

Atlanta Geological Society Newsletter

**Next meeting of the Atlanta Geological Society is OCTOBER 30, 2007
Fernbank Museum of Natural History (Clifton Road)
Social begins at 6:30 pm – Meeting begins at 7:00 pm**

President's Message

October 2007

The turnout for my talk last month on the *Hydrogeology of Alternate Aquifers of the Georgia Coastal Plain* was good, even with the meeting switched to a Wednesday. Thank you all for attending. I'd like to also thank **Allison Keefer** for her participation in the overall discussions. Right now, I'm looking forward to attending this year's Georgia Geological Society (GGS) annual field trip, which is scheduled for October 12th to 14th in the Georgia Blue Ridge. It should be loads of fun.

Before last month's meeting, I was asked what my goals as (Interim) President of the Atlanta Geological Society would be. I said something about the AGS Officers needing all-expense paid trips to Aruba (I was trying to be funny). Now that I've thought about it, what I'd really like to do is convene a comprehensive Executive Committee meeting to re-confirm that our Society is still on track, sticking to our By-Laws, spreading our name throughout the Atlanta Area (and beyond), and coming up with ways to enhance what is already a truly great organization, of which I'm proud to serve. Improvements/enhancements could include advertising, publications, and re-configuring some of the committees.

With this said, I'd like feed-back from all of our committee chairs and members, as well as those of you

who have ideas regarding Society improvements or who wish to chair or work in a particular committee, to contact me via email at nwthompson@mactec.com or find me at the next meeting. Around the first week of November, I'll send a meeting announcement to those interested members and current committee chairs and officers with details regarding the date, time, and location of the next Executive Committee meeting.

Finally, I'd like to publicly thank **Ken Bechely**, who has done a fantastic job serving as our Society's Treasurer. Ken joined me in January 2004 when I was first elected President and has since served with former President's **Julian Gray** and **Mark Cocker**. Ken has requested to step down from his position at the end of 2007; therefore, the job as Treasurer is open for any active member willing to run in our November elections. The next time you see Ken, please give him a huge pat on the back and thank him for his service.

If I don't see you at the GGS field trip, I hope to see you at the next AGS meeting on Tuesday, October 30th.

Nils

Refreshments for the October 2007 Social are provided by Southern Environmental Services, Inc.

Environmental concerns impacting your business or quality of life are serious issues. When you need to take action you want SOUTHERN ENVIRONMENTAL SERVICES, INC. (SESI) working for you. SESI possesses over ten years of incident free work experience across the country on all types of environmental abatement and remediation projects, from asbestos to mold to total air quality, as well as demolition, construction, and site preparation projects. We have an excellent record because we are dedicated professionals who know what's at stake and we provide unparalleled service to make sure your call to us is the first and last step to take to put your problem behind you - for good. Please contact Tom Wasson at (770) 933-0005, or log onto our website for more information at: <http://www.sesi.net/>

Newsletter Editor's Corner

Hello AGS members and welcome back to what I hope will be an interesting and informative newsletter. Some of you may remember my former stint as newsletter editor and wonder why anyone would want to return to this job. It is simple, I believe that the newsletter is the heart of any organization and without proper or timely information you as AGS members are unable to support the Society and attend its functions.

I want to acknowledge all the hard work and dedicated service provided by long-time AGS member John Mann, who has very capably served as the AGS newsletter editor for several years. Thank you John!

I hope to continue to make the newsletter a useful tool and I ask that you consider sharing it around the office, work site, or classroom in an effort to solicit interest in the AGS. There are approximately five million people in the greater Atlanta area and our Society membership is disproportional to this population.

Regrettably, what this means is that there are a LOT(!) of folks out there that either do not know about us or are not aware of the interesting and beneficial things that the Society offers to its members. While we cannot force them to attend meetings or field trips, we can make them aware of what they are missing in not being a member of the AGS. Please share this newsletter with others.

This newsletter also needs you as a source of information. If you are aware of any upcoming event or field trip that might be of interest to the AGS membership, then please share this information with me so that I can pass it along to others. There is plenty going on out there that we need to share.

Finally, I ask for your ideas in what you might want to see in a newsletter. For example, I am kicking around the idea of starting a photo contest that would reward the winner with a free GSA photoscale (similar in style and content to the Geotimes "Where in the World" photo contest).

Carl Froede Jr.

Georgia Geological Society Fall 2007 Field Trip

Date: October 12-14

Subject: Tectonics of the Georgia Blue Ridge: Basement/cover rift architecture, important aspects of overlying drift and clastic wedge facies, and the westernmost accretionary terrane.

Details of the field trip can be found at:

<http://www.westga.edu/~qgsweb/>

Reservation Deadline is OCTOBER 5th!!!

Graves Mountain "Rock Swap and Dig"

8 am to 6 pm, Saturday, October 6, 2007

8 am to 6 pm, Sunday, October 7, 2007

More info at:

<http://www.gamineral.org/commercial-gravesmountain.htm>

Carolina Geological Society Fall 2007 Field Trip

Date: November 9th to 11th, 2007

Subject: Lee Creek Phosphate Mine (Aurora, NC)

Hard Hat, steel-toed boots, and safety glasses – required! Visit website for more details:

<http://carolinageologicalsociety.org/cgs2002.htm>

Alabama Geological Society Fall 2007 Field Trip

Date: November 29th to December 1st, 2007

Subject: Economic and environmental geology in the area around Auburn, Alabama.

Details will be forthcoming.

<http://homepage.mac.com/jpashin/AGS.htm>

Share your research and work experiences: The Georgia State University Geology Club invites AGS members to present research/work experiences at club meetings. Please contact Ms. Eliza Andrews at andrews3@student.gsu.edu for additional information.



OCTOBER Presentation



By Robert Pope, Senior Remedial Project Manager, US EPA Region 4

ABSTRACT - Cleanup of Federal Facilities in the Southeast

Mr. Pope will discuss the cleanup activities at various federal facilities in the Southeast. He will cover cleanup work conducted at various military bases and depots as well as at Department of Energy facilities. The presentation will cover many topics and fields. There is a spectrum of issues addressed by the cleanup actions. Geology, toxicology, ecology, and hydrology are all important components of cleanup decisions and actions taken. However, the interactions between various federal and state agencies can be equally important. The input of various stakeholders such as the public, environmental groups, and academics will be discussed and addressed.

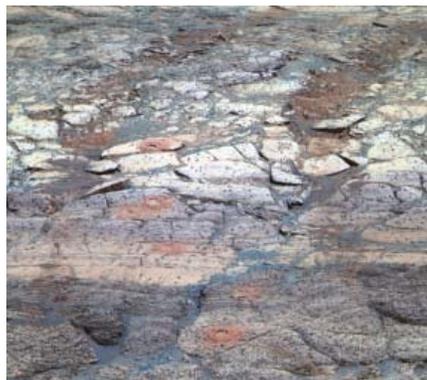
BIOGRAPHY

Rob has been working in the environmental field two decades. He has been employed with the United States Environmental Protection Agency since 1991. The focus of his work at EPA has been on federal facilities working in the RCRA Corrective Action (i.e., HSWA) and Superfund programs. He is currently a Senior Remedial Project Manager with the EPA Region 4 office in Atlanta, GA. Rob holds a Bachelors of Science in Biology from Wofford College (Spartanburg, SC) and a Masters of Science in Geology from Georgia State University. Prior to working for the EPA, he was employed by several environmental consulting companies. Rob's background and experience is in the fields of groundwater and surface water chemistry, ecological assessments, and project management. Rob has been fortunate enough to work on sites throughout the southeastern United States, Alaska, and Puerto Rico. He is currently the lead federal regulator for Superfund-driven cleanup work at the Department of Energy, Savannah River Site, in Aiken, SC.

AGS Career Development – Professional Registration

The next Professional Geologist Licensure Examination will be held on March 7, 2008, at 9:00 AM in Macon, GA. The AGS Continuing Education Committee will continue to hold study sessions each month until the test date. The October 27th workshop will concern study materials, strategies, and an overview of the last exam. The workshops are held in the Human Resources classroom at the Fernbank Science Center, 156 Heaton Park Dr from 10:00 am until 12:00 pm on the last Saturday of the month. If anyone would like to contribute to the workshops, we enjoy having speakers, almost any topic would be appropriate, from basic geology to industry specific. Please inform anyone who might be interested in becoming a professional geologist of our workshop. Everyone is welcome, AGS membership is not a prerequisite.

Ken



Four-Wheeling Across the Martian Surface

Image from the Mars Exploration Rover Opportunity showing the interior wall of Endurance Crater. These layered rocks are rich in salts believed to have formed by the evaporation of brines. The image shows the tracks of the rover as it descended into the crater, as well as a number of holes exposing fresh rock produced by the Rock Abrasion Tool. Image courtesy of NASA/JPL.

<http://marsrovers.jpl.nasa.gov/home/index.html>

AGS Rafting Trip Award Winner

On a warm Sunday morning my crew of four and myself (John Anderson – AGS member and rafting trip award winner) awaited our guides at the lower bridge near Humungous Rapids of the Olympic kayaking venue of the 1996 Olympics course. At 10 in the morning though, the white water was more like a trickle. Where's the water? What happened here? As we stood on the bridge looking at the rocks within the stream valley we were awakened to the sound of warning horns and a voice like the robot in "Lost in Space" danger! Danger! Please get out of the stream course water has been released from the dam. We waited expectantly for the water, 5 minutes, 10 minutes, nothing.

Our attention was redirected to the arrival of Dan Centofanti our guide and benefactor for the day. Dan and Mill Creek Environmental Services, Inc. provided the rafting trip for 6 (we only had 5) on the Ocoee River in Tennessee. Dan showed us the sulfide rich rocks that were the boom and the bust so to speak economically and environmentally within the region.

Ducktown and Copper Ridge owe there economic success to this rock unit, providing chalcopryrite for the copper industry, but also the desolate landscape around Ducktown where the smelter belched out sulfides that decimated the vegetation and created a sight that the organizers of the Olympics did not want to show the world.

Well back to the stream, once again the horns sounded and the voice bellowed Danger Will Robinson, Danger! (well maybe not Will Robinson) but at this time water appeared in the stream. Before our eyes the pastoral stream that had been running through this rocky scape became a raging river. Wow! Now that is more like it. Humungous was humungous!

With this entrance we boarded our vehicles and ventured to our starting point for an action packed day of fun. We bounced and pitched nearly the whole day. My family and I would like to thank Dan Centofanti and Mill Creek Environmental Services, Inc. for providing this trip as a door prize for the AGS annual social meeting. Thank you Dan and Thank you Mill Creek Environmental Services, Inc.



Fernbank Museum of Natural History
Upcoming Public Programs and Events
(All programs require reservations, including free programs)

On Exhibit:

Special exhibition [*Frogs: A Chorus of Colors*](#)
 Photography exhibition [*Nature's Jewels: Butterflies and Other Insects*](#)

Oct 9 - Private Tour of *Frogs: A Chorus of Colors* for Museum members
 Oct 10 - *In My World* —Nocturnal Animals
 Oct 13 - Fernbank Forest Family Walk—Water Detectives
 Oct 16 - Artemis Fall Social
 Oct 17 - *In My World* —Nocturnal Animals
 Oct 20 - Storytelling
 Oct 20 - *Bugs, Bats and Bones Day*
 Oct 23 - *Dinosaurs Underground and Other Burrowing Reptiles* lecture
 Oct 24 - *In My World* —Nocturnal Animals
 Oct 31 - *In My World* —Nocturnal Animals

Nov 11 - Prehistoric Sea Creatures of the South.

Dr. David Schwimmer, Columbus State University
 Sunday, November 11, 2 p.m. Lecture is free with membership; nonmembers must pay Museum admission (\$11-\$13, depending on age)

IMAX [*Coral Reef Adventure*](#) & [*The Alps: Giants of Nature. Everest*](#) is presented in the IMAX® Theatre on Fridays during **Martinis & IMAX®**

Fernbank Museum of Natural History

767 Clifton Rd, NE, Atlanta, GA 404-929-6300
 Visit our website at: www.fernbank.edu/museum
 Or sign up for our broadcast email at:
http://www.fernbank.edu/museum/e_news.html

National Earth Science Week

October 14-20, 2007

The Pulse of Earth Science

We are fast approaching the only time during the entire year when our science is “officially” celebrated across the U.S. Please consider how you can help local educators in elementary and junior high schools reach students who might be interested in the geological sciences, and offer a hand when requested.

Check out the following website to see how you can get involved.

www.earthsciweek.org

Martinis & IMAX® is presented at the Fernbank Museum of Natural History every Friday evening, January through November; from 5:30 p.m. to 10 p.m. Enjoy no cover charge when you visit us between 5:30 p.m. to 6:30 p.m.

Martinis & IMAX® includes a wine bar, where featured wines can be purchased by the glass and by the bottle. Dinner is also served in the Dining Room, where smaller parties can order chef-prepared dishes—from gourmet pizzas to prime entrées—and dine together in a more intimate and sophisticated setting. Desserts and coffee are available as well.

As always, a full cash bar is offered in the Great Hall where patrons can enjoy a lively atmosphere and musical performances by some of Atlanta's best jazz artists. Bands perform live from 6:30 p.m. to 10 p.m.

IMAX® film tickets are \$10. For those who wish to enjoy the atmosphere of Martinis & IMAX® without attending a film presentation, there is a \$5 cover charge after 6:30 p.m. The cover charge is waived for members and patrons who purchase an IMAX® ticket.

To purchase tickets in advance, call 404.929.6400.

Atlanta Geological Society Treasurer Report – October 2007

	Professional	Student	Corporate
2007	84	10	6
Delinquent	97	12	-

(Please check to see if your dues are paid up for 2007)

Account Balance as of October 1, 2007 - \$3,551.31

DUES ANNOUNCEMENT FROM THE TREASURER

Those members that **last paid in 2005, will be dropped from the mailing list in October 2007.** Please pay your dues to continue to support the AGS and keep current with Society business and activities. Thank you.

Atlanta Geological Society Meeting in November is a Poster Session

The Atlanta Geological Society is hosting a poster session for our November meeting. If you have a project or technical investigative technique that you think the geologists of AGS might find interesting, please consider putting together a display for our November meeting. For the universities, this would be a good opportunity for senior science projects or masters or doctoral theses to be viewed by working professional geologists. We will have tables available for use but if you want to bring a display board, that is fine too. Please contact Allison Keefer if you plan on bringing a "poster" so that she can reserve room for you. We ask that you not use this venue for business marketing. However, we will provide some opportunities for information transfer if your company has a geological technology that might be of interest to Society membership – contact Allison for more details. The purpose of this meeting is for geology and earth science education. Allison's email address is <allison_keefer@dnr.state.ga.us> and the phone number is 404-657-8642.

Geologic Map of the Greater Atlanta Area Still For Sale

GEOLOGIC MAP OF THE ATLANTA 1-DEGREE X 30-MINUTE QUADRANGLE, GEORGIA

By Higgins, M.W. and Crawford, R.F. (2006)

The Geologic Mapping Institute

(\$25.00 – Contact David Keefer [(404) 562-8932] for more details)

The Atlanta quadrangle, roughly centered on the City of Atlanta, spans from the Valley and Ridge province in its northwestern corner across the Blue Ridge and into the inner Piedmont. The Brevard zone crosses the quadrangle diagonally. The Blue Ridge in western Georgia and Alabama consists of a pile of nappes made up of folded thrust sheets. In the Villa Rica nappe Chilhowee Group rocks are both above and below the core of Great Smoky Group rocks. Southwest of the Brevard zone is the Atlanta nappe, which preserves a klippe of the Lake Russell allochthon, Carolina superterrane, at Soapstone Ridge. Carolina superterrane rocks (Paulding Complex) are also found northwest of the Brevard. Mylonites along the S.E. edge of the Brevard zone dip under the Atlanta nappe. These mylonites also dip under the N.E. end of the nappe, where they belong to the Dacula shear zone. East of the Atlanta nappe the Lithonia Gneiss consists of a granitoid phase and the Mount Arabia Migmatite. The migmatite occurs mostly around the edges of the granitoid phase and was probably formed when the Ordovician granitoid phase intruded Stonewall biotite gneiss, which occurs around the edges of the Lithonia and locally as roof pendants on/in the granitoid phase. Atop the Lithonia, the Stonewall Gneiss and units of the Allatoona allochthon are the aluminous schist and Chattahoochee Palisades Quartzite of the Sandy Springs Group that have been thrust upon the underlying rocks. The Lithonia and its country rock, the Stonewall Gneiss constitute a mantled gneiss dome assemblage. Sandy Springs Group rocks emerge from beneath the Brevard and form an outcrop belt along its N.W. side. Northwest of the Sandy Springs outcrop belt the Allatoona allochthon occupies the upper synformal limb of the Talladega nappe and is arched over the Dog River window to expose western Blue Ridge rocks of the Great Smoky and Chilhowee Groups. Northwest of the Allatoona allochthon Great Smoky Group and Chilhowee Group rocks emerge from beneath the allochthon and are part of the Talladega belt. Ordovician granitoids have intruded the Great Smoky rocks, providing evidence that the Emuckfaw/Lay Dam/Bill Arp rocks are older than Ordovician.

AGS Officers

President: Nils Thompson
nwthompson@mactec.com
 Phone (770) 421-3309

Vice-president: Allison Keefer
allison_keefer@dnr.state.ga.us
 Phone (404) 675-1679

Secretary: Jim Kennedy
jim_kennedy@dnr.state.ga.us
 Phone (770) 421-3402

Treasurer: Ken Bechely
ken.bechely@earthtech.com
 Phone (770) 990-1415

AGS Officer Nominations – Time to Volunteer

Your Atlanta Geological Society will be taking nominations for several positions at the October meeting. While some folks have volunteered to continue, and some have stepped forward already to fill vacating positions, we still have posts to fill. For example, our current Treasurer (Ken Bechely) has served as Society Treasurer for four years and he is stepping down. We need someone to volunteer to take over this important position within the Society. Please consider stepping up and serving in some capacity. Our Society cannot function if we all just sit on the sidelines.

The officers are considering adding “perks” for individuals who will serve the Society in an effort to attract more folks to positions. More on this at the October meeting.

AGS Committees

Career Development: Ken Simonton
ken_simonton@dnr.state.ga.us

Career Networking: Todd Roach
 Phone (770) 242-9040, Fax (770) 242-8388
tdr@piedmontdrilling.com

Continuing Education: Nils Thompson
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Fernbank Liaison: Chris Bean
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Field Trips: David Wilderman
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Join the Atlanta Geological Society

Membership Application/Update Form

Annual membership dues for the Atlanta Geological Society are \$25 for professional membership, \$10 for students, and \$100 for corporate sponsorship (which includes up to 4 professional memberships). For further details, contact the AGS Treasurer:

Ken Bechely

Phone: 770-990-1415

Email: ken.bechely@earthtech.com

Make checks payable to the "Atlanta Geological Society" and remit with the completed form to:

Atlanta Geological Society

Ken Bechely, Treasurer

1455 Old Alabama Rd., Ste. 170

Roswell, GA 30076

Name: _____

Organization: _____

Address: _____

Mailing Address: _____

Phone: (Work) _____ (Home) _____ (Cell) _____

Fax: _____

Email 1: _____

Email 2: _____

Ready to Serve the Society in Some Capacity?

Remember that although we have officers and various committees, it is ultimately the membership that keeps the Atlanta Geological Society active and growing. If you have ideas, please share them. Consider how you can step up, even for a limited time, and make our Society better. This is an all-volunteer organization and if everyone waits for someone else to do something – then nothing will ever happen. Please consider how **YOU** can share with the Society and make it an even better organization. We have a world of experience within our membership and we need to tap into it in a way that makes us all better geologists. Please consider volunteering – if even for a short time. Your Atlanta Geological Society needs you.