem & Mineral Club, Inc.
Attention: Treasurer
PO Box 33783,
Raleigh, NC 27636-3783

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

Tuesday, November 20, 2018

Attendees = 19

Opening of Club Meeting:

Linda opened the meeting at 7:30pm.

Two visitors, Maureen and Roger Mercer, and two new members, Beverly House and Renny Young.

Birthdays: Beverly, Joey, Anthony and Lilianna described how they became interested in rock-hounding.

Program: Officer Election

- President- Anthony Andreoli
- Vice President- George Harris
- Treasurer- Linda Searcy
- Secretary- Beverly House
- Newsletter and member at Large #1- Lindsey Bradsher
- Member at Large #2- Cyndy Hummel

- Field Trip Coordinator- Volunteer- Katelyn Hennessey

Show Business:

- Discussed buying batches of rocks for grab bags: Cyndy suggested 50 lbs sodalite? Linda proposed Sunstones. Members also suggested gypsum crystals, selenite, lapis.
- Geode Booth: buy a new pallet of Geodes?
- Trailer has flat tire-address in February or early March.
- January: Plan for show...Large sign—Greg Dillon will take over if fairgrounds allow signs
- February: Fliers—make file available for others to print/share on Facebook or Instagram
- Irregular geodes cut for grab bags?
- If any members have an old tablet, please consider donating it to the geode booth

Yearly Contest to Identify Badge Mineral

Anthony Andreoli identified the mineral as mimetite! He picked cobalt and calcite as his prize.

Door Prize:

Winner: Karen Santala picked gypsum crystals.

Close of Meeting:

Meeting closed at 8:30pm.

Respectfully Submitted
Lindsey Bradsher,
Secretary, Tar Heel Gem and Mineral Club, Inc.



Door prize of Gypsum Crystals



Anthony Andreoli with his prize of Cobalt and Calcite

Beryl: continued from page 1

an attractive stone of white and green, with inclusions of black tourmaline. Other deposits were discovered in Cleveland county in 1897 and 1909.

More recently, the famous "Carolina Emerald" was found in the 1970's in Hiddenite, NC, by Wayne Anthony. This 59-carat emerald was cut into a 13-carat stone and sold to Tiffany and Company for \$100, 000. Going into the 2000's, record-setting emeralds have been found in Hiddenite, NC. Jamie Hill set two records searching in the quartz and mica veins there. In 2003, he found the largest emerald ever collected in North America at 1,869 carats. He followed this up by discovering the longest emerald ever found on the continent in 2006, a 10-inch crystal weighing 591 carats. Terry Ledford found the stone that yielded the largest cut emerald in North America in 2009. Also searching in Hiddenite, he discovered the "Carolina Emperor," a 310-carat stone that was cut down to the record-breaking 64 carats.

Although the aquamarines found in North Carolina are not as famous as the emeralds, they are also mentioned in the geological surveys of NC from the early 20th century, being found in the same mica deposits and pegmatite veins as the emeralds. These old records indicate aquamarines were also found in Alexander, Avery, Cleveland, Mitchell, and Yancey Counties, specifically in the Wiseman and Grimshawe mines.

Today, there are a few different locations for the amateur geologist to search for beryl in North Carolina. Gem Mountain Gemstone Mine in Spruce Pine, NC and Emerald Hollow Mine in Hiddenite, NC may offer a more structured experience for beginners: Gem Mountain collects material from the Wiseman, Crabtree, and Hootowl Mines for their flumes, but the buckets are also salted with additional gems. Emerald Hollow offers a flume, creek and access to a dig area. Visitors may bring what they dig back to the flume. The creek is known to be salted, but the digging area is all native dirt. Buckets of premeasured dirt can be purchased native or salted.

Crabtree Mine, in Little Switzerland, is closed (flooded), but the public may dig through the surface-level tailings for a fee. This is a more "rough" attraction, visitors may bring or rent tools (from Emerald Village nearby) and will need to dig and break rocks. Emerald and golden beryl have been found here, as well as tourmaline, garnet and moonstone.

Closer to the Triangle, a man named Robert Neyland found mineral-quality green beryl in Mine Creek in North Raleigh. He states that the beryl likely washed down from old graphite mines in the area.

If you decide to search for beryls in any of the counties or areas described above, check to be sure you are on public land (or get permission on private land) and checking with the Bureau of Land Management is recommended (see:

<https://www.blm.gov/basic/rockhounding>).

Rockhounding is allowed on most public land, but there are exceptions for national monuments and national wilderness areas such as Linville Gorge. There may also be restrictions on where you can park. Usually, in public areas, collection is limited to less than 10-25 lbs of material.

Resources:

<https://www.ncpedia.org/symbols/stone>

<https://www.newsobserver.com/news/local/news-columns-blogs/josh-shaffer/article15462194.html>

<http://www.smliv.com/features/unearting-carolina%27s-emerald-highway/>

<https://www.internetstones.com/significant-emeralds-discovered-in-north-carolina.html>

<https://geology.com/gemstones/states/north-carolina.shtml>

<https://books.google.com/books?id=OhgtAAAIAAJ&pg=PA226&hl=en#v=onepage&q&f=false>

<https://www.gemsociety.org/article/mined-in-america/>

<https://www.emeraldvillage.com>

<https://gemmountain.com/>

Prez Sez: continued from page 1

At this month's meeting Tom Todaro will be conducting a mineral collecting and Quarry safety briefing. With all his knowledge and experience he has from visiting many quarries and mine sites, this is an excellent meeting to attend for those of you interested in attending the clubs many field trips.

Lastly, with the start of the new year brings the time to renew your membership with the club. Please see our new treasurer Linda at the meetings to renew.

Thank you! Looking forward to seeing you all at the meeting on January 15th!!

Massive emerald stone worth £2M found in Zambia mine

By Brandon Specktor



This 2.5 pound (1.1 kilogram) "lion emerald" is one of the single largest crystals ever unearthed in Africa's Kagem mine — the most productive emerald mine in the world.
Credit: Gemfields

Miners in Zambia, in Africa, have discovered an emerald so large that the Queen of England herself would probably think, "That's a bit much."

The massive crystal is 5,655 carats and weighs about 2.5 pounds (1.1 kilograms) — about the mass of an adult human brain. The emerald will be auctioned off in Singapore later this month, according to a statement from Gemfields — the British mining company that owns 75 percent of the mine where the emerald was unearthed. (The Zambian government owns the remaining 25 percent.)

The emerald was discovered on Oct. 2 at Kagem, the world's largest emerald mine, in central Zambia. According to Gemfields, Kagem produces approximately 25 percent of the world's commercial emeralds.

The company has promised to divide 10 percent of the emerald's sale value between two local lion conservation groups — the Zambian Carnivore Programme and the Niassa Carnivore Project. For this reason, Gemfields has named the stone "Inkalamu," which translates to "lion" in the local Zambia Bemba language.

After being sold, it's possible that Inkalmu will be divided into many hundreds of individual stones, Gemfields experts said.

"This lion's resulting offspring — 'The Pride of Inkalamu' so to speak — will continue the legacy for generations to come," Elena Basaglia, a Gemfields gemmologist, said in the statement.

Emeralds form over hundreds of millions of years as the fluid from cooling magma rises through various layers of deep-Earth minerals. According to the Kagem website, Zambian emeralds are the product of ancient reactions between two types of rock — talc magnetite schist (a black rock that formed about 1.8 billion years ago) and pegmatite (a white rock that formed a scant 500 million years ago). Using complex geological models, scientists at Kagem attempt to map out exactly where the largest intersections between these two types of rock are most likely to occur in the mine's approximately 16-square-mile (41 square kilometer) territory.

While Inkalamu is certifiably massive, it's not the largest emerald ever pulled out of Kagem. That honor goes to a 6,225-carat emerald mined in 2010. Gemfields named this stone "Insofu" — the Bemba word for "elephant" — for its massive size. Insofu was auctioned off in 2017 for an undisclosed price.

The world's largest uncut emerald — the so-called Bahia emerald — was unearthed in Brazil in 2001. It weighs nearly 800 pounds (360 kg), has been stolen multiple times and was once listed for sale on eBay at \$75 million.

Source:
<https://www.livescience.com/63993-giant-lion-emerald-unearthed-zambia.html>



Another view of the "lion emerald"
Credit: Gemfields

Michigan Man Discovers His Barn Doorstop Is Actually a Meteorite Worth \$100,000

By Samantha Mathewson, Space.com Contributor



The newly identified meteorite had been masquerading as a doorstop.
Credit: Mackenzie Brockman/Central Michigan University

A rock that had been used as a barn doorstop on a Michigan farm for more than 30 years is actually a massive meteorite worth over \$100,000.

The 22-lb. (10 kilograms) meteorite is believed to have touched down in the 1930s on a farm in Edmore, Michigan. Earlier this year, the man who purchased the farm in 1988 and obtained the meteorite as part of the property brought the space rock to Central Michigan University (CMU) for examination.

Mona Sirbescu, a geology professor at CMU, took a closer look at the rock. Although many people had asked her to examine rocks in the past, she knew this time was different, she said. As it turns out, this meteorite is the sixth largest recorded find in Michigan and potentially worth \$100,000, according to a statement from CMU. [Mars Meteorites: Pieces of the Red Planet on Earth (Photos)]

"I could tell right away that this was something special," Sirbescu said in the statement from CMU. "It's the most valuable specimen I have ever held in my life, monetarily and scientifically."

When the man purchased the farm in 1988, he was told that the rock holding open the barn door was in fact a meteorite that the previous owners witnessed fall from the night sky in the 1930s. The rock created a hole in the ground when it fell to Earth, and when the farmer and his son went out to

recover the object in the morning, it was still warm, according to the statement.

The rock remained a barn doorstop for the last 30 years, after the current owner purchased the farm. However, when people found small meteorites after the meteor that blazed through Michigan skies this past January, the farm's current owner wondered how much his doorstop was worth.

Meteorites are pieces of natural space debris that break off of asteroids or comets, fall through Earth's atmosphere and reach the planet's surface. While large impacts are fairly rare, thousands of meteorites weighing about a pound (0.5 kg) hit the ground each year.

Using X-ray fluorescence instruments, Sirbescu found that the doorstop meteorite is about 88 percent iron and 12 percent nickel, a metal rarely found on Earth, according to the statement.

Sirbescu sent a sample of the space rock to the Smithsonian Institution in Washington, D.C., where researchers further analyzed the rock and confirmed it to be a meteorite.

A sample of the meteorite was also sent to John Wasson, a professor in the Earth, Planetary and Space Sciences department at the University of California, Los Angeles. Wasson is considered the "guru of iron meteorites" and will perform a neutron-activation analysis to determine the meteorite's chemical composition. This, in turn, could reveal rare elements that would increase the meteorite's value, according to the statement.

"Just think — what I was holding is a piece of the early solar system that literally fell into our hands," Sirbescu said.

The farmer has not yet decided whether the meteorite will be sold to a collector or a museum to be put on display. Both the Smithsonian and a Maine museum are considering purchasing the rock, according to the statement.

Regardless, when the meteorite is sold, the man has promised to donate some of the money to CMU. However, students at the university have already benefited by being able to hold a real-life meteorite, Sirbescu said.

Source: <https://www.space.com/42084-valuable-michigan-meteorite-used-as-doorstop.html>

UPCOMING SHOWS

March 29-31, 2019: Raleigh, NC – 43rd 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; www.tarheelclub.org;

March 8-10, 2019: Augusta, GA - 30th Annual Aiken-Augusta Gem, Mineral & Fossil Show. Sponsored by the nonprofit organizations: Aiken Gem, Mineral & Fossil Society; Augusta Gem and Mineral Society. Julian Smith Casino, 2200 Broad St. Augusta, GA. Diamonds, sapphires, tanzanites, emeralds and other fine jewelry. Gorgeous everyday jewelry, mineral lamps, art objects, and beads. Fabulous fossils and minerals from around the world. Jewelry making and cabochon cutting demos. Kid's Treasure Dig, Grab Bags, Geode cutting, Member case displays, Educational resources. FREE "Adopt-a-Rock" to every child. Hours: Fri & Sat 10-6 / Sun 10-5. Concessions benefit Relay for Life. Admission: Kids under 12 FREE with one Adult admission: \$3/day or \$5 weekend pass; 50¢-off admission coupon on our websites. Contact: Show Chair: Chris Glass 706-284-9239; <http://www.aikengmfs.org>; <http://agams.club>

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 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 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.

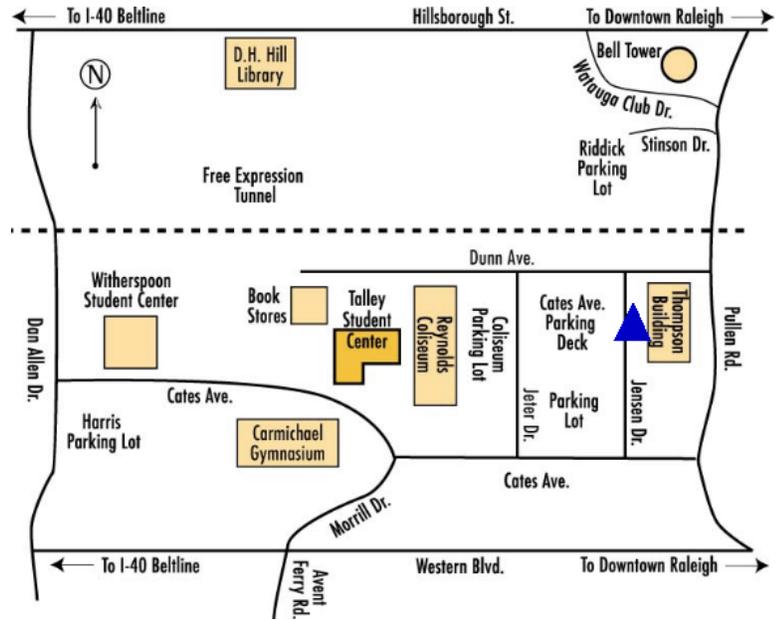
Park in the Cates Ave. Parking Deck off Jensen Dr. Enter Thompson Building directly across from the parking lot.

**Our Next Meeting is
January 15, 2019 @ 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

