November, 2012
Volume 40, Issue 11

Tar Heel Tailings

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

Special Interest Articles:

- President's Report
- What is an Ammonite
- Equipment for Sale

Individual Highlights:

President's Report - Tar Heel Gem & Mineral Club, Inc.

November. Time to reap the benefits of another hard year, and give thanks.

I have really enjoyed these last two years as President and I've learned a lot. I thought I had a pretty good idea how the club ran before taking the office but it is really quite different when "the buck stops here". It is an experience all members should

Continued on page 4

What Is An Ammonite?

Written by Roy Shepherd, Discovering Fossils.

Ammonites are perhaps the most widely known fossil, possessing the typically ribbed spiral-form shell as pictured above. These creatures lived in the seas between 240 - 65 million years ago, when they became extinct along with the dinosaurs. The name 'ammonite' (usually lower-case) originates from the Greek Ram-horned god called Ammon. Ammonites belong to a group of predators known as cephalopods, which includes their living relatives the octopus, squid, cuttlefish and nautilus.

How did ammonites evolve?

These sea creatures first appeared 415 million years ago in the form of a small, straight shelled creature, known as Bacrites. They quickly evolved into a variety of shapes and sizes including some shaped like hairpins. During their evolution the ammonites faced no less than three catastrophic events that would eventually lead to their extinction. The first event occurred during the Permian (250 million years

Continued on page 4

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

Michael Troutman – Secretary
michael.troutman@reichhold.com
(919) 676-3161

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

Bob Bendelow – Librarian
& Committee Member
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

Membership applications may be mailed to:

Tar Heel Gem & Mineral Club, Inc.
Attention: Treasurer
10609 Chelsea Drive
Raleigh, NC 27603

Program & Refreshments

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

November Karen Santala

PROGRAM SCHEDULE:

November Ryan O'Neal & Elections

Remember, the club will reimburse you for up to $40 (bring your receipts to the treasurer).
Thank you, Jeanette Baugh

November Treasurer's Report

Sep. Ending / Oct. Beginning Balance	$10,314.02
Deposits (+)	
Members	90.00
Sub total	$90.00
Checks Written (-)	
deposit fair grounds	$2000.00
IMP newsletter	155.32
Meeting Food	80.00
Field Trip Expenses	20.69
2013 Show	160.13
Sub Total	$2416.14
Oct. Ending / Nov. Beginning Balance	$7987.88

November B-Day Members

Tom Bapple
Jason Boyd
Daniel Cathey
Elizabeth Chestnut
George Crowell
Valerie Eakley & Gerald Knight
Melissa Ellis
Scott LaBorde
Deborah & Jerry Miller
Jan Schetzina
Jonathan Starke
Leland T. Thompson
Michael Troutman
Linda Vaughn-Burd
Ron Wheeler

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

Tuesday, October 16, 2012

Attendees = 27

At 7:45 Joe Moylan called the meeting to order and welcomed newcomers/members to our meeting.

Equipment Auction at the THG&MC Gem Show:

Joe Moylan next turned the meeting over to Bob Bendelow, who spoke about the:

1. Ultra Tec http://www.ultratec-facet.com/
2. Graves http://www.gravescompany.com/faceting.htm

These are both stone faceting machines that our club had acquired. He noted the prices new for both Ultra Tec was ~$1000 and ~$1500 for the Graves. He inquired if there would be an auction in November.

Joe M. noted that "We have stuff pilling up" and maybe we have enough for an auction in Nov. and in Feb.

Cyndy Hummel inquired if we could have a silent auction at the THG&MC Gem Show. She also stated that a silent auction could be better manned at the Hospitality Booth area since that area was responsible for "T" shirt sales (with club logo).

Joe M. stated that he had heard some grumblings over the "Demo Area" and the allotment of space and that maybe that would not be a good area to hold the silent auction in.

Bob B. interjected that if you could not be at the "Demo Area" to open it up, that you were out of luck when it came to prime real estate in the "Demo Area" and that you "lost out".

Joe M noted that the "Demo Area" at the show was supposed to go to, in order of priority:

1. People putting on demonstrations
2. People selling

Joe further noted that in light of the space issues, we should have sign up sheets prior to the show. Obsidian Harris would be responsible for the sign up sheets for:

1. Crafts/Crafting
2. Display Cases

Jack Fried would be responsible for the sign up sheets for:

1. Demonstrations
2. Selling/Sales

Corinne Hummel noted that it would be good to have a list of equipment for sale in the newsletter.

Joe M. stated that the Show Chair person Cyndy H. should start to establish the Show Committees needed and how to best move forward. One of these committees should address how to best move our stock sale items.

George Harris asked if we would be setting "minimum prices" for the club equipment to be auctioned for.

Joe M. agreed that there should be a "minimum price" for all equipment going into the silent auction. Joe then went on to say that there should be plenty of room for the silent auction materials and equipment in the "Demo Area".

Joe M then went on to mention the following:

1. Board meeting in November. Later set this for Thursday, 01-Nov-12.
2. Election of club officers to be held in November (Tuesday, 20-Nov-12).
3. That he and Kenny Gay (VP) would both be stepping down from office and that new replacements should/must be found.

Joe M. next turned the floor over to Tom Todaro. Tom T. discussed the successful field trip to Martin Marietta Burlington Quarry. Tom described what was found and both Tom T. and Joe M. brought in samples of materials from the quarry for us to look at.

Tom T. also stated that he had a field trip lined up to Emerald Hollow Mine on Saturday, 27-Oct-12.

Joe M. once again stated that we should break down into our respective committees and meet regularly whether this was post general meeting or at different times. Unfortunately, no commitments were tended.

Joe M. next turned the floor over to Jerry Miller. Jerry M. stated that a club member, Keith Lessee had been in a car accident and was hurt VERY badly. Keith L. can neither speak not walk. Jerry M asked us to reach out to him and visit. Keith's current address is as follows:

UniHealth Post-Acute Care,
3100 Erwin Road,
Durham, NC 27705
(919) 282-1222

Next, Joe M. recognized Walter Milowic who wanted to know who was taking care of our website, noting that much of the info regarding contacts and officers was obsolete. Joe said he would get a hold of Scott LaBorde and see if he will update the information there.

The Tar Heel Gem & Mineral Club website is http://www.tarheelclub.org/

Also noted by Joe M. and Cyndy H. "Grab-Bags" would be made after the end of this meeting.

The Door Prize was won by Marion Broadway who chose a beautiful Ammonite fossil. As a reminder, if you win a door prize, please write a short article about your win for submission to the new letter.

At ~8:25 PM, Joe Moylan closed the meeting thru executive decree. There were no dissenting members and all started in on making up "Grab-Bags" for sale at the THG&MC Gem Show.

Respectfully Submitted

Michael Troutman, Secretary

President's Report

Continued from page 1

submit to at least once. You don't have to worry about not "knowing" enough about club operations for the job. No one does. You learn on the job, and add your own personal touch. Unfortunately, the truth of the matter is, it all boils down to time. How much time do you have. There is no end to what this club could do, given the participation of volunteers with the time.

During my term I have led the club under the premise that we can do more. I don't know that that is true. We have the annual BIG show that takes up almost a third of our time each year. We have George Harris graciously and diligently putting together this newsletter each month as Editor. Thank You, George.

We have Tom Todaro doing a great job of finding us quarries and other sites to access as FieldTrip Chairperson. Thanks, Tom.

We have the continued efforts of Corrine and Cyndy Hummel as our "Go To" folks for direction. Thank You Both.

Not to mention the time and energy of many others that all help to keep the club a float.

But we are The Tar Heel Gem & Mineral Club representing the Capital City of one of the most mineral prolific states in the country, North Carolina. We have a great relationship and home with the Crafts Center of NC State University. We have access to museums, records, and the labs of the Earth Science school of the university. And we have a screen in our meeting room that there should be internet access on at every meeting for reference to be shared with all. It has been my term-long goal to establish displays that anyone, or group, from the club, can easily take to local schools, as they are in desperate need of such aid in education and are constantly asking us for it. I hope this will continue to be a work in progress for the club.

The November meeting will start with a short program given by new member Ryan O'Neal. Ryan is from Pennsylvania and was a member of a group of avid rockhounds there that he will be telling us a little about.

From approximately 8:00- 9:00 we will conduct our business meeting and Elections. At the same time we will be having a silent auction of the lapidary equipment posted and pictured in last month's newsletter. Cards and starting bids will be with each piece. This could prove to be a little chaotic, but if you don't mind hearing the gavel banging on and off through the night, and with a little co-operation, I think we will be able to pull it off.

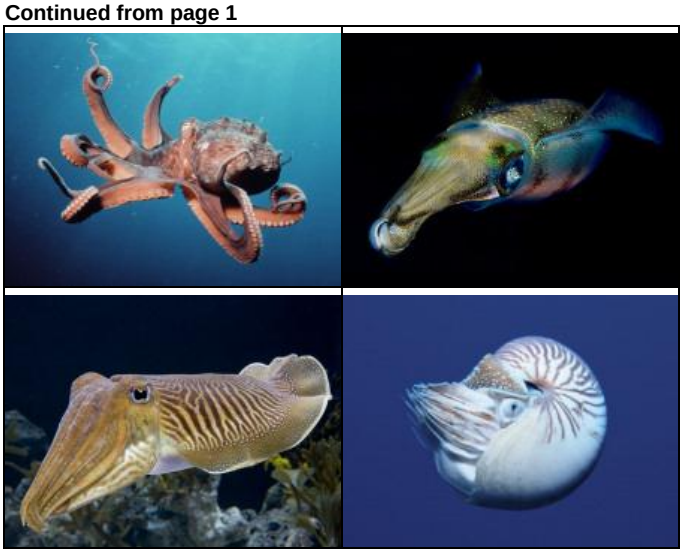
If you don't show, we will notify you of what office you have been elected to.

See you at the next meeting,

Joe Moylan, President, Tar Heel Gem and Mineral Club, Inc.

What is an ammonite?

Continued from page 1



ago), where only 10% survived. These surviving species went on to flourish throughout the Triassic, however at the end of this period (206 million years ago) they faced near extinction, when all but one species survived. This event marked the end of the Triassic and the beginning of the Jurassic, during which time the number of ammonite species grew once more. The final catastrophe occurred at the end of the Cretaceous period when all species were annihilated and the ammonites became extinct. This event apparently coincided with the death of the dinosaurs.

How did ammonites live?

Ammonites began life as tiny planktonic creatures less than 1mm in diameter. In their infancy they would have been vulnerable to attack from other predators, including fish; however, they quickly assumed a strong protective outer shell that shielded their soft interior from damage. Evidence suggests that they gained in size rapidly, with females growing up to 400% larger than the males.

Ammonites moved by jet propulsion, expelling water through a funnel-like opening to propel themselves in the opposite direction. They typically lived for two years, although some species survived beyond this and grew very large as pictured above. Evidence of their short lives is estimated by looking at their living relatives - the nautilus. These creatures exist within modern day seas and possess many characteristics similar to ammonites.

Nautilus shells comprise of individual chambers, each growing in size as the creature grows. These chambers are secreted by the creature at a rate of one every four weeks, equal to 13 each year. Using this as a guide an ammonite shell containing 26 chambers could be assumed to have housed the creature for two years. Like the nautilus, ammonites retained their original shell throughout their life. However it's worth noting that in comparison to modern day nautili which live in cold, deep water, ammonites preferred warm shallow waters and may have had a higher metabolism. Consequently, it's possible that ammonites could reach larger sizes far quicker than modern day nautili.

Ammonites were the predators of their time, feeding on most living marine creatures including molluscs, fish and even other cephalopods. By analogy to modern cephalopods, their method of attack probably comprised of silently stalking their prey, then rapidly extending their tentacles to grasp the target. Once caught the prey would be devoured by the ammonite's powerful jaws, located at the base of the tentacles, between the eyes.

Much of the ammonite's life was spent in shallow waters. The evidence to support this includes their diet, which could be found in the greatest volumes in the warm shallows. It is also unlikely that their shells could withstand the high pressures present in deep water (over 100 meters). Other theories based around their social behaviour suggest their shells were decorated by an array of patterns, indicating that colour/good light played a large part in their lives.

What does the shell reveal about the ammonite?

Most ammonite shells are coiled, and all contain a series of linked chambers. The body of the ammonite was contained within the large final, open-ended section called the living or head chamber, from which the tentacles were extended to catch prey. The opening of the shell - called the aperture - was possibly covered by a protective shield that could shut to protect the ammonite from other predators.

As the animal grew, new chambers were added behind the head chamber. The chambered interior of the shell is referred to as the phragmocone, and in life this contained gasses which enabled the ammonite to regulate its buoyancy within the water column. A small tube called the Siphuncle links the chambers.

Some ammonite fossils bear intricate patterned details on their outer surface called Sutures. These are located beneath the external shell wall, and are often visible if the fossil has been subject to weathering or artificial polishing. These patterns mark where the walls of the chambers, Septum, meet the outer wall of the ammonite shell. The bulk of the septum is relatively flat, but becomes folded where it meets the outer shell. This method of construction is thought to have provided strength to the shell when diving to deeper depths. Suture patterns are very useful for distinguishing different species of ammonite.

Written by Roy Shepherd. Discovering Fossils.
http://www.discoveringfossils.co.uk/ammonites.htm

Equipment for Sale or Auction

Richard Duggins Collection

The club has a couple faceting machines up for sale, one Ultra-Tec and one Graves. The UT is in excellent condition and works well. Machines of this approximate age sell on ebay for $1500 to $1750. The UT comes with many dops, a set of laps, and a Beale/Wooley Depth of Cut Indicator, better known as a B/W meter, has been added to the machine. This competes closely with the $2000 FacEtte meter in accuracy and ease of use.

The Graves also has a lop of dops with it, but not many laps at all. Graves machines make an excellent flat lap cabber!

1. 10" Star Diamond Vibrating Flat Lap
   Estimated value, $5.00

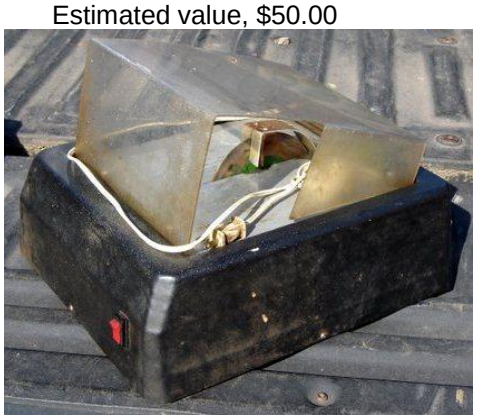
2. 8" Graves Vibrating Tumbler
   Estimated value, $5.00

3. Variable Speed Rotary Tumbler w/2 barrels
   Estimated value, $50.00

4. 2 wheel Polishing/Buffer Arbor w/motor
   Estimated value, $75.00

5. 3-4 wheel Star Diamond Cabbing unit
   w/ motor and end polishing disc
   Estimated value, $75.00

6. 6" trim saw,
   Estimated value, $50.00



7. Ultra sonic cleaner, don't know if it works.

Faceting Machines and accessories;

1. 1978 UltraTech V2 w/ some laps, dops and work table.
   Estimated value, $1,000.00

2. Graves Mark4 w/ some laps and dops.
   Estimated value, $400.00

UPCOMING SHOWS

November 16-18, 2012: Marietta, GA - Cobb County Gem and Mineral Society. 27th Annual Rock, Mineral & Jewelry Show, Cobb County Civic Center, 548 South Marietta Parkway, Marietta, GA. Hours: Fri & Sat 10-6, Sun 10-5. Free Admission. Contact Mary Ingram: 404-915-3588 or mandmingram@gmail.com.

November 16-18, 2012: Columbia, SC - The Columbia , SC Gem & Mineral Society. 45th Annual Gem, Mineral, & Jewelry Show, Cobb County Civic Center, 548 South Marietta Parkway, Marietta, GA. Hours: Fri & Sat 10-6, Sun 10-5. Admission $7, Children 12 & under are free. ALL military and dependents are FREE everyday. Visit website for $1 off coupon. http://www.cgams.org. Contact Sue Shrader: 803-736-9317 or ashrader@mindspring.com.

November 17-18, 2012 (Always held the weekend before Thanksgiving): West Palm Beach, Florida - Gem & Mineral Society of the Palm Beaches. 46th annual gem, mineral, jewelry, bead and fossil show, South Florida Fairgrounds Expo Center East, 9067 Southern Blvd., West Palm Beach. Hours: Sat 9-6, Sun 10-5. Free Parking. Admission $7, children under 12 free. Visit website for $1 off coupon. http://www.gemandmineral.cc. Contact show chairman, Barbara Ringhiser at bar5678@aol.com

December 8-9, 2012 (2nd weekend each December): Franklin, TN - Mid-Tennessee Gem & Mineral Society. Gem, Jewelry, Mineral, Fossil Show & Sale, Williamson County Ag Expo Park,4215 Long Lane, Franklin (this is a new location rather than the old location at the TN State Fairgrounds in Nashville). Drive 20 miles south of Nashville on I-65 and take exit #61, turn east onto Peytonsville Road for 1/3 mile, and turn left onto Long Lane. Hours: Sat 9-6, Sun 10-5. Admission $4 (2-Day Pass $6.00), students 18 and under $1, children under 12 free with adult. For additional information and maps visit www.MTGMS.org. Contact John Stanley, Show Chair, (615) 885-5704 or e-mail show@mtgms.org.



Vugsites

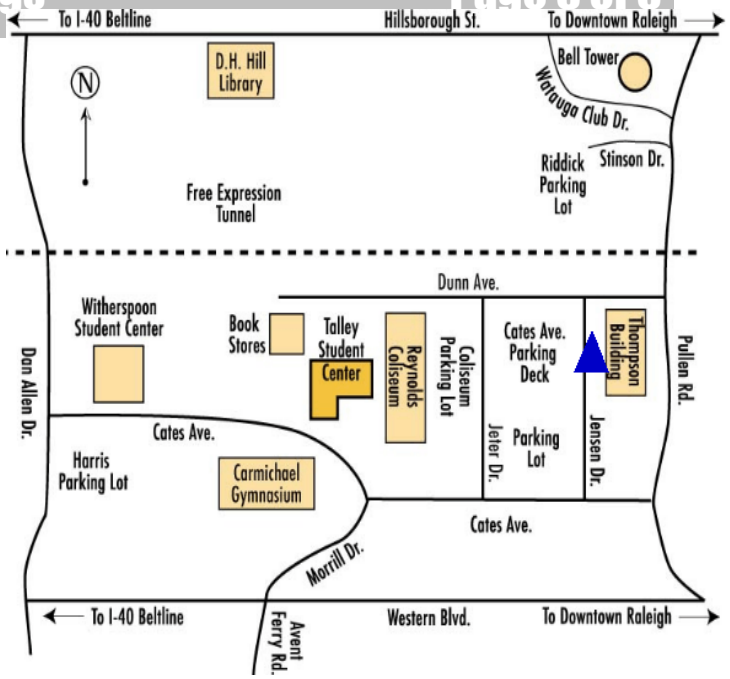
The following are some links to Web-Sites that may interest some of our members:

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.htmlThis 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 November 20, 2012 @ 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