



# THE OHIO GEOLOGICAL SOCIETY

*An Affiliate (1963) of the American Association of Petroleum Geologists (AAPG)*

The Newsletter of the Ohio Geological Society

October 2000

## **1999-2000 Officers**

### **President**

John L. Forman  
Appalachian Geophysical Services,  
L.L.C.  
262 N. Cassingham Rd.  
Columbus, OH 43209-1490  
(614) 237-6353  
(614) 237-6465 (Fax)  
jlforman@att.net

### **Vice-President**

James McDonald  
Ohio Geological Survey  
4383 Fountain Square Drive  
Columbus, OH 43224  
(614) 265-6601  
(614) 447-1918  
jim.mcdonald@dnr.state.oh.us

### **Secretary**

Paul L. Archer  
Geopetro, Inc.  
6463 Proprietors Rd. Suite 03  
Worthington, OH 43085  
(614) 885-9350  
geopetro@aol.com

### **Treasurer**

William M. Rike  
Consulting Geologist  
P.O. Box 763  
Worthington, OH 43085  
(614) 882-4570  
thegeologist@juno.com

### **Past President**

Steven P. Zody  
Zody Geoscience Services  
P.O. Box 921  
Wooster, OH 44691  
(330) 262-4323  
(330) 262-5226 (Fax)  
zodyoil@sssnet.com

## **PRESIDENT'S COLUMN**

Welcome to the 2000-2001 Ohio Geological Society

I'd like to thank last year's Officers, Trustees, OGS Delegates to AAPG and Committee Chairpeople for furthering the Society's objectives. We are to advance the science of geology, promote exploration and foster the spirit of scientific research in Ohio to ourselves and the general public. With the help of all OGS members, we can continue our "Society's" heritage into our 40th year stronger and better organized than ever before.

We have a great opportunity this year. Prices for oil and natural gas are at near record highs and the economy is strong with demand for all of Ohio's natural resources at high levels. It is in these times that any "Society" should become involved. I hope that you will all take time this year to disseminate information and technology related to Ohio geology and its natural resources to the public. Another important aspect of the "Society" is to encourage membership, not only in the Ohio Geological Society, but other societies. National, regional or other local scientific organizations would love to have you as their member too. Consider national's AAPG, SEG, AGI, GSA, SPWLA, AIPG, AAPL, IPAA, SPE. Or other local geological societies like AGS, PAPG, PGS, NYSGA, MBGS, KSPG, PGI, I-KGS, IGS. State non-geological societies/organizations: OOGA, SPWLA, SPE, MLBC, OAS. If you are interested and can't figure out all those letters, let me know and I'll get you their applications and find sponsors/references. It's time to learn what is going on outside of Ohio too.

We have set up a few joint meetings this year that will allow OGS members to interconnect with other geological and technical societies. There will be some meetings around the state and they won't always be in the evening. Let any of the officers know what you would like to see before this year's schedule is filled.

Remember to check our website and see what's happening.

## UPCOMING OGS MEETINGS AND EVENTS

### November 6

The next meeting will be November monthly meeting. Dr. Greg Nadon, of Ohio University will be presenting a talk on *The Application Of Sequence Stratigraphy To Low Accommodation Settings*. The meeting will be held at the University Plaza Hotel, and will start at 7:30 p.m. Formerly known as the Ramada University, this is the same hotel that the 1998 Eastern Section-AAPG meeting was held. Dinner will start at 5:30 p.m. For more information, please contact Jim McDonald at (614) 265-6601.

### December 1

The third annual OGS Christmas party will be held at the University Plaza Hotel, and will start at 6:00 p.m. Formerly known as the Ramada University, this is the same hotel that the 1998 Eastern Section-AAPG meeting was held. Social hour starts at 6:00 p.m. and the dinner will start at 7:00 p.m. The cost will be determined. Please RSVP Amy Burke at (740) 927-9173 by Monday, November 27th.

### The Application Of Sequence Stratigraphy To Low Accommodation Settings

Dr. Greg Nadon  
Ohio University

#### Abstract

Sequence stratigraphy, the technique of interpreting large- and small-scale stratigraphic geometry in terms of relative sea level change, is now commonly applied to virtually all sediments with a marine or marginal marine origin. This methodology has proved to be a powerful tool in predicting lateral and vertical facies relationships within sections bounded by unconformities by viewing the facies patterns as a result of some combination of eustasy, subsidence, and sediment supply. However, sequence stratigraphy was developed to explain the large-scale stratal geometry present on passive margins that contain primarily Mesozoic sediments. Interpreting sediments deposited in different tectonic and climate settings, such as the Paleozoic of Ohio, requires re-evaluation of the assumptions inherent in the original Exxon model. The Pennsylvanian sediments exposed in southeastern Ohio provide an opportunity to test the sequence stratigraphic concepts by applying them to sediments deposited during a much different climate pattern and on the distal margin of a major orogenic belt. Initial studies show that the facies patterns reflect a response to changes in relative sea level influence mainly by glacial-eustatic and climate factors. However, the low and variable rates of tectonic subsidence result in the preferential preservation of facies from the transgressive and early regressive phases as well as the formation of a complex hierarchy of erosion surfaces. The combination of preferential facies preservation and the erosion surfaces result in lateral and vertical facies geometries that are more complex than the current models suggest.

## OTHER OGS ANNOUNCEMENTS

**Membership Dues Are Due:** The membership dues for the 2000-2001 year are due. Your yearly dues help support a number of different programs, such as the monthly newsletter, monthly meetings, yearly workshops and seminars, and student activities. Dues for the year are \$20 for Active and Associate members, and \$5 for students.

This year, we plan on publishing a new membership directory. Please fill out the enclosed membership form as fully as possible. We will be using the membership form to help create the membership directory.

We plan on trying to send out the monthly newsletter via e-mail, starting sometime later this fall. If you would like to receive the monthly newsletter via e-mail, please check the appropriate boxes on the membership form.

## OTHER EVENTS

### November 2000

**November 9-18** - Geological Society of America Annual Meeting. Reno, NV

**November 13-14** - The Water Management Association of Ohio (WMAO) Fall Conference. Columbus, OH. "Water Resources Challenges for the New Millennium", University Plaza Hotel, 3110 Olentangy River Road, Columbus, Ohio, Chair: Tim Krichbaum (tim.krichbaum@epa.state.oh.us)

# PUBLICATIONS

The in-print publications of the Ohio Geological Society may be purchased from the Ohio Division of Geological Survey. Members of the Society receive a discount; the member price is in parentheses (M:). For more information, write the Ohio Geological Society, P.O. Box 14304, Columbus, OH 43214.

- OGS 1. Guidebook to the Middle Devonian rocks of north-central Ohio**, by A. Janssens. 30 p., 1970. \$2.50. (M: \$2.00).
- OGS 2. Geology of Silurian rocks, northwestern Ohio**, by C. F. Kahle and J. C. Floyd. Guidebook for First Annual Meeting, Eastern Section, American Association of Petroleum Geologists. 91 p., 1970. \$7.00 (M: \$6.00).
- OGS 3. Seminar on industrial self-help programs for natural gas supplies**, edited by Arie Janssens. 55 p., 15 figs., 1 table, 1977. \$3.50 (M: \$3.00).
- OGS 4. Clinton sandstone papers presented at the Ohio Oil and Gas Association Winter Meetings 1961 to 1978** (abridged reprint of 1980 volume). 228 p., 1985. \$25.00 (M: \$20.00).
- OGS 5. The new Clinton collection--1985**, edited by Jack Gray, Andy Maslowski, Warren McCullough, and W. E. Shafer (2nd printing). This edition includes a transcript of "Deeper Clinton-Medina drilling in southeastern Ohio" from a March 1986 Ohio Geological Society meeting. 257 p., 1985. \$25.00 (M: \$20.00).
- OGS 6. Principles of seismic exploration**. A collection of papers from a seminar presented at the 1987 AAPG Eastern Section meeting. 1987. Out of print.
- OGS 7. Computer-aided analysis of geologic data**, edited by Lawrence H. Wickstrom. A collection of papers from a seminar presented at the 1987 AAPG Eastern Section meeting. 100 p., 1987. \$15.00 (M: \$12.00).
- OGS 8. Maps and cross sections of the Cambrian and Lower Ordovician of central Ohio**, by G. G. Shearrow. 31 p., 8 pls., 1987. \$12.00 (M: \$10.00).
- OGS 9. An update on Ohio's subsurface geology**. Proceedings from the October 1993 technical symposium held in Canton, Ohio. 11 papers, separately paged, 1993. \$25.00 (M: \$20.00).
- OGS 10. The Ohio Geological Society anthology, the Morrow County, Ohio "oil boom" 1961-1967 and the Cambro-Ordovician reservoir of central Ohio**, edited by William E. Shafer. 452 p., 1994. \$65.00 (M: \$55.00).
- OGS 11. Major natural gas plays of the Appalachian basin and surrounding areas**. Proceedings from the October 1994 technical symposium held in Canton, Ohio. 11 papers, separately paged, 1994. \$25.00 (M: \$20.00).
- OGS 12. Structural influences on oil and gas reservoirs**. Proceedings from the October 1995 technical symposium held in Canton, Ohio. 14 papers. 129 p., 1995. Out of print.
- OGS 13. Enhanced recovery--historical development and future potential in Ohio and the Appalachian Basin and Integration of geology and geophysics in exploration**. Proceedings from the October 1996 technical symposium held in Akron, Ohio. 16 papers. 209 p., 1996. \$25.00 (M: \$20.00).
- OGS 14. Ohio Geological Society Fifth Annual Technical Symposium**. Proceedings from the November 1997 technical symposium held in Akron, Ohio. 11 papers. 117 p., 1997. \$25.00 (M: \$20.00).
- OGS 15. Petroleum Seismology in the Digital Age**. Course notes from the Ohio Geological Society's 3-D Seismic Seminar presented at the 1998 AAPG Eastern Section meeting. \$20.00 (M: \$15.00).
- OGS 16. Fossil Collecting in the Silica Formation at Sylvania, Ohio**. Guidebook for the 1998 AAPG Eastern Section meeting. 16 p., 1998. \$7.00 (M: 6.00).
- OGS 17. Into The New Millennium: The Changing Face of Exploration In The Knox Play**. Proceedings from the Sixth Annual Fall Symposium held in Akron, Ohio, October 1999. 12 papers. 120 p., 1999. \$25.00 (M: \$20.00).
- To order any of the Society's publications call or write: The Geologic Records Center, Ohio Geological Survey, 4383 Fountain Square Drive, Columbus, Ohio 43224-1362. Telephone (614) 265-6576. E-mail: geo.survey@dnr.state.oh.us.

## 2000-2001 Meeting Schedule

### September 2000

No Meeting

### October 1999

October 9

Joint Meeting with Appalachian Geological Society. AAPG Distinguished Lecturer Dr. John Warme – *Anatomy of an Anomaly: The Catastrophic Devonian Alamo Impact Breccia, Nevada.*

October 25

PTTC/Ohio Geological Society Fall Workshop - *Nuts and Bolts of Digital Geologic Analysis.*

### November 1999

November 6

Dr. Greg Nadon, Ohio University. *The Application Of Sequence Stratigraphy To Low Accommodation Settings.* Dinner at 5:30 p.m., talk at 7:30 p.m., University Plaza Hotel, Columbus.

### December 1999

December 1

3<sup>rd</sup> Annual OGS Christmas Party. Social hour 6:00 p.m., Dinner 7 p.m., RSVP Amy Burke at (740) 927-9173 by Monday, November 27<sup>th</sup>.

### January 2000

January 15

Tour of Ohio Geological Survey's Geologic Sample Repository, Horace R. Collins Laboratory, Alum Creek State Park.

### February 2000

February 19

Dr. Doyle Watts, Wright State University. *Seismic, Potential Fields, and Well Log Analysis of the Falls Township, Muskingum County Anomaly/Impact (?)*.

### March 2000

TBA

### April 2000

TBA

AAPG Distinguished Lecturer F. Jerry Lucia

### May 2000

TBA

*The Ohio Geological Society*

*P.O. Box 14304*

*Columbus, OH 43214*