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NAGT

[www.nagt.org](http://www.nagt.org)

SE-NAGT

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

Geological Society of America

[www.geosociety.org](http://www.geosociety.org)

US Geological Survey

[www.usgs.gov](http://www.usgs.gov)

Earth Science Week

[www.agiweb.org](http://www.agiweb.org)

[www.earthscienceworld.org](http://www.earthscienceworld.org)

[www.earthsciweek.org](http://www.earthsciweek.org)

**Winter-Spring 2009**

**Newsletter Deadline:**

**February 15, 2009.** Please

send news items to Bill at

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# Proposed Spring Southeastern GSA Sessions: Energy Geoscience Literacy

by Bill Witherspoon

Q: Which of the following does not belong with the other three and why?

- a. Southeastern Offshore Oil
- b. Nuclear Waste Disposal
- c. Bigfoot
- d. Clean Coal

A: c. Bigfoot. It is the only one for which geoscience research is not required to tell whether it is fantasy or reality.

There seems to be more media interest in energy now than at any time since the 1970's. Yet public ignorance regarding the related science is great. For example, as the politicians clamor about offshore oil, you get the impression it is only a matter of turning on a very slow tap. "I can't believe it could take ten years," I heard someone at the gym say. The public is offered little geological perspective that would explain that petroleum exploration not only takes time, but also is full of surprises.

Granted, the surprises are not always negative. When I worked for an oil company on the North Slope of Alaska in the 1980's, company lore had it that a former chief scientist, having seen the tightly-cemented Permian sandstone of the Sadlerochit Mountains and the mediocre source rocks underlying it, once vowed to drink every drop of oil discovered on the North Slope. But it turned out that the cementation was much diminished under Prudhoe Bay, and in an unusual scenario, the sandstone seemed to be charged from younger source rocks. Hey, presto! 10 billion barrels plus of oil was discovered, by my company's rivals.

At this spring's at Southeastern Section meeting of GSA, let's have a conversation about how we could be doing more to teach about the geoscience of energy. Are we leaving our students and the public prone to misinformation about aspects of fossil fuels and nuclear power?

I am submitting a proposal for an SENAGT-sponsored half-day technical session and a poster session entitled "Energy Geoscience Literacy: What Should Teachers, Students and the Public Know?" Any help with planning, presiding, and (of course) presenting at this session would be most welcome. You can contact me at [bill.witherspoon@fernbank.edu](mailto:bill.witherspoon@fernbank.edu).

Knowledge about energy-related science has become critical to informed citizenship.

Suppose that every undergraduate who has taken a geology course could explain the three ingredients necessary for an oil or gas accumulation (reservoir, charge, and trap). Suppose they knew that even when toxins such as mercury are removed from coal smokestacks, there remains the problem of keeping them out of the water supply. Suppose they understood that sequestering coal plant CO<sub>2</sub> down former oilfields has limitations, including the supply of suitable fields near the power plant and the uncertainty of the CO<sub>2</sub> remaining underground. Suppose they had heard of the years of struggle to find geologically as well as politically acceptable repositories for nuclear waste.

One recent bit of good news is that climate change education is receiving increased attention, for example, with the climate literacy principles recently drafted by NOAA and others. (See [http://www.climate.noaa.gov/education/pdfs/CL-Lit\\_Brochure\\_2nd\\_draft\\_v4\\_r.pdf](http://www.climate.noaa.gov/education/pdfs/CL-Lit_Brochure_2nd_draft_v4_r.pdf).) Suppose we were able to incorporate this progress, too, into our teaching.

Assuming that these topics were addressed adequately at the college level, what about K-12 education? Three years ago I experimented with teaching a semester-long seminar for high school students called "Energy for a Small Planet." The students earned a geology credit. About half the course content focused on the geoscience behind fossil fuel formation, nuclear waste disposal, carbon

sequestration, impacts of coal, and climate change. The remainder of the course surveyed the technologies of alternative energy and energy efficiency. Guest speakers and field trips helped compensate for the instructor's meager knowledge in some of these areas.

We need to try such experiments to discover how much of the science of energy is appropriate to the K-12 curriculum and at what grade level. We need to come together on the points of energy science literacy. The ultimate goal is to strengthen our democracy by having citizens who can participate in informed decisions.

## MEETING CALENDAR

### Most recently reported dates of past or future meetings

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National Science Teachers Association and Affiliates		
Area	Latest date on web site	City
National	Mar. 19-22, 2009	New Orleans
Southern	Oct. 30 – Nov. 1, 2008	Charlotte
Alabama	Sept. 30 - Oct. 1, 2008	Birmingham
Florida	Oct. 23-25, 2008	Orlando
Georgia	Feb. 12-14, 2009	Savannah
Louisiana	Nov. 1-3, 2007	LaFayette
Mississippi	Oct. 20-21, 2008	Jackson
North Carolina	Nov. 14-16, 2007	Greensboro
Puerto Rico	March 15-16, 2007	Bayamon
South Carolina	Oct. 22-24, 2008	Myrtle Beach
Tennessee	Nov. 20-22, 2008	Nashville

Geological Societies		
Organization (Area)	Latest date on web site	City
GSA (National)	Oct. 5-9, 2008	Houston
GSA (Southeastern)	Mar. 12-13, 2009	Tampa
GSA (South Central; incl. LA)	Mar. 15-17, 2009	Dallas
Georgia Geological Society	Oct. 17-19, 2008	Cartersville
Carolina Geological Society	Oct. 31- Nov. 2, 2008	Spruce Pine

## The Road to Tampa - Book Review by Pamela J. W. Gore: *Roadside Geology of Florida*

Jonathan R. Bryan, Thomas M. Scott, and Guy H. Means, 2008, *Roadside Geology of Florida*, Mountain Press, Missoula, Montana, 376 p. ISBN 13: 978-0-87842-542-6. \$26.

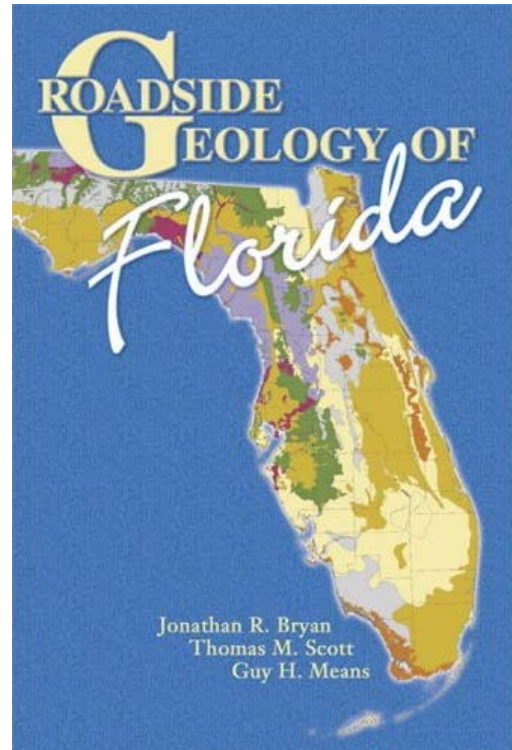
This book is a must-have for everyone venturing to Florida for the Spring 2009 SE-GSA / SENAGT meeting in Tampa, or your next trip to the beach.

The latest addition to the ever-popular *Roadside Geology* series from Mountain Press, it is the first in the series to be printed in full color and on slightly glossy paper, in a new printing process. The price is a little higher than previous editions (\$26, compared with \$18 or \$20 for the black and white editions), but the difference in appearance and quality is more than worth the slight cost increase. There are 112 color photographs, along with a number of geologic maps and diagrams in full color – a real accomplishment for the Roadside series. Some pages even have attractive navy blue text, highlighting unusual fossils and geologic features.

There are the usual road logs for the major highways, but with a surprise twist – there are even river logs, where a canoe trip can take you through geologically interesting territory - such as the Suwannee, Withlacoochee and Alapaha Rivers, which take you past outcrops with fossil localities (such as agatized coral, Florida's "State Stone"), whitewater rapids (yes, in Florida), and various historic locales. There are a number of side trips to Florida state parks, and separate sections on interesting items along the way - a trilobite found in a Florida drill hole, fossil elephants, fossil saber-toothed cats, fossil whales, sharks teeth, cave pearls, an oil field, sinkholes and springs galore (more than 700 in the state). There is even a photo of the Creature from the Black Lagoon, said to inhabit Wakulla Springs in the 1954 horror flick. There are a number of section titles throughout the book that make for fun reading, such as the one entitled "We Serve Anybody – Fossil Crabs of Florida".

The book divides Florida into five regions: the Panhandle, Northern Peninsula, Central Peninsula, Southern Peninsula, and the Florida Keys, each accompanied by a color geologic map with main roads and towns labeled. Introductory chapters cover the geologic framework of the state, with an emphasis on coastal processes and oceanography, in addition to common rocks, minerals and fossils (illustrated with color photos), and an overview of Florida through geologic time, from the Late Precambrian to the present. The dynamics of the coastal environment are described in a chapter called "Sculpting a Land from the Sea", including geomorphology and processes such as beach drift, the origin of barrier islands, and the effects of hurricanes on the coast. Aquifers, karst, and springs are also described.

The lead author, Jonathan Bryan, is an Earth Science instructor at Okaloosa-Walton Community College, in Niceville, Florida [and one of Florida's NAGT representatives – ed.]. The book took six years in the making, with input from co-author Tom Scott on topics such as geomorphology and phosphate mining, and co-author Guy Means on geoarchaeology. The outstanding computer-generated graphics were contributed by Amanda Kosche.



This is a fun book to look through, as well as read in greater detail, because it is so much more than a series of road logs. I have been to Florida several times, but without this book, I missed a lot of geology that I never knew was there. I am going to start planning my next fossil collecting trip. I can't wait for a chance to go back to go back to Florida – probably for the Tampa meeting in March!

*[Dr. Gore is Professor of Geology at Georgia Perimeter College, SENAGT Secretary and Treasurer, and a co-author of the forthcoming Roadside Geology of Georgia.]*

## Regional News in Geoscience Education

**Alabama** (submitted by David C. Kopaska-Merkel and Andrew K. Rindsberg)

Traditional themes continue in Alabama. Funding remains inadequate at all levels and in almost every place. This means that costly lessons generally cannot be taught.

There definitely are some bright spots, most of which continue from last year. The AMSTI initiative, which seeks to develop inquiry-based programs in math and science in Alabama schools has continued to expand its reach to additional schools. After successfully wresting control of its funding away from the Department of Environmental Management, Legacy (Alabama's environmental education outreach project) will be in a better position to bring environmental knowledge and awareness to Alabamians, especially schoolchildren. Legacy hosts an annual summer teacher institute, provides small grants of various kinds to environmental education projects, and publishes attractive and educational posters and other products that are distributed at no charge. This is something that Alabama does well. Contrary to national standards, evolution is generally not taught in Alabama schools and Earth sciences generally not talk in the high schools. There are a few exceptions, where well-funded schools are able to provide earth-science education as an elective in high school. The annual teacher fossil workshop, jointly sponsored by the Geological Survey of Alabama, University of West Alabama and Discovering Alabama, continues and remains popular. More material is available on the web all the time, although much of it is not specifically within the purview of earth-science education. New resources, such as the Encyclopedia of Alabama (<http://encyclopediaofalabama.org/>), supplement pre-existing source material (although in this case there are only a few Earth science contributions).

The ongoing drought continues to affect much of the inland Southeast. In Alabama the drought is currently severe in the Valley and Ridge province, including the Birmingham area. Water shortages in the Chattahoochee drainage continue to trouble Alabama, Georgia, and Florida. The water shortage provide opportunities for classroom discussions and activities relating to natural resources, urban planning, environmental protection, and so on.

<http://www.drought.noaa.gov/>  
<http://www.drought.gov/portal/server.pt>  
<http://www.nsstc.uah.edu/aosc/palmer.htm>

ALLELE lectures on evolution at UA. Here is last year's schedule:

<http://bama.ua.edu/~evolution/schedule.html>

And here is the home page for ALLELE:

<http://bama.ua.edu/~evolution/index.html>

A new series of lectures is planned for the 2008-2009 academic year (perhaps only for the spring semester), but details have not yet been finalized.

Fossils of the Black Belt XI (<http://bps-al.org/>) is coming up on October 21. For the first time, members of the Birmingham Paleontological Society will help with this event as volunteers.

The two amateur paleontological societies, APS and BPS, continue to hold monthly field trips and public lectures. APS has also gone monthly to the Minkin Site as part of their ongoing project to

salvage Carboniferous vertebrate trackways and other fossils. The APS is hosting Nic Minter, a British trace-fossil expert, who will visit Alabama to study the Minkin Site fauna in September.  
[www.alabamapaleo.org/](http://www.alabamapaleo.org/)  
<http://bps-al.org/>

This has been a good year for geoscience in local museums. The McWane Science Center (Birmingham) has an impressive new exhibit on Alabama Dinosaurs:  
<http://www.mcwane.org/subpages/Exhibits.asp>

The Anniston Museum of Natural History will host a temporary exhibit on fossils:  
"Ancient Microworlds: The Inner Beauty of Fossils

October 13-December 31, 2008

Ancient Microworlds demonstrates how beautiful fossils are under magnification. Giraude Foster, physician, biochemist, research investigator and photographer has assembled 66 fascinating and beautifully framed images of fossils."

[http://www.annistonmuseum.org/Exhibit\\_Halls/Changing\\_Exhibits/index.html](http://www.annistonmuseum.org/Exhibit_Halls/Changing_Exhibits/index.html)

The Gulf Coast Exploreum's Digital Theater will show "Alabama Eco-Journeys" through November 2.  
[http://www.exploreum.com/digitaltheater\\_current.html](http://www.exploreum.com/digitaltheater_current.html)

The Alabama Museum of Natural History (Tuscaloosa) has a new Curator of Paleontology: Dr. Mark D. Uhen, formerly Director of the Cranbrook Institute of Science in Michigan and more recently a Research Associate with the National Museum of Natural History. Dr. Uhen is a specialist on fossil whales, which he has collected in the American Southeast as well as sites as distant as Egypt and Peru.

Andrew K. Rindsberg (The University of West Alabama) was elected SE NAGT VP.

**Florida** (no information submitted, but see book review above)

**Georgia** (submitted by Bill Witherspoon)

### **September 15 is Evolution Revolution! Workshop Application Deadline**

The Emory College Center for Science Education invites high school science teachers to attend an exciting two-day evolution event. The October 23rd workshop for high school teachers will address the challenges and best practices of teaching evolution. Workshop participants are then invited to stay for E.O. Wilson's keynote address on "Darwin and the Future of Biology," and Friday, October 24th's public symposium on the future of evolution.

Stipends and professional learning units (PLUs) are available for participation in both days. The application deadline is September 15, 2008. Find out more and apply online at:

<http://www.cse.emory.edu/evolution>

### **Georgia Geological Society Field Trip**

The Georgia Geological Society will visit the Georgia Valley and Ridge for the 2008 Annual Field Trip (October 17-19). We move the fieldtrip from the normally scheduled Columbus Day weekend due to the National GSA meeting in Houston, TX. Many of our members will be attending the national GSA meeting. The trip, entitled: The Emerson-Talladega Fault, the Great Smoky Fault, and adjacent Folding and Faulting: Geology and Historical Interpretations based on detailed Geologic Mapping in Polk and Bartow Counties, Georgia, will be headquartered in Cartersville on I-75, less than an hours drive north of Atlanta. Leaders will include Randy Kath, Tim Chowns, Tom Crawford, and Jim Tull. For more information at this time contact Randy Kath at (678) 839-4063 or [rkath@westga.edu](mailto:rkath@westga.edu)

## **Tellus Museum to open in early 2009**

In early 2009, a major science museum with a strong geoscience component will open in Cartersville. The Tellus Museum incorporates the mineral collection of the Weinman Museum, which existed from 1983 till 2006 on the same site. However, the entire former museum could fit inside just one of the galleries of the new 120,000 square foot facility.

At the August meeting of the Atlanta Geological Society, members were wowed by a presentation by museum curator Julian Gray. The Fossil Gallery will exhibit several dinosaurs including a *Tyrannosaurus Rex* centerpiece. The Mineral Gallery will host a dazzling collection mounted in displays modeled after some of the best in the world. There will be a plate tectonics exhibit featuring a huge globe that will accommodate animated projections of plate movements, or other features of the Earth and other planets. Mining equipment will be part of a display on the Cartersville mining district. The museum will house a digital planetarium, and the grounds will also host an observatory.



## **Louisiana** (submitted by Pam Blanchard)

### **LSU – U Minn. Research Experience for Undergraduates**

Louisiana State University and the University of Minnesota are collaborating through a three-year National Science Foundation Research Experience for Undergraduates (REU). This program brings together high achieving undergraduates from around the country and introduces them to scientific research both in the field and in the lab. This year, LSU's Department of Oceanography and Coastal Sciences has hosted five undergraduates who are investigating multiple aspects of wetland land-building, such as post-flood sediment accretion, enhanced sediment trapping by plants, and nutrient assimilation by delta wetlands. The Wax Lake Delta is being studied as the model system for measuring the rates of the land building associated with a young delta. Each student has an individual project, which gives them exposure to field research, but at the same time, their findings complement a larger research project that has realistic application to coastal restoration in Louisiana.

This year's LSU-UMinn. REU students are: Michaela Long (University of Arizona), Christine Carter (Bradley University), Michael Sekor (Vassar College), Leslie Sinak (Lawrence University), and Jennifer Keliher (Southwestern College). The students are being mentored by LSU's Dr. Robert Twilley (principal investigator), Dr. Guerry Holm, and Azure Bevington. After spending July in Louisiana, collecting and analyzing data, they returned to the University of Minnesota to present their results in a group research paper and individual posters.

### **LaURGE - Louisiana Undergraduate Recruiting and Geoscience Education**

PI Jeff Nunn (LSU) and co-investigator Jeff Agnew (Centenary College) have recently been awarded an NSF grant entitled Louisiana Undergraduate Recruiting and Geoscience Education. Nunn and Agnew will develop professional development workshops for high school biology and physics teachers at LSU in Baton Rouge, LA and Centenary College in Shreveport, LA. In addition, Nunn and Agnew plan to develop a series of demonstrations that they and/or geology students can do in classrooms at teacher invitation. The workshops will include a field-based component and feature geoscience tools

such as ground penetrating radar to understand wave phenomena and its application to earth processes (e.g., greenhouse effect, earthquakes, seismic reflection and refraction). The goals of the proposed program are to interweave geoscience education into the existing curriculum for high school biology and physics classes in order to reach a greater number of students; provide teachers of those classes with lesson plans that promote interest in geoscience, foster critical thinking by students, relate what is learned in class to the real world, and are consistent with current knowledge/research in geoscience; and provide teachers with equipment/supplies that make these lesson plans the highlights of the course.

### **LSU's Pathways to Inquiry**

LSU's Pathways to Inquiry (PTI) Project, a proof-of-concept project funded through NSF DRK-12 program, is entering its third and final year of their grant. The PTI Project has built two tools to help middle school Earth science teachers incorporate inquiry skills into their teaching. The goal of the Inquiry Skill Analyzer is to assist teachers in analyzing their own science inquiry skills as well as those of their students in order to identify areas of strengths and weaknesses, to monitor progress, and to better utilize teaching time. The goal of the Inquiry Activity Portal is to assist teachers in developing skills in selecting, designing, implementing, and evaluating technology-supported inquiry activities to develop science inquiry skills in context, especially in weak areas identified through the assessment tool. This year, a dozen eighth grade Earth science teachers are piloting the two tools. The project website is <http://pti.lsu.edu>.

### **LA Sea Grant's Ocean Commotion**

The Louisiana Sea Grant College Program is proud to host Ocean Commotion 2008 at the LSU Pete Maravich Assembly Center on Thursday, November 13, 2008. Each year Ocean Commotion brings about 3,000 area K-8 students, teachers and chaperones to LSU to learn about our coast and sea from about 60 exhibitors. Hands-on exhibits are provided by LSU researchers and public and private organizations. The primary purpose of Ocean Commotion is to give students the chance to learn about and touch the products of the sea and coast—the aquatic animals, plants, and minerals—upon which Louisiana's citizens are so dependent. Visit the Ocean Commotion website at <http://lamer.lsu.edu/projects/oceancommotion/>.

### **LSU's Coastal Roots Program and LUMCON's Bayouside Classroom**

The LSU Coastal Roots Program and LUMCON's Bayouside Classroom were recent recipients of one of five 2008 NOAA Bay-Watershed Education and Training Grants. The three-year grant will allow Coastal Roots and Bayouside Classroom to enhance teacher professional development and expand their outreach by introducing new materials and increasing the number of schools in both programs. This grant will also allow Coastal Roots to expand into Mississippi through a subcontract to the Mississippi State University's Coastal Research and Extension Center in Biloxi, MS. The first of four Mississippi Coastal Roots schools is planned to join the program in the 2008-09 school year. Teachers in Mississippi will be able to draw from the expertise of the Louisiana teachers that have already been participating in both the Coastal Roots and Bayouside Classroom programs. The LSU Coastal Roots Program, which began in 2000, helps participating schools start and maintain school-based plant nurseries to produce seedlings that students then plant on annual restoration trips. Students learn about the issues facing the coastal zone as well as horticultural skills. Participating schools involved in this ecological stewardship program are located in thirteen parishes across the coastal zone, and will increase from 24 schools in 2007-8 to 32 schools in 2008-9. LUMCON's Bayouside Classroom is a middle and high school water sampling program designed to promote environmental awareness by collecting and interpreting water quality data and connecting this activity to the science that students learn in schools.

**Mississippi** (no information submitted)



## **North Carolina** (submitted by Randy Bechtel)

### **NC Science Teachers Association Professional Development Institute (NCSTA-PDI)**

The NCSTA is hosting a regional NSTA meeting this fall (see link below) and will not be running the usual statewide PDI in 2008. The NSTA Southern Regional meeting will be in Charlotte, North Carolina from October 30- November 1st, 2008. For more information contact: <http://www.ncsta.org/> or <http://www.nsta.org/conferences/>. The annual NCSTA-PDI will return in 2009.

Plans are in the works to bring the Rock Give-Away to the NSTA event in Charlotte. If you are interested in volunteering, please contact Dr. Kenneth Taylor, Chief Geologist and Assistant State Geologist, N.C. Geological Survey, by email [Kenneth.B.Taylor@ncmail.net](mailto:Kenneth.B.Taylor@ncmail.net) or by phone 919-733-2423 x401

### **The North Carolina Outstanding Earth Science Teacher (OEST) Award Winner for 2008**

The announcement of the 2008 North Carolina OEST Winner will be made soon, so watch our website for more information: [http://www.geology.enr.state.nc.us/proj\\_earth/proj\\_earth.html](http://www.geology.enr.state.nc.us/proj_earth/proj_earth.html)

### **Nominations/Applications for the North Carolina Outstanding Earth Science Teacher (OEST) Award in 2009**

In North Carolina, there are two awards: one for Formal Teachers in the K-12 classroom, and one for Informal Educators (museums, industry, etc.). Any teacher, or other K-12 educator, who covers earth science content with their students, and has not won the award previously, is eligible!

Nominations/Applications for the North Carolina OEST Award are currently being accepted through April 2009. This award acknowledges an outstanding formal teacher and an informal educator in the earth sciences. For more information go to:

[http://www.geology.enr.state.nc.us/proj\\_earth/proj\\_earth.html](http://www.geology.enr.state.nc.us/proj_earth/proj_earth.html) or contact Randy Bechtel at [Randy.Bechteln@ncmail.net](mailto:Randy.Bechteln@ncmail.net).

### **Elementary Teacher Workshop**

The NC Geological Survey is developing a 4th grade workshop on geology as it relates to the North Carolina Standard Course of Study (SCOS). The aim of this workshop is to provide 4th grade teachers with content and resources to assist them in teaching geologically related material in the SCOS. A Needs Assessment has already shown teacher interest in such a program. If you are aware of a similar program please let me know so this program can build on previous experiences. I can be contacted by email at [Randy.Bechteln@ncmail.net](mailto:Randy.Bechteln@ncmail.net) or by phone 919-733-2423.

### **Professional Development and Educational Field trip**

The Carolina Geological Society will be running its 2008 CGS Field Trip and Annual Meeting Spruce Pine Mining District- Little Switzerland, NC October 31-November 2, 2008. Sponsored by The North Carolina Geological Survey <http://www.carolinageologicalsociety.org/cgs2002.htm>

### **From the North Carolina Department of Public Instruction (DPI)**

The K-12 Science Section at the Department of Public Instruction is excited about a curriculum development project we are currently working on with master teachers from around the State and Dr. Lorin Anderson with Revised Bloom's Taxonomy. These teachers have developed unit plans for science for each grade level from Kindergarten through grade 8 and for Biology, Earth/Environmental Science, Chemistry, Physical Science and Physics at the high school level. The K-12 units presently are in draft form and were distributed at the Science Summer Leadership Institute in New Bern on July 14-17, 2008. These units will be up on our web site starting August 1, 2008. The final completed set of K-12 units will be ready to roll out at NSTA in Charlotte in late October.

Normally the NC Standard Course of Study for Science is revised every five years. Our current standards were adopted in 2004, so the next revision is due in 2009. However, the State Board of Education has asked for a delay in revisions pending their analysis of various recommendations from the Blue Ribbon Commission on Testing and Accountability. This report can be read at: [http://www.ncpublicschools.org/sbe\\_meetings/0801/accountabilityfinalreport.pdf](http://www.ncpublicschools.org/sbe_meetings/0801/accountabilityfinalreport.pdf)

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**Puerto Rico** (no information submitted)

**South Carolina** (submitted by Gwen Marie Daley)

### **Bob Campbell Geology Museum's Tenth**

Congratulations to Clemson University's Bob Campbell Geology Museum, which will celebrate its tenth birthday with an open house on September 28<sup>th</sup>. For more information about the festivities, as well as information about the exquisite 30-million-year old leatherback turtle fossil found in Summerville, please see: <http://virtual.clemson.edu/groups/geomuseum/>.

### **South Carolina Science Council Annual Conference**

The South Carolina Science Council ((SC)<sup>2</sup>) will hold its annual conference on October 22-24 at the Myrtle Beach Convention Center. Jeff Corwin, of Animal Planet fame, will give the keynote address. There will be field trips to Ripley's Aquarium, the Myrtle Beach solid waste facility and Myrtle Beach State Park, among others. Workshop topics include the geology, biogeography and geologic history of South Carolina as well as other topics.

The South Carolina Earth Science Teachers Association (SCESTA) will hold their annual conference at the (SC)<sup>2</sup> meeting on Friday, October 24<sup>th</sup>. More information on the meeting including registration and housing is available on (SC)<sup>2</sup>'s website: <http://www.southcarolinascience.org>.

### **Regional NSTA in Charlotte**

The Southeast Regional Conference of the National Science Teachers Association (NSTA) will be held in Charlotte, North Carolina a week after (SC)<sup>2</sup>'s meeting (October 30<sup>th</sup> - November 2<sup>nd</sup>). The keynote speaker will be forensic anthropologist Kathy Reichs, whose books inspired the television series *Bones*.

There will be over 300 workshops and presentations on a wide variety of topics including workshops on "Literacy-based Elementary Earth Science" and the South Carolina Physical Science Companion Project. Field trips on the schedule include tours of the Reed Gold Mine and a trip to the Blue Planet Water Environmental Center. For more information, please see: <http://www.nsta.org/conferences/2008cha/>.

### **South Carolina Water Resources Conference**

The inaugural biennial South Carolina Water Resources Conference, sponsored by the Clemson University Restoration Institute, will be held on October 14<sup>th</sup>-15<sup>th</sup> at the Charleston Area Convention Center. According to the official website, "[t]he purpose of this conference is to provide an open forum

to discuss current water policies, research projects, and water management in the state.” For more information, please see: <http://www.scwaterconference.org/>. At right, Dr. Scott Werts, Assistant Professor of Geology at Winthrop University, does some water resources education at the April 26 Earth’s Birthday Celebration at the Museum of York County. A groundwater model shares the stage with a garfish from the Catawba River.



## Tennessee (submitted by Michael A. Gibson)

### Master of Education: Geoscience Education degree has begun

This fall, UT Martin has begun a new Masters of Education: Geoscience Education degree. The program is designed for teachers seeking advanced degree in teaching the geosciences or wish to teach dual credit geology in their high schools.

The program is an online degree, with the exception of a field component, and consists of faculty from across Tennessee. Unlike most programs ours is shared with the School of Education and consists of approximately one-half of the courses master’s level instruction classes taught by education faculty and the other-half geoscience content courses taught by geoscience faculty and are usually team-taught.

Geoscience courses include Advanced Earth Systems Science, Advanced Physical Geology for Educators, Understanding Evolution, Oceanology for Educators, Field Experience in Geoscience, Global Climate Change, and Astrophysics for Educators. We anticipate expanding the course offerings in the future. For more information, contact Dr. Michael Gibson, Dept. of Geology, Geography, & Physics, University of Tennessee at Martin, Martin, TN 38238 (731.881.7435; [mjgibson@utm.edu](mailto:mjgibson@utm.edu)).

Dr. Gibson (top level, hat) with a group of teachers he took to the Dauphin Island Sea Lab.

“They started from this tropic port, aboard this tiny ship.”



OEST nomination form is now available at <http://nagt.org/nagt/programs/oest.html> .

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