

# Tar Heel Tailings

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

## Special Interest Articles:

- President's Report
- Internet Resources for Mineral, Meteorite, and Fossil Collectors
- Upcoming Events
- Pictures for May Auction

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## President's Report

Thanks to everyone that brought a dish to eat to the last meeting. There was more than enough to eat and everything was good! Especially desert, which was the very interesting program delivered by Tim Martin, on the scientific expedition he was on to the northern most port in Russia to collect core samples of the layers of sediments at the

*Continued on page 4*



## Internet Resources for Mineral, Meteorite, and Fossil Collectors

By Arvid Pasto and Robert Lauf

Most mineral and fossil collectors have access these days to a speedy internet connection. These connections provide download capabilities from tens to hundreds of kilobytes per minute, providing essentially instant access to literally a "world" of information.

On the internet are a number of search engines, such as Yahoo (<http://www.yahoo.com/>) and Google (<http://www.google.com/>). When you use these search engines with any

number of key words or phrases, you get a large number of "hits", ranked by some measure of "relevance". If, for

instance, you enter Tyrannosaurus Rex into the search engine, thousands of hits will be returned.

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Auction Item: Vibra sonic and attachments

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**We're on the Web!**  
See us at:  
[www.tarheelclub.org](http://www.tarheelclub.org)

**Program & Refreshments**

REFRESHMENT SCHEDULE:

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

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:

May	Auction
June	Open
July	Jeff Schlotman
August	Ice Cream Social
September	Open
October	Open
November	Open

Currently the Club reimburses members up to \$75 for bringing refreshments for our monthly meetings. We still need volunteers to bring refreshments for June and July. Please let Jeanette know on Tuesday if you would like to support your fellow club members who will be grateful. Thank you. Jeanette Baugh

**March Treasurer's Report**

Ending February /	
<u>March Beginning balance</u>	15220.36
Deposits Dealers	2082.50
Members	155.00
<u>Subtotal</u>	17457.86
Subtract checks written	
Office supplies	41.48
IMP flyers, post cards, raffle forms	164.48
IMP newsletter	57.11
Post Master	716.80
Tires & etc.	227.95
Meeting food	75.00
Motor & Parts	
Saws Geode Booth	202.03
Storage	86.00
Sign - Outside door	199.83
Show Food Upstairs	375.00
Postmaster	10.55
Staples name badges	43.08
Advertising show	200.00
Progressive G tees	1027.43
Progressive G tees	900.00
<u>Subtotal</u>	4326.74
Ending March /	
April Beginning Balance	13131.12

**May B-Day Members**  
Josh Chrisey  
Madeline Blatt  
Nancy Holland  
Corinne Hummel  
Tate Rogers  
Joseph (Jay)  
Calendine, Jr.  
Jeanette Baugh  
Mickey Broadway  
Jim Davenport  
Shirley Green



Membership applications may be mailed to:

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

## Tar Heel G & M Club April Meeting Minutes

Tuesday, April 19, 2011

7:40PM The meeting was opened by Joe Moylan

Walt read minutes. Bob Bendelow made a motion to accept the minutes as read. Barbara Watkins seconded, motion carried.

Because of the low attendance, the vote on the possible change to food/snacks at meetings was postponed.

Joe asked if anyone has sign-up lists from the show. No one did. People were told to bring them to the next meeting.

Corrinne said that the price for the NC State Fairgrounds will increase by \$200 per day next year or \$600 total for the 3 days of the show.

Old business: Joe asked if anyone was going to Glendon this weekend. Three people present responded yes.

There will be a board meeting next Tuesday, the 26th, at 6:30 at the craft center

Cyndy mentioned that Jeff Schlotman from Crystal Perfections is scheduled to speak at the July meeting, topic TBD.

## President's Report

Continued from page 1

bottom of a large crater lake. Very interesting. We all stayed till just before 10:00pm, when we have to be out of the building. If Mr. Martin should decide to come back and speak to us more in the future, you are not going to want to miss it.

At the May meeting we will be having an auction of lapidary materials and slabs, and rock specimens donated to the club by several past and present members. More information about the material to be auctioned is included elsewhere in this newsletter. Come a little EARLY if you would like to preview the items before the auction, and have some fun!

It was decided at the last Board Meeting that my suggestion of adding a Forum to our website is not needed at this time. There were many concerns about upkeep and maintenance of the forum, and whether the members would use it enough to make it worthwhile. The use of different group e-mail lists was decided to be the main means of contact when necessary, such as Toms' Field Trip notification list. And, by the way, I have not gotten confirmation yet but Tom has a couple of trips he's working on and our next Field Trip should be coming up soon! Thanks Tom. And we have the newsletter, and we always will, as long as someone like George is willing to step up and take on the job and responsibilities. And, with a little arm twisting, Jerry Miller has agreed to be our auctioneer at the next meeting.

This club would not be here if not for the hard work and dedication of our core group. Those that come to the

There will be an auction next meeting and there will be lots of stuff and equipment up for bids. There is a Vibrasonic tumbler and several homemade tumblers. Joe said he could meet you at the storage unit to look at them ahead of time because they will not be brought to the meeting for the auction.

Joe mentioned that August is open for a guest speaker at our meeting, but September-November is set.

Carrie Jones won the door prize and chose 3 slabs for lapidary work.

Walt Milowic made a motion that the meeting be adjourned. Bob Bendelow seconded. Motion carried. Meeting was adjourned at 8:10?

The Potluck dinner was served followed by our guest speaker, Tim Martin.

Respectfully submitted, Walt Milowic

meetings regularly and step up when there is a chore to do. I realize that people join clubs like this for their own usually specific reasons and when the subject matter is not something to your interest, it is easy to "tune-out". I am just as guilty of this as anyone. It is only natural. We have many members that join just for the fieldtrips or just to be a member of a SFMS club to take advantage of the perks that come with that membership. I do not begrudge anyone this position, and I realize many members live too far from Raleigh to justify coming to all the regular meetings. But it is very important for all members to realize and understand that there is more to being a member of a club than paying your dues.

We only have two hours a month to get things done. How much can you accomplish in two hours? And we have our annual show, that is, without a doubt, our most important undertaking of the year, taking up a third of that time.

We have NO committees! It takes people to form committees. If you feel you are ready to be on a committee let me know, and be ready to be in charge of that committee and get in contact with the rest on your committee by e-mail. I know, A LOT of you would like to contribute more of your time to the club, but there just isn't the time to get "around-to-it" at our regular meetings. This is something we will have to work on.

See You at the Auction!

Joe Moylan

## Internet Resources for Mineral, Meteorite, and Fossil Collectors

Continued from page 1

You'll quickly learn to be very specific about what you enter into the search box. To limit the number of hits, and make them more specific to what you want, it is best to add extra words. For instance, add the words "fossil" and/or "sellers" after T. Rex. Google will return a number of hits to your request, including anyone who has a specimen of your mineral for sale, or any site that even mentions the mineral, fossil, locality, etc., that you are asking about. If you ONLY want scientific papers, do the same request in Google Scholar [<http://scholar.google.com/>]. This will eliminate all the web pages that are just selling the mineral or fossil. Also, there are many tricks to "asking the question" of a search engine like Google: for instance, putting the words of your question inside of quotation marks will let Google return ONLY those site hits where the entire phrase is contained. Using parentheses around your phrase forces Google to ONLY return hits from sites where the entire phrase is contained AND where the words are in the correct order. On some search engines you can combine the quotation and the parentheses to be yet more specific. Also, use of the words "AND", "OR" and "NOT" between the words of your question phrase changes things yet again. Look up the term "Boolean Operators" to see how these work.

On the other hand, there are specific sites for mineral and fossil collectors, which specifically focus on just those areas. In fact, these sites will likely provide much more specific information than the more general search engines, and indeed the search engines often send the searcher to one of these specific sites!

For instance, if one were to input some mineral locality such as "Erongo Mountains minerals" into the Google search engine, one of the sites that will show up is called "mindat.org" (<http://www.mindat.org/>). This site is tailor made for mineral collectors, as it was set up and is run by mineral collectors!

The following "screen grab" will show some of what the mindat.org website offers:

To say that this site is useful is a major understatement! There is a huge amount of locality data, complete with listings of references, the minerals at the sites, sometimes GPS coordinates, sometimes photos of specimens, etc.

Also to be found on mindat are discussions, where many topics of interest can be located. One of the authors (AEP) has spent time dealing with numerous people from around the world in this discussion area, trying to unravel the combination of pure crystal forms from mysterious fluorite crystals that others own.

One of the most useful parts of this site is the "Search Mindat" function illustrated in the upper right corner of the first image. This can be used to generate a printed page for each locality from which you own a particular species. You can get more information by putting the exact locale info (from mindat) into the Google search engine later. For instance, if you want information on a fluorite locale in Utah called "Marysvale", you simply type that into the Locality Name search box and this is what comes up:

However, assume that the mineral label that came with this particular fluorite specimen specifically said "Deer Trail Mine, nr. Marysvale, UT", and yet, "Deer Trail Mine" doesn't show up in this list. So you would input "Deer Trail Mine" into the "locality" box (lower right) on the above screen, and get the following:

From here, you can see that there are several possibilities for the "Deer Trail Mine" in Utah, and indeed, one of them is in Piute County. What is going on? This example shows that the mindat site is not perfect, (and it isn't peer reviewed, so many of the entries shouldn't be relied on as the last word) but is nonetheless very useful if one tries several approaches to a given problem.

Going back to Google and typing in "Deer Trail Mine" gets several hundred hits, one of the top being the following (<http://www.marysvaleutah.org/things-to-do-things-to-see-marysvale-utah/historic-mining-sites/137-deer-trail-mine-marysvale-utah.html>), which turns out to be the complete history of the site, all the way back to the 1800s.

Aside from internet search engines like Google, and mindat.org, there are several other useful sites. Some of the long-time scientific or popular journals have their archives on line, and some of these are searchable.

American Mineralogist [<http://www.minsocam.org/msa/ammin/toc/>]  
Canadian Mineralogist [<http://ruff.geo.arizona.edu/doclib/cm/>]

Mineralogical Magazine [<http://www.minersoc.org/pages/Archive-MM/TOC/main.htm>]

Gems and Gemology [<http://www.gia.edu/research-resources/gems-gemology/back-issue-archive/index-back-issues-1934-80.html>]

The Am Min and Min Mag sites give free access to all papers >10 years old; abstracts only are available for current papers, but these are also free. (The Min Mag site is currently down, but should be back on line eventually). The Can Min site is actually scanned from someone's personal stash, so it only covers Vols. 6-44; papers are free but you need to know which volume and page you're looking for, as the index isn't searchable. Gems and Gemology has free ".pdf" downloads for articles of the issues from 1980 and earlier.

For the real geeks among you, interested in the crystal structures of minerals, the Am Min website has a "Home" button, which takes you here...

Clicking on the "MSA Crystal Structure Database" takes you here....

Finally, clicking on the "Crystal Structure Database" hot link takes you here:

Almost every crystal structure you can imagine can be found here. As an example, part of the entry for "epidote" gives the following:

As you can see, there is a listing of where all the atoms are in the unit cell (you can download this as a Crystallographic Information

File (.cif) if you're using software to draw the crystal structure) and also download the original paper by clicking on the pdf icon.

Moving on to other resources.....

Most of the major mineral magazines also have excellent websites, packed with lots of information:

Mineralogical Record [<http://www.minrec.org/>]

Rocks & Minerals [<http://www.rocksandminerals.org/>]

Mineralien Welt [<http://www.mineralien-welt.de/>]

All of the major rock and mineral and fossil shops have websites, of course, where one can not only purchase specimens, but also get information on localities and other historical details simply by reading the captions used for specimens.

Many government sites have excellent reference information as well, including international, US government, and state or lower level. For instance, the U.S. Geological Survey and many state geological surveys have lots of info. The Russian Mineral Society has a good website, which is searchable to some degree. For most papers, the English abstract is free. [<http://www.minsoc.ru/proceedings/>]

Many universities have useful websites, one of the best being that at the University of Arizona called RRUFF (<http://rruff.info/>). The following screenshot shows the main screen from RRUFF:

Note that this website contains Raman spectra, x-ray diffraction data, and chemical data for most minerals. It also has a large number of reference articles available for free, many scanned in from the original old journals.

Note particularly in the upper toolbar area the "Search References" tab. Clicking this gives you the following screen:

Here is part of the result you get for rutile:

Clicking on any of the pdf icons will get you a free copy of that paper.

Numerous other institutions involving minerals have websites, including museums (e.g., the nearby Tellus Museum in Georgia, at <http://www.tellusmuseum.org/>), professional associations (e.g., the

Mineralogical Association of Canada, at <http://www.umanitoba.ca/geoscience/mac/>), and assorted websites dealing with minerals (e.g., Amethyst Galleries' Mineral Gallery, at <http://www.galleries.com/>).

Lastly, if you search for technical papers, you will often end up at the publisher's web site (e.g., Geoscience World), where you can see the abstract and maybe the first page for free, and there will be a link to purchase a copy of the paper as a pdf file (typically for \$40 or so!) Here's where bricks and mortar come in: Your local library has an Interlibrary Loan desk, and they'll get you a copy of the paper for 10 cents a page!

#### FOR METEORITE COLLECTORS

##### Meteoritical Bulletin

This link provides archives of annual issues of Meteoritical Bulletin going back to 1957. The Meteoritical Bulletin announces new meteorites and gives basic characterizations and locations. It is the essential reference to newly discovered extraterrestrial materials. Supplemental materials, including maps and photographs, are provided in the Bulletin web pages. The Bulletin is published annually in a supplement to Meteoritics and Planetary Science and is also distributed electronically. This site also has a searchable database on 40,000 approved meteorites.

[http://www.meteoriticalsociety.org/simple\\_template.cfm?code=pub\\_bulletin&CFID=12181732&CFTOKEN=86728342](http://www.meteoriticalsociety.org/simple_template.cfm?code=pub_bulletin&CFID=12181732&CFTOKEN=86728342)

##### Meteoritics and Planetary Science

The journal was first published in 1935 under the title "Contributions of the Society for Research on Meteorites." In 1947, the publication became known as "Contributions of the Meteoritical Society" and continued through 1951. From 1953 to 1995, the publication was known as "Meteoritics," and in 1996, the journal's name was changed to "Meteoritics and Planetary Science" or MAPS. The journal was not published in 1952 and from 1957 to 1964. At this site, papers are available for issues from 2002-2009.

[http://digitalcommons.library.arizona.edu/holdings/journal?r=uadc:/azu\\_maps/](http://digitalcommons.library.arizona.edu/holdings/journal?r=uadc:/azu_maps/)

## May Field Trip

Wake Stone Knightdale Quarry  
Saturday, May 28, 2011 9:00 AM

Contact: Tom Todaro  
Tar Heel Gem & Mineral Club Chair  
caribtomt@yahoo.com  
919-639-7798, H  
919-349-9143, M

OK I know the date is not probably going to work for some, but I finally got approval from WAKE STONE to visit their KNIGHTDALE QUARRY at 9:00 AM on Saturday, May

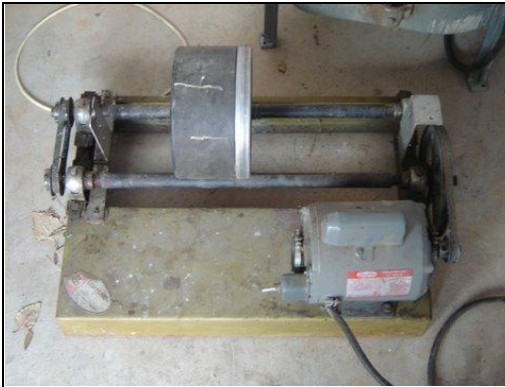
28th. Since Wake Stone has forbid clubs from visiting it took many phone conversations (and some begging) to let us back in. **People who want to go MUST have hard hats and approved boots or they will be asked to leave.** This is a privilege for our club and we want to make a great

impression. I will bring Bojangles for the staff. People who wish to attend need to call me at 919-639-7798 or email me caribtomt@yahoo.com advising who many are coming. I realize the 28th is already established for another dig; however the date of the 28th was given to me from David Lee as the best he can do. More later.....

Ps...I need to advise David next week on approximately how many attendees will be coming.

Regards,  
Tom Todaro

Pictures for May Auction



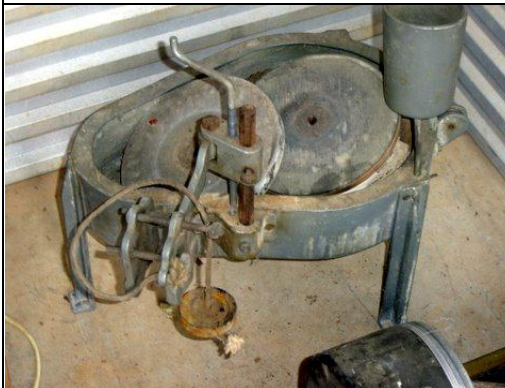
Small homemade tumbler with motor



Large homemade tumbler, no motor



Hot Dop pot



Flat Lap, no motor



Box of sanding discs for flat lap



Vibra sonic and attachments



Misc. onyx, agate and crystal specimens



Cut geodes; Sterling Hill fluorescent; Aurora fossils; Agate and jasper



Herkimer specimens



Slabs



Hourglass Selenite crystals



Crabtree Emerald Mine; Fluorescent specimens; Misc Agate

## Upcoming Events

### Laurie's Open House and Rock Swap!

All Day, Saturday May 14th, 2011

You are invited to the Spring Open House at my rock shop in Denton, North Carolina on May 14th. The event we had here last spring was a resounding success, with about 20 participants setting up their wares for swapping or selling. This year should be equally successful as I am inviting members from many NC clubs. The kids will have a big pile of freebie rocks to dig through, (which will be open for adults this time). One of my goals is to encourage young rockhounds so I will be giving away lots of stuff to the kids. Any mineral dealer or collector that wants to come can set up for free! I only have a limited number of tables I can provide so if you can bring your own tables that would be greatly appreciated. As with the first event, I'll be giving away a very fine specimen by drawing. There will be a campfire and hopefully music and picking in the evening. You are welcome to camp on the site, both on the night before and the night after the event.

There will be a grill set up for hot dogs, hamburgers, or whatever and other refreshments. I will provide coffee, a bunch of hot dogs and ice for drinks. It would be helpful for me if you could e-mail me in advance so I could get an idea of how many to expect. Tables will be provided on a first come first serve basis. You can buy, sell, or trade, but even if

you don't set up a table, be sure to bring a few specimens to swap. The campfire at night can be magical, bring your instruments. I also have a modest rock shop here for you to look at. Thanks, Laurie.

This year I will be inviting anyone interested to join me on Sunday, the day after the event, to go down with me to the Bowers Limonite Mine, in Stanly County, about 45 minutes from my shop, a well known locality for pseudomorphs of limonite after pyrite in singles and clusters. (The owner requires a \$5.00 per day digging fee).

**DIRECTIONS TO THE OPEN HOUSE:** The shop is located about one hour east-northeast of Charlotte, 45 minutes southeast of Winston-Salem, and about 45 minutes southwest of Greensboro. If coming from Greensboro or points east, take I-85 south from Greensboro to the main Thomasville exit and turn left at the end of the ramp (south) onto Hwy 109. After the second RR crossing, take the next road to the left (at a crossroads). This is Cedar Springs Road. Go 2/10 mile to the shop at the third house on the right. **FOR THOSE WITH GPS SYSTEMS, THE ADDRESS IS 268 CEDAR SPRINGS ROAD.**

For more info, call me at 336-859-3471 or email me at: [laurieadams@triad.rr.com](mailto:laurieadams@triad.rr.com)

## UPCOMING SHOWS

June 4 & 5, 2011 Birmingham, AL. 38th Annual Tannehill Gem, Mineral, Fossil, & Jewelry Show; Alabama Mineral & Lapidary Society. Sat: 9 am to 5 pm; Sun: 9 am to 5 pm. Tannehill Ironworks Historical State Park. Show contact: Gene Blackerby, 205-807-6777. Email contact: [gene@lapidaryclub.com](mailto:gene@lapidaryclub.com)  
<http://lapidaryclub.com>

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](http://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](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.

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.

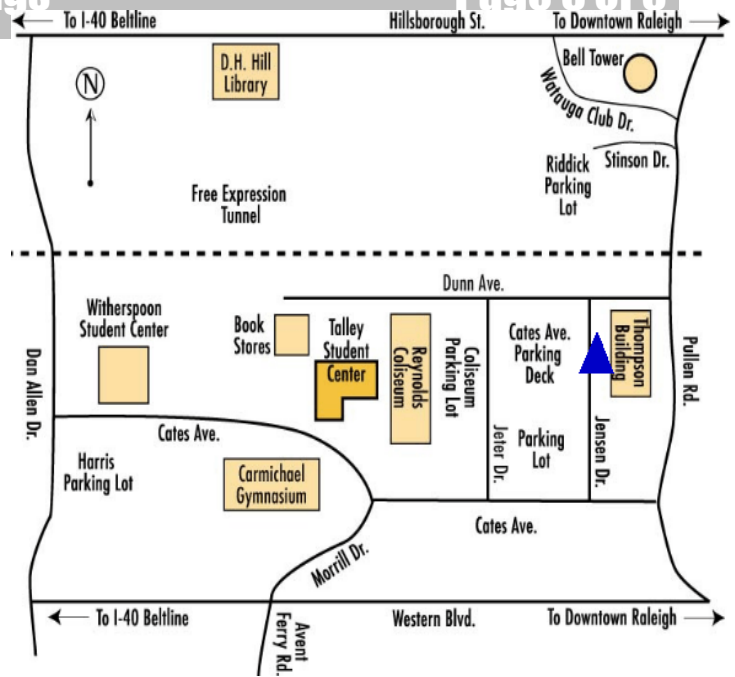
Park in the Cates Ave. Parking Deck off Jensen Dr. Enter Thompson Building directly across from the parking lot.

# Our Next Meeting is May 17, 2011 @ 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

