



THE OHIO GEOLOGICAL SOCIETY

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

The Newsletter of the Ohio Geological Society

May 2000

1999-2000 Officers

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PRESIDENT'S COLUMN

Unfortunately, this month, I will start off with some unpleasant news. Although many of you may already be aware, Angie Bailey, of the Ohio Geological Survey's records center passed away on Friday, April 28 after battling with cancer. She had been with the survey for over 21 years and was always extremely helpful, friendly, and an enjoyable person to be around for anyone that frequented the Geologic Records Center. In memory of Angie, the Ohio Geological Society has made a \$100 donation in her name to Camp Sychar, a church camp in which she was very active. I know many thoughts and prayers go out to her family during this time.

I hope to see all of you for our final fling of the year in Cambridge on May 25. This will be a joint meeting with SPWLA and we always enjoy a good turnout. Take advantage of this opportunity to learn about Ohio's seismic network and do some networking of your own!

A big thank you to John Forman for once again coordinating our judging at the State Science Day at Ohio Wesleyan. Thank you also to his team of judges: Bill Shafer, Jim McDonald, Paul Archer, Jim Hanlon, and Steve George. OGS again awarded cash prizes for the top projects.

John provided the following information on the State Science Day: OGS had 20 State Science Day Projects to judge this year. All projects were great again. But for the first time in many years, all the projects were well organized; showed the use of research, especially utilizing the web; tested a hypothesis; employed the use of the scientific method; and drew conclusions, the actual order of finishing was most difficult to judge this year. The Ohio Geological Society salutes the award winners this year. A note of interest - the first three award winners this year all have geologists as their father.

1st PLACE—RALPH J. BERNHAGAN AWARD

Ms. Roberta L. Hannibal, 12th grade, Beaumont School in Cleveland Heights
A Systematic Study of Fossil Fish from the Upper Devonian Chagrin Shales

2nd PLACE

Ms. Emmy W. Brockman, 7th grade, Frank B Willis Intermediate School in Delaware
Bit by Bit: Talus Slope Erosion

3rd PLACE

Ms. Jeanette L Bauer, 9th grade, Clay High School in Portsmouth
How Did Ancient Creatures Grow?

Continued from the first page.

4th PLACE

Ms. Natalie A. Wanders, 8th grade, Tower Middle School in Centerville
Soil Liquefaction

Four Honorable Mentions:

- 1) Mr. Ashik Sathish, 7th Grade, Brookfield Middle School in Brookfield
Landslides: Testing Soil Slippage
- 2) Mr. Christopher A. Saling, 7th Grade, Frances Hazen Middle School, Minerva
Is It Possible to Create an Early Warning Seismograph?
- 3) Ms. Laura K. Smith, 9th grade, St Thomas Aquinas High School, Kensington
Meteorite, Meteor-wrong
- 4) Mr. Jared J. Moon, 9th Grade, Miami Trace High School, Washington Courthouse
Erosion --The Affecting Factors

UPCOMING OGS MEETINGS

May 25

The next meeting will be a joint OGS - SPWLA Monthly Meeting. Dr. Michael Hansen, Ohio Geological Survey, will be presenting a talk on the new earthquake seismic network, OHIOSEIS. The meeting will be held at the Cambridge County Club, Cambridge, Ohio, and will start at 11:30 a.m. The cost of the luncheon is \$15. Please make your reservations, before Monday, May 22nd, with John Forman at (614) 237-6353.

OHIOSEIS—THE OHIO SEISMIC NETWORK

Dr. Michael C. Hansen
Ohio Geological Survey
Columbus, OH 43224

Earthquakes in the eastern United States, including Ohio, are low probability but potentially high-consequence events. The state of Ohio has experienced more than 120 earthquakes since 1776, and 14 of these events have caused minor to moderate damage. The largest historic earthquake centered in Ohio was in 1937 in Shelby County. This event, estimated to have had a magnitude of 5.5, caused considerable damage in Anna and several other western Ohio Communities. The Anna area is one of the most active seismic areas in the eastern U.S, second only to the New Madrid, Missouri region. At least 40 earthquakes have been felt in the Anna area since 1875. Northeastern Ohio, east of Cleveland, is the second most active area of the state; there have been at least 20 felt earthquakes since 1836, including a 5.0 magnitude event in 1986 that caused moderate damage. A broad area of southern Ohio has experienced more than 30 earthquakes.

In order to detect and accurately locate earthquakes in the state, the Ohio Geological Survey established a 16-station network of seismographs in January, 1999. This ended a five-year gap during which the state was dependent on seismographs in Kentucky and Michigan to record Ohio earthquakes. The network was funded, in part, by the Federal Emergency Management Agency, through the Ohio Emergency Management Agency. Stations were established in seismically active areas at colleges and universities as part of a cooperative agreement that uses volunteer station operators. Newer technology, including low-cost seismometers, GPS receivers, and the Internet for data transfer, enabled the network to be established for a modest expenditure. It is anticipated that precise location of earthquakes will add to our understanding of basement structure in Ohio and provide a more accurate picture of seismic risk in the state.

BIOGRAPHY OF MICHAEL C. HANSEN

Michael C. Hansen is a Senior Geologist with the Ohio Geological Survey and is coordinator of the Ohio Seismic Network. He has been with the Division since 1972 and has participated in a variety of geologic projects in Ohio. He is editor of the Division's quarterly, *Ohio Geology*, and has written a number of publications on diverse geologic topics. Hansen has B.S. and M.S. degrees in geology from Ohio University and a Ph.D. in geology from The Ohio State University. He is Adjunct Assistant Professor of Geology at Ohio State.

Angelena M. Bailey
1949-2000

It is with deep sorrow that we announce the death of Angelena (“Angie”) M. Bailey on April 28, 2000, after a long and courageous struggle with cancer. Angie began her 23-year career with the Geological Survey in February 1978, as a typist in what was then the Subsurface Geology Section. From the beginning, Angie demonstrated that her work was of the highest quality. She was a very dedicated and loyal employee and involved in all aspects of the Survey. She served on numerous committees and took advantage of the opportunities to improve her job skills—as is evident by the many certificates and awards she received from various job-training classes and seminars. Angie became very proficient at several word-processing programs and readily taught other staff members the skills she had learned.

Angie’s duties dealt largely with processing information about oil and gas wells in Ohio and responding to customer inquiries and requests. She became very knowledgeable about oil and gas information and was an integral member of the interdivisional Risk-Based Data Management System team that was responsible for computerizing this information. Angie’s involvement in the oil and gas industry extended beyond work, as she was an active member of the Central Ohio Energy Affiliates, Association of the Desk and Derrick Clubs from 1986 to 1996. Angie truly enjoyed working with the oil and gas community and the many friendships that came from that work. Angie was always very helpful to the professional societies, especially the Ohio Geological Society (OGS) and the American Association of Petroleum Geologists (AAPG). Angie typed many of the manuscripts for OGS publications and helped with logistics and registration at both OGS and AAPG special meetings.

Angie served as the Geological Survey’s coordinator for ODNR/American Red Cross blood-donor drives. In 1989, she received two Departmental awards in recognition of her continuing support of this program. In 1990, Angie received the Division’s Employee of the Year award. This award is significant because recipients are selected from nominations submitted by fellow employees.

Angie treasured her years as a member of the ODNR and the Geological Survey families. She was always willing to assist any staff member or customer to the best of her ability. Angie’s dedication, commitment, and unselfish devotion to her job and everyone she dealt with is witnessed by her many friends and lasting relationships. We will not forget her. Angie is survived by two daughters, three grandchildren, her father, a sister, and a brother.

Donations can be made in memory of Angelena Bailey to Camp Sychar, P.O. Box 0175, Westerville, OH, 43081. Camp Sychar is a Church Camp that Angie has spent a week at every summer for many years. She always looked forward to that time.

OTHER EVENTS

June 2000

June 10 - PTTC Workshop: Creating Oil and Gas Related Websites. Lexington, KY. For more information, contact Doug Patchen at 304-293-2867,x5446, email: dpatch@wvunrce.wvu.edu, website: <http://karl.nrcce.wvu.edu/calendar/Jun10Wksp.html>.

June 14-15 - PTTC Workshop: Real Time Stimulation Solutions for the Appalachian Basin. This one and a half day seminar/workshop is intended to give industry professionals hands on experience in the fundamentals and applications of fracture stimulation. The first day is geared to those with limited experience with fracturing or a review for those with an intermediate level. The second day is dedicated to coalbed methane technologies and their local applications. If scheduling permits, a tour of a fracturing unit will be available. National Research Center for Coal and Energy (NRCCE) of West Virginia University, Morgantown, WV. Advance registration is necessary to adequately plan the catered lunch, and will begin now and end June 07th. The cost is \$75.00 for the first day and \$50.00 for the second half day. If you attend both, the cost is \$100.00. For more information, contact Doug Patchen at 304-293-2867,x5446, email: dpatch@wvunrce.wvu.edu, website: <http://karl.nrcce.wvu.edu/calendar/Jun14Wksp.html>.

August 2000

August 1 - PTTC Workshop: New Technology for Core and Reservoir Analysis. Morgantown, WV. For more information, contact Doug Patchen at 304-293-2867,x5446, email: dpatch@wvunrce.wvu.edu.

August 6-11 - SEG International Exposition and 70th Annual Meeting, Calgary, Alberta, Canada, by the Society of Exploration Geophysicists. For more information, contact the SEG Business Office, Phone: 918-497-5500, website: <http://seg.org>.

August 7-8 - OOGA 2000 Summer Meeting. Zanesville Country Club, Zanesville, 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.

September 2000

September 13 - PTTC Workshop: New Technology for Coal Bed Methane Development. Beckley, WV. For more information, contact Doug Patchen at 304-293-2867,x5446, email: dpatch@wvunrce.wvu.edu.

September 17-20 - The Society for Organic Petrology. The Society for Organic Petrology will be holding its annual meeting at Indiana University in Bloomington, IN. There will be special sessions on surface expressions of hydrocarbons and sedimentology of organic matter-bearing sequences, a general session on organic petrology and organic geochemistry-related subjects, and a field trip to examine exposures of organic-rich Paleozoic sedimentary rocks in the Eastern Interior Basin. For more information, contact Dr. Maria Mastalerz, 812-855-9416, email: Mmastale@indiana.edu, website: <http://adamite.igs.indiana.edu/tsop/>.

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 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. Abstracts of papers must be received by June 30, 2000. Abstracts are limited to 300 words and must include, title, author name, their affiliation, contact address, phone number, and e-mail address if available. Submit abstracts via diskette or via e-mail to: 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/mwgwc.html>.

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.

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.

1999-2000 Meeting Schedule

September 1999

No Meeting

October 1999

October 12

Joint Meeting with Appalachian Geological Society. AAPG Distinguished Lecturer Robert C. Balling – *Climate of Doubt About Global Warming*.

October 20

Ohio Geological Society 6th Annual Fall Symposium.

November 1999

November 3

AAPG Distinguished Lecturer Mark Cooper – *Exploring for Hydrocarbons in the Cambro-Ordovician of Newfoundland and Quebec*.

December 1999

December 3

OGS Christmas Party.

January 2000

January 24

Dale Gnidovic, Orton Geological Museum, Ohio State University. Tour of the Orton Geological Museum.

February 2000

February 29

AAPG Distinguished Lecturer Alistair Brown - *Let the Data Speak to You: How to Improve Your 3-D Seismic Interpretation*.

March 2000

No Meeting

April 2000

April 20

Dr. Wallace Broecker, Columbia University - *The Global Climatic Seesaw*.

May 2000

May 25

Joint Meeting with SPWLA. Dr. Michael Hansen – *OHIOSEIS - The Ohio Seismic Network*. 11:30 a.m., Cambridge Country Club, Cambridge, OH. Cost is \$15. RSVP John Forman, (614) 237-6353

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