



National Association of Geoscience Teachers
Southeastern Section Newsletter
Summer-Fall 2011

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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 2012

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

July 28, 2011

I am excited to be the incoming President and it was nice to be able to put faces to email addresses at the SEGSA this past March in Wilmington, North Carolina. There were many discussions and much enthusiasm during the Geoscience Education Session and at the annual business meeting. I hope that all who were affected by the tornado outbreaks in multiple states earlier this year are firmly on their way to recovery.

There is certainly a lot happening that will affect geoscience education in the near future, either directly or indirectly, including the release of the national 'Conceptual Framework for K-12 Science Education', Race to the Top funding, GSA and NSTA meetings, and of course the current political climate that has affected the funding and structure of education at the local state and national levels. There will be many opportunities to monitor, discuss and be involved in these developments at upcoming meetings. I look forward to learning more from earth science teachers, and those that work with them, on best practices in geoscience education.

The first opportunity will be at GSA in Minneapolis, Minnesota October 9-12, 2011 *Archean to Anthropocene: The Past is the Key to the Future*. Further opportunities will occur during the southeastern sectional and national meetings in 2012, both to be held in North Carolina. Yes, through a quirk of scheduling North Carolina will be hosting SEGSA in Asheville, N.C. March 31-April 2, 2012 *Shaping Continents, Shaping Landscapes, Shaping Policy* and national GSA in Charlotte, N.C. November 4-7, 2012. The latter meeting is the weekend before the North Carolina Science Teachers Association Professional Development Institute in (NCSTA).

Also of note is the Association of Environmental & Engineering Geologists (AEG) recently established a K-12 Education Committee to investigate and formulate ways to advocate for earth science education so seek out your local AEG representatives and see how we can partner with this group.

I look forward to continuing the momentum, and flow of ideas, from the previous meeting to invigorate current members and encourage new members and partners at upcoming meetings.

Randy Bechtel

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From the Vice-President

by David Kopaska-Merkel, SENAGT Vice-President

[Ed. Note: The NAGT by-laws state that “Sections shall normally meet at least one time each year to conduct current business and elect officers.” At the 2011 SENAGT annual meeting in Wilmington, we elected David Kopaska-Merkel as the new VP of SENAGT. David has submitted the following statement.]

I want to be vice president, and then later president, of this section because I believe all scientists need to support science education at every level. I have worked, on the side, to support science education throughout my career. This has generally taken the form of making presentations at schools or science-education meetings and helping to run workshops of various kinds for science teachers. I believe this section has an important role to play in teaching educators how to teach science. I want to help make that as effective as I can.

I was vice president and then president of the section 10 years ago. My other qualifications or affiliations are these. I have worked at the Geological Survey of Alabama since 1989, chiefly in the energy resources group. My research is primarily in the area of carbonate petrography. I am active in the informal educational outreach program at the Survey, and have been for about 20 years. I have participated in educational outreach programs associated with the Society for Sedimentary Geology and elsewhere.

David Kopaska Merkel

[Also submitted by David for this issue:] Three photographs (taken under different lighting conditions) of a pelagic trilobite, *Agnostus* sp., from the Conasauga Formation, St. Clair County Alabama. The Geological Survey of Alabama trains University of Alabama students in core description by offering both paid and unpaid part-time positions in the Energy Investigations program. Part-time student workers at the agency also learn GIS methods and many other aspects of geology. Photograph by Ann Arnold, Geological Survey of Alabama.



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	Mar. 29–Apr 1, 2012	Indianapolis
Southern	Nov. 10-11, 2011	New Orleans
Alabama	Oct. 18, 2011	Birmingham
Florida	Oct. 20-22, 2010	Orlando
Georgia	Feb. 16-18, 2012	Atlanta
Louisiana	Nov. 10-12, 2011	New Orleans
Mississippi	Oct. 23-25, 2011	Jackson
North Carolina	Nov. 10-11, 2011	Greensboro
South Carolina	Nov. 2-4, 2011	Myrtle Beach
Tennessee	Nov. 10-12, 2011	Murfreesboro

Geological Societies		
Organization (Area)	Latest date on web site	City
GSA (National)	Oct. 9-12, 2011	Minneapolis
GSA (Southeastern)	April 1-2, 2012	Asheville, NC
GSA (South Central; incl. LA)	Mar. 7-9, 2012	Alpine, TX
Georgia Geological Society	Oct. 21-23, 2011	McDonough
Carolina Geological Society	Oct. 21-23, 2001	Sanford, NC

Regional News in Geoscience Education

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

K-12

The state budget isn't in good shape and the tornadoes that came through last spring didn't help any. The good news is, things were so bad last year, they aren't much worse. Seriously, I haven't heard about much changing one way or another.

Universities

The University of West Alabama's Department of Biological & Environmental Sciences has been renovating its labs. Two new labs are devoted to molecular biology, and another to field ecology. Andrew Rindsberg's paleontology lab is being thoroughly renovated; it now has built-in bookshelves, cabinets, and a sink, with additional museum storage in Lane cabinets. Andy says that this is the first paleo lab that he's had with water that runs when he wants it to – a reference, no doubt, to the Great Flood at Jones Hall in his early Survey days. Still another lab was built up by vertebrate paleontologist James Lamb, who joined the UWA faculty a year ago. He is constructing new exhibits for the Black Belt Museum, starting (of course) with a dinosaur excavated from the Black Belt region of Alabama.

The Department of Geological Sciences at The University of Alabama is continuing its expansion. Graduate student enrollment will exceed 60 students in the fall of 2011 (up almost 50% compared to 7 years ago). Undergraduate enrollment (though more difficult to measure) exceeds 100 students. Our faculty ranks are also swelling - though we have lost one faculty member (Joshua Schwartz) we have hired a new sedimentologist (Ryan Ewing) and are in the final stages of hiring a geochronologist. We also have an active search for a new hydrogeologist. The two previous positions are new positions. We will be conducting a search for a new igneous petrologist starting in the fall. This is a time of unprecedented growth for our department. This growth is also reflected in the number of publications, classes taught, and research grant activity. By all metrics, we are among the most productive departments in The University of Alabama. All of the above translates into excellent opportunities for new students (graduate and undergraduate). At both levels there are ample opportunities for students to participate in world-class research projects. Job opportunities for our students remain very good - it is very much a great time for a student who is looking at embarking on a career in the geosciences.

The University of South Alabama has seen little change in enrollment in geological sciences, which is a good sign; other departments have been less stable.

Workshops

This past summer, Legacy (Alabama's environmental education organization) and other organizations sponsored a teacher workshop called "Mountains to the Gulf." Jim Lacefield, author of "Lost Worlds in Alabama Rocks," helped run the workshop and filed this report.

"Along with science specialists from two other fields I helped guide a group of 20 teachers on a road trip through all of the physiographic provinces of Alabama to examine the connections between the geology, watersheds, and life of each part of the state. The workshop was designed to give teachers in a variety of content areas an "integrated" view of the natural history of the state to use in their teaching. For my part I presented an overview of the surface geology of each area, how the surface rocks affect the modern landscape (such as topography, landforms, stream direction and flow, etc.) and how the rocks of each province contribute to our scientific understanding of the geologic history of the state. Dr. Bill Deutsch of Auburn presented information on aquatic biology, watersheds, and stream quality, and Dr. George Cline of Jacksonville State discussed ecology and the connections of animal life to the environment of each province.

"The workshop was very rigorous, with long days on the road and a huge quantity of science content presented during the week. However, it was also extremely successful, with lots of very positive feedback by the participants. The intent of the workshop was to get Alabama teachers to use the home environment and special qualities of the state's natural history in their teaching more. There were a number of Earth science teachers on the expedition, but also gifted educators, elementary specialists, and language arts people. The workshop was so successful it will likely become a permanent offering supported by Legacy and other funding sources. More info is available by Googling 'Mountains to the Gulf' or going on a special Facebook group the teachers created, called 'Mountains to the Gulf.'"

Fossils of the Black Belt XIII, a hands-on field workshop for science teachers, will be held on October 18. This annual event is led by members of the University of West Alabama, Geological Survey of Alabama, and Birmingham Paleontological Society with support from the Alabama Geological Society and Discovering Alabama. Enrollment was down in 2010 from historical levels and so far it appears enrollment in 2011 will be comparable to last year.

Other

Planned future events include presentations on earth science at the annual meetings of the Alabama Science Teachers Association and the Alabama Association of Environmental Educators. A second edition of "Lost Worlds in Alabama Rocks" by Jim Lacefield is in the late stages of preparation, and may be published by the time of the next newsletter. A book about the Stephen C. Minkin Paleozoic Footprint Site is in preparation by David Kopaska-Merkel and Ron Buta.

Thanks to Andrew Goodliffe, Doug Haywick, Jim Lacefield, and Andrew K. Rindsberg for providing information used in this report.

Florida (State Representatives: Jonathan Bryan and Paul Cutlip; no information submitted)

Georgia (State Representatives: Pamela Gore and Nan Huebner)

From Randy Kath, University of West Georgia:

The 2011 Georgia Geological Society Fieldtrip will be held October 21-23, headquartered at the Comfort Suites, McDonough, GA. . This year's annual Georgia Geological Society fieldtrip will be held in the Inner Piedmont at the northeast end of the Pine Mountain window ~65 km southeast of Atlanta, GA. The fieldtrip will involve characteristic exposures of the Inner Piedmont terranes (Tugaloo and Cat Square) and the Pine Mountain window, as well as the major faults that bound them. Stops at major fault zones will include the Brindle Creek fault, which separates the Tugaloo and Cat Square terranes, and the dextral-then-sinistral Towaliga fault, which frames the northwest side of the Pine Mountain window, then continues through the Inner Piedmont possibly as far northeast as the Savannah River. Participants will see Grenville basement gneiss, Ordovician through Permian granitoids, amphibolite-facies metasedimentary rocks, and faults active during two Paleozoic orogenies and the Mesozoic breakup of Pangea; all vital pieces in understanding the complex geologic history that encompasses the area.

Our headquarters will be at the Comfort Suites in McDonough, Georgia (I-75, Exit 218). A block of 43 rooms, mixed queen beds and king bed suites, have been reserved for \$89.00 per room per night. Attendees must call the hotel directly at (678) 216-1900 and state they wish to pick up a room under the block name of: Georgia Geological Society.

We will have our traditional introduction and icebreaker on Friday evening at 7:00 p.m and overview technical sessions beginning at 8:00pm in the Comfort Suites Georgia- and Green-rooms. Buses will depart from the hotel to the field at 8:00 a.m. Saturday and Sunday mornings. The trip will conclude with lunch and our annual business meeting at High Falls State Park.

Registration includes an introductory Social on Friday evening beginning at 7:00 pm and annual dues.

Lunch on Saturday will be from the Blind Pig BBQ. We will be serving pulled pork and chicken. Please be sure to circle your choice for lunch. Additionally, Sunday's lunch will be from the Hot Dog Hut. The Hot Dog Hut will be serving hamburgers and gourmet hot dogs. We are not sure if vegetarian versions are available, but we will keep you posted via email.

Following lunch on Sunday, Steven Jaret (Harvard University) and Scott Harris will lead an optional afternoon excursion to Woodland, Georgia, to discuss the evidence for a large asteroid impact structure in the middle of the Pine Mountain terrane. We ask that anyone interested in attending the optional trip contact Scott Harris as soon as possible

(gagesociety@gmail.com)

The registration form is available at:

http://www.westga.edu/~ggsweb/fieldtrip/GGS2011_registration.pdf

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

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

AEG and students on a Mississippi field trip

(by Ken Ruckstuhl kruckstuhl@env-mgt.com, courtesy of Rick Kolb of Carolinas Section of the Association of Environmental and Engineering Geologists, via Randy Bechtel)

Students from Mississippi State University (MSU) and the University of Mississippi joined AEG geologists for a field trip to study the effects the record high flood of the Mississippi River in Vicksburg on May 21, 2001, two days after the crest. The aerial photograph below shows the high water conditions on the Yazoo River along the downtown Vicksburg flood wall. The Yazoo River normally flows into the Mississippi River at Vicksburg, but on the date of the crest, the Yazoo River was flowing backwards (upstream) at an estimated rate of 30,000 cubic feet per second. See pictures below.



North Carolina (submitted by Randy Bechtel, NC Geological Survey, State Representative)

A. Education and Environment

- I. Effects of State budget cuts

B. Geoscience Education

- II. N.C. Department of Public Instruction and Curriculum
- III. Conceptual Framework – National Science Standards
- IV. Association of Environmental & Engineering Geologists

C. Geoscience Education Events

- V. Southeastern Geological Society of America
 - Geoscience Education session part II
 - Look forward to national GSA
- VI. North Carolina Science Teachers Association Professional Development Institute
 - OEST/E Awards
 - Rock Giveaway
 - Geoscience presentations
- VII. Environmental Education

A. Education and Environment

I. Effects of State budget cuts

These are “exciting” times locally, statewide, nationally and globally. As of this writing the dust is still settling from the recently passed two-year state budget. Many cuts and reorganizations were included in the budget. Governor Perdue vetoed an historic number of bills but the Republican controlled General Assembly has been able to override most of her vetoes.

Dee Freeman, Secretary of the N.C. Department of Environment and Natural Resources (DENR), sent an email to all staff painting a big picture of the effects of the recession and the current budget cuts. Below I have included a few of the relevant points:

“DENR has taken considerable cuts to its state appropriations with this budget, which are especially severe when you consider the reductions we have already taken since 2008. For example, since 2008 the department's state appropriation has been reduced by 24 percent; the 2011-2012 budget will reduce that by an additional 12 percent in 2011-12 and 22 percent in 2012-13. This will mean that since the end of 2008, DENR will have absorbed over 40 percent cut in budget reductions over this short period of time.

“In addition to the monetary cuts, next fiscal year's budget also contains some significant organizational changes to the department upon mandate of the General Assembly. DENR will lose almost 1,050 employees through reductions in force, fund shifting and divisional transfers.”

One of the final budget decisions included ending the North Carolina Geological Survey's Landslide Hazards Mapping program including the elimination of its six geologist positions. Although a few of the geologists may be able to move on to other positions within state government, landslide mapping will no longer be conducted by the North Carolina Geological Survey.

The Office of Environmental Education was reduced from five to two people with an annual operating budget of \$500. The Office has been under consistent attack and is almost completely dismantled from a peak of ten staff who brought in hundreds of thousands of dollars in external grants. The national Office of Environmental Education, part of the EPA, has also been under attack and is slated to be eliminated.

The effects of the budget cuts on teachers and schools statewide are still being determined.

B. Geoscience Education

II. N.C. Department of Public Instruction and Curriculum

The following is an excerpt from an email sent in July to North Carolina teachers by the State Superintendent June Atkinson.

“Dear North Carolina Teachers,

“I hope that your summer is off to a good start, and while a break from the day-to-day school activities may be welcome, the new school year will be here soon. Even as we plan for 2011-12 it also is critical that we prepare for the sweeping changes that will occur one year from now.

“This week, curriculum specialists and other education leaders gathered in the western region to begin a summer-long series of institutes designed to help local educators prepare for the 2012-13 school year when North Carolina public schools will:

- *implement an entirely new standard course study in all subjects and grades;*
- *use new student assessments to track student performance; and*
- *measure school success with a new accountability model.*

“Teams from every school district are participating in the regional Summer Leadership Institutes, which will be followed this fall with special sessions for principals and additional local professional development activities. Thanks to federal Race to the Top funding, we are able to support a widespread professional development initiative to help all of us be ready for fall 2012.

“These changes are significant. This marks the first time in my career of more than 30 years that North Carolina public schools have transformed our classroom practices and expectations so completely. When the early work on the new essential standards and Common Core began more than two years ago, we knew that we needed to build into our implementation plan professional development and ongoing communication so that all teachers, principals, instructional and curriculum leaders and central office staff would be well prepared and fully supported for the changes ahead.

“Beginning with this email, our Communications staff will be providing you with a monthly calendar that highlights activities to support our transition to 2012-13 and helps you consider your role in the changes that are coming. This calendar will include a few additional informal items to help you get to know the state-level leaders guiding this work and to give you food for thought and, perhaps, a little inspiration for the journey ahead.

“This is just one small way that we hope to support the many activities that are before us. Thank you for everything you do on behalf of our state’s more than 1.4 million public school students.

*“All the best,
State Superintendent June Atkinson”*

These institutes will provide guidance in the transition (Cross-walk) from the previous science curriculum (2004 version) to the 2009 version. Institutes will also cover the detailed 2009 curriculum (Unpacked Content). Still to come is training and development of resource materials (Tool Kits) to support the new state curriculum.



A recent field trip with 2007 N.C. Outstanding Earth Science Teacher Sam Fuerst, Northern High School, giving us “direction” while on a geologic field trip to the Little River Park to see metavolcanic rocks of the Carolina Terrane, north of Durham, North Carolina.

III. Conceptual Framework – National Standards

The ‘Conceptual Framework for K-12 Science Education’ is available at www.national-academies.org Both NAGT and NSTA have held webinars discussing how earth science fits into the conceptual framework and the ramifications for national and state curricula. For more information visit their respective national websites. The following is excerpted from the original National Academies announcement email:

“The framework will serve as the basis for new national K-12 science education standards. It offers a new vision for K-12 education in science and engineering, and embodies a significant shift in how these subjects are viewed and taught. It will also inform the work of curriculum and assessment developers, researchers, teacher educators, and others.”

Race to the Top request for involvement:

Here is a request from **Jennifer Preston** Race to the Top Project Coordinator for Teacher and Leader Effectiveness. Her contact information is listed below:

“We are just kicking off our recruitment for educators to join work groups that will design measures of student learning for all of the non-tested grades and subjects. The registration page is up and running, and can be accessed at <http://tinyurl.com/NCDPIworkgroups>.

These work groups are a wonderful opportunity for teachers to become involved in the discussion of what students should know and be able to do as a result of their time in NC schools.

If you have any questions, please don’t hesitate to contact me via phone or email.

*[P] 919.807.4187 [Please note new phone number.]
[C] 919.448.5967”*

IV. Association of Environmental & Engineering Geologists

(by Rick Kolb, rkolb0915@aol.com)

The Association of Environmental & Engineering Geologists, or AEG, recently established a **K-12 Education Committee** to investigate and formulate ways to advocate for earth science education in grades K-12. One of our objectives is to establish a united effort with other

geological organizations to lobby the American Geological Institute (AGI) for preparation of an AP Earth Science curriculum. We are looking for a few teachers (elementary through high school) to participate in our committee and provide perspectives from the classroom on what is important and where our efforts should be focused. Please email Rick Kolb if you are interested in participating. The committee meets once a month via a GoToMeeting conference call of about an hour.

The Carolinas Section of AEG will again purchase AGI Earth Science toolkits for distribution in November at the annual meeting of the North Carolina Science Teachers Association Professional Development Institute (see below for more information). We will solicit donations from private individuals and other geological organizations to buy the toolkits, and expect to purchase several hundred, as we have in past years. Our members will also help bag samples of rocks that will be distributed to meeting attendees.

The Carolinas Section typically holds a geologic field trip in the fall. All are invited, members and non-members alike, and the cost is nominal. Our section website, www.aegcarolinas.com, will have details once the trip is finalized.

The Carolinas Section of AEG holds quarterly dinner meetings in Charlotte (January/February), Raleigh (April), Asheville (summer) and Greensboro (Natty Greene's on October 27 this year). We welcome attendance by geoscience teachers at all of our meetings. Admission to our meetings for teachers is only \$10, and it's likely members will also buy you a beer or two to accompany your buffet dinner. Meeting information is on our section website. Other AEG sections also hold periodic meetings. You can find out details for your state through AEG's national website: www.aegweb.org.

The President-elect of AEG, Jennifer Bauer of Arden, will ascend to the presidency at AEG's annual meeting in Anchorage this September. Jennifer is a native of western North Carolina and received her degree in geology from UNC-Chapel Hill. She will be touring the United States making presentations at AEG's sections during her year in office, and she will present at one of the meetings of the Carolinas Section.

C. Geoscience Education Events

Here is a list of upcoming North Carolina events:

1. October 12-15, 2011 – NAAEE Raleigh North Carolina
2. October 2011 – Carolina Geological Society (CGS) Date/Field Trip TBD
3. November 9-11, 2011 – NCSTA Greensboro, North Carolina
4. March 31-April 2, 2012- SEGSA Asheville, North Carolina
5. Fall 2012 – CGS TBD
6. November 4-7, 2012 - GSA Charlotte, North Carolina
7. November 8-9, 2012 - (these dates are not confirmed) NCSTA Greensboro, North Carolina

V. Southeastern Geological Society of America (SEGSA) and GSA

Through a quirk of scheduling North Carolina will be hosting SEGSA in Asheville, N.C. March 31-April 2, 2012 *Shaping Continents, Shaping Landscapes, Shaping Policy* and national GSA in Charlotte, N.C. November 4-7, 2011. The latter meeting may be the weekend before the North Carolina Science Teachers Association Professional Development Institute in (NCSTA) in Greensboro.

I have sent in a proposal for the SEGSA in Asheville to continue the theme from the geoscience education session at the previous meeting. The proposal's emphasis is on assisting outstanding earth science teachers to mentor students and new, or geologically

inexperienced, teachers to help them understand the interconnectedness of geology over a wider range of topics than identifying rocks and minerals and learning the layers of the Earth. Industry, Government and Academia can support teachers by providing understandable information in an understandable format so that real world connections can be made. Another aspect to this process is the revision of the National Science Curriculum (in process, see Conceptual Framework this article), the Race to the Top program and how geoscience education is affected by these programs.

Lastly, keep looking ahead to the other conferences, in particular GSA, and send in proposals for workshops, field trips and ideas for other ways to work with earth science teachers.

VI. North Carolina Science Teachers Association Professional Development Institute (NCSTA-PDI)

The NCSTA-PDI will be November 9-11, 2011 in Greensboro, North Carolina www.ncsta.org/. This year will again see the N.C. Aggregates Association organizing and providing literally tons of rock samples at the PDI. In conjunction with the rock giveaway, I put a call out to earth science teachers and educators to send in proposals to the PDI to present their rock kit geoscience activities (or any kind of geoscience activity) to highlight the rock giveaway and assist teachers with geoscience education in their classrooms. Hopefully there will be plenty of room in the session schedule for these presentations.

The PDI is also where the state winner of the Outstanding Earth Science Teacher (OEST) and Outstanding Earth Science Educator (OESE) are presented. I am proud to announce this years' North Carolina winners The N.C. OEST winner is Mr. Tim Martin from Greensboro Day School www.greensboroday.org/ in Greensboro, Guilford County, N.C. The N.C. OESE winner is Dr. Andy Heckert from Appalachian State University in Boone, Watauga County, N.C.

VII. Environmental Education

Even though the Office of Environmental Education has been deeply cut, the Environmental Education Certification program is still active. The certification is a program for informal educators to learn new teaching skills, hone old skills, and get a first hand idea of the education that occurs outside the formal education arena. The certification will give you a background in environmental education (not environmentalism or activism) and teach effective communication techniques for multiple learning styles, age levels and audiences. This program is flexible so the 40-hour work week person can complete the certification program in the allotted time. For more information go to <http://www.eenorthcarolina.org/>

The National Association of Environmental Educators (NAAEE)

NAAEE will be holding its 40th annual conference in downtown Raleigh at the new convention center October 12-15, 2011. Here is the link to register for the conference along with more information about the organization <http://www.naaee.net/conference/program>

Thank you to Rick Kolb and Mark Ruckstuhl, of AEG Carolinas Section and Manley Midgett, N.C. Race to the Top for their contributions to this submission.

Note: This is not an official publication of the North Carolina Department of Environment and Natural Resources

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

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

The Carolina Geological Society will hold its 2011 Annual Meeting from October 21st – 23rd. The meeting's two-day field trip will be to the Deep River Triassic basin. No other meeting information is available at this time, but will soon appear here:

http://www.carolinageologicalsociety.org/CGS/2011_Meeting.html.

The South Carolina Science Council (SC² - <http://www.southcarolinascience.org/>) will hold its annual meeting from November 2nd-4th at the Myrtle Beach Convention Center. There will be two keynote speakers, one of whom will be Tom Falvey, the Education Director at the South Carolina State Museum. His keynote address will be "You're Teaching Science?! Nerve-racking Adventures in the Uncomfort Zone."

The South Carolina Department of Health and Environmental Control (SCDHEC) continues to provide educational resources appropriate to South Carolina's teaching standards. DHEC's Office of Solid Waste Reduction and Recycling office offers the "Action for a Cleaner Tomorrow" training program and curriculum supplement (<http://www.scdhec.gov/environment/lwm/recycle/education.htm>), as well as other recycling-related educational resources. The "Becoming a Green Driver" initiative (http://www.scdhec.gov/environment/lwm/recycle/green_driver.htm) is an environmental education initiative focused on new drivers in high school driver's education courses.

The SCDEC is also conducting a study that attempts to find the sources of mysterious pollution along St. Helena Sound on Edisto Island (http://www.scdhec.gov/environment/water/ow_edisto.htm). Several pollution advisories have been issued in recent years, but there is no known source of this pollution. The study is ongoing and can be tracked at the study website.

Clemson University continues to offer K-12 Earth Science educational resources through their various outreach programs (<http://www.clemson.edu/ces/geolk12/index.html>). The university's Creative Inquiry initiative and Bob Campbell Geology Museum are sponsoring the Carolina Paleontology Project (<http://www.clemson.edu/public/geomuseum/research/creative-inquiry.html#Creative%20Inquiry>), which sponsors original student research with the goal of publishing papers or creating educational tools for K-12 classrooms, teacher training workshops or museum programs. The students blog extensively about their experiences in the classroom, lab and field.

Environmental Education in South Carolina (EEinSC - <http://eeinSC.org/>) offers links to many useful resources for teaching a variety of environmental subjects, including environmental education grants, contents and awards as well as webinar opportunities.

South Carolina Educational Television (SCETV) is offering episodes of the "Environmental Ed" program (<http://eng-apps.sctv.org/ITVSch/seriesSchedule.cfm?Class=Science&POrd=31&SearchWord=environmental%20ed>). These episodes are available through the ITV network. Curriculum guides are available at ITV searchable database of teacher's guides. SCETV are also sponsoring RiverVenture (<http://www.riverventure.org/>), which is a nifty little website allowing students to take virtual field trips on several South Carolina rivers. There are extensive teacher resources attached to each "float-trip."

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

2011 TSTA Workshop Scheduled. The 2011 Tennessee Science Teachers Association annual meeting will be held at the in Murphreesboro, TN November 10-12, 2011. The Tennessee Earth Science Teachers (TEST) has organized a day-long workshop entitled “Chemistry and Physics Using Tennessee Earth Materials”. The session is being co-led by Drs. Lionel Crews (Physical Properties) and Michael Gibson (Chemistry with Fossils) from the University of Tennessee at Martin, Dr. Ann Holmes (Chemical Properties of Earth Materials) from the University of Tennessee at Chattanooga, and Dr. Don Byerly (Application of Earth Materials Chemistry to Daily Life) from the University of Tennessee, Knoxville. The workshop is scheduled for Thursday November 10 at a cost of \$55 per person. Additional one-hour earth science break-out sessions will occur on Friday November 11. Teacher participants receive hands-on lesson and earth materials boxes for classroom use. To register for the meeting and workshop visit: <http://www.tnsta.com/> or contact Dr. Michael Gibson, Dept. of Agriculture, Geosciences, and Natural Resources, University of Tennessee at Martin, Martin, TN 38238 (731.881.7435; mgibson@utm.edu).

Meteorology Concentration at University of Tennessee at Martin. With the recent hiring of Dr. Todd Albert, UT Martin’s Dept. of Agriculture, Geosciences, and Natural Resources has added a concentration in meteorology to its Bachelor of Science in Geosciences degree program. The only program like it in the State, UTM’s program has already matriculated 14 new majors. For more information, visit: <http://www.utm.edu/departments/geosciences/documents/GEOSCIENCE-Meteorology.pdf>.

GeoConclave. The annual geology competition between geology programs in Tennessee will hold its next GeoConclave at Fall Creek Falls State Park Sept. 23-25. 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 UT Knoxville hosts with a field trip. For information contact Dr. Colin Sumrall ((865) 974-0400; csumrall@utk.edu).

You can join NAGT using the online form at <https://www.webassociationmgmt.org/nagt/>, or by downloading a membership application at https://www.webassociationmgmt.org/nagt/memform.v2_small.pdf.

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

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