

The Eastern Section of the Society for Sedimentary Geology ~ ES-SEPM ~ Winter 2011 Newsletter



Announcements

The joint SEPM (Eastern and Great Lakes Sections) and Paleontological Society Reception and Keynote Address are scheduled for 6:00 to 8:00 pm on Sunday, March 20th, 2011 in Pittsburgh; all are welcome to attend, refreshments will be provided. The keynote address will be given by the SEPM Secretary-Treasurer Diane Kamola from the Department of Geology at the University of Kansas.

“Anatomy of Foreland Basin Strata: Clues from Stratal Patterns and the Paleontological Record.”



Dr. Diane Kamola, University of Kansas

Strata within the Cretaceous Sevier Foreland Basin record a complex history of depositional events. The Sevier Foreland Basin (FLB) was joined with the Cretaceous Western Interior Seaway (KWIS) through much of the Cretaceous, and formed a major physiographic feature in North America during Cretaceous time. Strata within the basin include fluvial, strand plain and shoreface sandstones, which interfinger with marine shales to the east. During highstand events, wave dominated shorelines along the western margin prograded into the basin in basinward-stepping stratal packages, reflecting thrust activity. The wide areal extent of the sea produced an expansive fetch length and large wave heights. These large waves developed the thick hummocky

and trough cross stratification characteristic of shoreface strata from the region. Comparison of these strata with hydrodynamic studies on modern shorefaces has allowed for interpretation of the dynamics of depositional conditions, such as daily wave and tide regime, and size and frequency of storms. Trace fossil assemblages allow for more refined interpretations of shoreface conditions: for example, concentrations of large-scale, thick-walled *Ophiomorpha* are used to interpret barred vs. non-barred shorefaces. During lowstand events, depositional controls changed and the geometry of the FLB had a more dominant influence on sediment distribution along the western margin of the seaway. In extreme lowstand events, the FLB and the KWIS may have been decoupled, with sediment dispersal and drainage patterns changing to a north-south trend, indicating a shift in sediment transport parallel to the axis of the FLB. A number of lowstand deposits and incised valley fills record such events. A decoupling of the FLB from the KWIS would have resulted in a much restricted fetch length and lower wave energy. Lowstand deposits often lack the strong wave influence present in the highstand strata. Comparison of foraminifera from modern marginal marine and shallow marine settings with strata deposited during lowstand events are used to help with depositional analysis of problematic lowstand strata.

Additional Events of Interest at Northeastern-North Central and Southeastern GSA

The following are ES-SEPM sponsored events at the spring regional Geological Society of America meetings.

Northeastern/ North Central GSA Meeting

Northeastern/North-Central Sections GSA Joint Meeting-

<http://www.geosociety.org/Sections/ne/2011mtg/>

Pittsburgh, Pennsylvania, 20-22 March 2011

Chairs: NC - Daniel K. Holm (dholm@kent.edu), and NE - Patrick Burkhardt (patrick.burkhardt@sru.edu)

Theme Sessions

Mesozoic/Cenozoic Vertebrate Paleontology

Michael Ryan (Cleveland Museum of Natural History, mryan@cmnh.org), Matt Lamanna (Carnegie Museum of Natural History, lamannam@carnegiemnh.org)

Quaternary History of the Great Lakes

Tim Fisher (Univ. of Toledo, timothy.fisher@utoledo.edu)

The Effect of Late Paleozoic Tectonics on the Devonian Shales

Mark Evans (Central Connecticut State Univ., evansmaa@ccsu.edu)

Provenance of Organic Content in the Marcellus Shale

Christopher Laughrey (Weatherford Labs, christopherlaughrey@weatherfordlabs.com)

Life's Footprint: New Frontiers in Field and Experimental Trace Fossil Research

Ilya Buynevich (Temple Univ., coast@temple.edu), Stephen Hasiotis (Univ. of Kansas, hasiotis@ku.edu), Jacob Benner (Tufts Univ., jacob.benner@tufts.edu)

Workshop

Sequence Stratigraphy for Graduate Students

This is a great opportunity for students and we encourage all to register. There is still room available!

Instructor: Vitor Abreu (Senior Technical Consultant - Hydrocarbon Systems, ExxonMobil Upstream Research Company)

Description: This course is designed to teach graduate students the principles, concepts and methods of sequence stratigraphy. Sequence stratigraphy is an informal chronostratigraphic methodology that uses strata surfaces to subdivide the stratigraphic record. This methodology allows the identification of coeval facies, documents the time-transgressive nature of classic lithostratigraphic units and provides geoscientists with an additional way to analyze and subdivide the stratigraphic record. Using exercises that utilize outcrop, core, well log and seismic data, the course provides a hands-on experience to learning sequence stratigraphy.

\$25; limited to 20 graduate students

8:00 AM-4:30PM, Sun.-Mon, March 20-21, 2011

Southeastern GSA Meeting

Southeastern Section GSA Meeting- <http://www.geosociety.org/Sections/se/2011mtg/>
Wilmington, North Carolina, 23-25 March 2011

Chairs: Richard Laws (laws@uncw.edu) and Bill Harris (harrisw@uncw.edu)

Symposia

Coastal Response to Sea Level and Climate Changes; A Tribute to the Career of Stan Riggs
David Mallinson (East Carolina University, MALLINSOND@ecu.edu) and Dorothea Vonderporten Ames
(East Carolina University, AMESD@ecu.edu)

Coastal Response to Tidal Inlets: A Tribute to the Career of Bill Cleary
Spencer Rogers (North Carolina Sea Grant, rogerssp@uncw.edu) and Duncan Fitzgerald (Boston
University, dunc@bu.edu)

Theme Sessions

Karst Geology and Hydrology

Lee Florea (Western Kentucky University, lee.florea@wku.edu) and Doug Gamble (University of North
Carolina Wilmington, gambled@uncw.edu)

Surficial and Subsurface Geology and Hydrogeology of the Cape Fear River Basin

Jean Self-Trail (US Geological Survey, jstrail@usgs.gov) and Kathleen Farrell (NC Geological Survey,
kathleen.farrell@ncdenr.gov)

Energy Sources and Issues: "Offshore and Unconventional"

Roger Shew (University of North Carolina Wilmington, shewr@uncw.edu)

Reducing Carbon Dioxide Emissions in the Southeast: Advances in Geologic Carbon Sequestration
and CO₂-Enhanced Oil Recovery

Tina Roberts-Ashby (University of South Florida, oxbowlk@yahoo.com)

Field Trip

Natural Gas Potential of the Sanford Sub-Basin, Deep River Basin, North Carolina.

Kenneth Taylor (kenneth.b.taylor@ncdenr.gov) and Jeff Reid (jeff.reid@ncdenr.gov), North Carolina
Geological Survey. After the field trip ES-SEPM will partially reimburse each participating student
member.

Section News

Old Section Field Guides – Free for Active Members!

The following four field guides are available at no charge to active ES-SEPM members on a first come-
first served basis. Please e-mail the Section Secretary/Treasurer Bosiljka Glumac
(bglumac@smith.edu) a list of guides you would like to receive. If your membership is not up to date,
please send in your dues before or with your request for the guides. Any contributions for shipping are
welcome. Thank you!

"Lake sequences of the central Hartford Basin, Newark Supergroup" by Elizabeth Gierlowski-Kordesch
and Phillip Huber.

"Sedimentology, stratigraphy, and ichnology of the Lower Silurian Medina Formation in New York and
Ontario" by William L. Duke, William C. Brusse, Peter J. Fawcett, Gerard V. Middleton, Margaret
A. Rutka, Carlos J. Salas, and S. George Pemberton, 1987.

"The Taconian clastic sequence in northern Virginia and West Virginia" by Richard J. Diecchio, 1985.
"Lower Paleozoic carbonate rocks, Roanoke region, Virginia" by J.F. Read with contributions from J.A. Bova, S.L. Dorobek, G.A. Grover, W.F. Koerschner, R.D. Kreisa, J.R. Markello, and W.J. Mussman, 1983.

Membership Information

Become and Stay Active!

To determine your current membership status, please check the mailing label of this newsletter. Following your name you will see "Stu" for student members or "Pro" for professional members. These indicators are followed by a year designation: for students it's the year they joined the section or updated their information, and for professional members it indicates their membership dues status (for example, "Pro 11" means paid up through 2011). If your paid-up status is for a year earlier than 2011, you owe dues now. If your mailing label has your name and address only, and you are no longer a student, then your dues payment is currently due in the amount of \$8 and will be credited for 2011 (and beyond if additional money is sent). Student members are not required to pay dues, but please let us know about your current status and ensure that we have your updated contact information. We would like to avoid too many "Return to Sender" situations. For the same reason, we have started to delete from our membership list the names of members whom we have not heard from in a while. If you are one of those, please either update your status or let us know if you would prefer to be taken off the membership list (by e-mailing the Secretary/Treasurer Bosiljka Glumac: bglumac@smith.edu). Thanks to all of you who have recently paid your membership dues, and we hope to hear from the rest of you soon.

E-Mail Distribution List

Please make sure that we have your current e-mail address. We will also be e-mailing you a PDF version of this Newsletter and the link to our web page. If you do not receive this e-mail in the next week or so we do not have your current e-mail address. Please update your e-mail information on the enclosed membership form or by e-mailing the Section Secretary/Treasurer Bosiljka Glumac: bglumac@smith.edu. Thank you!

Get Membership for Life!

Tired of constant reminders about paying your \$8 ES-SEPM dues each year? For a contribution of \$100 or more you can now become a life-long member of ES-SEPM!!! For more information, please see the Membership Form included in this Newsletter.

Honorary Life-Long Members:

Gerald M. Friedman
Gerard V. Middleton
John B. Southard
H. Allen Curran

Thank you for your support!

Other Announcements

Symposia and Theme Sessions that our members may be interested at the spring 2011 regional GSA meetings include:

NE/NC GSA- Pittsburgh, PA

Symposium

Devonian Climate and Paleoecology—Insight from Stratigraphic Studies.
Dave Brezinski, Carnegie Museum of Natural History

Theme Sessions

Conodont Stratigraphy.
Cosponsored by the Pander Society.
Jeff Over, SUNY Geneseo

Advances in Arthropod Paleobiology.
Cosponsored by Paleontological Society.
Carrie Schweitzer; Rod Feldmann, Kent State Univ.

Devonian Sands of Northern Pennsylvania.
Gordon Baird, SUNY Fredonia; Jeff Over, SUNY Geneseo

Sedimentary Environments of Post-Paleozoic, Pre-Glacial Strata of the Midwest-Appalachian Region.
Cosponsored by Great Lakes Section, SEPM.
C. Pius Weibel, Illinois State Geological Survey

Field Trips

Late Devonian Paleontology and Paleoenvironments at Red Hill and Other Fossil Sites in the Catskill Formation of North-Central Pennsylvania.
Ted Daeschler, Academy of Natural Sciences of Philadelphia; Walt Cressler, West Chester Univ. of Pennsylvania.

SE GSA- Wilmington, NC

Symposium

Significant Fossil Sites in the Southeast: Why They Are Important and How They Contribute to Our Knowledge of the Fossil Record.
Cosponsored by the Southeastern Section of The Paleontological Society.
Sandy Ebersole, Alabama Geological Survey; Melanie Devore, Georgia College and State Univ.

Theme Sessions

Micropaleontology of the Southeast.
Cosponsored by the Southeastern Section of The Paleontological Society.
Ronald Lewis, Auburn Univ.; Steve Culver, East Carolina Univ.

Macropaleontology of the U.S. Coastal Plain.
Cosponsored by the Southeastern Section of The Paleontological Society.
Patricia Kelley, Univ. of North Carolina–Wilmington; Gregory Dietl, Paleontological Research Institution

Field Trips

Plio-Pleistocene Stratigraphy and Paleontology of Southeastern North Carolina.
Cosponsored by The Paleontological Society and the National Association of Geoscience Teachers (NAGT).
Co-Leaders: Greg Dietl, Lauck Ward, Tricia Kelley.

Workshops

Standardized Core Logging Techniques for Students.
Kathleen Farrell, NCGS; Jean Self-Trail, USGS

OTHER UPCOMING CONFERENCES

AAPG 2011 Annual Convention & Exhibition 10 April 2011 to 13 April 2011 Houston, TX, USA

The 19th Annual David S. Snipes/Clemson Hydrogeology Symposium will be held at Clemson University on April 7th, Abstracts are due March 1st for more information log on to <http://www.clemson.edu/ces/hydro/symposium/index.html>

ES AAPG annual meeting will be held September 25-27 in Washington, DC. The ES Student Job Quest will be held just before the meeting, on September 24-25. This is an opportunity for students to meet with potential employers as well participate in the optional poster competition. For further information log on <http://www.gswweb.org/aapg/>

The ES AAPG is working to expand the AAPG Student Chapter Program to additional universities and colleges throughout the section. The Student Chapter Program provides financial support for the chapter and a student each year through the Weeks Grant Program. More information about the student chapter program is at <http://students.aapg.org/>

Geoscience graduate students are encouraged to explore a career in the energy industry by participating in the Imperial Barrel Award Program. For more information check the AAPG website at <http://www.aapg.org/iba/>

Additionally every spring several states hold their Academy of Science meetings, though the abstract deadlines have passed for many. It is worthwhile to check these out since they do have Geology and Earth Science sections (<http://www.academiesofscience.org/naas-affiliated-academies>). New Jersey is still accepting abstracts (until March 10th) for its April 9th meeting to be held at Montclair State University.

Call for Newsletter Contributions

Please send your news, announcements, and any other Newsletter contributions to the Newsletter Editor Deborah Freile (dfreile@njcu.edu). We look forward to hearing from you!

ES-SEPM MEMBERSHIP FORM

NOTE: This form is for New Members or for Current Members to update membership information. If the information on your mailing label is correct and we have your e-mail address, there is no need to return this form with your dues payment. Current members – *please pass this form on to prospective new members, both professionals and students as appropriate.*



Membership type:

Please check one: Professional (\$8/year*) ____ Student (free) ____

*** make checks payable to: Eastern Section SEPM**

****for a contribution of \$100 or more become a life-long member!!!**

Name: _____

Title/Occupation: _____

e-mail: _____

Would you like to have your e-mail included on our online list of members? _____

Address: _____

Professional interests: _____

Web page (if you wish to have a link from the ES SEPM page):

Return completed forms with dues payment as applicable to:

**Bosiljka Glumac
Eastern Section SEPM Secretary/Treasurer
Department of Geosciences, Smith College
Northampton, Massachusetts 01063**

e-mail: bglumac@smith.edu

You can find a copy of this form and other pertinent information at: www.essepm.org

**Bosiljka Glumac, Secretary/Treasurer
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Address Correction Requested**



Attention!!! Membership information ↓