



THE GEOLOGICAL SOCIETY OF AMERICA

Geoscience Education Division

<http://gsaged.org/>

January 2010

From Your Newsletter Editor

Greetings Division members! Our January 2010 newsletter is packed with exciting news and important information. So, as I tell my students: pay attention! ☺

If you have items you would like to be included in the next newsletter, please send them to mhafen@cas.usf.edu.

Mark Hafen
University of South Florida

Nominations Sought for Biggs Award

The **2010 Biggs Award for Outstanding Earth Science Teaching** is available for early career faculty that exhibit innovative and effective teaching of earth science. Earth science instructors and faculty from all academic institutions engaged in undergraduate education, who have been teaching full-time for 10 years or less are eligible. Part-time teaching is not counted in the 10 years. Nominees may self-nominate for this award. The deadline for nominations is **February 1, 2010**. Additional details can be found at <http://gsaged.org/biggsaward/award2010.htm>. Nominating packets are to be sent to the Geoscience Education Division Second Vice Chairperson:

Steven H. Schimmrich
Department of Math, Science, Engineering & Technology
SUNY Ulster County Community College
Stone Ridge, New York 12484 USA

Eric J. Pyle
GED Chair 2009-2010

Congratulations All Around the Division!

Several of our members have been honored recently. Read on!



Professor of the Year - Robert C. Thomas, Professor of Geology at the University of Montana Western, was one of four national winners of the prestigious 2009 U.S. Professor of the Year award. The awards are presented annually to the most outstanding undergraduate educators in America by the Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education (CASE).



The "Rock Doctor" was introduced by former student Helen Sladek at the awards ceremony, held November 19, 2009 at the Willard Intercontinental Washington Hotel in the District of Columbia.

For more about the Professor of the Year awards, visit <http://www.usprofessorsoftheyear.org/winners/winners09.cfm>, and for more about Rob, visit

<http://www.umwestern.edu/>, where he is currently the lead story, and <http://www.umwestern.edu/envirosoci/rob/thomas.html>. **Congratulations Rob!**



Distinguished Teaching Professor - James R. Ebert, SUNY College at Oneonta, was promoted from Professor to Distinguished Teaching Professor, the highest rank in the State University of New York system, by the SUNY Board of Trustees. He is a past recipient of the SUNY Chancellor's Award for Excellence in Teaching and the Eastern Section of NAGT's John H. Moss Award for Excellence in College Teaching. Jim teaches Sedimentary Geology, Earth History, Forensic Geology, inquiry-based courses for pre-service Earth Science (7-12) and elementary teachers, and graduate courses for in-service teachers. He hosts the ESPRIT listserv for Earth Science teachers and also serves as chair of the Earth Sciences Department. Jim is also a co-PI with colleagues in the Earth Sciences, Secondary Education, Chemistry and Physics on a recently funded NSF Noyce Scholars grant to support future teachers of science who will serve in high needs districts. Send your congratulations to Jim at Ebertjr@oneonta.edu. **Congratulations Jim!**

Teaching Fellow - GED member **Dr. Michael J. Passow** recently received the 2009 Fellows Award from the Science Teachers Association of New York State (STANYS). He taught Earth Science for 22 years at White Plains (NY) Middle School, and now teaches four classes at Dwight Morrow High School in his hometown of Englewood, NJ. Dr. Passow is the 2008 - 2010 President of NESTA (National Earth Science Teachers Association, www.nestanet.org), and a Past President of STANYS and the NAGT-Eastern Section. He is the founder and organizer of the Earth2Class Workshops for Teachers at the Lamont-Doherty Earth Observatory. E2C provides opportunities for research scientists to interact with classroom teachers. To date, E2C has provided more than 100 Saturday workshops, and disseminates archived versions of these, as well as a vast array of education resources, through www.earth2class.org. Find out more about Mike at (<http://www.ldeo.columbia.edu/directory/michaeljpassow>).



Congratulations Mike!

Distinguished Service - William Slattery (at right in photo) of Wright State University received the Geoscience Education Division's 2009 Distinguished Service Award. This is the third year the GED has bestowed this award, which recognizes a member who has given outstanding service to the Division. Bill is the outgoing GED Secretary-Treasurer, and has held this position since 2002, even though board terms are only supposed to last for two years! Bill's contribution and dedication to the Division, and his contribution to the board will be sorely missed. Bill received his award at the joint GED/NAGT awards luncheon held at the 2009 GSA conference in Portland. **Congratulations Bill, and thanks for all your hard work!**



And Finally...The 2009 Biggs Award Winner - The GED's Biggs Award for Excellence in Earth Science Teaching recognizes innovative and effective teaching of Earth Science among early career faculty. Earth Science instructors and faculty from all academic institutions engaged in undergraduate education, and who have been teaching full time for 10 years or less, are eligible.



The 2009 Awardee is **Laura Guertin** (at right in photo), an associate professor at Penn State, Brandywine. She is a graduate of the geology program at Bucknell University, and earned a Ph.D. in Marine Geology and Geophysics at the University of Miami's Rosenstiel School of Marine and Atmospheric Science (RSMAS). Dr. Guertin incorporates a service learning component into her teaching, including making dinosaur-themed boxes for kids in the hospital and getting students involved in fundraising to battle pediatric cancer. She is also active with the Girl Scouts, hosting science and technology badge workshops for Scouts at her Penn State Campus. Laura received her award at the joint GED/NAGT awards luncheon held at the 2009 GSA conference in Portland.

Congratulations Laura!

An Ice Free Earth?



Henry Pollack of the University of Michigan has published a new book titled [A World Without Ice](#). The book is fundamentally a tale of climate change and people, told through the prism of ice.

Published by Penguin, and with a foreword by Al Gore, the book relates the role ice has played in the development of Earth's landscapes, climate, and human civilizations, and the reciprocal impact of people on the planet's ice. It describes the delicate geological balance between ice and climate, and why the rapid disappearance of ice portends serious consequences in our not-so-distant future. It provides insight into why ice matters, and how we humans are dramatically changing this critical component of our global environment. More information about the book can be found at <http://www.worldwithoutice.com>.

Henry N. Pollack
University of Michigan

Geology Seminar at Craters of the Moon

Craters of the Moon National Monument and Preserve in Idaho contains the three youngest lava fields on the eastern Snake River Plain (ESRP) and the best developed volcanic rift on the ESRP. The Craters of the Moon Lava Field is the largest young basaltic lava field in the lower 48 States, 618 sq. miles (1600 sq. km). The park contains almost every kind of feature associated with basaltic volcanism.

The Monument will be offering a two day seminar, Friday July 9th and Saturday July 10th 2010, on the geology of Craters of the Moon and the surrounding region. Over half of the class will be spent in the field studying the geology firsthand. It is being taught by the park geologist and education specialist and is available for 1 hour of college credit for \$50 or without credit free. Reservations are required, so call Doug Owen (208) 527-1331 to sign up or for more information.

Douglass E. Owen
Park Geologist and Nature Education Specialist
Craters of the Moon National Monument and Preserve
P.O. Box 29, Arco, ID 83213
Phone: (208) 527-1331
Fax: (208) 527-3073
<http://www.nps.gov/crmo/index.htm>

Return to Morocco in 2010

Enroll Today

Summer 2010 Travel Course
Geography 4910/5510
May 22 - June 6
1 credit hours

The Cultural and Natural Resources of Morocco

Highlights:

- Roman city of Volubilis and Chellah Necropolis of Rabat
- historic medina, ville nouvelle, and artisan works of Fez
- exploring the high dunes of Erg Chebbi, Sahara Desert
- Sijilmasa archaeological site and Tafilalet Oasis
- Todra Gorge and Kasbah of Ait ben Haddou (World Heritage Site)
- exotic Jamaa el Fna square and historic architecture of Marrakech
- Toubkal National Park in the High Atlas Mountains
- commercial fisheries at Safi and Oualidia beach

Cost:
\$4251 graduate students
\$4161 undergraduate students

For more information: www.oral.us

Dr. Dale Lightfoot, Oklahoma State University
lightfo@okstate.edu

Dr. Tom Wikle, Oklahoma State University
twikle@okstate.edu

In 2009, Tom Wikle and Dale Lightfoot of Oklahoma State University led a geography field course to Morocco. Among other places their group visited in May/June of 2009 were the Roman City of Volubilis, Toubkal National Park in the High Atlas Mountains, the dunes of Erg Chebbi in the Sahara (near Algeria), and Kasbah of Ait ben Haddou World Heritage Site. They also explored urban landscapes in Rabat, Fez, Safi and Marrakech.

Based on their amazing experience leading 22 students last year Tom and Dale have decided to offer the course again in May/June of 2010:

GEOG 4910/5510 The Cultural and Natural Resources of Morocco

3 credit hours (undergraduate and graduate credit options)

Oklahoma State University

May 22 to June 6, 2010

This study abroad summer course, offered through Oklahoma State University, College of A&S Outreach, will focus on themes of cultural and natural resources in Morocco and include fascinating and exciting experiences along the way. The course instructors are Dale Lightfoot and Thomas Wikle, both in the Department of Geography at OSU. Dr. Lightfoot has more than 15 years of experience with research and outreach projects in Morocco and the wider Middle East and North Africa region. His co-instructor, Dr. Wikle has traveled throughout North Africa and the Middle East and has directed more than a dozen summer travel courses since 1994.

The cost of the trip will be \$4,181 for undergraduate students and \$4,251 for graduate students and non-credit participants. For more information please contact: Dr. Thomas Wikle (t.wikle@okstate.edu) or Dr. Dale Lightfoot (d.lightfoot@okstate.edu).

Thomas A. Wikle, Professor
Oklahoma State University
(405) 744-7978

Opportunities at Falls of the Ohio

Geology On-line

The Falls of the Ohio State Park (Clarksville, Indiana) has beefed up its educational content. Look in the "Discovery Center" at www.fallsoftheohio.org to see more. All of the park's fossil and geology brochures are on-line. The recent "History of Land Plants" temporary exhibit, created by paleobotanist Dr. David W. Taylor, is posted with all text as well as the fossil and biological specimens. Two articles, "Microfauna of the Salem Limestone" and "Curating Your Geological Collection," have been added to the Fossil page. More articles and information will be added throughout 2010. A comprehensive page for educators can be found on the site, since school programs are the "meat and potatoes" of the park's interpretive services.

Photo albums and a wide variety of information about the Falls of the Ohio State Park and its various activities can be found at the park's Facebook page. Become a fan and you will be kept up to date with what's going on, including new content on the web site from www.facebook.com/fallsoftheohio. The photo albums show a wide variety of topics, including images of the famous Devonian fossil beds and close-ups of fossils.

Professional Development

The Falls of the Ohio State Park offers summer professional development opportunities for K-12 educators in geology and paleontology. In-service credit is available with most programs for participants through their school district. Pre-registration is required. Contact Alan Goldstein agoldstein@dnr.in.gov for more information about these programs:

Field Paleontology Institute

June 14 - 16, 2010 9:00 a.m. - 4:00 p.m. (limit 20) \$15 fee

How do I get fossils for the classroom? Are there other ways to use fossils in activities for students? What are the best resources available? This three-day workshop combines collecting fossils in the field with activities using those fossils in the classroom. Participants take two excursions to collect Ordovician and Silurian/Devonian fossils (which you can keep) as well as explore the park's fossil bed (where you can observe, but not collect). The group will explore our famous fossil beds (observation, no collection) in order to develop an understanding of how the ecology of a 390 million year old ecosystem is reconstructed. Photos from previous Institutes are posted on the park's Facebook page.

Field Paleontology Institute – Discovery Day

June 17, 2010 9:00 a.m. - 4:00 p.m. (limit 20) \$5 fee

Participants will collect a variety of Upper Mississippian fossils in the morning at an exposure in Crawford County. Afternoon includes identification and discussion of classroom activities. It is recommended (not required) that participants take the three-day workshop first.

Evolution & Adaptation

June 28 & 29, 2010 9:00 a.m. - 4:00 p.m. (limit 25) \$40 fee

In partnership with the Louisville Zoo, this workshop is designed to help teachers and other interested educators better understand the unifying scientific concept of evolution. Held at the Falls of the Ohio on the 28th and at the Louisville Zoo on the 29th. It will explore such questions as: What is science? What is the difference between a scientific theory and a belief? How do we tell geologic time? What is Natural Selection? Participants will learn a number of creative activities that can be put to use in the classroom. Content appropriate for grades 6 – 12.

Fantastic Fossil Festival

The 15th annual Falls Fossil Festival at the Falls of the Ohio State Park will be held on September 18 (9:00 a.m. - 6:00 p.m.) - 19 (10:00 a.m. - 5:00 p.m.), 2010. This is one of the park's largest annual events. Look for vendors with fossils, minerals, books, jewelry, lapidary items, and food. There will children's craft activities, digs for Silurian and Devonian fossils from local quarries, and minerals from Cave in Rock, Illinois mines. There are always fascinating earth science speakers, free resources from geo-parks across North America, special fossil bed hikes, and more! See the festival web site for details:

<http://www.fallsoftheohio.org/>. Sponsored by the Falls of the Ohio Foundation with additional support from the Kyana Geological Society, Kentucky Paleontological Society, and Indiana Society for Paleontology.

Alan Goldstein, Certified Interpretive Planner
Interpretive Naturalist
Falls of the Ohio State Park
201 West Riverside Drive
Clarksville, IN 47129-3148
(812) 280-9970 ext. 403

Are You Working Closely Enough with NESTA?

NESTA is the National Earth Science Teachers Association (www.nestanet.org). NESTA focuses on supporting K – 12 Earth Science education, but also cooperates with universities, science centers, professional organizations, and others interested in geoscience education. NESTA publishes *The Earth Scientist*, a quarterly journal that provides articles of interest to precollege teachers and students. *TES* is a great way to share results from educational projects at your institution. For example, a recent issue featured a collection of articles written by classroom teachers and professors at Penn State-Brandywine. NESTA also disseminates information about opportunities for professional development through its monthly newsletter and website calendar.

At the national and area conferences of NSTA (National Science Teachers Association), NESTA conducts "share-a-thons." A share-a-thon involves 10-40 participants at tables in a ballroom, each sharing one or more classroom-tested activity or information about programs. Up to 300 teachers visit the tables to gather information of interest for their schools. NESTA also offers special lectures by research scientists during the Earth and Space Science Resource Day at the national NSTA convention.

NESTA's leadership also advocate for quality pre-college geoscience education through discussions with decision makers at GSA, AGU, AMS, and other organizations. NESTA's current President, Dr. Michael J.

Passow, has participated in committee meetings of GSA, AGI, and other professional societies to bring greater consideration of the needs of K-12 students and teachers.

If you are involved in training Earth Science teachers, or if you have summer or academic year programs that support K-12 teachers or students, consider expanding your interaction with NESTA. For more information, go to <http://www.nestanet.org> or communicate with Michael J. Passow michael@earth2class.org.

Michael Passow
NESTA President
Earth2Class Workshops for Teachers

Two GED Service Opportunities

1. Seeking Division Officer Nominations

The Geoscience Education Division of the Geological Society of America is seeking a candidate for the position of second vice-chair to join the management board. The job of second vice-chair entails management board planning work, as well as supervising the Biggs Award, student-travel awards, and other Division award processes. The second vice-chair moves up each succeeding year to first vice-chair, chair, and past chair, so the position is a four-year commitment.

If you are interested in running for this position, or if you would like to nominate someone else, please respond to Elizabeth Nagy-Shadman eanagy-shadman@pasadena.edu by April 1, 2010. We will request a brief bio and statement for the ballot. Elections will be held in June, with the new member officially joining the board at the 2010 GSA Annual Meeting.

2. Nominations for GED Representative to GSA Committee on Education

The Geoscience Education Division seeks a representative to serve on the GSA Committee on Education who will act as a liaison between the two groups. Our current representative, Ginny Peterson, has served two four-year terms and will be stepping down from this position on June 30, 2010. Typically the Education committee meets formally 2 times per year, once at the Annual GSA meeting and a second time in early spring, although sometimes the spring meeting is a teleconference. The representative should plan to attend the GED Board and Business Meetings during the Annual GSA meeting and provide updates on Committee business.

The GSA Committee on Education consists of 12 voting members, serving 4-year terms, plus *ex officio* members. The Committee advises and advocates to GSA on issues and programs that have the potential to stimulate interest in the importance and acquisition of basic knowledge in the Earth sciences at all levels of education. Committee members work with the GSA Education and Outreach staff, and with other interested scientific and education organizations, to develop informal, pre-college (K-12), undergraduate, and graduate earth-science education and outreach objectives and initiatives.

If you would like to nominate someone or volunteer for this position, please send the name of the individual (or yourself) to Elizabeth Nagy-Shadman (eanagy-shadman@pasadena.edu) before April 1, 2010. GSA Council will then review the name that are submitted and select a representative. The 4-year position begins July 1, 2010.

Elizabeth Nagy-Shadman
GED Past-Chair

Report from the GSA Committee on Education

The Committee on Education serves as advisor and advocate to the Society on issues and programs that have the potential to stimulate interest in the importance and acquisition of basic knowledge in the Earth sciences at all levels of education. Committee members work with the GSA Education and Outreach staff, and with other interested scientific and education organizations, to develop informal, pre-college (K-12), undergraduate, and graduate earth-science education and outreach objectives and initiatives.

Recent activities of the Education Committee

An ongoing activity of the committee in the last year has been to explore and implement ways to better serve geoscience faculty at 2-year/community colleges. The committee believes that faculty at 2-year institutions are important partners in the outreach to pre-college and early college students and are potentially a population that has been underserved by the society. As a start, the committee collected data via a survey of GSA members from 2-year institutions. Survey results pointed to a need to engage this group at the Annual meeting. To do this the committee hosted a welcome reception for 2-Year Geoscience Faculty at the Annual Meeting on Saturday, October 17, 2009, from 4-5 PM, directly before the Annual Geoscience Educators' Social Reception (5-7 PM in an adjacent room). This was a successful event that will be repeated next year with an effort to minimize overlap with workshops and short courses. The committee is working toward establishment of a listserv for 2-year college geoscience faculty as a way to facilitate networking. Finally, a sub-committee is working on a short article summarizing results and suggestions from this survey for *GSA Today*.

The committee is exploring ways to raise awareness of the value of Geoscience Education Research to the GSA community. A subcommittee will work on developing a position statement and welcomes input from GSA members and particularly those involved in Geoscience Education research.

The committee sent a memo to GSA Council encouraging them to place a high priority on retention and maintenance of the Teacher Advocate Program. Current budget challenges and natural attrition have led to understaffing of this program, which has a high impact on pre-college students.

In his report to the committee, the GSA Education and Outreach Director, Gary Lewis, indicated that education and outreach programs such as GeoCorps, EarthCaching, and several mentoring programs have been very successful and are growing. GSA is a leading partner in a relatively new initiative, EarthTrek, which is a global citizen science program that started in July of 2009.

Make-up of the GSA Education Committee

The makeup of the committee has recently been revised to consist of the following 12 voting members, serving 4-year terms, plus ex officio members.

- 1 - 2yr college faculty representative
- 1 - 4yr college faculty representative
- 1 - Graduate educator representative
- 1 - K-12 teacher representative
- 1 - Informal science educator (museum, visitor center, interpretation officer, etc.)
- 1 - Graduate student (2-year term)
- 1 - Undergraduate student (2-year term)
- 1 - Geoscience Education Division Representative
- 2 - Section representative (on a rotating basis through all the Sections)
- 2 - At-large Members
- 1 - Past-President shall serve as an ex officio, non-voting member
- 1 - GSA Education and Outreach Director, ex officio, non-voting Headquarters Liaison

The committee welcomes ideas and input from all GSA members. A good way to provide comments or make suggestions to the committee is through the current Division representative to the committee, Ginny

Peterson (petersvi@gvsu.edu). We strongly encourage members to nominate themselves or others to serve on this important committee. The Education committee meets formally 2 times per year, once at the Annual meeting and a second time in early spring.

Ginny Peterson, GED Representative
GSA Committee on Education

GED a Hit at the 2009 GSA

This past year's Annual Meeting of the Geological Society of America was definitely a high-water mark for the division, at least for now. There were a total of 19 technical sessions that were sponsored by the Geoscience Education Division, which included 385 separate abstracts and presentations. When you consider that the total number of presentations was just over 4000, this means that GED had nearly 10% of the total presentations at the meeting! This was the single largest showing by any division of GSA.

Some of the proposed sessions grew so large that they were expanded into additional half-day sessions. And there were enough proposed abstracts left over to create two-half day sessions from the pool. This created quite the problem for the leaders of the Joint Technical Planning Committee, but from where I am sitting, this is certainly a good problem to have. And working closely with NAGT and their JTPC representative, Mike Taber (from Colorado College), was a real pleasure and we made a good team.

Thank you to all of the presenters who put forth their time and effort to share the results of the geoscience education discipline. And as you read this, session proposals for the 2010 meeting in Denver are being considered and organized. From what I have seen so far, there should be a broad and engaging set of sessions to which you can submit your abstracts in the coming months. Let's see if we can beat 2009's record showing by beating 10% in 2010! Ten-squared, anyone?

Regards,
Eric Pyle
GED Chairperson, 2010

Your 2009-2010 GED Officers and Key Contacts

Chair:	Eric J. Pyle, James Madison University, pyleej@jmu.edu
First Vice-Chair:	Paul E. Baldauf, Nova Southeastern University, pb501@nova.edu
Second Vice-Chair:	Steven H. Schimmrich, SUNY Ulster County Comm. Coll., schimmrs@sunyulster.edu
Sec.-Treasurer:	Christopher L. Atchison, Ohio State University, atchison.6@osu.edu
Past Chair:	Elizabeth Nagy-Shadman, Pasadena City College, eanagy-shadman@pasadena.edu
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GSA Council Liaison:	Lisa D. White, San Francisco State University, lwhite@sfsu.edu
GED Web Site:	http://gsaged.org/
