

# National Association of Geoscience Teachers

# Southeastern Section Newsletter

Summer-Fall 2012

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President's Letter State News in Geoscience Education

WWW... NAGT

www.nagt.org

SE-NAGT

http://facstaff.gpc.edu/~pgore/nagt/se-home.html

Geological Society of America www.geosociety.org

US Geological Survey www.usgs.gov

Earth Science Week www.agiweb.org

www.earthscienceworld.org www.earthsciweek.org

# Winter-Spring 2013 Newsletter Deadline:

February 15, 2012. Please send news items to Bill at witherspoonb@fc.dekalb.k12.ga.us

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## **President's Letter**

by Randy Bechtel, SENAGT president

First and foremost, on behalf of the Southeastern Section of the National Association of Geoscience Teachers (SENAGT), I congratulate Kevin McMahon from Renfroe Middle School in Decatur, Georgia on being chosen the **2012 SENAGT** <u>Section</u> Winner of the Outstanding Earth Science Teacher (OEST) Award! It was a very tight race for section winner and it is great to know there are so many outstanding Earth science teachers in the southeast.

I would like to thank all of the state representatives and officers who participated in this year's OEST Southeastern Section award competition. The SE section made the transition to the national OEST online system which provided a few organizational challenges. Thanks to the efforts of all involved, we received nominations from most of the southeast states. Greg Wheeler, National OEST Chair, was very helpful and patient in answering all of our questions. I am sure the process will go smoother next year in the capable hands of our future President, David Kopaska-Merkel (I will still be around to assist too).

In years past, the SENAGT business meeting has been held during the spring SEGSA meeting but, after a survey of our members, this year we have a change in schedule. The annual SENAGT business meeting will be held during the Charlotte GSA meeting Nov. 4-7, 2012. During this meeting David will begin his second stint as SENAGT President. Watch for details of time and place for the business meeting in a future email. There is no official SENAGT business meeting planned for the SEGSA meeting in San Juan, Puerto Rico in March 2013.

All of the officers in SENAGT have been doing a tremendous job, but I know they would be happy to let others have some of the fun too. This is an excellent opportunity, especially for early- and mid-career geoscience educators who want to help the cause of geoscience education and add to a resume or tenure application. We are grateful that Gerald Pollock, our new Georgia state representative, has consented to run for Secretary at the upcoming meeting. We are looking for additional candidates who are interested in becoming an officer in SENAGT, specifically, Vice-President. The VP's responsibilities include the logistics of the annual business meeting/luncheon. The VP normally succeeds to the position of President at the end of the President's two-year term.

David will be vacating the VP position when he becomes President. Pamela Gore has been Secretary-Treasurer for many years, and is willing to continue as Treasurer for another year or two. If editing is more your thing, I am sure Bill Witherspoon would 'let' someone become the SENAGT Newsletter Editor [correct - ed.]. Please contact one of the current officers for more information. See contact information for officers and state representatives at the end of the newsletter or go to one of the following web addresses: <a href="http://facstaff.gpc.edu/~pgore/nagt/se-home.html">http://facstaff.gpc.edu/~pgore/nagt/se-home.html</a> or <a href="http://nagt.org/nagt/sections/aboutse.html">http://nagt.org/nagt/sections/aboutse.html</a>

I hope to see many of you in Charlotte for GSA November 4-7 and don't forget to vote before you go. Election Day is November 6<sup>th</sup>. If any of you want to stay in North Carolina a bit longer please think about attending the N. C. Science Teachers Association meeting November 8-9 in Winston-Salem, N.C. <a href="http://www.ncsta.org/">http://www.ncsta.org/</a>, just a short drive north of Charlotte. I will be heading there straight from GSA so you are more than welcome catch a ride with me. Just let me know.

Thank you.
Randy Bechtel

N.C. Geological Survey 919-707-9402

## MEETING CALENDAR

# Most recently reported dates of past or future meetings

National Science Teachers Association and Affiliates		
Area	Latest date on web site	City
National	Apr. 11-14, 2013	San Antonio
Southern	Nov. 1-3, 2012	Atlanta
Alabama	February 14 - 16, 2013	Huntsville
Florida	Oct. 25-27, 2012	St. Pete Beach
Georgia	Nov. 1-3, 2012 (NSTA)	Atlanta
Louisiana	Nov. 12-14, 2012	Shreveport
Mississippi	Oct. 23-25, 2012	Jackson
North Carolina	Nov. 8-9, 2012	Winston-Salem
South Carolina	separate regional meetings in 2012 and 2013	
Tennessee	Nov. 2-4, 2012	Murfreesboro

Geological Societies			
Organization (Area)	Latest date on web site	City	
GSA (National)	Nov. 4-7, 2012	Charlotte	
GSA (Southeastern)	March 20-21, 2013	San Juan, PR	
GSA (South Central; incl. LA)	April 4-5, 2013	Austin, TX	
Georgia Geological Society	Oct. 13-14, 2012	Thomson	
Carolina Geological Society	Oct. 12-14, 2012	Greenville, NC	

## **State News in Geoscience Education**

If you would like to contribute state news to the next newsletter, please send your geoscience education information and pictures to your state representative, before February 1, using the e-mail address at the end of this newsletter.

**Alabama** (submitted by David C. Kopaska-Merkel, Geological Survey of Alabama, Co-State Representative and SENAGT VP)

A mixed bag to report this time around. The Geological Survey of Alabama has a new geological hazards website, which includes geohazards information, educational links, interactive maps, and more: http://gsa.state.al.us/gsa/geologichazards/index.htm

Andy Goodliffe, of the University of Alabama Department of Geological Sciences, will join the NAGT executive committee as of the Charlotte GSA meeting in November.

The annual Fossils of the Black Belt teacher workshop will take place October 23<sup>rd</sup> in and near Livingston Alabama. Spaces are still available; contact me if you're interested.

James Lamb is continuing to ready dinosaur specimens for the University of West Alabama's Black Belt Museum. It is always exciting when a new museum comes onto the scene, and when a professional paleontologist is involved you know that geological education will be well represented.

The Deepwater Horizon oil spill has been studied by more than one team of researchers in Alabama, providing opportunities for geoscience education, but I don't have any details about what has been done in that regard.

The deepening effects of global warming have been making some Alabama citizens uneasy, though the State Climatologist continues to deny its reality. Aside from the coast, the Black Belt is considered to be the region that is most in harm's way. The Black Belt's black soils are thin and overlie impermeable chalk; the groundwater available to local plant communities consequently is held in only a meter or two of soil, making the region more vulnerable to drought than neighboring areas. Again, an opportunity for educational outreach, which I hope the new Black Belt Museum will jump on.

Andy Rindsberg, Andy Goodliffe, and Sandy Ebersole contributed to this report.

Florida (State Representative: Paul Cutlip; no information submitted)

**Georgia** (submitted by Gerald Pollack, State Representative)

[Dr. Gerald D. Pollack, Assistant Professor of Geology at Georgia Perimeter College, joins these pages as the new Georgia state representative. He is also a candidate for SENAGT Secretary in the election to be held at the Charlotte meeting. Thanks for stepping up, Gerald! – ed.]

### SE Sectional OEST Winner: Kevin McMahon

Congratulations to Kevin McMahon, who teaches 6<sup>th</sup> grade Earth Science at Renfroe Middle School in Decatur, GA.

Kevin's goal is to inspire kids to become lifelong learners. He has been able to share his collaborative climate research on the Greenland Ice Sheet (part of the TREC/PolarTREC collaborative teaching program) with his students. Students have the opportunity to experience what it is like to be a researcher in a remote region by visiting Kevin's virtual base camp and reading his journals, looking at his photos and videos, and asking questions. Kevin strives to help students learn how to solve problems through problem-based learning (PBL) cases. As the name implies, a PBL case starts with an engaging problem and the students try to solve it. Students first identify the facts, and then make some hypotheses. They also list "learning issues" (things that they don't know but can look up in print or online). Some of their questions lead to experiments. At the end of the year, his students realize that any problem (whether it is science-related or not) can be tackled using this problem-based learning approach.



Kevin has been teaching for 12 years. He received his undergraduate degree from Duke University and a Master of Arts in Teaching degree from Emory University. Kevin was the City Schools of Decatur Teacher of the Year in 2008 and a TREC/PolarTREC teacher participant in 2006 and 2011. This award marks the first sectional OEST award winner from Georgia since 1997.

## Dr. Knox of U GA recognized

Dr. John A. Knox, Associate Professor of Geography at the University of Georgia, was honored by the Princeton Review as one of "<u>The Best 300 Professors</u>" the only geography professor in the US to receive the honor. Dr. Knox is a former associate editor of the Journal of Geoscience Education, who currently has two Ph.D. students working on dissertation topics related to geoscience education. Two of his current/former graduate students, Aneela Qureshi and Myron Petro, have won NAGT Outstanding Teaching Assistant Awards.

## **Georgia Geological Society**

The 2012 Georgia Geological Society Annual Meeting and Field Trip (October 13-14) will focus on the complex and less documented portion of Georgia's geologic history, the Permian to Jurassic. Visits to several aggregate quarries, a variety of intrusions, and examination of recent kaolinization of granites, middle Tertiary faulting, and the mineralogy of pegmatites will be highlighted. The trip will be led by Scott Harris and Jerry German from the Georgia Department of Transportation. Current information will be posted at Georgia Geological Society on Facebook. Additional details can be requested by e-mailing rkath@westga.edu or tchowns@westga.edu.

## **Environmental Education Alliance of Georgia**

The Environmental Education Alliance of Georgia is celebrating its 20<sup>th</sup> anniversary! They have many exciting events planned this year to commemorate this remarkable time. The EEA's 20th Anniversary Fall Retreat will take place November 16 - 17, 2012 at the Wahsega 4-H Center. The retreat will focus on networking and learning opportunities for environmental educators. The Environmental Education Alliance of Georgia and the rangers at the Davidson-Arabia Nature Preserve will also host a guided hike on Arabia Mountain to celebrate the winter solstice, Friday December 21, 2012 from 7:00 – 9:00pm. Register for these events online at <a href="http://www.eealliance.org">http://www.eealliance.org</a>.

#### **National Science Teachers Association**

Georgia's science education community is proud to invite you to attend the NSTA Atlanta Area Conference on Science Education. The NSTA 2012 Area Conference will take place November 1–3, 2012 in Atlanta, Georgia. This year's theme is "Science: Passport for Success", featuring a three-stranded program focusing on: Providing Access for All Students to the Science in STEM, Effective and Engaging K–8 Science, and No Student or Teacher Left Inside. Exciting featured speakers will anchor these strands, including an NSTA leader, a young discoverer, and an administrator with a compelling personal and professional journey. Online registration for this conference is available at <a href="http://www.nsta.org/conferences/2012ata/registration.aspx">http://www.nsta.org/conferences/2012ata/registration.aspx</a>.

## Atlanta Geological Society [added by ed.]

The Atlanta Geological Society continues to meet on the last Tuesday of each month at Fernbank Museum of Natural History. The social begins at 6:30, followed by a business meeting and talk. The October 30 presentation will be "Geology on the Edge - SF Bay, Yosemite, and Volcanoes East of the Sierra," a preview of a California trip for K-12 educators and others tentatively planned for June 2013. The speaker is Dr. Bill Witherspoon [your SENAGT newsletter editor], geologist-instructor at DeKalb County Schools' Fernbank Science Center, and co-author (with Pamela Gore) of Roadside Geology of Georgia, to be published in Spring 2013 by Mountain Press. The presentation will include 3D tours of the California landscape (internet connection permitting). Browse annotated pictures and poke around in Google Earth yourself at http://georgiarocks.us/california.



Obsidian at 700-year-old Panum Crater near Mono Lake, CA.

Louisiana (State Representative: Pam Blanchard; no information submitted)

Mississippi (State Representative: Gail S. Russell; no information submitted)

**North Carolina** (submitted by Randy Bechtel, NC Geological Survey, State Representative and SENAGT President)

- I. N.C. Outstanding Earth Science Teacher (OEST) and Educator (OESE) Winners
- II. N.C. Science Teachers Association Professional Development Institute, Winston-Salem, N.C. **November 8-9, 2012**.
  - a. Solar System Ambassadors NASA
  - b. Free stuff for Teachers
- III. Geological Society of America Annual Meeting, Charlotte N.C. November 4-7, 2012.
- IV. N.C. Department of Public Instruction (NCDPI)- Common Core and Essential Standard New State Level Curriculum Implementation
- V. Federal Education Programs in North Carolina
  - a. Race to the Top Involvement
  - b. No Child Left Behind Waiver
  - c. Next Generation Science Standards National Science Curriculum
- VI. Division Changes and Shale Gas

# I. The 2012 N.C. Outstanding Earth Science Teacher and N.C. Outstanding Earth Science Educator Winners are...

The 2012 North Carolina Outstanding Earth Science Teacher (OEST) winner is Ms. Beverly Owens from Crest Middle School in Shelby, Cleveland County, N.C. Beverly engages her 8<sup>th</sup> grade students with experiments, demonstrations, technology and group activities. This experiential, learner-centered instruction allows students to make real world connections and understand the relevance of science.

Beverly dives into her teaching by dressing as a 'protist' or historical geology figure or as elements then, through interviews by students, teaches the content for each of these topics in a unique and engaging manner. She is not the only one to dress up – students research fossil organisms then create costumes based on that organism. The activity culminates in a Geologic Time Parade around the athletic track in chronological order!

Beverly empowers her students to work toward special events such as raising money to participate with paleontologists in a fossil dig in Utah, to travel to the Outer Banks of N.C. and to participate in the Science Olympiad. It is also critical to have a teacher such as Beverly involved with NCDPI in assisting them with statewide initiatives. Her efforts are much appreciated by her students, fellow teachers and parents.



Special to The Star

Beverly Flynn Owens uses a pick to remove dirt around dinosaur bones in
a quarry in Luck, Wyo. Ms. Owens first learned of the trip when she visited the Schiele Museum in Gastonia last year. Read more in the story
of what goes into digging up and preserving dinosaur bones.

The 2012 N.C. Outstanding Earth Science Educator (OESE) winner is Dr. Judith McDonald from Belmont Abbey College in Belmont, Gaston County, N.C. Judy teaches both ED409 Teaching Science in the Elementary Classroom and SC201 Earth Science, a course taken by future teachers as well as non-education majors. She addresses all areas of K-6 science included in the N.C. Essential Standards and is known as the "Rocks and Minerals Lady", a title which she proudly answers to!

Judy has metamorphosed the science methods class for pre-service teachers into a highly praised and joyfully anticipated part of teacher preparation. She creates an engaging classroom environment that is safe for questioning and risk taking for the sake of learning. She wraps her classroom in authentic energy and enthusiasm. Teacher candidates not only learn content and pedagogy but also determine to make science a dynamic and engaging subject for their future elementary and middle level students.

Outside of her classroom Judy is very active and runs a particularly important program called Girls Leading Girls. This program nurtures interest in science in fifth grade girls from local Title 1 schools. Judy's lead role in science education for future teachers, underserved populations and promoting science for many audiences is much needed and commendable.

PLEASE SEE OUR WEBSITE FOR MORE INFORMATION ON HOW TO NOMINATE A DESERVING N.C. TEACHER (OEST) AND EDUCATOR (OESE): <a href="http://portal.ncdenr.org/web/lr/earth-science-outreach">http://portal.ncdenr.org/web/lr/earth-science-outreach</a>

FOR OTHER STATES WHO WANT TO NOMINATE A TEACHER FOR THE OEST AWARD: <a href="http://nagt.org/nagt/programs/oest-nom.html">http://nagt.org/nagt/programs/oest-nom.html</a>

Remember the nomination process is electronic and can be found at the following web address. Be sure to address the 7 criteria for the award. <a href="http://nagt.org/nagt/programs/oest-nom.html">http://nagt.org/nagt/programs/oest-nom.html</a>

# II. North Carolina Science Teachers Association - Professional Development Institute (NCSTA-PDI) www.ncsta.org/

The NCSTA-PDI will be November 8-9, 2012 in Winston-Salem, North Carolina. The PDI is also where the North Carolina state winner of the Outstanding Earth Science Teacher (OEST) and Outstanding Earth Science Educator (OESE) awards are presented.

Also at the conference:

## a. Solar System Ambassadors (SSA)

http://www2.ipl.nasa.gov/ambassador/directory.htm

I recently discovered a great resource for teachers to discover firsthand about NASA missions including the new rover Curiosity. Solar System Ambassadors are volunteers for NASA/JPL that are very enthusiastic about educating and visiting schools. One of the North Carolina SSAs is working to bring the inflatable model of Curiosity to the N.C. Science Teachers meeting and give a presentation on the Curiosity mission! Go to the web address above to find an SSA near you OR you can apply to be a Solar System Ambassador <a href="http://www2.jpl.nasa.gov/ambassador/">http://www2.jpl.nasa.gov/ambassador/</a>

#### **b.** Free stuff for Teachers:

- The Association of Environmental and Engineering Geologists (AEG) will be distributing free Earth Science Week Kits through generous donations.
- The N.C. Geological Survey is again raiding its inventory to bring free materials to the teachers for geosciences education.
- NASA materials will be distributed by the Solar System Ambassadors
- Other donations of K-12-appropriate teacher materials to be distributed at the conference are welcome. If you have materials to donate please contact Randy.Bechtel@ncdenr.gov

# III. Geological Society of America (GSA)

http://www.geosocietv.org/meetings/2012/

http://www.geosociety.org/meetings/2012/educators.htm

The Geological Society of America will be hosting its annual meeting November 4-7, 2012 in Charlotte North Carolina. Teachers and Educators check out the web address above for registration deals and a list of workshops and session specially priced for teachers.

GSA attendees don't forget to stay a while longer and attend the NCSTA conference just up the road in Winston-Salem <a href="www.ncsta.org/">www.ncsta.org/</a>. Come meet all the great teachers at the Awards Ceremony including the N.C. OEST and OESE winners (place and time TBD but probably Thursday afternoon or evening, 11/8/12).

## IV. N.C. Department of Public Instruction (NCDPI)

a. New State Level Curriculum to be Implemented (from the NCDPI website)

<u>http://www.ncpublicschools.org/curriculum/</u> - Standards Homepage

http://www.ncpublicschools.org/acre/standards/new-standards/ - New Standards

Starting with this school year 2012-2013, the new Common Core State Standards and the Essential Standards will be taught and assessed. North Carolina adopted the Common Core State Standards in K-12 Mathematics and K-12 English Language Arts released by the National Governors Association Center for Best Practices and the Council of Chief State School Officers. With the adoption of these state-led education standards, North Carolina is in the first group of states to embrace clear and consistent goals for learning to prepare children for success in college and work. **The Essential Standards includes** the standards for the newly adopted curriculum in the following areas: English as a Second Language, **Science**, Social Studies, World Languages, Arts Education and Healthful Living.

## <u>V.</u> <u>Federal Education Programs in North Carolina</u> (\*from the NCDPI website)

a. \*Race to the Top (RttT)

http://www.ncpublicschools.org/rttt/

North Carolina is one of only 12 recipients of the 2010 federal RttT grants, bringing nearly \$400 million to the state's public school system for use through 2014. School districts and charter schools across the state will put RttT funds to good use with creative and meaningful programs and activities that will result in more students: graduating from high school, being better prepared for college, and possessing skills necessary for careers in today's economy.

For more information on the detailed scope of work including targets, yearly status reports, weekly updates and much more, go to the web address above for a comprehensive posting of North Carolina's involvement in RttT.

## b. \*No Child Left Behind (NCLB)

http://www.ncpublicschools.org/nclb/

In May 2012, North Carolina was granted flexibility waivers from many of the NCLB provisions. This flexibility, granted by the U.S. Department of Education, makes significant changes to North Carolina's implementation of ESEA's requirements especially in the areas of Adequate Yearly Progress, parent notifications, public school choice and Supplemental Educational Services. These waivers will allow North Carolina's public school system to move forward with strengthened College- and Career-Ready expectations for all students, new ways to hold Title I schools accountable for students' academic proficiency, and new initiatives to support effective instruction and leadership.

Many of the former strict federal requirements regarding Adequate Yearly Progress (AYP) and sanctions for schools that do not make AYP are no longer required statewide and are now local school district decisions.

While schools will still be measured against annual measurable objectives (AMOs) calculated and reported under NCLB, the new standards will recognize growth in performance and will no longer be the "all or nothing" targets of the past. North Carolina's goal is to provide more and stronger support to enable all students to graduate from high school career and college ready. Information about how the federal ESEA program is implemented is available on the Federal Program Monitoring's ESEA website at <a href="https://www.ncpublicschools.org/program-monitoring/esea/">www.ncpublicschools.org/program-monitoring/esea/</a>.

## c. \*Next Generation Science Standards (NGSS)

http://nextgenscience.org/

http://nextgenscience.org/north-carolina

As many of you know the Next Generation of Science Standards is in draft form and is scheduled to be released for adoption during the Winter/Spring 2013 timeframe. North Carolina is one of 26 Lead State Partners that "will provide leadership to the writers and to other states as they consider adoption of the NGSS, and address common issues involved in adoption and implementation of the standards." A second draft for public comment should be available this Fall 2012. For more information about the NGSS and how North Carolina is involved please see the two web addresses listed above.

## <u>VI.</u> <u>Division Changes and Shale Gas Legislation in North Carolina</u> http://portal.ncdenr.org/web/guest/

"Following General Assembly ratification in July 2012 of the "Clean Energy and Economic Security Act," or <u>Session Law 2012-143</u>, the Energy Program in the Land Quality Section of the Division of Energy, Mineral, and Land Resources will assist the <u>N.C. Mining and Energy Commission</u> in developing a modern regulatory program for the management of oil and gas exploration and development in the state, including the use of horizontal drilling and hydraulic fracturing." <u>The following legislative changes have occurred to the Division:</u>

- a. The Division of Land Resources (DLR) has been renamed the **Division of Energy**, **Mineral**, **and Land Resources (DEMLR)**.
- b. DEMLR consists of 2 sections: The North Carolina Geological Survey and Land Quality Sections. There were 3 sections in DLR but the Geodetic Survey was moved to the Emergency Management Section in the N.C. Department of Public Safety.
- c. The newly created Energy Program will join the existing programs of Mining, Dams, and Erosion and Sediment Control in the Land Quality Section of the DEMLR. The Energy program will administer and enforce the provisions of the Oil and Gas Conservation Act.
- d. Three new oil/gas positions will staff the Energy program
- e. For more information about the Energy Program go to the web address http://portal.ncdenr.org/web/lr/energy
  - i. Energy
    - Geologic Assessment
    - Studies
    - Mining and Energy Commission

### Other changes not related to legislation are:

- a. Longtime DLR Director and State Geologist, Jim Simons, retired effective May 31, 2012. The new Division Director of DEMLR is Tracy Davis and the new State Geologist is Dr. Kenneth Taylor.
- b. The Division has a new phone system along with new phone numbers:
  - ii. DEMLR Main Office: 919-707-9200
  - iii. N.C. Geological Survey: 919-707-9210
  - iv. Land Quality Section: 919-707-9220
- c. New web addresses for the entire Department of Environment and Natural Resources (DENR)including DEMLR, Land Quality and the Geological Survey sections can be found at the DENR portal <a href="http://portal.ncdenr.org/web/guest">http://portal.ncdenr.org/web/guest</a>

Puerto Rico (State Representative position open; no information submitted)

# **South Carolina** (submitted by Gwen Daley, Winthrop University, Co-State Representative)

Greetings from the Palmetto State, where we are excited about the National Geological Society of America meeting being in Charlotte, North Carolina which is within easy driving distance for most our state. K-12 teachers are especially welcome at this meeting, as indicated by the excellent offer for K-12 teachers who attend one of three short courses designed for K-12 educators on Saturday, November 3<sup>rd</sup>. (<a href="http://www.geosociety.org/meetings/2012/educators.htm">http://www.geosociety.org/meetings/2012/educators.htm</a>). The first 25 K-12 educators to register for one of the three short courses will be awarded the following: waived registration fee, one-year Geological Society of America membership including membership to the Geoscience Education Division, free lunch and a free Geoscience Education Division patch. Vouchers for the Geological Society of America bookstore will also be given out to teachers attending each of the three sessions. I hope you will take advantage of this offer, as well as the other educational opportunities available at the meeting.

As part of the budget process this summer, South Carolina Governor Nikki Haley again vetoed the funding for the South Carolina Sea Grant (<a href="http://www.thestate.com/2012/07/07/2344499/haley-issues-budget-vetoes.html">http://www.thestate.com/2012/07/07/2344499/haley-issues-budget-vetoes.html</a>), whose purpose is to support research aimed toward "enhancing practical use and conservation of South Carolina's coastal and marine resources that foster a sustainable economy and environment" (<a href="http://www.scseagrant.org/">http://www.scseagrant.org/</a>). Thanks in part to the efforts of scientists, coast dwellers and conservationists, the South Carolina legislature overwhelmingly voted to override the veto, and restored funding to the organization (<a href="http://www.blufftontoday.com/bluffton-news/2012-07-18/sc-sea-grant-back-existence-and-back-work">http://www.blufftontoday.com/bluffton-news/2012-07-18/sc-sea-grant-back-existence-and-back-work</a>).

In more positive news, NOAA's research vessel Okeanos Explorer (http://oceanexplorer.noaa.gov/okeanos) is coming to Charleston, and will offer a professional development short course for grades 5-12 educators at the South Carolina Aquarium (http://scaquarium.org/Education/professionaldevelop.html) on Saturday, February 25, 2012. Registration is required and space is limited, but educators will receive a stipend as well as volume one of the Okeanos Explorer Education Materials Collection: "Why do we explore", other curriculum materials, a certificate of participation from NOAA as well as free breakfast and lunch. For more information about the founding of the Okeanos Explorer project, please see this talk by Robert Ballard at the TED Convention (http://www.ted.com/talks/robert\_ballard\_on\_exploring\_the\_oceans.html).

NOAA is also looking for high school teachers to "Pilot Innovative Curricula" for their "Planet Stewards" and "State of the Coast" curricula (http://eeinsc.org/core/item/page.aspx?s=104701.0.0.37431). The "Planet Stewards" project is being developed in conjunction with 3D GameLab, and requires two total weeks of teacher training in November to prepare for implementing the curriculum during spring semester. The "State of the Coast" project combines scientific and economic information about the Gulf of Mexico. They are looking for teachers to review the lesson plans by November 16<sup>th</sup>, 2012. Small stipends are available for each program.

The South Carolina Department of Health and Environmental Control is looking for K-12 applicants for their "Champions of the Environment" program (<a href="http://www.scdhec.gov/environment/water/champions/">http://www.scdhec.gov/environment/water/champions/</a>). Applications much be submitted electronically by October 15<sup>th</sup>, 2012.

The South Carolina Geographic Alliance (SCGA) and the University of South Carolina Upstate will offer a one-day workshop entitled "Earthquakes in South Carolina: Bridging the Social and Science Divide for K-12 Educators" on November 3<sup>rd</sup>, 2012 in Spartanburg

(http://artsandsciences.sc.edu/cege/events/calendar.html). Registration is required, but there is no registration fee. SCGA also continues to offer posters featuring South Carolina geographic and geologic features for little to no cost via their website

(<u>http://artsandsciences.sc.edu/cege/resources/posters.html</u>). They also offer free GPS and Geocaching PDFs and PowerPoint files for use by educators and GPS clubs

(http://artsandsciences.sc.edu/cege/resources/GPS.html), as well as other educational resources.

The third biennial South Carolina Water Resources Conference will be held in Columbia on October 10<sup>th</sup>-11<sup>th</sup>, 2012 (http://www.scwaterconference.org). Clemson University's Center fro Watershed Excellence (<a href="http://www.clemson.edu/watershedcenter">http://www.clemson.edu/watershedcenter</a>) will coordinate the two day meeting.

The South Carolina Science Council (SC<sup>2</sup>) will continue its split meeting schedule (<a href="http://www.southcarolinascience.org/conference.html">http://www.southcarolinascience.org/conference.html</a>), with conferences in Spartanburg (October 13<sup>th</sup>), Johnsonville (February 9<sup>th</sup>) and Aiken (March 16<sup>th</sup>).

In other more general science news, the South Carolina Governor's School for Science and Mathematics has launched a campaign called "The Wave" (<a href="http://scgssm.org/do the wave/">http://scgssm.org/do the wave/</a>) to "seek constancy and quality in the state's approach to science, technology, engineering and math (STEM) education in the Palmetto State." They are recruiting like-minded individuals and organizations to "get your wave on."

**Tennessee** (submitted by Michael A. Gibson, University of Tennessee at Martin, State Representative)

**2012 TSTA Workshop Registration Open.** The 2012 Tennessee Science Teachers Association annual meeting will be held at the in Murfreesboro, TN November 2-4, 2012. The Tennessee Earth Science Teachers (TEST) has organized its annual day-long workshop around the emphasis to increase reading skill in Tennessee by focusing on earth science reading. The earth science content focus of the session, entitled "Reading in the Extremes", will be environmental issues, with emphasis on "extreme" events such as volcanic eruptions, tornadoes, and earthquakes.

Dr. Michael Gibson will be assisted by Dr. Lionel Crews, both from the University of Tennessee at Martin, will lead activities on earthquakes emphasizing the New Madrid system which celebrates its bicentennial in 2012. Dr. Ann Holmes from the University of Tennessee at Chattanooga will lead activities on volcanoes and volcanic hazards. TEST has arranged for a meteorologist from the local television affiliate to be on hand to help with extreme weather with emphasis on the Tennessee Tornado Alley. Dr. Becky Cox, University of Tennessee at Martin School of Education, will focus on reading resources and the Tennessee Common Core requirements. Weather specialist Lisa Spencer from Channel 4 News in Murfreesboro will present "Surviving the Storm". Grade-appropriate standards-based instruction will include teaching reading.

The workshop is scheduled for Thursday November 1<sup>st</sup> at an estimated cost of \$35 per person. Teacher participants receive hands-on lessons, reading materials, and earth materials boxes for classroom use. To register for the meeting and workshop visit: <a href="http://www.tnsta.com/">http://www.tnsta.com/</a>. Participation is limited to the first 30 paid registrants. The workshop will run from 9 a.m. to 4 p.m. with a Noon to 1 p.m. lunch break. For more information contact Dr. Michael Gibson, Dept. of Agriculture, Geosciences, and Natural Resources, University of Tennessee at Martin, Martin, TN 38238 (731.881.7435; <a href="mailto:mgibson@utm.edu">mgibson@utm.edu</a>).

**GeoConclave**. The annual geology competition between geology programs in Tennessee will hold its next GeoConclave at Fall Creek Falls State Park October 5-6<sup>th</sup>. Teams from around Tennessee that participate include Austin Peay State University, East Tennessee State University, University of Tennessee at Chattanooga, UT Knoxville, and UT Martin, Vanderbilt University, Middle Tennessee State University, and Tennessee Tech. This year Vanderbilt hosts with a field trip. For information contact Dan Morgan in the Department of Earth and Environmental Sciences, Vanderbilt University, 5726 Stevenson Center; 7th floor, Nashville, TN 37240 Phone: 615.322.2976.

You can join NAGT using the online form at <a href="https://www.webassociationmgmt.org/nagt/">https://www.webassociationmgmt.org/nagt/</a>, or by downloading a membership application at <a href="https://www.webassociationmgmt.org/nagt/memform.v2">https://www.webassociationmgmt.org/nagt/memform.v2</a> small.pdf .

An online Outstanding Earth Science Teacher (OEST) nomination form is now available at <a href="http://nagt.org/nagt/programs/oest-nom.html">http://nagt.org/nagt/programs/oest-nom.html</a>.

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