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# South Carolina Earth Science Teachers Association Newsletter

# Highlights from the Annual SCESTA Meeting at SC<sup>2</sup>

On November 5, 2004 we had our annual meeting at the SC<sup>2</sup> Conference held this year at the Charleston Convention Center. Eighteen members were in attendance. Outgoing president Carla Keasler chaired the meeting.

Due to low attendance in the past and lack of participation, the question was asked, "Should we continue as an organization"? The overall feeling was that our numbers and participation on the middle school level may be somewhat hindered by the change to the "integrated" curriculum of Life, Earth and Physical Sciences for the middle school grades. Those teachers cannot afford to belong to three organizations in addition to  $SC^2$  and we, in our mission to support teachers of Earth and Space Sciences cannot fully support them with curriculum needs. Still, it is hoped that, S.C. will follow the current trend to move back towards the traditional curriculum.

The e-mail listserve is now up and running, but many SCESTA members from last year never got added to the list, and so they never received anything. Those folks

should identify themselves to Secretary Leslie Sanford and they will not have to pay dues this year. One of the characteristics of SCESTA in the past was the arrangement of field trips for it's members. Attendance at these outings had been poor and so the trips were no longer arranged, yet those present still feel a need to have some activity for our organization other than the annual meeting and Share-a-thon. The idea was presented to have "miniopportunities" - one day events held in various areas around the state, which would make for easier travel and be events that one could not go to on their own – behind-the-scenes types of activities that would convey professional development credit. Carla Keasler will arrange an activity in the Upstate, Donna Petty in the Midlands, and Dina Ledford in the Low Country. Details for these activities will be sent to the SCESTA list-serv, in the newsletter as well as through the SC2 list-serv..

Next, Donna Petty announced a plan to improve on the newsletter by having it go out four times a year, instead of three, and having a theme for each to provide ideas for activities in order to be a stronger resource for teachers. These and suggested links would be posted on the web site.

Next, the Outstanding Earth

Science Teacher of the Year is announced – Tom Littlejohn. See more about Tom below. Congratulations to this long-time servant of Earth Science Education in S.C.

Tom Littlejohn explained why we didn't have a SCESTA Share-A-Thon this year at SC2 (only two people signed up to do anything). Since Tom Littlejohn had announced his plans to retire, a new organizer of the Share-a-thon was needed. Alan Weekes volunteered to take up that job and Tom agreed to help him - but only if the membership is willing to participate. Someone suggested that the session tie activities to assessment.

John Wagner was asked to have Clemson print updated SCESTA brochures - we are apparently out of the old ones.

According to tradition, the vicepresident, Dina Ledford, became the new president and a new vice president was elected – Alan Weekes! The Secretary-Treasurer Leslie Sanford, as well as Newsletter editor, Donna Petty, agreed to stay on in their current positions.

The meeting ended with door prizes of rocks and fossils brought by Tom Littlejohn and posters acquired by our "fearless leader" Dr. Wagner. There were enough so that all attendees received at least one prize. Members were encouraged to step across the hall and visit the SC LIFE reception which was also giving out door prizes - as well as refreshments. Many thanks to you both for the "goodies"!

#### **Outstanding Earth Science**

#### **Teacher of the Year Award**

The winner of the National Association of Geoscience Teachers Outstanding Earth Science Teacher Award for 2004 is Tom Littlejohn, of Roper Mountain Science Center. Tom also came in second in the Southeast Region for the NAGT Sectional Award. In addition to receiving a plaque from the National Association of Geoscience Teachers, anda subscription to the Journal of Geoscience Education. Tom also received a set of rock bookends, a \$100 check from the Carolinas Section of the Society of Mining Engineers and a \$100 check from the Mining Association of South Carolina. The "gold" pick, which is usually donated from SCESTA to the award recipient is a tradition that Tom himself began some years ago.

The following narrative about Tom will appear in the January issue of the Journal of Geoscience Education:

"Thomas E. Littlejohn, a career earth science teacher with 27 years experience, is currently the Curator of Earth and Environmental Sciences at Roper Mountain Science Center in Greenville, South Carolina. Tom serves as the 'earth science specialist' and chair of the department, providing instructional programs in geology, paleontology, and environmental sciences for all ages as well as teacher in-services. Tom's exceptional earth science lessons have garnered him, and the Center, quite a few awards in recent vears.

Tom is a consummate hands-on teacher. Instead of just talking about gold mining, Tom designed and built a gold mining flume (salted with both real gold flakes and pyrite) in the back of his classroom so students can experience the thrill of actually finding gold for themselves. Every student is active, involved, and learning critical science concepts. Tom helps lead the state earth science teachers' group and has organized share-a-thons at the state science teachers' convention for the last several years."

Nominations for the Outstanding Earth Science Teacher for 2005 are now being accepted. The nomination form can be accessed on the web at <http://www.nagt.org> and will soon be posted on the SCESTA website. You can also request a nomination form from Dr. John Wagner at Clemson University jrwgnr@clemson.edu.

#### 'Need to Contact Officers?

#### **President: Dina Ledford**

(Fort Dorchester High School) 112-A Canvasback Dr. Summerville, SC 29483 (843) 760-4450 dledford@dorchester2.k12.sc.us

#### Vice President:

Alan Weekes (Pickens Middle School) 467 Sparks Lane, Pickens, SC 29671 (864) 878-8735

weekesaf@pickens.k12.sc.us

#### Secretary/Treasurer: Leslie Sanford

(Northside Middle School) 206 Karen Way Greenwood, SC 29646 (843) 881-1646 sanford@earthlink.net

#### Newsletter Editor: Donna M. Petty

(E. L. Wright Middle School) 2740 Alpine Rd. Columbia, SC 29223 (803)736-8740 ext. 3117 dpetty@usit.net

### Upcoming Teacher Awards & Grants

#### **Toyota TAPESTRY Grants**

The 2005 program will award 50 grants of up to \$10,000 each and a minimum of 20 "mini-grants" of \$2,500 each to K-12 science teachers. Interested teachers should propose innovative science projects that can be implemented in their school or school district over a oneyear period. All middle and high school science teachers and elementary teachers who teach some science in the classroom are eligible. **Deadline for application is January 19, 2005.** 

#### **NEA Foundation Grants**

The NEA Foundation makes \$2,000 and \$5,000 grants to practicing US public school teachers in grades K- 12, public school education support professionals, and faculty and staff at US public higher education institutions . Grant deadlines 2/1, 6/1, & 9/15

#### **American Honda Foundation**

American Honda Foundation supports various programs within youth education. Projects that have been funded include a focus on job training, math, science and environmental education. Eligibility includes: nonprofits, including K-12 schools and school districts involved with curriculum development that encourage innovative education methods and techniques. Honda's deadlines are Feb. 1, May 1, Aug. 1, and Nov. 1. If the staff receives preliminary proposals a month before the deadline, they can provide feedback in time for applicants to make changes and still meet the deadline. For guidelines, send a SASE to: American Honda Foundation, PO Box 2205, Torrance, CA 90509.

#### **RGK Foundation**

The Foundation's primary interests within education include programs that focus on formal K-12 education (particularly mathematics, science and reading), integrating technology into curriculum, teacher development, literacy, and higher education. The Foundation is also interested in programs that attract female and minority students into the fields of mathematics, science, and technology. All applicants must complete an electronic Letter of Inquiry from the Web site as the first step. There is no deadline for submitting the Letter. The Foundation reviews Letters on an ongoing basis. Within three weeks, the Foundation will send an e-mail message either declining your request or inviting you to submit a formal application packet for further consideration.

#### Sony Corporation of America

Sony's company-wide philanthropic efforts reflect the diverse interests of our core businesses. While positive consideration is given to efforts that promote literacy and basic educational competency, the company also seeks to apply its financial, technological, and human resources to the encouragement of the creative, artistic, technical, and scientific skills required of tomorrow's workforce. In the area of Education, Sony is responsive to grant-seekers and institutions who bring commitment and innovation to the task of strengthening education at the primary and secondary school levels. The company welcomes requests for support throughout the year within the guidelines and program areas set forth. We do not consider multi-year requests for support. This grant funder has rolling deadlines. There is no grant application form.

#### **Captain Planet Foundation**

The Captain Planet Foundation provides grants for projects promoting the understanding of environmental issues and focusing on hands-on experiences for students ages 6-18. Due to some recent changes the Captain Planet Foundation is temporarily limiting grant awards to \$500. **Complete the online form. Deadlines are Mar. 31, June 30, Sept. 30, and Dec. 31.** 

#### Waste Management

Waste Management focuses its giving on the following priority areas: Environment, Education and Community Impact. A committee considers requests to the corporate office quarterly, usually during January, April, July and October.

#### **NASA Explorer Schools**

Schools from across the country are eligible to apply online for an opportunity to partner with NASA in a program designed to bring engaging mathematics, science, and technology learning to educators, students, and families. The deadline for submission of the on-line application for NASA Explorer Schools is January 31, 2005.

#### NWA Sol Hirsch Education Fund Grants

National Weather Association. The \$500 grants are awarded annually to

teachers in grades K-12 to help improve the education of their students in meteorology. The teachers selected will be able to use the funds to take an accredited course in atmospheric sciences, attend a relevant workshop or conference, or purchase scientific materials or equipment for the classroom. **Deadline for application is August 1 each year.** 

#### American Institute of Aeronautics and Astronautics

The Foundation has established a Classroom Grant program specifically for use by AIAA Educator Associates or those who will become one. If you are a K-12 teacher interested in the development or application of science, mathematics, and technology within your educational curriculum, you may qualify for a grant of up to \$200 per individual request to supplement your learning program. Each school is limited to up to \$1,000 per calendar year. Use your grant for classroom demonstration kits. classroom science supplies, or other materials to enhance the teaching-and learning-of science, mathematics, and related technology. Submit your proposal for review at least 9 weeks before your intended purchase date and at least 30 days before their guarterly consideration of grant proposals in January, March, June, and September. They also have an Educator Achievement Award with a September deadline for nomination.

# **Student Opportunities**

#### Craftsman/NSTA Young Inventors Awards

http://www.nsta.org/programs/cra ftsman/

The Craftsman/NSTA Young Inventors Awards Program challenges students to use creativity and imagination along with science, technology, and mechanical ability to invent or modify a tool. **Deadline March 15, 2005** 

#### **Toshiba America Foundation**

The Toshiba America Foundation encourages projects that can

improve classroom teaching and learning of science, math, and technology. Proposals from individual teachers or groups of teachers, grades 7-12, will be considered for funding. Proposals are welcomed from public or private schools throughout the United States, but the foundation gives priority consideration to schools in Toshiba America company locations. Decisions about small grants are made monthly, except in March and September. Applicants are strongly encouraged to contact the foundation before or during the proposal preparation process. **Deadline February 1, 2005** 

#### Teaching the Poetry of Rivers-

**Online -** The Colorado Foundation for Water Education offers online lesson plans that address the interdisciplinary study of watersheds and assist students with submissions to the River of Words Poetry Contest (deadline **Feb. 22**, **2005).** Access the lesson plans at

www.riverofwords.org/educators/res ources.html.

# Volunteer Newsletter Editor and Webmaster Needs Your Help

Any news? Do you have your own class website? Do you know of good links or other resources we can pass on? Please drop us a line! Both the website and the newsletter are only as good as you make them by letting us know what is important to you. Together we can be a strong force for Earth Science education in South Carolina! Please send your news, as it happens, to: dpetty@usit.net and/or amie@clemson.edu Thanks! Donna & Amy

SPECIAL NOTE: The SCESTA newsletter is now delivered electronically through e-mail. If we do not have your e-mail address on file, please notify the SCESTA Secretary/Treasurer. Only those members who have paid their \$5 dues will receive the newsletter. To receive a hard copy, you must request one from the newsletter editor (contact info on front page)

# Upcoming Courses and Workshops of Interest to Earth Science Teachers

If you know of any courses or workshops we can post here, please send the info to <u>dpetty@usit.net</u>. We'd love to pass it on to teachers, etc.

#### Check with the following Colleges and University Geology Departments to find courses of interest to you!

Charleston Southern University The Citadel **Clemson University** Coastal Carolina University Coker College College of Charleston Erskine College Francis Marion University Furman University Lander University Newberry College Presbyterian College South Carolina State University **University of South Carolina** Columbia campus Aiken campus Beaufort campus Lancaster campus Salkehatchie campus Spartanburg campus Winthrop University Wofford College The SC MAPS and SC LIFE

programs at Clemson University offer a series of discounted courses and workshops each semester. For information, check this web page <http://www.clemson.edu/scmaps>

# Check Out These Sites for Freebies (or almost free stuff)!

The El Niño Poster and Educational Resources

EPA Kids Planet Protector Club Kit

NASA/JPL PO.DAAC Free cd "Perspectives on an Ocean Planet" for teachers grade 9 and up.

Disaster Action Kids - More than just posters.

"Phytopia" is an <u>educational</u> <u>CD-ROM</u> that provides a window to the fascinating world of the oceans' microscopic life. Order on-line by <u>clicking here.</u>

Space Thrills poster for K-4 educators uses reading and writing activities to teach students about the solar system. Students will Meet Our Solar System and ponder Solar System Mysteries. Teacher Tips and Resources and Student Activities are included. The file can be printed (Space\_Thrills.pdf -

0.98 MB PDF File) or only teachers can <u>request</u> a free copy of this poster.

Ocean's Music: Climate's Dance Poster

Science of safety - This lesson is a two-sided poster with instructional activities designed for grades 4-7. These activities contain simple explanations, easy experiments and applications for safety at home.

The program was developed by State Farm Fire and Casualty Company and the National Fire Protection Association to teach children the science behind safety.

If you'd like to give this program to a school, contact a <u>State Farm agent</u> or the State Farm <u>Regional office</u> near you.

We'll need the following information:

Name of School

Street address of school (no P.O. Boxes, please)

Name of teacher using program

Hey! Let us know if you've heard of any great freebies we don't have here or on the web site!

# Web Sites for Teaching

Mountain Adventures: Exploring the Himalayas, Andes, and Appalachians - This National Gardening Association curriculum is designed to introduce students (grades 5–8) to the role and importance of native plants in the United States and abroad via simulated alpine expeditions. Along the way, students explore biodiversity, cultural diversity, ethnobotany, and hydrology unique to mountain environments. The five modules also guide students through related explorations in their local areas. Access them at <u>www.kidsgardening.com/TMI/teache</u> <u>rs/introduction.htm</u>.

#### Earth Exploration Toolbook -

The EET website gives step-bystep instructions for using Earth science datasets and software tools in educational settings. Each chapter of the EET takes users through an example: a case study in which the user accesses data and uses analysis tools to explore issues or concepts in Earth system science. In each chapter, users produce and analyze maps, graphs, images, or other data products. Explore the EET at <u>http://serc.Carleton.edu/eet</u>.

The Natural Inquirer - This environmental research and science education journal for middle school and high school teachers and students was created to provide English- and Spanish-speaking students with access to actual scientific findings and procedures from scientists working with the U.S. Department of Agriculture's National Forest Service, Each issue has six or more articles on nature, forests, animals, outdoor activities, and water and resource management and incorporates math, language arts, hands-on activities, and critical thinking. Articles correlate with national science education standards and contain alossaries. See www.naturalinguirer.usda.gov.

Bulletin for Educators in Space Science - Sponsored by the NASA Education and Public Outreach Broker/Facilitator at the Space Science Institute in Boulder, Colorado, this electronic publication informs subscribers in the western United States about space science and Earth science opportunities in their areas, as well as nationally. To be added to the *BESS* listserv, e-mail Amy Wilkerson at awilkers @colorado.edu. An archive of past newsletters is located at <u>http://ssibroker.colorado.edu/brok</u> <u>er/bess/Default.htm</u>.

Science Bulletins -Sponsored by the American Museum of Natural History (AMNH) and supported by NASA, this website features breaking news on astrophysics, Earth sciences, and biodiversity. The bulletins present current science news stories through interactive videos (fiveto seven-minute video stories that follow scientists into the field), photographs, graphics (using 3-D computer models), and interactive data visualizations (using NASA satellite data). AMNH is an NSTA Institute online partner. View Science Bulletins at http://sciencebulletins.amnh.org.

Working Scientifically - This website is used by Australian students and teachers to better understand the scientific method of investigation. The site covers such topics as observations, hypothesis formation, experimental design aspects, ethics, types of research, and data analysis. Refer to <u>http://agsci.eliz.tased.edu.au/WS</u> 1.HTM.

Earth Exposed - This TERC website "uses the beauty of our planet as seen from space to promote Earth systems science, geography, and art." Located at <u>http://earthscienceart.org</u>, the site presents satellite images of Earth and asks viewers to consider them from the perspective of a scientist, a geographer, and an artist. Teachers will find lesson plans for exploring the images and for using image processing software to work with images on a computer.

# Call for Papers – Get Published!

The NSTA is looking for Earth Science teaching or lesson articles for their magazines. Please send your submission to: Janet Gerking, NSTA Editor 443 Valley Stream Dr. Geneva, Fl 32732 Phone: (407)349-9093 Fax: (407)349-9094 jgerking@nsta.org

# Resources for this Newsletter's Theme – Tsunamis

http://www.cln.org/themes/ts unamis.html

http://www.pbs.org/wnet/sav ageearth/tsunami/index.html

http://school.discovery.com/ lessonplans/programs/tidalwave/

#### (Webquest)

http://edweb.sdsu.edu/courses/E DTEC596/Units/Wave/Tsunamis

http://education.ssc.nasa.go v/fad/default.asp

It is hoped that these resources will help you address the "teachable moment" this terrible tragedy provides.

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ADDRESS CORRECTION REQUESTED

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