



NEWSLETTER

Volume 5, Number 4

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Editor's Comments

We are wrapping up the final *Newsletter* of 1994 in good style. We congratulate our new OAC President Mark Seeman for his achievement and welcome his upbeat message for the New Year to the President's Column. Also, I want to thank Al Tonetti for his continuing work coordinating and editing the *Newsletter*. We also may take considerable pride in the success of the Chillicothe Conference and thank everyone who participated.

The OHPO Column reports that summaries of the public meetings on the State Historic Preservation Plan are available from the State Historic Preservation Office. In addition, the NAGPRA Grant Program has funds for 1994 and the first progress report on implementing NAGPRA is available from the National Park Service. The National Park Service published two more in their Technical Briefs series as well. A new publication concerning the positive results of deliberate burial to protect threatened archaeological resources is obtainable from the New York Historic Preservation Office.

Timothy Nowak, District Archaeologist for the Bureau of Land Management, Rawlins, Wyoming, writes about corridors and trails as elements of transportation systems in developing a classification of archaeological "property types" based on feature functions, structural attributes, and feature locations. Timothy goes on to develop a methodology for a functional evaluation of these property types. Later he shows how to evaluate the integrity and significance of a particular historic archaeological corridor or trail for eligibility to the National Register of Historic Places. He includes many examples to illustrate his ideas and uses them to focus our attention at every level of his presentation. Overall, it is a well done and an interesting piece.

Al Tonetti has included his own magazine review, up close and personal, on *Zinj*. *Zinj* is a popular, fun, and informative magazine for the child with an interest in "really old stuff." Also, archaeological training opportunities for educators are available at the Crow Canyon Archaeological Center in Colorado. The Center will provide occasions to explore field techniques and discover new methods for teaching archaeology and prehistory. The *Newsletter* concludes with our usual array of position openings, calls for papers, and calendar of events for your perusal and diversion. Have a safe and happy New Year!

Len Piotrowski

President's Column

As the new President of the OAC, it is great to begin office with something positive to say about our organization. In brief, the fall conference, "A View From the Core," held in Chillicothe went very well. Bob Genheimer and the entire Education Committee did a superb job. More than 235 registered participants heard two very good sessions on Ohio Hopewell research. The overall quality of the papers was great, and a variety of approaches were represented. I especially enjoyed the discussion sessions inserted by organizer Paul Pacheco, which seemed to center on the issues of Hopewell settlement pattern and earthworks organization, and which featured participation by such senior researchers as James Griffin and Olaf Prufer. It was good also to have active participation in the conference by many Ohio amateur archaeologists. I even thought the banquet food was pretty good!

It is interesting that certain issues at the Hopewell conference--vacant versus densely-occupied ceremonial centers, gathering versus farming, ceremonial versus defensive hilltop enclosures, and localized evolution versus long-distance encounters--continue to occupy our attention after nearly 150 years of debate. In each of these cases, it seems that new methods and changing interpretations have moved us 180 degrees, and back again. A closer look, however, shows that these archaeological "mood swings" are never exactly identical; there can be no question that we are providing a better described, and more culturally sophisticated prehistory than ever before. At the same time, I always will remember a comment by Jim Brown regarding Ohio Hopewell (made, as I recall, in a rapidly descending elevator), that if we were looking for relationships that "made sense" then we were studying the wrong people. I think what he meant by this was that in Ohio Hopewell we have certain social ambiguities that are difficult

IN THIS ISSUE

Editor's Comments	1
President's Column	1
OHPO	2
"Techniques of Identifying and Evaluating Corridors and Trails"	3
<i>Zinj</i>	6
Training Opportunities	6
Call for Papers	7
Position Announcements	7
Internet News Brief	8

to penetrate, and ultimately, to resolve--especially given the nature of our data. In large part, this is what makes the study of Hopewell so interesting, and such an appropriate topic for our second conference.

As the new President, the first thing I did was to look over our Code of Regulations and the membership list. I was interested to see where in the state our members come from, and also, what sort of relationship they have with Ohio archaeology (academic, museological, public archaeology, etc.). Initially, it was clear to me that I didn't know everyone, nor in some cases, did I know where certain "central places" like South Bloomingville or Rockbridge, Ohio, are located. I hope you will take the opportunity to introduce yourselves, and will feel free to write, phone, or talk with me about your concerns. In brief, it looks to me that the strength of our membership lies in the central and southern portions of the state, centering on Columbus and Cincinnati, respectively. Thirty-eight percent of our membership live or work in the Columbus area, and twenty-eight percent of us are in the southwestern area. The southeastern and northwestern areas of the state make up the smallest segments of the OAC membership--seven percent and twelve percent, respectively. Although we always are happy to receive applications from people who can support our values and programs, clearly stronger membership in northwestern Ohio and southeastern Ohio would help us all a great deal.

In contemplating membership, I think it is important to recognize not only our proactive efforts toward heritage and education, but also our ability to represent professional attitudes and expertise to many of our own institutions or companies. Simply put, we must recognize that many decisions are made by administrators or managers with their own perspectives and priorities, which in some cases are combined with very limited expertise in archaeology. At a time of increasingly strident calls for fiscal leanness and "growth by substitution," I think a regional organization such as ours is in an especially good position to offer support to our membership in a number of important ways. I look forward to seeing our organization move forward in these, and other, areas over the next several years.

Mark F. Seeman

OHIO HISTORIC PRESERVATION OFFICE

STATE HISTORIC PRESERVATION PLAN

The Ohio Historic Preservation Office recently completed analyzing and summarizing information received from public meetings held in 1992 providing input into

the goals and objectives of the State Historic Preservation Plan. These activities are summarized in a Planning Process Document required by the National Park Service.

Copies of public meeting summaries and the Planning Process Document have been sent to all public meeting participants. Others who want to receive a copy of these documents should contact Barbara Powers, Planning, Inventory, and Registration Department Head, at (614) 297-2470.

VOLUNTEER(S) SOUGHT

The Ohio Historic Preservation Office oversees and administers the Ohio Historic Inventory, Ohio Archaeological Inventory, and the National Register of Historic Places. These records, describing more than 163,000 properties in all parts of Ohio, are housed at the Ohio Historical Center in Columbus. This information documents buildings, historic districts, sites, structures, and objects reflecting Ohio's prehistory, history, and culture.

The Ohio Historic Preservation Office is seeking volunteer(s) to manage these research files and the maps and reports relating to them. Duties would include overall maintenance of the files and related materials; assisting persons using the files for research; looking up information in the files to answer telephone inquiries and written requests from the public; and working with the National Register Manager, Survey Manager, and Archaeology Manager on technical projects associated with the maintenance and updating of the files including coding and computerization of the files and preparing historic site maps. Volunteers must have demonstrated communication, both orally and in writing, and organizational skills.

If you are interested in learning more about Ohio's historic places and having hands-on experience working with information about historic properties, and helping others use this type of information, please contact Barbara Powers at (614) 297-2470.

NAGPRA GRANT PROGRAM FUNDED

The Federal Government's FY 1994 budget includes \$2,300,000 in grants to museums and Indian Tribes for help in completing and responding to inventories mandated by the Native American Graves Protection and Repatriation Act. The Archeological Assistance Division of the National Park Service will administer the grants program. For grant application forms or for more information contact C. Timothy McKeown, NAGPRA Program Leader, Archeological Assistance Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127, telephone (202) 343-4101, FAX (202) 523-1547.

NEW NATIONAL PARK SERVICE TECHNICAL BRIEFS

Two new Technical Briefs have recently been published by the National Park Service. Technical Brief No. 14 is *The Peer Review of Public Archeology Projects: A Procedure Developed by the Department Consulting Archeologist*. This publication describes objectives, organization, and methods that can be used for conducting peer reviews in public archeology projects. It is based on peer reviews conducted by the U.S. Department of the Interior's Department Consulting Archeologist between 1981 and 1990. The purpose is to provide guidance to government agencies and other archeological resources management programs on use of the peer review process as one tool to improve the effectiveness of their activities.

Technical Brief No. 15 is *State Archeology Weeks: Interpreting Archeology for the Public*. This publication is a condensation of the best ideas from states that have sponsored successful archeology weeks. These kinds of public education and outreach activities provide important opportunities for non-archeologists to learn about modern archeology and the need to protect archeological resources. Archeology weeks exemplify the kinds of public outreach efforts called for in the National Strategy for Federal Archeology, which the U.S. Department of the Interior is promoting for Federal and other archeology programs.

Technical Briefs are designed and produced by the Department Consulting Archeologist/Archeological Assistance Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127. Comments, topics for future Technical Briefs, and requests for copies should be addressed to the Editor.

SITE BURIAL REPORT AVAILABLE

In the February, 1993 issue of the *OAC Newsletter* (Vol. 5, No. 1), it was reported that the New York State Historic Preservation Office had completed a study of the use of site burial to protect *in situ* archaeological deposits during construction activities. The study concluded that although site burial is not always a viable alternative, *in situ* preservation should be considered and in some cases it is preferable to data recovery.

The New York State Historic Preservation Office recently announced that copies of the report describing this project, titled *Reducing the Effects of Heavy Equipment Compaction Through a Program of In Situ Site Preservation*, are available upon request from the New York State Office of Parks, Recreation and Historic Preservation, Historic Preservation Field Services Bureau, Peebles Island, P.O. Box 189, Waterford, NY 12188-0189, tele-

phone (518) 237-8643.

OAC'S A VIEW FROM THE CORE CONFERENCE A SUCCESS

All indications are that the OAC's second conference, *A View From The Core: A Conference Synthesizing Ohio Hopewell Archaeology*, was a big hit. Two hundred thirty-six people registered; 171 non-students and 65 students. The guided bus tour was taken by 154 people, while the banquet and keynote address was attended by 153. Sixteen states and Quebec, Canada were represented.

Over 20% of the registrants returned conference evaluation forms. Very favorable responses were the norm, though there remains room for improvement. The OAC Education Committee will meet in late January to discuss where we go from here.

TECHNIQUES OF IDENTIFYING AND EVALUATING CORRIDORS AND TRAILS : ARCHEOLOGICAL PROPERTY TYPES AS CONTRIBUT- ING ELEMENTS

By Timothy R. Nowak, District Archeologist, Rawlins District Bureau of Land Management, Rawlins, WY.

[Editor's Note: This article was submitted by Al Tonetti, Archaeology Manager, Ohio Historic Preservation Office. Al notes that Ohio is replete with prehistoric and historic transportation corridors and urges archaeologists and historians to think about the archaeological record as elements of transportation (of material and non-material culture) systems. Although this article has a western U.S. focus, it demonstrates how transportation-related historical archaeological sites anywhere can be conceptualized and evaluated in cultural resource management activities. This article is reprinted in its entirety from *CRM*, Volume 16, No. 11, 1993, which is a thematic issue on historic transportation corridors. *CRM* is a publication of the National Park Service]

A significant part of the historical landscape of corridors and trails is the associated cultural remains of those who have used these transportation routes over time. These remains, found both above and below the ground, are the tangible historic resources which link the corridor or trail to its historic context. They are elements which serve to substantiate and illuminate the historical research which forms the framework for understanding the events, activities, and socio-cultural patterns which influenced the route.

Archeology, however, does not merely serve as the handmaiden to history. Beyond being a technical methodology, archeology, as a subdiscipline of anthropology, offers a unique theoretical perspective. It provides an analytical approach to material culture and spatial configuration and raises questions of behavioral patterning with regard to environmental and economic issues, social interaction, and culture process, all of which should be important to development of the historic context of the corridor.

Keep in mind that the location of any event or activity has the potential to provide archeological data, whether it be where someone lost a few coins from their pocket at some spot along a trail or whether it be where entrepreneurs constructed a ferry and roadhouse at a major stream crossing. Both are related to the corridor or trail in question. But unlike the first example which is random and isolated, the second example likely contains a pattern of associated structures and activity areas, and is certainly more significant in terms of the kind of information it can provide.

As with most cultural remains, these patterned features, which we identify as property types, are often related by shared physical or associative characteristics. Physical characteristics may relate to structural forms, architectural styles, or site types, whereas associative characteristics may relate to the nature of associated events or activities. At one level, historic corridors and trails are, themselves, property types. These include emigrant routes, cattle drive trails, federally-funded wagon roads, land grant military wagon roads, railroads, canals, river margins, national boundaries, and highways. But they can be identified and described by other, more numerous property types which collectively, define the corridor or trail.

A property type may include the remains of a variety of buildings and structures with diverse physical characteristics or functions; it may also include any number of non-structural features, such as blaze marks, graves, privies, dumps or trash scatters. This can be illustrated by the Union Pacific Railroad corridor which formed the first transcontinental railroad line extending from Omaha, NE, to its connection point with the Central Pacific Railroad at Promontory Point in Utah. This corridor comprises not only preserved abandoned portions of the original railroad grade, it also includes the locations of construction camps, division points, section stations, and sidings. In turn, each of these property types are defined by other property types and features, such as water towers, bunk houses, bake ovens, depot buildings, round houses, privies, and even graves, just to name a few. Other property types which contribute to defining the railroad corridor may include tunnels, trestles, snow sheds, tie camps, etc. More intangible sites, which would not normally be manifested in archeological remains but would contribute to the

historic context, would be the sites of train wrecks or train robberies.

The identification of property types ultimately depends upon the identification of feature functions. Archeologists have traditionally depended upon three sets of variables to identify these functions: artifact assemblage, features form, and feature location.

Functional analysis of property types might begin with a determination of the range of feature types that could conceivably have existed. Archeological property types can sometimes be found based upon our predictions of what resources likely existed at a given place and time; very often they are discovered during archeological inventory surveys; most frequently they are located as a result of historical research. In the last case this does not necessarily insure that the property type was really there or that it still exists. The bottom line is that archeological property types must be positively identified in the field. The problem with archeological property types, however, is that they are not often manifested as easily recognizable features. The remains of structures may be observed as merely depressions in the ground, subtle changes in vegetation, the surface patterning of artifacts, or sometimes as only a slight difference in soil phosphates.

Of the three sets of variables previously mentioned, the analysis of artifact assemblages associated with specific features should initially provide the most reliable data for the identification of feature function. This is due, in part, to the fact that archeologists have historically expended greater effort in the analysis and interpretation of artifacts than in the analysis of feature form and location. Unfortunately, many artifact assemblages are often too small to be useful or they may contain materials that will yield ambiguous information that is not diagnostic in terms of artifact function or social diversity and, therefore, provide little information relating to feature function. In such instances feature form (i.e., structural attributes) and feature location may be used to supplement feature function identification.

Once all of the observable features of an archeological site have been inventoried, they must be described and evaluated. This includes the types and quantities of both artifacts and features. Usually the features fall into three broad categories of property types: those that contribute to the historic significance of the property, i.e., the features that were present during the period of time that the property achieved its significance; and those problematical features which cannot be readily determined to be either contributory or non-contributory. These latter features will probably require subsurface testing or the use of remote sensing techniques to answer that particular question. The types and quantities of contributing artifacts and features, in conjunction with historical research data and integrity, are the foundation for

evaluating the significance of the property.

All aspects of the property should be documented, including standing structures and buildings, as well as small-scale elements, such as trail ruts, stone fence lines, individual trees which may have been planted during the period of significant occupation, footpaths, etc. If they contribute to the significance of the property, structures and small-scale elements should not be described and evaluated separate from their archeological deposits.

It is also important that the boundaries or horizontal extent of the property be defined and that all resources within those boundaries have been inventoried and described. Boundaries of historical archeological properties may be based on one or more factors. Some of the more commonly used include: absence of artifacts and features or a significant decline in surface and subsurface artifact density; natural topographic or hydrological features such as a river or steep-sided drainage; historical or legal boundaries associated with the property; or land disturbance, such as construction or erosion, which has adversely affected portions of the property.

The first step in evaluating historic archeological properties is a determination of the site's integrity. This is a measure of the amount of interpretable physical remains and the quality of the information retained within the property. Two aspects of these remains must be considered: focus and visibility. Focus is the degree to which a pattern of the physical remains can be "read" clearly as to how it represents the remains of a structure or an activity area. Visibility refers to the actual amount of physical remains, however clearly or ambiguously they might be perceived.

Since this information cannot be exactly determined without extensive excavation, the integrity of the archeological property is usually estimated based upon the apparent "intactness" of the archeological record. This is most often demonstrated by the lack of serious disturbance to the property's archeological deposits and observation of spatial patterning of both surface and subsurface artifacts and features that represent differential uses or activities. Above-ground patterning of features and artifacts may indicate that below-ground patterning is still intact.

It is important to keep in mind that if significant information is still retrievable despite some disturbance, then the property may still have integrity. In other words, what is important is that the horizontal and vertical patterning of the archeological remains is discernible and that significant data can be recovered.

If it is determined that the archeological property has integrity, then it must next be demonstrated that the property has information potential relative to the

research questions that are important. This is perhaps the most critical issue in evaluating the site. It is not enough that the archeological property will likely yield information - the real question is whether that information is important to our understanding of the site and the overall historical context of the corridor to trail. On the other hand, it is important to note that the information potential of historic archeological sites does not necessarily decline in relation to the amount of written historic information. Archeological data cannot only substantiate the written record, but the remains of material culture often provides truths and insights to social behavior not commonly or accurately documented.

The key to evaluating historic archeological properties is directly related to the data gaps and information needs defined by the historic context. This process can be outlined as follows:

Identify research questions applicable to the corridor or trail and to the associated property types.

Justify that the research questions are important.

Determine the data categories that are needed to answer the research questions.

Confirm that the data is likely to be in the site to answer the research questions.

Demonstrate that the property does not contain information that is typical or that is provided by similar sites.

After these steps have been completed, it is now possible to further evaluate the historical archeological property in terms of National Register criteria. Certainly, if all of the previous five steps have been well documented, then the property can be deemed significant in that it may likely yield information important in history. This is Criterion D under which most archeological properties are evaluated.

Historic archeological properties, however, may also be evaluated under the other criteria. For example, historic archeological property types that have good archeological integrity and are associated with important historical events are significant under Criterion A (e.g., Big Horn National Battlefield). Historic archeological property types that have good integrity and are associated with important persons are significant under Criterion B (e.g., Brigham Young's privy at Nauvoo, IL). Historic archeological property types that have good integrity and illustrate a type, period, or method of construction are significant under Criterion C (e.g., the ruins of an Overland Trail stage station). Often, the property type

will have significance under a combination of these criteria.

ZINJ: A Prehistory Science Magazine for Kids

Reviewed by Al Tonetti

For anyone looking for gifts for kids for the Holidays, birthdays, school projects or special events, *Zinj* magazine should be high on your list. *Zinj* is a full-color, hero-sized (that's 17" x 11" for you cartoon-deprived scientists) quarterly magazine. Written for kids (and some adults, I must confess) of all ages, *Zinj* is about "dinosaurs, fossils, ancient people, and other really old stuff." It's educational, scientific, colorful, and fun. "*Zinj*" is, of course, short for *Zinjanthropus*, the scientific name given to an early hominid fossil from Olduvai Gorge in East Africa.

The premier issue was titled "Dinotopia," and includes an interview with the fantasy book's author James Gurney. Although *Dinotopia* tells the story of a lost world where dinosaurs and humans peacefully coexist on a remote island, the interview makes it clear that dinosaurs became extinct 65 million years before humans evolved. Dispelling myths about science appears to be one of the primary purposes of *Zinj*. Other sections of the premier issue include "Greek Speak," explaining the origins and meanings of scientific terms used in the issue, articles about early paleontologists (other scientists who dig in the dirt) and the dinosaurs they discovered, an article on why dinosaurs became extinct, a couple of articles about rock art, and more. Subsequent issues have been titled "Jurassic Park: Science Behind the Science Fiction," "Ice Age: Where Have All the Great Beasts Gone?," and forthcoming issues are titled "This Really, Really Old House," and "Art On the Rocks."

Although the early issues appear to have a western USA focus, *Zinj* welcomes artwork, stories, photographs, and other submissions, especially from children, from all over. Each numbered issue should have a life span of two to three years. Subscription rates are \$8/year. T-Shirts (I've got one and it's quite the conversation piece) and buttons are also available.

Zinj is published quarterly by the Utah Division of State History and its Interagency Task Force partners (the U.S. Forest Service, the National Park Service, and the Bureau of Land Management) as a non-profit educational project. Their collective goal is to "share the delights of history and prehistory with kids because we believe

that with appreciation and awareness come a sense of ownership, pride, and a desire to protect and preserve our heritage resources." For more information write *Zinj* at 300 Rio Grande, Salt Lake City, UT 84101, or telephone (801) 533-3565, telefacsimile (801) 533-3503.

TRAINING OPPORTUNITIES

ARCHAEOLOGY TRAINING FOR EDUCATORS

Crow Canyon Archaeological Center, a private, not-for-profit institution devoted to research and education in Southwestern archaeology, offers a number of opportunities in 1994 for educators to explore archaeological techniques in the field and to examine methods for teaching archaeology and prehistory. Educators at any grade level are invited to participate.

For internships, a travel allowance of up to \$350 is available and there is a modest stipend to help defray minor living expenses. All internships include meals at the Center's dining hall and lodging in tents. The Center does not offer course credit for internships, but does certify work performed and provide evaluations if students wish to arrange credit through their own institutions. Interns work a five-day week, usually Monday-Friday.

School Program Education Internship (Spring). School Program interns gain experience in observing and working with several different educators. They work with participants of elementary and secondary ages in various campus programs. By the end of the internship the intern will lead groups under supervision of an educator. The intern will give at least one evening program and develop and test one lesson plan for the Center. The intern assists in the upkeep and repair of educational materials and assist educators with administrative work. Two School Program Education Internships are offered between March 13 and May 21, 1994.

Educational Programs Internship (Summer). Interns gain experience in observing and working with several different educators and with participants in excavation programs as well as in the High School Field School and the Education Workshop. By internship's end, the intern will lead groups under supervision of an educator. The intern will give at least one evening program and develop and test one lesson plan for the Center. The intern will also assist in the upkeep and repair of educational materials and assist educators with adminis-

trative duties. Four Summer Internships are offered, two between May 15 and July 23, 1994, and two between June 26 and September 3, 1994.

Application deadline is January 31, 1994. Application forms and further information can be obtained by writing or calling the Crow Canyon Archaeological Center, 23390 County Rd. K, Cortez, CO 81321, telephone (303) 565-8975.

Crow Canyon Archaeological Center also offers weekend and summer workshops. The weekend workshops cost \$175 each and are titled "Archaeology in Science, Math, and Environmental Curriculums," "Insight into Fine Arts through Archaeology," and "Multicultural Studies through Archaeology." One hour of graduate credit is available from Colorado State University. A separate fee is paid to CSU for this credit.

Two summer workshops are offered in 1994. "Introduction to Southwest Archaeology," June 19-25 (\$700) with two hours of graduate credit available from CSU; and "Archaeology for the Classroom," July 24-August 6 (\$1125) with four hours of graduate credit available from CSU.

For more information about workshops write or call Crow Canyon Archaeological Center, 23390 County Road K, Cortez, CO 81321, (800) 422-8975, ext. 130.

CALL FOR PAPERS

COLLECTED PAPERS ON ARCHAEOLOGY AND EDUCATION

To encourage educators to publish about archaeology and education, educators are invited to submit articles about their work in the classroom, at museums, and in the field to Crow Canyon Archaeological Center. The Center wants to establish a network to refine and validate ideas and materials about archaeology and education. The publication will be distributed at cost to educators at all grade levels (K through college) in all subject areas.

Manuscripts should be 3 to 8 doubled-spaced pages, including references, in Word Perfect. Send two copies. Submission deadline is January 15, 1994. For further information contact Pam Wheat, Director of Education, Crow Canyon Archaeological Center, 23390 County Road K, Cortez, CO 81321, telephone (303) 565-8975.

ETHNOBIOLOGY: PERSPECTIVES AND PRACTICE IN THE NORTHEASTERN UNITED STATES AND EASTERN CANADA

November 12-13, 1994

Sponsored by the Research Division, Rochester Museum & Science Center, Rochester, New York

The purpose of this conference is to provide an opportunity for researchers interested in the human use of plant and animal resources in the northeastern United States and eastern Canada to present results of their current work and to discuss topics of mutual interest. Its intended scope is both temporally and topically broad. Data papers relevant to prehistoric and/or historic time periods are sought as are presentations bearing upon techniques in specimen recovery and analysis, and syntheses of our current knowledge base.

As preliminarily envisioned, the conference will consist of morning and afternoon sessions of papers on Saturday, November 12, and a workshop/poster session on methods and techniques on Sunday, November 13. Suggested paper topics include:

- Paleoecology
- Environmental reconstruction
- Taphonomy
- Zooarchaeology
- Changing patterns of plant/animal exploitation
- Subsistence adaptations to changing social and ecological environments
- Palynology
- Paleoethnobotany
- Development of agricultural technology
- Evolution of plant/animal management systems
- Boundaries between and interactions among agricultural and non-agricultural populations

Those who would like to participate in the workshop/poster session may wish to consider topics pertaining to floatation, fraction sorting, voucher specimen collection and preparation, living gardens, techniques of identification, relevant aspects of plant and animal science, dating techniques, and statistical analysis.

Potential contributors are asked to submit a 150-word abstract by March 31, 1994, to:

Ethnobiology Conference
c/o Charles F. Hayes III
Rochester Museum & Science Center
657 East Avenue, Box 1480
Rochester, New York 14603-1480

Questions may be directed to the above address or to (716) 271-4552, extensions 345 or 440.

Papers and workshop/poster session presentations will be selected by the conference committee by June 1, 1994. Preregistration forms and further program details will be available shortly thereafter.

POSITION OPENINGS

The Virginia Department of Historic Resources has two positions open; one for Senior Archaeologist (\$28,652 - \$43,747) and the other for Archaeologist (\$23,505 - \$35,888). Application forms (due December 17, 1993) and further information can be obtained from Connie M. Lett, Department of Historic Resources, 221 Governor St., Richmond, VA 23219, telephone (804) 786-3143, FAX (804) 225-4261, TDD (804) 786-1934.

The Senior Archaeologist conducts Section 106 reviews of state, federal, and local projects and permit applications; develops mitigation measures and alternatives to minimize damage to historic resources; conducts archaeological research; and provides planning assistance in the development of archaeological resource management plans and memorandum of agreement.

Qualifications for Senior Archaeologist include a knowledge of and experience working with both historic and prehistoric archaeological resources in Virginia or the Mid-Atlantic region; an advanced degree; and demonstrated experience in archaeological resource management and project review.

The Archaeologist manages archaeological survey and register projects; provides technical expertise to state agencies in site identification, evaluation, and protection; designing and conducting staff workshops; develops and maintains computerized archaeological site inventory; manages archaeological survey and register grants; reviews and assesses potential impact on archaeological sites; and reviews state permits for archaeological research.

Qualifications for Archaeologist include a broad knowledge of Virginia or Mid-Atlantic historic and prehistoric archaeology; ability to conduct and supervise archaeological research and surveys; develop and utilize computerized inventory systems; and an advanced degree or equivalent experience.

The Department of Historic Preservation at Mary Washington College, a state-supported liberal arts college located in Fredericksburg, Virginia, seeks candidates for a tenure-track faculty position at the rank of assistant professor in historical archaeology. Candidates must possess their Ph.D., must have attained a recognized position in the field of historical archaeology, and must have achieved a record of publication and scholarship. In addition to courses in archaeological method and theory, the successful candidate will teach

courses in material culture and historic preservation. The successful candidate will also have responsibilities with the Center for Historic Preservation, an important research and public service arm of the College which is responsible for administering two historic sites, sponsoring research projects, and supporting public programs. Send letter of application, curriculum vitae, and three references to Chair, Search Committee, Department of Historic Preservation, Mary Washington College, Box 615, Fredericksburg, Virginia 22401-5358. Closing date for receipt of applications is 31 January, 1994. Mary Washington College is deeply committed to affirmative action and encourages minorities and women to apply.

The Kentucky Transportation Cabinet, Division of Environmental Analysis has a permanent, full-time opening for an Archaeologist Coordinator. Duties include: Conduct reconnaissance surveys of highway projects; coordinate the work of archaeologists, survey crews and field workers; assess the significance of archeological sites located, tested or excavated in accordance with state and federal rules and regulations; write reports; and recommend mitigation when necessary. Responsibilities will be statewide and will involve considerable travel.

Minimum Requirements: Graduate of a college or university with a Master's degree in anthropology, archaeology or cultural resource management (applied anthropology) or closely related field supplemented by one year of archaeology or anthropology experience concentrated in the United States; or Ph.D. in anthropology with an emphasis in archaeology, United States prehistory or cultural resource management (applied anthropology).

Salary: Beginning salary will depend on education, training and experience and will range between \$22,272 - \$28,980 annually.

How To Apply: Send an introductory letter and resume or vita to:

Mr. D.W. Lambert, Director
Division of Environmental Analysis
419 Ann Street
Frankfort, Kentucky 40622-1994

All information received will be held in strict confidence. M/F/H An equal opportunity employer.

Internet News Briefs

The National Archeological Database (NADB) Online System is a Federal internet computer site intended to facilitate the exchange of archeological information useful in the management of archeological resources, collections, records, and reports. It is administered by the Departmental Consulting Archeologist/Archeological Assistance Program of the National Park Service in

consultation with the Center for Advanced Spatial Technologies (CAST) at the University of Arkansas, Fayetteville, the U.S. Army Corps of Engineers and the U.S. Department of Defense Legacy Program. The NADB is accessible via telnet to *CAST.UARK.EDU* (130.184.75.44). New users should login with the account name "NADB."

NADB evolved over the last 10 years out of the National Park Service's network of stand-alone programs and online system. The NADB was implemented in the Fall of 1992. The computing equipment is located at the University of Arkansas, maintained and operated by CAST. Additional data accessibility and coverage has been provided by the U.S. Army Corps of Engineers and the U.S. Department of Defense Legacy Program.

Two data modules are currently online, with two more scheduled for the Summer and Fall of 1994. The NADB-Reports module has been online since the Fall of 1992. It is updated annually and contains over 100,000 records of archeological projects, largely reports of restricted distribution. This database has a query procedure by which the archeological records can be searched by state, county, cultural group, material, keyword, date, author, and title. The results of the query search are downloadable to a local PC or workstation in *American Antiquity* citation format.

The NADB-Native American Graves Protection and Repatriation Act (NAGPRA) module has been online since the Fall of 1993. It is updated regularly with information pertaining to NAGPRA such as Congressional reports, statute data, proposed regulations, guidance, Review Committee summaries, Federal Register Notices of Completion of Inventory and Intent to Repatriate. A query procedure is anticipated in the near future, but users can download documents now from a directory. File transfers can be accomplished either in ASCII, WordPerfect 5.1, or PostScript formats.

Two new data modules are anticipated for 1994. The Permits module (Summer of 1994) will contain information on permits issued for archeological and paleontological surveys or excavations on Federal and Indian Lands. Users will be able to search the database by state, county, managing agency, project personnel, collections repository, and keywords.

The NADB-Multiple Attribute Presentation System (MAPS) is scheduled for the Fall of 1994. It is a graphical display interface of archeological and environmental resources. The database will consist of site density and citation distributions displayable using the GRASS (Geographic Resources Analysis Support System) mapping routines.

LRP

CALENDAR OF EVENTS

April 8-9, 1994 *Integrating Archaeological Demography: Multidisciplinary Approaches to Prehistoric Population.* This conference presents pa-

pers that explore the role of population in anthropological explanation or consider data, methods, or theoretical models of prehistoric demography. Contact Richard R. Paine, Center for Archaeological Investigations, Southern Illinois University, Carbondale, IL 62901, telephone (618) 549-4009.

April 20-24, 1994 *59th Annual Meeting of the Society for American Archaeology.* Disneyland Hotel, Anaheim, CA.

May 5-7, 1994 *Ohio Historic Preservation Office Conference.* The Great Southern Hotel, Columbus, OH. Contact Mary Beth Hirsch, Ohio Historic Preservation Office, 1982 Velma Avenue, Columbus, OH 43211-2497, telephone (614) 297-2470.

May 20, 1994 *Ohio Archaeological Council Spring Membership Meeting.* The Ohio Historical Center, Columbus, OH. Contact Bob Genheimer, Cincinnati Museum of Natural History, 1720 Gilbert Avenue, Cincinnati, OH 45202, telephone (513) 345-8503.

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Schedule For Submission:

<u>Deadline</u>	<u>Issue</u>
January 1st	February
April 1st	May
July 1st	August
October 1st	November

Editors

Len Piotrowski (614) 292-5558
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1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for ensuring transparency and accountability in financial operations.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It highlights the need for consistent and reliable data collection processes to ensure the validity of the results.

3. The third part of the document describes the statistical methods used to analyze the collected data. It details the various tests and procedures used to determine the significance of the findings and to draw meaningful conclusions from the data.

4. The fourth part of the document discusses the implications of the research findings and their potential applications in various fields. It highlights the importance of sharing research results and the need for further research to address any remaining questions.

5. The fifth part of the document provides a summary of the key findings and conclusions of the study. It reiterates the importance of accurate record-keeping and the need for consistent data collection and analysis methods.

6. The final part of the document includes a list of references and a list of figures and tables. It provides a comprehensive overview of the sources used in the research and the visual representations of the data.