



Newsletter of  
The

# Archaeological Geology

The Geological Society of America

Division

Volume 24, Number 1

Summer 2002

## BRUCE GLADFELTER WINS RIP RAPP AWARD



The 2001 Rip Rapp award was presented to Bruce Gladfelter at the Archaeological Geology Division Business meeting in Boston, MA last fall. Bruce is one of the pioneers of geoarchaeology. His numerous well-known papers have set the tone for the role of the geoarchaeologist and geoarchaeology in archaeological research. He has worked on numerous Paleolithic sites throughout the world providing groundbreaking insights on the roles played by ancient landscapes and associated geomorphological processes. The citation was read by Curtis Larsen.

## MESSAGE FROM THE DIVISION CHAIR

Many members of the Archaeological Geology Division (AGD) deserve praise and thanks for their contributions of time and energy. I want to thank those members who served on Division committees during 2001 and to those that have agreed to keep things going in 2002. In this light, the AGD has recently

gone through a transition of sorts. The position of Division Secretary-Treasurer has been transferred from Bill Johnson (Univ. Kansas) to Andrea Freeman (Univ. Calgary). Bill has done a tremendous job, and the Division is grateful for his service. Andrea now has the job of coordinating the business of the Division, as well as continuing as editor for the newsletter and maintaining the web page – thanks, Andrea!

The 2001 Boston meeting went very well. The poster session and oral sessions were very well attended and featured a broad range of studies. Vance Holliday and Rolfe Mandel deserve special thanks for coordinating the topical session on the Pleistocene-Holocene transition. Reid Ferring and M.H. Ort deserve thanks for presiding over the afternoon session.

The AGD's management board is considering the possibility of changing the duration of the terms of the Chair and First Vice-Chair from one year to two years. Several other GSA divisions are also considering this as a means of increasing administrative continuity. Such a change would require amending the AGD bylaws. To amend the bylaws of the Division would require a majority vote of the voting affiliates of the Division and ratification by the GSA Council.

I hope you will consider helping to support the endowments that fund the AGD awards. There are three Division awards: the Rip Rapp Archaeological Geology Award to recognize a distinguished career in the field; the Claude C. Albritton, Jr. Award, established to help support student research; and the Student Paper Award to help defray costs associated with attending the GSA Annual Meetings. Contributions to support any of these endowments would be greatly appreciated.

It is time to start looking forward to the 2002 Denver meeting to be held October 27-30. GSA Annual Meetings will now start earlier in the week, with sessions from Sunday through Wednesday. Plans have been made for an AGD-sponsored field trip on Saturday, October 26. Also, please be reminded that the abstract submission deadline for paper submission is 9 July while the online submission deadline is 16 July.

It is my pleasure to serve as the chair of the AGD for 2001-2002. Please feel free to contact me if I can assist you during this term.

Christopher L. Hill

Chair, Archaeological Geology Division

## ARCHAEOLOGICAL GEOLOGY STUDENT AWARD

The Archaeological Geology Division encourages students to apply for a travel grant to attend the GSA's Annual Meeting. The grant is competitive and is awarded based on evaluation of an abstract and a 1,500-2,000 word summary paper prepared by a student for presentation in the Division's technical session at the GSA meeting. The summary paper may include one figure and must be single authored. Applications are due in the spring for the next year's meeting. Please consult the Division website at <http://rock.geosociety.org/arch/> or the fall newsletter for more information.

## CLAUDE ALBRITTON FUND FOR ARCHAEOLOGICAL GEOLOGY

Under the auspices of the Archaeological Geology Division, family, friends and close associates of Claude C. Albritton, Jr. have formed a memorial fund in his honor at the GSA Foundation (see item in March, 1991 Newsletter). Initially, the fund was set up with a gift of several thousand dollars. Members of the GSA Archaeological Geology Division, GSA members, and those who knew Claude Albritton are being asked to consider contributing to this fund. The Albritton Fund will provide scholarships and fellowships for graduate students in the earth sciences and archaeology. Recipients of these awards will be students who have (1) an interest in achieving a M.S. or Ph.D degree in earth sciences or archaeology; (2) an interest in apply-ing earth science methods to archaeological research; and (3) an interest in a career in teaching and academic research. Awards will be given in support of thesis or dissertation research, with emphasis on the field and/or laboratory parts of this research. The deadline for submissions is in the spring. For more information, consult the fall newsletter or the Division web site at: <http://rock.geosociety.org/arch/>  
Those wishing to contribute to the Albritton Fund should send gifts to the GSA Foundation, designating the gift for this fund.

## DOUGLAS C. KELLOGG FUND FOR GEOARCHAEOLOGICAL RESEARCH

Under the auspices of the Society for American Archaeology's Geoarchaeology Interest Group, family, friends and close associates of Douglas C. Kellogg formed a memorial fund in his honor. The fund will provide support of thesis or dissertation research, with emphasis on the field and/or laboratory parts of this research, for graduate students in the earth sciences and archaeology. Recipients of this award will be students who have (1) an interest in achieving the M.S., M.A., or Ph.D. degree in earth sciences or archaeology; (2) an interest in applying earth science methods to archaeological research; and (3) an interest in a career in geoarchaeology.

Money donated to the Douglas C. Kellogg Fund is not to be used for the annual award. Instead, the interest generated each

year will be awarded on an annual basis to the recipient. Initially, a minimum of \$500 will be awarded; the amount of the award will increase as the fund grows and the amount of annual interest increases. The first Douglas C. Kellogg Award will be made in Milwaukee at the 68<sup>th</sup> Annual Meeting of the SAA (Spring, 2003).

Applications must include:

- A one page cover letter briefly explaining the individual's interest and how he or she qualifies for the award;
- A current resume or vitae;
- Five (5) copies of a 3- to 4-page, double-spaced description of the thesis or dissertation research clearly documenting the geoarchaeological orientation and significance of the research - may include one illustration;
- A letter of recommendation from the thesis or dissertation supervisor emphasizing the student's ability and potential as a geoarchaeologist.

Paper copies of the items listed should be mailed to Dr. Rolfe Mandel, Chair, Committee for the Douglas C. Kellogg Fund, Department of Geography, University of Kansas, Lawrence, KS 66045-2121. **Electronic submissions will not be considered.** For additional information, Dr. Mandel may be contacted at <mandel@ku.edu>. Applications must be received by **Feb. 1, 2003**. The award recipient will be notified by March 1, 2003.

## ARCHAEOLOGICAL GEOLOGY DIVISION MANAGEMENT BOARD, 2001-2002

### Chair

Chris Hill  
Dept. of Anthropology  
Boise State University  
1910 University Drive  
Boise, ID 83725  
christopherhill@yahoo.com

### First Vice-Chair

Vance T. Holliday  
Dept. of Anthropology  
University of Arizona  
Haury Building  
Tucson, AZ 85721-0030  
vthollid@email.arizona.edu  
(520) 621-4734

### Second Vice-Chair

David Cremeens  
GAI Consultants, Inc.  
570 Beatty Road  
Monroeville, PA 15146  
d.cremeens@gaiconsultants.com  
(412) 856-6400 x. 3234

### Secretary-Treasurer

Andrea Freeman  
Department of Archaeology  
University of Calgary  
Calgary, AB T2N 1N4  
freeman@ucalgary.ca  
(403) 220-2792

### Past Chair

Paul Goldberg  
Department of Archaeology  
Boston University  
675 Commonwealth Avenue  
Boston, MA 02215  
paulberg@bu.edu  
(617) 358-1666

**GSA ANNUAL MEETING  
DENVER, CO  
October 27-30, 2002**

Members of the Archaeological Geology Division should plan to attend the Annual Meeting of the Geological Society of America in Denver this fall. The business meeting and awards ceremony for the Division will be held on Tuesday, October 29, 2002 from 5-7 pm. We also have a field trip "Geoarchaeology of South Park: A Prairie Ecosystem in the Rocky Mountains" scheduled for Saturday, October 26, 2002. Please plan to attend these special events. The Division is sponsoring a workshop on Laser Ablation ICP-MS, which is also scheduled for Saturday, October 26, as well as three topical sessions:

- T1: Application of GIS and Remote Sensing to Archaeological Geology
- T2: Nature, Effects, and Control of Groundwater at Archaeological Sites
- T3: Obsidian Sources and the Distribution of Archaeological Sites from these Sources

Please plan to participate in the meetings. The abstract deadlines are soon approaching! For more information, please see the meeting website: <http://www.geosociety.org/meetings/2002/>

**OTHER MEETINGS**

July 22-25, 2002. Texas Tech University, Lubbock Texas. **International Conference on Aeolian Research and the Global Change and Terrestrial Ecosystems -Soil Erosion Network (Wind)**. Session topics will include Fundamental Aeolian Processes, Instrumentation/Measurement in the Field and Lab, Modeling, Coordinated Field Studies, Environmental Impacts and Erosion Control, and Landforms and Aeolian Paleoenvironments as well as other studies in wind erosion and aeolian processes. Each session will include oral presentations, discussions and posters. Two field trips are planned. For more information please visit the web page at: <http://www.lbk.ars.usda.gov/wewc/icar5/icar5.html> or contact Ted Zobeck at [tzobeck@lbk.ars.usda.gov](mailto:tzobeck@lbk.ars.usda.gov)

August 5-7, 2002, University of Alaska, Anchorage, AK, **AMQUA biennial meeting**. Proposals are being sought for the next Biennial meeting program theme. Contact: Cathy Whitlock, AMQUA President ([whitlock@oregon.uoregon.edu](mailto:whitlock@oregon.uoregon.edu)) before the next Council meeting in November.

August 28-31, 2002. McDonald Institute for Archaeological Research, University of Cambridge. **New Perspectives in Phytolith Research. Fourth International Meeting on Phytolith Research**. For more information see: <http://www.arch.cam.ac.uk/phytolith/>

August 29-September 2, 2002. Brunel University, west London. **Holocene environmental catastrophes and recovery**. For information: <http://www.brunel.ac.uk/depts/geo/Catastrophes/>

September 9-13, 2002. Nagoya, Japan. **Ninth International Conference on Accelerator Mass Spectrometry**. The purpose of the Conference is to assess, exchange and share our most recent development of AMS techniques, both AMS machines and the preparation of samples, as well as new findings in a variety of application fields. To achieve this objective, in addition to the main Conference that will cover all kinds of subjects, pre- and post-conference workshops will be organized, in which several topics will be discussed in detail. Some of the workshops may be hosted by AMS groups in China and Korea. For details, see: <http://www.nendai.nagoya-u.ac.jp/AMS-9/>

November 13-17, 2002. Calgary, AB. **35<sup>th</sup> Annual Chacmool Conference. Apocalypse Then and Now: A Conference about Archaeology and World's Ends**. Relevant geoarchaeological sessions include several sessions on natural hazards, megafauna extinction, and a session on drought as a factor in human and landscape history. For more information, please consult the conference website at: <http://www.ucalgary.ca/UofC/faculties/SS/ARKY/Chacmool/2002mainpage.html>

February 4-7, 2003. **AQUA / Friends of the Pleistocene (NZ) Conference**. Please visit the conference website: <http://www.geo.vuw.ac.nz/conferences/aqua03/index.html>

April 24-25, 2003. Queens University, Belfast. **Annual Symposium of the Association for Environmental Archaeology. Worlds apart: human settlement and the biota of islands**. Further details can be found at the Conference website: <http://www.qub.ac.uk/arcpal/events/aea.htm>

May 24-29, 2003. Dawson City, Yukon Territory. **3<sup>rd</sup> International Mammoth Conference**. For more information please see the conference website at: <http://www.yukonmuseums.ca/mammoth/index.htm>

June 8-12, 2003. Halifax, NS. **CANQUA**. For information, see: <http://www.gov.ns.ca/natr/meb/canqua/Canqua.htm>

June 21-26, 2003. Washington, DC. **5<sup>th</sup> World Archaeological Congress (WAC5)**. Call for proposals is now out. The deadline for new themes is July 1, 2002. The deadline for new sessions is January 1, 2003. For more information, please see the conference website at: <http://www.american.edu/wac5>

September 1-5, 2003. Wellington, New Zealand. **The 18th International Radiocarbon Conference**. The conference web page is located at: <http://www.14Conference2003.co.nz>

Pages currently posted include contact details for the organizing committee and information and photos of Te Papa, the conference venue. Please bookmark the site and check for updates. Conference timetable, information about submitting abstracts, and descriptions of the social program will be posted later this year. In 2002, abstract submission, registration and

accommodation booking will be available through the website as well as by mail. For now, the local organizing committee invites you to submit workshop, session, and program suggestions. September 24-26, 2003. Milan, Italy. **Archaeometallurgy in Europe.** Organized by the Associazione Italiana di Metallurgia. The first announcement of the conference is available on the conference website: <http://www.fast.mi.it/aim/archaeo.htm>

October 10-13, 2003. Boston University/Manchester, NH. **Archaeological Soil Micromorphology Workshop.** Contact Paul Goldberg <paulberg@bu.edu>, Sarah Sherwood <Sherwood@mtsu.edu> or Trina Arpin <tarpin@bu.edu>.

### **FRIENDS OF THE PLEISTOCENE FIELD CONFERENCES**

#### **Pacific Northwest Cell**

Eolian Deposits and Megaflood Features, Columbia Plateau, Washington, 16-18 August 2002.

This trip will highlight recent research on paired sand dune and loess deposits of the Channeled Scabland and Palouse of eastern Washington, as well as examining the dramatic geomorphic features and deposits of the megafloods from glacial Lake Missoula. There will be a winery tour and wine tasting. The trip will be limited to 75 persons. Anticipated price is \$30-40. We will use the last Pacific Northwest Cell FOP e-mail list for our first notification this spring. If you want to be added to the list, contact Alan Busacca (busacca@wsu.edu). Trip leaders will be David Gaylord (Washington State Univ), Eric McDonald (Desert Research Institute), Mark Sweeney (WSU), and Alan Busacca (WSU). More than 150 people attended the 2001 Pacific NW Cell of the FOP at Summer Lake. Copies of the guidebook may be purchased for \$10.00 from Rob Negrini (rnegrini@cs.csubak.edu). For field trip details, see <http://www.cs.csubak.edu/Geology/Faculty/Negrini/FOPDocs/NWFOP2001.html>.

#### **Southeast Cell**

Greenbrier County, West Virginia, 4-6 October, 2002

Led by Greg Springer, this trip will explore the balance of physical versus chemical erosion in rivers and karst in the scenic mountains of southeastern West Virginia. Highlights include exploration of Buckeye Creek Cave (about 5 miles of large passages with abundant speleothems) and the incised Greenbrier River canyon with 200-m-high bedrock cliffs. In the gorge, you may take the challenge and jump off a 6-m high boulder into the creek. See <http://www.bedrockstreams.org/sefop/2002/> for additional information and registration.

#### **Rocky Mountain Cell**

Quaternary Stratigraphy and Tectonics and Late Prehistoric Agriculture of the Safford Basin, Graham County, Southeastern Arizona, October 11-13, 2002.

The general subject of the field trip is the Quaternary history of sedimentation, erosion, and deformation in the Safford Basin. Although the itinerary is still in the early planning stages, the following are some proposed highlights of the trip.

- (1) We will examine evidence in basin-fill sediments and Gila River deposits that indicates stepwise initiation of the drainage connection between the Safford Basin and the Duncan Basin (upstream), probably by late Pliocene or early Pleistocene time.
- (2) We will study the style of Pleistocene tectonic activity and its relationship to structural subbasins, to the location of thermal wells, and to the evolution of the course of the Gila River within the valley.
- (3) A late prehistoric agricultural site characterized by gridded rock alignments will be visited. Data of a soil investigation of the site will be presented and we will see how Pleistocene alluvial deposits and faults played an important role in determining the location of the gridded rock features.
- (4) Data on the Holocene history of the Gila River channel will be presented.

Co-leaders so far are: Brenda Houser (geology and structural setting of the upper Gila Valley), Jim Witcher (geothermal studies), Phil Pearthree (Quaternary fault scarps), Jeff Homburg (soils and archaeology), Bill Doolittle (land use and archaeology), Jeanne Klawon (Holocene history of the Gila River).

A registration form and information on the final itinerary, costs, lodging, and camping will be out in about mid-May. There are no constraints on the number of attendees other than keeping the vehicles in the trip caravan to a manageable number. Carpooling may be necessary. If you have questions or wish to be added to the email list, please contact Brenda Houser at <bhouser@dakotacom.net> or (520) 455-9256.

### **FUNDING OPPORTUNITIES FOR GRADUATE RESEARCH**

**Jonathan O. Davis Scholarship Fund.** Jonathan O. Davis, a prominent Quaternary geologist and geoarchaeologist (and active member of the Archaeological Geology Division), was tragically killed in an auto accident in December, 1990. The family, colleagues and friends of Jonathan O. Davis have established an endowment which provides both a \$3,750 annual national scholarship and a \$1,475 stipend for a student at the University of Nevada - Reno. The national scholarship, administered by DRI's Earth and Ecosystem Sciences, is open to graduate students enrolled in M.S. or Ph.D. programs at any U.S. university. The stipend is open to graduate students in M.S. or Ph.D. programs at the University of Nevada, Reno. Applicants must be pursuing research with a geologic component or with a strong reliance on geological techniques. Applicants must submit a description of the thesis/dissertation research clearly documenting its geologic orientation. Applications must be postmarked by February 2 so that the scholarship can be used during the subsequent summer. For more information contact: Dr. Michael Auerbach, Executive Director, Division of Earth and

Ecosystems Sciences, 2215 Raggio Parkway, Reno, NV 89512. To help the endowment grow, contact Michael Auerbach (auerbach@dri.edu).

**GSA Sectional Grants.** The six GSA sections offer grants to student members of GSA who are enrolled in institutions within their respective section geographical boundaries. Contact the section secretaries for your section for application information or see: <http://www.geosociety.org/profdev/grants/travel.htm>.

**Research Awards for Graduate Students in Archaeology,** Laboratory for Archaeological Chemistry, University of Wisconsin-Madison. The Laboratory for Archaeological Chemistry at the University of Wisconsin-Madison is initiating an annual program of research award grants to graduate students in archaeology programs around the world. The Laboratory for Archaeological Chemistry has been involved in the study of questions of archaeological interest for many years. The primary focus of research in the laboratory is on the characterization of prehistoric bone, soils, and pottery. A variety of other materials including stone, dyes, organic residues, metals and glass are also investigated in the laboratory. Instrumentation in the lab includes a (1) Inductively Coupled Plasma - Atomic Emission Spectrometer for the rapid elemental characterization of a variety of materials with a resolution in parts per million, and (2) Finnigan Element Inductively Coupled Plasma High-Resolution Mass Spectrometer for isotopic and elemental characterization of many materials, often at the parts per billion level. This instrument incorporates laser ablation as a sample introduction technique appropriate for many solids and for small or fragile samples. In addition, the lab has access to other instrumentation and equipment on campus that is often used in our research.

Applications for the award should contain (1) a three-page letter from the applicant containing the specifics of the research and the analyses involved, (2) a curriculum vitae for the applicant, (3) a tentative table of contents for the dissertation, and (4) a letter of recommendation from the major advisor. The letter of application should contain detailed information on the research project, the kinds of analyses involved, the number of samples and analyses required, availability of samples with letter(s) of permission, if appropriate, and a discussion of the importance of the analysis to the proposed research. This letter should also provide a timetable for research and completion of the project. Discussions with the lab staff are recommended prior to application to ensure that the project meets award criteria and employs services available in the Laboratory for Archaeological Chemistry. There is no form for applications.

One award will be made each year consisting of analytical services involving elemental or isotopic measurements available with Laboratory for Archaeological Chemistry instrumentation. The lab encourages students to participate in analyses, where possible, in order to learn & understand the methods employed. The award will be made by the staff of the Laboratory for Archaeological Chemistry and major criteria for selection will be the significance of the research question, feasibility of the

project, and impact on the student and the field. Deadline: January 1<sup>st</sup> for awards beginning in September 1<sup>st</sup> of the same year. The award will be announced on March 15<sup>th</sup> each year. Awards should be appropriately acknowledged in any dissemination of results of the analyses and copies of resulting publications should be provided to the laboratory for the files.

Questions and applications should be addressed to T. Douglas Price or James H. Burton, Laboratory for Archaeological Chemistry, University of Wisconsin-Madison, 1180 Observatory Drive, Madison WI 53706 USA. Phone: 608-262-2575 (tdp), 608-262-0367 (jhb), 608-265-4216 (fax). E-mail: [tdprice@facstaff.wisc.edu](mailto:tdprice@facstaff.wisc.edu) or [jhburton@facstaff.wisc.edu](mailto:jhburton@facstaff.wisc.edu). For information on the Laboratory for Archaeological Chemistry, please see our web site at [www.wisc.edu/larch/acclab/larch.htm](http://www.wisc.edu/larch/acclab/larch.htm)

**Geochron Laboratories.** Each year Geochron Laboratories awards research grants to graduate students enrolled in academic institutions around the world. The awards consist of analytical services performed free of charge for the winner of each category. The deadline for applications is May 1st. Early application is suggested to assist us with prompt evaluation and notification of winners. The four separate awards are offered by Geochron Labs in an effort to encourage the application of isotopic analysis techniques to solve original and significant problems. The awards consist specifically of the following services:

***K-Ar age determinations:***

Up to five (5) age determinations using the K-Ar method.

***14C age determinations:***

Up to eight (8) conventional 14C age determinations or three (3) AMS age determinations or some combination of the two.

***Stable Pb or Sr isotopic analyses:***

Up to five (5) isotopic analyses of either stable Pb or Sr.

***Stable Isotope Ratio Analyses:***

Up to \$1,500.00 in stable isotope analyses, of any variety or combination (except hydrogen and oxygen on silicates), based on our published prices.

There will be at least one award in each category receiving applications. We may select more than one winner in any category, at our option. The various categories cannot be combined in the same proposal, although separate proposals by the same applicant are welcome and will be judged independently in their respective categories. Contact us for more information about the exact nature of the services available.

***Competition Rules***

All applicants must be graduate students in good standing at U.S. or foreign accredited academic institutions. Applicants must submit their name, address, telephone number, institutional affiliation, and field of specialization, as well as their graduate supervisor's name, address, and telephone number. The category of analysis should be specified and the problem to which the

analyses will be applied should be accurately described in less than 500 words, including evidence that the application of the analyses to be awarded is likely to solve the problem. Additional documentation, references, reprints, maps, etc., may be included separately. Supplementary material will not be returned, so please send copies. All entries must be written in English. Applications must be received at Geochron no later than May 1st. All entries will be judged on the basis of originality, actual availability of appropriate materials for analysis, significance to the field of study, and probability of a solution by the analytical method chosen and the amount of work to be awarded.

Winners of each award will be notified by June 30. Please give a summer address if you will be away from your school address in June. Samples for analyses must be submitted before the end of the calendar year. Analyses will be completed within approximately 90 days of receipt. Analytical results will be reported on our standard forms. It is expected that the award will be appropriately acknowledged in any thesis or subsequent publications using data provided under the award and that copies or reprints of such publications will be sent to Geochron for our records.

Send applications to: Research Awards, Geochron Laboratories, 711 Concord Avenue, Cambridge, MA 02138-1002 U.S.A.

#### **CONTENTS OF RECENT ISSUES OF GEOARCHAEOLOGY**

##### **Volume 16, Number 8, October, 2001**

Geologic sources and geographic distribution of sand tempers in prehistoric potsherds from the Mariana Islands. William R. Dickinson, Brian M. Butler, Darlene R. Moore, Marilyn Swift.

Using in-field phosphate testing to rapidly identify middens at Piedras Negras, Guatemala. J.J. Parnell, C. Golden, R.E. Terry.

Investigation of Islamic ceramics from Tell Tuneinir using X-ray diffraction. M.L. Eiland and Q. Williams.

##### **Volume 17, Number 1, January, 2002**

#### **SPECIAL ISSUE - SITE FORMATION PROCESSES IN REGIONAL PERSPECTIVE: PART I**

Dedication. D.L. Johnson and R.D. Mandel.

Introduction. D.L. Johnson, R.D. Mandel, J. Leach, M. Petraglia.

Darwin would be proud: Bioturbation, dynamic denudation, and the power of theory in science. D.L. Johnson.

Buried artifacts in stable upland sites and the role of bioturbation: A review. C.L. Balek.

The good earthworm: How natural processes preserve upland Archaic archeological sites of Western Illinois, USA. J. Van Nest.

Biomantle formation and artifact translocation in upland sandy soils: An example from the Holly Springs National Forest, north-central Mississippi, USA. E. Peacock and D. Fant.

##### **Volume 17, Number 2, January, 2002**

#### **SPECIAL ISSUE - SITE FORMATION PROCESSES IN REGIONAL PERSPECTIVE: PART II**

Introduction. R.D. Mandel.

The hidden record: Late Holocene landscapes and settlement archaeology in the Lower Ohio River Valley. Russell Stafford and Steven Creasman.

The effects of temporal and spatial patterns of Holocene erosion and alluviation on the archaeological record of the central and eastern Great Plains, USA. E.A. Bettis III and R.D. Mandel.

Dynamic landscapes, artifact taphonomy, and land use modeling in the western Mediterranean. C.M. Barton, J. Bernabeu, J.E. Aura, O. Garcia, N. LaRoca.

Evidence for eolian deposition on a summit profile in the sandy uplands of east Texas and the implications for archaeological site integrity. C.D. Frederick, M.D. Bateman, R. Rogers.

#### **NEW BOOKS AND MONOGRAPHS**

*African Biogeography, Climate Change and Human Evolution*, Timothy G. Bromage and Friedemann Schrenk, (eds.) (1999) Oxford University Press, Oxford, xi+485 pp.

*Ancient Floods, Modern Hazards: Principles and Applications of Paleoflood Hydrology*. P. Kyle House, Robert H. Webb, Victor R. Baker, and Daniel R. Lebish (eds.) (2001) Water Science and Application Series, Vol. 5, American Geophysical Union, Washington, 386 pp.

*The Archaeologist's Laboratory: The Analysis of Archaeological Data*, E. B. Banning (2000) Kluwer Academic/Plenum Publishers, 233 Spring Street, New York, NY, xviii+316 pp.

*The Archaeology of Drylands: Living at the Margin*. Graeme Barker and David Gilbertson (2000) One World Archaeology Volume 39, Routledge, New York, NY, xxiii+372 pp.

*The Archaeology of Geological Catastrophes*, W. J. McGuire, D.R. Griffiths, P.L. Hancock, and I.S. Stewart (2000) The Geological Society Special Publication No. 171, The Geological Society, London, ix+417 pp.

*Bones, Boats & Bison: Archaeology and the First Colonization of Western North America*, E. James Dixon (1999) University of New Mexico Press, Albuquerque, NM, 322 pp.

*Les céramiques d'Oman et l'Asie moyenne: Une archéologie des échanges à l'Âge du Bronze*, Sophie Méry (2000) Centre National de la Recherche Scientifique CRA Monographies 23, 314 pp.

*Coastal and Estuarine Environments: Sedimentology, Geomorphology and Geoarchaeology*, K. Pye and J.R.L. Allen (eds.), (2000) Geological Society Special Publication 175, The Geological Society, London, 435 pp.

*Earth Sciences and Archaeology*, Paul Goldberg, Vance T. Holliday and C. Reid Ferring (2001) Kluwer Academic/Plenum Publishers, 233 Spring Street, New York, NY, xxi+513 pp.

*El Niño in History: Storming Through the Ages*. César N. Caviedes (2001) Univ. Press of Florida, Gainesville, FL, 304 pp.

*Enduring Records: The Environmental and Cultural Heritage of Wetlands*. Barbara A. Purdy (ed.) (2001) Oxbow Books, Oxford, UK and The David Brown Book Company, Oakville, CT, xiii+302 pp.

*An Environmental History of Northeast Florida*. James J. Miller (1998) University Press of Florida, Gainesville, FL, 240 pp.

*Excavation*, Steve Roskams (2001) Cambridge University Press, The Edinburgh Bldg, Cambridge, CB2 2RU, UK, 311 pp.

*Geoarchaeology in the Great Plains*, Rolfe D. Mandel (2000) University of Oklahoma Press, Norman, OK, 336 pp.

*The Holocene Evolution of the London Thames*, Jane Sidell, Keith Wilkinson, Robert Scaife and Nigel Cameron (2000) MoLAS Monograph 5, Museum of London Archaeology Service, London, 144 pp.

*Interhemispheric Climate Linkages*, Vera Markgraf (ed) (2001) Academic Press, New York, v+454 pp.

*Out of Africa in the Pleistocene*, Lawrence Guy Strauss and Ofer Bar-Yosef (eds.) (2001) Quaternary International Volume 75, Pergamon, Oxford Terrytown, NY, 130 pp.

*Perspectives in Amino Acid and Protein Geochemistry*, Glenn A. Goodfriend, Matthew J. Collins, Marilyn L. Fogel, Stephen A. Macko, and John F. Wehmiller, (eds.) (2000) Oxford Univ. Press, 198 Madison Avenue, New York, NY, xiii+366 pp.

*River Basin Sediment Systems: Archives of Environmental Change*, D. Maddy, M.G. Macklon, and J. C. Woodward (eds.) (2001) A.A. Balkema Publishers, Lisse, The Netherlands, xxii+508 pp.

*The Science and Archaeology of Materials*, Julian Henderson, (2001) Routledge, New York, vi+352 pp.

*Scientific Analysis of Archaeological Ceramics: A Handbook of Resources*. Katherine Barclay (2001) Published for English Heritage by Oxbow Books, Oxford, UK, vii+56 pp.

*Seasonality and Sedentism: Archaeology Perspectives from Old and New World Sites*, Thomas R. Rocek and Ofer Bar-Yosef (eds.) (1998) Harvard University, Cambridge, MA, xv+221 pp.  
*Sediments in Archaeological Context*, Julie K. Stein and William R. Farrand (2001) University of Utah Press, 1795 E. South Campus Drive #101, Salt Lake City, UT, xiii+218 pp.

## **GEOARCHAEOLOGY: AN INTERNATIONAL JOURNAL**

*Geoarchaeology* is published bimonthly and has a broad interdisciplinary scope dealing with the understanding of archaeological sites, their natural context, and the material artifacts recovered from them. Manuscripts may include subjects from disciplines within the earth sciences (e.g., geography, pedology, climatology, geology, oceanography, geochemistry, geochronology, and geophysics) or those from biological sciences. The editors are particularly interested in manuscripts that bear upon site-formation processes. Members of the Archaeological Geology Division are encouraged to submit manuscripts. They should be sent to: Rolfe Mandel, Editor-in-Chief, Department of Geography, University of Kansas, Lawrence, KS 66045-2121 (tel.: 785-228-0571, fax: 785-228-0587).

Members of the Archaeological Geology Division and the Quaternary Geology & Geomorphology Division of GSA qualify for the group rate of \$105/year. The rate for Division members outside North America is \$153. The offer is for personal subscriptions only (subscription orders must include GSA membership number). Payment can be sent directly to: Subscription Dept., John Wiley & Sons, Inc., 605 Third Ave., New York, NY 10158. For subscription inquiries, please call 212-850-6645 or e-mail: SUBINFO@wiley.com. U.S. members should include appropriate state sales tax and Canadian members should add 7% GST, which Wiley is obliged to collect.

**Note:** *Geoarchaeology* is now on the ISI Web of Science Database.

## **A NOTE FROM THE NEWSLETTER EDITOR**

The AG Division newsletter is always better with your contribution. The two sections titled "News from the Membership" and "Featured Research" are good ways of letting other members know about your current research. **PLEASE SEND ME MATERIAL FOR THE NEWSLETTER!!** My e-mail address is: freeman@ucalgary.ca

## DIRECTORY OF GRADUATE PROGRAMS IN ARCHAEOLOGICAL GEOLOGY

The Directory of Graduate Programs in Archaeological Geology and Geoarchaeology is published by the Archaeological Geology Division of the Geological Society of America. It is accessible through the GSA Web site at:

<<http://rock.geosociety.org/arch/>>. Rolfe Mandel took over the responsibility of updating Rip Rapp's Directory; for a free hard-copy, contact Rolfe (mandel@falcon.cc.ukans.edu).

## SOCIETY FOR ARCHAEOLOGICAL SCIENCES

The SAS exists for the purpose of bringing together those concerned with natural science applications in archaeology. Its principal role is fostering communication and interdisciplinary collaboration and cooperation. Regular membership in the SAS includes a subscription to the *Journal of Archaeological Science* (published by Academic Press) as well as a subscription to the SAS Bulletin. Regular membership is now \$75/yr. For more information write: SAS, Membership, Radiocarbon Laboratory, University of California, Riverside, CA 92521.

## NOTE

A **paleoclimate discussion list** has been established. For more information on how to join this listserver, see website at: <http://www.ngdc.noaa.gov/paleo/listserv-invitation.html> or send e-mail to: paleolist.help@noaa.gov.

## ON THE WEB

**CALIB on-line.** The online version of the radiocarbon program CALIB 4.2. is available at the following sites:

University of Washington:

<http://depts.washington.edu/qil/calib/>

Queen's Univ. of Belfast: <http://radiocarbon.pa.qub.ac.uk/calib/>

Operating instructions are given on the web page. If you have any comments or questions about CALIB, please send an e-mail to: Dr. Paula J. Reimer, School of Archaeology & Palaeoecology, Queen's University of Belfast, Belfast BT7 1NN, Northern Ireland, Phone: 44-(0)1232-273980, FAX: 44-(0)1232-315779, e-mail: [p.j.reimer@qub.ac.uk](mailto:p.j.reimer@qub.ac.uk),

<http://www.qub.ac.uk/arcpal/staff/reimer>

The **Dictionary of Quaternary Acronyms and Abbreviations** has moved to: <http://www.scirpus.ca/cgi-bin/dictqaa.cgi>

The latest version of the computer program **CALPAL** i.e. the **Cologne Radiocarbon Calibration & Palaeoclimate Research Package**, can now be downloaded from the site:

<<http://www.calpal.de/>>. The idea underlying the development of CALPAL is that it may be useful to show calibrated 14C-ages in graphic context with selected palaeoclimate proxies. The

palaeoclimate data base integrated in CALPAL presently contains some 60 climate proxies, mainly from the polar and equatorial ice-cores. Another incentive is to explore data & methods applicable to the Glacial extension of the 14C-calibration curve. CALPAL is now in the 2001 "Ghost of Edinburgh" edition, which supports 14C-age conversion back to 50 ka 14C-BP. The climate database covers 500 ka. Our application of CALPAL is in studying human/geo/environmental events and processes in relation to climate change. CALPAL runs on PC under the operating systems WIN9x/NT/2000. The package requires c. 20 MByte free storage on a hard-disk drive named c:/ and a 200 MHz 586 Processor or faster. CALPAL is free-of-charge for the scientific community.

## NEWS FROM THE MEMBERSHIP

Division members **Rolfe D. Mandel** and **E. Arthur Bettis III** have published a new book titled: *Late Quaternary Landscape Evolution in the South Fork of the Big Nemaha River Valley, Southeastern Nebraska and Northeastern Kansas*, Guidebook 11, Nebraska Conservation and Survey Division, University of Nebraska. This guidebook presents the results of a recent interdisciplinary study resulting in a detailed alluvial stratigraphic and paleoecological record spanning the past 40,000 years. Considerable attention also is given to the geoarchaeology of the study area. To order: Send \$8.00 (Nebraska residents must add state and local sales tax) plus \$3 shipping for first class postage or \$2 for fourth class to: Publications Dept, Conservation & Survey Division, Nebraska Hall, University of Nebraska, Lincoln, NE 68588-0517.

Congratulations to **Jeff Homburg** (Statistical Research, Tucson) and **Manuel Palacios-Fest** (Terra Nostra Research, Tucson) for their winning poster at the Society for American Archaeology meeting in Denver! To see the award winning poster, click on "awards" in the Terra Nostra website at: <http://www.tnesr.org>.