

Tar Heel Tailings

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

Special Interest Articles:

- President's Report
- New Officers
- Field Trip Notice
- Orchids of the Mineral Kingdom

Individual Highlights:

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President's Report

Greetings to All and to the new year, 2011.

Elections were held at the January meeting and the officers have been elected for the year. New officers were elected for President, me, Vice-President, Kenny Gay, and Secretary, Walt Milowic. All other positions remained the same. So we're ready to get down to business!

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Tarheel Gem & Mineral Club New Officers

By George Harris

In January, the Tarheel Gem & Mineral Club elected their new officers. Joe Moylan was elected President. Kenny Gay was elected Vice President. Walt Milowic was elected Secretary. Corinne Hummel was elected Treasurer. Bob Bendelow and Cyndy Hummel were elected as Members at Large to the Executive Board. George Harris will continue as Newsletter Editor. Tom Todaro will continue as Field-Trip Coordinator.

Jeanette Baugh will continue as Refreshments Coordinator. Anyone wishing to volunteer for Programs

Coordinator or to volunteer to help any of the committees should contact one of the officers.



Officers from left: Joe Moylan, President; Kenny Gay, Vice President; Walt Milowic, Secretary; Corinne Hummel, Treasurer;

Tar Heel Gem & Mineral Club, Inc.

10609 Chelsea Drive
Raleigh NC 27603

Joe Moylan – President
jmoylan1002@nc.rr.com
(919) 554-3175

Kenny Gay – V-President
kenny.gay@ncdenr.gov
(919) 604-2376

Walt Milowic – Secretary
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(919) 327-3227

Corinne Hummel – Treasurer
mchummel@mindspring.com
(919) 779-6220

Bob Bendelow – Librarian
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r.bendelow@earthlink.net
(919) 552-8175

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

George Harris – Newsletter Editor
GeorgeFHarris@yahoo.com
(919) 674-0243

Tom Todaro – Field-Trip Coord.
caribtomt@yahoo.com
(919) 639-7798

We're on the Web!

See us at:

www.tarheelclub.org

Program & Refreshments

REFRESHMENT SCHEDULE:

Coordinator: Jeanette Baugh (919) 522-9044
villagegems@yahoo.com

| | |
|-----------|---------------------------|
| February | Open |
| March | Open |
| April | Potluck |
| May | Sarah and Barrett Redpath |
| June | Open |
| July | Open |
| August | Ice Cream Social |
| September | Walt Milowic |
| October | Cyndy and Corinne Hummel |
| November | Jerry and Deborah Miller |

PROGRAM SCHEDULE:

| | |
|-----------|-------------------|
| February | Collecting Pearls |
| March | Grab Bags |
| April | Open |
| May | Open |
| June | Open |
| July | Open |
| August | Ice Cream Social |
| September | Open |
| October | Open |
| November | Open |

The Club reimburses members up to \$75 for bringing refreshments. Please email or call Jeanette before 9pm Sunday 13 February 2011 if you would be willing to bring refreshments for the February meeting on Tuesday. At the meeting, you may sign up for the month of your choice to bring the refreshments. We still need volunteers to sign up for the other months. Thank you.

November & December Treasurer's Report

| | |
|----------------------------|-------------|
| December 31 Ending Balance | \$11,907.46 |
| Deposits Dealers | 1,830.00 |
| Deposits Dealers | 1,750.00 |
| | ----- |
| Sub Total | \$15,487.46 |
| SFMS Dues | 233.75 |
| Meeting Food | 85.36 |
| Storage | 86.00 |
| Staples supplies | 44.10 |
| IMP Newsletter | 162.92 |
| | ----- |
| Ending Balance January 31 | \$14,875.33 |

February B-Day Members

- Clea Gallian
- Jim Jin
- Susan Bourland
- Mike Shore
- Greg Dillon
- Glenn Branch
- Melissa Branch
- Karen Branch
- Joy Gardner
- Chuck Steely
- Kathy Williams



Membership applications may be mailed to:

Tarheel Gem & Mineral Club
Attention: Treasurer
10609 Chelsea Drive
Raleigh, NC 27603

Tar Heel G & M Club January Meeting Minutes

Tuesday, January 18, 2011

Attendance: 35

Walt called the meeting to order about 7:30 pm

Walt asked folks if they got minerals as gifts during the holidays.

"Show & Tell" took place.

We had 5 people showed what interesting things they experienced.

Walt proceeded to do the door prize drawing.

Walt also mentioned about offices to be filled.

Emma & Mary Hardy were the door prize Winners and won a mineral of Pyrite on quartz! Congratulations!

After munchies Walt called the meeting back for elections.

Joe nominated Kenny Gay for Vice President.

Corinne was nominated for Treasurer.

Walt was nominated for Secretary.

George nominated Obsidian for Secretary.

George nominated Bob for "At large".

Joe was nominated for President.

Walt was elected as the new Secretary, to which Obsidian did with a shout "Free at last!"

Joe is the new President

Kenny is the new V. President

And Corinne is the carrying Treasurer.

Congratulations to the new officers and a photo was done.

Jeanette announced about the sign up sheet for munchies per meeting.

And a Big Thank You to Jeanette for bringing the munchies & drink for the meeting!

Corinne shared some health news, Wayne Jesse is in decline.

Jerry Miller suggested sending \$300. - \$400. to purchase specimens from Wayne Jesse. Kenny also stated \$400.

Walt also mentioned about the auction would occur at the meeting.

Jerry volunteered to be the auctioneer.

Joe stated that there would be a auction for the February meeting. At present this subject is on hold.

Jerry made a motion for the sum of \$400. for the lot being purchased.

The motion was seconded and carried.

In addendum to the above, after Corrine talked to Wayne Jesse, Wayne and his wife decided to hold off on actions for now. Anyone can visit and view the specimens.

It was also mentioned that the March meeting will be putting the Grab Bags for the April G & M show.

And in April for the meeting would be the "Pot Luck". There will also be a speaker for the meeting.

Scott will be placing a button on the site online for the club for the membership form to be printed.

Scott mentioned that he is going page by page on the online site for the club and updating.

Joe also mentioned about the formation of groups/committees in the club for cabbing, silver-smithing, faceting and so forth.

There was Barrett Redpath suggesting a group for young members that are beginners. Juniors Group Committee?

Joe mentioned about a talk with Scott about doing a forum on the site online. For communication between members.

Scott will be doing research on the options for the online site forum.

Barrett also mentioned about field trips that would be worthwhile for young rock hounds under the age of 18.

Cyndy made a motion to close the meeting.

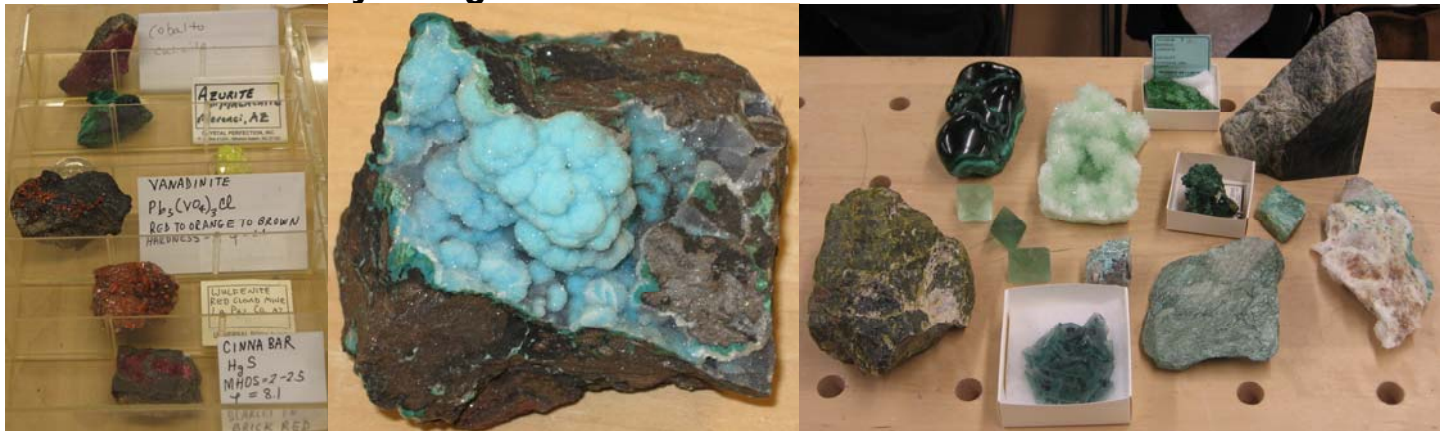
Happy Rock Hounding

Happy Holidays Everyone!!

Obsidian Harris

***On a personal note, I would like to thank everyone for making my time as Secretary for the Club an interesting experience for the last 4-?- years. And now, I hand the key board over to Walt! Go for it Dude! ***

Pictures from January's Program



President's Report

Continued from page 1

Our big annual show in the Kerr-Scott Building at the NC State Fairgrounds is our main focus at this time. The March meeting will be dedicated to final preparations for the big event and a final "Grab Bag" bagging session. So if you have any rock materials for the Grab Bags or any rock specimens to donate to the Silent Auction, please bring them to the March meeting. We also have a dozen display cases that need to be filled. If you have not done this before it is an excellent opportunity to showcase your collection to other club members and the world! Don't hesitate and secure your case as soon as possible before they are all spoken for.

For the February meeting we have a guest speaker who will present a program on collecting pearls on a pearl farm

in Indonesia. Also, Field Trip Chair, Tom Todaro, has arranged a field trip to the Martin Marietta East Alamance Haw River Quarry for Saturday, Feb 12, 9:00am- 1:00pm, and we can look forward to a report of how that went. We will hold the business part of the meeting after the program and report.

In short, there is no shortage of things to be done. We have a pretty full slate between now and the show, but I know it is work we all look forward to! We will be looking for volunteers for all the usual positions to help at the show. Don't wait to be asked, volunteer today!

Thanks, Joe Moylan

More Pictures from January's Program



TAR HEEL GEM & MINERAL CLUB - FIELD TRIP NOTICE

| | |
|------------------------------|-------------------------------------------------------------------------------------------------------------------|
| FIELD TRIP DAY / DATE | SATURDAY, FEBRUARY 12, 2011 |
| TIME: | 09:00 am – 1:00 pm |
| QUARRY OPERATOR | MARTIN-MARIETTA |
| QUARRY NAME | East Alamance Haw River Quarry |
| QUARRY ADDRESS: | Martin Marietta Access Rd, 13, Haw River, NC 27217 |
| QUARRY TELEPHONE: | 336-578-5420 |
| QUARRY IN-CHARGE | Freddie Blanchard |
| TAR HEEL TRIP COORD | Thomas Todaro, 919-349-9143 (M), 919-639-7798 (H) caribtomt@yahoo.com |

REQUIRED

1. Everyone must comply with any and all safety requirements set forth by Martin-Marietta.
2. Everyone is to stay away from quarry edges.
3. No climbing on rock face's.
4. Everyone must have and wear a hard-hat.
5. Everyone must have work boots with steel toe would be better.
- Note: Sorry but do not show up wearing sneakers and expect to go down into the quarry.
6. Everyone must have safety goggles or glasses.
7. Everyone must sign in at the quarry office.

EXTRA STUFF:

1. Feel free to bring buckets, picks, hammers, shovel, hand cart, rags, crow bar, etc.
2. Children under 10 yrs not recommended.

3. Bring a change of clothes in case you get wet.
4. Dress according to the weather, expect it to be cold. It is always easier to take clothes off then put stuff on that you don't have.
5. Camera.
6. Magnifying glass or eye loop.
7. Food / snacks.
8. Drinking water to stay hydrated.
9. Ask for help to load your take home rocks, as we don't want to see anyone hurt their back.
10. Please be prompt as the quarry operator is coming in on his day off to host our club.
11. Be sure to thank the quarry operator upon leaving as we want to leave a good impression so as we can come back.
12. Have Fun!

As I have not ever been to this Martin Marietta quarry, I have no information as to what can be found there. The Plant Manager tells me that this mine being in close proximity to the Haw River contains more minerals than the sister quarry in Burlington. Other Clubs have visited this quarry before and they seemed "happy" with their finds. As this quarry is east of the foothills of the NC mountains, I would suspect the usual quartz, calcite, pyrite, mica, garnets in chist, etc.

Directions:

[Raleigh, NC](#)

| | | |
|-----|-----------------------------------------------------------------------------|---------|
| 1. | Head east on E South St toward S Wilmington St | 0.1 mi |
| 2. | Turn right at the 1st cross street onto S Blount St | 0.6 mi |
| 3. | Continue onto Hammond Rd | 0.4 mi |
| 4. | Merge onto I-40 W/US-64 W via the ramp to I-440 Continue to follow I-40 W | 46.2 mi |
| 5. | Take exit 157 for Buckhorn Rd | 0.2 mi |
| 6. | Turn right at Buckhorn Rd | 0.4 mi |
| 7. | Turn left at US-70 W | 7.5 mi |
| 8. | Turn right toward N Carolina 49 N/Roxboro Rd | 115 ft |
| 9. | Turn right at N Carolina 49 N/Roxboro Rd Continue to follow N Carolina 49 N | 2.4 mi |
| 10. | Turn left at Martin Marietta Access Rd | 0.5 mi |

[Martin Marietta Access Rd 13, Haw River, NC 27217](#)

Note: The Gem & Mineral Society of Lynchburg, VA club has noted the following minerals from their trip in March, 2009. (<http://www.lynchburgrockclub.org/calendar/details/273115-martin-marietta-east-alamance-quarry>) They collected some 13 different minerals not to mention several Zeolites yet to be identified: Quartz, Feldspar, Epidote, Pyrite, Chalcopyrite, Garnet, Titanite (aka /Sphene), Stellerite, Gismondine, Chlorite, Biotite and Muscovite Mica, Hornblende, and Apophyllite.

Anthodites of Skyline Caverns - Orchids of the Mineral Kingdom

Basic Information

Etymology: [Greek](#), *anthos*, “flower”, *-ode*, adjectival combining form, *-ite* adjectival suffix. The term “anthodite” is first cited in the scientific literature in 1965 by Japanese researcher N. Kashima^[1], who described “flower-like dripstone” composed of “an alternation of calcite and aragonite”^{[2][3]}.

Location: Warren County, Virginia, Front Royal, Virginia. Latitude 38 degrees 53 minutes North, Longitude 78 degrees 12 minutes West.

Structural Class: [Speleothems](#) (cave formations) composed of long needle-like crystals situated in clusters which radiate outward from a common base. The “needles” may be quill-like or feathery.

Chemical Class: [Aragonite](#) (a variety of [calcium carbonate](#), CaCO_3), although some are composed of [gypsum](#) ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$).

History

In 1937, geologists around the world stood in awe of Walter S. Amos when he discovered Skyline Caverns. He carefully examined the surface topography, exposing a secret that had lain beneath the earth’s surface for 60 million years. This method of scientific analysis makes the discovery of Skyline Caverns rare, if not unique.



[Photo by Altman, M.](#)

Amos was contracted by several private and government agencies to search for caves and caverns to open in conjunction with Skyline Drive. During his search, he came across the current parking lot of the caverns, which he noticed was in the shape of a sinkhole. Normally, sinkholes are created by the collapsing of a cavern roof, which takes the ground above with it.^[4]

Knowing this, Amos began to search the edges for some opening to the possible cave system below. He found this opening on the lip of the sinkhole by noticing a small colony of camel crickets (which only live in damp, dark areas by nature) under a small ledge. Upon digging out the first

“room” of the caverns, he came into a large system of connected rooms, most of which were navigable and cleared from all obstructions. 90% of the caverns were naturally accessible and other than the entrance area, only 10% needed to be dug out.

While clearing of mud from the cavern floor, Amos and his men discovered another area in the caverns that had been blocked for thousands, possibly hundreds of thousands of years, by a large amount of mud. Upon clearing the newly discovered area, the geologist discovered anthodites. Anthodites are a very rare form of crystal, or perfect 6-sided crystalline structures made of pure calcite, that were discovered in Skyline Caverns that have only been found in two other places since.

Structure, composition and appearance

The individual crystals of anthodites develop in a form described as “acicular” (needle-like) and often branch out as they grow. They usually grow downward from a cave’s ceiling. Anthodites often have a solid core of aragonite and may have huntite or hydromagnesite deposited near the ends of the branches.

Anthodite crystals vary in size from less than a millimeter to about a meter, but are commonly between 1 and 20 millimeters in length.

Anthodites are normally nearly pure white in color and usually consist of radiating bunches of needle-like crystals of [calcium carbonate](#). Their mode of formation is not well understood, but they presumably form in air-filled chambers by the slow precipitation of calcium carbonate from thin films of water that are held to their surface by [capillary attraction](#).



[Photo by Van Gundy, J](#)

Most anthodites are composed of the mineral [calcite](#), which is the variety of calcium carbonate that’s thermodynamically favored at the temperatures and pressures usually found in caves. [Aragonite](#), another mineral with the same chemical formula but different crystalline structure, has greater stability at higher temperatures and pressures. Why aragonite forms at all in caves is somewhat of a mystery,

but its deposition appears to be favored when the concentration of a [magnesium ion](#) is elevated in the depositing water. ^[5]

Occurrence

Anthodites may be spectacularly abundant in some limestone caves, with clean white crystals growing all over the calcite or other rock surfaces. Examples of sites with abundant anthodite displays include Skyline Caverns in the United States and the Grotte de Moulis in France.

Type

Among the "quill-like" varieties of anthodite is sometimes included the "sea urchin-like" formation known as flos ferri^[6], although others^[7] have considered them a slender variety of helictite.

Anthodite-like formations

- Helictites are curved or angular twig-like lateral projections of calcium carbonate, which appear to defy gravity. Rather than radial clusters, helictites often occur in tangled masses. The "twigs" have a tiny central canal.
- Cave flowers (also known as "gypsum flowers" or "oulopholites") consist of gypsum or epsomite. In

contrast to anthodites, the needles or "petals" of cave flowers grow from the attached end.

References

1. Kashima, N. (1965), *Mem. Ehime Univ.*, Sect. 2, Ser. D, 5, 79.
2. Hey, M.H. and P.G. Embrey (1974), "[Twenty-eighth List of New Mineral Names](#)", *Mineralogical Magazine*, December 1974, Vol. 39, pp 903-932.
3. See also the abstract in *Min. Abstr.* 18-282.
4. Skyline Caverns Official Website, <http://www.skylinecaverns.com/index.htm>
5. Van Gundy, J. (2009), Anthodites in Skyline Caverns, Earth Science Picture of the Day, <http://epod.usra.edu/blog/2009/11/anthodites-in-skyline-caverns.html>
6. Hill, C. A. and P. Forti, eds (1997), *Cave Minerals of the World*, 2nd ed., [Huntsville, Alabama: National Speleological Society](#).
7. Shaw, T. (1992), *History of Cave Science: The Exploration and Study of Limestone Caves to 1900*, 2nd ed., [Sydney Speleological Society, Broadway, NSW, Australia](#).

UPCOMING SHOWS

Mar 4- 6, 2011: St. Petersburg, FL - The Suncoast Gem and Mineral Society. 41st Annual Gem, Jewelry & Mineral Show and Sale, The Minnreg Bldg, 6340 126th Ave N., Largo, FL 33773. Hours: Fri & Sat 10-6, Sun 10-5. Hourly Door Prizes & Grand Drawing at end of show! Free Parking. Contact Bill Schmidt, Show Chair, 727 822-8279 or schmidwj@Eckerd.edu

Mar 11-13, 2011: Augusta, GA - Aiken Gem, Mineral & Fossil Society. 23rd Annual Aiken-Augusta Gem, Mineral and Fossil Show, Julian Smith Casino, 2200 Broad St. Hours: Fri & Sat 10am-7pm, Sun 10am-4 pm. Admission: \$3 Adult, children

under 16 FREE with an adult. Contact: www.aikengmfs.org or www.augustagemandmineralsociety.org.

Mar 12, 2011: Bartow, FL-Imperial Bone Valley Gem, Mineral, and Fossil Society. Polk County Extension Service Building, Highway 17 S. Contact Cindy at 863-255-5256.

June 17-19, 2011: Asheville, NC - Southern Appalachian Mineral Society. Asheville Gem Fest 2011, Pack Place, 2 South Pack Square (Downtown Asheville). Hours: Fri & Sat 10 AM - 6 PM, Sun 12 noon - 5 PM. Free admission, minerals, gems, jewelry, fossils, kids' activities, silent auction, door prizes. Contact (828) 254-7162 or www.colburnmuseum.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.

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.

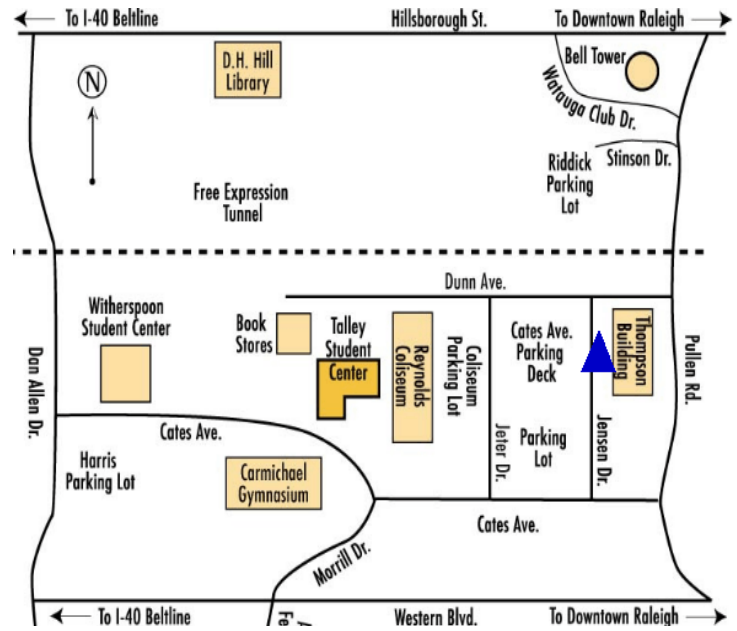
Park in the Cates Ave. Parking Deck off Jensen Dr. Enter Thompson Building directly across from the parking lot.

Our Next Meeting is February 15, 2010 @ 7:30PM Thompson Building / NCSU Campus.

About Our Organization...

The Tar Heel Gem and Mineral Club 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

