

# Tar Heel Tailings

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

## Special Interest Articles:

- Prez Sez
- Opals from Bonanza Opal Mine
- Field Trip Report

## Individual Highlights:

Prez Sez	1
Opals from Bonanza Opal Mine	1
Treasurer's Report	2
July's Business Meeting Minutes	3
Field Trip Report	4
Announcements	7
Vug Sites:	7

## Prez Sez By Cyndy Hummel

August is our Ice Cream Social so please bring either ice cream or toppings.

We will also have our long awaited auction (cleaning out our storage shed). There are various odds and ends that will be up for bid. There is a lot of cutting rough that will be available. There will also be 2 crates of hand-sized cut geodes. See the various pictures throughout this newsletter.



Continued on Page 4

## Opals from Bonanza Opal Mine By Gary McCutchen

I'm out opal mining again this summer and realized that some of our club members might be interested in buying some of the opals that the Bonanza Opal Mine (I own a share in the mine) is selling. I can send you photos of a couple of examples and an example of a finished stone. The pieces of opal rough are in the \$50 range and the finished opal is \$175. I can provide price, weight and dimensions on request, and the opals can be returned for a full refund (buyer would only have to pay to ship the opal back). I can do the sale and mail the pieces by priority mail. Please let me know if anyone is

interested.

The Bonanza Opal workings are a precious opal deposit and mine group, located primarily in the SW $\frac{1}{4}$  section 6, T45N, R26E, MDM, at an elevation around 5,200 feet. The patented portion of the mine is 103 acres. The early history of

the Virgin Opal-Bonanza deposit is vague, but was one of the earliest claims in Virgin Valley. The original discovery of opals in the area is reported to have occurred about 1905-1906 at what is now the nearby Opal Queen Mine just S-SE of the Bonanza Mine.

Continued on Page 6



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

10609 Chelsea Drive  
Raleigh NC 27603

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

Dan Cathey – V-President  
danielcathey@hotmail.com  
(919) 554-1381

Melissa Whitfield – Secretary  
sanfordsgal@gmail.com  
(919) 395-3441

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

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

Linda Searcy – Committee Member  
LJS0928@gmail.com  
(919) 909-0750

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

Shirley Green – Field-Trip Coord.  
richard60green@yahoo.com  
(919) 848-1085

**We're on the Web!**

See us at:

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

**Program & Refreshments**

REFRESHMENT SCHEDULE:

Coordinator: Need Volunteer

August Ice Cream Social

PROGRAM SCHEDULE:

August Ice Cream Social AND Auction  
September Scott LaBorde: Quartz Collecting  
October Grab Bags AND (short) Program  
November Field Trip General Safety  
Session, Elections & Thank You  
from The Club

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

**August Treasurer's Report**

August Treasurer's Report

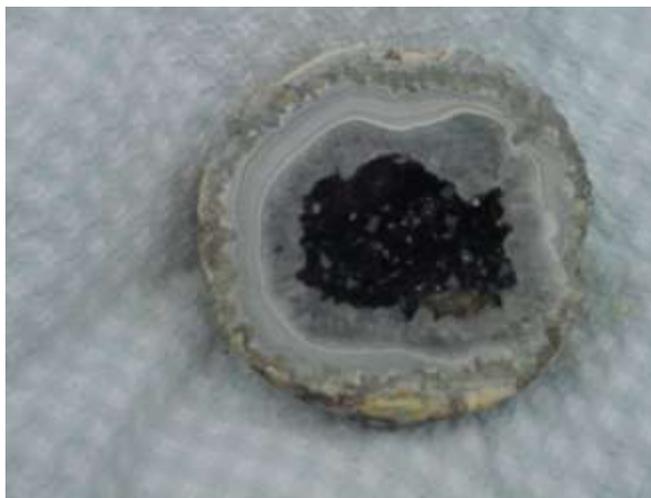
June Ending /  
July Beginning Balance \$1,358.67

Deposits (+)  
Membership deposit \$100.00  
-----  
Sub total \$100.00

Checks Written (-)  
Newsletter \$106.22  
show expenses 574.67  
meeting food 75.00  
-----

Sub Total \$755.89

July Ending /  
August Beginning Balance \$702.78



**August B-Day Members**

Steve Glaser  
Julie Niederkorn  
James Tunney  
Kelly Williams



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. - July Meeting Minutes

Tuesday, July 19, 2016

Attendees = 41 (including 2 kids under 12)

### Opening of Club Meeting:

The meeting was called to order by President Cyndy Hummel at 7:35pm.

### Program:

Dan Cathey began the program by introducing our speaker Fred Booth. Fred grew up on a dead end road overlooking a gorge in rural Ohio. From a young age he was fascinated by the Devonian fossils he found in the creek below. With degrees in Horticulture, Environmental Science with minor in Geology, he is now nearing the completion of a Master's degree in Science Education. He is a state certified Environmental Educator and member of the Geological Society of America, the Cape Fear Mineral and Gem Society and the Environmental Educators of North Carolina.

Fred's program was a multi-media presentation covering a road-trip based course through UNC Pembroke. The 15-day field-based course focused on how North America's landscape has changed due to the geomorphic effects of the last ice age and of volcanic processes related to the Yellowstone Hotspot. He passed around many samples from the trip.

A group from UNC-P (Fred, a Professor, an Assistant, and 8 undergrads) took this whirlwind trip all the way to Wyoming and geologic spots of interests in between over 15 days.

Some of the places they visited:

**Pilot Mountain, NC** – A quartzite monadnock remnant of the Sauratown Mountains.

**New River Gorge, WV** – A remnant of the Teays river system that geologists believe existed before the continental ice sheets plowed down from the north. This river has its source in NC.

**Missouri River, MS** – where they camped on the same spot as Lewis and Clark exactly 211 years to that day!

**Badlands National Park, SD** – Home to striking erosional formations and the world's richest collection of Oligocene-age vertebrate fossils.

**Ashfall Fossil Beds, NE** – This state park is the scene of a fascinating diverse fossil find: a watering hole was instantly covered by a super volcanic eruption 1600 km, killing most of the life around it and leaving a fossil record of the tragedy.

**Black Hills, SD** – The Crazy Horse Monument is being carved out of the Harney Peak granite batholith.

**Devils Tower, WY** – Has the distinction of being the nation's first national monument, established in 1906 by Theodore Roosevelt.

**Paradise Valley, MT** – Extremely varied history of geologic activity.

**Yellowstone National Park, WY** – Rich in a geologic past, it's been covered with inland seas, experienced the Absaroka volcanics, stretching of the crust, a hotspot that causes volcanics, as well as glaciation.

**Mammoth Hot Springs (Yellowstone)** – These ever changing springs form when superheated water dissolved calcium carbonate from the surrounding limestone.

**Petrified Tree (Yellowstone)** – Unfortunately the hillside they visited has just one (there used to be many but visitors took parts of those until this area was fenced off)

**Grand Canyon of Yellowstone** – The site of the present canyon was probably the result of uplift and related faulting.

**Sulphur Caldera and Mud Pots** – Sulphur Caldron is an acidic mud pot with sulfuric acid levels at a pH of 1.3! While this is nearly as acidic as battery acid life does exist there.

**Midway Geyser Basin** – Fumaroles or steam vents in Yellowstone are hydrothermal features that continuously hiss steam. The temperature in these vents can be as high as 238 degrees F.

**Old Faithful (Yellowstone)** – Both fascinating and faithful with its eruptions.

**Earthquake Lake, MT** – Once known as Hebgen Lake in Montana, it is the site of a devastating earthquake on August 17, 1959. The magnitude of the quake measured between 7.3-7.5. The lake actually tilted and the waters sloshed during it.

**Mesa Falls, ID** – At Upper Mesa Falls, a thunderous curtain of water, as tall as a 10 story building

Fred also showed photos of Trip to the Tucson Gem and Mineral Show (HUGE!) Drool worthy specimens in his pics! This show takes over the whole city and is one of the biggest in US.

### Old Business:

We had no refreshments this month so Cyndy talked about getting a refreshments coordinator who can get volunteers and make sure we get refreshments. We had some people approach her about volunteering.

Next month is auction and ice cream social. Cyndy talked about some of the items up for auction including a lot of geodes, nice ones, rough, machinery, bench, nice minerals. Bring your money and checkbook!

No birthdays this month (and no confessions).

### New Business:

Board met and upped food budget to \$85.

Next month is ice cream social so please bring a sweet item...ice cream, toppings, a dessert! Melissa will post on Facebook.

Tom Todaro discussed the Field Trip to quarry in Greensboro hosted by Shirley and himself for July 30<sup>th</sup>.

### Door Prize:

Marilyn Moragne, a new person to our meeting, won the door prize this month. She picked out tourmaline rough.

### Close of Meeting:

The meeting closed at 9:06 pm.

Respectfully Submitted

Melissa Whitfield,

Secretary, Tar Heel Gem and Mineral Club, Inc.

# August Field Trip

By Shirley Green

TAR HEEL GEM & MINERAL CLUB

FIELD TRIP NOTICE

Friday, August 26, 2016

Wake Stone Knightdale Quarry

**“REQUIRED”**

1. Everyone must comply with any and all safety requirements set forth by Martin-Marietta
2. Everyone must 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 and signoff on the safety rules

**EXTRA STUFF:**

1. Feel free to bring buckets, picks, hammers, chisels, shovel, hand cart, rags, crow bar, sunscreen, bug spray, newspaper, etc.
2. Bring a change of clothes in case you get wet.
3. Camera
4. Magnifying glass or eye loop
5. Food, snacks
6. Drinking water to stay hydrated
7. Ask for help to load your take home rocks, as we don't want to see anyone hurt their back
8. Please be prompt as the quarry operator is coming in on his day off to host our club.
9. Be sure to thank the quarry operator upon leaving as we want to leave a good impression so as we can come back.
10. Temperatures in the quarry will be excessive **MAKE SURE** you bring plenty of fluids. It also doesn't hurt to bring a small cooler with water to dip a face towel into for cooling.
11. Be sure to arrive around 07:45 AM so as we can be safety briefed.
12. It will be hot, scorching, frying, boiling, etc. bring a closed bucket of water and a rag so as you can cool yourself.....take it from me there is nothing like wiping your face down with water. J
13. Have Fun and Rock On.....

<b>FIELD TRIP DATE</b>	<b>FRIDAY, AUGUST 26, 2016</b>
<b>TIME:</b>	08:00 am – 11:00 am <i>(or as directed by quarry manager). WE WILL NOT WAIT FOR ANYONE WHO IS LATE...NOT EVEN 5 MINS...SO COME EARLY TO BE ASSURED A PLACE!!</i>
<b>QUARRY OPERATOR</b>	Martin Marietta
<b>QUARRY NAME</b>	Wake Stone Knightdale Quarry
<b>QUARRY ADDRESS:</b>	6811 Knightdale Blvd. (64 Business), Knightdale, NC
<b>TAR HEEL TRIP COORD</b>	Shirley Green 919 848-1085 Esteemed helper <i>Tom Todaro</i>

**NOTES**

1. Let **Shirley Green** know ASAP if you are able to attend.
2. NO AGE LIMIT BUT PARENT SUPERVISION IS REQUIRED FOR ANYONE UNDER 1
3. On our last field trip we had someone who DID NOT follow the safety rules. It is very difficult to get quarries to agree to let us in these days SO IF YOU DON'T THINK THE RULES APPLY TO YOU DON'T COME!! People who break the rules are the reason quarries are so hesitant to let us in anymore.
4. If you bring snacks sure not to simply throw your trash on the ground...I state this cause I have seen this happen before.
5. If you need a ride I suggest you sync up with other club members so as to share expenses, etc.
6. Remember we are guests.....

Minerals that you might find here:

- Pyrite
- Amethyst
- Quartz
- Epidote
- Mica

## Prez Sez

Continued from Page 1

Also, a few club members will be picking up a new donated lot of machines. I am told these are in working order. Here is the list of those - 18" diamond Raytech saw with blades, 10" diamond Raytech saw with blades, Diamond Pacific Genie cab cutter, 18" Vibrolap which polishes slabs & geodes, geode & slab sander, dremel tool set and a 6 foot lighted showcase. Now is the time to get a great bargain as everything must go!

See you soon,

Cyndy Hummel  
President,

Tar Heel Gem and Mineral Club, Inc.

**Auction Pictures**

Malachite



Tiger's Eye



Rhodochrosite



Red Jasper



Bubble Lace Agate



Varisite



Owyhee Jasper



Amethyst Geode



## Bonanza Opal Mine

Continued from Page 1

The Bonanza deposit was discovered, staked and became the second major location in Virgin Valley. Ivan Dow, George Mathewson, Alfred Thompson and others were the original owners. The deposit was first officially reported by J.C. Merriam in 1907.

The early workings at the Bonanza were shallow surface cuts, and the tendency of the opals to craze upon exposure to atmospheric conditions after mining caused disappointment and abandonment in their early commercial mining. Some years later, after 1916, Flora Loughhead (pronounced "Lockheed") acquired the Bonanza group claims, which was one of the ten major groups she owned during her mining efforts in Virgin Valley.

In January, 1943 Flora Lockheed died and the Bonanza deposit was relocated on April 3, 1943, as the Virgin Opal Placer by Mark M. Foster, Frank L. Garaventa, and others, being 2,640 feet by 2,640 feet, or 160 acres. Mark Foster located a 40 acre addition measuring 2640 feet by 660 feet on July 1, 1953, known as the Virgin Opal #2 Placer, on the southerly side of the existing Virgin Opal, bringing the amount of ground claimed to 200 acres. The work consisted of a cut to begin tunnel near the north side center line of the new claim. On December 11, 1954, Mark Foster sold the Virgin Opal group placer claims to the Hodson family. The Virgin Opal claims were downplayed in their importance by their new owners to discourage highgrading due to the remoteness of the location and the valuable nature of the gems in the exposed deposits, and in literature was purported to "be only a localized enrichment", which was not the actual case.

In 1973, while working on the Virgin Opal claim, Keith Hodson accidentally discovered the 7.25 pound "Bonanza" Opal, which was broken into 5 large pieces and numerous smaller chunks by the bulldozer blade. During 1974-1975, the United States Geological Survey examined the Virgin Opal-Bonanza deposit as part of their study of the mineral potential of Virgin Valley and the Sheldon Range. On June 15, 1979, Keith Hodson located the Bon #1-5 Lode mining claims over his existing Virgin Opal Group placers and filed a patent application. On September 7, 1982, Keith Hodson received a mineral patent, covering 103.305 acres. The mine was worked for

many years by owner Keith Hodson, and in the early 1980's produced a 3,853 carat limb replacement precious opal discovered by Hodson's wife, Agnes, known as the "Crowning Glory" which was valued at \$50,000.00 as a wet specimen. On July 15, 1988, Keith Hodson sold the patented Bon #1-5 lode mining claims to Richard Leger and Lloyd Olds, who in turn formed a limited partnership selling 1% digging right shares in the mine. Initially the shares sold for \$6,000.00 each, and averaged \$9,000.00 or so in later years. On September 15, 1989, Richard Leger and Lloyd Olds filed the Virgin Opal #1 and #1A placer claims, claiming ground on either side of and buffering the patented Bonanza Opal mine. On October 22, 1991, the Bonanza shareholder partnership formed Bonanza Opal Mines, Inc., a Nevada corporation. On July 9, 1992, Lloyd Olds and Richard Leger quitclaimed their interests in the Virgin Opal #1 and #1A placers to the Bonanza corporation, as well as the patented mine. The Virgin Opal placer claims on either side of the patented Bonanza Opal mine were apparently so valuable that Lloyd Olds stipulated in the deed that the claims were to remain with Bonanza Opal Mines Inc. forever or be returned to him upon dissolution of the corporation. The corporation subsequently filed buffer lode claims on both sides of the patented mine.

For some time afterwards, the Bonanza Corporation and shareholders were involved in lawsuits over management, ownership and share disputes, among other issues. However, after initiating a shareholder plan for the patented mine, considerable amounts of precious opal was recovered, of which 1/2 went to the corporation and 1/2 to the discovering shareholder; exceptional specimens remained property of the corporation. After legalities were settled, the tailings portion of the mine was open for public fee digging.

The Virgin Opal-Bonanza deposit is underlain by in-place, nearly horizontal to 45 degree dipping ash, tuff, and tuffaceous sandstone beds. The opal bearing horizon can generally be traced and averages more than 4 feet (1.2 m) thick and consists primarily of light colored bentonite containing varying amounts of petrified wood, rhyolite pebbles, ash, and opal. Precious opals are usually found in the upper half of the horizon. The Bonanza mine is quite developed

and active, with many large trenches, open cuts, pits and workings. The original float (placer) deposits are exhausted; the lode deposit is being actively mined. The mine has produced large precious opals, the most noteworthy weighing 7.25 pounds ("The Bonanza Opal"); 8 pounds ("Irene's Delight"); and other smaller pieces too numerous to mention. Bonanza Opal Mines Inc., sales for 1995 totaled \$47,566 (11/30/1995) and the patented mine yielded a total of 79 gallons of opal from the 1995 season (the corporation's 50% share was 49 gallons of opal, or approximately ten 5-gallon buckets, which was considered to be a "bad" season). Heylman (1987, p.44) notes that "In places, precious opal has been involved with slumping and landsliding; undoubtedly, some valuable opal deposits lie buried

beneath the landslides." The Virgin Opal-Bonanza deposit was noted as being one of several mines in Virgin Valley having opal reserves worth millions of dollars (USGS, 1984, p.7). The patented mine, along with the other adjoining claims, transferred by Lloyd Olds and Richard Leger to the Bonanza Corporation, were estimated to be worth not less than \$5,000,000.00 (five million dollars USA) in 1987 and 1994 (Defendants, 1996). The Bonanza deposit has also been noted as being one of the two most important mines in the area (Zeitner, 1986 p.44).

Resources: <http://www.mindat.org/loc-8801.html>

## UPCOMING SHOWS

**Sep. 30 - Oct 2, 2016: Dallas, NC** - 38th Annual Gaston Gem & Mineral Show. The show is located at Gaston County Park on Hwy 279(1303 Dallas-Cherryville Hwy). It is located 1/2 mile off 321. There is a sluice. We sell buckets of sand with minerals and great other items in them. Hours: Sep. 30 - Oct 1: 9:00-6:00; Oct 2: 9:00-5:00. Admission is free. hourly raffles, Grand prize drawn Oct. 2 at 5:00. We offer geodes, wire wrapping, quality gemstones, fossils, minerals, faceted stones, makings, cutting material, jewelry. Our website is <http://gastongemclub.weebly.com/>

**Nov. 18 - 20, 2016: Columbia, SC** - The Columbia, SC Gem & Mineral Society will hold its 49th Annual Gem, Mineral, & Jewelry Show. Jamil Temple, 206 Jamil Rd., Columbia, SC 29210. Jewelry, beads, loose stones, fossils, minerals, gold, silver, & tools for sale, Geodes sold & cut; Club member's rock collections on exhibit & lapidary demonstrations. Lots of fun for the whole family. South Carolina amethyst on display. Sponsored by The Columbia Gem & Mineral Society. Hours: Fri. 10:00 - 6:00; Sat. 10:00 - 6:00; Sun. 12:00 - 5:00. Admission: \$5.00 for adults, Sixteen & under free with adult. All military & their dependents free. Contact: Sue Shrader 803-736-9317; ashnader@mindspring.com. Dealers; Sharon Sterrett 803-356-1472; ssterrett@sc.rr.com. <http://www.cgams.org>

**March 31 - April 2, 2017: Raleigh, NC** - 41<sup>st</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.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](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.

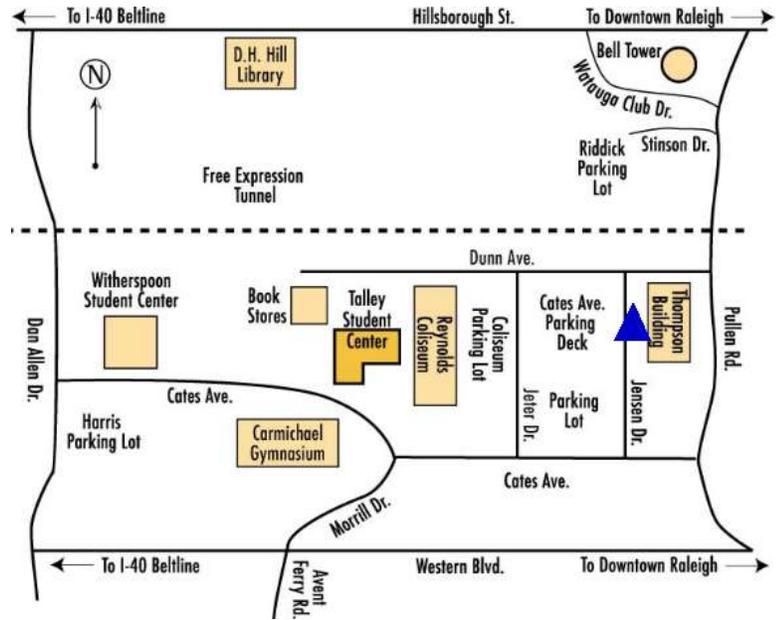
Park in the Cates Ave. Parking Deck off Jensen Dr. Enter Thompson Building directly across from the parking lot.

**Our Next Meeting is  
August 16, 2016 @ 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

