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CALL FOR NOMINATIONS

The Society for American Archaeology (SAA) will hold its 1992 annual elections for the following offices:

President-elect (1 year) who succeeds to the office of President for a 2-year term (1992-1994)

Secretary-elect (1 year) who succeeds to the office of Secretary for a 2-year term (1992-1994)

Executive Board Place 3, 3-year term (1992-1995)

Executive Board Place 4, 3-year term (1992-1995)

Nominations of candidates for these positions are to be presented to the SAA Executive Board at their November 1991, semi-annual meeting. In order to avoid initiating a call for nominations during the summer field season, we are now asking for recommendations from the membership. This is a particularly crucial election, since these officers and board members will be responsible for leading the Society through the planned transition from a contracted executive service to a full-time executive office.

The Chairperson of the Nominating Committee for the 1992 elections is Don Fowler, Department of Anthropology, U of Nevada, Reno, NV 89557. The other members are Alison S. Brooks, Department of Anthropology, George Washington U, Washington, DC 20052; Ruthann Knudson, Archaeological Assistance Division (436), National Park Service, USDI, P.O. Box 37127, Washington, DC 20013-7127; Ann Ramenofsky, Department of Anthropology, U of New Mexico, Albuquerque, NM 87131; Barbara L. Stark, Department of Anthropology, Arizona State U, Tempe, AZ 85287-2402. The Executive Board Nominating Committee Liaison is Katharina J. Schreiber, Department of Anthropology, U of California, Santa Barbara, CA 93106.

SAA members are urged to suggest names of candidates for the offices listed above to any member of the Nominating Committee by October 1, 1991.

EARLIER DEADLINE FOR SYMPOSIA/PAPER PROPOSALS

Please note that the deadline for symposia and paper proposals for the 1992 SAA meetings is September 23, 1991, approximately one week earlier than normal. For more information, contact Gary Feinman, Department of Anthropology, 5240 Soc Sci, University of Wisconsin, Madison, WI 53706.

The editors would like to thank Lynne Goldstein for creating the organizational chart of the Society for American Archaeology that appeared on page 6 of the March issue of the **Bulletin**, and which appears on page 8 of this issue.

Surveying the Field

The fifty-sixth Annual Meeting of the Society for American Archaeology is over, and by most accounts it was a great success. Apart from some serious problems with the hotel concerning guest reservations (which we could not have foreseen and which we deeply regret), the program was smoothly scheduled (thanks to Program Chair Timothy Kohler) and heavily attended. A total of 2157 individuals registered, the largest number ever at an SAA meeting.

New Orleans is a popular location for the SAA; the city was popular in 1986 and again in 1991, and no doubt will be chosen as a meeting site at some time in the future. It is important for us to select cities that attract large numbers of participants, because the Annual Meeting is one of the most important activities the Society undertakes for its members.

All of this may lead you, the membership, to wonder how and why meeting locations are selected. The following, discussion is an attempt to outline some of the issues that are considered by SAA Executive Director, Jerome A. Miller, in making recommendations to the Executive Board. I am sure that you will be happy to learn that the bottom line concern is price... but price itself is a consequence of a number of factors. And ultimately tradeoffs have to be made.

Location: We try to move the meeting to a variety of geographical locations within the U.S. "Southern coastal cities"-e.g., New Orleans -- are proven favorites. But questions of distance and travel costs to members from all over the country dictate that we also try to select cities in northern, eastern, western, and mid-western locales. We would like to have meetings in Canada, but archaeologists working for Federal agencies cannot obtain funds for travel to foreign countries. We try to select cities that are large enough to have easy airline travel, ample hotel facilities, and attractions for archaeologists and their families, such as museums, nearby sites, tours, etc.

Timing: Meeting sites in some areas -- especially southern cities -- often involve consideration of "in-season" and "out-of-season" demand. The traditional timing of our meetings in April is often on the "cusp" of in-versus out-of-season rates. We could probably get cheaper rates in May, but this is a difficult time with respect to academic and field work schedules. We also have to try to avoid conflicts with Easter and Passover holidays, as well as with the scheduled meetings of other organizations. The dates and hotel accommodations must be negotiated and booked two years or more in advance.

Price: Amid these concerns of geography and timing, our priority is cost. We try to find a city and a hotel that can provide guest rooms for less than \$100 per night. Given inflation, this is becoming more and more difficult. Normally a large proportion of the people attending the meeting choose to stay not at the host hotel, but rather at other hotels offering lower guest room rates. We are particularly concerned that students be able to afford to attend the meetings, and we try to ensure that alternative lodging and meals can be obtained at reasonable rates within walking distance of the host hotel.

Facilities: This is a complex issue that is closely intertwined with price. The annual meetings have fairly substantial requirements as to symposium rooms. We need a variety of accommodations from small groups of 15-20 or so, up to large gatherings of 200-300 (plenary session, business meeting, posters, book displays, etc.). More importantly, to accommodate the large number of symposia, the hotel has to have enough mid-size conference rooms for us to hold 10 to 12 simultaneous sessions per day.

Hotels usually give convening organizations a certain number of meeting rooms at reduced rates on the basis of projected numbers of guest rooms rented. Among scholarly and professional societies, the SAA has unusual room requirements in that we have a large number of symposium sessions in proportion to the number of registered attendees. A moment's reflection will indicate why this should be so: Many archaeologists cannot afford to attend meetings unless their travel is reimbursed, and for many reimbursal can be made only if they are on the program. From the hotel's point of view, the ratio of meeting rooms required to paying guests means that SAA is not very cost efficient.

I describe these considerations in such detail so that members can understand the difficulties faced by the Executive Director and Executive Board in selecting meeting sites. As noted above, we always have to make trade-offs among the key variables of location, timing, and price. Although we could schedule the meetings in a small northern city in early March and get cheap room rates, we would probably also get very low attendance, thus doing a tremendous disservice to the membership.

We cannot possibly please all of the members all of the time in our selection of meeting sites, but we do try to explore a wide range of possibilities before selecting a city and a hotel for each year's meeting. In evaluating possibilities for the 1993 and 1994 meetings, for example, Jerry Miller contacted 16 hotels in 13 cities. For those of you looking to the future, we will be meeting in Pittsburgh in 1992 (April 8-12) and, pending final contractual arrangement, it looks like we will convene in St. Louis in 1993 (April 21-25) and in Anaheim in 1994 (April 20-24).

Prudence M. Rice, President

1991 DISTINGUISHED SERVICE AWARD TO DOUGLAS W. SCHWARTZ

T. Douglas Price

Chair, SAA Distinguished Service Committee

The 1991 Distinguished Service Award was presented to Douglas W. Schwartz at the Society's Annual Meeting in New Orleans, April, 1991. The award recognized Dr. Schwartz's efforts toward the enhancement of the Society and the School for American Research. Dr. Schwartz has served notably as President of the Society for American Archaeology, as Chair of the Department of Interior's Park Service Advisory Board, and as Vice President of the Archaeological Conservancy. Under Dr. Schwartz's leadership, the School for American Research has grown enormously, and become a major force in archaeology and anthropology. The School's Advanced Seminar Program, Resident Scholars Program, Book Award, and publication series have had a significant impact on the scholarly and intellectual development of our discipline. These programs offer recognition and opportunities for scholars in archaeology, and related fields, to participate in the discussion and distribution of archaeological knowledge. Dr. Schwartz's service to research, the profession, and the public at large has truly been most distinguished.



AWARDS 1991

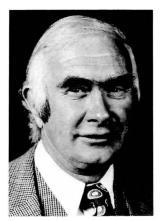
THE DONALD CRABTREE AWARD FOR DISTINGUISHED SERVICE

Dan F. Morse Chair. SAA Crabtree Award

The Donald Crabtree Award is given for distinguished service by an avocational archaeologist. This year the Society has selected James F. Pendergast of Merrickville, Ontario, Canada.

Jim Pendergast joined the Canadian army in 1940, directly from high school, as an infantry private. He retired 35 years later as Lieutenant Colonel after service in Britain, Europe, Canada, Lebanon, and even Washington, D.C., which his colonial Canadian ancestors once burned down.

During those 35 years as a soldier, he was hospitalized four times, three of those for skiing. His skiing companion, Bill Taylor, suggests this echoes more guts than control.



As an archaeologist, Colonel Pendergast has served learned societies, institutions, students, colleagues, and heritage organizations. His many awards include the Ontario Volunteer Service Award and the Queen's Jubilee Medal. Perhaps most indicative of his achievements, Colonel Pendergast was presented for his McGill University doctorate, honoris cause, by Dr. Bruce Trigger.

In his forty years of archaeological and ethnohistorical research, Dr. Pendergast has published 27 papers, eight monographs, and a major coauthored work on Cartier's Hochelage. A pre-eminent contribution has been his effort to return the vanished St. Lawrence Iroquois to the literature.

And this enthusiastic autodidact continues. He has just published a major paper, has two in press and five in preparation. James Pendergast, unfailingly supported by his wife Margaret, has by the diversity, abundance, and excellence of his work, fully met all our best criteria of scholarship. He is, to borrow a graceful old phrase, the pure amateur—and so we proudly claim and acclaim him.

1991 FRYXELL AWARD TO PAUL PARMALEE

W. E. Klippel University of Tennessee

For nearly four decades Paul Parmalee's name has been synonymous with the study of faunal remains from archaeological and paleontological sites throughout North America. As a pioneer in the field, he has set standards for excellence in basic taxonomic identification, and has provided detailed analyses of faunal remains from a myriad of archaeological and paleontological contexts.

Paul entered the United States Army in 1944, and served with the U.S. Army Combat Engineers in the Philippines and Japan. After his honorable discharge, he received a B.S. Ed. degree in Zoology from Ohio University at Athens (1948), a M.S. degree in Ecology from the University of Illinois at Urbana (1949), and a Ph.D. degree in Wildlife Management from Texas A & M University at College Station (1952). He subsequently taught zoology at Stephen F. Austin State University in Nacogdoches, Texas, before taking a job at the Illinois State Museum in Springfield.

Trained as a zoologist, Dr. Parmalee's career in zooarchaeology didn't begin until the mid-1950's when, as Curator of Zoology for the Illinois State Museum, he became interested in the archaeologically recovered fauna from Modoc Rock Shelter in the central Mississippi River Valley. It was at this



point that Paul became aware of the need to develop relatively specialized comparative collections if credible identifications were to result. His resolve, that any interpretation of faunal remains must begin with accurate identification and that accurate identification must proceed with the aid of a comprehensive, comparative collections, has, if anything, strengthened over the years.

During his twenty-year tenure at the Illinois State Museum, Dr. Parmalee has published on the fauna from over 50 archaeological sites in the Midwest and the Southeast. Included among his publications are the results of the pioneering work he conducted with the late John Guilday of the Carnegie Museum of Natural History, "Aboriginal Butchery Techniques at the Eschelman Site (36 La 12), Lancaster County, Pennsylvania," which appeared in the *Pennsylvania Archaeologist* (1962), and the exemplary report "The Food Economy of Archaic and Woodland Peoples at the Tick Creek Cave Site, Missouri," published in the *Missouri Archaeologist* (1965).

In 1973 Dr. Parmalee accepted a faculty position in the Department of Anthropology at the University of Tennessee-Knoxville where he taught classes is zooarchaeology on a regular basis until 1980, when he became Director of the University's Frank H. McClung Museum. In 1989 he formally retired from the University of Tennessee and he is presently more active in research than ever now that the administrative and teaching obligations are not competing for his time. During the 18 years that Paul has been at Tennessee, he has authored or co-authored over 60 scientific publications. His "retired" status promises to increase his productivity in zooarchaeology.



1991 DISSERTATION AWARDED TO DAVID G. ANDERSON

Janet Levy Chair, SAA Dissertation Prize Committee

The Society for American Archaeology has awarded the 1991 Dissertation Prize to David G. Anderson for his dissertation, *Political Change in Chiefdom Societies: Cycling in the Late Prehistoric Southeastern United States.* Dr. Anderson completed his dissertation in 1990 at the University of Michigan under the direction of Professor Richard Ford. The dissertation integrates a massive amount of data about the late prehistoric and protohistoric cultures of the Savannah River area. Dr. Anderson convincingly argues that fluctuations in complexity and centralization are inherent aspects of chiefdom organization, and supports this argument with detailed archaeological, paleoclimatic, and ethnohistoric data. The Dissertation Prize Committee also recommended honorable mention for Bruce Masse for his dissertation, *The Archaeology and Ecology of Fishing in the Belau Islands*, *Micronesia (SIU* Carbondale), 1990.

Archaeology of the Frobisher Voyages: 1990

William W. Fitzhugh Arctic Studies Center, Smithsonian Institution

William Fitzhugh shifted his base of operations from Labrador to Baffin Island this past summer and began a 4-5 year historical archaeology project researching European-Inuit contact at the time of the

Martin Frobisher voyages (1576-78). The 1990 Frobisher Bay work marked the first season of an interdisciplinary study of Frobisher's base camps and "gold" mines, and of Inuit sites associated with this early contact episode. The work is being conducted as a joint Smithsonian-Canadian National Museum of Civilization enterprise, with cooperation from a wide range of American, British, and Canadian anthropologists, historians, and scientists.

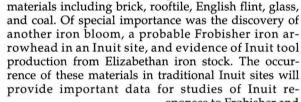


Canadian and American archaeologists surveying one of Martin Frobisher's coal dumps and mines in Frobisher Bay, NWT, Canada.

The Frobisher project grew out of an earlier tenyear study of an iron "bloom" (smelter mass) given to the Smithsonian by Charles Francis Hall, an arctic explorer who discovered the Frobisher sites on Kodlunarn ("white man's") Island in 1862. Radiocarbon dates on carbon in the iron bloom produced 12-13th century dates, suggesting that Norsemen, not

Englishmen, might have occupied the site. A Smithsonian expediorganized by tion Fitzhugh, Jacquelin Olin, and Wilcomb Washburn in 1981 verified the Frobisher period attribution of the site and recovered three more iron blooms, which produced early radiocarbon dates like those from the previous studies.

Solving the metallurgical problems and the mystery of the early iron dates has become a peripheral, though interesting, aspect of the



proposed research program. The 1981 Smithsonian

expedition established that the Frobisher sites contain important archaeological evidence bearing on

the history of the voyages, early English iron-work-

ing and assaying processes, mining, and Inuit contact

history. While the Frobisher voyages are well-docu-

mented historically, details of settlement and mining

cally.

activities, and the extent

and nature of contacts

with local Inuit can only

be studied archaeologi-

search, conducted with

the aid of the research vessel *Pitsiulak*, a 51-

foot liner with accom-

produced highly valu-

able results. The team

of archaeologists, ar-

cheometrists,

geologists, and his-

torians discovered over

50 Inuit sites, several of

which contained large

amounts of Frobisher-

period artifacts and

modations for

scientific

The 1990 field re-

a

crew,



Eric Loving inspecting the remains of Martin Frobisher's house on Kodlunam Island, Frobisher Bay, NWT, Canada.

sponses to Frobisher and later European contact within the changing climatic regimes of the Little Ice Age. Surveys also added to the inventory of Frobisher sites and mines, which will become the focus of historical archaeological excavation under the direction of Reginald Auger of Laval University, Quebec, in 1991. Other members of the research team are Susan Rowley (Alberta), Robert Ehrenreich (National Research Council), Garman Harbottle (Brookhaven Laboratory), and Donald Hogarth (Ottawa).

Council for Maryland Archaeology Objects to OUTDOORS IN MARYLAND Article and MEASURE SEARCH Television Show

William A. Lovis Chair, SAA Government Affairs Committee

The public presentation of materials which encourage illegal activities, or foster the destruction of cultural resources, is a situation which all professional archaeologists need to closely monitor. The following situation, while it occurred in Maryland, has the potential to take place at any state or local level. SAA members should be aware that these situations can arise with short notice, and that we are under an ethical obligation to respond appropriately and quickly.

A recent article published in *Outdoors in Maryland* magazine, titled "Searching for Maryland's Past" (Autumn 1990 issue), contained information which the Council for Maryland Archaeology felt was professionally objectionable. This circumstance was especially unfortunate given that the publication is an official organ of the Maryland Department of Natural Resources. Specifically, the article discusses the pleasurable aspects of collecting artifacts from Maryland's historical and archaeological sites. The article made no mention of the illegality of undertaking such activities on Federal- and Stateowned or managed properties, the financial irresponsibilities of selling such artifacts from private properties.

Update on Implementation of the Native American Graves Protection and Repatriation Act

In New Orleans, the SAA Repatriation Task Force met with Frank McManamon of the National Park Service to get an update on the Department of Interior's efforts to implement the Native American Graves Protection and Repatriation Act (NAGPRA). This law requires all federally funded institutions to inventory collections of Native American skeletal remains, funerary objects, and sacred objects within three to five years depending on the nature of their collections. The bill provides for grants to museums and Native American groups to help them in the inventory and repatriation process. A review committee composed of three Native Americans, three representatives of museum and scientific organizations and one person appointed by the Secretary of Interior will monitor the inventory and repatriation process.

As a partial remedy to this unfortunate situation the CMA has requested that *Outdoors in Maryland* publish a follow-up piece discussing the protection of Maryland's cultural resources for the benefit of the public at large. While this after-the-fact remediation might partially ameliorate the damage done by the initial article, it is likely that at least some members of the larger public will still initiate collecting activities.

The content of the Outdoors in Maryland article was mirrored in a five-part video series aired on Maryland Public Televisions. Titled Treasure Search, the series presented the case for collecting valuable bottles, coins, Civil War artifacts, and prehistoric stone tools from historic and prehistoric sites. While the CMA also objected to this series, it is likely that the shows will be aired, or considered for airing, on other public television stations nationwide. It is essential that professional archaeologists make a concerted effort to familiarize themselves with the content of this series, and make their views known to their local stations. If possible, informed previewing might be a viable means of instilling sensitivity among local broadcasters. Alternative programming, such as the recently released Assault on Time program produced by the Federal Law Enforcement Training Center, might also provide a counterpoint to programs which foster the looting of historic and archaeological sites.

The Maryland cases serve as a warning that even government agencies responsible for resource protection can create an environment antithetical to the goals of archaeology. The professional archaeological community needs to be on the watch for negative materials and programs, particularly those produced at various levels of government, which compromise the integrity of our cultural resources.

A lack of funding has slowed the implementation of NAGPRA. Although no grant money is currently available for museums and Native American organizations, funding has been proposed for the next federal budget. The 120-day deadline for establishment of the review committee has already been missed, in part owing to a lack of staff support. This situation is changing, however. Guidelines for the review committee are being developed and two new staff positions have been created for people who will work on the development of NAGPRA regulations.

Nominations for review committee members are being solicited from Native American, museum, and scientific organizations. The committee selection process probably will be completed by the end of September. The Department of Interior hopes to finish a rough draft of the proposed regulations during the fall so that public meetings can be held. Publication of the proposed regulations in the Federal Register is scheduled for January 1992.

THE STRUCTURE OF THE SAA

Lynne Goldstein

University of Wisconsin, Milwaukee

With the introduction of new By-laws in 1989, the structure of the Society began to change. The associated chart outlines the basic structure of the Society. Here I identify the current members of the Society's Executive Board, the editors of the Society's publications, the Society's Washington representative, and those responsible for the Society's next annual meeting. In the September issue of the *Bulletin* I will discuss the various Society committees and their membership.

EXECUTIVE BOARD

Executive Director: The current Executive Director is Jerome A. Miller.

President: Prudence Rice is President until the Annual Business meeting in 1993.

President-Elect: There will be no President-Elect for the coming year.

Secretary: The current Secretary is Shereen Lerner, and she will complete her term of office at the Annual Business Meeting in 1993.

Secretary-Elect: There will be no Secretary-Elect for the coming year.

Treasurer: Mark Leone is the current Treasurer, and he will remain in office until the Annual Business meeting in 1992.

Treasurer-Elect: Vincas Steponaitis is the new Treasurer-Elect; he will serve one year as "elect," then will take over as Treasurer.

Executive Board positions: There are six members of the Executive Board, and each is elected for a three-year term. Current Board members include James A. Brown, Margaret Conkey, Brian Fagan, Bill Marquardt, Jerald Milanich, and Katharina Schreiber. Two new members are elected each year.

EDITORS

American Antiquity: J. Jefferson Reid is the current Editor of American Antiquity, and he will remain in office until 1993. Reid is the last elected Editor; the next Editor (to be selected in 1992) will be determined by a new process. Interested candidates will complete proposals, and the Nominations Committee will select the best candidate. The process was described in the last issue of the *Bulletin*. If interested, check your *Bulletin*, or call or write the SAA office for details.

Latin American Antiquity: The Editor of Latin American Antiquity is Prudence Rice. When this position becomes open, a proposal process will be used to select the next editor.

Bulletin: The Bulletin Editors are Stephen Plog and Don Rice. They were selected on the basis of a proposal they submitted to the Executive Board. When this position is open again, a similar process will be used.

WASHINGTON REPRESENTATIVE

For several years, our Washington Representative has been CEHP, Incorporated. Loretta Neumann is President of the firm, and Kathleen Reinburg is her associate. The Washington Representative reports to the Board, and works directly with the President and President-Elect, and the Government Affairs Committee.

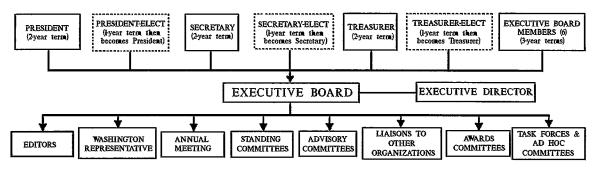
ANNUAL MEETING

The physical coordination for the Annual Meeting is done by Jerry Miller and associates at the SAA office, but the Executive Board appoints an individual to develop the Program and someone to develop and coordinate special local arrangements and events, above and beyond the hotel meeting site.

Program Chair: The Program Chair for 1992 is Gary Feinman. Developing the program is a difficult job, and it is essential that the Program Chair be computer literate. Each Program Chair appoints his or her own program committee to review abstracts and symposium proposals.

Local Arrangements Chair: The Local Arrangements Co-Chairs for the 1992 (Pittsburgh) annual meeting are William Dancey and Marc Bermann.

THE ORGANIZATION OF THE SOCIETY FOR AMERICAN ARCHAEOLOGY



Requesting a Data Set From SARG

Sylvia Gaines Arizona State University

The Southwestern Anthropological Research Group (SARG) has begun a new era in data sharing. Our goal is to disseminate our computerized survey data, free of charge, to interested scholars involved in research in the American Southwest. The following report outlines briefly SARG's accomplishments, and highlights the guidelines and procedures for obtaining the computerized data.

SARG was founded 18 years ago as a cooperative organization composed of a number of Southwestern archaeologists who devoted a portion of their individual research to problems of broad cultural significance. The focus of much of the research has pertained to the impact of stress (population/resource imbalances) on site locations. To date, SARG participants have contributed survey data from 10 field projects located in Arizona, New Mexico, and Utah. This extensive database, totaling almost 4000 sites, is maintained in the Department of Anthropology at Arizona State University.

The last analytical effort of SARG highlighted the relative diversity of the environments on the Colorado Plateaus, the variable demographic trends that characterized different parts of the region prehistorically, and the lack of correlation between population and climatic change.

At the 1990 Society for American Archaeology meeting in Las Vegas, SARG members met to explore further research which would utilize the database. We felt that we should concentrate our initial efforts on developing procedures for disseminating the existing data sets. We also hope to attract additional Southwest scholars to SARG as database users and contributors. The basic steps for acquiring the data sets follow. More detail will be sent upon request. All inquiries should be made to: Sylvia W. Gaines, Professor Emeritus, Dept of Anthropology, Arizona State University, Tempe, AZ 85287; (602) 965-6213.

The 10 available data sets are listed below with the area name and number of cases (sites):

 Black Mesa (AZ) 	745
 Cedar Mesa (UT) 	124
 Chevelon (AZ) 	612
Chaco (NM)	636
 Elk Ridge (UT) 	368
 Grand Canyon (AZ) 	766
 Long House Valley (AZ) 	551
 El Morro (NM) 	185
 Pinedale (AZ) 	152

Tijeras (NM)

There are 74 variables potentially recorded for each site. These include locational, demographic, organizational, and environmental data.

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Who is eligible to receive the SARG data? All professional archaeologists engaged in Southwest research and graduate students working on theses or dissertations may request these data sets. Requests will be reviewed by a SARG advisory committee.

How many data sets can be requested? The number depends upon the nature of the research. If a legitimate pan-regional problem is involved, multiple data sets may be requested. However, the spatial focus of most research would require only one or a few of the data sets. Data sets will be released only upon approval of the SARG advisory committee.

Requestor's responsibilities:

1. Send a letter of inquiry to ASU. You will be sent a form on which to request specific data sets and to briefly describe the proposed research. Requestors will provide the appropriate number of non-formatted, 5 1/4 inch diskettes and mailing envelopes.

2. All who request data sets are strongly urged to contribute their own survey data to the SARG organization on a diskette in the standard SARG format. We recognize that only a portion of the SARG variables may have been recorded, but even a subset of the data will enhance the overall SARG database. It is in this spirit of cooperative, voluntary data sharing that new avenues of research will continue to develop.

SARG's responsibilities:

Upon arrival of the request, you will be provided with the following:

1. Diskettes will be formatted in 3.3 DOS, and the requested data sets copied onto these in standard ASCII card image format.

2. A "definitions file" will also be copied onto the diskette which will contain the data format, variable and value label statements in standard ASCII format which can be read by most programs such as SAS, SPSS, etc.

In conclusion, with the dissemination of the SARG data as outlined above, it is our hope to attract new data sets and new scholars, and ultimately new research directions. More importantly, we hope this further step in resource sharing by SARG members will expand and enhance our original SARG model of voluntary, cooperative research.

Technical Graphing Programs: Surfer/Grapher

Alex Barker, University of Michigan Michael Adler, Southern Methodist University

Making contour maps may be an important task, but few would argue that it lies at the heart of the "romance of archaeology." After one or two it can become sheer drudgery. *Surfer* can make the job a lot less tedious. But it would be a waste of *Surfer's* talents to use it only for mapping and surveying. Its contour maps and 3-D surfaces are powerful tools for analyzing artifact distributions or other three-dimensional data, and it includes utilities for creating cross-

sections and calculating surface areas and volumes. It even includes a simple 2-D graphing program (*Grafit*) which produces the pie and bar charts not offered by its bigger brother, *Grapher*.

Surfer consists of a series of modules, permitting use on floppy-based computers, integrated by the Surfer access module, making movement between modules simple for hard-disk users. Surfer accepts data from external ASCII or Lotus files or from its internal data editor. The editor looks like a spreadsheet, and even uses the familiar "/" command prefix, but it lacks the cell manipulation capabilities of a true spreadsheet. Up to 14,000 irregularly spaced x,y,zdata points can be entered and a regular grid computed using one of several user-specified interpolation techniques, including kriging and minimum curvature. The output grid can contain up to 64,000 points (limited by memory). Users may also specify search techniques for locating points used in kriging or weighted inverse distance gridding. Surfer supports a variety of smoothing routines, including cubic splining, useful for filling in a sparse grid, and matrix smoothing, used to suppress noise in a series of gridded points.

Contour maps are generated using the *Topo* module, and can be modified using an onscreen gridediting routine, letting users fix errors interactively. By grid-editing after smoothing the grid, walls of test units or similar features can be kept vertical in an otherwise averaged landscape. *Surfer* offers a wide array of options controlling the labelling and spacing of contour lines and the placement of titles, legends, tic-marks and axis labels, as well as the application of color zones and symbols. It includes a large set of standard fonts and symbols, and an editor for creating your own.

Surface or 3-D wire mesh plots (see the cover of the *Bulletin*) are prepared from the same grid files used to generate contour maps, and can be displayed at any horizontal or vertical viewing angle. You can also specify orthographic or perspective projection, which makes it possible to change the apparent sur-

face-to-eye distance for the plot. Routines are also provided for changing the mesh spacing and orientation, x, y, and z scales, and display of hidden lines. Boundary files can be put in to create surface or contour maps within a specified border, such as the outline of a state or county, or the limits of excavation at a site, and blanking files can be used to drape

objects (like roads) over surfaces. *Surfer* can also plot user-defined mathematical functions.

Surfer supports a wide variety of printers and plotters, and no problems were encountered using nonstandard printers emulating a supported model. It runs under CGA, EGA, VGA, Olivetti and Hercules graphics cards, and while a numeric coprocessor is not required, it is heartily

recommended. Even on a fast 386, complex plots can drag out for several minutes. Plot files can also be exported in several file formats, including ASCII, AutoCAD.DXF and HPGL.

Surfer has some serious limitations, however. The Surfer manual is thorough and well-written, but focuses more on the capabilities of the system than on the perils and pitfalls of the routines it offers. The data editor provides limited mathematical transformations, and it is not possible to use cell values as variables. As a result, it is not possible to use azimuth-distance-elevation values (like transit readings) to generate x,y,z grids. These data must be transformed by some other method before importing them to Surfer. The matrix smoothing algorithm distorts surfaces near the edges of maps. While this can be rectified by editing individual grid points, most users will probably not bother. It does not support triangulation, as does its competitor *Gridzo*, which has extensive geologic capabilities, nor does it have any provision for accepting data from a digitizer, as does CPS/PC. It lacks the bells and whistles of Spase, which runs under Windows, but then again it also lacks Spase's (and CPS/PC's) \$2000 price tag. Golden Software's telephone support is a strong point in Surfer's favor. Some of its competitors limit free support to 30 minutes, then begin charging \$60/hour for assistance. And while some competitors, like Axum or Graftool, offer a wider array of graphing and charting features, Surfer isn't limited to powerful computers with hard disks and other expensive hardware. By far the easiest package to use and a bargain to boot, Surfer easily holds its own against the 3-D mapping competition.

Surfer won't add any romance to contour and surface mapping, but then it might give you time for some.

Grapher is Golden Software's contribution to 2-D graphics. Grapher presents a powerful package for the manipulation of x, y and triaxial data. In this sense it is a very flexible package. Data are imported in the same formats as *Surfer*, and the spreadsheet



capacity matches that in *Grapher*. One major drawback is that *Grapher's* spreadsheet editor does not allow any data transformations.

Altering orientation, size, layout, labels, and other components of x,y plots is managed effortlessly in a hierarchical, menu-driven environment. Plot previewing can be done in a single keystroke. The View module allows panning and zooming graphs, indicating text location, and viewing several graphs simultaneously. Grapher can overlay up to ten different data sets on the same graph, and six curve-fitting options are available (linear, cubic spline, exponential, logarithmic, power, and polyno-Menu selections come with single line mial). explanations. Even for the more complicated options, the documentation is clear and comprehensive, and Grapher also comes with a helpful tutorial text.

However, if you need to do more than scatter plots, *x*,*y* graphs and line plots, *Grapher* is not your package. Assuming you have purchased both *Grapher* and *Surfer*, you can return to *Surfer's Grafit* module to do pie, bar, and histogram charts, but *Grafit* does not have the broad flexibility for graph manipulation offered in *Grapher*. Packages such as *Graftool*, *Axum*, and *Grafit* outshine *Grapher* in these respects, but at more than double *Grapher's* price.

Databases and Spreadsheets: Borland's Latest Programs

Phillip R. Scarr University of Virginia

Borland International recently has updated its most popular programs, *Quattro Pro 3.0* and *Paradox 3.5*. *Quattro Pro* is Borland's fast and versatile spreadsheet program, intended to compete with *Lotus 1-2-3*, *3.1* and *MicroSoft Excel 3.1*. By all accounts it outperforms both of these products easily. *Paradox* is currently the best selling database program in the country, outselling even Ashton-Tate's popular *dBASE IV* (with good reason).

The pricing of the products is as follows:

	Paradox	Quattro Pro
Retail	\$795.00	\$495.95
Educational	\$ 69.95	\$ 69.95

Borland also offers an extremely generous site licensing agreement to universities. Simply put, for one fee a university can install copies of all of Borland's products (compilers, spreadsheets, database managers, graphing programs, etc.) on all eligible machines. Contact Borland's education department for further details about this program.

Installation

Installation is simple and painless for both products, the only problematic question is how many

fonts you want *Quattro Pro* to build at the time of installation. If you run *Quattro Pro* on a slow 8088 machine and you don't want to wait around for hours to build fonts, indicate that you want either the basic set or none at all and *Quattro Pro* will construct the fonts it needs "on the fly" as you design and print charts and graphs.

Both products come complete with one set of 360K disks and one set of 720K disks as well as a standard keyboard template and an enhanced keyboard template. There are also handy quick-reference guides. Be sure to back-up your disks before installing either program.

Documentation and Support

Quattro Pro comes with an introductory manual called *Getting Started* which introduces the user to spreadsheets in general and *Quattro Pro* in particular. There is a *User's Guide* and a *@Functions and Macros* manual as well. All are concise, accurate and well written. The indexing is a little haphazard at times, but in general it is easy to find the information you need if you persist. The context sensitive help screens are also easy to understand and are often quite help-ful.

Paradox's biggest drawback is it's documentation. The manuals are in full 8 1/2 x 11 size and are difficult to work with. The pages are cluttered and the secondary color is a horrible shade of aqua. All the manuals are turgidly written and often not helpful. The complete set includes 6 manuals. 'In addition to an introductory manual and a User's Guide, there is a PAL. User's Guide, a Personal Programmer Guide, a guide to Presenting Data and a Network Administrator's Guide (Paradox comes ready to run on almost ANY network). The Paradox help screens are more helpful than the manuals.

Borland's customer support is useful, but there is no toll-free 800 number. Support can also be found on BIX and *CompuServe* or by writing Borland's Technical Services Department.

Features

Both programs have hundreds of features, far too many to detail here, but here are a couple of especially nice ones.

Quattro Pro has two video modes, text and WYSIWYG (What-You-See-Is-What-You-Get). Text mode supports all current video adapters (from the old IBM text adapters through SuperVGA). This is the mode most users will use because it is somewhat speedier on slower 8088 and 286 machines. The other mode is a true WYSIWYG mode and will run on VGA and EGA adapters only. It allows you to incorporate graphs into the spreadsheet and see them on the screen. You can also zoom in and out of your spreadsheet to see as little or as much as you want.

If you are a user of *Windows 3.0*, you can run *Quattro Pro* in a window and it even comes complete with its own Icon file. It is especially nice to see *Quattro Pro* running in WYSIWYG mode in a protected window on a 80386 machine; it feels like a true Windows application.

The *Paradox* interface is simple and clean with a menu bar across the top of the screen. All the colors can be customized with a script program which you run from inside *Paradox*.

File format translation in *Quattro Pro* is transparent, which can be very important for users switching from some other spreadsheet to *Quattro Pro*. *Quattro Pro* can read and write files from *Lotus* 1-2-3 (v1A, 2.01, and 2.2), *Symphony*, *Multiplan*, *VisiCalc* and *Surpass* as well as *Reflex*, *dBASE II*, *III* and *IV*, and of course, earlier versions of *Quattro* and *Quattro Pro*. What it cannot read are *Excel* files and *Lotus* 3.0 or 3.1 files. No other spreadsheet program offers this level of built in versatility. *Paradox* offers a similar level of versatility through the import/export feature and can read and write several spreadsheet and database formats.

Hardware requirements for both programs are as basic as ever, 512K minimum, 640K recommended, *Quattro Pro* will run on an 8088 machine (*Lotus* and *Excel* will not) and it offers full LIM 4.0 support. One of the unique features of *Quattro Pro* is VROOMM (that's Virtual Runtime Object-Oriented Memory Manager), a technology which has been developed by Borland to allow *Quattro Pro* to assess the platform it is running on and maximize performance accordingly. This is why the program runs well on an 8088 and runs exceptionally on a 80386 (you can load the same full-capacity spreadsheet on any machine without a significant loss of performance). The program is "selftuning" and adjusts itself to its environment.

Analysis

If you only use your spreadsheet to balance your budget or use your database manager for simple data entry, then *Quattro Pro* and *Paradox* are a definite overkill. They are big and bulky and contain many unnecessary features for those users. You can accomplish the same tasks with much smaller and simpler programs like *PC-File* or *AsEasyAs*. However, if you use *Windows* or you need to create sophisticated graphic output from your data, then *Quattro Pro* is right for you. Or if you use a database to keep sophisticated artifact or museum inventories, or need to do complex querying of your data, then there is no better database program then *Paradox*.

Keep in mind, however, that both *Paradox* and *Quattro Pro* are disk hogs. *Paradox*, when fully loaded (including the Applications Generator and the Utilities) eats up 5 megabytes of disk space and *Quattro Pro* another 5.4. That's more than 10 megs of space for two applications. No matter how good they are, that may be too much for some people (not to mention some computer systems) to handle.



The Advisory **Council on Historic** Preservation an-Round nounces **Two--President's His**toric Preservation Awards, honoring excellence in privately funded preservation, and The National Historic Preservation Awards, honoring excellence in Federally-

assisted preservation. Award nominations are open May 1-July 31, 1991. Preservation disciplines recognized for this competition include architecture, architectural history, archaeology, maritime preservation, and materials conservation. The awards program is administered by the Advisory Council on Historic Preservation under the auspices of the White House. Contact: Elizabeth Moss, Old Post Office Building, 1100 Pennsylvania Ave., NW #809, Washington, DC 20004; (202) 786-0503.

The Society for American Archaeology (SAA) announces the competition for the 1992 Doctoral Dissertation Prize. The prize is lifetime SAA membership and is awarded to an individual whose doctoral dissertation is judged outstanding and important. Nominees must have defended their dissertations and received their Ph.D. degrees within three years prior to September 13, 1991. It is not necessary that a nominee already be a member of the SAA. Members (other than student members) of the SAA are encouraged to nominate students whose dissertations they consider to represent outstanding scholarship and original contributions. Letters of nomination must be received by September 13, 1991. Contact: Janet E. Levy, SAA Dissertation Prize Committee, Dept of Anthropology, UNC-Charlotte, Charlotte, NC 28223.

The National Endowment for the Humanities Reference Materials Program supports projects that organize essential resources for scholarship and improve access to information and collections. Awards are made in two categories: Tools and Access. Dictionaries, historical or linguistic atlases. encyclopedias, concordances, catalogues raisonnes, grammars, descriptive catalogues, and data bases are eligible in the Tools category. Archival arrangement and description projects, bibliographies, bibliographical data bases, records surveys, cataloguing projects for prints, graphic, film, sound, and artifact collections, indexes, and guides to documentation are eligible in the Access category. The deadline for both categories is September 1, 1991 for projects beginning after July 1, 1992. Contact: Reference Materials, Room 318, NEH, Washington, DC 20506.

It is now fifteen years since the tragically early death of **David Clarke**. He left an indelible mark on the field of archaeology and many were inspired by his writing or by his personal enthusiasm. As yet no permanent memorial to David Clarke has been established. His students still working at Cambridge have decided to establish a fund in his name, it's purpose being to pay the costs incurred in holding, biennially, a memorial lecture on new developments in archaeological theory and method. A general appeal to raise the necessary funds is being made. Contributions, payable to the University of Cambridge, can be sent directly to David Clarke Memorial Funds, Downing Street, Cambridge CB2 3DZ. Tax deductible contributions can be made through the American Friends of Cambridge U, c/o Mr. S. Price, P.O. Box 374, Leesburg, VA 22075.

The University of Guam announces the formation of a journal about the Micronesian regions of the Pacific Ocean. To be published semi-annually, ISLA: A Journal of Micronesian Studies will be a refereed publication and multidisciplinary in character. The editors hope that articles published in ISLA will expand our understanding of Micronesia from the period of its earliest human occupation to today, and that the existence of a forum for Micronesian studies will encourage research in this part of the Pacific. Micronesian archaeology definitely falls within the aim and scope of ISLA's purpose, and we are currently soliciting contributions in that category as well as in several others. For further information, author guidelines, and subscription entry, write to: Dr. Robert A. Underwood, Editor, ISLA Editorial Office, University of Guam, UOG Station, Mangilao, GUAM 96923.

The American Association for the Advancement of Science invites nominations for the 1990 AAAS/Westinghouse Award for Public Understanding of Science and Technology. This annual Award (\$2,500 stipend) recognizes scientists and engineers who make outstanding contributions to the popularization of science and are not members of the media. It will be presented at the AAAS Annual Meeting in Chicago, Illinois, February 6-11, 1992. Archaeologist William L. Rathje, University of Arizona, received the 1990 Award for his innovative contributions to public understanding of science and its societal impacts. Types of contributions to be considered include: publishing, broadcasting, lecturing, museum presentation and exhibit design, and other public outreach activities. The deadline for nominations is August 1, 1991. Contact: Patricia S. Curlin, AAAS, Committee on Public Understanding of Science and Technology, 1333 H Street, NW, Washington, DC 20005; (202) 326-6680.

November 1, 1991, is the deadline for applications to the National Heritage Preservation Program, a national initiative from the National Endowment for the Humanities' Office of Preservation, which will award funds for the preservation of anthropological and other collections of material culture. Applicant institutions may request grants of up to \$700,000. Draft proposals will be read by the staff of the Office of Preservation, if received at least 6 weeks before the deadline. To receive further information and program guidelines, contact: National Heritage Preservation Program, Office of Preservation, National Endowment for the Humanities, 1100 Pennsylvania Avenue, NW, Room 802, Washington, DC, 20506; (202) 786-0570.

Pulbished by Cambridge University Press, the Cambridge Archaeological Journal is an exciting new twice-yearly periodical devoted to archaeological research. With the foundation of the McDonald Institute in 1990, Cambridge is firmly established as one of the world's leading centers for archaeology. The Cambridge Archaeological Journal will focus particularly on the role and development of human intellectual abilities as reflected, for example, in the art, religion and symbolism of early societies. The journal will also provide a forum for the publication of other significant archaeological research, both descriptive and theoretical. For information, contact: Dr. Chris Scarre, McDonald Institute for Archaeological Research, University of Cambridge, 62 Sidney Street, Cambridge CB2 3JW, ENGLAND.

The Advisory Council on Historic Preservation has issued a new publication, Balancing Historic Preservation Needs with the Operation of Highly Technical or Scientific Facilities. This publication recommends ways in which the continual need of scientific and technical institutions to upgrade or modify their facilities or equipment should address the historic nature of many such institutions. The Council, which administers the Section 106 review of the effects of federal and federally supported undertakings on historic properties, encourages the consideration of preservation values early in an agency's planning process, and the issues raised throughout the text illustrate this. For more information, contact: Elizabeth Moss, Advisory Council on Historic Preservation, Old Post Office Building, 1100 Pennsylvania Avenue, NW, #809, Washington, DC 20004; (202) 786-0503.

THE WENNER-GREN FOUNDATION:

CORRECTIONS TO THE SAA COMMITTEE ON STUDENT AFFAIRS COLUMN, JAN. 1991

During the past year, several important changes have been introduced to the Wenner-Gren Foundation's application and grant-making policies that will be of particular interest to all who may wish to apply for funding. In particular please note: the addition of a second application deadline to the funding year (May 1 and November 1) and the increase in the limit for the Regular and Predoctoral Grant awards from \$10,000 to \$12,000. Also, please note that the current address for the foundation is: Wenner-Gren Foundation for Anthropological Research, 220 Fifth Avenue, New York, NY 10001-7780.

Positions Open

UNIVERSITY OF MAINE solicits applications for a Research Associate in prehistoric archaeology. Duties include planning and supervision of field and laboratory work and report preparation. Prior experience in staff management and report writing is essential. Some computer skills needed. Prior experience in Northeastern archaeology required. Minimum education is an M.A. in Anthropology. This is a permanent position with an initial ten month appointment beginning August, 1991. Send application, vitae and names of three references to David Sanger, Department of Anthropology, University of Maine, Orono, Maine 04473. The University of Maine is an AA/EOE.

INFOTEC RESEARCH, INC. is hiring for a permanent, full-time position with competitive salary/benefits. M.A. or Ph.D., five years experience, strong knowledge of research methods, CRM, and writing skills required. Submit c.v., names of references, and examples of written work under cover letter summarizing qualifications to: INFOTEC Research, Inc., ATTN: Dr. Michael J. Moratto, 423 W. Fallbrook, Suite 204, Fresno, CA 93711.

CHAMBERS GROUP, INC., an Orange County, CA-based firm, is seeking a SOPA certified (or SOPA certifiable) Historic Archaeologist who wishes to work in an environment where quality work is expected. This is a permanent position with benefits. The candidate should have an advanced degree with several years experience in the field. Salary is competitive. Please send resume to: CHAMBERS GROUP, INC., 1761 East Garry Avenue, Suite A, Santa Ana, CA 92705.

UNIVERSITY OF OKLAHOMA, AR-CHAEOLOGICAL SURVEY seeks an individual to fill permanent 1. OFTE Archaeologist III position. Qualifications: Ph.D. in anthropology; 4 years archaeological experience; proven supervisory, organization, and grant getting abilities; record of peer-review publications; and ability to communicate effectively with public. Responsibilities: develop and long-term interdisciplinary conduct research, resource management, and public education program for Oklahoma's Southern Plains; serve as principal investigator for research proposals; participate in Survey's teaching rotation for Department of Anthropology; and work positively with student and avocational archaeologists. Employment to start September 1, 1991; salary range from \$22,200 to \$36,500 depending on qualifications and experience. The University of Oklahoma is an Equal Opportunity and Affirmative Action employer. Qualified individuals send letter of application, vita, and three letters of recommendation to Search Committee, Oklahoma Archaeological Survey, 1808 Newton Drive-Room 116, Norman, OK 73019.

THE LASSEN NATIONAL FOREST is currently accepting applications from individuals interested in temporary jobs as archaeologists. We are looking for people with a range of skills, and have openings at various locations in the Forest. Government housing will be provided for most, if not all, of these jobs. Starting dates will range from early March through the summer field season. For information concerning the nature of the work to be performed and further details, contact: Renee Cranston, P.O. Box 220, Fall River Mills, CA 96028; (916) 336-5521.

UNIVERSITY OF HAWAII, MANOA, Department of Anthropology invites applications for a tenure track Assistant or Associate Professor (Pos. No. 84206), full-time, general funds, in archaeology, pending approval. Successful applicant will start in Spring 1992 or Fall 1992. The department seeks to hire an individual who will maintain and then develop our internationally recognized research program in Asian prehistory. Subregional specialties may include Southeast Asia, East Asia or South Asia. Minimum qualifications: For Assistant Professor a Ph.D. is required at the time of hiring as is research experience in Asia. Research skill in archaeometry or paleoenvironmental analysis or archaeological method and theory is required. For Associate Professor, applicants must have a record of accomplishments, including nationally recognized scholarship, teaching experience and successful grant requests. Duties: Maintain and then develop our internationally recognized research program in Asia prehistory, undergraduate and graduate teaching of anthropology and Asian archaeology courses, supervision of undergraduate and graduate student research, and conducting research in Asian archaeology, as well as contributing community service. Salary range: Assistant Professor \$36,408 to \$44,280; Associate Professor \$42,576 to \$51,816. The University of Hawaii is an equal opportunity and affirmative action institution and encourages applications from women and minorities. Applicants should send a letter stating their teaching and research interests, vitae, and the names of three referees to: University of Hawaii, Honolulu, HI 96822. Closing date: September 15, 1991

WAPORA INC. has immediate opening(s) for principal investigator, up to two positions. Position(s) require Masters degree in anthropology or related fields, one to two years documentable supervisory experience in prehistoric and historic archaeology, and field experience in the Midwest, Southeast, and/or Eastern Seaboard. Qualified applicants must satisfy Section 106 requirements for PI. Experience in budget development, proposal preparation, and technical report writing is a must. Successful applicant(s) must be able to handle deadlines, and supervise day-

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to-day operations of the archaeological program. Travel required. Experience in lithic analysis is highly desirable. Send a vita to: WAPORA, Inc., 2110 Anderson Ferry Road, Cincinnati, OH 45238; (513) 451-0800.

THE STATE OF VERMONT, Division for Historic Preservation, is seeking a highly motivated, self-initiating, experienced M.A. or Ph.D. level archaeologist to participate in a joint State/Soil Conservation Service "Sites on the Farm" project. Work involves archaeological site identification on individual farms, analysis of Soil Conservation Service project impacts, and development of more precise predictive models for site locations. Project dates are approximately May 20-Sept 15, 1991 (an earlier start date is possible). Experience in Northeastern prehistory is desirable; experience with identifying prehistoric sites in agricultural lands and evaluating land and soil disturbances is essential! Send resume and two letters of recommendation to Giovanna Peebles, State Archaeologist, Division for Historic Preservation, 58 East State Street, Montpelier, VT 05602; (802)828-3226, as soon as possible.

THE STATE OF VERMONT is now seeking funding and authorization for several other experienced M.A. or Ph.D. level archaeology positions in the state. One potential position is for an Agency of Transportation Archaeologist (full-time, classified state employee). A second position would plan and implement a jointly sponsored State/U.S. Department of Agriculture demonstration project to develop "best practice" approaches for ensuring that federally funded farm construction projects do not impact archaeological resources. In anticipation that these positions will be funded by May or June 1991, please send a letter of interest and resume as soon as possible, to Giovanna Peebles, State Archaeologist, Division for Historic Preservation, 58 East State Street, Montpelier, VT 05602;(802) 828-3226.

DAMES & MOORE, Cultural Resource Group, Western Region, invites applications for two permanent positions: (1) Project Archaeologist, Great Basin, and (2) Project Archaeologist, Pacific Islands. Both positions require previous areal experience, graduate degree, and previous CRM experience. Duties will include project management, fieldwork supervision, research design and report writing, proposal preparation, and business development. Positions available in California, Nevada, Hawaii, and Guam. Dames & Moore offers excellent professional opportunities in an international, multidisciplinary consulting environment. Please submit letter of interest, CV, and reference to James H. Cleland, Manager, Cultural Resource Services, Dames & Moore, 9665 Chesapeake Drive, Suite 360, San Diego, CA 92123. Dames & Moore is an Equal Opportunity Employer.

Calendar, continued from back page

Symposia include: geoarchaeology, new techniques in archaeology, Oneota, Hopewell, Plains/Woodland interaction and many others. Symposia proposals should be submitted no later than July 1, 1991 and abstracts are due by Sept 1, 1991. Contact: Jim Gallagher, Mississippi Valley Archaeological Center, U of Wisconsin-La Crosse, 1725 State St, La Crosse, WI 54601; (608) 785-8463.

Nov 1-2 FORT DEFIANCE CONFERENCE. Theme: "Contest for the Old Northwest: The United States, Canada, and the Ohio Country Indian Wars, 1790-1795." The symposium will commemorate America's struggle with Great Britain and the Northwest Indian tribes for control of the Northwest Territory during the post-Confederation era. Contact Larry L. Nelson, Fort Meigs State Memorial, Ohio Historical Society, P.O. Box 3, Perrysburg, OH 43551.

Nov 7-10 24TH ANNUAL CHACMOOL CON-FERENCE, Calgary, Alberta. Theme: Culture and Environment, A Fragile Co-existence. The conference will explore past and present human relationships with the environment from a range of perspectives. The time depth of archaeological research provides a unique opportunity to examine both the positive and negative aspects of human-environment interaction. Contact: 1991 Conference Programme Committee, Dept of Archaeology, U of Calgary, Calgary, Alberta, CANADA, T2N 1N4; (403) 220-5227.

Nov 7-10 AMERICAN SOCIETY FOR ETH-NOHISTORY 1991 ANNUAL MEETING, Doubletree Hotel, Tulsa, OK. Papers, organized sessions, special events and speakers that treat any world area are encouraged. Abstracts of 100-200 words, affiliation and registration fees are due by June 3, 1991. Contact: Dr. Garrick A. Bailey, Dept of Anthropology, U of Tulsa, Tulsa, OK 74104.

Nov 13-16 49TH PLAINS ANTHROPOLOGICAL CONFERENCE, Holiday Inn, Lawrence, KA. Deadline for abstracts-Sept 14, 1991. Contact: William B. Lees, Kansas State Historical Society, 120 West 10th, Topeka, KA 66612; (913) 296-2625.

Nov 20-24 90TH ANNUAL AMERICAN ANTHROPOLOGICAL ASSOCIATION CON-FERENCE, Chicago Marriott Hotel, Chicago, IL.

1992

April 8-12 57th ANNUAL MEETING OF THE SOCIETY FOR AMERICAN ARCHAEOLOGY, Pittsburgh, PA. Deadline for submission of symposia proposals and paper abstracts is September 23, 1991. Contact: Gary Feinman, Department of Anthropology, 5240 Soc Sci, U of Wisconsin, Madison, WI 53706. Society for American Archaeology 808 17th St NW, Suite 200 Washington, DC 20006

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June 17-22 MAYA CERAMIC WORKSHOP, in San Ignacio, Cayo, Belize, will focus on comparative ceramic chronological sequences in the Maya area, and will seek to achieve a better understanding of the temporal issues that are problematic in the area. Contact: Dr. Anabel Ford, MesoAmerican Research Center, Social Process Research Institute, U of California, Santa Barbara, CA 93106.

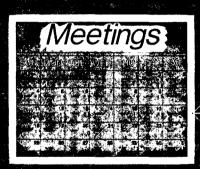
June 19-22 HISTORY OF AGRICULTURE AND THE EN-VIRONMENT, an interdisciplinary symposium, Washington, DC. - Sponsored by agencies of the US Dept of Agriculture and other organizations. Contact: Douglas Helms, National Historian, Soil Conservation Service, PO Box 2890, Washington, DC 20013; (202) 447-3766.

July 15-18 5TH SIMPOSISO DE ARQUEOLOGIA GUATEMALTECA, Guatemala City, Guatemala. Deadline for abstracts: April 15, 1991. Contact: Dora de Gonzalez, Museo Nacional de Arqueologia y Ethnologia, Edificio 5, La Aurora, Zone 13, Guatemala City, Guatemala, CENTRAL AMERICA.

July 21-28 14TH INTERNATION-AL CONGRESS FOR CARIBBEAN ARCHAEOLOGY, Barbados, West Indies. The Congress will include coverage of historic and prehistoric archaeology. The biennial ICCA draws archaeologists and other interested persons from the West Indies, Latin America, North America, and Europe. Papers may be presented in French, Spanish or English. Contact: Ms. Philippa Newton, 14th ICCA Barbados, Barbados Museum, St. Ann's Garrison, St. Michael, Barbados, WEST INDIES; (809) 427-0201.

July 31-Aug 2 NATIONAL CON-FERENCE OF STATE HISTORIC PRESERVATION OFFICERS, SESHPO Regional Meeting, Nashville TN. Contact: NCSHPO, Suite 332, Hall of the States, 444 North Capitol St, NW, Washington, DC 20001.

Aug 26-28 5TH CONFERENCE OF THE EDISON ELECTRIC INSTITUTE TASK • FORCE • IN • CULTURAL RESOURCE MANAGEMENT is open to representatives of EEI member utility companies, their cultural resource con-



sultants, and any other CRM professionals who are interested in attending. Papers are invited and abstracts of 150 words or less are due no later than June 1, 1991. Contact: Dr. David R.M. White, Sr. Anthropologist, Environmental Affairs Division, Southern California Edison Co., Room 405, PO Box 800, 2244 Walnut Grove Ave, Rosemead, CA 91770; (818) 302-9539.

Sept 1-7 INTERNATIONAL UNION OF PREHISTORIC AND PROTOHISTORIC SCIENCES, 12th Congress, Bratislava, Czechoslovakia. Presentation of the results of world archaeology and its allied disciplines. Contact: - Slovenska Akademia Vied Archeologicky Ustav, Sekretariat XII Kongresu UISPP, 949 21 NITRA-Hrad, CZECHOSLOVAKIA.

Sept 21-22 GREAT LAKES AR-CHAEOLOGY AND PALEOECOL- OGY SYMPOSIUM, U of Waterloo, Waterloo, Ontario. Participants in the symposium, sponsored by the Quaternary Sciences Institute, will entertain a broad cross-section of topics dealing with Holocene humans and their environments. The main objective is to explore common ground in order to stimulate an on-going interdisciplinary dialogue. Contact: Quaternary Sciences Institute, Dept of Earth Sciences, U of Waterloo, Waterloo, Ontario, CANADA, N2L 3G1; (519) 885-1211.

Sept 26-29 SIXTH NORTH AMERICAN FUR TRADE CON-FERENCE, at the Grand Hotel on Mackinac Island, MI, hosted by Mackinac State Historic Parks. Contact Dr. Donald P. Heldman, P.O. Box 515, Mackinaw City, MI 49701.

Oct 14-Jan 15 COLUMBIAN ICONOGRAPHY: IMAGINING THE NEW WORLD, New York Historical Society, 170 Central Park West, New York, NY. • The exhibition of over 150 paintings, watercolors, original prints, manuscripts and maps will commemorate the 500th anniversary of Christopher Columbus's first voyage of discovery to the New World in 1492.

Oct 16-20 45TH NATIONAL PRESERVATION CONFERENCE, San Francisco, CA. Theme: "Historic Preservation: The Next 25 Years", to commemorate the 25th anniversary of the National Historic Preservation Act of 1966. For more information, contact: National Trust for Historic Preservation, 1785 > Massachusetts > Ave, > NW, Washington, DC 2003

Oct 18-20 36TH ANNUAL MID-WEST ARCHAEOLOGICAL CON-FERENCE, hosted by the Mississippi Valley Archaeological Center at the U of Wisconsin in La Crosse in the La Crosse Raddison Hotel and Convention Center. Continued 1 on 1 p. 200 15