

# SAS Newsletter

## Society for Archaeological Sciences

Volume 11

Number 1

January-March 1988

### From the Editor

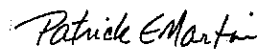
With this issue we welcome two new Associate Editors. David Yesner has agreed to collect and channel information related to environmental archaeology. James Ebert has offered to coordinate news of remote sensing, geographic information systems, and related areas. Both Ebert and Yesner have contributed to this issue, and will be collecting material for upcoming issues. We all hope that this will help to stimulate more offerings in these vital areas of interest.

I have recently received the following message from Annelise Warren of the Journals Marketing Department of Academic Press regarding special subscription rates for *The Journal of Archaeological Sciences*.

JAS is to be sold in 1988 at a Full Rate of \$194.00/£ 98.00 (in the U.K. only). This rate applies to Institutions, Personal Subscribers, and Libraries. However, we do make special offers to **individuals** of certain societies, such as

SAS. Members of SAS are able to subscribe to the Journal at the special membership rate of \$66.00/£38.00 (in the U.K. only); however, they **MUST** pay out of personal funds directly to us. Libraries and institutions are not eligible for the special membership rate.

While SAS folklore has long suggested that such a special rate was available, the collective memory of the Executive Board and the record in the Society's "Archive" failed to shed any light on the issue. The message from Ms. Warren is the result of a series of official inquiries to clear up the matter so that our members could be sure of their appropriate subscription costs.



Patrick E. Martin

### News of Geoarchaeology

- A symposium titled "Soils, Landscape Evolution, and Human Occupation" will be a part of the 53rd annual meeting of the Society for American Archaeology in Phoenix, April 27 to May 1, 1988. This will be the first annual SAA-sponsored Fryzell Symposium on interdisciplinary studies in archaeology. This year's award will be given for significant contributions to the earth sciences and archaeology.

The organizer of this year's symposium is Dr. Vance T. Holliday (Geography, University of Wisconsin). Nine papers will be delivered:

- Soil Morphologic Properties and Weathering Zone Characteristics as Age Indicators in Middle Holocene Alluvium in the Upper Midwest, E. Arthur Bettis.
  - Alluvial Soils and Geoarchaeological Research, C. Reid Ferring.
  - Soils and Landscapes in Southern Sinai During the Late Pleistocene, Bruce G. Gladfelter.
  - Micromorphology, Soils, and Archaeological Sites, Paul S. Goldberg.
  - Soil Formation, Time and Archaeology, Vance T. Holliday.
  - Holocene Landscape Evolution in Central and Western Kansas: Implications for Archaeological Studies, Rolfe Mandel.
  - Soils at Prehistoric Agricultural Terracing Sites in New Mexico and Peru, Jonathan A. Sandor.
  - Implications of Sub-Soil Lamellae for Reconstructing Prehistoric Occupation Surfaces, Joseph Schuldenrein.
  - Organic Matter: A Clue for Interpreting Landscape Evolution, Julie K. Stein.
- Geological Society of America sponsored a Penrose Conference on "Paleoenvironmental Interpretations of Paleosols," September 12-16 at the Warm Springs Indian Reservation in North Central Oregon. The conference was con-

vened by Gregory Retallack and Patricia McDowell (both of the University of Oregon). Nearly 70 individuals attended including students and professionals from nine countries. The group also included six soil/geoarchaeologists.

The purpose of the conference was to encourage discussion between Quaternary soil/geomorphologists, soil scientists and geologists working with ancient (pre-Quaternary) soils. About half of the presentations and discussions were devoted to Quaternary soils and were of interest to archaeology. Topics included soils as indicators of age and climate, variations in soils across the landscape, and soil/stratigraphic terminology.

- Geological Society of America—Phoenix, Arizona—October 26-29, 1987. At the business meeting of the Archaeological Geology Division the division award was given to John C. Kraft. Presentation of the award by John Gifford and acceptance speech will be published in the GSA bulletin in 1988.
- Geological Society of America—Denver, Colorado—October 31-November 3, 1988. Next year the GSA will be celebrating its Centennial year. The Archaeological Geology Division will be joining that celebration by organizing a symposium, an awards presentation, and a field trip.

The symposium for the 1988 GSA is being organized by Fekri Hassan. The topic is now under discussion. For more information contact him at the Department of Anthropology, Washington State University, Pullman, WA 99164.

The award recipients for 1988 (GSA Centennial Celebration Year) will be Claude C. Albritten and Glen L. Evans. These individuals were selected to share this award in 1988 in recognition of their contribution to establishing the Pleistocene/Holocene stratigraphic framework for the central United States. Their award will be presented at the Archaeological Geology Division business meeting in 1988. All are encouraged to attend. A pre-meeting field trip is planned for October 28-30, 1988, "Archaeological Geology in the Colorado Piedmont and High Plains of SE Wyoming and NE Colorado," organized by Vance T. Holliday, George Frison, and Adrienne Anderson. The group will visit the Lindenmeier, Hell Gap, Frazier, Jurgens, and Dent sites. For further information write to Vance T. Holliday, Geography, University of Wisconsin, Madison 53706.

- International Symposium on "Engineering Geology as Related to the Study, Preservation and protection of Ancient Works, Monuments and Historical Sites," Athens, Greece-September 19-23, 1988. At this conference, besides the main subjects covering geotechnical and decay aspects, other themes will cover a broader spectrum in the field of Geoarchaeology. Participants had to have abstracts to symposium chair Professor Paul G. Marinos, by October 1987. Anyone interested in attending this symposium should contact: Greek Committee of Engineering Geology, 1988 Symposium Secretariat, P.O. Box 19140, GR-117 10 Athens, Greece. Proceedings will be published by A.A. Balkema Publishers.

## New Publications

Torres, Victor R. Pacheco, Alfredo Altamirano Enciso, and Emma Guerra Porras (translated by Elsie Sandefur)  
1987 The Osteology of South American Camelids. *Archaeological Research Tools 3*. The Institute of Archaeology, University of California, Los Angeles, 405 Hilgard Avenue, Los Angeles, CA 90024. \$6.50 plus \$2.50 postage and handling.

## Necrology

Archaeological science lost a major figure on June 21, 1987, when Robert C. Eidt perished with his wife in a tragic private plane crash. Bob Eidt completed a B.S. in meteorology at UCLA in 1947. Following a period in South America (where, among other things, he started a weather station at the University of Huamanga) he returned to UCLA to complete a Ph.D. in geography in 1954.

While teaching at the University of Minnesota (1954-56), Cal State Los Angeles, and since 1967 at the University of Wisconsin-Milwaukee, Bob never lost his interest in Latin America. He published two books on research he did there: *Pioneer Settlement in Northeast Argentina*, University of Wisconsin Press 1971 and *Advances in Abandoned Settlement Analysis: Application to Prehistoric Anthrosols in Colombia, South America* Center for Latin America, University of Wisconsin-Milwaukee 1981.

His major contribution to archaeological science was his development of more refined methods of soil phosphate analysis to identify ancient land use. See especially his papers: "A rapid chemical field test for archaeological site surveying" *American Antiquity* 38:206-10, 1973; "Detection and examination of anthrosols by phosphate analysis" *Science* 197:1327-33, 1977"; "Theoretical and practical considerations in the analysis of anthrosols" chapter 7, pp. 155-190, in *Archaeological Geology* edited by G. Rapp, Jr., and J.A. Gifford, Yale, 1985. These methods are now used world wide.

George (Rip) Rapp, Jr.

## Positions Available

### Massachusetts Institute of Technology

The Anthropology/Archaeology Program and the Center for Materials Research in Archaeology & Ethnology invite applications for a joint position in archaeology, at the rank of Assistant Professor, to begin Fall 1988. We seek an archaeologist with a strong research background in materials science of archaeological materials (e.g. metals, ceramics, lithics, biological materials). Primary research must include technology of artifact production. Must have extensive experience in the technical analysis of archaeological materials, be able to supervise Ph.D. level student research in some area of materials analysis, and co-direct the Center's materials research facility. Teaching includes a graduate seminar/lab course in materials analysis of archaeological materials and undergraduate courses in archaeology and laboratory techniques in archaeology. Ph.D. required. Women and minority candidates strongly encouraged. Send only a vita, letter of application, and names of three referees to

Heather Lechtman  
Room 8-138, MIT  
Cambridge, MA 02139

The Center for Materials Research in Archaeology and Ethnology invites applications for a position as Principal Research Scientist. We seek an archaeologist/ceramist/geologist with a strong research background in the materials science of ceramics (pottery, brick, furnace refractories, glass and slags, etc.). Applicant's primary research must include the technology of ceramic artifact production. She/he must have extensive experience in the technical laboratory analysis of ceramics and should be able to direct a materials research facility for study of archaeological ceramics. Teaching includes a year-long graduate seminar/laboratory course in ceramics as ancient materials, a professional Summer Institute course in materials analysis of archaeological ceramics, and supervision of Ph.D. level student research. Ph.D. required. Initial appointment for a period of three years. Women and minority candidates strongly encouraged. Send only a vita, letter of application, and names of three referees to

Heather Lechtman  
Room 8-138, MIT  
Cambridge, MA 02139

Equal Opportunity/Affirmative Action Employer

## Environmental Archaeology

David Yesner, Affiliate Associate Professor at the University of Alaska, Anchorage, has agreed to serve in a new capacity as Associate Editor for environmental archaeology. Beginning with the next issue of the *Newsletter*, if anyone has information on recent research, activities or publications in the area of environmental archaeology, please send that information to him at the following address: Department of Anthropology, University of Alaska, 3211 Providence Drive, Anchorage, AK 99508. This would include any work pertaining to zooarchaeology, paleoethnobotany, or human osteology. Any publications in these areas sent to the associate editor will be sent out for brief reviews to be included in future issues of the *Newsletter*. An attempt will be made to include news of environmental archaeology in most future issues.

## News of Archaeometallurgy

- Professor Ronald F. Tylecote's new book, published in September, is called *The Early History of Metallurgy in Europe*. It is in Longman's Archaeology Series (ISBN 0-582-491959) and costs £ 39.50, about \$60. It contains much new and interesting information including, for example, a source of bog copper which was included among the site visits of the 23rd Annual Conference of the Historical Metallurgy Society. The conference was held in Wales in September. The Dolfrynog Turf copper "mine" is actually a hillside bog, where at least from the nineteenth century peat was cut at the bottom, stacked and dried at the top, then burned in a curious kiln (of about 1 1/2 feet interior diameter) which looked like a boshless furnace. The ash was then sold to the copper smelters at Swansea.
- A catalogue of over 300 knives, a hundred scabbards and fifty pairs of shears and scissors has appeared under the title "Knives and Scabbards" as the first monograph in the series *Medieval Finds from Excavations in London* published by Her Majesty's Stationery Office (1987, ISBN-0-11-290440-8) for £ 10.95. It was written by J. Cowgill, M. de Neergaard and N. Griffiths, and contains chapters on manufacturing techniques and on the use of knives, shears, scissors, and scabbards as well as an appendix on the metallographic examination of medieval knives and shears by Paul Wilthew.
- An illustrated 48-page pamphlet on *Tennessee's Iron Industry Revisited: The Stewart County Store* has been prepared by Stephen V. Ash and can be obtained from the Land Between the Lakes Association, Golden Pond, Kentucky 42231, for \$2 postpaid.
- A group of Historical Metallurgy Society members and others met in Washington DC September 10, 1987 to organize the Society for Ancient and Historical Metallurgy. Formal independence of the HMS was dictated in part by the tax laws governing non-profit organizations. The new society voted to invite the HMS to North America in 1992, the year of the Columbian quincentennial, for a joint meeting focusing on archaeometallurgy in the New World. Suggestions for programming and names of persons who would be interested in membership should be given to Martha Goodway, Chairman pro tem, or to Professor Robert B. Gordon, Vice Chairman pro tem, Department of Geology and Geophysics, Kline Geology Laboratory, P.O. Box 6666, New Haven, CN 06511, (203) 436-1188.

If you have any archaeometallurgical news to contribute, please call Martha Goodway at (202) 287-3733, or write her at CAL MSC, Smithsonian Institution, Washington, DC 20560.

## Remote Sensing

The publications of the American Society of Photogrammetry and Remote Sensing (ASPRS) are known world-wide as primary sources of authoritative information on photogrammetric and remote sensing principles, instruments, data, and analytical methods, as well as their applications in a wide range of scientific and engineering disciplines. The Society's *Manual of Photogrammetry* (1980) and *Manual of Remote Sensing*, the second edition of which was published in 1983 and contains an extensive chapter on "Archaeology, Anthropology, and Cultural Resources" applications, already serve as universal references.

In early October 1987, the ASPRS approved a second edition of the *Manual of Photographic Interpretation*. The first edition, published in 1960, contained a pioneering paper by Ralph Solecki on "Photo Interpretation in Archaeology." Scientific applications of photointerpretation have come a long way since 1960, however (a photo caption in the first edition's introduction states that "Photo interpreters in the future will use photographs like this one . . . taken by the US Navy's VIKING rocket at an altitude of 143 miles.") Chapter 18 in the second edition, which will be published in 1988 or 1989, will cover photointerpretive methods, techniques and applications (illustrated by numerous case studies) in "Archaeology, Cultural Resource Management, and Anthropology."

Chapter editors James I. Ebert (Ebert & Associates, Albuquerque, NM) and Scott L. H. Madry (Space Remote Sensing Center, Institute for Technology Development, Bay St. Louis, MS) will coordinate the contributions of nearly 20 authors from the USA, Canada, Great Britain, West Germany, and Fiji. The volume's editor-in-chief, Dr. Warren Philipson, has made the editorial decision to restrict the primary focus of the 2-volume edition to the collection and analysis of **photographic** data rather than that from nonphotographic scanners and other devices, thus increasing the depth of coverage on this subject. While multispectral scanning and digital analysis are popular areas of discussion in remote sensing today, aerial photographs (and those from space) provide far higher temporal and spatial resolution, are available for almost all portions of the Earth's surface, and are unexcelled in terms of economy of use—all of which contribute to their still being our "best" remote sensor data source.

Information on ASPRS publications and membership are available from ASPRS, 210 Little Falls St., Falls Church, VA 22046.

James I. Ebert  
Ebert & Associates  
3100 Ninth Street, N.W.  
Albuquerque, NM 87107  
(505) 344-9676

## New Laboratory Established

Professor Marvin W. Rowe of the Department of Chemistry, Texas A&M University, reports the establishment of a plasma chemical laboratory for the restoration and preservation of metallic artifacts. This lab will apply a method developed by Professor S. Veprek and others in Switzerland during the past few years, a method generally applied to iron artifacts. In irons the method effectively removes chlorides and in this way greatly slows corrosion, avoiding some of the problems inherent in some chemical treatment methods. By use of low-temperature and low-pressure reducing plasmas, no irreversible changes occur in wrought iron, so that original composition, structural inclusions, and morphologies are generally preserved. Veprek and colleagues

have shown that it is often easier to uncover and restore the original surface of the artifacts using the plasma system than by use of more conventional techniques. The method seems to work most effectively if original soil matrix is left in place on excavated objects.

Rowe would welcome collaboration, and would like to receive some freshly excavated metallic artifacts for treatment with the plasma system. The treatment attempts to restore artifact surfaces to a nearly original condition, and a second treatment should serve to reduce the likelihood of continued corrosion. Rowe can be contacted at the Department of Chemistry, Texas A&M University, College Station, TX 77843-3255.

## Meetings Calendar

- January 10-14.** 171st Meeting of the American Astronomical Society. Austin, TX. David Evans, University of Texas.
- January 10-15.** Electronic Imaging. Los Angeles. Society for Imaging Science and Technology, 7003 Kilworth Lane, Springfield, VA 22151.
- January 13-17.** Society for Historical Archaeology. Reno. Donald L. Hardesty, Department of Anthropology, University of Nevada, Reno, NV 89557-0006 (702) 784-6704.
- January 15-16.** Southwest Symposium. Tempe, Arizona. Paul Minnis, Amerind Foundation, P.O. Box 248, Draagoon, AZ 85609 (602) 586-3666. A scholarly conference to advance a synthetic understanding of the prehistory of the greater Southwest.
- January 20-22.** 35th Annual Conference of the Western Spectroscopy Association. Pacific Grove, California. Heather Lafferty, WSA Conference Secretary, P.O. Box 10460, Eugene, OR (503) 343-1200.
- February 1-3, 1988.** 2nd International Symposium on Preparative and Up-Scale Liquid Chromatography. Baden-Baden, Federal Republic of Germany. Gesellschaft Deutscher Chemiker, Abt. Tagungen, Postfach 90 04 40, D-600 Frankfurt/Main 90, F.R.G.
- February 3-5.** Society for Computer Simulation, Conference, San Diego. SCS, P.O. Box 17900, San Diego, CA 92117.
- February 11-16.** American Association for the Advancement of Science, 154th Annual Meeting. Boston. AAAS Meetings Office, 1333 H St. NW, Washington, DC 20005 (202) 326-6450.
- February 27-28.** Midwestern Conference on Andean and Amazonian Archaeology and Ethnohistory. Ann Arbor, Michigan. Jeffrey R. Parsons, Museum of Anthropology, University of Michigan, University Museums Building, Ann Arbor, MI 48109-1079.
- March 6-10.** Second International Symposium on Geotechnical Applications of Ground-Penetrating Radar. Gainesville, Florida. Gregg Schellengrager, U.S. Department of Agriculture, Soil Conservation Service, 701 SE First Ave., Gainesville, FL 32601 (904) 377-1092.
- March 9-12.** Northeast Section, Geological Society of America. Portland, Maine. Edna Collis, GSA, 3300 Penrose Place, Box 9140, Boulder, CO 80301 (303) 447-2020.
- March 14-15.** South-central Section, Geological Society of America. Lawrence, Kansas. Edna Collis, GSA, 3300 Penrose Place, Box 9140, Boulder, CO 80301 (303) 447-2020.
- March 16-18.** 21st Annual Simulation Symposium. Tampa, Florida. S. Witenhafer, Program Chair, 848 Levitt Parkway, Rockledge, FL 32955 (305) 984-5711.
- March 17-20.** Northeast Anthropological Association. Albany, New York. Dean R. Snow, Department of Anthropology, State University of New York, Albany, NY 12222. Proposals for symposia and abstracts due by 12/31/87.
- March 18-19.** Paleodiet and Paleoclimate: Conference on Stable Isotopic Approaches to the Prehistoric Human Condition. Los Angeles. Michael DeNiro, Department of Earth and Space Sciences, University of California, Los Angeles, CA 90024-1567.
- March 18-21.** American Physical Society, Spring Meeting. Washington, D.C. W.W. Havens, 335 E. 45th St., New York, NY 10017 (212) 661-9404.
- March 23-26.** Southwestern Anthropological Association. Monterey, California. Myreleen Ashman, 600 Hudis St., Rohnert Park, CA 94928. Deadline for papers: 1/15/88.
- March 24-26.** American Association of Physical Anthropologists. Kansas City, Missouri. David W. Frayer, Department of Anthropology, University of Kansas, Lawrence, KS 66045 (913) 864-4103.
- March 24-27.** Central States Anthropological Society. St. Louis. Alice Kehoe, Department of Sociology, Marquette University, Milwaukee, WI 53233. Abstract deadline: 12/15/87.
- March 25-27.** Middle Atlantic Archaeological Conference. Rehoboth Beach, Delaware. Laurie C. Steponaitis, Department of Anthropology, State University of New York, Binghamton, NY 13901. Abstract deadline: 1/15/88.
- March 28-30.** Cordilleran Section, Geological Society of America. Las Vegas. Edna Collis, GSA, 3300 Penrose Place, Box 9140, Boulder, CO 80301 (303) 447-2020.
- April 5-8.** Materials Research Society Spring Meeting. Reno. J.B. Ballance, MRS, 9800 McKnight Road, Suite 327, Pittsburgh, PA 15237 (412) 367-3003. Includes symposium on Materials Issues in Art and Archaeology. Topics to be covered are technical methods of examination and characterization of artifacts and works of art; technical studies of the technologies of ancient and historic manmade materials; deterioration of natural, ancient, and modern glasses. Co-sponsored by the Getty Conservation Institute and the Conservation Analytical Laboratory of the Smithsonian Institution.
- April 6-8.** Southeastern Section, Geological Society of America. Columbia, South Carolina. Edna Collis, GSA, 3300 Penrose Place, Box 9140, Boulder, CO 80301 (303) 447-2020.
- April 7-10.** Association of American Geographers. Phoenix. AAG, 1710 16th Street NW, Washington, DC 20009 (202) 638-6079.
- April 18-21.** American Physical Society, Spring Meeting. Washington, DC. W.W. Havens, 335 E. 45th St., New York, NY 10017 (212) 661-9404.
- April 21-22.** North-Central Section, Geological Society of America. Akron, Ohio. Edna Collis, GSA, 3300 Penrose Place, Box 9140, Boulder, CO 80301 (303) 447-2020.
- April 27-29.** Handling of Environmental and Biological Samples in Chromatography. Basel, Switzerland. R. Frei, Department of Analytical Chemistry, De Boelelaan 1083, Vrije Universiteit, 1081 HV Amsterdam, The Netherlands.
- April 27-30.** Association for Arid Land Studies, Annual Meeting, in conjunction with the 30th Annual Meeting of the Western Social Science Association. Denver. F. Andrew Schoolmaster, AALS Program Chair, Department of Geography/Anthropology, N. Texas State University, Denton, TX 76203.

**April 27-May 1.** Society for American Archaeology. Phoenix. Jerome Miller, SAA, 1511 K Street NW, Suite 716, Washington, DC 20005 (202) 638-6079.

**May 5-6.** 19th Annual Pittsburgh Conference on Modelling and Simulation. Pittsburgh. W. Bogt, Modelling and Simulation Conference, 348 Benedum Engineering Hall, University of Pittsburgh, Pittsburgh, PA 15261. Abstract deadline: 1/31/88.

**May 8-15.** Four-Yearly National Soils Conference; sponsored by Australian Society of Soil Science. Canberra. Australian Convention and Travel Service, GPO box 1929, Canberra, ACT 2601, Australia.

- May 9-13.* Marble in Ancient Greece and Rome: Geology, Sources, Commerce, and Artifacts; NATO Advanced Research Workshop, Tuscany, Italy. Norman Herz, Department of Geology, University of Georgia, Athens 30602 (404) 542-7765 or Marc Waelkens, Department of Archaeology and Art History, Catholic University of Leuven, 3000 Leuven, Belgium (32/16)284890).
- May 16-18.* Rocky Mountain Section, Geological Society of America. Sun Valley, Idaho. Edna Collis, GSA, 3300 Penrose Place, Box 9140, Boulder, CO 80301 (303) 447-2020.
- May 16-20.* American Geophysical Union, Spring Meeting. Baltimore. AGU Meetings, 2000 Florida Ave. NW, Washington, DC 20009 (202) 462-6903.
- May 16-22.* 26th International Symposium on Archaeometry. Toronto. Ursula Franklin, Department of Metallurgy, University of Toronto, Toronto, Ontario M5S 1A7 Canada (416) 978-3012.
- May 22-25.* Geological Association of Canada, Annual Meeting. St. John's, Newfoundland. John Fleming, Newfoundland Department of Mines & Energy, Box 4750, St. John's, A1C 5T7 (709) 576-2768.
- June 5-9.* American Astronomical Society, 172nd Meeting. Kansas City. AAS 2000 Florida Ave. NW, Suite 230, Washington, DC 20009.
- June 5-10.* 36th American Society for Materials Science Conference on Mass Spectrometry and Allied Topics. San Francisco. Judith Watson, ASMA, P.O. Box 1508, East Lansing, MI 48823 (517) 337-2548.
- June 5-10.* 195th American Chemical Society National Meeting and 3rd Chemical Congress of North America. Toronto, Canada. B. Hodson, 1155 16th St. NW, Washington, DC 20036.
- June 6-8.* American Quaternary Association 10th Biennial Conference on Land-Sea Interactions in the North Atlantic Region Between Approximately 14,000 and 6,000 Years Ago. Amherst, Massachusetts. Anqua Local Program Committee, Department of Geology and Geography, University of Massachusetts, Amherst, MA 01003-0026, (413) 545-2286. (See Meeting Announcement in this issue.)
- June 12-16.* American Nuclear Society. San Diego. ANS Headquarters, 555 N. Kensington Ave., La Grange Park, IL 60525 (312) 352-6611.
- June 12-17.* American Society of Limnology and Oceanography; sponsored by U.S. Geological Survey Water Resources Division. Boulder, Colorado. Diane McKnight, U.S. Geological Survey, Box 25046, MS 407, Denver Federal Center, Denver, CO 80225.
- June 20-23.* 10th Symposium on Thermophysical Properties. Gaithersburg, Maryland. J.V. Sengers, Institute for Physical Science and Technology, University of Maryland, College Park, MD 20742 (301) 454-4117.
- June 26-July 1.* Shelf Sedimentation: Events and Rhythms (research conference sponsored by Society of Economic Paleontologists and Mineralogists). Santa Cruz, California. M. Field, U.S. Geological Survey, 345 Middlefield Road, Menlo Park, CA 94025 (415) 354-3088.
- July 10-15.* International Working Meeting on Soil Micromorphology; sponsored by Sub-Commission B of the International Society of Soil Science. San Antonio. Dr. Richard Drees, Department of Soil and Crop Sciences, Texas A&M University, College Station, TX 77843-2474. See SAS Newsletter, 10:3.
- July 24-31.* 12th International Congress of Anthropological and Ethnological Sciences. Zagreb, Yugoslavia.
- July 26-30.* Symposium on Asian Pacific Mammalogy; sponsored by American Society of Mammalogy and the Mammalogical Society of China. Kunming, Yunnan Province, People's Republic of China. Dr. Andrew T. Smith, Department of Zoology, Arizona State University, Tempe, AZ 85287. Primary focus will be the mammalogy of eastern Asia and the Pacific basin; includes a session on systematics and faunistics of recent and fossil mammals.
- August 1-5.* 15th Annual Conference and Exhibition on Computer Graphics and Interactive Techniques. Atlanta. A. Newton, University of Waterloo, Department of Computer Science, Waterloo, Ontario, Canada N2L 3G1 (519) 888-4534.
- August 2-5.* Permafrost, 5th International Conference. Trondheim, Norway. International Conference on Permafrost, Studies Administration, Norwegian Institute of Technology, N-7034, Trondheim-NTH Norway (47-2- 466960).
- August 2-11.* International Astronomical Union, 20th General Assembly. Baltimore. IAU-UAI Secretariat, 61 Avenue de l'Observatoire, F-75014 Paris, France (1-4325-8358).
- August 11-14.* Natural and Man-Made Hazards in Coastal Zones. San Diego and Ensenada, Mexico. International Organizing Committee, The Tsunami Society/Hazards Conference, Suite 6, 2919 Kapiolani Boulevard, Honolulu, HI 96826.
- August 21-23.* 7th York Quaternary Symposium. Lethbridge, Alberta, Canada. Dr. R. W. Barendregt, Quaternary Symposium, Department of Geography, University of Lethbridge, 4401 University Drive, Lethbridge, Alberta T1K 3M4 Canada.
- August 23-31.* Joint Oceanographic Assembly. Acapulco, Mexico. W.S. Wooster, JOA HF-05, University of Washington, Seattle, WA 98195. Special symposia include Global Sea Level Change; Ocean Variability and Biological Change; Tropical Coastal Systems. Abstract deadline: 11/30/87.
- August 21-26.* 9th International Congress on Thermal Analysis; sponsored by International Confederation for Thermal Analysis. Jerusalem. S. Shoval, Everyman's University, P.O. Box 39328, Tel Aviv 61392, Israel.
- August 22-26.* 26th International Geographical Congress. Sydney, Australia. Professor Bruce Thom, Department of Geography, University of Sydney, N.S.W. 2006, Australia.
- August 29-September 2.* 1st Congress of the Australian Rock Art Research Association. Darwin, Australia. Australian Rock Art Research Association, P.O. Box 216, Caulfield South, 3162, Victoria, Australia.
- August 29-September 1.* Third Australian Archaeometry Conference. University of Adelaide; South Australia. J.R. Prescott, Physics Department, University of Adelaide, S.A. 5001.
- September 4-9.* 9th European Congress on Electron Microscopy. York, United Kingdom. Congress Secretariat, The Royal Microscopical Society, 37/38 St. Clements, Oxford, OX4 1AJ, United Kingdom.
- September 5-8.* Computer Applications in Analytical Chemistry. Jena, German Democratic Republic. K. Danzer, c/o Friedrich Schiller University Jena, Department of Chemistry, Steiger 3, Jena, DDR-6900, G.D.R.
- September 5-9.* Fission Track Dating, 6th International Workshop. Besancon, France. J.L. Janier-Dubry, Laboratoire de Microanalyses Nucleaires, JFR des Sciences et Techniques, 16 Route de Gray, 25030 Besancon Cedex, France.
- September 14-17.* Geological Society of Italy. Compania and Lucania, Italy. S.G.I. Secretariat, Dipartimento di Scienze della Terra, Universita di Napoli, largo S. Marcellino 10, 80138 Napoli, Italy (telex: 720634 UNGFVG). Field trips include volcanoes and archaeological geology.

**September 19-23.** International Symposium on Engineering Geology as Related to the Study, Preservation, and Protection of Ancient Works, Monuments, and Historic Sites; organized by the International Association of Engineering Geology. Athens, Greece. Paul G. Marinos, Greek Committee of Engineering Geology, 1988 Symposium Secretariat, P.O. Box 19140, GR-117 10 Athens, Greece; Telex:45 4312 POLX (c/o Marinos).

**September 28-30.** Avian Paleontology and Evolution. Los Angeles. Kenneth E. Campbell, Natural History Museum, 900 Exposition Boulevard, Los Angeles, CA 90007 (213) 744-3414.

**October 31-November 3, 1988.** Geological Society of America. Denver. Edna Collis, GSA, 3300 Penrose Place, Box 9140, Boulder, CO 80301 (303) 447-2020.

**November 6-13, 1988.** 7th Latin American Geology Conference; 35th Brazilian Geological Congress (sponsor: Departamento Nacional de Producao Mineral). Belem,

Brazil. Carlos Oiti Berbert, Organizing Committee, Departamento Nacional de Producao Mineral, SAN Q 01, B1 "B," 70040 Brasilia DF, Brazil.

**November 16-20.** American Anthropological Association. Phoenix. AAA, 1703 New Hampshire Ave. NW, Washington, DC 20009 (202) 232-8800.

**November 29-Dec. 4.** Soil Science Society of America. Atlanta. SSSA, 677 S. Segoe Road, Madison, WI 53711 (608) 273-8080.

**December 5-9, 1988.** American Geophysical Union, Fall Meeting. San Francisco. AGU Meetings, 2000 Florida Ave. NW, Washington, DC 20009 (202) 462-6903.

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## Meeting Announcements

### Australian Archaeometry Conference

The Third Australian Archaeometry Conference will be held at the University of Adelaide, South Australia, from August 29 to September 1, 1988. Professor E.T. Hall of the Research Laboratory for Archaeology and the History of Art at Oxford University will deliver the keynote address. There will be no parallel sessions, and the general topics should include technology, chronology, environment, project reports, and analytical techniques. The call for abstracts will be issued to participants from the Second Conference and to those who request the detailed Second Announcement by writing the

Secretariat  
Third Australian Archaeometry Conference  
Physics Department  
University of Adelaide  
GPO Box 498  
Adelaide, S.A. 5001

### American Quaternary Association Tenth Biennial Meeting University of Massachusetts Amherst, Massachusetts

The 1988 AMQUA meeting is scheduled for Amherst June 6-8, 1988. The theme for this meeting is Land-Sea Interactions in the North Atlantic Region Between Approximately 14,000 and 6,000 Years Ago. The Program Committee will invite speakers on this theme, additional papers will be solicited, and a program will be announced soon. Seven field trips are scheduled, 3 before and 4 after the meeting. For details and registration materials, contact the

AMQUA Local Program Committee  
Department of Geology and Geography  
University of Massachusetts  
Amherst, MA 01003-0026

(413) 545-2286

### Second Annual Northeast Faunal Analysis Conference Princeton University Princeton, NJ 08544

A second Northeastern Faunal Analysis Conference is planned for April 1988, as a sequel to the highly successful conference held at the University of Connecticut in the Spring of 1987. The 1988 conference will take place at Forbes College of Princeton University, tentatively on Saturday, April 9.

The organization of this meeting will follow the lines of the 1987 conference, a one-day symposium devoted to the analysis of animal bones from archaeological sites. The tone of the conference will be informal. Presentations can be made on a variety of topics which relate to the study of animal bones from archaeological sites, including methodological issues, research reports, and interpretive analyses relying on faunal data. Computer facilities (a room with 13 IBM PC's) are available at Forbes College for the demonstration of computer applications, if desired.

A registration form will be sent to those who respond to this announcement. Prompt response is necessary to insure that time will be available for all those who wish to present papers.

Northeastern Faunal Analysis Conference  
c/o Center for Visitor and Conference Services,  
Princeton University,  
Princeton, NJ 08544

Questions can be addressed to:

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## □ Ebert & Associates Develop □ Nonsite Survey Methods

Methodological research being carried out by Ebert & Associates under a Phase I Small Business Innovation Research (SBIR) grant from the National Science Foundation is directed toward archaeometry in its truest sense; measuring the locational and formal attributes of the archaeological record.

Ebert & Associates is an Albuquerque firm specializing in the application of remote sensing and photogrammetric methods to archaeology, ethnology, international development, environmental studies, and the forensic sciences. It is certainly unusual, perhaps unique in being one of the only American private-sector firms offering not only remote sensing applications, but also committed to the conduct of basic research.

In January 1987, Ebert & Associates was awarded a Phase I SBIR grant for the "Development of an Instrument-Assisted Method for Distributional Survey." The SBIR program, with a wide range of participating government agencies, consists of a three-phase grant process to encourage small businesses to develop innovative processes and products for commercial or practical applications and markets. Phase I grants are given for feasibility studies; in Phase II, prototypes are developed and proven. The final SBIR phase consists of market research and development.

Distributional archaeological survey is a method which builds on "non-site" or "off-site" surface survey approaches, using artifacts and features as units of discovery, field mapping, and analysis. All discoverable archaeological items are located using intensive (5m) and highly controlled survey "transects," mapped using electronic distance measurement (EDM) equipment, and characterized in detail in the field. Since "sites" are not involved at any stage of such an approach, these materials are discovered and recorded continuously over relatively large contiguous areas. This methodology has been successfully applied by Ebert & Associates personnel in Wyoming and New Mexico. Research under the Phase I SBIR grant focused on the addition of EDM data logging and the use of truly portable, in-field computers with time- and storage-efficient software for artifact and feature coding.

The results of this research indicate that it soon will be possible to economically code individual-item archaeological data in the field to facilitate distributional survey methods. The major conceptual resistance to this sort of data collection has been that it costs too much. The findings of this research suggest that systemizing, standardizing, and streamlining these methods can result in their practical application. Rather than a sampling approach, or partial collection of data, these methods result in a complete record of all items recovered, including highly precise locational data, on the order of a few mm over several square km. This record can be used to represent all archaeological items recovered, and can be "reduced" to sites or clusters in analytical phases of research. In addition, it can be used for analyses which are **not** dependent upon proximity as a criterion for association, a consideration not previously utilized in survey archaeology, and one that may well open new vistas for archaeological analysis.

Communications are welcomed from other researchers using computer-aided field data recovery, as well as those interested in the analysis of point data from archaeological contexts. Although the system under development is designed in terms of total archaeological survey, it is equally applicable to excavation or laboratory analysis. Other scientists have shown interest, as well, including biologists interested in recording plant and animal distributions in continuous space, and forensic scientists who must quickly map and characterize the distributions of materials resulting from air crashes and other disasters.

James Ebert, Ebert & Associates  
3100 Ninth Street, NW, Albuquerque, NM 87107



## Journal of Field Archaeology

Editor: Creighton Gabel  
Published by  
**Boston University**  
for the  
**Association for  
Field Archaeology**

The *Journal of Field Archaeology* is the major international scholarly quarterly of field archaeology. It publishes accounts of fieldwork and analysis from archaeological projects in both the Old and New Worlds.

Regular features include

- The Antiquities Market
- Archaeometric Clearinghouse
- Editorial Commentary
- Perspectives (letters from readers)

And, returning in 1986, a revival of the section originally entitled **Preservation and Rescue**.

Reports by leading professionals on

- excavations in all parts of the world
- the most recent scientific advances affecting archaeology
- archaeological methodology and techniques
- archaeological reconnaissance
- approaches to the study of artifacts and specimens

Subscriptions are by calendar year and for individuals include membership in the Association for Field Archaeology. Annual subscription/membership: \$40.00; institutions (subscription only) \$50; foreign subscribers please add \$4 for postage.

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## SAS Newsletter

Society for Archaeological Sciences

Published quarterly by the Society for Archaeological Sciences. Distributed to members of the Society with membership, \$10.00/year, \$5.00/for students, \$15.00/year for institutions, \$150.00 for life membership. ISSN 0739-0637.

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### Deadlines for Submissions

No. 1 November 15      No. 3 May 15  
No. 2 February 15      No. 4 August 15

1987-88

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