



THE OHIO GEOLOGICAL SOCIETY

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

The Newsletter of the Ohio Geological Society

March 2002

2001-2002 Officers

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

Vice-President

Ron Rea
Ohio Geological Survey
4383 Fountain Square Drive
Columbus, OH 43224
(614) 265-6585
ron.rea@dnr.state.oh.us

Secretary

Paul L. Archer
Geopetro, LLC.
6463 Proprietors Rd. Suite 204
Worthington, OH 43085
(614) 885-9350
geopetrollc@aol.com

Treasurer

Nicole Venteris
CGAS Exploration, Inc.
4770 Indianola Ave.
Columbus, OH 43214
(614) 781-3259
nicolev@cgasinc.com

Past 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

President's Column

I would like to take this time to talk about one of the Society's important resources, The Ohio Geological Society Web Site. It is an important resource for a number of reasons. First and foremost, the web site contains a calendar of upcoming monthly meetings, the abstracts of the talks, and most importantly, maps and directions to the locations of the meeting. For example, under the MEETING SCHEDULE link, you will find that this month's meeting is going to be held in a new location, and there are directions and maps to the new location on the web site. As we begin to move closer to spring, more meetings keep on popping up. We have on our web site a link called OTHER EVENTS. Inside of this link, we have listings of other events, training classes, and other meetings in Ohio and the surrounding states. For example, we have listings for PTTC workshops, the upcoming North Central/Southeastern GSA meeting, and the Eastern Section AAPG meeting in Champaign, Illinois. We have a LIST OF SOCIETY PUBLICATIONS link, enabling you to look at the Society's list of publications and also look find instructions on how to place an order. We have an OFFICERS AND CONTACTS and MEMBERSHIP INFORMATION link, where members can learn how to contact the Society's leadership and where you can download forms to renew your membership. We have a lot of things available for the members on the web site. Please visit.

Speaking of upcoming meetings, we have Dr. Loren Babcock, of Ohio State University as our March monthly speaker. Dr. Babcock will be giving a talk on Cambrian biostratigraphy in Ohio and around the world. The meeting will be held on March 25, 7:30 p.m. at a new location. The meeting will be held at the Hearth & Eagle Tavern, 7800 Olentangy River Road. The new location is on State Route 315, about 1 mile north of the I-270 & Rt. 315 intersection. It is located in the Olentangy Valley Center shopping center, at the bottom of the Worthington Hills entrance. We will be having dinner at 5:30 p.m., with a happy hour at 7:00 p.m., for those people that can't make the dinner.

I happy to report that the PTTC Workshop on the Trenton/Black River is scheduled for April 25, at the Canton Four Points Sheraton. The program that the Bill Rike and Larry Wickstrom have put together is outstanding. Dick Beardsley of Triana Energy, Ohio Geological Society members Bill Grubaugh and Pete McKenzie of CGAS Exploration Inc., and a host of other speakers will be giving presentations. For more information call Larry Wickstrom, ODNR, Division of Geological Survey (614) 265-6598, visit the Appalachian PTTC website at: [http:// karl.nrcce.wvu.edu](http://karl.nrcce.wvu.edu), or visit the PTTC workshop web site at <http://www.ohiodnr.com/geosurvey/events/pttc0402/pttc0402.htm>

The Eastern Section AAPG deadline for the Call for Abstracts is April 1. This years meeting will be held on October 2-4, Champaign, Illinois. The web site for the meeting is <http://www.isgs.uiuc.edu/oilgas/eastaapg2002/index.htm>

(President's Column continued on page 3)

UPCOMING OGS MEETINGS AND EVENTS

March 25th, 7:30 p.m. at a New Location: Hearth and Eagle Tavern, Worthington, OH (see map below)

Dr. Babcock of the Ohio State University (Big Ten Basketball Champs) will be giving a talk on Cambrian biostratigraphy in Ohio and around the world. The meeting will be upstairs in a meeting room at the Hearth and Eagle Tavern, 7800 Olentangy River Road, Worthington, OH 43085 (614-888-0872). Dinner will be at the Hearth and Eagle at 5:30 p.m. A “Happy Hour” will be held from 7:00 to 7:30 in the meeting room. Please RSVP for dinner by noon of the day of the meeting (March 25th) to Jim McDonald (614-265-6601). For more information, please contact Jim McDonald at (614) 265-6601 or by e-mail at jim.mcdonald@dnr.state.oh.us. **See the map below or contact one of the officers if you need directions to the new meeting place.**

GLOBAL CHRONOSTRATIGRAPHY OF THE CAMBRIAN: EMERGING CONCEPTS AND RELEVANCE TO OHIO by Loren E. Babcock, Department of Geological Sciences, The Ohio State University Columbus, OH 43210, USA

Synopsis: Regional stage- and series-level schemes are in widespread use for all major Cambrian continents, but the Cambrian System currently has no formally accepted subdivisions applicable on a global scale. The base of the Cambrian System (at the first appearance of the trace fossil *Trichophycus pedum* in Newfoundland) and the base of the overlying Ordovician System have been ratified, but internal boundaries within the Cambrian are in the process of being determined. In contrast to the longstanding practice of subdividing the Cambrian into three divisions (lower, middle, and upper), recognition of a thick pre-trilobitic lower Cambrian provides strong incentive to adopt a four-fold division of the Cambrian, with two series in the lower half, and two series in the upper half. Ultimately, each series will likely be divided into two or three stages.

At least 11 candidate horizons for global chronostratigraphic correlation are present in the upper half of the Cambrian System, although not all are equally useful for stage and series boundaries. If a four-fold, series-level division of the Cambrian is adopted, internal boundaries can be expected to roughly correspond to the first appearance datum (FAD) of trilobites; the FAD of an as-yet-undetermined, intercontinentally distributed fossil; and the FAD of the cosmopolitan agnostoid trilobite *Glyptagnostus reticulatus*. A proposal for the base of an upper Cambrian stage and series, based on the FAD of *G. reticulatus* in China, is currently under consideration by the International Subcommittee on Cambrian Stratigraphy. The recommended boundary position is one of the most recognizable datum points in the Cambrian; it corresponds to a short-lived interval of major paleoceanographic and biotic changes on a global scale.

Cambrian strata from the subsurface of Ohio are rather poorly constrained chronostratigraphically, but seem to represent parts of the upper one-third of the system. Trilobites recovered from core in southwestern Ohio, which provide much of the key biostratigraphic information, indicate the presence of strata correlative with the *Cedaria* Zone (Marjuman Stage), the *Crepicephalus-Aphelaspis* zones (Marjuman-Steptoean stages), and the *Elvinia* Zone (upper Steptoean? Stage) as currently used in Laurentia (the North America-Greenland continent). Considerable intervals of Cambrian time are not represented in the strata of Ohio. The lower half of the system seems to be absent, and inferred disconformities account for significant missing intervals in the upper half of the system. This stratigraphic pattern is characteristic of much of the Laurentian craton.

Meeting Location:



DIRECTIONS: The meeting will be held at the Hearth & Eagle Tavern, 7800 Olentangy River Road. The new location is on State Route 315, about 1 mile north of the I-270 & Rt. 315 intersection. It is located in the Olentangy Valley Center shopping center, at the bottom of the Worthington Hills entrance.

RÉSUMÉ IN BRIEF:

LOREN E. BABCOCK

Associate Professor Department of Geological Sciences, The Ohio State University

125 South Oval Mall, Columbus, OH 43210 USA Phone: (614) 292-0358; fax: (614) 292-7688

E-mail: babcock.5@osu.edu

- **Education:** Ph.D., Geology, University of Kansas, 1990; M.S., Geology, Kent State University, 1986; B.S., Geology/Biology, SUNY Fredonia, 1983.
 - **National and international positions:** Currently: Voting Member, International Subcommission on Cambrian Stratigraphy; Vice-President, Institute for Cambrian Studies. Past positions: Councilor-at-Large, Co-Editor of Special Publications, Paleontological Society; Chair, North-Central Section, Paleontological Society; Panelist, National Science Foundation; session chair or symposium organizer at numerous national and international meetings.
 - **Honors and awards:** Charles Schuchert Award (for excellence and promise in paleontology), The Paleontological Society; Fellow, Geological Society of America; Paleontological Society Distinguished Lecturer.
 - **Major research grants:** Five awards from National Science Foundation; one award from National Geographic Society.
 - **Publications:** > 200, including 80 refereed papers and one book.
 - **Student projects directed:** Four Ph.D. dissertations (of which two are in progress); six M.S. theses (of which two are in progress); nine B.S. theses (of which two were Honors Theses); one postdoctoral researcher. Student projects have resulted in > 25 publications.
 - **Teaching:** Principally Earth history courses, emphasizing global processes; undergraduate and graduate levels; Honors College. Awarded three instructional grants.
 - **Administrative service:** Numerous college and university committees, including Chair of departmental Computer Committee and Ad Hoc Committee on Teaching Evaluations.
- Research:** Currently focused on: 1, global changes in the biosphere (together with implications for climate change, paleoceanographic reconstruction, and paleogeographic reconstruction) during critical intervals of Earth history such as the Neoproterozoic-Cambrian transition and the late Paleozoic-early Mesozoic transition from icehouse to greenhouse conditions; and 2, taphonomy and paleoenvironmental context of deposits of exceptional preservation (Konservat-Lagerstätten).

(President's Column continued from page 1)

Other meetings – There are other PTTC workshops coming in May and June. May 16, Integrating GPS and GIS for the Petroleum Industry; Lexington, KY; May 29, Gas Storage: Case Studies and New Potential, Morgantown, WV; June 4, Outcrop Analogs for Trenton/Black River Fractured Dolomite Reservoirs, Lexington, KY. For information on all the workshops call 304-293-2867 ext. 5446 or visit the Appalachian PTTC website at [http:// karl.nrcce.wvu.edu](http://karl.nrcce.wvu.edu).

Science Fair – The Ohio Academy of Science State Science Fair is going to be held this year a little later than usual. It will be held on May 11, at the Ohio State University. The Society annual judges and awards prizes for the best science fair projects. If you are interested in judging for this year's Science Fair, please contact John Forman.

I would like to congratulate one of our members, Dr. Paul Potter of the University of Cincinnati. He is being awarded the AAPG Distinguished Educator Award at the AAPG National Meeting in Houston this month. It is an honor to have Dr. Potter as a member in the Society. With all the students that he has advised, the textbooks that he has written, and the research that he has conducted, he is truly deserving of this award.

Jim



PETROLEUM TECHNOLOGY TRANSFER COUNCIL

Focused Technology Workshop

Exploration and Development of the Trenton-Black River of the Appalachian Basin

(a.k.a. Bill & Larry's Most Excellent Workshop)

April 25, 2002

Four Points Hotel Canton, Ohio

Hosted by:

The Ohio Geological Society, and the ODNR, Division of Geological Survey

Bill Rike and Larry Wickstrom, Workshop Coordinators

The Ohio Geological Society, in conjunction with the Petroleum Technology Transfer Council, and the Ohio Geological Survey, invite you to attend this full-day focused technology workshop. The intention of this workshop is to provide a comprehensive look at the Trenton-Black River Play in the Appalachian Basin, from the perspective of those who have been involved in it's exploration and development.

The tentative agenda of presentations/speakers is as follows:

- An Overview of Recent Appalachian Basin Trenton-Black River Activity; K. Lee Avary, W. Va. Geological Survey, and Larry Wickstrom, Ohio Geological Survey
- Does the Grenville Have Anything To Do With This Stuff? – Basement Architecture and It's Relation to the Trenton-Black River Play; Richard Beardsley, Triana Energy
- Exploration and Development of a Trenton-Black River Field in Northeastern Ohio; Bill Grubaugh and Pete MacKenzie, CGAS Exploration, Inc.
- Prevailing Drilling Practices; James L. Weekley, Consulting Engineer
- Considerations of Seismic Acquisition & Processing; Tom McGovern, Lauren Geophysical
- Seismic Character of Trenton-Black River Reservoirs; Alan Leaver, East Resources
- Optimal Logging & Imaging Suites for the Trenton-Black River; Jay Terry, Schlumberger Well Services
- Practical Well Test, Production Data, and Reserve Evaluation Methods; Ken Brown, Holditch & Associates
- West Virginia Oil & Gas Law, Present & Future; Brett Loflin, West Virginia Oil & Gas Commission

Date/Time: April 25, 2002 — Registration/Coffee 8-9 a.m., Workshop 9 a.m. — 5 p.m.

Location: **Four Points by Sheraton Canton**, 4375 Metro Circle Northwest, Canton, OH 44720
[Belden Village Area] For sleeping room reservations only call: (330) 494-6494

For more information: Larry Wickstrom, ODNR, Division of Geological Survey (614) 265-6598

Or visit the Appalachian PTTC website at: [http:// karl.nrcce.wvu.edu](http://karl.nrcce.wvu.edu)

If you wish to receive notices of future PTTC activities via email, please send a message to: avary@geosrv.wvnet.edu

PTTC gratefully acknowledges that its primary funding comes through the U.S. Department of Energy's (DOE) Office of Fossil Energy through the National Energy Technology Laboratory.

ADVANCE REGISTRATION FORM

PTTC Focused Technology

Workshop – April 25, 2002

Cost: \$50.00 before April 17; \$60.00 after April 17 – includes handbook, breaks, and lunch

Name _____ Nickname for badge _____

Company _____ Address _____

City _____ State _____ Zip _____ Phone _____

Email address: _____

Make check payable to the Ohio Geological Society

Mail To: PTTC C/O Ohio Geological Society, P. O. Box 14304

Columbus, Ohio 43214

HURRY! Space is limited!

Other Meetings and Events:

Ohio Geological Society Meetings:

April 15th Dr. Scott Bair, Hearth & Eagle Tavern, 5:30 p.m. dinner, 7 p.m. happy hour, Presentation at 7:30 p.m.

May 9 OGS/ SPWLA(OH)/PAPG/PGS/AGS/ Joint Luncheon
Robbie Gries, President AAPG
Topic to be announced
Cambridge Country Club
Cambridge, OH

Others of note:

11 April 2002 SPE Monthly Meeting
Stephen A. Holditch, President SPE
SPE in the 21st Century
Lampighter Restaurant, Delmont, PA

18 April 2002 PAPG Monthly Meeting
Mark Evens, University of Pittsburgh
“Basinal Fluid Flow in the Appalachian Basin”
Location to be announced

24-25 April North American Coalbed Methane Forum
Spring Session
Holiday Inn – Meadowlands
Washington, PA

14 May 2002 SPE/PAPG Joint Monthly Meeting
Mark Cook, SPE Distinguished Lecturer
“Use and Abuse of Economic and Risk Indicators in Upstream Projects”
Location to be announced

The Ohio Geological Society

P.O. Box 14304

Columbus, OH 43214

(We would prefer to E-mail you this Newsletter. Please send us your E-mail address.)

Need a Membership Form? See our web site, or contact one of the Officers.