January, 2013 Volume 41, Issue 01

# **Tar Heel Tailings**

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

# Special Interest Articles:

- · President's Report
- Epidote
- Vice-President's Report

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

I hope you all had a wonderful holiday season. Mine was great, especially with a field trip to the American quarry in Carrboro /Chapel Hill.

As usual, we have installed new officers as follows; myself as President, Obsidian Harris as Vice President, Tom Todaro and Emily Carabello as Committee members at large.

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# **Epidote**

### by Mary Harbison.

As winner of the door prize last month, I chose a beautiful Epidote specimen from the Calumet Iron Mine in Colorado.

#### **Calumet Iron Mine**

Located near Salida. Colorado, this mine is a premier source of some of the better Epidote crystals found in North America, up to about 2 inches in size. It was originally mined long ago for iron ore by Colorado Fuel and Iron Steel of Pueblo. Colorado, which has been the largest steel producer west of the Mississippi. The Calumet Mine has also produced massive magnetite, actinolite, blue corundum, pryrite,

and fine gem grade quartz, some included with epidote or chlorite, among other minerals. It is not difficult to find plenty of interesting specimens to take home with you at the Calumet Iron Mine, though if you want to find the best this location has to offer,

be prepared to do some hard rock mining.

Salida, Colorado is a great central Colorado location for a Colorado rockhounding vacation. There are at least half dozen good day trips that can be made from this area.

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# Tar Heel Gem & Mineral Club, Inc.

10609 Chelsea Drive Raleigh NC 27603

Jack Fried – President jacklfried@aol.com (919) 761-9390

Obsidian Harris – V-President foxivy@nc.rr.com (919) 604-2376

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

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

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

Emily Carabello – Committee Member moonbeamwhippets@yahoo.com (910)-581-2468

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

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

We're on the Web! See us at:

www.tarheelclub.org

Membership applications may be mailed to:

Tar Heel Gem & Mineral Club,

Attention: Treasurer 10609 Chelsea Drive Raleigh, NC 27603

## **Program & Refreshments**

REFRESHMENT SCHEDULE: Coordinator: Need Volunteer

January Jack Fried PROGRAM SCHEDULE:

January TBA

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

## **January Treasurer's Report**

Oct. Ending / Nov. Beginning Balance	\$7987.88
Danasita (I)	
Deposits (+) None	0.00
Sub total	\$0.00
Checks Written (-)	
Q Books - software grab bag rocks annual accountant newsletter Craftcenter Wildacres donation William Holland donation NCSU Geology Club food field trip	\$409.74 1050.07 1095.00 214.14 500.00 500.00 1500.00 40.00 37.00
Sub Total	\$5845.95 
Nov. Ending / Dec. Beginning Balance	\$2141.93



Above: Rhyan O'Neil Below: Joe Moylan & Jack Fried



### January B-Day Members

Roxanne Alexander
Marion Broadway
Ken Carlson
Christa Ennis
Jack L. Fried
Peter Glud
Cyndy Hummel
Bernadette James
Jason Jin
Carrie Jones
Walt Milowic
John Nigro
Mary Obenchain
Mimi Quick
Greag & Rita Wase







# **Tar Heel Tailings**

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

Tuesday, November 20, 2012

Attendees = 29

At 7:38 Joe Moylan called the meeting to order and welcomed newcomers/members to our meeting.

#### Rhyan O'Neil's Peresentaion:

Joe Moylan next turned the meeting over to Rhyan O'Neil, who spoke about how his old club in Pennsylvania did business.

Rhyan worked for a quarry in Pennsylvania and therefore had access to a network of guarries. He mentioned the H&K Group of quarries (Hanes and Kibbelhouse) and Cornwall Iron Mines as examples of mines/quarries his club had access to.

He further went on to say how they were in a different guarry every weekend getting samples and donating them to local Boys and Girls Clubs, Scouts, schools, colleges/universities and museums. He mentioned the University of Delaware, Delaware Institute of Science, and the James Madison University as examples of upper level institutions they had donated samples to.

He stated that his club members, 4 in all, had insurance and that to the public.

Rhyan next mentioned a group of minerals that his club was instrumental in proving existed in Pennsylvania including wavellite in Mount Pleasant and okenite written about in the Mineral News, and ruizite found in a geode during 2008.

#### Discussion of Rhyans Ideas:

Joe M. then allowed guestions regarding the NC State Geology Department to come to the floor. Questions included the following:

- Cost of mineral testing (said to be at ~\$60.00 per test)
- 2. Free membership to Geology students
- What the club was receiving for its generous donation to the John Parker Fund.

Joe M. next turned the floor over to Tom Todaro. Tom T. stated that he would be very happy to work with Rhyan and get his input for accessing new quarries. He also stated that we should work more closely with the NC State Dept of Geology, donating samples, and where possible, getting some services from the department in return, such as analysis of minerals obtained.

Joe M. next allowed general discussion of possible places to donate samples to. The following were suggestions brought to the floor:

- Museum of Natural History in downtown Raleigh
- NC State Department of Geology 2.
- Grandfather Mountain Museum 3.
- 4. Aurora Fossil Museum.
- Public/private schools.

Joe M. next allowed general discussion of what we would need to insure the display of the donated samples of minerals. The following were suggestions brought to the floor:

- Display cases (emphasis on keeping it simple)
- Volunteers for outreach programs
- Make sure there is room for the display so it does not end up in storage.

4. Make school/institutional contacts

#### Silent Auction:

Joe M. next set the meeting up for the silent auction and indicated that the silent auction would b over at 9:10. Many bids were placed and equipment was sold.

#### THG&MC Inc. Gem Show:

At 8:33 Joe M. called the meeting back to order and recognized Cyndy Hummel. Cyndy H. reminded us that:

Patrick Kelly

**Exceptional Gemstones** 

6126 Brookshire Boulevard

Charlotte, NC 28216-3363

Phone: (704) 483-8332

Had donated a beautiful Ethiopian Opal ring with diamonds (described later as an orange sherbet color with beautiful fire) to our club to sell for operating money. She went on to say that the raffle would be held at the end of the show and that tickets were \$5.00. this permitted them to access mines that would normally be off limits Retail price of the ring was ~\$750.00. Tickets are available from the Treasurer, Corrine Hummel.

Joe M. facilitated the election of new officers to the 2013 board of the Tar Heel Gem & Mineral Club, Inc. The following is the list of officers newly elected by verbal vote of the club members present to the board.

President: Jack Fried Vice Pres: Obsidian Harris

Treasurer: Corinne Hummel (and Historian)

Secretary: Mike Troutman 1st At Large: **Emily Carabello** 

2nd At Large: Tom Todaro (and Field-Trip Guy)

In all cases, nominated members were elected by unanimous acclaim of the present club members, all members casting "Ayes" caring the vote, nominated individual and election to the board positions listed above.

#### Field Trips:

As the final piece of business, Joe M. next turned the floor over to Tom Todaro. Tom T discussed the successful field trip to Emerald Hollow in Hiddenite NC and then stated he was planning the next field trip to American Stone Quarry in Carrboro, NC

Saturday, Dec 15, 2012
09:00 Am – 2:00 Pm
American Stone Quarry
1807 Hwy 54 West, Chapel Hill, NC 27516
(919) 929-7131
Roger Ramey
Thomas Todaro, 919-349-9143 (M), 919- 639-7798 (H)
Caribtomt@Yahoo.Com

At ~9:20, Joe Moylan closed the meeting thru executive decree. There were no dissenting members.

#### Respectfully Submitted

Michael Troutman, Secretary, Tar Heel Gem and Mineral Club, Inc.

## **President's Report**

Remaining are Michael Troutman as Secretary and Corinne Hummel as Treasurer.

I am looking forward to the year ahead. There will be many challenges to overcome and I am sure this new board will step up to the challenge.

We have the show coming up, early this year and I hope we will get a great many of you to come out to the meetings held early in the year, as well as volunteer, to help us prepare for and produce another successful show. I am sure Cyndy will appreciate all your help.

Well that you at our of you at our of you have another successful show. I am sure Cyndy will appreciate all your help.

### **Epidote**

Continued from page 1

My suggestions for any interested in this area, among many available other choices, would include Mt. Antero (aquamarine), Tarryall (topaz), Lake George (amazonite), Kremmling (pet wood), win Mountains (Agate including geodes) and Bonanza (gold).

Information below was found at: http://webmineral.com/data/Epidote.shtml

#### **Physical Properties of Epidote**

Cleavage: {001} Perfect

**Color:** Yellowish green, Brownish green, Black,

Yellow, Gray.

**Density:** 3.3 - 3.6, Average = 3.45

**Diaphaneity:** Transparent to translucent to opaque **Fracture:** Regular - Flat surfaces (not cleavage)

fractured in a regular pattern.

**Habit:** Fibrous - Crystals made up of fibers. **Habit:** Massive - Uniformly indistinguishable

crystals forming large masses.

Habit: Prismatic - Crystals Shaped like Slender

Prisms (e.g. tourmaline).

Hardness: 7 - Quartz
Luminescence: Non-fluorescent.
Luster: Vitreous (Glassy)
Streak: grayish white

Continued from page 1

I hope to see our club continue to grow in the very near future.

If there is anything you need to know, please free to contact any officer, because I am sure we would all be happy to help you out.

Well that's all I have to say at this point and hope to see you at our January 15, 2013 meeting @ the Crafts Building.

President, Tar Heel Gem and Mineral Club, Inc.

Chemical Formula: Composition:	Ca2(Fe+++,AI)3(SiO4)3(OH) = Ca2(Fe,AI)AI2(SiO4)(Si2O7)O(OH) Molecular Weight = 519.30 gm
	Calcium 15.44 % Ca 21.60 % CaO
	Aluminum 3.90 % Al 7.36 % Al <sub>2</sub> O <sub>3</sub>
	Iron 24.20 % Fe 34.60 % Fe <sub>2</sub> O <sub>3</sub>
	Silicon 16.22 % Si 34.71 % SiO <sub>2</sub>
	Hydrogen 0.19 % H 1.73 % H <sub>2</sub> O
	Oxygen 40.05 % O
	100.00 % 100.00 % = TOTAL OXIDE
☑ Empirical Formula:	Ca <sub>2</sub> Fe <sup>3+</sup> <sub>2.25</sub> Al <sub>0.75</sub> (SiO <sub>4</sub> ) <sub>3</sub> (OH)
☑ Environment: ☑ IMA Status:	Contact metamorphic rocks. Valid Species (Pre-IMA) 1801 - Dana # Changed from 58.2.1a.7
☑ Locality:	Common world wide. Link to MinDat.org Location Data.
☑ Name Origin:	From the Greek epidosis - "addition."
☑ Name Pronunciation:	Epidote • • • • •
Synonym:	ICSD 10268
	PDF 45-1446
	Pistacite - pistachio green

There are additional links to other databases for Epidote at this site.

Calumet Iron Mine, Salida, Colorado, September 2004, By Dave Bruess.

Excerpts from: <a href="http://www.mcrocks.com/FTR-A/FTRDaveBSeptember2004.html">http://www.mcrocks.com/FTR-A/FTRDaveBSeptember2004.html</a>

## **Vice-President's Report**

Hello Rock Hounds,

Just a short note, to let you know I'll do what I can as VP to assist Jack in his role. There is much to do like field trips, rock shows, auctions, speakers and demonstrations by club

members in 2013. Ideas are always helpful and asked for. And thank you for your patience while I get my feet wet.

Happy Rock Hounding

Obsidian Harris,

Vice-President, Tar Heel Gem and Mineral Club, Inc.

## **Hospitality Report**

Lee Fleming has had another major heart attack. He's in intensive care at Wake Med. He has been unconscious since Saturday. Please keep him and his family in your thoughts

and prayers. For more information, contact his family at (919) 621-5383.

Joe Moylan

## **Liquidation of 50 year collection**

Highland Park 8" grinder and buff Raytech 6" wheels with 3" expandable drums Lortone 6" diamond wheels Lortone 10" slab saw

18" slab saw 3 burn out ovens NC/US minerals, slabs, and rough John Heinz; (919) 851-0483; jpheinz@earthlink.net

### **More on Epidote**

From Wikipedia (http://en.wikipedia.org/wiki/Pistacite)

Epidote is a calcium aluminium iron sorosilicate mineral.

#### Description

Well-developed crystals of epidote, Ca2Al2(Fe3+;Al)(SiO4)(Si2O7)O(OH), crystallizing in the monoclinic system, are of frequent occurrence: they are commonly prismatic in habit, the direction of elongation being the species piemontite and allanite, which may be described perpendicular to the single plane of symmetry. The faces are often deeply striated and crystals are often twinned. Many of the characters of the mineral vary with the amount of iron present for instance, the color, the optical constants, and the specific gravity. The color is green, grey, brown or nearly black, but usually a characteristic shade of yellowish-green or pistachio-green. It displays strong pleochroism, the pleochroic colors being usually green, yellow and brown. Clinozoisite is white or pale rose-red variety containing very little iron, thus having the same chemical composition as the orthorhombic mineral zoisite. The name is derived from the Greek word "epidosis" (επίδοσις) which means "addition."

Epidote is an abundant rock-forming mineral, but one of secondary origin. It occurs in marble and schistose rocks of metamorphic origin. It is also a product of hydrothermal alteration of various minerals (feldspars, micas, pyroxenes, amphiboles, garnets, and others) composing igneous rocks. A rock composed of quartz and epidote is known as epidosite. Well-developed crystals are found at many localities: Knappenwand, near the Großvenediger in the Untersulzbachthal in Salzburg, as magnificent, dark green crystals of long prismatic habit in cavities in epidote schist, with asbestos, adularia, calcite, and apatite; the Ala valley and Traversella in Piedmont; Arendal in Norway; Le Bourgd'Oisans in Dauphiné; Haddam in Connecticut; Prince of Wales Island in Alaska, here as large, dark green, tabular crystals with copper ores in metamorphosed limestone.

The perfectly transparent, dark green crystals from the Knappenwand and from Brazil have occasionally been cut as gemstones.

#### Related species

Belonging to the same isomorphous group with epidote are as manganese and cerium epidotes respectively.

Piemontite occurs as small, reddish-black, monoclinic crystals in the manganese mines at San Marcel, near Ivrea in Piedmont, and in crystalline schists at several places in Japan. The purple color of the Egyptian porfido rosso antico is due to the presence of this mineral.

Allanite and dollaseite-(Ce) have the same general epidote formula and contain metals of the cerium group. In external appearance allanite differs widely from epidote, being black or dark brown in color, pitchy in lustre, and opaque in the mass; further, there is little or no cleavage, and welldeveloped crystals are rare. The crystallographic and optical characters are similar to those of epidote; the pleochroism is strong with reddish-, yellowish-, and greenish-brown colors. Although not a common mineral, allanite is of fairly wide distribution as a primary accessory constituent of many crystalline rocks, gneiss, granite, syenite, rhyolite, andesite, and others. It was first found in the granite of east Greenland and described by Thomas Allan in 1808, after whom the species was named. Allanite is a mineral readily altered by hydration, becoming optically isotropic and amorphous: for this reason several varieties have been distinguished, and many different names applied. Orthite was the name given by Jöns Berzelius in 1818 to a hydrated form found as slender prismatic crystals, sometimes a foot in length, at Finbo, near Falun in Sweden. Dollaseite is less common, famous from the Ostanmossa mine in the Norberg district of Sweden.

# TAR HEEL GEM & MINERAL CLUB, INC

Membership Application 2013

Date		RenewalNew Member	ership
Applicant Name			
		birth mont	h
Additional Name	es	birth month	
		birth month	
		birth month	
Address			
	Street City	State	Zip
Telephone (			
E-Mail Address _			
Would you like to	o receive the newslette	via email rather than mail? YES NO	
Would you like to	o be a volunteer in the	annual club gem & mineral show? YES NO	
Will you be an act	ive participant on field tr	ps and like to be notified about them? YES NO	
Please check your in	terests –		
	Applicant	additional members	
Mineral collecting			
Fossil collecting			
Gold smithing			
Silver smithing			
Wire wrapping			
Cabbing			
Faceting			
Jewelry making			
Other			

PLEASE RETURN THIS FORM WITH PAYMENT TO TAR HEEL GEM & MINERAL CLUB, INC. 10609 CHELSEA DR. RALEIGH, NC 27603

Annual dues are \$20.00 for the first member and \$5.00 for each additional family member over the age of 12.

# **UPCOMING SHOWS**

February 2-3, 2013: Panama City, FL - 22nd Annual Panama City Gem & Mineral Show, American Legion Bldg at the Bay County Fairgrounds, 2230 East 15th St and Sherman Ave. Panama City FL 32404. Hours: Sat 9-5, Sun 9-4. Free Parking and Free Admission. Chairman Joe Schings (850) 871-1846

February 8-10, 2013: Cocoa, FL - 36th Annual Symphony of Gemstones show and sale. Central Brevard Rock & Gem Club; Space Coast Convention Center (Holiday Inn Express); 301 Tucker Ln., Exit 201 west, I-95 at Hwy. 520; Hours: Fri. 12-6, Sat. 10-5, Sun. 10-5; adults \$4 (discount coupon on Website), children (12 and Society and Augusta Gem and Mineral Society. Julian Smith under) free; contact Ray Huntington, (321) 799-8536; e-mail: raymich06@bellsouth.net; www.centralbrevardgems.org

February 23, 2013: Lakeland, FL - Imperial Bone Valley Gem, Mineral and Fossil Society; 175 Lake Hollingsworth Dr., Lakeland, Fl. 33801; Hours: 9-4. Admission: Adults \$3.00, Children and Teachers Free. Show Chair: Kim Price 863-412-9156; email contact Society, The Forum, Rome GA. Hours: Fri & Sat 10-6, Suny 11-5. IBVGMFS@gmail.com; Website: www.bonevalley.net

March 1-3, 2013: St. Petersburg, FL - 43rd Annual Gem, Jewelry & Mineral Show and Sale. THE SUNCOAST GEM & MINERAL SOCIETY. The Minnreg Building, 6340 126th Ave. N., Largo, FL 33773. Hours: Fri: 10-6; Sat: 10-6; Sun: 10-5. Show contact: Bill Schmidt, Show Chair, (727) 822-8279; Email contact: SGAMSgemshow@gmail.com; http://www.sgams.com/Shows/show.html;

March 8-10, 2013: Augusta, GA - 25th Annual Aiken-Augusta Gem, Mineral & Fossil Show. Aiken Gem, mineral and Fossil Casino, 2200 Broad St., Augusta, GA. Hours: Fri & Sat 10-7; Sun 10-4. Admission: \$3/Adults; Children under 16 Free with an Adult. Co-Chair: Richard McNutt and Chris Glass

March 15-17, 2013: Rome, GA - The 34th Annual Valley and Ridge Gem and Mineral Show, Sponsored by the Rome Georgia Mineral FREE ADMISSION!. For more information: Jose Santamaria, Show Chair (678) 488.9560; rogams.show@gmail.com;



# **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 interests that many of us have in common.

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

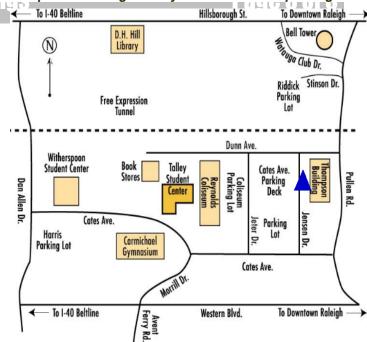
# **Our Next Meeting is January 15, 2012 @ 7:30PM** Thompson Building / NCSU Campus.

#### About Our Organization...

The Tar Heel Gem and mineralogy, paleontology, Mineral Club, Inc. was earth formed in 1974 as a lapidary nonprofit arts, earth sciences, and goals related subjects. The main publications, objectives of the club are lectures, and share knowledge of and other activities. rocks, minerals, and precious stones, and to interest promote

sciences. techniques, educational among club members and organization for people among the general public. who enjoy the lapidary The club pursues these through meetings, field trips, to investigate, preserve, exhibits, demonstrations,

> Come and be a part of the Fun!



**TAR HEEL GEM & MINERAL CLUB** 10609 Chelsea Drive Raleigh, NC 27603