



THE OHIO GEOLOGICAL SOCIETY

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

The Newsletter of the Ohio Geological Society

September 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
Geopetrol, 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

UPCOMING OGS MEETINGS AND EVENTS

September – No Meeting

Due to upcoming AAPG - Eastern Section meeting in London, Ontario, there will be no meeting for the month of September.

October 9th

The next meeting will be a joint OGS – Appalachian Geological Society Monthly Meeting. AAPG Distinguished Lecturer, Dr. John Warne of the Colorado School of Mines, will be presenting a talk on *Anatomy of an Anomaly: The Catastrophic Devonian Alamo Impact Breccia, Nevada*. The meeting will be held at the Holiday Inn, 701 Pike Street, Marietta, Ohio, and will start at 11:30 a.m. The cost of the luncheon is \$25, with a cash bar. Please make your reservations, before Monday, October 2, with Jim McDonald at (614) 265-6601.

October 25th

PTTC Workshop – *Nuts and Bolts of Digital Geologic Analysis*. The intention of the workshop is to instruct participants in manipulation of well and production data for a wide range of applications using several, modern software systems. Most the data used in the workshop will be based in Ohio. Cost of the workshop is \$60 before October 10: \$70 after October 10 – includes handbook, CD's of data, breaks, and lunch. Location will be at the University of Akron, Bierce Library. Hosted by OGS, The University of Akron – Dept. of Geology and ODNR, Division of Geological Survey. For more information, please see the insert to this newsletter or contact Larry Wickstrom, ODNR, Division of Geological Survey (614) 265-6601, e-mail: larry.wickstrom@dnr.state.oh.us.

ABSTRACT OF OCTOBER 9TH AAPG DISTINGUISHED LECTURER PRESENTATION

One must understand the expectable, in order to recognize the anomalous. Facies models, stratification sequences, sequence stratigraphy, and seismic stratigraphy provide tools to interpret sedimentary rocks. Using these tools, and by experience, rock analysis learn what to expect in sedimentary basins. Without such background and expectations, important anomalous occurrences are misinterpreted, or completely overlooked. This theme is illustrated using three stratigraphic anomalies. All three are ancient catastrophic carbonate mass flows. Two are expectable, occurring along rift fault lines and therefore readily understood. The third, the Alamo Breccia, seems totally anomalous, and requires another level of investigation.

The Late Devonian Alamo Breccia is a sedimentary megabreccia discovered in 15 different mountain ranges across southern Nevada. It occurs

anomalously within the shallow-water carbonate platform facies of the Upper Devonian Guilmette Formation. Before tectonic dismemberment by thrusting, it covered a north-south distance of 200 kilometers and an area of several thousand square kilometers across the carbonate platform. The Breccia ranges in thickness from 130 meters near its center to a feather edge at its periphery. Iridium concentrations, shocked quartz, ejecta spherules, displaced fossils, and other evidence all confirm that the Breccia formed a meteorite or comet impact. Internally it contains a chaotic ejecta bed and displayed blocks as much as 500 m long, overlain by as many as five graded beds deposited by tsunamis. The Alamo Event was large enough to rearrange the Devonian platform paleogeography, but not sufficient to cause direct extinctions.

The known flux of asteroids and comets with Earth-crossing orbits predicts that many similar deposits must exist in the stratigraphic record. They may serve as significant reservoirs, seals or seismic markers, as well as extinction horizons. The anomalous Alamo Breccia is well-exposed example that represents a model for such deposits.

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

September 2000

September 20 2000 Governors Natural Gas Summit, Hyatt Regency Columbus, Columbus, Ohio. Website: http://www.iogcc.oklaosf.state.ok.us/MEETINGS/2000_Governors_Natural_Gas_Summit.htm

September 24-26 - Eastern Section-AAPG Meeting. The annual Eastern Section-AAPG meeting will be held in London, Ontario, on September 24-26, 2000, and is hosted by the Ontario Petroleum Institute. Some of the proposed topics include Trenton-Black River reservoirs, Basement geology and hydrocarbon traps, Natural gas storage, Exploration databases and digital mapping, and Hydrothermal dolomite reservoirs. For more information, please contact the General Chair, Robert Trevail, c/o Ontario Petroleum Institute, London, Ontario N6E 1A2, Canada, ph: 519-433-7710 fax: 519-433-7588, e-mail: rtrevail@odyssey.on.ca, website: <http://www.ogsrlibrary.com/aapg1.htm>.

October 2000

October 5-7 - Field Conference of Pennsylvania Geologists: Pittsburgh At The Millennium-The Impact Of Geoscience On A Changing Metropolitan Area. For more information contact: Gary M. Fleegeer, Secretary, email: fleegeer.gary@dcnr.state.pa.us. Website: <http://www.paonline.com/gfleegeer/fcogp/frames.htm>

October 11 - PTTC Technology Workshop: New Technology for Core and Reservoir Analysis; Morgantown, WV
Information: 304-293-2867 x5443; registration: 304-293-2867 x5446

October 16-18 - 45th Annual Midwest Ground Water Conference. The Holiday Inn East in Columbus, Ohio. The conference provides an opportunity for hydrogeologists, geologists, engineers, students and others studying ground water resources in their respective states to meet and exchange ideas, discuss mutual problems affecting the Midwest, and summarize results of field and laboratory studies. For more information, please contact Kristy Hunt, MWGWC Technical Committee Ohio EPA, Division of Drinking and Ground Waters, P.O. Box 1049 Columbus, Ohio 43216-1049, email: kristy.hunt@epa.state.oh.us, fax: 614-644-2909, website: <http://www.epa.state.oh.us/ddagw/mwggwc.html>.

October 20 - Mather Medal Award and Banquet. The Ohio Geological Survey announces the presentation of the Mather Medal, recognizing outstanding contribution to Ohio Geology to Dr. Benjamin H. Richard, Wright State University. The award will be presented at a banquet at the Fawcett Center-The Ohio State University, on Friday, October 20, 2000. The banquet will begin at 7 p.m., with a social hour and cash bar at 6 p.m. The cost of the banquet is \$23. For more information, please contact Jim McDonald, ODNR, Division of Geological Survey, (614) 265-6601, email: jim.mcdonald@dnr.state.oh.us.

October 24 - OOGA 2000 Fall Meeting. Akron/Fairlawn Hilton, Akron, Ohio. For more information, please contact the Ohio Oil & Gas Association, P.O. Box 535, Granville, OH 43023, (740) 587-0444/ (740) 587-0446 Fax.

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 Warne – *Anatomy of an Anomaly: The Catastrophic Devonian Alamo Impact Breccia, Nevada*. 11:30 a.m., Holiday Inn, Marietta, OH. Cost is \$25 for the buffet with cash bar.

October 25

PTTC/Ohio Geological Society Fall Workshop - *Nuts and Bolts of Digital Geologic Analysis*. 9 a.m., University of Akron, Bierce Library. Cost is \$60 before October 10, \$70 after that date.

November 1999

November 6

Dr. Greg Nadon, Ohio University. Tentative title: *New Sequence Stratigraphy Interpretations of the Pennsylvanian of Southeastern Ohio*

December 1999

TBA

OGS Christmas Party.

January 2000

TBA

February 2000

TBA

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