A Message from the Chair
May, 2007

Greetings and hope all is well. This is my second (and final) year as chair of the Archaeological Geology Division (AGD). I want to take this opportunity to update you on the status of the division, review recent changes, and announce some upcoming events.

First, Happy 30th birthday to the AGD! Hard to believe (especially for those who were there) that it has been 30 years since a small cadre of professionals proposed to GSA the creation of a division dedicated to archaeological geology. Thirty years later, the division is going strong but certainly has room for growth and improvement. We are holding steady at about 500 members, regularly sponsor symposia and field trips at the GSA Annual Meeting, sponsor professional career and student awards, maintain a web site, and have our own professional publication. Thus, the overall health of the division is good…but it could be better.

An area where we need to improve is in increasing membership and participation. My focus has been and continues to be on recruiting students into the organization. Approximately 26% of our membership is registered as students, and yet we struggle to have students participate in the annual meeting. We also struggle with too few applications for our two student awards. The Claude C. Albritton Jr. Award provides scholarships and fellowships for graduate students in the earth sciences or archaeology for research. The recently renamed Richard Hay Student Paper/Poster Award is a travel grant awarded to a student presenting original research at the GSA Annual Meeting. Although the awards are relatively small (e.g., ~$500), they are merit-based and a worthy accomplishment to be listed on a young scholar’s CV. I ask members in academia to encourage their students to attend GSA meetings, present their research, and apply for these awards (see division website at http://rock.geosociety.org/arch/ for more information regarding awards). Also have students check out the Student News link on the AGD website where one can find student-useful information (e.g., list of grants and funding opportunities, tips on poster preparation, and suggestions for getting involved in AGD). Students can also contact the AGD Student Representatives, Ellery Frahm frah0010@umn.edu and Cynthia Fadem cfadem@gmail.com.

By several measures, the annual meeting in Philadelphia was a success, with several sponsored topical sessions and a fieldtrip of the Delaware River Valley led by Joe Schuldenrein (thanks Joe!) I invite all members to attend the upcoming GSA Annual Meeting in Denver. In addition to the general sessions, we are sponsoring four proposed topical sessions (see below for additional information) that include diverse topics such as alluvial cycles and climate, geochemical techniques to source archaeological materials, geoarchaeological sedimentology (a memorial to Richard Hay), and paleoenvironmental cataclysms in the Black Sea-Mediterranean Corridor. And just when you think we have used up all AGD fieldtrip opportunities in the Denver area, lo and behold….we are sponsoring three (!) proposed field trips (see below for more information): 1) Geoarchaeological Context of Paleoindian Sites in Middle Park, Colorado; 2) Geoarchaeology of the Clary Ranch Paleoindian Sites, Western Nebraska; 3) and Behind the Scenes at the Denver Museum of Natural History. These trips won’t go unless you sign up for them. For more information, see below or go to http://www.geosociety.org/meetings/2007/.

And it is not too early to start thinking about the joint GSA-SSSA (Soil Science Society of America) 2008 annual “mega-meeting” to be held in Houston. As pointed out in an earlier chair’s message by David Cremeens, this meeting has the potential to draw 10,000 participants and should be an exciting venue for geoarchaeology. I encourage you to start thinking now about sessions and field trips (feel free to float ideas to me or AGD Vice-Chair, Andrea Freeman, at freeman@ucalgary.ca). Pedology and geoarchaeology are closely allied, and we have the opportunity to bridge gaps and enhance collaboration between our disciplines.
Finally, I want to announce recent changes at Geoarchaeology: An International Journal. After years of service and sacrifice, Paul Goldberg and Rolfe Mandel are stepping down as Co-Editors of the journal (although they will remain as Associate Editors). On May 1, 2007, Jamie Woodward (University of Manchester) and I became the new Co-Editors. All Editorial Board members are now Associate Editors and will play a more active role in processing manuscripts and selecting reviewers. Jamie and I seek to maintain the reputation of Geoarchaeology as the flagship journal of our discipline. Our success will depend in part on your willingness to submit well-written manuscripts containing original research and analyses that will appeal to broad geological and archaeological audiences. We will also need your help in providing objective and expedient reviews of manuscripts and books. Manuscript submission and review is fully electronic and processed through Manuscript Central, a web-based program for managing documents in the peer-review process. For more information, go to the “For Authors” link at http://www3.interscience.wiley.com/cgi-bin/jhome/36011. It is an exciting time for the journal, and together we can use this publication as a means of increasing the visibility and prestige of our discipline within the scientific community.

If you should have any questions or concerns regarding the journal or division, feel free to contact me.

Sincerely,

Gary Huckleberry
ghuck@email.arizona.edu

ARCHAEOLOGICAL GEOLOGY DIVISION MANAGEMENT BOARD, 2005-2007

Chair
Gary Huckleberry
3577 E. Nugget Canyon Pl. Place
Tucson, AZ 85718
(520) 615-2644
ghuck10@comcast.net

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

Secretary-Treasurer
C. Russell Stafford
Department of Geography, Geology & Anthropology
Indiana State University
Terre Haute, IN 47809
(812) 237-3889
anstff@isugw.indstate.edu

Past Chair
David Cremeens
GAI Consultants, Inc
385 East Waterfront Drive
Homestead, Pennsylvania 15120
(412) 476-2000
d.cremeens@gaiconsultants.com

ELECTION TIME!

Note: It’s time to elect the next slate of AGD officers; see pages 11-12 for the ballot and instructions on how to vote.

FOR MORE INFORMATION
VISIT THE DIVISION WEBSITE
http://rock.geosociety.org/arch

GSA ANNUAL MEETING
October 28-31, 2007
Denver, CO

The deadline for submitting an abstract is July 10! The Division is sponsoring (or cosponsoring) the following sessions, so please consider participating. Please visit http://gsa.confex.com/gsa/2007AM/index.cfm to submit.

T2. Sourcing Techniques in Archaeology
GSA Archaeological Geology Division; Mostafa Fayek, Sharon K. Hull

The intent is to bring together researchers who have applied or developed geochemical techniques to source archaeological materials. Contributions on applications of trace element and isotopic geochemical techniques are strongly encouraged. Oral. Archaeological Geology; Geochemistry; Mineralogy/Crystallography

T3. Alluvial Cycles, Climate, and Human Prehistory
GSA Archaeological Geology Division; GSA Quaternary Geology and Geomorphology Division

Gary Huckleberry
This session will focus on research regarding the timing of late-Holocene valley entrenchment and filling in arid and semiarid landscapes, connections to climate change and local geomorphic controls, and correlations to prehistoric settlement changes. Oral. Archaeological Geology; Geomorphology; Hydrogeology

T4. From Geoarchaeology and Paleoanthropology to Sedimentary Geology and Geochemistry: A Memorial to Richard L. Hay
GSA Archaeological Geology Division; GSA Limnogeology Division; GSA Sedimentary Geology Division; Mineralogical Society of America
Gail M. Ashley, Marie Jackson, Enrique Merino, Thure E. Cerling

This interdisciplinary session in memory of Richard L. Hay encourages papers in geoarchaeology, limnogeology, tephra and sedimentary geochemistry, and zeolite minerals, to provide an opportunity for presentation of new research inspired by Hay's multifaceted career. Oral. Archaeological Geology; Limnogeology; Geochemistry

GSA Archaeological Geology Division; GSA Sedimentary Geology Division; GSA Quaternary Geology and Geomorphology Division; GSA International Division; Avalon Institute of Applied Science
Valentina Yanko-Hombach, Ilya Buynevich, Olena V. Smyntyna
The session presents a cross-disciplinary examination of paleoenvironmental cataclysms in the Black Sea-Mediterranean Corridor over the past 30 k.y. and their influence on landscape dynamics and human adaptive strategies in semi-isolated basins. Oral.

Environmental Geoscience; Quaternary Geology; Archaeological Geology

**T57. Geology of Groundwater-Discharge Deposits in Arid Lands** Jeffrey Pigati, Jason Rech

This session focuses on the geology of groundwater-discharge, or “spring,” deposits in arid lands and their potential use for reconstructing past climatic, hydrologic, and environmental conditions. Oral.

**DIVISION SPONSORED FIELD TRIPS FOR THE DENVER MEETING**

Visit [www.geosociety.org/meetings/2007/ft_pre.htm](http://www.geosociety.org/meetings/2007/ft_pre.htm) for more information and to register.

**408. Geoarchaeology of the Clary Ranch Paleoindian Sites, western Nebraska.** Dave May (University of Northern Iowa), Matt Hill, and Dave Rapson (both Iowa State University).

One-day (October 26, 2007), pre-meeting field trip associated with the annual Geological Society of America meeting in Denver (1 bus to get to the ranch + Suburbs to get out to the sites). Lunch included.

This trip will visit two Late Paleoindian sites in the Ash Hollow drainage, a major tributary to the North Platte River in western Nebraska. These two sites are contemporary and are believed to represent complementary dimensions of a single settlement and subsistence system. One is a bison processing area; the other a camp. Emphasis will be on interdisciplinary research in the basin and at the archaeological sites, including geomorphology and early-Holocene stratigraphy in the basin, paleo-environmental reconstruction using several lines of evidence, and Paleoindian archaeology. We will investigate two or three cutbank exposures and make a visit to a local museum (Ash Hollow Cave) as well.

**412. Geoarchaeological Context of Paleoindian Sites in Middle Park, Colorado** James H. Mayer (University of Arizona), Todd A. Surovell.

Geoarchaeological investigations have been carried out in Middle Park as part of ongoing research by the University of Wyoming Dept. of Anthropology, with the primary goals of (1) defining the soil and stratigraphic context of the Paleoindian occupation; (2) determining processes and patterns in Holocene landscape evolution potentially modifying the Paleoindian record; and (3) understanding components of the landscape most likely to yield in situ Paleoindian sites. We will visit two localities subjected to fairly detailed geoarchaeological inquiry: Barger Gulch Locality B, a Folsom campsite, and the Jerry Craig site, a Cody Complex bison kill. Both sites have yielded in situ Paleoindian components associated with buried forest soils in settings currently dominated by sagebrush, thus providing insights into Holocene landscape evolution and paleoenvironmental change. Three to four hours will be spent at Locality B, where the most extensive archaeological and geoarchaeological work has been carried out. Profiles in the upland excavation block, exposure in a low-order tributary gully, and alluvial exposures along Barger Gulch proper will be examined. At Jerry Craig, we will spend one to two hours examining an exposure in the excavation block, as well as a road cut. Discussion at both sites will concentrate on geomorphic histories, with special attention to the soil stratigraphic records. Site records will be compared to other non-archaeological settings examined in Middle Park. Finally, the Middle Park geoarchaeological records will be compared with well-documented glacial, pollen, and fossil insect records from higher elevations in the Colorado Front Range.
1. **Chair Report** (Gary Huckleberry)
   - Reviewed AGD activities at the Philadelphia meetings; thanked Joe Schuldenrein for leading this year’s fieldtrip.
   - Discussion of student travel award and the need for more student involvement in AGD. Graduate, undergraduate, and high school students should all be eligible for the award. Paper and posters can be co-authored and still be eligible; applicant must be lead author. Should name the award to attract more applicants (none this year).
   - Nominations needed for division officers. Send to Catherine Yansa, chair of the Nominations Committee.
   - There is an opening on the Awards Committee; interested members should contact the Chair.
   - Thanks to Jen Smith for her efforts in putting together the AGD Newsletter; Jen indicated that the membership should send information and brief research reports for inclusion in the Newsletter. Still have plenty of fanny packs to give as donation thank-you gifts.
   - To commemorate the 30th Anniversary of the Division a student T-Shirt design competition was announced. A $100 prize will be awarded to the winner. Designs should be submitted to Andrea Freeman or Rolfe Mandel by March 1, 2007.

2. **Vice-Chair Report** (Andrea Freeman)
   - Commented on next year’s 30th Anniversary meeting in Denver.
   - Two pre-meeting field trips planned:
     - Paleoindian sites in Nebraska on Friday
     - Middle Park on Saturday
   - Possible in-meeting trip to Denver Museum also mentioned.
   - Two topical sessions have been suggested:
     - Alluvial Cycles in the West
     - History of Geoarchaeology for the 30th Anniversary
   - Contact Management Board to get AGD sponsorship for topical sessions.

3. **Secretary-Treasurer Report** (Russ Stafford)
   - As of the September 30, 2006 the general division account had a balance of $9768.11
   - Rip Rapp Fund balance is $55,718
   - Albritton Fund balance is $23,619
   - Student travel line item is $1,138.44
   - Moderate increases since the first of the year in both Award funds

4. **Open Discussion and Announcements**:
   - Rolfe Mandel indicated that *Geoarchaeology* now has electronic manuscript submission. Fewer special issues planned in the future.

   Gary Huckleberry indicated that minor Bylaws changes are required in order to comply with changes in GSA membership categories. Such changes do not require a vote of the membership since they are mandated by GSA. Once changes are made the revised Bylaws will be posted on the website.

5. **Awards Ceremony**
   - The *Claude C. Albritton, Jr. Award* was made to Elizabeth Sonnerberg (McMaster University) for research entitled “Holocene Water-Level Change and Paleo-Indian Settlement of Rice Lake, Ontario”
   - The *Rip Rapp Archaeological Geology Award* was made to Peter J. Mehringer (Professor Emeritus) *Washington State University*. Gary Huckleberry & Vance Haynes were the citationists.

   Meeting adjourned at 6:20 pm.

Respectively submitted:
Russell Stafford
Secretary/Treasurer

---

**FROM THE NEWSLETTER EDITOR**

Please send input! We need more “News from the Membership” and “Featured Research”. If there’s something you’d like to see in the Newsletter that’s not here, something that would be particularly useful or enjoyable to you, please let me know. Any and all suggestions for improving the newsletter would be welcomed! Send all correspondence to: Jennifer R. Smith, Department of Earth and Planetary Sciences, Washington University, Campus Box 1169, 1 Brookings Drive, St. Louis, MO 63130, Office: (314) 935-9451, Fax: (314) 935-7361, email: jensmith@wustl.edu.
FUNDING OPPORTUNITIES FOR GRADUATE STUDENTS

CLAUDR 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 applying 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.


Contact: More information, including an online application form, may be found at http://rock.geosociety.org/arch/. For further inquiries, contact Awards Committee Chair Loren Davis at loren.davis@oregonstate.edu To contribute to the Albritton Fund, send your gift to the GSA Foundation, designating the gift for this fund.

RICHARD HAY STUDENT POSTER/PAPER AWARD

At the 2006 Annual Meeting in Philadelphia, PA, the Management Board of the Archaeological Geology Division elected to rename the student travel award for a distinguished scientist in Archaeological Geology.

After consulting with his family, the student paper/poster award was officially named the Richard Hay Student Paper/Poster Award. Richard Hay was a long-standing member of the Archaeological Geology Division and had a long and distinguished career in sedimentary geology, mineralogy, and archaeological geology. He is particularly well known for his work on the Olduvai Gorge and Laetoli hominid-bearing sites and was awarded the Division's Rip Rapp award in 2000. The Division is proud to have our student travel award bear his name.

The Richard Hay Student Paper/Poster Award is a travel grant awarded to a student presenting a paper or poster at the GSA's annual meeting. The grant is competitive and will be awarded based on the evaluation of the scientific merit of the research topic and the clarity of an expanded abstract for the paper prepared by a student for presentation in [one of] the Division's technical session[s] at the meeting. The deadline for receipt of the application is September 20, 2007. For more information (and online applications), contact Awards Committee Chair Loren Davis at loren.davis@oregonstate.edu or consult the Division website at rock.geosociety.org/arch/.

DOUGLAS C. KELLOGG FUND FOR GEOARCHAEOLOGICAL RESEARCH

The Douglas C. Kellogg Award provides support for thesis or dissertation research, with emphasis on the field and/or laboratory aspects of this research, for graduate students in the earth sciences and archaeology. Recipients of the Kellogg 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.

Under the auspices of the SAA’s Geoarchaeology Interest Group, family, friends, and close associates of Douglass C. Kellog formed a memorial in his honor. The interest from money donated to the Douglas C. Kellog fund is used for the annual award. Initially the amount to be awarded on an annual basis was $500. The amount of the award given to the recipient will increase as the fund grows and the amount of the annual interest increases. The 2008 Award will be presented at the 73rd Annual Meeting of the SAA.

Requirements:
- A one page letter that briefly explaining the individuals interest and how he or she qualifies for the award
- Curriculum vitae
- Five (5) copies of a 3 to 4 page, double-spaced description of the thesis or dissertation research that clearly documents the geoarchaeological orientation and significance of the research. One illustration may be included with the proposal.
- A letter of recommendation from the thesis or dissertation supervisor that emphasizes the student's ability and potential as a geoarchaeologist.

Deadline: December 1, 2007

Contact: Dr. Christopher L. Hill, Department of Anthropology, Boise State University, 1910 University Drive, Boise, ID 83725-1950 E-mail: chill2@boisestate.edu.
OTHER FUNDING OPPORTUNITIES FOR GRADUATE RESEARCH

NSF Doctoral Dissertation Grants
The National Science Foundation's programs in Archaeology, Cultural Anthropology, and Physical Anthropology have changed the maximum amount that can be requested for Doctoral Dissertation Research Improvement Grants. Hitherto, the project budget maximum was $12,000. Effective January 1, 2007 the new maximum will be $15,000. Applications in Archaeology may be submitted at any time.

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 in one of two categories: 

**14C age determinations:** up to eight (8) conventional 14C age determinations, and 

**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 Geochron Lab’s published prices.

**Deadline:** Application deadlines in past years have generally been late spring/early summer (May-June), but early applications are suggested in order to assist with prompt evaluation and notification of winners.

**Contact:** For information or application procedures - website www.geochronlabs.com/research.html; phone: (617) 876-3691; fax: (617) 661-0148; email: staff@geochronlabs.com; address 711 Concord Ave., Cambridge, MA 02138.

*ADDITIONAL FUNDING INFORMATION*

Ellery Frahm has updated his webpage featuring information on funding resources for geoarchaeological research. It can be found at: http://web.mac.com/elleryfrahm/iWeb/Geoarch/. New features include: a better format, RSS support, the ability for visitors to add comments and further information. Thanks to Ellery for maintaining this page!

SOCIETY FOR ARCHAEOLOGICAL SCIENCES
The Society for Archaeological Sciences (SAS) was founded to establish a forum for communication among scholars applying methods from the physical sciences to archaeology and to aid the broader archaeological community in assessing the potentials and problems of those methods. Annual base membership (including subscription to the SAS Bulletin) is $20. For membership inquiries, please contact Rob Sternberg, Department of Earth and Environment, Franklin & Marshall College, Lancaster, PA 17604-3003 USA; (717) 291-4134 (phone); (717) 291-4186 (fax); Rob.Sternberg@FandM.edu.

NEWS FROM THE MEMBERSHIP

AGD member Ellery Frahm recently announced that the University of Minnesota's Electron Microprobe Lab will be offering free, non-destructive obsidian artifact sourcing based on a reference collection that he has been studying. For details, one can either do a Google search for Ellery's website and click on the "Obsidian Sourcing" link or visit the page directly at: http://web.mac.com/elleryfrahm/iWeb/Obsidian/.

After defending her doctoral dissertation on the geoarchaeology of Alberta's Cypress Hills last year, Liz Robertson started a tenure-track job as an assistant professor in the Department of Archaeology at the University of Saskatchewan. The department's focus is on the archaeology of the Northern Plains, and she was hired specifically to bring a geoarchaeological perspective to its teaching and research. With that in mind, she'll be undertaking some preliminary research in Alberta and Saskatchewan this summer, in order to identify new projects that will complement the research currently taking place in this department.

GEOARCHAEOLOGY: AN INTERNATIONAL JOURNAL

Geoarchaeology: An International Journal is now on the ISI Web of Science Database. The journal now is being edited by Gary Huckleberry and Jamie Woodward.

Geoarchaeology is published 8 times per year 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. Electronic submission of manuscripts is available at mc.manuscriptcentral.com/gebra.

CONTENT OF RECENT ISSUES OF GEOARCHAEOLOGY

Volume 22, Issue 5 (June 2007)

Research Articles

*Fire-cracked rock features on sandy landforms in the Northern Rocky Mountains: Toward establishing reliable frames of reference for assessing site integrity* (p 477-510) Alston V. Thoms

Wind erosion and intensive prehistoric agriculture: A case study from the Kalaupapa field system, Moloka'i Island,
Book Review
Book review (p 555-556) Melissa Goodman Elgar

Volume 22, Issue 4, Pages 387-475 (April 2007)

Introduction (p 387-390) E. Christian Wells, Richard E. Terry

Research Articles
Geoarchaeology of the Boca Negra Wash Area, Albuquerque Basin, New Mexico, USA (p 756-802) Vance T. Holliday, Bruce B. Huckell, James H. Mayer, Steven L. Forman, Leslie D. McFadden

Compositional analysis of Yayoi-Heian period ceramics from Okinawa: Examining the potential for provenance study (p 803-822) Scott M. Fitzpatrick, Hiroto Takamiya, Hector Neff, William R. Dickinson

Sourcing carbonate pointed stones from the barrier beach of Mantoloking, New Jersey, USA (p 823-842) John P. Vermilyen, Lincoln S. Hollister

Geoarchaeological simulation of meandering river deposits and settlement distributions: A three-dimensional approach (p 843-874) Quintijn Clevis, Gregory E. Tucker, Gary Lock, Stephen T. Lancaster, Nicole Gasparini, Arnaud Desitter, Rafael L. Bras

Book Review
Environmental archaeology: Theoretical and practical approaches (p 878-880) Richard W. Yerkes

Volume 22, Issue 3 (March 2007)

Research Articles
Introduction (p 285-290) E. Christian Wells, Richard E. Terry


Application of carbon isotope analysis to ancient maize agriculture in the Petexbatún region of Guatemala (p 313-336) K. D. Johnson, David R. Wright, Richard E. Terry

Soil resources of the Motul de San José Maya: Correlating soil taxonomy and modern Itzá Maya soil classification within a classic Maya archaeological zone (p 337-357) Christopher T. Jensen, Matthew D. Moriarty, Kristoffer D. Johnson, Richard E. Terry, Kitty F. Emery, Sheldon D. Nelson

Biogeochronological studies of a Native American runoff agroecosystem (p 359-386) Jonathan A. Sandor, Jay B. Norton, Jeffrey A. Homburg, Deborah A. Muenchrath, Carleton S. White, S. E. Williams, C. I. Havener, P. D. Stahl

Book Review
Amazonian dark earths: Origins, properties, management (p 151-153) Jeffrey A. Homburg

Volume 21, Issue 8 (December 2006)

Research Articles
Geoarchaeology of the Boca Negra Wash Area, Albuquerque Basin, New Mexico, USA (p 756-802) Vance T. Holliday, Bruce B. Huckell, James H. Mayer, Steven L. Forman, Leslie D. McFadden

Compositional analysis of Yayoi-Heian period ceramics from Okinawa: Examining the potential for provenance study (p 803-822) Scott M. Fitzpatrick, Hiroto Takamiya, Hector Neff, William R. Dickinson

Sourcing carbonate pointed stones from the barrier beach of Mantoloking, New Jersey, USA (p 823-842) John P. Vermilyen, Lincoln S. Hollister

Geoarchaeological simulation of meandering river deposits and settlement distributions: A three-dimensional approach (p 843-874) Quintijn Clevis, Gregory E. Tucker, Gary Lock, Stephen T. Lancaster, Nicole Gasparini, Arnaud Desitter, Rafael L. Bras

Book Review
Cultural resource laws and practice: An introductory guide (p 875-877) Joseph Schuldenrein

Environmental archaeology: Theoretical and practical approaches (p 878-880) Richard W. Yerkes

Volume 22, Issue 2 (February 2007)

Research Articles
Soilscape and land-use evolution related to drift sand movements since the bronze age in Eastern Jutland, Denmark (p 155-179) Jari Hirsch Mikkelsen, Roger Langohr, Richard I. Macphail

Geoarchaeology of the Kostenki-Borschchevo sites, Don River Valley, Russia (p 181-228) Vance T. Holliday, John F. Hoffecker, Paul Goldberg, Richard I. Macphail, Steven L. Forman, Mikhail Anikovich, Andrei Sintsyn

Geoarchaeology of Tonga: Geotectonic and geomorphic controls (p 229-259) William R. Dickinson, David V. Burley

The lower paleolithic landscape of ‘Ayoun Qedim, al-Jafr Basin, Jordan (p 261-275) Jason A. Rech, Leslie A. Quintero, Philip J. Wilke, Emily R. Winer

Book Review
Book review (p 277-279) Matthew G. Hill

Book review (p 279-281) James K. Feathers

Volume 22, Issue 1 (January 2007)

Research Articles
Integration comes of age: A conversation with Rip Rapp (p 1-14) Zhichun Jing

Geoarchaeology and late glacial landscapes in the western Lake Superior region, Central North America (p 15-47) Christopher L. Hill

Overcoming disciplinary solitude: The archaeology and geology of native copper in Eastern North America (p 49-66) Mary Ann Levine

Trace-element analysis of native copper: The view from Northern Minnesota, USA (p 67-84) Susan C. Mulholland, Mary H. Pulford

Environmental deterioration and human agency in ancient Macedonia: A case study (p 85-110) James Wiseman

Interdisciplinary survey in Messenia, Southwest Peloponnese, Greece (p 111-120) Richard Hope Simpson

The geographies of ancient Ephesus and the Artemision in Anatolia (p 121-149) John C. Kraft, Helmut Bückner, Ilhan Kayan, Helmut Engelmann

Book Review
Amazonian dark earths: Origins, properties, management (p 151-153) Jeffrey A. Homburg

Volume 22, Issue 4 (April 2007)

Introduction (p 387-390) E. Christian Wells, Richard E. Terry

Research Articles
Geostatistical and multi-elemental analysis of soils to interpret land-use history in the Hebrides, Scotland (p 391-415) J.A. Entwistle, K.J.W. McCaffrey, R.A. Dodgshon

Soil chemical surveying: A path to a deeper understanding of prehistoric sites and societies in Sweden (p 417-438) Johan Linderholm

Chemical residues in lime-plastered archaeological floors (p 439-452) Luis Barba

Midden formation and intrasite chemical patterning in Kalinga, Philippines (p 453-475) Margaret E. Beck

Volume 22, Issue 3 (March 2007)

Research Articles
Introduction (p 285-290) E. Christian Wells, Richard E. Terry


Application of carbon isotope analysis to ancient maize agriculture in the Petexbatún region of Guatemala (p 313-336) K. D. Johnson, David R. Wright, Richard E. Terry

Soil resources of the Motul de San José Maya: Correlating soil taxonomy and modern Itzá Maya soil classification within a classic Maya archaeological zone (p 337-357) Christopher T. Jensen, Matthew D. Moriarty, Kristofer D. Johnson, Richard E. Terry, Kitty F. Emery, Sheldon D. Nelson

Biogeochronological studies of a Native American runoff agroecosystem (p 359-386) Jonathan A. Sandor, Jay B. Norton, Jeffrey A. Homburg, Deborah A. Muenchrath, Carleton S. White, S. E. Williams, C. I. Havener, P. D. Stahl

Book Reviews
Book review (p 277-279) Matthew G. Hill

Book review (p 279-281) James K. Feathers
NOTES

▶▶A proposal has been submitted for the 2008 Meeting of Young Researchers in Earth Sciences (see MYRES.org) by a small group of young researchers at St. Anthony Falls laboratory in Minnesota, USA. The proposed meeting focuses on “The Dynamic Interactions of Life and its Landscape”. Their plan is to bring together scientists from a range of disciplines to examine two-way geomorphic-ecological feedbacks at multiple space and time scales. This integrative theme represents an innovative direction in Earth-surface research that has direct bearing on pressing management issues affecting human life. This theme is one of 3 competing proposals and is the only proposal concerned with surface processes. The successful theme is chosen by an open voting process. Please visit http://www.minsocam.org/ to learn more about this proposal and most importantly to place your vote: voting closes on July 14th.

▶▶A paleoaltimetry shortcourse will be run this October by the Mineralogical Society of America and the Geochemical Society. The shortcourse covers methods for inferring paleoaltimetry, which is of interest to Earth scientists working in geochemistry, tectonics/ tectonic geomorphology, paleo-climatology and geodynamics especially anyone investigating links between tectonics and climate change. It will be held immediately prior to the GSA Annual Meeting in Denver, in fact in one of the GSA hotels downtown. The cost is especially low for students, and includes a copy of the forthcoming fact in one of the GSA hotels downtown. The cost is especially low for students, and includes a copy of the forthcoming

▶▶Now available: Guidebook for Field Trips: 18th Biennial Meeting of the American Quaternary Association, edited by Rolfe D. Mandel. Contents include:

• Last Glacial Loess Sedimentary System of Eastern Nebraska and Western Iowa, by J. A. Mason et al.
• Late Quaternary Biogeography and Paleocology along the Prairie-Forest Border
  Part 1: Konza Prairie—Fire, Bison, and Vegetation on the Konza Prairie, by G. Towne
  -Biogeochemical Signatures within Soils of the Konza Tallgrass Prairie LTER Site, by W. C. Johnson et al.
  Part 2: The South Fork of the Big Nemaha River, Southeastern Nebraska Late Quaternary Paleocology of the Eastern Great Plains, by R. G. Baker et al.
• Multiple Pre-Illinoian Tills and Associated Sediments and Paleosols, Northeastern Kansas and Central Missouri
  Part 1: Kansas, by W. Dort, Jr.
  Part 2: Missouri—Description of Glacigenic Sediments in North-central Missouri, by C. W. Rovey II and J. P. Tandarich
  -Lithostratigraphy of Glacigenic Sediments in North-central Missouri, by C. W. Rovey II and J. P. Tandarich

The Kansas Geological Survey has formally published this guidebook from the 2004 biennial meeting as KGS Technical Series 21. This full-color volume is now available at $30.00, plus $5.00 postage and handling. Kansas residents must pay sales tax (contact 785-864-2157 for amount). Please contact the Kansas Geological Survey to order: (785) 864-2157.

▶▶U.S. researchers will be without Landsat imagery for at least the next five years. In an effort to address this gap in a critical data set, UCSC, in conjunction with Terra Image, USA, established the SPOT at UCSB program to provide U.S. educational institutions high-resolution SPOT imagery for the U.S. and Canada at a reasonable cost.

SPOT satellite imagery has many of the same characteristics as Landsat imagery and the constellation of SPOT satellites can be programmed to acquire imagery for a particular site and time. Like Landsat, there is a rich archive of historical imagery dating back to 1986. The problem with utilizing SPOT imagery has been price; retail prices are several to many thousands of dollars per scene. Hence, SPOT satellite imagery has not been affordable for most academic users. The SPOT at UCSB program reduces the per scene cost by 80 to 90% compared with retail prices (discounted to $299 - $999), but does require an annual institution-level subscription fee of $9,999. The yearly subscription fee is recovered with the purchase of as few as two scenes. The SPOT at UCSB program makes SPOT imagery more affordable for U.S. educational institutions and allows participants to target acquisition of SPOT imagery for their study sites. It is our mission to both address the Landsat data gap and enable U.S. academic researchers and their students to use SPOT satellite data in innovative ways.

Further information about the SPOT at UCSB program is available on our website at www.spot.ucsb.edu or by phone at (805) 893-8475.
From Nick Lancaster nick.lancaster@dri.edu: “Sand seas and dune fields of the world: A digital Quaternary atlas" is now an official INQUA Project (#0704), with funding to conduct the inaugural workshop at the INQUA Congress in Cairns in July-August 2007.

We have also received seed funding from DRI to develop a demonstration version of the global map and database of desert and other inland dunefields and sand seas using a GIS approach. The map database will incorporate information on dune morphology, activity status, and dune chronology, so enabling regional and global correlation of periods of dune construction or reworking via construction of time-slice maps of dune development and extent. Metadata associated with each dunefield will include full information on the levels of confidence to be placed in the chronologic data, literature citations, and other pertinent information as available. The compilations will be made available as a web-accessible database and in a gridded form, thereby facilitating modeling and verification of past, present, and future climates.

We plan to use an open community based approach to developing and updating the database in a way that has proved successful in so many other fields. The task of populating the databases will be facilitated by using a network of regional correspondents who have knowledge of (and in many cases studied) dunefields in different regions. The regional collaborators will feed information to a central database maintained initially by DRI. We plan to identify and select regional collaborators at the workshop at INQUA this year.

As project leader, I would like to invite you to participate in this exciting venture. If you are interested in participating, please contact me. If you or a representative are able to attend the workshop at INQUA, this would help to get the project off to a great start. We have limited funding available to assist with travel costs for workshop participation. If you or a colleague would like to apply for funds, then please send me an email stating your interest and motivation. Preference for these funds will be given to young investigators and those from countries with a low GDP.

UPCOMING MEETINGS


► August 22-27, 2007, Marrakech, Morocco. 24th European Crystallographic Meeting. A microsymposium, MS45 - Crystallography in Art and Archeology, will illustrate how crystallographic (including X-rays, electrons and neutrons) techniques (experimental and theory) are playing an ever-increasing role in uncovering secrets of many art and archaeological artifacts in the past, and are essential in their understanding and in their restoration. For more information, visit http://www.ecm24.org/.

► September 7-9, 2007, San Luis Valley, CO/NM. 48th Field Trip - Friends of the Pleistocene-Rocky Mountain section. The FOP 48th Field Trip will be conducted in the San Luis Valley of southern Colorado and northern New Mexico. This section of the FOP has been dormant for 3 years, so we are hoping to restimulate our Friends in the Rocky Mountains. The second announcement is posted at the following website: http://esp.cr.usgs.gov/info/foprocky2007.

► October 5-7, 2007, Durham, NC. Binghamton Symposium 2007: Complexity in Geomorphology. When we look at the Earth’s surface, what do we see? Do landscapes operate with straightforward relationships between forcing and response, or do they suggest nonlinear feedbacks leading to the emergence of large-scale structures? Do complicated arrangements of flow, sediment transport, and vegetation imply complicated causes, or do we look for simple interactions that give rise to self-organized patterns and complex dynamics? For many geomorphologists, the answers to these questions have been shifting; perspectives arising from complex-systems research have opened up new ways of understanding surface processes. Participants will learn about state-of-the-art modeling and data-analysis techniques, and the advances in our understanding of surface processes they are facilitating.

Additional meeting and registration information can be found at the symposium website: http://www.nicholas.duke.edu/geomorphology/index.html. The symposium will host an international cast of speakers and we encourage participation in poster sessions, a pre-meeting field trip to the Atlantic coast, and lively discussions. For additional information, contact Mark Fonstad mfonstad@txstate.edu or Brad Murray abmurray@duke.edu.

► October 12-13, 2007, Chicago, Illinois. Fifth New World Luminescence Dating and Dosimetry Workshop (NWLDDW). The workshop will be held at the Department of Earth and Environmental Sciences at the University of Illinois at Chicago. We anticipate two days of presentations and some time for enjoying the University of Illinois campus and the surrounding city. All presentations will be oral. The registration fee will be $100 for professionals and $50 for students. Lunch will be provided and refreshments. Abstract deadline is September 1, 2007. Please direct your questions to Steve Forman sff@uic.edu.
recent analyses of archaeological materials from eastern North America, and will provide a venue for presenting new research involving archaeometry, computer applications, geoarchaeology, and other methods used to advance our knowledge of past cultures. Please submit a title and short abstract (200-250 words maximum) by August 1, 2007.

Submissions and requests for additional information should be directed to Matthew Boulanger at the Archaeometry Laboratory boulangerm@missouri.edu. Additional information on the 74th Annual ESAF meeting can be found on the website of the Eastern States Archaeological Federation at http://esaf-archeology.org/.

►November 14-17, 2007, San Diego, CA. American Schools of Oriental Research Annual Meeting. The session “Artifacts: The Inside Story” welcomes submissions in which the analysis of Near Eastern artifacts by means of physical or chemical techniques has led to a new or re-interpretation of the archaeological record. Paper topics include provenance, materials characterization, raw material acquisition, workshop activity, manufacturing techniques, and ancient technology. One session is planned for 4-5 speakers. Papers will be limited to 20-25 minutes. Abstracts are limited to 250 words and should be e-mailed to the Section Chair, Dr. Elizabeth Friedman, at friedman@iit.edu. Deadline for abstracts is April 1st, 2007 but the section chair would welcome them sooner. Please check the ASOR website for membership and participation requirements: www.asor.org/.


►May 12-16, 2008, Siena, Italy. 37th International Symposium of Archaeometry. The aim of the Symposium is to promote the development and use of scientific techniques in order to extract archaeological and historical information from the cultural heritage and the paleoenvironment. In general, papers submitted should deal with the development and/or application of scientific techniques for extracting information related to human activities of the past, including the biological nature of man himself and the environment in which he lived. Papers that deal with weathering and deterioration of archaeological objects or monuments will be welcome provided they are relevant to one of the main themes of the Symposium. For additional information, please visit www.unisi.it/eventi/issa2008/. Please note that the deadline for abstract submission is December 1st, 2007.

►June 29-July 4, Dublin, Ireland. Developing International Geoarchaeology (DIG) at the World Archaeological Congress. Developing International Geoarchaeology is the title of two very successful recent international conferences bringing together geoarchaeologists from around the world. The goal of DIG is to bring together a wide variety of international researchers, practitioners and students in what is a diverse and interdisciplinary field in order to facilitate discussion, stimulate research, and promote international scholarship in geoarchaeology.

This proposal is to expand the DIG remit and audience, by running a series of sessions and poster sessions focused on developing geoarchaeological approaches internationally, as a theme at the World Archaeological Congress, aimed at the world archaeological audience. The intent is to present work interesting to an international and interdisciplinary audience, to elicit discussion of geoarchaeological approaches, and to make new connections between archaeologists from different parts of the world. The theme will also be associated with an international archaeological soil micromorphology workshop, to be run independently at UCD in the 2-3 days prior to WAC.

The DIG theme was proposed at the latest DIG conference in Cambridge 2007, where it received widespread approval. This was followed by a web mailing to geoarchaeologists worldwide, calling for session, paper and poster proposals. To date, five sessions have been proposed through the theme organisers; the current state of play is as follows:

- **Session 1**: Subsistence and Sustainability of Ancient Societies in Arid Environments.
- **Session 2**: The Cultural Use of Caves and Rockshelters.
- **Session 3**: The Temporality of Houses.
- **Session 4**: Dating and Geoarchaeology.
- **Session 5**: Agricultural Landscapes.

**For additional information, contact** Dr. Helen Lewis, School of Archaeology, University College Dublin, Belfield, Dublin 4, Ireland; helen.lewis@ucd.ie; +353-1-716-8169.

►December 1-5, 2008 Christchurch, NZ. International ICCE Symposium in Christchurch. The Symposium, “Sediment dynamics in changing environments,” will include field trips to the magnificent New Zealand gravel bed rivers and a scientific programme including the following topics:
- 1. Scaling issues in sedimentary systems from point to continents;
- 2. Dating and source tracing technologies;
- 3. Global change and erosion;
- 4. Linking erosion with environmental and societal impacts.

Feel free to view/download the full Conference flier under: http://www.cig.ensmp.fr/~iabs/conferences/2008Christchurch.pdf.

Abstract deadline is 30 of November.
GSA Archaeological Geology Division Ballot Instructions

This is the ballot for the election of 2007-2009 officers for the **GSA Archaeological Geology Division**. Candidate biographies are on the reverse side of this sheet. Vote for no more than one candidate for each office.

Submit your vote in one of the following ways:

1) Vote on the paper ballot below. Complete the bottom section of the ballot. Mail the completed ballot to: Geological Society of America, PO Box 9140, Boulder, CO 80301, Attn: Division Ballot. Ballots must be received at GSA by August 31, 2007 or

2) Vote on the paper ballot below. Complete the bottom section of the ballot. Fax the completed ballot to GSA, Attn: Division Ballot, at (303) 357-1074. Ballot must be received at GSA by August 31, 2007 or

3) Vote online at <https://rock.geosociety.org/ballot/vote.asp?Name=arch>. Log onto the ballot using your GSA member number (given on your mailing label) or your e-mail address (which will work only if your e-mail address is in your GSA member record). For assistance, please contact GSA at <gsaservice@geosociety.org> or (303) 357-1000 (option 3) or tollfree in the U.S. at (888) 443-4472. Electronic votes must be submitted by August 31, 2007.

**Ballot**

**Chair** (two-year term) - vote for one candidate

( ) Andrea K.L. Freeman  ( ) Write-in ________________________________

**Vice-Chair** (two-year term) - vote for one candidate

( ) Loren G. Davis

( ) Kathleen Nicoll

( ) Write-in ________________________________

**Secretary-Treasurer** (two-year term) - vote for one candidate

( ) Russell Stafford  ( ) Write-in ________________________________

**Your Name** (printed) ______________________________________________________

**Your Signature** (required) ________________________________________________

**Your GSA Member Number*** (required) _______________________________________

* Your seven-digit GSA Member Number is at the top of your mailing label. If you need assistance, GSA contact information is printed near the top of this ballot.
Chair
Andrea K.L. Freeman. Educ: BA Anthro, Southern Methodist Univ; MA Anthro, Univ Arizona; PhD Anthro, Univ Arizona. Prof Exp: Univ Calgary, Depts of Archaeology, Geography and Geology & Geophysics and Earth Sciences Program, Asst Prof (97-present); Adjunct Asst Prof, Archaeology, Univ Saskatchewan. GSA member since 1992. GSA Service: AGD Vice-Chair (05-07), Secty-Treas (00-05), Newsletter Editor (00-04). Addtnl Serv: Society for American Archaeology GIG Co-Chair (01-03), Newsletter Editor, Fryxell Committee (03-08), Chair (07-08); Kellogg Award Committee (04-07). Pub Include: Geoarchaeology, Plains Anthropologist, Geographie Physique et Quaternaire, Kiva. Rsrch Int: Geoarchaeology, Paleoindian archaeology, fluvial geomorphology, hunter-gatherer archaeology; primarily on the northern Plains and American Southwest.

Vice-Chair

Kathleen Nicoll. Educ: BA, Geol & Envtl Studies, Univ Pennsylvania; MA, Geology, Bryn Mawr College; PhD, Geosci, Univ Arizona. Prof Exp: Asst Prof, Dept Geog, Univ Utah (06-present); Univ Oxford, UK, Royal Soc Rsrch Fellow, Oxford Centre for the Envt (02-06), College Lecturer & Head Geography Tutor, Brasenose College (04-06), College Lecturer, St Catherine's College (02-05); Chevron Petroleum Tech Ctr, Stratigrapher (00-02); Chevron Overseas Petroleum Co, Inc, Exploration Consultant, (98-00); bp-Alaska, Sequence Stratigrapher (97-98). GSA member since 1990. GSA Serv: AGD studt awrd Cmte (99-03); Limnogeol Div field trip ldr (05), nwsltr contributor (05-06). Pub include: Geoarchaeology, Quaternary Science Reviews, Sedimentary Geology, Nyame Akuma, Elsevier Encyclopedia of Archaeology. Rsrch Int: Geoarchaeology, chronostratigraphy, soils, geomorphology, recent landscape evolution, aridlands, Africa & Middle East, and the desert SW-USA.

Secretary-Treasurer