

SAPROLITE

Newsletter of the Southeastern Section The Geological Society of America

Southeastern Section

No. 12, Fall 2000

AN INVITATION FROM CUBA: RSVP - Si or No?

At the recent national convention of the GSA held in Reno, NV, our section secretary Don Neal reminded me that my newsletter message was overdue, so if this fall's issue of Saprolite arrives late, I'm to blame. When I got back to the office and reviewed the chairs' messages in previous newsletters, I found that the forum has been used to convey varying sorts of information and commentary. This year, I'll use it as a sounding board.

This past August I attended the 31st International Geological Congress (IGC) held in Rio de Janeiro. As a member of the National Academy of Science U.S. National Committee for the Geological Sciences (USNC/GS) I was part of the USA's official 8-person delegation to the IGC. During the IGC, I met with Dr. Manuel A. IturraldeVinent, vice-president of the organizing committee for the 4th Cuban Geological and Mining Congress (CGMC) and secretary for international relationships for the Cuban Geological Society (CGS), with whom I had previously corresponded. Subsequent to our conversations in Rio, the Cuban Geological Society formally invited me as chairman of the Southeastern Section of the GSA (and president of the American Geological Institute) to represent those organizations at their 4th CGMC this coming March in Havana.

Their stated purpose in inviting me is to initiate formal contact and friendship among our respective organizations, ie, SEGSA, CGS, and AGI. I have informed Dr. IturraldeVinent that I would be most pleased to accept his kind invitation to officially represent SEGSA, start a friendship between us and the Cuban Geological Society and explore potential mutually advantageous future relationships IF I have a definite mandate from our membership to do so.

Let me know how you feel about this. Shall I go to the 4th CGMC as SEGSA's official representative? Si or No. You can reach me at woodfork @ geosrv.wvnet.edu or FAX 304/594-2575 or telephone 304/594-2331.

Thanks for your counsel. I'll let you know the consensus of the feedback that I receive. See you in Raleigh next April. Until then, HAPPY HOLIDAYS to you and yours!

Larry D. Woodfork Chair, Southeastern Section

Southeastern Section Officers: 2000-2001 Larry Woodfork

Chair:	
Past Chair:	
Vice Chair:	
Past Vice-Chair:	
Chair-Elect:	
Secretary-Treasurer:	

Edward Stoddard Michael Katuna Harold Stowell Donald Neal

Gail Russell

Nominations for Section Officers: 2001-2002

The Nominating Committee submitted the following nominees:

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Chair:	Harold Stowell
Chair-elect:	Allen Dennis
Vice-Chair:	John Kiefer
Secretary-Treasurer:	Donald Neal

Financial Status of the Section

At the end of FY 1999, the Section had \$55,502 in its accounts. The total

interest realized in 1999 was \$2623. This interest, together with a reported surplus of \$21,396 from the Southeastern Section meeting in Charleston, SC, and Section members' dues, is used to fund the Section's Student Grant Program, Student Travel Program and Educational Grant Program as well as the general operations of the section. The section budgeted expenditures exceeding income by \$5600 in 1999; however, we realized a profit of \$4172 for the year.

49th Annual Meeting of the Southeastern Section

The annual meeting of the Section was held March 23-24 in Charleston, SC. Michael Katuna of the College of Charleston was the Chairman of the meeting. A total of 362 papers were presented in symposia (11), theme sessions (9), and poster sessions (12). Eight field trips were run. The meeting had 852 registered participants. Of this number, 477 were professionals, 294 were students, and 8 were science teachers. Thanks to everyone who made this a most successful meeting.

50th Annual Meeting of the Southeastern Section

The 50th Annual Meeting of the Southeastern Section of the Geological Society of America, hosted by the Department of Marine, Earth and Atmospheric Sciences at North Carolina State University, in conjunction with the North Carolina Geological Survey and the North Carolina Museum of Natural Sciences, will be held Thursday and Friday April 5-6, 2001, in Raleigh, North Carolina. Information concerning registration, accommodations, and activities is available on the web at http://www.meas.ncsu.edu/segsa/ or

http://www.geosociety.org/sectdiv/southe/01semtg.htm and in GSA Today.

Abstract deadline: January 2, 2001

Abstracts for all sessions should be submitted on-line through the GSA website. To learn more about on-line abstract submittal, go to http://www.geosociety.org/sectdiv/newabsub.htm. Late abstracts or abstracts sent by e-mail or fax will not be accepted. Only one volunteered paper may be presented by an individual; however, a person may be a coauthor on other papers. Those invited for symposia may present additional papers.

FIELD TRIPS

Preregistration Deadline: February 23, 2001

1. Framing the Piedmont Zone in NC & Southern VA. Jim Hibbard, North Carolina State University (jhibbard@ncsu.edu , (919) 515-7242); Kevin Stewart, University of North Carolina, Chapel Hill (kgstewar@email.unc.edu); and Bill Henika, Virginia Department of Mines, Minerals and Energy, and Virginia Tech (henika@vtvm1.cc.vt.edu).

2. Depositional and Structural Framework of the Deep River Triassic basin, North Carolina. Tyler Clark, North Carolina Geological Survey, (tyler.clark@ncmail.net, (919) 733-2423); Pamela Gore, Georgia Perimeter College (pgore@gpc.peachnet.edu); and Mary Watson, North Carolina Geological Survey (mary.watson@ncmail.net).

3. Structural Features Exposed in Triassic Sedimentary Rocks near the Proposed Low-Level Radioactive Waste Disposal Site, Southwestern Wake County. Rick Wooten, North Carolina Geological Survey (rick.wooten@ncmail.net, (919) 733-2424); Jerry Bartholomew, University of South Carolina (jbarth@esri.esri.sc.edu); and Peter Malin, Duke University (pem@geo.duke.edu). 4. North-South Transect of the Goochland Terrane and Associated A-type Granites, VA-NC. Stewart Farrar, Eastern Kentucky University (glyfarra@acs.eku.edu, (859) 622-1279) and Brent Owens, College of William and Mary (beowen@wm.edu).

5. Cape Fear River Transect: The Cretaceous Cape Fear, Black Creek, and Peedee Formations of Southeastern North Carolina, and the Overlying Tertiary Section. Kathleen M. Farrell, North Carolina Geological Survey (kathleen.farrell@ncmail.net, (919) 733-2423); Lauck B. Ward, Virginia Museum of Natural History (lwward@vmnh.org); and S. Duncan Heron, Jr., Duke University (heron@eos.duke.edu).

6. Building Stone Use in Historical and Modern Architecture of Downtown Raleigh, NC - A Walking Tour. Al Carpenter, North Carolina Geological Survey (retired) (alvalcarp@mindspring.com, (919) 553-4572).
7. Inquiry-Based Field Trip to Outstanding Geological Sites in the Triangle - For all educators (especially secondary). Lynne Gronback, (Lgronback@mindspring.com, (919) 644-2681), Rob Greenberg (antares8@mindspring.com), and Ruben Giral (dcuben@mindspring.com), all at McDougle Middle School, Chapel Hill; and Mary Watson, North Carolina Geological Survey (mary.watson@ncmail.net).

8. A Temporal View of Terranes and Structures in the Eastern North Carolina Piedmont. Dave Blake, University of North Carolina at Wilmington (blaked@uncwil.edu, (910) 962-3387); Tyler Clark, North Carolina Geological Survey (tyler.clark@ncmail.net); and Matt Heller, North Carolina Ground Water Section (matt.heller@ncmail.net).

9. The Tate-Marble Hill Window in the Marble Belt of Northern Georgia. Mike Higgins, Applied Mapping Systems, Inc.

(mhiggins@mindspring.com, (770) 641-1268); Ralph Crawford, Applied Mapping Systems, Inc.; Tim La Tour, Georgia State University; John Costello, Georgia State University; Bill Grant, Applied Mapping Systems, Inc.; Mike Linkous, J.M. Huber, Corp.; and Tonya Edwards, Georgia State University.

10. Building Stone Use in Historical and Modern Architecture of Downtown Raleigh, NC - A Walking Tour. *Repeat of Trip 6.*

SYMPOSIA

1. Cancelled

2. Groundwater Conditions in Coastal Aquifer Systems: Past, Present, and Future. Richard Spruill, East Carolina University,

spruillr@mail.ecu.edu, (252) 328-4399.

3. Cenozoic Evolution of the Appalachian Orogen. Jim Knapp, University of South Carolina, knapp@geol.sc.edu, (803) 777-6886; Ray Christopher, Clemson University; and Dave Prowell, U.S. Geological Survey.

4. Advances in Geochronology and Thermochronology in the Appalachian Orogen. Brent Miller, University of North Carolina, Chapel Hill, bvmiller@email.unc.edu, (919) 962-6583; and Scott Samson, Syracuse University.

5. Great Ideas in Teaching Geoscience - K-16. (Co-sponsored by SE Section NAGT and the SEGSA Education Committee.) Michael Gibson, University of Tennessee, Martin, mgibson@utm.edu, (901) 587-7435; and David Kopaska-Merkel, Geological Survey of Alabama.

6. Earth Science in the High School Curriculum. (Co-sponsored by SE Section NAGT and the SEGSA Education Committee.) Charles Gardner and Mary Watson, North Carolina Geological Survey, Charles.Gardner@ncmail.net, (919) 733-3833.

7. Atlantic Coastal Plain geology: A Symposium in Honor of Gerald H. Johnson. Heather Macdonald, College of William and Mary, rhmacd@mail.wm.edu, (757) 221-2443; and Scott Harris, Coastal Carolina University.

8. Beach Nourishment: The Wave of the Future for Erosion Control. Bill Cleary, University of North Carolina, Wilmington,

clearyw@uncwil.edu, (910) 256-3721, ext. 251; and Orrin Pilkey, Duke University.

9. Terrane Boundaries and Paleosubduction Zones in the Inner Piedmont and Blue Ridge: Where are they, what is their History? Calvin Miller, Vanderbilt University, millercf@ctrvax.vanderbilt.edu, (615) 322-2232; and Bob Hatcher, University of Tennessee, Knoxville, and Oak Ridge National Lab.

THEME SESSIONS

1. Geologic Maps and Digital Geologic Maps . Ralph F. Crawford and Michael W. Higgins, Applied Mapping Systems, Inc., mhiggins@mindspring.com, (770) 641-1268. Poster.

 The Stratigraphy of the Southeastern Atlantic Coastal Plain: A Poster Session with Core Samples. Kathleen Farrell, North Carolina Geological Survey, Kathleen.Farrell@ncmail.net, (919) 733-2423; and Bill Harris, University of North Carolina, Wilmington. Poster.

3. Triassic Basins of the Southeastern U. S. (Sponsored by the SE Section SEPM.) Paul Thayer, University of North Carolina, Wilmington, Thayer@uncwil.edu, (910) 962-3780; and Dan Textoris, University of North Carolina, Chapel Hill.

4. Engineering and Environmental Geology. (Sponsored by Engineering Geology Division.) Charles Welby, North Carolina State University, cwwelby@unity.ncsu.edu, (919) 515-7158.

5. Great Ideas in Teaching Geoscience - K-16. (Co-sponsored by SE Section NAGT and the SEGSA Education Committee.) Lynne Gronback, McDougle Middle School, Chapel Hill, Lgronback@mindspring.com, (919) 644-2681. Poster and Oral.

6. Geologic Linkages between Land and Sea: Estuarine Sediment Dynamics and Deposits. Clark Alexander, Skidaway Institute of Oceanography, clark@skio.peachnet.edu, (912) 598-2329; and John Wells, University of North Carolina, Chapel Hill.

7. Hard Rock Hydrogeology: The Occurrence and Movement of Ground Water in the Southern Appalachian Blue Ridge and Piedmont. Matt Heller, North Carolina Ground Water Section, Matt.Heller@ncmail.net, (704) 663-1699; Barbara Christian, North Carolina Ground Water Section; and Charles Daniel, United States Geological Survey.

8. Granitoid Plutons, Rocks, and Minerals. Loren Raymond, Appalachian State University, raymondla@appstate.edu, (828) 262-2749; and Sam Swanson, University of Georgia.

9. Undergraduate Research. Undergraduate Research. (Sponsored by the Council for Undergraduate Research.) Brannon Andersen, Furman University, brannon.andersen@furman.edu, (864) 294-3366. Poster.

10. Terrane Boundaries and Paleosubduction Zones in the Inner Piedmont and Blue Ridge: Where are they, what is their History? Calvin Miller, Vanderbilt University, millercf@ctrvax.vanderbilt.edu, (615) 322-2232; and Bob Hatcher, University of Tennessee, Knoxville, and Oak Ridge National Lab.

11. Paleoecology of the Paleogene Coastal Plain: An Interdisciplinary Testing Ground. (Sponsored by the Paleontological Society.) Steve Hageman, Appalachian State University, HagemanSJ@appstate.edu, (828) 262-6609.

12. Terrestrial Vertebrate and Ecosystem Evolution of the Southeast. (Sponsored by the Paleontological Society.) Reese Barrick, North Carolina State University, reese_barrick@ncsu.edu, (919) 515-7648.

WELCOMING PARTY

Wednesday, April 4, from 6:00 - 8:30 p.m. at the new North Carolina Museum of Natural Sciences http://www.naturalsciences.org Enjoy an informal tour of the museum's exhibits, including a wonderful walk through time featuring *Wilo*, the dinosaur with a heart, and the world's only complete *Acrocanthosaurus*. Museum staff will be on hand and hors d'oeuvres and drinks will be available. You must be registered for the meeting to attend the Welcoming Party.

K-12 PROGRAMS

Technical Programs. There are several programs scheduled that should be of interest to those involved in pre-college education. Speakers in Symposium 6 will discuss aspects of the recent changes made in the science curriculum of the North Carolina Department of Public Instruction. Symposium 5 and Theme Session 5 will provide an opportunity for educators (K-16) to share ideas on effective teaching. The poster-format theme session, Thursday afternoon, will highlight K-12 teaching, while the Friday morning oral session is designed for all levels, including college teaching. Symposium 1 may also be of interest to K-12 educators.

Field Trips. Field Trip 7, all day Friday, is specifically designed by and for K-12 teachers. Field Trips 2, 6, and 10 may also be of interest. Workshop. Earth Science/Environmental Science Education - Meeting the New North Carolina Teaching Standards, will be held on Saturday, April7. The workshop will be led by the staff of The Science House, North Carolina State University, Science_House@ncsu.edu, (919) 515-6118. This is a hands-on workshop for Earth/Environmental Science educators (grades 6-12) to explore learning activities for the new North Carolina Earth/Environmental Science Requirement (The workshop is co-sponsored by NSF Science and Technology center for Environmentally responsible Solvents and processes and the N. C. Department of Public Instruction.).

Future Section Meetings

2002 – joint meeting with NC section, Lexington, NC, John Kiefer will be the Local Chair.

2003 - Memphis, TN, Daniel Larsen will be the Local Chair.

2004 – joint meeting with NE section, Washington, DC, Richard Diecchio will be the Local Chair.

2005 - Biloxi, MS, Gail Russell will be the Local Chair.

Student Travel Grants

The Student Ttravel Grant program continues to be very popular. In the Spring of 2000, the Section spent a total of \$3580 (\$1790 from the GSA Foundation) to help cover the travel costs of students who gave papers at the Charleston, SC, meeting. In the Fall of 2000, the section spent \$ 5420 (including \$2710 from the GSA Foundation) for travel to the Reno meeting. Total student travel expenditures for 2000 was \$9000 thanks to an increase in matching funds by the GSA Foundation. The following students received travel support last year:

Charleston, SC

Bier, Sara Cantrell, Diedra Carter. Brad Clepper, Marta Coleman, Alvin DeSmedt, Megan Gastineau, Heather Grimes, Analee Holm, Christopher Jackson, Burke Jones, Thomas Lawson, Joshua Campbell, Matthew McCarter, Renee McCoy, Kurt Miller, Dana Moore, Bruce Motes, Adam Nicholas, James Pitner, Andrew Rizzuti, Anthony Robinson, Amelia Settles. David Stapleton, Collene Tinkham, Doug Waters, Chervl Whisner, Christopher Williams, Scott Wyatt, Michael

Bekker, Andrey Bier, Sara Bream, Brendan R. Burns, Amy State Cantrell, Deidra Chen, Zhensheng Coleman, Alvin L., Jr. Flaum, Jason A. Garry, William Brent Greer, Lisa Jones, Thomas E. Mirante, Drew Moses, Christopher S. Rollins, Stephanie M. Rosenheim, Brad

University of Alabama Auburn University Columbus State University State University of West Georgia College of William and Mary University of Tennessee, Knoxville East Carolina University Florida State University State University of West Georgia University of Tennessee at Martin State University of West Georgia Indiana University Appalachian State University West Virginia University University of Tennessee, Knoxville University of Tennessee at Martin State University of West Georgia State University of West Georgia University of Tennessee, Knoxville University of South Carolina University of Tennessee, Knoxville University of Tennessee, Knoxville University of Georgia University of Alabama University of Wisconsin University of Tennessee, Knoxville University of Tennessee, Knoxville University of Tennessee, Knoxville

University of Tennessee, Knoxville

Reno, NV

VPI &SU University of Tennessee, Knoxville University of Tennessee, Knoxville University of West Georgia University of Alabama University of Tennessee, Knoxville State University of West Georgia University of Alabama University of Kentucky University of Kentucky University of Tennessee, Martin University of Georgia University of Georgia University of Miami, RSMAS East Carolina University University of Miami, RSMAS

Stiles, Cynthia A.	
Tavernier, Stephen A.	

University of Tennessee, Knoxville University of Tennessee, Knoxville

Student Research Grants

The Section received twenty two applications for grants in the Spring of 2000 (fourteen Master's and eight Doctoral students). Twelve student research proposals were funded for a total amount of \$ 5400.

Bayona, German University of Kentucky

- Controls on Middle to Late Ordovician (Taconic) synorogenic deposition
- in the southeasternmost part of the North American Craton (Laurentia) Bekker, Andrey Virginia Tech
- Chemostratigraphy of carbonates and organic-rich shales associated with 2.45-2.22 GA glacial deposits: test of the Paleoproterozoic Snowball
- Earth and coupling between climatic and isotopic phenomena
- Borella, Josh University of North Carolina-Chapel Hill The investigation of a new control on the macroscopic brittle-ductile transition
- Davis, Eric West Virginia University Quaternary development of the Terraces and floodplains in the Kanawha River valley, W Virginia: an analysis of climate-driven fluvial responses in the upper Ohio River basin
- Martin, Cindy University of North Carolina-Wilmington Kinematic analysis across the Salmon-Payette shear zone, Idaho
- McCartha, Jeremy Auburn University

Hydrochemical evolution and saltwater intrusion in the upper Floridian aquifer of Bay County, northeastern Florida

- Moore, Bret Auburn University
- Field and structural characterization of eclogite occurences in the Lofoten
- archipelago, Norway
- Robitaille, Kenneth University of North Carolina-Wilmington Structural analysis of the Tar River area
- Schaefer, Ricky Auburn University
- Sediment distribution and dynamics in Mobile Bay, Alabama Stocksill, Karen University of Tennessee
- Melt inclusions in SNC meteorites: implications for parental magmas Tornabene, Livio University of South Florida
- Characterization and age of a possible Tertiary impact site near Gamboa.

Panama Canal zone

Zeitner, Daniel Auburn University

The geology of east Bodo, north Norway

Deadlines for Student Support Applications

The Section provides research and travel grants to deserving students. Research awards are available to support undergraduate, M.S., and Ph.D. research for GSA members enrolled in universities in the Section. Research grant applications must be on current GSA forms and comply with all GSA rules. Travel assistance is available for GSA members presenting papers or posters at GSA meetings. Applications for travel grants must include an official form, certification of GSA membership (e.g., copy of membership card), documentation of student enrollment, and documentation that the student is presenting a paper (e.g., abstract acceptance). The Section Web Page http://www.geology.ecu.edu/geology/segsa/segsa.html) provides travel grant application forms and information.

Dr. Donald W. Neal Secretary, SEGSA Department of Geology East Carolina University Greenville, NC 27858-4353 neald@mail.ecu.edu or (252) 328 4392

The application deadlines are: Research Grants February 1, 2001 Travel Grants to Raleigh: March 1, 2001 Travel Grants to Boston: October 1, 2001

Election of Officers, 2001-2002

Southeastern Section, GSA

The slate of officers for the Southeastern Section election is presented below with biographic data. Please vote by checking the appropriate box or by writing in the name of a nominee.

Your ballot must be returned to GSA in Boulder no later than January 31, 2001. Please fold your ballot on the line and **tape** (do not staple) it, making certain the address is showing, and affix a first class postage stamp.

		BALLOT	
Chair	Chair-elect	Vice-Chair	Secretary-Treasurer
Harold Stowell() () (write-in)	Allen Dennis() () (write-in)	John Kiefer() () (write-in)	Donald Neal () () (write-in)

HAROLD H. STOWELL, METAMORPHIC PETROLOGY. *Educ*: Florida State Univ BS 79; Univ South Carolina, MS 82; Princeton Univ, Ph.D. 87. *Prof Exp*: assist to Prof Univ of Alabama 86-present. *Mem*: GSA, MSA, AGU. *Res*: Metamorphic petrology and tectonics of southern Appalachians and Alaska. *Mailing Add*: Dept of Geological Sci., Univ of Alabama, Tuscaloosa, AL 35487-0338; email: hstowell@wgs.geo.ua.edu

ALLEN J. DENNIS, STRUCTURAL GEOLOGY/TECTONICS. Educ: Colgate Univ, AB 82; Univ of South Carolina, MS 85, Ph.D. 89. Prof Exp: Instr to Prof and Chair UNIVERSITY OF SOUTH CAROLINA, AIKEN 88-present. *Mem:* GSA, AGU, CGS, Sigma Xi. *Res:* Faulting and fault rocks, Appalachian and Himalayan tectonics, *Mailing Add:* Dept of Biology and Geology, Univ. of South Carolina, Aiken, 471 University Parkway, Aiken, SC 29801-6309; email: dennis@sc.edu

JOHN D. KIEFER, ENGINEERING GEOLOGY, *Educ*: St. Joseph's College (Ind.), B.S. 61; Univ of Illinois, Champaign, M.S. 65; Ph.D. 70; *Prof Exp*: Instructor, University of Illinois, 65-67; Assistant Professor, Department of Geology, Eastern Kentucky University, 1967-71; Chief Engineering Geologist, Geotechnical Engineering Associates, 1971-78; Head of Water Resources, Alabama Geological Survey, 1978-79; Head of Water Resources, Kentucky Geological Survey 1979-81, Assistant State Geologist, Kentucky Geological Survey, 1981-present; Adjunct Professor, University of Kentucky, Department of Geological Sciences, 1997-present; *Mem*: GSA, AAPG, AEG, SEPM, AAAS, NSPE, Registered Professional Geologist: Kentucky # 1283, Indiana # 1968; *Mailing Add*: Kentucky Geological Survey, 228 Mining and Mineral Resources Bldg., Univ. of Kentucky, Lexington, KY 40506-0107; e-mail: kiefer@kgs.mm.uky.edu

DONALD W. NEAL, STRATIGRAPHY. *Educ*: College of William and Mary BS 73; Eastern Kentucky Univ, MS 75; West Virginia Univ, Ph.D. 79. *Prof Exp*: Loggiing Geol, Exploration Logging of USA, Inc, 75-76, Research Assoc West Virginia Geol and Econ Survey, 77-79, Ass to Assoc Prof EAST CAROLINA UNIV, 79-present. *Mem*: GSA, SEPM, IAS, SGE, NAGT. *Res*: Appalachian Basin stratigraphy, petrology, petroleum geology. *Mailing Add*: Dept of Geology, East Carolina Univ, Greenville, NC 27858-4353; email: neald@mail.ecu.edu

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Southeastern Section Ballot Geological Society of America P.O. Box 9140 Boulder, CO 80301-9140