

Newsletter of the Association of Environmental and Engineering Geologists and American Institute of Professional Geologists, Carolinas Sections

Winter 2006

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MARK YOUR CALENDAR!
AEG President Terry West
Date – February 27, 2007
Place – Columbia SC
Contact – Raymond Knox
Vicechair@aegcarolinas.org

Calendar of upcoming events is on our website - http://www.AEGCarolinas.org

Issue date 21 December 2006 (published on January 5, 2007

FEBRUARY 27 MEETING IN COLUMBIA TO FEATURE AEG PRESIDENT TERRY WEST

Solid Waste Disposal, Past, Present and Future

Abstract: Solid waste disposal has undergone major improvements since the 1970's. Open dumps were used for disposal, with municipal solid waste (MSW) placed in depressions and excavations that sometimes contained standing water. Abandoned gravel pits were favorite disposal sites. Vectors including rats and birds fed directly on exposed garbage; fires were prevalent and difficult to extinguish. With the advent of sanitary landfills, six inches of soil cover were placed over the face of trash using heavy earth moving equipment at the close of each day's operations. This controlled both vectors and fires as the face was starved of oxygen. Clayey soils were required for cover material rather than sand, which decreased infiltration and provided clays to help neutralize leachate. Termed natural attenuation landfills, it was assumed that soil below the landfill would neutralize the leachate, by absorption and ion exchange.

Natural clay liners proved to be inadequate and more stringent requirements for new landfills led to basal leachate collection systems placed above the liner, and methane collection pipes with provisions for methane burning or disposal.

Future systems for solid waste disposal will involve substantial recycling of leachate and possibly the introduction of air to enhance decomposition. Methane collection will be an important part of the process with the methane processed to pipeline quality natural gas and utilized by a near-by facility. Various recycling procedures may also be involved to reduce solid waste volume transported to the landfill.

About the Speaker: Terry R. West has a BA degree in Geology, a BS degree in geological engineering and an MA degree in Geology with a minor in Civil Engineering from Washington University in St. Louis; with MSCE in Civil Engineering and Ph.D. in Engineering Geology from Purdue University. He is a registered professional engineer in Missouri. Dr West has been on the Purdue faculty for the last 45 years and is currently a Professor of Engineering Geology in the Department of Earth and Atmospheric Sciences. He has directed the studies for 75 graduates students, 16 Ph.D.s and 59 master's degrees who finished their studies under his direction. He is a Past Chair of the Engineering Geology Division, Past Chair of the Steering Committee of the Highway Geology Symposium, and is the current President of AEG. He is a member of AEG, GSA ASCE and IAEG.

Location and Directions:

At press time, the details of the location of this talk were not completely decided. However, it will be in Columbia, SC, at either Jillian's or California Dreaming. Please email Raymond Knox at rknox@schnabel-eng.com for details.

Other details:

Date: February 27, 2007

Time: 6pm, social hour; 7pm dinner; 8pm

speaker

Program: Solid Waste Disposal, Past, Present

and Future

Cost: Members/Non-members, \$25,

Students \$10

Reservations: Please make reservations with Raymond Knox by Friday, February 23, 2007.

Email: rknox@schnabel-eng.com

Phone: 803.796.6240

MESSAGE FROM THE CHAIR Rick Kolb, Chair, AEG Carolinas

As most of you know, the word "environmental" was recently added to the name of our organization in an effort to expand our membership base. I am among the environmental geologists in the organization, though I also did some geotechnical geology here at MACTEC in the second half of the '90's. With my background being a little different from the "traditional" AEG geologist, you can expect the coming year to be a little different



Rick Kolb, Chair, AEG Carolinas

from past years (e.g., no mention of ACC sports, since I didn't go to UNC, NCSU, USC or Clemson).

Among the topics of interest to me are: 1) the future (or lack thereof) of geology and geologists as a profession, 2) expanding our presence in the public eye (related to #1), 3) increasing our membership base and meeting attendance by, among other ideas, attracting college faculty and staff to our meetings, holding meetings in different locations, and bringing more environmental geologists into AEG, and 4) having elections where there is more than one candidate per position. I was the treasurer and president of Groundwater Professionals of North Carolina in the second half of the '90's, and I have some ideas from that organization that I hope to integrate into our chapter.

As an aside to #4, I would like to thank those on the board who recently left their positions. Thanks to: Tyler Clark for being the past chair, even

with all that he has to do with the Survey and setting up other meetings (see his note in the next newsletter for his future plans); Briget Doyle, our past secretary who will now devote her free time to chairing and organizing the 2010 national AEG meeting in Charleston; and Jennifer Bauer, who was the chair before Tyler and who remained on the board this past year and offered much assistance to all of us. Jennifer has chosen to stay active in AEG and has gone "national" by joining AEG's governing council.

As a result of the recent election, the Carolinas Section welcomes Misti Benchabbat of Schnabel (Columbia) as the vice chair and Rich Lovett of MACTEC (Greensboro) as secretary. Those staying with the board are Raymond Knox of Schnabel (Columbia), who agreed to run unopposed as treasurer; Jane Gill-Shaler, who will remain the newsletter editor; and Tami Idol, who remains as webmaster. Thanks to all the volunteers, past and present, and especially to Dr. Welby, past section chair and official and unofficial membership chair for years, and still a regular contributor to the newsletter.

Remember that our organization, both on the chapter level and national level, is only as strong as those volunteers willing to serve. I urge you to consider using some of your limited free time to give back something to the profession. Though the chapter's signing bonuses and salaries are not that remarkable, we do have a good time, and you get to work with other geologists. Likewise, the national organization, to which Jennifer has matriculated, can always use volunteers.

Some of you attended the meeting last summer when Darrel Schmitz, AEG's president, made a fascinating presentation on the geological effects of Hurricane Katrina on New Orleans and the Gulf coast. We are fortunate to have AEG's president for 2007, Terry West of Purdue University, come for our February 27 meeting. After discussion and persuasion/pleading by Raymond Knox and select others, we have decided to hold a meeting in Columbia. Yeah, that may be a long drive for some of you, but the folks South of the Border (no jokes, please) will be happy not to

have to drive hours for the meeting (from Raleigh, it's a 225-mile drive, so I'll be able to relate to the past drives to meetings by the folks in South Carolina). I hope all of you in Columbia, Charleston, Greenville, Spartanburg and Charlotte will turn out and show our support for Terry, who has a lot longer journey than y'all. PLEASE CARPOOL. For details of Terry's talk, see the meeting announcement elsewhere in the bulletin, (Page 1, or look for it on our website, www.aegcarolinas.org). We hope to see you there.

Rick Kolb



GeoNews is a publication of the Carolinas Section of AEG. There are four issues per year, with deadlines and issue publication dates listed below. We publish news of the profession, job openings, and positions wanted.

Deadlines can be flexible depending on events
Spring – deadline March 1, issue date March 21
Summer – deadline June 1, issue date June 21
Fall – deadline September 1, issue date September 21
Winter – deadline December 1, issue date December 21

Deadlines for submittals for the National AEG News: March issue – January 21, 2006 June issue – April 30, 2006 September issue – July 31, 2006 December issue – October 31, 2006

AEG Carolinas Section - Current Officers and Contacts ChairRick Kolb Vice-ChairMisti BenchabbatVicechair@aegcarolinas.org TreasurerRaymond Knox treasurer@aegcarolinas.org Secretary.....Richard P. Lovett secretary@aegcarolinas.org Membership Chair......OPEN Past Section ChairTyler Clark<u>tyler.clark@ncmail.net</u> Advisor Gary Rogers (336) 274-9456 advisor@aegcarolinas.org AEG Carolinas Section Websitewww.aegcarolinas.org AEG National Websitehttp://aegweb.org/indexf.html AIPG Carolinas Section – Officers and Contacts President..... John M. Stewart, P.G. (336) 668-0093jstewart@trigoneng.com Secretary/Treasurer......Russ Patterson, P.G. (919) 774-3770russ@pattersnexploration.com Membership Chair..... Macklin M. Armstrong(919) 838-9933<u>armgeoeng@mindspring.com</u> GeoNews Newsletter Editor.....Jane Gill-Shaler (336) 883-0170janehgill@stanfordalumni.org Emeritus Newsletter Editor Phil Winchester, Jr.(828) 628-2119

.....pwinchesterjr@aol.com

NEW AIPG SCHOLARSHIP

By Jeff Reid

The American Institute of Professional Geologists (AIPG) announces a National Scholarship Program to assist students with college education costs and to promote student participation in AIPG. Up to four scholarships in the amount of \$1,000.00 each will be awarded to declared undergraduate geological science majors who are at least sophomores.

Additional information and application information are at URL

http://www.aipg.org/StaticContent/anonymous/stu dents/scholarship_program.htm. The application deadline is 15 February 2007. Awards are made in the month of September.



GEO Geology Executive Online An Electronic Helping Hand Project Management Editing Scheduling Report writing Website Management Formatting Jane H Gill-Shaler, R.G., (CA & NC) JaneHGill@aol.com Cell (336) 687-6144

NCSTA CONVENTION

By Richard Lovett

On November 9-10, 2006, the Koury Convention Center in Greesnboro hosted the 38th Annual Professional Development Institute for the North Carolina Science Teachers Association. The theme of this year's convention was Solving the Mystery of Great Science Teaching, and included a simulated crime scene incorporating aspects of forensic science similar to those used in the popular television show CSI which encouraged individuals to use all aspects of science to help solve a murder.

Several professional organizations in the North and South Carolina area including the AEG, along with some generous individuals donated approximately \$1,650 which AEG used to purchase of 470 earth science packets for North Carolina teachers. All of the kits were quickly snatched up by the teachers. In addition Mr. Paul Allen of the North Carolina Aggregates Association coordinated the donation and scheduled the delivery of 12 representative rock/soil samples of differing geological and physiographic provinces of the state. The packaging and distribution of the sample kits were prepared by AEG volunteers and volunteers from approximately 20 different governmental agencies, local rock and mineral clubs, private consulting companies, universities and commercial rock quarries.

The Earth Science Week kits and the rock samples were huge hits as recognized by the long lines and many thanks from teachers. I can honestly say that all of the teachers were appreciative of the volunteers' time, the donors' generosity and Q&A sessions that help their understanding of various of geological topics and how they can relate to their class room instruction. Thanks to all the donors and volunteers for a job well done.

Richard Lovett is the AEG Carolinas Section Secretary, and the proud father of a son born Dec. 19th. (See page 11)



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New Book about Carolina Geology for General Readers

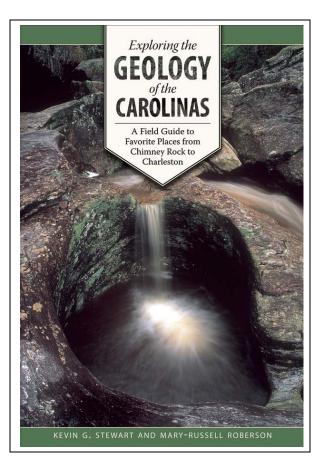
By Mary-Russell Roberson

Finally! A comprehensive, up-to-date, reader-friendly book about the geology of the Carolinas is set to hit the bookstores. *Exploring the Geology of the Carolinas: A Field Guide to Favorite Places from Chimney Rock to Charleston* will be available February 26, 2007; readers can receive it two to four weeks earlier by pre-ordering it from UNC Press at http://uncpress.unc.edu/books/T-6234.html.

The authors are Dr. Kevin G. Stewart, associate professor of geological sciences at the University of North Carolina at Chapel Hill, and Mary-Russell Roberson, a freelance science writer living in Durham. Stewart has taught at UNC for 20 years, winning a number of teaching awards along the way. He has also done extensive research in the Carolinas with a focus on the Blue Ridge mountains and plate tectonic history of the area. Roberson writes about everything from astronomy to zoology, but especially enjoys writing about geology, which was her major in college.

"We felt there was a real need for a book like this that would be accessible to non-scientists," Stewart says. "We want to help people see the Carolinas in a new way. But the book will also be useful to professional geologists because it contains results from the most current research on the geologic history of the Carolinas."

The book begins with an overview of geology and the geologic history of the Carolinas, followed by 31 "field trips" to popular outdoor sites such as Mount Mitchell, Ceasars Head, Reed Gold Mine, Forty Acre Rock, and Jockey's Ridge. Each field trip encourages readers to observe the prominent geologic features at the location, then explains the origin of these features in the context of the overall geologic history of the region.



The field trip chapters are designed to stand alone to encourage readers to dip into the book as their interests and travels dictate. Earth science teachers will find the book useful when planning field trips or answering students' questions about Carolina geology. Professional geologists will appreciate the results of current research contained in the book.

"We hope our readers who are not geologists will take away some big picture ideas about how geologists work and the fact that the way the Carolinas look today is really just a snapshot in geologic time," Stewart says. "Most of all, we hope readers will learn to think like geologists when they're outside—to notice landforms and rocks and to wonder about them."

Exploring the Geology of the Carolinas is 320 pages long, with 86 black-and-white illustrations, 12 color plates, 44 maps, and an extensive glossary.

North Carolina Coastal Geology Field Trip sponsored by AIPG and PCS

By John Stewart, Trigon Engineering

The Carolinas Section of the American Institute of Professional Geologists (AIPG) in conjunction with PCS Phosphate Mine sponsored a North Carolina coastal geology field trip on Friday, October 6, 2006 at the PCS Phosphate mine in Aurora, North Carolina. Tex Gilmore, the consummate host, developed and led a great field trip. I believe there is still debate on whether the geology or lunch was the best part of the trip. The weather was perfect and the small number of attendees provided for a very personal one-on-one discussion with Tex and other folks on the trip. David Wiley, with Leggette, Brashers & Graham, one of PCS Phosphate's long time hydrology consultants was in attendance and was able to add his expertise and knowledge about the hydrology of the mine's dewatering system.



Figure 1. Post-Croatan blue-gray gumbo clay is shown overlying white sugar sands.

The field trip consisted of about a half dozen stops located throughout the mine. The first stop allowed us an opportunity to view the top 85 to 100 feet of Quarternary sediments. The sediments consist of the Post-Croatan gumbo clay and sugar sands. These sediments are too soft for the large drag lines to sit on so they are stripped with bucketwheel excavators. The sediments are transferred to the spoil piles by conveyor belt. The next stop on the tour

included an up-close and personal encounter with the large drag lines. Wow, these are big toys! After a few photo opportunities on the outside of the drag line, we were able to enter the cabin with he operator, where we were treated with a bird's eye view of what the operator sees as they remove the remaining overburden to get to the phosphate



Figure 2. Field trip participants in the obligatory drag line bucket photo shot.

ore. The drag line removes approximately 100 feet of Pliocene and Miocene sedimentary rock, including the Yorktown and Pungo River Formations, to reach the ore. From the vantage point of the operator, the bucket on the drag line looks small, but up close, you could park a dozen vans full of excited geologists in it. After observing the mining operation we, observed the groundwater dewater system and mine reclamation and wetlands program. The reclaimed areas are a naturalist's dream.



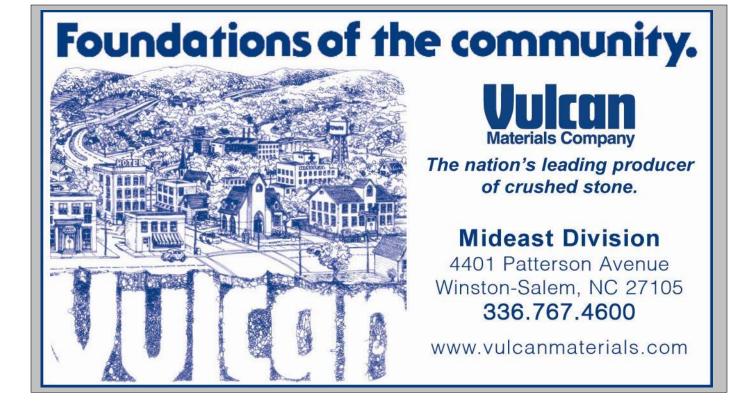
Figure 3. View from the operator's seat. Drag line bucket is exposing the phosphate ore (tabular feature).

After the fieldtrip, the mine staff treated us to a seafood buffet, which included flounder, shrimp, oysters, baked potatoes, hush puppies, and any drink you wanted. Lemon meringue pie topped the meal off. After lunch those that we still awake had a brief meeting. As a way to increase membership, we entered the names of new members in a drawing for the new fifth edition of the GSA Glossary of Geology. We had six new members sign up and were able to put their names in the hat. Walt Pelkan walked away with the prize. After lunch we toured the Aurora Fossil Museum and then spent a little time looking for fossils. A few of us cheated and purchased shark's teeth instead of digging through the spoils.

If you are in Aurora on Memorial Day, make sure you bring a shovel and pail and take part in their fossil day celebration. The town, mine, and a group of volunteers have done a fantastic job developing an educational master piece with the museum. It is definitely worth the trip.

We want to thank Tex Gilmore, PCS Phosphate Mine, and Leggette, Brashears & Graham, Inc for making the field trip possible. We hope to see them again next year.

John Stewart, President of the Carolinas Section of AIPG, is a geologist with Trigon Engineering Consultants, Inc. in Greensboro. He may be reached for comments at 336.668.0093 or by email at mailto:jstewart@trigoneng.com.



GeoRamblings

By Charles W. Welby

This last summer my wife and I took a granddaughter to Vermont for two weeks to introduce her to a bit of her immediate family's history and to the Vermont environment. While there, we visited the Ben and Jerry's Ice Cream Plant in Waterbury, VT, and there one evening we enjoyed a movie based on Lemony Snickett's series of books entitled "A Series of Unfortunate Events," written for children of middle school age. It seemed as I pondered this issue of Georamblings that this title might serve as a theme. Although we cannot find a Count Olaf as a villain, perhaps our civilization's occupation of certain landscapes is the villain.

One of the "Unfortunate Events" in recent time has been the Hurricane Katrina and its effects on New Orleans. During the recent AEG Annual Meeting in Boston, several papers reported the findings related to the failure of the levees that led to the inundation of New Orleans. Other studies have pointed to the causes of this "Unfortunate Event," but the paper by J. David Rogers (a former Jahns Lecturer for AEG and GSA) described the sedimentary sequence which underlies the levees at 17th Street and London Ave. canals, and the conclusion was that pore pressures were transmitted rapidly through sediments from the canals and caused the sheet piles under the concrete levees to literally float or to slide laterally. Use of micropaleontology established the environments of deposition of the various layers in the sedimentary sequence (Watkins, C.M., et al.,), establishing that Lake Pontchartrain had once extended in to the area of levee failures.

An article in the U.C. Berkeley, College of Engineering publication, Forefront for Fall 2006, discusses the research that was done on the levee failures in New Orleans in response to Hurricane Katrina. Part of that research was described by Rogers and by Watkins at the Boston AEG meeting. One point of the article

is that a similar situation regarding levees exists in the Delta Region of California where the Sacramento and San Joaquin rivers feed into San Francisco Bay. The article describes the levee construction in the Delta and the ongoing research which is related to establishing the strength of the levees. (There is not much strength there.) Seepage beneath the levees supplies water for the agricultural activity in the "islands" which are actually below river level. Because the levees have been built in a more or less haphazard fashion and as need arose to protect the "islands" of agriculture, the capability of the Delta levees to survive a major slippage along the Hayward Fault, the Concord-Green Valley Fault, the Greenville Fault, the Mt. Diablo Thrust Fault, or even some fault more distant is highly suspect. The Forefront article admonishes that the levee system is, in the terms of this epistle, an Unfortunate Event waiting in the wings to happen. Marc Reisner in his 2003 book, A Dangerous Place which was published after his death, describes what the Unfortunate Event might look like.

A Dangerous Place details the havoc that could be engendered in the San Francisco Bay Area by an earthquake initiated by slippage along the Hayward Fault in the East Bay area, including the lengthening of one side of the football field in U.C. Berkeley's Memorial Stadium. (An undetected fraction of a millimeter movement on the fault probably caused me to miss a tackle during a football game one Saturday, undoubtedly.) The fictional event takes place on February 28, 2005, at 2:38 in the afternoon.

Early chapters of the book describe the beginning of the agricultural activities in the Delta Region of the Sacramento and San Joaquin rivers and along the Sacramento River upstream in the Sacramento region. Starting in the middle of the 19th century, the Delta becomes an area of intense farming on an industrial scale. The great herds of deer and elk that had once occupied and roamed the San Joaquin Valley, rivaling the herds found in the Serengeti Plain of East Africa, had been hunted to near extinction by this time.

A thick layer of peat underlies much of the area, providing ideal soils for agriculture.

Agricultural activity brings about wind erosion and lowering of the peat surface, and withdrawal of ground water causes subsidence. Ever higher levees have been constructed to protect the farmland and associated urban areas. Driving across the region today, one does not readily spot the levees but rather the wide expanse of agricultural activity lying within the levee system.

Reisner in the later portion of his story describes the failure of the levees and the resulting chaos. Something like two-thirds of the water used in the San Joaquin Valley and Southern California passes through the Delta. So Reisner addresses in some detail the problems that could arise with the failure of the levees, the Unfortunate Event. It is to be noted also that in recent years heavy rainfall and runoff from the Sierras has caused levee failure in the Delta. Therefore it is possible that an Unfortunate Event can take place without an earthquake, but an earthquake has the potential of creating a great inland sea in the Delta Region as it is now configured. The New Orleans story arising out of Hurricane Katrina provides an ample warning.

A recent seminar given in the Department of Marine, Earth and Atmospheric Sciences at N.C. State University provided information on another possible Unfortunate Event. Stephen Goodbread of Vanderbilt University discussed research done in the Great South Bay of Long Island. He described a layer of sediment composed mostly of disarticulated fossil shells which lies between finer grained sediment more typical of the sediments accumulated before and after the event in the bay area. The nature of the shell-rich layer indicates that it had obviously been deposited in a single event. Cores detected the layer and showed its nature; the extent of the layer was defined in the shallow geophysical records. Age-dating of the shells indicated an event that had occurred about 2300 years ago. The interpretation provided during the seminar was that a tsunami had struck the south shore of

Long Island and the New York City area 2300 years ago.

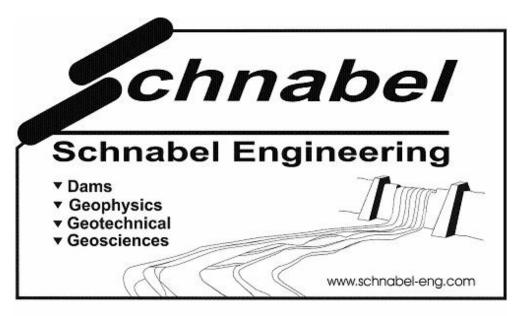
Whether one wants to describe the event as an Unfortunate Event or not, depends upon whether one believes that this portion of Long Island was occupied by ancestors of the Native Americans found there when Long Island was first colonized. Certainly a hurricane of the size and intensity of Katrina could be an Unfortunate Event for this part of the world, and perhaps could move sediment and shells in a manner that would leave a record like that described by Stephen Goodbread.

It is obvious that insurance companies which cover for hurricane damage believe that something like Katrina could happen and are therefore withdrawing from insuring properties on parts of Long Island. The record from New Orleans and Katrina shows that 172 hurricanes have struck the southern Louisiana coast since 1659 (Rogers, AEG, Boston).

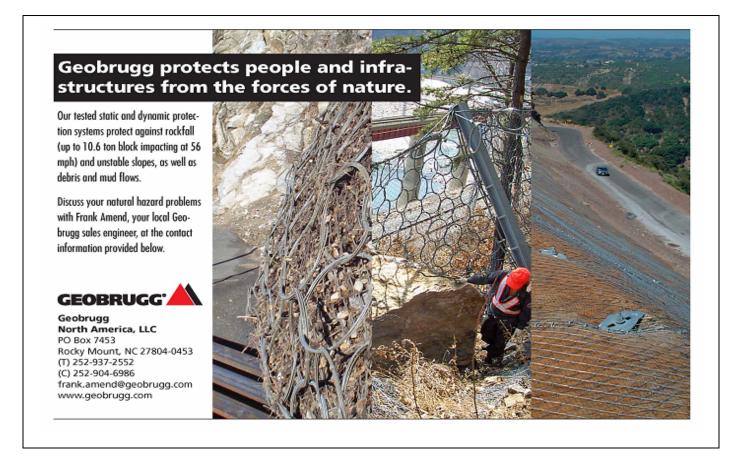
Stratigraphic interpretation of the deposits beneath the levees in New Orleans has provided evidence for the repeated impact of hurricanes. So the work in the Great South Bay described by Goodbread perhaps provides some insight into the history of massive walls of water impacting the south shore of Long Island, whether generated by a far off earthquake, a massive landslide down the continental slope, a volcanic eruption somewhere in the Atlantic, or perhaps a large hurricane. In any case, it records something that could be in today's society an Unfortunate Event. Perhaps Count Olaf is actually out there stirring things up!

Charles W. Welby

Dr. Charles W. Welby is a former section chair for AEG and a regular contributor to this newsletter. He may be reached at cww_ral@hotmail.com.



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Announcements

GSA Southeastern Section Meeting *Registration Information*

Online registration opened in this month at https://rock.geosociety.org/registration2/secure.as p?meeting_code=07sesect. While you are thinking about it, why not invite your friends and colleagues to join you?

The early registration deadline is Monday, 26 February 2007, and the cancellation deadline is Monday, 5 March 2007. Please note: ALL SPEAKERS MUST REGISTER FOR THE MEETING.

Upcoming Dates

Student Volunteer Sign-up Deadline: February 1, 2007. We are pleased to offer student volunteers free registration for the meeting in return for ~6 hours of volunteer work. Contact student volunteer coordinator Chuck Trupe, chtrupe@georgiasouthern.edu.

Exhibitor Registration Deadline: 1 February 2007. This meeting will attract a wide array of both applied and academic geoscientists from the Southeast region, For more information: http://www.geosociety.org/sectdiv/southe/07semt g.htm#exh, or e-mail Pranoti Asher, PAsher@GeorgiaSouthern.Edu.

Hotels

Make your hotel reservation in the GSA hotel block before rooms fill up. This block of rooms at a special GSA rate will be available through 5 March 2007 at

http://www.geosociety.org/sectdiv/southe/07semtg.htm #acc or at Geological Society of America, 3300 Penrose Place, Boulder, CO 80301

Birth announcement

Richard and Michelle Lovett are pleased and excited to announce the birth of their second child, Eric Michael who was born on December 19th at 11:07am. The bruiser weighed in at 10lbs 6.8 oz. and 23 inches long. Mother and child are doing well.

JOB OPPORTUNITIES

The Association of Environmental and Engineering Geologists has launched their new interactive job board, the AEG Career Center. With its focus the environmental and engineering geology industry, the AEG Career Center offers its community members—and the industry at large—an easy-to-use and highly targeted resource for online employment connections.

All industry employers can use the AEG Career Center to reach qualified candidates. Employers can post jobs online, search for qualified candidates based on specific job criteria, and create an online resume agent to email qualified candidates daily. They also benefit from online reporting that provides job activity statistics.

For job seekers, the AEG Career Center is a free service that provides access to employers and jobs. In addition to posting their resumes, job seekers can browse and view available jobs based on their criteria and save those jobs for later review if they choose. Job seekers can also create a search agent to provide email notifications of jobs that match their criteria.

Make an employment connection on the AEG Career Center today!

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AEG CAROLINAS SECTION – SPONSOR INFORMATION

The Carolina Section of AEG supports many of its activities with financial assistance provided by our sponsors. Our activities include quarterly meetings, periodic field trips and seminars, a quarterly newsletter, and email announcements about our meetings and geoscience related activities. In addition, we donate educational resources to science teachers.

We offer several levels of sponsorship, but they all have one goal: to keep the sponsor's name in front of our members and to bring you business. We have a real commitment to connecting our sponsors to potential buyers and will do all we can to help you build your business. Most of our members are practicing professionals with responsibility for selecting subcontractors, so our group is a great place to find new customers and to catch up with existing customers in an informal setting.

Our sponsors provide financial support that allows us to have reasonably priced dinner meetings, host seminars, provide discounted dinner meeting costs for students, underwrites the cost of newsletters and our web site, and supports science education in our schools. All costs listed below are per year and begin on the date that your payment is received.

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GeoNews Newsletter: Business card size ad (2" high x 3-1/2" wide), four times per year.

Meetings: Listing on a Sponsor Poster, located at sign-in table. Name, contact information and a paragraph about services listed on the back of meeting abstracts handed out at each meeting. Verbal acknowledgement by name in Chairman's introductory comments.

Meeting Exhibits: Space for tabletop display at one meeting. Cost of meeting waived for one person on the exhibit date. Email Announcements: Listing of your company name on each AEG - Carolina Section email announcement (our email list is currently over 1,000 people)

Web Page: Acknowledgement on the Carolina Section Web Page, www.aegcarolinas.org.

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Please complete the form below and mail to Jane H. Gill-Shaler, AEG Newsletter Editor.

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GEOHAZARDS IN TRANSPORTATION IN THE APPALACHIAN REGION COALITION TO BE HELD ON AUGUST 1-2, 2007

The North Carolina Department of Transportation (DOT) along with the North Carolina Geologic Survey and the Association of Environmental and Engineering Geologists is pleased to announce hosting the annual symposium to be held in Asheville, NC on August 1-2, 2007.

The Coalition is comprised of interested Professionals in transportation or associated with transportation projects. Members and presenters come from primarily Southern Appalachian states and represent public interests including states' DOT'S, FHWA, states' Geologic Surveys, Army Corps of Engineers and private interests that include academia, railroads, consultants, contractors and vendors serving the industry.

Presentations are sought ranging from direct transportation impact to any earth science, environmental or engineering topic that furthers the science of Geologic Hazards and their effect on transportation systems. Recent geologic events worldwide and regional pressures for development have focused attention on Geohazards.

The Session topics intend to emphasize the economic impacts and the need for increased planning and geological awareness in the built environment. In addition, there is a need to share information related to failures associated with geohazards remediation. Presentations addressing failure forensics will be of particular interest and a learning tool for participants.

Submitted abstracts are reviewed and selected by section chairs and the committee. Selected presentations will require an abstract and Power Point presentation. The 2007 section headings include:

Session

Moderator/Chair

Economic Impact of Geological Hazards
Jody Stanton, USACE

Cost/ Benefit of Geoscience Information
Hugh Bevans, USGS

Landslides: Past, Present and Future
Kirk Beach, ODOT

Rock Slope Stabilization
Vanessa Bateman, TDOT

Additional session headings are developing and will be presented in the formal conference announcement. For information about submitting presentations, attending the conference or other details please contact: Jody Kuhne, NC DOT, 828-298-3228, jkuhne@dot.state.nc.us Jennifer Bauer, AEG, 828-296-4500, Jennifer.Bauer@ncmail.net
Rick Wooten, NCGS, 828-296-4500, Rick.Wooten@ncmail.net
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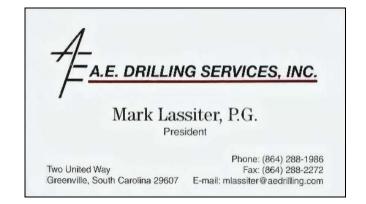
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CALENDAR OF EVENTS 2006/07

Geological, Environmental and Geotechnical Events in the Carolinas
Courtesy of AEG Carolinas Section – www.aegcarolinas.org
Last Updated December 18, 2006
Send updates/corrections to rakolb@mactec.com
Posted on the Web at www.aegcarolinas.org

Meeting Date/Time/Location are Subject to Change – Please Verify Prior to the Meeting

Date (TBA = To be announced)	Event	Location	Time	Additional Information	Estimated PDH's
February 27, 2007	AEG dinner meeting, talk by Dr. Terry West of Purdue University, President, AEG	Location TBA, Columbia, SC	6:00- 9:00	For reservations, contact Raymond Knox, rknox@schnabeleng.com or Vicechair@aegcarolinas.org	ТВА

Recurring meetings in the region and other information

W:	later Research	Various, but	Varies	http://www.ncsu.edu/wrri/events.html#wrriseminars	
		generally in		Email: water_resources@ncsu.edu	
and	nd other events	Jordan Hall on			
		NCSU			
		Campus			

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3rd Thurs. of the Month	Forsyth Gem and Mineral Club Monthly Meeting	Vulcan Materials, 4401 N. Patterson Ave., Winston- Salem,	7:30 PM	Forsyth Gem and Mineral Club The Club holds monthly meetings and has an annual gem and mineral show in September. Phone: Jim Stroud at (336) 744-2940 Email: stroudj@vmcmail.com or Website: http://www.forsythgemclub.com/	
Generally on the last Thursday of the month	AGS Monthly Meeting	Atlanta, Fernbank Museum	6:30 PM	The Atlanta Geological Society holds monthly meetings, generally on the third Thursday of the month, and quarterly field trips. Stone Mountain, GA field trip on November 4, 2006. President: john_costello@mail.dnr.state.ga.us Website:http://www.atlantageologists.org/	
First Monday of each month except January	Southern Appalachian Mineral Society	Murphy- Oakley Community Center, Asheville, NC	7:00 PM	Southern Appalachian Mineral Society Field Trips to limited access and historic collecting sites take place from April to October. Information on the website and from (828) 298-4237. Website: http://www.main.nc.us/sams/	

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Various Dates	Listing of National Geo Events of Various Groups	Various Locations		Geological Society of America Geoscience Calendar http://www.geosociety.org/calendar/	
March 29-30, 2007 THE GEOLOGICAL SOCIETY OF AMERICA	GSA Southeastern Section Conference	Savannah, GA	All Day	Geological Society of America – Southeastern Section George Stephens Email: geoice@gwu.edu SE Section: http://www.geosociety.org/sectdiv/southe/index.htm 2007 annual meeting in Savannah, 2008 in Charlotte	8+
GEO INSTITUTE	ASCE GeoInstitute Conferences and Links	Your Choice		American Society of Civil Engineers GeoInstitute http://www.geoinstitute.org/events/events.cfm	
May 6-9, 2007 ACEC AMERICAN COLUCIL OF ENGINEERING COMPANIES of North Carolina	ACEC National Convention	Washington, DC		http://www.acecnc.org Phone: (919) 781-7934	

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