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PRESIDENT'S CORNER

As the year winds down everyone's thoughts turn with great anticipation to the annual meeting. Just one of the important things that happen at the meeting is the work of the nominations committee. A slate of candidates for society officers must be selected. Please feel free to give me your suggestions for SHA officers. (Paul Johnston will be glad to hear from you about potential ACUA candidates.) Call or drop me a note before the meeting or have a word with me early in the week when we get to Vancouver. A strong slate of candidates will yield a good group of officers to carry forward the society's work.

The SHA's business is humming along thanks to the efforts of the officers, committee chairpersons, and the business office. Now is the time to consider initiatives for the next year. I invite the membership to contact your friendly board of directors member or the chairperson of the appropriate committee with ideas about how the society can advance the cause. I will be glad to hear from you, and so will Elizabeth Reitz. Betsey will assume the mantel of SHA President at the business meeting in Vancouver. Ideas to improve the Society are always welcome.

Many members will be interested to know that a handsome SHA lapel pin is available. The circular mental pin is black with red initials in the style of the popular SHA brochures. Call or write Mike Rodeffer at the business office (602/886-8006) to order yours. The cost is \$4.00 per pin. The pins will be available at the meeting.

I am honored, privileged, and happy to have served as SHA President for 1993. The society is doing great work. Let's all keep at it!

J. Barto Arnold III

SHA NEWS

- Results of 1993 SHA Elections: President-Elect: Donna J. Seifert; Secretary-Treasurer: Stephanie H. Rodeffer; Board of Directors (1994-1996): Teresita Majewski and Lester A. Ross; Advisory Council on Underwater Archaeology: Daniel J. Lenihan, Judith A. Logan, and Melanie J. Stright.
- SHA '94 Vancouver: the SHA Annual Conference will be held at the Hotel Vancouver, Vancouver, British Columbia, Canada, between January 5-9, 1994. Preregistration packets have been mailed to SHA members. For further information contact: SHA-'94, Dept. of Archaeology, Simon Fraser University, Burnaby, British Columbia, Canada V5A 1S6. 604/291-4196. Fax 604/291-5666.

- Field Schools: listing of 1994 field schools will be published in the March 1994 Newsletter. Send a brief summary including location, dates, and cost to the Newsletter Editor no later than January 24, 1994.
- M.A./Ph.D. Abstracts: readers are urged to send the Newsletter Editor titles with abstracts of M.A. theses/Ph.D. dissertations [provide name of author, institution and department, date of completion, and 75-100 word abstract].
- Changes in Newsletter Current Research Coordinators: new coordinators have been appointed for the following regions:

Central Plains (Iowa, Kansas, Nebraska, Missouri) - Vergil E. Noble, Jr., NWAC/USDI-NPS, Fed Bldg/Rm 474, 100 Centennial Mall North, Lincoln, NE 68508, W402/437-5392. Fax 402/437-5098. [Vergil previously served as coordinator for the Midwest region; he succeeds William Lees, who has moved to the Oklahoma Historical Society].

Midwest (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) - Dean Anderson, Michigan Historical Center, 717 W. Allegan, Lansing, MI 48918, W517/373-1618, Fax 517/373-0851.

- Newsletter Editor has E-Mail: if desirable, send electronic mail to the Newsletter Editor at NFBark@mail.wm.edu.
- Curation Standards/Guidelines: at the 1991 SHA conference held in Richmond, Virginia, several society members approached the Board of Directors and requested that the Society address the subject of archaeological curation. This was prompted by a growing recognition of the often poor condition of archaeological collections, the difficulty of accessing and reanalyzing older excavation data and the lack of any standards

or guidelines to follow for proper curation. The Department of the Interior had begun to address this problem in 1990 by issuing regulation 36 CFR Part 79: Curation of Federally-Owned and Administered Archaeological Collections. This important document provided general direction but referred only to Federally -controlled collections. The SHA Board determined that the Society should address this significant problem in a timely manner so that minimal standards for all historic collections could be established.

As a result, a committee was created by the Board and charged with the task of developing a set of curation standards and guidelines relevant to historic sites archaeology. This committee consisted of Lysbeth B. Acuff, J. Barto Arnold, Norman F. Barka, Charles D. Cheek, Charles H. Fithian, Curtis S. Moyer, Stephanie H. Rodeffer, Robert C. Sonderman, Michael K. Trimble and Henry M. Miller, who served as committee chair. Comprised of SHA members from a variety of geographic areas and institutions, the curation committee held several working sessions at the Clara Barton National Historic Site near Washington, DC during 1991 and 1992. Following consultation with curation specialists, numerous reviews of the draft, the receipt of comments from members of the Board and many revisions, these standards were officially adopted by the SHA Board of Directors at the Kansas City Conference in January of 1993. The SHA is the first national organization of professionals to develop and adopt standards for archaeological curation. (The Curation Standards Committee, October 1993).

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SHA STANDARDS AND GUIDELINES FOR THE CURATION OF ARCHAEOLOGICAL COLLECTIONS

INTRODUCTION

Archaeologists have an ethical obligation to preserve the data they collect during archaeological projects for future generations. The following standards and guidelines were developed by the Society for Historical Archaeology with the explicit goals of permitting the long term preservation of archaeological collections and maintaining their research and public education values. These SHA standards are in accordance with the more general federal regulations issued as 36 CFR Part 79: Curation of Federally-Owned and Administered Archaeological Collections. For the purposes of archaeological curation, the following terms are employed:

- Archaeological collections are comprised of several components including but not limited to: artifacts, environmental and dating samples, field documentation, laboratory documentation, photographic records, related historical documents and reports.
- Curation is an integral element of the archaeological process and refers to the long term management and preservation of archaeological materials and their associated documentation.
- Curation Facility is a designated repository for archaeological materials which can provide accountable, professional curation of collections in a secure, climate controlled environment on a long-term basis.

Due to its significance, planning for curation should begin in the project design phase through consultation with the curatorial facility which will ultimately receive the collection. Curation expenses and storage fees must be considered in the preparation of project budgets. The following recommendations for the processing and storage of archaeological materials represent the minimum standards which are essential if our professional responsibility to preserve archaeological collections for the future is to be realized.

1. ARTIFACT CLEANING

1A. All artifacts should be cleaned unless this will harm the object or result in the loss of potential data (i.e. blood residue analysis, etc.). Cleaning is necessary for the accurate identification and study of most artifact types. Appropriate cleaning procedures depend upon the type and condition of the material. Due care must be exercised during the cleaning process to insure that the integrity and information value of the object is maintained.

2. ARTIFACT LABELING

- 2A. Artifacts must be labeled in such a way that the site and intrasite provenience data are retrievable. Thus must be done in a permanent and archivally stable manner. Where direct labeling on the object is not feasible, other archivally stable methods of permanently maintaining the relationship between an artifact and its provenience may be used (for example, string tags with acid free paper for beads, etc.).
- 2B. All diagnostic artifacts must be labeled whenever physically possible. If not appropriate, the object must be packaged in archivally stable materials which are permanently labeled.
- 2C. When certain less diagnostic artifacts types occur in large quantities within a specific provenience, all specimens need not be individually labeled. Examples include but are not limited to slag, shell, fire cracked rocks, flakes, window glass, nails, brick, mortar, plaster and coal (exceptions should include unusual specimens or those of particular research potential). These artifacts may be grouped by material type and placed in a resealable plastic bag with the exterior permanently labeled. In the bag with less diagnostic artifacts, a mylar or acid free paper slip labeled with the provenience information must be included. Other material classes not appropriate for individual labeling (floral remains, soil samples) should be stored in suitable labeled containers with a labeled mylar strip placed inside.
- 2D. All faunal material which can be physically labeled should be labeled. Bones too small for individual marking should be placed in a labeled, resealable plastic bag. It is recommended that bones within a provenience unit be bagged separately by zoological class to prevent or reduce the crushing of fragile remains.
- 2E. An explanation of the label information including locational data about the excavation units must be submitted with the collection. It is suggested that one copy be stored with the site artifacts and one with the documentation.

3. STORAGE

- 3A. The most suitable artifact storage container currently available is the polyethylene, "zip-lock" type plastic bag. Unless the curation facility requires a different container, these should be used. Paper bags and polyethylene bags of less than 2 ml thickness are not acceptable for permanent curation. Exceptionally large or unusually shaped artifacts may require different methods but should be stored using archivally stable materials. Bags should be perforated to allow air exchange and inhibit the development of unwanted microenvironments. Use of non-perforated bags, however, may sometimes be appropriate for very climate sensitive artifacts, which need special storage conditions, such as iron.
- 3B. It is recommended that all bags be permanently labeled with the appropriate site and provenience information.

For certain fragile or sensitive materials (i.e. C14 samples or floral remains), standard sized glass or other archivally stable containers labeled with the site and provenience data are recommended.

- 3C. Artifact storage boxes must be made of archivally stable materials and standard sized. The specific type will be determined by the curation repository. Consultation with the curation facility before containers are purchased is highly recommended. Artifacts must be packed in such a way to avoid crushing or otherwise damaging them. It is mandatory that all packing materials also be archivally stable.
- 3D. All storage containers must be labeled with the site and provenience information. Rather than direct marking of the box, a transparent label holder affixed to the container is suggested. Listing the content of the box may also be appropriate.
- 3E. If storage is to be by provenience unit, certain artifact classes (i.e. ceramic vessels, bottles) should be retained in their analytic categories and not disassembled and the sherds returned to their original proveniences for storage. Notation should be made in the provenience unit documentation that these artifacts are stored elsewhere.
- 3F. All slides, black and white negatives and prints are to be stored in archivally stable materials.

4. DOCUMENTATION

- 4A. Records, notes, reports, catalogues, related historical documents, and photographs are integral components of an archaeological collection. They must be submitted with the artifacts for permanent curation. Two copies of all records are recommended. Paper documentation should be on acid free paper. Readable copies reproduced by a heat fusion process (eg. photocopy) are acceptable. Documentation must include the following:
 - Ownership document (legal title) for all archaeological materials.
 - A complete listing of all components of the collection including the number of containers, their contents and associated provenience units, and all accompanying documentation.
 - A catalogue of the artifacts by provenience unit. It is recognized that there are different levels of cataloguing. At a minimum, catalogues must include an identification of the object, its material of manufacture and quantification (count and/or weight). A description of the artifact according to the best current levels of professional knowledge is recommended where possible. Notation regarding artifacts stored outside of their provenience unit should be included.

- A copy of the final report, site location data, project scope of work and any relevant historical documentation pertaining to the site.
- A statement indicating whether conservation treatment was performed, a list of those objects treated and a complete description of the treatments used. If conservation was not complete, a list of those objects requiring immediate attention must be included.
- An archivally stable photocopy of all original field and laboratory documentation.
- A master set of permanent black and white photographs, negatives, color slides and video tapes using the best current standard films and papers. Slides should be unprojected originals or copies. All photographic material should be minimally labeled with the site, provenience and a catalogue number using archivally stable methods.
- A catalogue of all photographic materials describing the images.
- Electronic data (tape, disks, etc.) may accompany the documentation and must be accompanied by a statement describing the system and software used and the content of each disk, tape, etc. Standardized methods for the storage of electronic data will likely be developed in the future.

5. CONSERVATION

- 5A. All archaeological excavation carries the professional obligation to preserve the materials recovered through both proper curation and appropriate conservation treatments. Conservation of perishable material is an ethical responsibility and an essential element in the archaeological process. Project design should include a consideration of conservation needs and the funding requirements for this essential service.
- 5B. Conservation is especially critical for underwater sites of all kinds and can cost up to twice the expense of the field work. Excavation of an underwater site must not be undertaken without conservation facilities established beforehand and adequate funding for conservation dedicated to the project.
- 5C. Conservation treatments must be appropriate to the artifact's material and its condition, and should reflect the best current standards in methodology and materials. All treatments must be carried out by or under the supervision of an adequately trained professional. All treatments must be fully documented and this documentation must form a part of the site's permanent archive.
- 5D. The decision to conserve any artifact or class of artifacts is a complex one. It may reflect, in different cases, the condition, uniqueness, research potential, or the exhibit potential of an artifact. It may also reflect the availability of

long term storage under controlled environmental conditions and the degree to which those conditions may be achieved and precisely controlled. Consultation with the Curation Facility regarding this subject is strongly recommended.

6. CURATION FACILITY

- 6A. Repositories used for the permanent curation of archaeological collections must provide, at a minimum, 1) physical security, 2) climate control, 3) fire suppression, 4) collection monitoring and 5) access by qualified researchers. This demands adequate space and resources dedicated to the purpose of curation. Curation space within a repository must be organized to allow controlled access, efficient collection retrieval and optimum preservation. A professional staff, safe and secure storage, effective fire protection, disaster and pest management plans are essential. Collections should be isolated from work areas and people to the extent possible.
- 6B. For many historic artifacts, climate control is crucial to reduce their rate of deterioration and minimize the need for conservation treatment. Relative humidity and temperature must be monitored on an ongoing basis and controlled to minimize harmful fluctuations. Control of light levels, especially ultraviolet radiation, is also needed. Regular inspections to detect insect, rodent or other biological problems, structural defects in the physical plant, and to monitor the condition of artifacts are essential. Specific guidelines for humidity, temperature and light control are as follows:
 - Relative Humidity (RH): Control of this is crucial due to the extreme sensitivity of many artifacts to RH. For most objects, RH should be kept between 40-60% with monthly fluctuations of less than 5%. Iron and some other materials require much lower RH levels for long term preservation.
 - Temperature: Normally, lower temperatures are better for artifact curation because chemical and biological activity increases with higher temperatures. In areas with people, the temperature should remain between 65 and 70 degrees F. For storage spaces where people are seldom present, temperatures in the 40 to 60 degree F range are desirable. In no case should temperatures in a collections area exceed 75 degrees F. Abrupt changes in temperature must be prevented as these put great stress on artifacts.
 - Light (UV Radiation): Light levels in collections should not exceed 150 lux (15 footcandles). Control of Ultra-Violet radiation is necessary to protect containers and their labels from deterioration. All light sources should be filtered for UV radiation.
- 6C. Where possible, the repository selected for curation should be in the same state as the site or in a facility which stores materials from the same region. Preference should be given to a facility which curates other collections from the same site or site area.

7. DEACCESSIONING

7A. Discard of archaeological materials by a curation facility is not recommended. This is because discard or deaccessioning can jeopardize the ability to study the primary site data. In particular, current levels of knowledge may not adequately recognize the research value of certain artifacts classes. Exceptions are live ammunition, toxic or radioactive materials and other hazardous substances. However, deactivation of historic ammunition rather than its discard is suggested to preserve this often rare class of material culture.

7B. In decisions regarding any deaccessioning, materials recovered from good archaeological contexts should be given the greatest priority for retention. Effort should be made to first find a repository which will accept material to be deaccessioned. If unsuccessful, placement in a stable environmental setting which permits later retrieval of the material is strongly encouraged. Decisions about any deaccessioning of archaeological materials should be made by or in consultation with professional archaeologists. Any deaccessioning must be fully documented, including a thorough description of the material, the procedures for selection of the artifacts, the sampling techniques employed and the final destination of the material. This must be filed with the primary site documentation. Adequate samples should be retained of any material classes which are deaccessioned. Defining what is an adequate sample will vary by material and should take into account the range of variation within a particular artifact class.

8. HUMAN REMAINS

Archaeologists can encounter human remains during excavations and these materials may be curated. All human remains must be treated in a dignified manner and with respect for the deceased individual. Due to the wide range of potential situations, specific treatment and the ultimate deposition of human remains must be handled on a case by case basis and in accordance with applicable laws and religious traditions.

ARCHAEOLOGICAL CONSERVATION FORUM

Reported by Curt Moyer

The Standards and Guidelines for the Curation of Archaeological Collections, published in this issue of the SHA Newsletter, represents the best effort of a group of well intentioned and fair-minded people to create a common standard for the responsible curation of archaeological artifacts. I know this, because I was one of them.

I think most SHA members, when they see these guidelines, will already be familiar with what is under discussion. Most of them will already have adopted some or most of the suggested standards, and I do not believe that anything that is being proposed represents a radical departure from best prevailing practice. Probably few people will currently conform in every respect, or agree in every particular. But I think that what we are addressing is not a wholesale departure from current principles; it is instead a series of incremental improvements.

What is important, as much as any single decision reached by the committee on any individual issue, is the presentation of an overt, written standard which can be consulted, considered, even rejected in specific instances, but which represents the professions's best attempt to consciously set a norm for curation practice. These are, after all, guidelines, not graven commandments. Behind their usage lie questions which need to be addressed about what archaeologists do and why they do it.

Archaeology is destructive. The data, both conceptual and physical, which field work generates and lab work elaborates, relates to sites or portions of sites which excavation has destroyed. It seems somewhat cavalier, at best, and unbridled arrogance, at worst, to regard this work as absolutely correct, absolutely complete, and absolutely final. If we are ever to corroborate, correct, expand, extrapolate, review or in any other way re-analyze the basic data which supports the conclusions encapsulated in final reports, it must be curated in such a way that it is physically preserved, and intelligibly recorded and organized. That is what these guidelines intend to encourage.

The archival aspects of curation are the most straightforward; that is why they take up such a large proportion of the guidelines and are relatively detailed. There is broad, common sense agreement about how to keep records. Unfortunately, there is no simple, direct, unified approach to curation of physical data because of the breadth of physical material which is of interest to archaeologists.

In practice, archaeologists are compelled to be generalists, to know a certain amount about history and how it is recorded, a little practical surveying, a knowledge of soil and its structure and history, how to sharpen a shovel or a trowel, and as thorough a knowledge of the material culture of some or several periods, especially ceramics, as anyone; and yet also enough of forensics, of palynology, and of other specialties to at least carry on a meaningful conversation. If no aspect of human life and activity, and no aspect of the environment with which humans interact, is exempt from archaeological enquiry, then the range of knowledge required to pursue that enquiry is indeed vast. Not every type of archaeology, and not every site, requires this full a range of specialization, but the fact of this generalization is inescapable. It is both one of the most attractive things about archaeology, and perhaps also one of the most limiting.

The long term result of this breadth of enquiry is that the consequent collection of physical data is equally broad. It is obvious that most of the accumulation of abstract analytical data in archaeology is more than paralleled by the accumulation of material physical data.

Because it has been collected based on its relevance to past human activity and not based on its specific composition, this physical data can potentially include any form of any material which people can exploit or which their presence modifies. Just as the archaeologist's conceptual knowledge should either encompass or touch upon many other disciplines and specialties, so necessarily the physical database which the archaeologist collects crosses many boundaries in the physical world. If the resulting physical database is to be kept, its curation must address all of those differences in structure and composition which the database encompasses. And this is a tall order. For it is not just the volume of material which presents curatorial problems: its variety is just as important, because data with widely different physical compositions and structures require widely different storage conditions and environments.

Like the interest on the national debt, storage is consuming more and more of today's money and attention to pay for yesterday's endeavors. Whether those past endeavors were bureaucratic follies or brilliant frontier-advancing work, their consequences are still being played out. The real questions raised by the variety and size of archaeological data collections are not just concerned with the mechanics of specialized storage environments, or with the scientific facts upon which such systems are based. They are concerned with the ultimate purpose behind the data collection itself.

No curator or conservator in the world is currently able to infallibly divine, in every case, how to best store every piece of physical data from every site. Despite this, I am confident that, with enough money and imagination, efficient and effective storage systems can be devised. I am confident that the methods and systems used in curation and storage, and in conservation generally, will improve. That improvement must involve not just technical efficacy but productive efficiency. The technical problems can be solved: the real problem lies in procuring resources and in fitting resources and idealism together in a way that is both intellectually honest and economically efficient. The proposed new SHA Standards of Curation represent a start down this road. If we cannot cope with these relatively simple guidelines, either because of abstract objections, or because of more concrete issues of money or organization, then we probably need to review and rejustify or redefine more basic archaeological principles.

Like other situations in which rising or changing standards have substantial consequences on economic price setting, archaeologists must eventually face the true costs associated with their activities; and just as the Detroit of 1975 just couldn't cope with standards of safety and engine efficiency which the Detroit of 1993 is leaving behind in the dust, so the archaeologists of 2003 will, I hope, look back at our struggles over acidfree paper and legible labels in 1993 with fond amusement.

I have recently been reminded of the possibility of an ironic circularity in the problem of archaeological curation. This involves the fact that the potential recoverable information of most curated collections exceeds our technological and organizational ability to analyze and record it. This is one part of the reason for keeping all of this stuff: in the back of our minds lies the thought that, 'later', if that time ever comes, we ourselves or someone else will 'get back' to that stuff and take another look at it. It is also true that every site produces its whatzits, its 'ceremonial objects' and unintelligible, if vaguely familiar, fragments of something else. Parts of a collection which are not diagnostic, not fully understood or not fully explicated, are not likely to be featured in reports, are not likely

to be conserved, and are not likely to be carefully curated in displays or type collections. They are likely to be in dead storage. It is sometimes tempting to resent the space and attention taken up by such material. And, all too frequently, such material receives less storage attention than more prominent parts of the assemblage.

Nicola Longford's recent research with iron points out the circularity to which this situation can give rise. Unidentified iron is assumed, for the most part correctly, to be unidentifiable iron, by current standards and with current resources, and is thereby resigned to generalized, dead, bulk storage. Since it cannot be categorized or dated, it tends not to be described or analyzed in any detail, if at all, and not to be conserved. Lacking, almost always, the kinds of specific environmental control which iron particularly requires, and which untreated iron requires even more so, the iron gradually (or rapidly, as the case may be) disintegrates. Because it has disintegrated, because it has not been elaborately recorded or described, it will almost certainly never be identified.

The danger here is that we will limit our future ability to analyze or reanalyze physical data through the loss of vulnerable portions of that data in storage. Eventually, given a long enough time in an uncontrolled environment, the entire database, except perhaps for ceramics and lithics, will be unusable. And in that case, all of our good intentions and time and money spent on storage will have been wasted. Given the generally successful breadth of archaeological analysis, it would seem just as bad to paint ourselves out of a corner as into one, and we can do both if we continue to amass data for which we cannot adequately care.

What we need just as much as new and better storage systems are new and better uses for what we have in storage. Ms. Longford calls for more archaeology to take place in storerooms in the future, and I heartily second her prescience. It is very hard to take storage issues seriously if we do not, by implication, take the collections to be stored equally seriously. Sooner or later, curation constraints may force archaeology to try to agree on the fundamental significance of every part of its ever increasing fund of physical and analytical data. Applying adequate curatorial standards to all the many classes of that data can help ensure that, if that day ever comes, something significant will be left to discuss.

ANNOUNCEMENTS

• Publication on Cemeteries: A long-term research project has recently concluded on the historical archaeology of cemeteries with the preparation of a book-length bibliographic guide by Edward L. Bell (Massachusetts Historical Commission). Direct inquiries and widely published requests for information were sent out to State Archaeologists, historic preservation officials, and scholars in Canada, England, and the United States. Over a hundred individuals generously contributed research material to the project. Vestiges of Mortality and Remembrance: A Bibliography on the Historical Archaeology of Cemeteries will be published by Scarecrow Press, Inc. (Metuchen, N.J., and London), in late 1993 or early 1994. The

book includes a scholarly overview of the subject and over 1,900 references indexed by keyword on archaeological survey and excavation reports, the physical anthropology and demography of historical populations, the history and anthropology of death practices, gravestone studies, and the literature on law, repatriation, and curation (including the "reburial" issue). Both published material and the "grey" literature are included in this comprehensive work. It is hoped that Vestiges of Mortality and Remembrance will be a helpful research tool for archaeologists, physical anthropologists, historians, material culture specialists, cultural resource managers in the public and private sectors, and other groups involved in the study and preservation of historical cemeteries. If interest develops in this first attempt at a comprehensive research guide, it is possible that an expanded and revised edition of the book may be planned for the future. Contributions to the bibliography may continue to be sent to Edward L. Bell (Massachusetts Historical Commission, 80 Boylston Street, Boston, MA 02116-4802). Information on the book may be obtained from the publisher (Scarecrow Press, Inc., P.O. Box 4167, Methuchen, NJ 08840, Tel. 800/537-7107 or 908/548-8600).

• Treatment Plan for Isolated Historic-Era Refuse Deposits Planned: small, geographically isolated historic refuse deposits pose a management problem throughout the western United States. In the first place, they are extremely common. Second, due to their modest research value they have received highly inconsistent consideration in state and federal planning. Some have been studied in detail, while others have been ignored or needlessly protected. This has led to considerable confusion and frustration among planners, agencies, archaeologists, and the public.

To address this problem, the California Office of Historic Preservation initiated development of a treatment plan for such resources in the late 1980s. The plan was envisioned as an efficient and systematic way to evaluate small, isolated historic refuse deposits within the context of regional, national, and global changes in technology, lifestyle, and other related themes. The underlying assumption of the plan is that while these resources may have limited value when considered by themselves, they can contribute incrementally to the study of important questions about history when considered collectively. The plan is being designed to ensure the recovery of that important information.

Efforts are now underway to complete the small, isolated historic refuse scatter treatment plan. Several challenges will need to be addressed during its development. Those challenges include definition of the resource type, the level of characterization needed to recover their important data, the level of expertise/training needed to apply the treatment measures, and the manifold technological, behavioral, and historical associations of such scatters. To address these issues, appropriate data collection measures will need to be balanced against practical implementation procedures, while minimizing the risk that individually significant resources qualify for the proposed treatment.

Completion of a draft treatment plan is anticipated by the spring of 1994, with a revised version available by the summer of 1994. If you are interested in actively participating in the

development of the plan or would simply like the opportunity to comment on it, please contact us at the addresses listed below. We would appreciate any insights and information about how SHA members have dealt with the evaluation and management of small, isolated historic refuse scatters. Thad M. Van Bueren, Caltrans-Environmental Division, 650 Howe Avenue, Suite 400, Sacramento, CA 95825, 916/263-3404 and Gary Reinoehl, Office of Historic Preservation, P.O. Box 942896, Sacramento, CA 94296-0001, 916/653-5099.

• Summer Fellowships, Deerfield: This spring six college undergraduates from across the nation will be chosen to attend the Historic Deerfield Summer Fellowship Program in Early American History and Material Culture. For the thirty-ninth year a select group of students will live in Deerfield, Massachusetts from mid-June to mid-August while participating in an intensive examination of early American history, architecture, decorative arts, museum interpretation, and museum operations.

Each applicant appointed to the program is awarded a fellowship which covers tuition, books, and visits to other museums. The fee for room and board for nine weeks is \$1,750. Financial aid for room and board is available for students with demonstrated need. Applicants to the program must be undergraduate students of sophomore, junior, or senior standing in a college or university as of January 1, 1993. Completed applications will be reviewed after April 1, 1994.

Interested students should request a Fellowship brochure and application by writing to Dr. Kenneth Hafertepe, Director of Academic Programs, Historic Deerfield, Inc., Deerfield, MA 01342, or by telephoning 413/774-5581.

EMPLOYMENT OPPORTUNITIES

Reported by Sara F. Mascia

- Reminder: Please send all correspondence for the Clearinghouse for Employment Opportunities to: Sara F. Mascia, Dept. of Archaeology, Boston University, 675 Commonwealth Ave., Boston, MA 02215. Telephone 617/353-3415 (Office), FAX 617/353-6800. DO NOT send Clearinghouse mail to the SHA offices.
- Employment Seekers: send one copy of your resume, including a daytime phone number, along with a cover letter stating any preferences such as region, type of job or duration of job to the above address. Once received, your resume is placed on file and as jobs open that fit your qualifications and requirements, notice of these will be sent to you. It is also possible that you may be called by a prospective employer (if you do not wish to be called, please so note in your cover letter). It is up to you to respond to the notice, following normal or specified application procedures.

• Employers: send a position description and note any relevant requirements such as a regional experience or specialized skills. Copies of the description will be sent to qualified prospects. An application deadline or notification once a job is filled would be appreciated. If for any reason you do not want your position advertised in the *Newsletter* please note that at the top of your announcement. If a position must be filled immediately, call and a check through the files may provide some leads.

IOB OPPORTUNITIES

 State of Louisiana, Division of Archaeology: State Archaeologist

The Louisiana Division of Archaeology seeks an archaeologist to serve as State Archaeologist and Director of the Division of Archaeology.

Responsibilities: direct statewide program of archaeological resource identification, documentation, and education; develop plans and policies; manage personnel including division staff and archaeologists at regional offices; review, comment, and develop agreements related to Section 106 reviews; advise university, State and Federal archaeologists on laws, regulations, and policies governing archaeological investigations; and expand the archaeological outreach and education programs. Qualifications: Ph.D. in anthropology plus four years of professional level experience in New World archaeological research, administration or management. Applications can be obtained by contacting Mr. Eddy Martin, Office of Cultural Development, P.O. Box 44247, Baton Rouge, LA 70804, 504/342-8200. EOE. December deadline for applications.

· Assistant Curator, Historical Archaeology

N. Michigan museum system seeks experienced historical archaeologist for on-site supervision of field excavation and laboratory processing, material culture analysis, statistical analysis, report writing, professional papers and speaking. MA required, Ph.D. preferred, in historical archaeology with minimum 3 seasons experience at supervisory level on 18th and 19th c. colonial and early American sites in the Eastern United State. Successful candidate will have demonstrated computer literacy and material culture analysis skills. Experience conducting archaeology in a museum setting and ability to communicate with the public required. Annual contract position. High 20's + benefits. For application package call Mackinac State Historic Park, 517/373-4296. EOE.

• Northwestern State University: Archaeologist

Northwestern State University seeks an archaeologist to serve on the faculty of the Department of Social Sciences. The successful applicant will teach semester length courses in archaeology and anthropology as well as workshops and short courses. This person will maintain an active research and publication program as well as work closely with the National Center of Preservation Technology and Training.

Qualifications: Ph.D. in anthropology with a specialization in North American archaeology and experience in both historical

and prehistoric archaeology. Extensive field experience and publications desired. Computer skills and/or familiarity with remote sensing is expected. This is a tenure track position. Send letter of intent and vita to Dr. Kathleen Byrd, Head, Department of Social Sciences, Northwestern State University, Natchitoches, LA 72497, 318/357-6195. Applications due February 1, 1994. Position to begin August 1994. Northwestern State University is an EEO/AA/ADA employer.

College of William and Mary: Historical Anthropologist the Department of Anthropology anticipates a tenure-track appt. in historical anthropology at the rank of assistant or associate prof. beginning fall semester 1994. The department with eleven full time faculty members is looking for a cultural anthropologist who can contribute to our historical archaeology oriented graduate program. Research should focus on Europe and comparative colonialism. Ouantitative skills and wilingness to teach courses on quantitative research methods desirable, but not required. The College of William and Mary is an equal opportunity, affirmative action employer. Members of underrepresented groups (including women, people of color and persons with disabilities) are strongly encouraged to apply. Review of applications will begin on November 16, 1993. Send vita, and names of three references to Tomoko Hamada, Chairperson, Department of Anthropology, College of William and Mary, Williamsburg, VA 23187-8795.

Mary Washington College, Department of Historic Preservation: Historical Archaeology

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 the Ph.D., must have attained a recognized position of prominence 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 January 31, 1994. Mary Washington College is deeply committed to affirmative action and encourages minorities and women to apply.

FUTURE CONFERENCES/WORKSHOPS

- After the Backcountry: Rural Life and Society in the Nineteenth-century Valley of Virginia: Call for Papers by March 15, 1994. Papers are solicited for presentation at an interdisciplinary conference on society and economy in the nineteenth-century Valley of Virginia, to be held in the spring of 1995 at Virginia Military Institute. Possible topics include economic activity, especially agriculture, but also nonfarm economic endeavors; material culture; household and family; gender relations; and slavery and its aftermath. Proposals on other topics are invited. Proposals from scholars in disciplines other than history, e.g., American studies, anthropology, archeology, demography, economics, environmental studies, and folklore, are welcome. Also, to promote comparative perspectives, proposals not on the Valley per se are encouraged, if they address methodological or substantive issues that arise in the analysis and interpretation of agrarian, small-town societies of the post-frontier era in middle-America. The goals of this conference are to assess current scholarship on the nineteenth-century Valley of Virginia and to suggest directions for future research. The organizers intend to edit papers resulting from this conference for publication as a collection of essays. Contact: Kenneth E. Koons, Department of History and Politics, Virginia Military Institute, Lexington, Virginia, 24450, 703/464-7338 or Warren R. Hofstra, Community History Project, Shenandoah University, Winchester, Virginia 22601, 703/665-4564.
- Artifacts from Wrecks: The Archaeology of European Material Culture from Shipwrecks of the Late Middle Ages to the Industrial Revolution. September 9-10, 1994, in Wales. First Call for Papers. This international conference, jointly organized by the Society for Post-Medieval Archaeology and the Nautical Archaeology Society, will concentrate on the period c.1485-1785, covering material from well-dated shipwrecks and submerged sites, the composition of cargoes, artifacts as evidence of trade, and their scientific analysis. Sessions will be devoted to recent research on particular artifact classes such as pottery, weapons, dress accessories, personal possessions and raw materials.

Offers of papers/posters displays should be submitted for consideration with a 100 work abstract, by December 20, 1993. Details of the conference organization will follow. Send information to: Dr. M. Redknap, Department of Archaeology and Numismatics, National Museum of Wales, Cathays Park, Cardiff CF1 3NP. Fax 0222-667-320.

• Delaware Seminar: The 1994 program of the Delaware Seminar in American Art, History, and Material Culture will include the following speakers - on February 25, Brock Jobe, "The Impact of Chinese Design on Queen Anne Furniture in England and its American Colonies," - on March 24, Sarah Bradford Landau, "The 'First Skyscrapers': Innovation in the 1870," - on April 18, Barbara Carson, "Housing Travelers in the Early National Period," - on May 10, Richard Powell, "Cinque, Nathaniel Jocelyn, and Robert Purvis, Antislavery Portraiture

and Patronage in Jacksonian Philadelphia." Contact: Prof. Damie Stillman, Dept. of Art History, University of Delaware, Newark, DE 19716. 302/831-8415.

- New York State Archaeological Association 1994 Annual Meeting: to be held at the Eddy Farm Resort Hotel in Sparrowbush, New York, on April 29, 30, and May 1. Call for Papers. Abstracts for papers must be received by March 1, 1994, for consideration and program listing. Contact: Edward J. Lenik, Program Chair, c/o Sheffield Archaeological Consultants, P.O. Box 437, 24 High St., Butler, NJ 07405. 201/492-8525 (days).
- Society of Bead Researchers: a meeting is tentatively scheduled for 7:30 PM, March 24, 1994, at the Hotel St. Francis, Sante Fe, New Mexico, at Bead Expo '94. Contact Karlis Karklins for additional information.
- 1994 Mid-Atlantic Archaeological Conference: to be held in Ocean City, Maryland from April 8th to 10th, 1994. Proposed sessions include: Late Woodland Archaeological Research in the Mid-Atlantic and Beyond: Models to Investigate, chaired by Roger Moeller, (Archaeological Services, P.O. Box 386, Bethlehem, CT 06751); Geographical Information Systems in Archaeology: Tools for Management and Research, chaired by Maureen Kavanagh (Office of Research, Survey and Planning, Maryland Historical Trust, 100 Community Place, Crownsville, MD 21032); It's the Law, That's Why: The Effects of OSHA and Other Regulations on Archaeologists, chaired by Louise Akerson (Baltimore Center for Urban Archaeology, 800 East Lombard Street, Baltimore, MD 21202); Hypothesis Building and Hypothesis Testing in Prehistoric and Historic Archaeology in the Mid-Atlantic, chaired by John Martin (Center for Public Archaeology, Department of Anthropology, Douglass Campus, Rutgers University, P.O. Box 270, New Brunswick, NJ 08903); Current Research in Historic Archaeology chaired by Meta Janowitz (Cultural Resource Group, Louis Berger and Associates, 100 Halsted Street, P.O. Box 270, East Orange, NJ 07019); and Current Research in Prehistoric Archaeology chaired by Douglas McLearen (V.C.U. Archaeological Research Center, Virginia Commonwealth University, 1814 West Main Street, Box 3029, RIchmond, VA 23284). Please send ideas for additional organized sessions to the overall program chair, Silas D. Hurry, Historic St. Mary's City, P.O. Box 39, St. Mary's City, MD 20686 (301/862-0973).

MILITARY SITES ARCHAEOLOGY FORUM

Reported by Daniel J. Crouch

Artifacts for Sale in Oklahoma: The June-July and the August-September issues of *Headquarters Heliogram*, newsletter of the Council on America's Military Past, contained an item

about horse and mule shoes being sold in Oklahoma. According to this, the shoes are part of a large collection which had been exposed by an electrical contractor working on property which was once part of Camp Supply. This post, located on the North Canadian River in northwestern Oklahoma, was established as an advanced supply base for Sheridan's winter campaign of 1868. Late in that year a column with the Seventh Cavalry under Custer and with supporting troops, all under the command of General Alfred Sulley, began its construction in the location chosen by Sheridan. Following the winter campaign, Supply was retained to protect and supply the Cheyenne and Arapaho Indian agency.

Following the initial, accidental discovery, archaeological controls were applied to the excavation of the remainder of the deposit. Although I have not seen the published findings of this excavation, it was determined that the cache represents spoil from the fort's blacksmith shop. Indeed, that is one of the selling points for the souvenirs. According to the August-September feature (page 13, column 4) which repeated the earlier item, the shoes "dating from the fort's active dates of 1869-1879, are mounted on plaques and are available for a \$50 donation to the Historic Fort Supply Historical Foundation, a 501(c)(3) tax deductible, tax exempt organization." Further, "Noting that adequate shoes are being retained 'for future historians,' the society's president Dr. John B. Carmichael said that souvenir plaques can be obtained from . . . " the Ft. Supply Military Park Supervisor. This individual is, I believe, an employee of the Historical Society.

After seeing the initial article I made inquiries. In a letter dated 31 August 1993, Dr. Bob L. Blackburn, Deputy Executive Director of the Oklahoma Historical Society, replied to my inquiry, confirming the facts of the sale and providing other details as well. His letter is quoted here at length [with his permission].

First, the horseshoes were not found on property controlled by the Oklahoma Historical Society. They were discovered by an electrical contractor working for the State Department of Mental Health, which has no official responsibility for turning over artifacts to another state agency. Fortunately, they called our staff member at Fort Supply and asked him to look at the discovery. After they finished excavating the site, it was discovered that more than 800 horseshoes had been found, all of a similar type and most rusted together and largely unidentifiable. At that point, we informed the Mental Health Department that we wanted the horseshoes but that we did not have storage space for such a large collection. We also asked for the assistance of Dr. Bob Brooks, State Archaeologist, at the University of Oklahoma.

First, Dr. Brooks suggested that the entire collection as a whole should be assessed, which the Mental Health Department allowed us to do. Then, based on that information, again according to Dr. Brooks "a series of specimens should be set aside as a type index on preservation for this artifact category. This would function much like that utilized for coins." These "specimens," approximately 20 percent

of the entire cache, were transferred to the Oklahoma Historical Society where they are awaiting more detailed analysis. The remainder of the horseshoes which were in an advanced state of deterioration remained with the Department of Mental Health, which went through state law to surplus the property. A local support group for the Fort's preservation, Fort Supply Foundation, Inc., submitted the highest bid for the surplused horseshoes and began a fund-raising campaign using those horseshoes as souvenirs. The foundation agreed that all funds raised through the sale of the horseshoe plaques would be used in our preservation and restoration efforts at Fort Supply. We have had no official role in the production or marketing of the plaques.

In summary, this arrangement was the best possible compromise involving three state agencies. Bottom line, we were given the right to analyze the entire collection and preserve the best specimens for future research. We also preserved the good relations with the Mental Health Department, whose goodwill is essential for our long-range preservation efforts at the old fort.

This will not affect our general policy regarding collections. The Oklahoma Historical Society would never sell or distribute an artifact out of its own collections. In fact, we have a very strict policy on the control of accessioned items, and if the discovered collection on the Department of Mental Health's property had been anything other than horseshoes, we probably would not have worked with that department on such a compromise. As Dr. Brooks wrote in his letter, we "would not necessarily extend this kind of action to other artifact categories. However, with horseshoes, we are dealing with a special condition.

This is not the first time that unusual collection management procedures have been tried. Remember for example, the storm surrounding the Smithsonian's decision to sell swatches of fabric from early airplanes in its collections which were being recovered. Not archaeological perhaps, but still a dispersal of what is in some sense historic fabric. And certainly it is easy to sympathize with the lack of adequate space to house growing collections, and the need to work cooperatively with other agencies. However, many questions remain, and perhaps particularly so for the Historical Society, in which is housed the function of the Oklahoma SHPO. What procedures were used to evaluate the collection before it was sampled? Were other repositories considered before it was decided to permanently scatter 80 percent of the collection? State surplus property procedures were used to dispose of these items. This I assume means that they went to the highest bidder. Certainly if this is a precedent, the community of bottle collectors will want in the future to keep a sharp eye out for state agencies which have too little storage capacity. And what is it about horseshoes that sets them apart from other types of artifacts?

If you have thoughts on this or know of other innovative solutions to collections over-crowding, of the relative expendability of one class of artifact over another, of the correct sampling strategy for retention of a portion of a collection, or any of the other issues which surround this situation, please write. Let me know what if any of your comments you would allow me to reprint. I will keep confidential that which you so designate. I am particularly anxious to hear how this policy, either in specific or in general, might affect your work as a military archaeologist.

CURRENT PUBLICATIONS

Reported by Priscilla Wegars

To obtain a listing in this section, send information on your publication (typed, doubled-speced, following the format below) to Priscilla Wegars, Current Publications Editor, SHA *Newsletter*, Laboratory of Anthropology, University of Idaho, Moscow, ID 83844-1111. Please include price and ordering information.

Spude, Catherine Holder, Douglas D. Scott, Frank Norris, David R. Hulesbeck [sic], Linda Scott Cummings, and Kathryn Puseman

1993 - Archeological Investigations in Skagway, Alaska, Volume 4: Father Turnell's Trash Pit, Klondike Gold Rush National Historical Park, Skagway, Alaska, United States Government Printing Office, Denver. Approximately 150 pages, illustrations (maps; recent and historic site and artifact photographs and drawings), appendices, bibliography. No index. Copies available free of charge while supplies last. Contact Catherine H. Spude, Archeologist, National Park Service, Denver Service Center-TWE, PO Box 25287, Denver, CO 80209.

In the gold rush port city of Skagway, Alaska, the Catholic priest Father Philibert Turnell deposited his household trash in an abandoned privy pit sometime between about 1914 and 1918. A portion of that undisturbed trash was recovered during an archeological testing program. It included a substantial amount of construction debris, probably related to the remodelling of the priest's rectory. More importantly, at least 245 non-structural artifacts provide a great deal of information about the personal habits of one of Skagway, Alaska's earliest leading citizens on the eve of the national prohibition era. The data suggest he was a very literate man who enjoyed fine brandy, tobacco from a pipe, steaks, exotic fruits and fancy European ceramics. His aristocratic upbringing is evident despite the fact that he was not wealthy.

The collection offers good comparative material to other pre-prohibition era assemblages. Of some interest were the presence of a large number of beverage bottles. A minimum of 72 bottles once containing an alcoholic beverage were supplemented by 45 bottles that held non-alcoholic beverages. A comparison with other artifact collections taken from family and bachelor male contexts suggest that Father Turnells' consumption of liquor was not abnormally high, but his use of non-alcoholic beverages was higher than in most other collec-

tions. These findings suggest that he was making an effort to please his temperate guests, and perhaps his own drinking habits, as first local, then national prohibition was enacted.

The archaeological data is supplemented by an examination of the prohibition era in Alaska, and Skagway in particular, and by the attitude of Catholics towards drinking.

Spude, Catherine Holder and Robert L. Spude

1993 - East Base Historic Monument, Stonington Island, Antarctic Peninsular: Part I, A Guide for Management, Part II, Description of the Cultural Resources and Recommendations. United States Government Printing Office, Denver. 168 pages, illustrations (maps; recent and historic site and artifact photographs including 8 color photos), appendices, bibliography. No index. Copies available free of charge while supplies last. Contact Catherine H. Spude, Archeologist, National Park Service, Denver Service Center-TWE, PO Box 25287, Denver, CO 80209.

The National Park Service, assisting the National Science Foundation in an effort to clean-up their abandoned research bases, documented the oldest scientific exploration base camp remaining in Antarctica. East Base was one of two camps established by Admiral Richard E. Byrd on his third expedition in 1940. The camp was occupied by 26 men from March 8, 1940 to March 22, 1941, at which time the explorers were evacuated precipitously by plane, taking only their scientific records and the clothing they were wearing, fully intending to return the following year. World War II prevented reoccupation of the base until 1947, when a privately funded expedition began another year's residence. The Ronne Antarctic Research Expedition included two women, the first to winter-over on the continent.

Three of the original six prefabricated wooden buildings still remain, as well as a massive amount of material culture associated with the first (1940-1941) United States Antarctic Service expedition: two tracked vehicles and an airplane engine; caches of coal, building supplies, and canned goods still in their wooden crates; two extensive trash dumps; and lesser scatters of domestic trash, structural debris, human and dog wastes, and seal remains. The dumps are unusual in that they contain undamaged goods thrown out of the buildings by the second expedition and intervening visitors, rather than the usual waste materials. The abacterial Antarctic environment permitted exceptional preservation of organic materials, and the remoteness of the site at 65 degrees south latitude has prevented extensive looting.

The report documents the material culture remaining at the site and makes management recommendations to the National Science Foundation for the stabilization, clean-up and interpretation of the base. The recommendations were implemented by the NSF the year following the study, and their effort was reported by the National Geographic Society in their March 1993 issue.

The report should be of interest to archeologist, historians and curators interested in World War II-era material culture, polar and frontier exploration, and the protection of isolated sites.

Briefly Noted: Authors who wish to obtain an additional, longer listing are invited to submit one following the instruction at the head of this section.

Birmingham, Judy

1990 - Wybalenna: The Archaeology of Cultural Accommodation in Nineteenth Century Tasmania. Sydney: Australian Society for Historical Archaeology. 202 pages, bibliography, no index, illustrations (site and artifact photos; plans and sections). Price Austr. \$36.00 (pb) includes shipping. Order from Publications Officer, ASHA, P.O. Box 220, University of Sydney 2006, Australia.

Cameron, Catherine M. and Steve A. Tomka, editors

1993 - Abandonment of Settlements and Regions: Ethnoarchaeological and Archaeological Approaches. Cambridge: Cambridge University Press. 201 pages, chapter bibliographies, index, illustrations (maps, plans, site photos). Price \$49.95 (hb). Order from your bookseller.

Hodder, Ian

1992 - Theory and Practice in Archaeology. London: Routledge. 285 pages, chapter bibliographies, index, illustrations (maps, plans). Price \$54.95 (hb). Order from Routledge, Chapman, and Hall, 29 W. 35th St., New York, NY 10001.

Shackel, Paul, editor

1993 - Interdisciplinary Investigations of Domestic Life in Government Block B: Perspectives on Harpers Ferry's Armory and Commercial District. Harpers Ferry, VA: National Park Service. Ca. 400 pages (chapter paging), bibliography, no index, illustrations (maps, plans, sections, site and artifact photos), 3 microfiche. Available free, while supplies last, from Dr. Stephen R. Potter, Regional Archaeologist, National Capital Region, 1100 Ohio Dr., SW, Washington, DC 20242.

Smith, Steven D.

1993 - Whom We Would Never More See: History and Archaeology Recover the Lives and Deaths of African-American Civil War Soldiers on Folly Island, South Carolina. Columbia: South Carolina Department of Archives and History. 50 pages, index, illustrations (maps, site and artifact photos). Price \$6.75 (pb) postpaid. Order from South Carolina Department of Archives and History, P.O. Box 11669, Columbia, SC 29211.

Walker, James W.

1993 - Low Altitude Large Scale Reconnaissance: A Method of Obtaining High Resolution Vertical Photographs for Small Areas. Denver: National Park Service. 127 pages, bibliography, no index, glossary, illustrations (site and equipment photos). Available free from Steven L. DeVore, Archeologist, Interagency Archeological Service, Division of National Preservation Programs, National Park Service, Rocky Mountain Regional Office,12795 W. Alameda Parkway, P.O. Box 25287, Denver, CO 80225-0287.

OPINION

Let the "Aye's" Have It, Please. An open letter to the Editorial Board of Historical Archaeology

L. Daniel Mouer Virginia Commonwealth University

In the October 1991 issue of the SHA Newsletter (Vol. 24, Number 3) Parker Potter presented a plea concerning the journal's proscription of first person pronouns. While Potter wrote partially with pen in cheek, his message was a serious one. Since we've seen no revised style guidelines for the journal, I would like to underscore Potter's position and reanimate the discussion. All journals have style guidelines. Insofar as these provide some ease of editing and reading, they are useful and warranted. Although I am certain it is not the (conscious) intention of either the editor or the editorial board of Historical Archaeology to act as censors, certain style guidelines clearly have such an effect. Those I find particularly objectionable are the prohibitions against the first person and footnotes (or end notes).

Over the past two or three decades postmodernism in its various guises has become entrenched in the social sciences and humanities. This has led to a lengthy and penetrating reflection on the importance of rhetoric and style in framing our work. In anthropology, for example, we've had important studies of writing forms in ethnography, from analysts such as Clifford Geertz (Works and Lives), James Clifford (The Predicament of Culture), Renato Rosaldo (Culture and Truth: The Remaking of Social Analysis), and the various contributors to Writing Culture (edited by James Clifford and George Marcus). Historical archaeology has many outcomes, but among the most important are its written works. One observation made by Potter (and dozens of other scholars in other fora) is that writing which removes the writer, and which relies on frequent use of passive voice, is essentially a rhetoric designed to sound "scientific" and authoritative. By removing the writer from an archaeological article, the reader is meant to be believe that it is not an archaeologist who makes claims, assertions, and interpretations; the piece, instead, is framed as truth itself, revealed by pure logic and correct methods.

Many of us who choose to work in modes that are interpretivist, critical theoretic, feminist, humanist or otherwise different from the traditional "positivist" manner of scientistic archaeology would prefer to present our written work in other forms. Many prefer to write essays, rather than "papers." The essay nearly always has a personalized voice. The reader is aware that the writer is expressing an opinion, an interpretation. It is the writer's burden to convince the reader of his/her authority and competence through careful argument and an appropriate choice of writing style, not through a demonstration of mastery of conventionalized scientistic rhetoric and rote citation of appropriate sources.

For these reasons, the first person pronoun and the active voice has not been avoided in this author's writings. To rephrase: I have used the first person pronoun and the active voice in my written work. I am reminded of a remark made to me years ago on a first reading of my doctoral dissertation by

one of my graduate school advisors. Upon encountering the term "I feel..." twice in my 400-page text, this reader reacted vehemently by stating, "Neither I nor any other reader gives a damn about what you feel, think, or believe." Much of my career has been devoted to the proposition that nothing could be further from the truth. A great deal of what I write is comprised of what I feel, I think, or I believe. What's more, I feel, I think, and I believe that this is always the case, even when an article or report is written in the authoritative neutral voice of science.

Footnotes or end notes are a traditional part of a scholarly essay. While few archaeologists would argue that the social sciences' system of referencing other works is far superior to that used in the humanities, that is no reason to abandon notes. Notes have evolved over the years as a method of demonstrating that a scholar has critically examined the sources he/she cites and the issues that raise, and to remind readers that all assertions bear scrutiny and require qualification. Notes engage the informed and interested reader in the process of discourse. If I write a statement such as, "The sky is green (Binford 1968, South 1977)" without further comment, I have called on Binford and South to authorize the truthfulness of my assertion (and to show that I read all the right stuff and must know what I'm talking about). If, on the other hand, Binford actually said that the sky appears to be green on Tuesdays and Thursday, and South actually used the term "verdigris," I may need to critically examine the context and content of their statements in a note that is quite aside from my main discussion. I, for one, have a very difficult time writing without notes, as do most historians, critics, and a great many anthropologists and archaeologists.

Over the past 20 years I have published numerous papers, articles and chapters, but none of these has been in Historical Archaeology. I had to withdraw my invited paper from a symposium in the journal (Henry Miller's Chesapeake session from the Savannah meeting) because I could not conform to HA style guidelines without fundamentally changing what the paper was. Following the 1991 conference in Richmond, several colleagues suggested that I submit my opening comments to the Plenary Session on postmodern archaeology as a paper to HA. I would love to do so, but I cannot imagine it would be accepted in any form I would be willing to publish. I believe that a search of the historical archaeology literature of recent vintage will show that many productive practitioners are putting their writings in book chapters, magazine articles, and other outlets which do not similarly constrain style. If I'm correct in this judgement, then our journal no longer adequately represents historical archaeology as a discipline. Just as Clifford Geertz, Jack Goody, and many others have chosen to publish in journals like Daedalus or The Yale Journal of Criticism rather than the mainstream journals of anthropology, many potential contributors who have philosophical and theoretical differences with traditional archaeological writing are being shut out of Historical Archaeology by style guidelines.

Finally, if HA were opened up to allow essays and more experimental written work, we might well find that there are those other than historical archaeologists who would like to read the journal. As it stands, Historical Archaeology remains the bastion of an in-group in which members know how to walk the walk and talk the talk. It takes a secret handshake to get in,

and others are left out. It's a very well-edited, highly professional journal, but it does not reflect the range of philosophies and approaches of SHA's membership. The problem is serious enough that I believe it deserves further discussion and, if necessary, a vote by the membership.

SPECIAL REPORT

SHA's Washington Office Keeping the Society Abreast of Changes

> Reported by Kathleen Schamel CEHP Incorporated

As the new Administration has begun to chart the future course of federal policy concerning cultural resources and archaeology, the Society for Historical Archaeology has endeavored to make its voice heard in the process. CEHP Incorporated is privileged to serve as the SHA's representative in Washington, D.C.

The Society contracted with CEHP to provide government relations and policy analysis. By maintaining a close relationship with Congressional members and staff, as well as federal personnel, we are able to convey information to the SHA about those issues of interest to them. This interaction with the Washington establishment takes many forms, as described below.

CONGRESS

Congressional action can be divided into two parts: (1) authorization, whereby standing committees in the House or Senate oversee federal programs and agencies and set goals for those agencies, or (2) appropriation, with appropriations committees determining funding allocations for those same federal programs and agencies. This two-fold process also receives direction from the President, who takes the lead in setting overall policy and budget, but then relies upon Congress to fine tune the issues.

Every spring, Congressional Appropriations Committees go about the business of setting spending policy. SHA decided to focus its efforts on the National Endowment for the Humanities budget since NEH is the primary funding sources for historic archaeological research and no other national preservation organization was making NEH a priority. In May, CEHP drafted testimony which Dr. Henry Miller, Chairman of the SHA Governmental Affairs Committee, presented before the House Appropriations Subcommittee on Interior and Related Agencies. Dr. Miller highlighted several areas in the National Endowment for the Humanities budget which were necessary to ensure the preservation of America's heritage. In a time of severe fiscal constraints, the necessity of making the case for funding programs within the Endowment like the divisions of Fellowships and Seminars, Public Programs, and Preservation and Access cannot be underestimated. The fact that these programs were able to achieve a degree of success in maintaining sufficient funding levels was due to organizations like the SHA making the case for archaeological promotion and protection before the Congressional appropriators.

Congressional hearings convened by other committees often touch upon cultural resources and archaeological issues. The committees with jurisdiction over these issues include the Natural Resources, Merchant Marine, and Public Works and Transportation Committees in the House and the Energy and Natural Resources, Environment and Public Works, and Indian Affairs Committees in the Senate. The primary committees—the House Natural Resources and Senate Energy—usually conduct oversight and authorization hearings on the programs of the National Park Service, Bureau of Land Management, and Fish and Wildlife Service.

CEHP's legislative specialist, Grant Farrar, attends many of these hearings to ascertain what items may be of specific interest to the SHA. These hearings occur when Congress is in session, and during a typical week, there may be one or as many as three hearings that may specifically touch upon issues and programs that are of interest to the SHA. Grant condenses his notes from those hearings into memoranda, and sends these along to Dr. Miller, and Dr. Barto Arnold, president of the SHA. Any available testimony or written statements can be sent along as well. In addition to covering hearings, tracking pertinent legislation is important. CEHP informs SHA about certain significant bills, and follows their progress throughout the legislative process.

The SHA's Governmental Affairs Committee develops priority recommendations based on the information CEHP provides. The Committee then presents the recommendations to the SHA Board which approves the government relations agenda. Close coordination is maintained at all times.

The major issue that SHA has been involved in this year has been the implementation of the Native American Graves Protection and Repatriation Act (NAGPRA), which was signed into law in 1990. January saw the first Congressionally-mandated funding be targeted towards carrying out the requirements of the law. The Society worked with a NAGPRA coalition of universities, museums, and tribes to advocate \$10.7 million for the program. This funding would have allowed grants to go to archaeological professionals, museums, universities and tribes to complete summaries and inventories of Native American artifacts in their possession. CEHP helped generate several letters for the SHA on this issue, and sent them to Representatives like Sidney Yates (D-IL), Chairman of the House Appropriations Subcommittee on Interior, which oversees NAGPRA funding.

The SHA also participated in hosting a reception in September for members of the NAGPRA Review Committee. By joining with the archaeological community, federal and private entities, in recognizing the first steps taken in enacting this law, SHA works to stay involved in ensuring the objectives of NAGPRA are achieved.

SHA is also tracking the newly introduced National Maritime Heritage Trust bill sponsored by Representative Tom Andrews (D-ME). This legislation, which has not had hearings yet, has the potential to enhance protection and interpretation of historic shipwrecks. In addition, there are dozens of historic park and historic trails bills pending in Congress.

FEDERAL AGENCIES

SHA's work in the Nation's capitol extends beyond hearings and receptions. The Society relies on CEHP's contacts in the professional archaeological community to keep pace with the newest developments in the field, as well as to glean information on federal programs and professionals. This information is passed along to Dr. Miller and Dr. Arnold to help keep them abreast of events.

Turnover at all levels of the federal government continues, as the Clinton administration completes the long process of installing new personnel. We will assist the SHA in establishing relationships with the new policy makers such as Jim Baca, director of the Bureau of Land Management, and Roger Kennedy, director of the National Park Service. Communication between CEHP and Dr. Miller ensures that when we have the opportunity to correspond with administration officials, the concerns and comments of the SHA reach the appropriate officials. CEHP will set up meetings between SHA Board members and key administration representatives as needed.

Various federal agencies are reviewing and implementing new initiatives relating to historic archaeology. The National Park Service recently released a report of the Civil War Sites Advisory Commission on the status of Civil War sites and battlefields around the country. Of 384 principal Civil War battlefields identified by the Commission, 50 should be given priority attention for protection. Congressional legislation in response to the report's findings is possible. The Park Service is also engaged in holding a series of meetings to determine professional standards for archaeologists under Section 110 of the 1992 Amendments to the National Historic Preservation Act. The Bureau of Land Management continues to develop its heritage education programs throughout the country which has been very successful in developing programs to educate school children about heritage resources. The Forest Service's Passport in Time program has brought volunteers into their heritage program. The Fish and Wildlife Service has produced a report entitled Broken Homes on the Range, focusing on the old buildings and historical landmarks which are deteriorating on refuge lands.

HOW TO HELP

In a time when members of Congress are subjected to a multitude of different issues, an effective and interested SHA membership can ensure adequate attention is paid to areas of special concern to the Society. Letters remain the most frequent means of contacting Members. Following are their Washington mailing addresses:

The Honorable (Name) US Senate Washington, DC 20510

The Honorable (Name) US House of Representatives Washington, DC 20515 Each time you write, you should provide the following information:

- Your relationship to the Member, ie. constituent, friend, donor
- · Clear statement of purpose of the letter.
- · Your personal concerns with respect to the issue.
- Your professional affiliation or job title.
- A note of whether this is an official communication from your association.
- Background information on your concern, keeping it as brief as possible.
- Most importantly, what action you would like the Member to take (eg, introduce or cosponsor a bill, vote for a bill, offer an amendment to a bill, etc.)
- Close by mentioning you look forward to the Member's response.

You may reach any Congressional office by phone by calling the Congressional switchboard at (202) 224-3121. As always, CEHP is ready to assist your efforts in contacting Congress.

The same process is useful when contacting federal employees. SHA members are encouraged to share their thoughts on federal regulations, cultural resources programs, and other thoughts on improving federal cultural resources programs.

SUMMARY

At first glance, the happenings on Capitol Hill and the rest of Washington may not seem related to the work and goals of the SHA. Yet by keeping track of the actions of the federal government and Congress, and assisting the SHA in acting forcefully on those issues of interest, the overall goal of the preservation of the nation's historic archaeological heritage is met. These programs help archaeologists, whether they are working in universities, or government agencies, or the private sector. Congressional and federal actions can provide new opportunities for archaeological work, or enhance the quality of work that is accomplished. The importance of SHA members communicating with us directly is key. This represents a task that we at CEHP are pleased to be engaged in. (This article prepared with the assistance of Grant Farrar).

CURRENT RESEARCH

NORTHEAST

Reported by Faith Harrington

CONNECTICUT

Bellamy-Ferriday House Museum: Mary Dieter, of Historical Perspectives, Inc., has completed three testing and monitoring projects at the late 18th century Bellamy-Ferriday House Museum. Referred to as "The Hay" and owned by The Antiquarian and Landmarks Society (A&L), the museum and its formal gardens are situated in Bethlehem. The lawn and entranceways are currently undergoing extensive changes in anticipation of increased public access. The A&L have incorporated archaeological considerations into their long range comprehensive plan for the buildings and grounds. The results of the monitoring and testing have provided insights into the manipulation of the landscape, including a prehistoric component, and the location and use of demolished outbuildings, including a kaolin pipestem deposit.

MAINE

Nahumkeag Trading Post: The 1993 field season of the Upper Kennebec Archaeological Survey conducted four weeks of field work at Agry Point in Pittston, the site of the Nahumkeag trading post, c. 1650-1676. The Upper Kennebec Archaeological Survey is funded by a grant from the Maine Historic Preservation Commission and matching funds from Old Fort Western, and under the direction of Leon Cranmer. This season has been the most rewarding to date of the four seasons of work at Agry Point. It was rewarding both for answering some of the questions which had been puzzling us for the past three years, as well as for recovering some exciting artifacts.

From the beginning of the excavations we believed we were dealing with two structures connected by a palisade. This years work has changed that assumption. Now the two structures appear to be one - a longhouse measuring almost 80 by 20 feet. The western portion of the structure (still called Structure 1) was timber-frame with wattle and daub construction, while the eastern part (Structure 2) shows no evidence of wattle and daub. The trenches previously thought to have been for palisades were actually builder's trenches in which posts were set for the wattle and daub structure. These post were spaced two feet apart with sleepers tied into them. No evidence of wood sills were found, but rather small, linear mounds of clay (unfired daub) were present where the sills should have been. It appears that the wattle may have been secured directly into the ground with the daub built up from the ground surface. The mounded lines of clay are the remains of the unfired daub walls.

The dimensions of the cellar, fully within Structure 2, proved to be about 30 by 6 feet. The cellar was probably wood lined and portions of the floor were covered with wood. A post hole and mold were found in the northeast corner of the cellar. Work in Structure 1 revealed more of the hearth measuring about seven feet wide; it consisted of three parts: a chimney base or fire back of large rock; a firepit of small rock (containing ash); and the front of the hearth, of large flat rocks with a wooden boarder around it.

Seventeenth century artifacts generally have been sparse. Although the numbers are still few, some very exciting objects were recovered. A silver Pine Tree shilling, a large type dating between 1667-1674, was found in a post mold in Structure 1. A smoker's companion, a tweezer type instrument used to pick up burning embers from a fire to light a pipe, was found in the cellar. A complete pipe bowl was found in the hearth. This is unique in that it is very small, which along with other attributes of the bowl suggests an early date for this piece. Two pipe bowl heel fragments were recovered with complete maker's marks stamped on them, both dating to the mid-seventeenth century. Also recovered were several sherds of manganese stipple decorated delftware, and a short iron wedge, chisel, or most likely, a calking iron, with a well battered end.

MASSACHUSETTS

Harwich United Methodist Church: University of Massachusetts Archaeological Services (UMAS) has completed a program of archaeological and documentary research at the Harwich United Methodist Church (HUMC) burying ground on Cape Cod. The church's planned construction of a new parish hall threatened unmarked interments in the adjacent burying ground. As the agency responsible for unmarked burials, the Massachusetts Historical Commission (MHC) requested the site examination.

Archaeological investigators, directed by Jim Garman (Project Archaeologist) and F. Timothy Barker (Crew Chief), identified eight shaft features of unmarked graves. In addition to the unmarked graves, archaeological survey revealed substantial modifications to the landscape of the burying ground in the 1840s, modifications that can be linked to the construction of a new cemetery one mile away from the church. These included sill stains from a structure predating the burying ground, a scatter of stained-glass from removed church windows, and the remains of a barrel-vaulted, brick-lined "receiving tomb" at the edge of the property. Among the more striking features was the grave of Jonathan Buck, exhumed in 1843; those in charge of the removal had simply dumped Buck's slate headstone into the excavated hole, erecting a more fashionable marble marker in the new cemetery.

Through co-operation with the MHC and UMAS, the church was able to design a footprint for the addition that avoided any of the newly-identified shaft features. Document research is continuing with the goal of identifying those whose remains lie in the unmarked graves that will surround the new parish hall.

RHODE ISLAND

Freeborn Sites RI 2053-55: Archaeologists and historians are learning more about slavery in Rhode Island, thanks to a grant funded through the Rhode Island Historic Preservation Commission and the Bristol (RI) Historic District Commission. Project Archaeologist Jim Garman (UMass-Amherst), Project Historian Eve Sterne (Duke University) and Field Supervisor Charlotte Taylor (Brown University) have been identifying and documenting cultural landscapes associated with slavery in the East Bay region. African American slavery began in the late 1630s with the settlement of the region and died out slowly from about 1780 to 1800.

Fieldwork this summer focused on RI2053, the Jonathan Freeborn site in Portsmouth, on Aquidneck Island. Occupied between approximately 1756 and 1881, the Freeborn farm appears to have been organized along the lines of a plantation; the site included over 100 acres of sheep-grazing lands, a water grist mill and an early commercial apple orchard. A 1756 probate inventory lists nine African slaves and two Native American indentured servants living on the site within the main house. A five-week program of excavation documented the foundations and extent of the house, which may have been constructed as a "stone-ender". Two earlier, seventeenth-century sites associated with the same family have also been identified, and will be the object of further work this winter.

Research is ongoing, with a report expected in March of 1994. For further information, please contact Jim Garman, Department of Anthropology, University of Massachusetts at Amherst, Amherst, MA.

MID-ATLANTIC

Reported by Douglas W. Sanford

NEW JERSEY

Pahaguarry Copper Mines: The Eastern Team of the National Park Service's Denver Service Center is nearing completion on a cultural landscape study of the Pahaquarry Copper Mines. The mines are located within the New Jersey section of Delaware Water Gap National Recreation Area, just north of the Water Gap and adjoining the Delaware River. Although initial exploratory mining is reputed to date to the seventeenth century, documentary evidence and physical examination of the landscape indicate the earliest activities date to c. 1754-1761. During that period, a series of horizontal test shafts were excavated along the base of the Kittatinny Mountains by John Reading et al. In 1847, the Allegheny Mining Company was formed and began acquiring lands. From 1861 to 1862, the company expanded the eighteenth century adits and excavated a series of incline shafts along dip lines, but failed to locate commercial grade veins. In 1901, the property was leased by Henry Deshler, and a new adit was begun. Based on explorato-

ry mining, the Montgomery Gold Leaf Mining Company was formed that year. Extensive mining and site development ensued after the Montgomery Company purchased the property from the Allegheny Company in 1902. In addition to the mines, a tipple, a double-track gravity tramway, a gas plant, a blacksmith shop, a boarding house, several dams, a pumphouse, a 13,000 gallon water tank, numerous outbuildings, and a large multi-storied processing mill were eventually constructed. Mining ceased in 1913 after a failure to extract commercially profitable copper. From 1925 to the 1960s, the property was owned by the Trenton council of the Boy Scouts and was developed and operated as a camp. Most of the mining machinery and stock was removed in 1928. The surviving structures of the mining and Boy Scout operations were removed during the 1960s by the U.S. Army Corps of Engineers for the proposed Tocks Island Dam. Today, the archeological landscape of remnant foundations, roadways, dams, landscaping features, and mines survives as a reminder of the property's history. Landscape architect, Steve Burns, is the team captain. Historian, Berle Clemensen, is the primary documentary researcher. Paul Inashima of the DSC's Eastern Applied Archeology Center serves as the consulting project archeologist.

PENNSYLVANIA

Independence National Historical Park, Philadelphia: The eastern Applied Archeology Center, an office of the National Park Service's Denver Service Center (DSC), has initiated a long term archeological support project in conjunction with a planned ten-year program of building and facilities' improvements. Paul Inashima of the Center serves as the coordinating project archeologist. Dr. David Orr and Brook Blades of the park service's Mid-Atlantic Regional Office, as well as Dr. Doris Fanelli and Bob Giannini of the park, serve as consultants. During the first year of the project, Shirley Rosenberger of Temple University, working under a graduate student internship, began a comprehensive survey and synthesis of the archeological and historical documentation. Her investigations form the basis for a series of preliminary base maps encompassing subsurface structures and utilities. Her efforts will be focused in more detail in subsequent years. Field investigations are planned for several of the proposed construction localities. Remote sensing is being explored as a tool to facilitate planning decisions at several locales. A CAD-based GIS system is being implemented to help manage the extensive database of cartographic, design, historical, and archeological data. A comprehensive program of archeological monitoring and data recovery is also being developed to efficiently manage anticipated construction within areas of previously demolished structures and of earlier installed and/or abandoned utilities. To facilitate the presentation of cultural landscape data, technical illustrator Steven Patricia has been added under contract, to the project team. Other disciplines to be represented on the team are ethnobotany, parasitology, zooarcheology, and conservation. Cooperating architectural/engineering parties include DSC project manager, Bob Whissen, and Vitetta Group project manager, Mary Dempsey Lau.

City of Pittsburgh Archaeological Protection Plan: GAI Consultants, Inc. of Monroeville, Pennsylvania recently submitted a GIS-based archaeological resources protection plan to the Pittsburgh Department of City Planning. The major focus of this project was the preparation of a general predictive model oriented to the identification of important historic archaeological resources throughout the project area, which includes the Golden Triangle, Oakland, and 35 miles of riverfront. The model was presented to the city in hardcopy and digital format (i.e., ARC/INFO Version 6.1), and provides an expert system capability, performing an archaeological sensitivity analysis based on selected parcels, current and historic land use, and ground integrity. Integration of these variables resulted in an overall archaeological sensitivity map. In addition to providing the Pittsburgh Department of City Planning and the State Historic Preservation Office with a means of initially assessing redevelopment projects within the city, it provides a wealth of easily accessible historical and geographical data for researchers interested in the history of Pittsburgh. Along with the sensitivity maps, GAI submitted a detailed bibliography of Pittsburgh archaeology and land use, study units important to understanding the prehistoric and historic settlement of Pittsburgh, and a discussion concerning the nature and significance of archaeological resources which can be expected to be identified within the city.

The archaeological protection plan developed for this project provides a preliminary procedure for evaluating the archaeological importance of different parcels within the city. It is based on a specific set of data, i.e., selected historic maps (land use) and a limited field survey (ground integrity), and provides a general assessment of archaeological potential within the project area. Examination of primary archival documents was not conducted since it was considered premature given the broad geographic scope of the project. Instead, it is recommended that detailed land-use histories be reserved for parcels within the city that have been identified as having a moderate to high potential for containing intact archaeological resources and which are to be subjected to redevelopment.

For the above reasons, the project results should be considered a starting point for a long-term planning study. Although landfill is not integrated in the model developed for this project, it must be addressed on a parcel-specific basis when reviewing future redevelopment projects. Landfill is of great importance since it may attenuate the effects of ground disturbance on the archaeological record. It should be noted that the archaeological sensitivity model is based on a flexible system that is easily modified should one wish to define components of the model or their integration differently. The effectiveness of the overall model, of course, is contingent on future historical and archaeological research.

Saltsburg Canal Park: Under a contract with the Eastern Applied Archeology Center of the National Park Service's Denver Service Center, GAI Consultants, Inc. has submitted a draft report on the completed archeological investigations at Saltsburg Canal Park, Borough of Saltsburg, Indiana County, Pennsylvania, NPS involvement with the project is part of a program of technical assistance to the Southwestern Pennsylva-

nia Heritage Preservation Commission. The Commission's federal mandate is to preserve and interpret resources related to the history of the iron and steel, coal, and transportation industries of nine counties in western Pennsylvania. As part of this effort, a canal park is being developed in Saltsburg to interpret the remains of the Pennsylvania Main Line Canal, Western Division. The goal of the project is to determine potential canal park-related construction impacts to archeological resources at the Altman Mill, Ash Alley Lot, Locktender's House, and Stewart Warehouse, and to mitigate impacts to archeological resources at the site of the proposed Community Park. Archaeological fieldwork for this project was conducted between April and June, 1993. Archeological investigations included the excavation of a total of 115 shovel test pits, 30 backhoe trenches, and one test unit in the five above noted locations. This work resulted in the identification of 30 features, the majority of which were stone foundation walls associated with historically documented structures, dating to the mid-to-late nineteenth to early twentieth century.

Excavations at the site of the proposed Community Park revealed an extensive distribution of fill debris overlying a series of foundations associated with the late nineteenth-early twentieth-century Saltsburg Glass Company/Saltsburg Flint Bottle Company. Archeological investigations within Ash Alley were successful in delineating the remains of three buildings including a large warehouse/store, its northeast addition, and an associated storage structure. Based on an examination of historical data, it appears that the former structure served as a grain warehouse during the canal era. Archeological testing of yard areas adjacent to the locktender's house, along the Kiskiminetas River, resulted in the identification of mixed deposits containing railroad fills mixed with the architectural and domestic refuse dating from the nineteenth through midtwentieth century.

Fieldwork conducted in the Point street area near Altman Mill uncovered the remains of two canal-period structures, both represented by dressed stone foundations. One of these structures, a dwelling, was represented by a cellar hole located immediately west of the Altman Mill; the other structure, interpreted as a possible cooper shop/dwelling, was identified several feet below the surface near the northeast corner of Altman Mill. A small assemblage of pearlware ceramics was recovered near the latter foundation and represents the earliest historic deposit identified during previous and current archeological investigations at the Saltsburg Canal Park.

Additional excavations in the Point Street area revealed the presence of an extensive dressed stone wall adjacent to the eastern canal bank, which apparently served as a mooring for canal boats. A gray clay stratum, identified as the canal liner, was encountered in several locations between Point Street and Market Street and was generally exposed directly atop a truncated B horizon soil, approximately four to five feet below the surface. Two possible stone bridge abutments were also identified in this area as well as a mid- to late nineteenth-century stone culvert/retaining wall parallel to Point Street,

Additional testing and mitigation is planned for the Saltsburg Canal Park. GAI will further delineate and record additional structural remains of the canal-period cooper shop/dwelling identified near the Altman Mill. This work will mitigate impacts relating to landscape and streetscape activities,

and the excavation of underground utility lines. Archeological testing is also to be carried out at the site of the proposed Comfort Station near the intersection of Marble Alley and Market Street. Late nineteenth to early twentieth-century maps depict the location of several structures in this area including a dwelling, barn, a store, and sheds. Moreover, the yard area of the Stewart Warehouse will be tested to determine the presence and condition of architectural an archeological remains associated with the warehouse and outbuildings.

These investigations were carried out in cooperation with the Saltsburg Borough Council.

VIRGINIA

Mount Vernon Ladies' Association

The Mount Vernon Archaeology Department, under the direction of Chief Archaeologist, Dennis J. Pogue, and Assistant Archaeologist, Esther C. White, carried out three major excavation projects this year. The summer's work was supported by the sixth annual Mount Vernon field school, in conjunction with The American University of Washington, DC, and the third annual field school for the deaf, jointly sponsored by Mount Vernon and Gallaudet University.

- South Grove: A third, and final, summer of intensive excavations focused on a 20-foot diameter trash midden, located just south of the mansion and near the kitchen. Artifacts recovered date to the circa 1760-1775 period, and a brick drain installed circa 1775 intrudes the feature. Large quantities of domestic refuse, food remains, and structural debris were recovered. Finds of particular note from this summer include a matched pair of male and female pipe clay figurines that may be toys used by Martha Washington's children from her first marriage. Colonoware continued to be found in large numbers, with more than 400 sherds recovered to date.
- Dung Repository: A second intensive excavation focused on revealing the foot print of an outbuilding depicted on the 1787 Vaughan plan of Mount Vernon. The structure, identified as the "Dung Repository" or "stercorary," was constructed in 1787 and appears to have remained in use until the mid-19th century. Its location near the stable made it a convenient receptacle for horse manure, which was mixed with a variety of other organic matter to produce fertilizer for the nearby gardens, orchard, and fields. As the structure was in existence in 1799, the year that the Mount Vernon restoration aims to interpret, it is a candidate for reconstruction. This summer's investigations sought to determine whether sufficient archaeological data about the building exists to undertake an authentic reconstruction of this important component of the plantation.

Documentary references and graphic depictions of the Dung Repository are few, but several helpful sources of information have been revealed. The earliest reference to the building dates to 1787, which indicates that the building was under construction at that time. In 1796 Washington directed that workmen should "rake, and scrape up all the trash, of every sort and kind about the houses, and in the holes and

corners, and throw it (all I mean that will make dung) into the Stercorary." Washington's directive corresponds well with the advice of John Spurrier, writing in the *Practical Farmer* of 1793, where he recommended a variety of waste and refuse to mix with animal manure to produce fertilizer. Interestingly, George Washington is listed as a subscriber to Spurrier's publication, and placed the largest order for books as well. A corn house was built on the site by 1855, and the Dung Repository may have been torn down to make way for it.

The building consisted of a recessed, stone paved pit. covered by a wooden structure supported by hole-set posts. Four 10-ft. squares were excavated, revealing the eastern half of the building. Below topsoil and numerous strata of 20thcentury fill, several linear intrusions interpreted as trenches stemming from archaeological investigations undertaken by Morley J. Williams in 1935 were revealed. Williams had succeeded in locating the structure and defining its foot print based on the evidence of the cobblestone paved floor. In addition to the floor, two generations of post holes/molds running just south of the manure pit were found this summer. The original posts were set at slightly more than a five-foot interval. Finally, a partial brick foundation was found along the east gable, and Williams revealed a similar feature at the building's west end in 1935. The Repository adjoined a Ha-Ha wall, built in 1785, that included an adjacent ditch. As the brickwork appears to exist only at the gables, and no evidence exists to suggest that it ever extended to form a continuous foundation, it may have served to wall up the gap between the sill and the sloping ground surface of the ditch. Otherwise, the usefulness of the subterranean pit for mixing the manure would have been severely compromised.

Current plans call for a second excavation season next year, to reveal the remainder of the structure's footprint. The existing Ha-Ha wall was reconstructed early in the 20th century, and appears to have been shifted slightly south from the original route. This is suggested by the fact that the current wall overlies the cobblestone floor. Therefore, excavation next year will include testing behind the Ha-Ha to locate the line of post holes/molds hypothesized as marking the Repository's north wall.

• Dogue Run: A survey to locate and test the site of the 16-sided barn built by George Washington at his Dogue Run Farm in 1792-94 was completed this summer. As the Ladies' Association plans to reconstruct the barn at mount Vernon in 1995 as part of an agricultural interpretive program, the archaeological survey was undertaken to answer specific questions about the building footprint and related barnyard layout. The barn site is located outside the present 500-acre Mount Vernon estate in a residential area. Permission was granted by six property owners to conduct an intensive survey, consisting of systematically excavating more than 400 shovel test pits, several 5 x 5 ft. test units, and the stripping of a 20 x 70 ft. area.

Computer manipulation of several 20th and 19th century maps depicting the barn enable a relatively close approximation of the site location. An extensive concentration of brick rubble was discovered in the targeted area. Excavation of two 5×5 ft. test units and a series of 5×5 s forming a trench 50 feet long revealed a stratum of brick rubble several inches thick. The

brick consisted overwhelmingly of overfired and underfired fragments, with some evidence for firing on the site. Therefore, the brick concentration is interpreted as the site of the brick making operation, known to have been located near the barn. A second, much smaller concentration of hand-made brick was found approximately 200 feet from the possible brick clamp in the area identified as having the highest probability for containing the site. Unfortunately, the small concentration of brick is located adjacent to a house and swimming pool. The evidence from the map research, combined with topographic constraints on possible building sites and the proximity of the brick clamp, suggest that the barn and barnyard are overlain by the modern dwelling and swimming pool and associated road, driveways, and other features.

WEST VIRGINIA

Virginius Island Archaeological Research: The Division of Archaeology at Harpers Ferry National Historical Park continues its program of research and cultural resource management under the supervision of division chief Paul Shackel, with research/project archaeologist John Eddins and lab director Carl Young Ravenhorst.

In the Virginius Island project, excavations were completed along the 19th-century Wernwag Street and rail spur corridor during the winter of 1992/93, with Ken Kulp as crew chief. Archaeological specialist John Ravenhorst with data from the units and historic maps used AutoCAD to generate a best fit for the layout of a new trail system to be developed on the island. Excavations exposed several sections of brick and shale slab sidewalks, road bedding, a railroad tie mold, and postholes from a Civil War occupation fence compound. Work is currently underway at the Wernwag sawmill site, 45JF229, with Anna Borden as crew chief.

In September, 1993, excavations under the supervision of John Eddins were completed at the Wernwag House site, 46JF212, a domestic site lot occupied by a series of residents, including the bridge builder Louis Wernwag, from the 1820s to the 1920s. Nineteen 5 x 5 excavation units were distributed over a number of zones in the yard lot. Most of the units contained strata interpretable as occupation zones and flood zones spanning the last third of the 19th century into the 20th century. Susannah Dean, Anna Borden, Mia Parsons, Marcey Jastrab, Mark Goleb, Anna Marie York, Gwyneth Duncan, and several volunteers worked at the site. The earliest deposits, from the middle third of the 19th century, were encountered in a 5 x 8 stone foundation, possibly a cleaned privy, utilized as a kitchen midden receptacle. Excavation of the 'privy' was coordinated by Ms. Dean with the assistance of Ms. Borden and Ms. Parsons.

The main focus of the Virginius Island archaeological research is a contribution to the study of the changing physical, social, and economic characteristics of a concentrated industrializing community in a rural setting during its development and decline in the 19th century. The research is intended to help further define and delineate the archaeological resources on the island and provide data useful for interpreting the changing social history and cultural landscape.

The Virignius Island Research represents a continuation of the research goals and compliments the data sets of previous projects at the Park, including Package 116 and 118 in Lower Town Harpers Ferry. Results of the Package 116 work have been published as Interdisciplinary Investigations of Domestic Life in Government Block B: Perspectives on Harpers Ferry's Armory and Commercial District, edited by Paul Shackel, with Susan Winter, Principal Investigator, Occasional Report No. 6, Regional Archaeology Program, National Capital Region, NPS. Copies of reports are available upon request.

Testing along Shenandoah Street in Lower Town Harpers Ferry was conducted by Mike Lucas in March and April, 1993, in order to assist cultural landscape staff in the placement of a new walkway along the route of the 19th-century sidewalk. Results of this testing are presented in Archeological Investigations of Shenandoah Street Sidewalk by Michael Lucas, June 1993, on file at the Division of Archaeology, Harpers Ferry. Jennifier Shamburg, Anna Borden, Eric Lersen, and Mark Goleb placed test units adjacent to building foundations in Lower Town on several occasions in 1993 in order to assess cultural resources and assist historical architects and structural engineers in planning for building stabilization and renovation. Currently, Eric Larsen, lab assistant-director, is conducting a phase 1 survey on a tract of land being considered for development of a new museum and archaeological research facility for the National Capital Region of the Park Service, on School House Ridge, adjacent to Harpers Ferry National Historical Park.

In addition to the reports mentioned above, staff members from the Division of Archaeology have presented papers on various aspects of the program at Harpers Ferry in a number of different venues including the SHA meetings, the Mid-Atlantic conference, the West Virginia state meetings, and the Council for Virginia Archaeologists Symposium VII.

SOUTHEAST

Reported by Maurice W. Williams

FLORIDA

St. Augustine: The excavations at the governor's house site in St. Augustine has been completed. The excavation revealed colonial structures, an 18th century ballast stone and tabby paved courtyard, a ca. mid-17th century decorative courtyard well, and other significant features. Bruce Piatek and Stanley Bond were the site archaeologists, assisted by Mary Martin. The site was open to the public and over 105,000 people visited during an eight month period. Visitors toured the excavation area as well as a 3,000 foot hands-on archaeological exhibit gallery designed and fabricated by Bruce Piatek. Work is proceeding on analysis and report production.

GEORGIA

Archeological Survey of the Historic Smith House Site, Roswell, (Fulton County): Southern Research has completed a preliminary survey of the grounds surrounding this intact farmstead located in the heart of urban Roswell, north of Atlanta. The three acre site centers around the two-story main house built in 1840s by one of Roswell's founding families, Archibald and Ann Magill Smith, who migrated with Roswell King, Sr. in the late 1830s from the Georgia coast near Darien. The core site, once part of a 300 acre plantation, is well preserved and includes, besides the main house, three periphery dwellings, a detached kitchen, a barn, a stable, a corn crib, three storage buildings, a greenhouse/heating-cooling structure, a well-house, and a substantial rock spring-house complex. The site remained in the Smith Family over the years and the present heirs, the Skinners, are very supportive of preserving the historical integrity of the site. They have allowed the Roswell Historical Society to locate its headquarters in one of the periphery dwellings and open the site to public tours. In 1990 Stanley South recorded the contents of the Smith House and several of the outbuildings in his ATTIC archaeology program. The current archeological work was supported by the family through the Roswell Historical Society. The survey included shovel testing, mapping of the site, and the excavation of three test pits. Several features thought to be associated with an earlier detached kitchen were identified in two test pits excavated near the present kitchen, which was rebuilt after the original kitchen burned in 1863. Mid-nineteenth century artifacts were recovered in association with the features identified in the test pits. It is hoped that this survey and future archeological work will identify earlier structures and landscape features associated with this important site. Laboratory analysis and report writing are just beginning and a final report by Kay G. Wood is expected late this fall.

Little River Mils, Cherokee County: Southeastern Archeological Services, Inc., has just completed detailed archival research, mapping, and photographic recording of a mid-nineteenth through mid-twentieth century mill site on the Little River at the backwaters of Allatoona Lake near Woodstock, Georgia. The site is the property of the U.S. Army Corps of Engineers under the jurisdiction of the Mobile District. The study resulted from a request by the Cherokee County Water and sewerage Authority to the Mobile Corps for an easement along the south side of the river across from the main portion of the mill site. Archival research revealed that the mill site began operation in the mid-nineteenth century as a grist, saw-mill, and sash mill enterprise. Sometime in the 1870s a yarn mill began operation there and for the next seventy years textiles were manufactured on the site. The mill operation grew from a small affair run by four or five family members, producing cotton and woolen yarns, into a larger operation that produced yarn and rope and employed around 12 individuals. The mill passed through several owners and around the turn of the century it became a rope mill producing plowlines and well ropes. The mill is possibly one of only a few mills in the state that manufactured only rope, since many of the larger cotton mills manufactured rope as a by product from lesser quality

cotton fibers. The mill ceased operation in 1949 prior to the inundation of Allatoona Lake, which did not flood the site. The mill dam, raceway, mill foundations, and mill houses, which are still visible, were recorded in detail using Historic American Engineering Record (HAER) standards. The archival research was conducted by Karen G. Wood and the site mapping and recording were conducted by Thomas H. Gresham. The final report is titled A History of the Little River Mills Site, Cherokee County, Georgia and is co-authored by Wood and Gresham (1993).

Columbus, Georgia, Riverfront Survey and Testing: Survey and testing was conducted along the Chattahoochee River in downtown Columbus's Historic District. The project was directed by Karen G. Wood for Southeastern Archeological Services (SAS), Inc. of Athens. A corridor located on the lower bank of the river, along the industrial riverfront between the old City Wharf and the Oglethorpe Bridge was examined. Columbus, Georgia, is located at the head of navigation on the Chattahoochee River and steamboat traffic on the river was quite active during the nineteenth century. Archival records indicated that the only industry on the lower bank in the project area was a ante-bellum boatyard that became a Confederate Navy Yard during the Civil War.

In late 1862 the Confederate Navy rented the Columbus Iron Works and the nearby boat yard, converting them into a busy Navy Yard that was responsible for supplying boilers and additional parts to other Confederate Navy Yards. At the same time, the navy Yard in Columbus was tasked with the construction of the Confederate ironclad, the Jackson, as well as a supply ship, the steamship Shamrock, and at least one torpedo boat, the Viper. The gunboat, the Chattahoochee, which was constructed at another yard downstream in Early County, Georgia, was pulled back to the Columbus yard for repairs following a disastrous boiler explosion that occurred in 1863, which killed 18 men and sunk the ship near Chattahoochee, Florida. The Jackson, Chattahoochee, and Viper were launched just prior to the destruction of the Navy Yard by Brigadier-General E. F. Winslow on April 16, 1865. Following the Civil War, the boatyard continued operation, although at a much reduced level, constructing and repairing steamboats that traversed the treacherous Chattahoochee River.

There was no surface evidence of the boat yard on the lower bank, which received considerable disturbance during the 1960s and 1970s from the construction of a sewer line and amphitheater. Early in the 1980s an underwater survey by East Carolina University found in the river near the reputed location of the boatyard, a series of piers that possibly could have been part of the boatyard's ways or an old jetty.

In late March of this year SAS excavated three large backhoe trenches in the vicinity of the boatyard. In one backhoe trench a buried zone (12 ft. below surface) of brick rubble, oxidized iron, wood, and late nineteenth century artifacts were found in what appeared to be a drainage ditch or gully. This zone was quite isolated, measuring no more than 6 ft. by 15 ft. There was no conclusive evidence that the zone was part of the boatyard, although it is possible that it was a remnant of the yard that had washed into the gully. No other evidence of the boatyard was found and it was determined that

the 1960s sewer line had probably destroyed any evidence of the boatyard. The work was financed by the Columbus Water Works prior to the construction of a new sewer line. The results are reported in A Cultural Resource Survey of the Columbus, Georgia Riverfront from the City Wharf to Oglethorpe Bridge (Wood 1993).

SOUTH CAROLINA

Data Recovery at the Roche Carolina Tract, Florence County: In the early part of 1993 Chicora Foundation performed data recovery on two sites located on property being developed by Roche Carolina near Florence, South Carolina. One site consisted of a slave/tenant row occupied from the late antebellum period into the first half of the twentieth century. The other site is an Archaic through Middle Woodland Period Native American site.

At the slave/tenant row three structures, thought to represent a continuum of architectural styles and temporal episodes, were examined. The goal of the research, to explore the transition from slavery to tenancy, was only partially successful since so much of the early occupation had been "swamped" by the later tenant occupation and episodes of rebuilding. However, the site supported the decline in edged and annular wares from slavery to freedom and an increase in the diversity of personal and clothing artifacts. The faunal study revealed greater diversity of meat cuts in slavery than in freedom, although the cuts were uniformly low status. Examination of landscape and yard areas revealed pattern and an indication of sweeping.

This site, situated on a sandy ridge which has not been plowed since site abandonment, was compared to two plowed tenant sites on the tract. These two sites were examined using techniques which included survey level shovel testing, close interval shovel testing, and complete surface collections. These techniques are compared in an effort to better understand site formation and degradation processes in the sandy soils of the Upper Coastal Plain, as well as the ability of various archaeological techniques to predict research value. More significant findings include the inability of traditional shovel testing practices to accurately establish site boundaries, and the importance of a large sample when creating pattern analysis.

This report will be published as Life in the Pee Dee: Prehistoric and Historic Research on the Roche Carolina Tract, Florence County, South Carolina (Chicora Foundation Research Series 39). It is anticipated that the report will be available by the end of 1993. For more information contact: Debi Hacker, P.O. Box 8664, Columbia, SC 29202. Phone 803/787-6910.

TENNESSEE

Dickson-Williams House, Greeneville: In September, Chicora Foundation performed test excavations at the Dickson-Williams House in Greeneville, Tennessee. The house, constructed in 1821, has been characterized as having a very formal Federal style. The major goal of this research was to allow a better

understanding of architectural features, ensuring a more sensitive and accurate interpretation of the structure's fabric. Generally, the work was to address specific questions posed by the project architectural conservator, Mr. George Fore.

We were able to determine that there was at least one doorway on the west facade leading into the basement in the original plans. At some point, probably during the early postbellum, the doorway was abandoned, the opening bricked over, and the stairs filled. At that time a small window was placed in the upper part of the doorway opening and a window well was created. Later, a coal chute was installed and even more recently a series of pipes were placed through the previous opening. This entrance, as well as a probable matching entrance, likely provided access to servant's quarters and storage areas in the basement during the antebellum period.

Evidence of a porch was identified, centered around the rear entrance to the main house. While a complete footprint was not present, it helps confirm the existence of a porch and assists in better understanding the scale and massing of the original ca. 1821 west facade.

There was also evidence of a later postbellum and early twentieth century porch which spanned the west facade while the building was used as a hotel. More significantly, evidence was found for the music room addition.

Archaeological evidence suggests that there was an earlier structure on the property. The presence of lead glazed slipware and creamware, as well as a massing of stone work and a brick arch incorporated into the Dickson-Williams house.

This report is available as Archaeological Test Excavations at the Dickson-Williams House, Green County, Tennessee (Chicora Research Contribution 115). To obtain a copy, contact: Debi Hacker, P.O. Box 8664, Columbia, SC 29202. Phone 803/787-6910.

MIDWEST

Reported by Vergil E. Noble

OHIO

Cuyahoga Valley National Recreation Area: Throughout the spring and summer of 1993, the National park Service (NPS), Midwest Archeological Center, conducted a dozen small-scale archeological survey and evaluation projects at Cuyahoga Valley National Recreation Area in Summit and Cuyahoga Counties, Ohio, south of Cleveland. Each field project was organized under the direction of NPS archeologist Jeffrey Richner and funded out of planning or construction monies programmed for park development. Five of the projects entailed investigations at historic structures where adaptive restoration activities are proposed or now under way.

Discovery of an 1830s-1850s sheet midden away from the existing circa 1880 Hunt House (33-SU-135) in Everett Village provided strong archeological evidence for an earlier, previously unrecorded site occupation. Several features from the late

19th-century occupation of the extant Hunt House also were recorded through shovel test survey and limited test excavation. They include two carefully constructed cobblestone walkways and a rectangular cistern.

The Hunt House cistern is crudely constructed form Berea sandstone blocks parged with three layers of mortar. It had been filled to a depth of nearly 2 m with cinders and a large number of complete or reconstructible turn-of-the-century ceramic and glass vessels. Modification of the restoration plans allowed the cistern and walkways to be preserved in place.

Survey and testing of the small, mowed lawn about the mid-19th-century Mathews House (33-Cu-1365), also in Everett Village, revealed stratified cultural deposits spanning the period circa 1830-1920. Plans for various site improvements, including new utilities, walkways, and a 3-car parking area, were altered to accommodate preservation of those archeological resources.

Near the Clayton Stanford House (33-Su-105), north of Boston Village, archeological survey prior to the scheduled installation of a septic leach field revealed a sheet midden of historic debris. Not related to the existing circa 1905 domicile, the early 19th-century refuse deposit is probably associated with the James Stanford tenancy. James Stanford and his family were among the earliest settlers of Boston Township, arriving in 1806. They are known to have lived in a log cabin until a surviving frame structure (now called the George Stanford House) was built a short distance north in 1843. The potential significance of the newly discovered archeological site justified placing the leach field at another location.

An area surrounding the Boston Land and Manufacturing Company Store in Boston Village was the focus for survey and limited testing as part of the restoration planning effort for that commercial structure built in 1836. The store is situated immediately alongside the Ohio and Erie Canal (1827-1913) and relied on that waterway for its supplies. According to an 1856 plat of Boston, seven other structures formerly stood on several small Boston Village lots in a 1.25 acre area south and west of the store. Several artifact scatters recorded in 1993 relate to early and mid-19th-century use of those structures.

The dense and varied content of several refuse deposits suggest commercial functions for at least some of the former structures. The team located foundation elements for the Commercial Hotel, which once stood next to the store, and one other building. Excavation of two test units against the east facade of the Boston Company Store and along the canal towpath exposed a linear sandstone alignment, which appears to be the foundation for a porch used in unloading merchandise. Its discovery conforms with documentary and architectural evidence, augmenting information that will be used in the restoration.

Grounds about the circa 1826 Frazee-Hynton House (33-Cu-341) were subjected to survey, field evaluation, and data recovery in preparation for the development of visitor amenities, including parking, restrooms, trails, and accessible walkways. Survey revealed an extensive sheet midden and the foundation ruins of an early 19th-century, three-bay barn. Data collection, in the form of a small block excavation, was undertaken immediately adjacent to the house in a place where the installation of paved walkways would cause substantial ground disturbance.

Excavations revealed an extremely well-preserved kitchen midden next to the house. The preservation of perishable items was excellent, since the deposit included thick lenses of ash and was sealed under a layer of more recent pea gravel and mortar. That later stratum had been laid to level the ground surface prior to construction of a frame addition to the house in the middle or late 1800s. The addition was removed during an aborted restoration effort of the early 1970s, prior to NPS acquisition.

The field crew recovered a variety of animal remains, numerous pre-1850s ceramic sherds, and other household debris from the midden. Fauna include large numbers of fish elements, whereas the ceramic assemblage is dominated by painted and edge-decorated wares. Materials recovered from the midden will contribute much new data pertaining to the poorly documented, pre-1860 occupation of the site by Stephen Frazee and his family, particularly with regard to their diet and economic status.

PACIFIC WEST

Reported by Judy D. Tordoff

CALIFORNIA

Manzanar National Historic Site: Manzanar National Historic Site was established by Congress on March 3, 1992, and memorializes the internment of Japanese-American citizens at this Owens Valley site during World War II. The project is administered by the National Park Service, which is in the process of developing a General Management plan for the site. During April, 1993, the Western Archeological and Conservation Center (National Park Service) completed an archeological survey of 670 acres of Manzanar. Fieldwork, under the direction of Jeff Burton and George Teague, was designed to identify and inventory all archeological resources within the Historic Site boundary, plus any other related resources nearby.

Significant amounts of both historic and prehistoric material were discovered on the survey. The remains can be divided into three major categories: 1) those associated with the relocation center; 2) those associated with the pre-camp town of Manzanar; and 3) those associated with Native American Indian use of the area.

Manzanar War Relocation Center was one of ten camps at which Japanese-American citizens and Japanese immigrants were interned during World War II. Construction began in 1942 at the Manzanar camp, which remained in operation until late 1945. At its peak, Manzanar held a population of about 10,000. The living area consisted of 36 blocks, each with 16 barracks, a mess hall, laundry, bath house, and latrines. Other blocks contained administrative buildings, warehouse, factories, and a hospital. Beyond the barbed wire were adjacent farm fields, hog and chicken farms, a reservoir, an airfield, a cemetery, and a sewage treatment plant. In all, the Manzanar facility encompassed some 6,500 acres. After the camp was

closed, the wooden barracks and other buildings were sold at auction and removed. Rubbish and camp equipment were disposed of in shallow landfills west of the camp.

Of the over 824 known camp buildings, structural remains were present at 490 and most of the others could be defined on the basis of topographic features, vegetation, or artifact Identified internee-constructed features concentrations. included ponds and pond/garden complexes, gardens with extensive rock work, concrete and rock walls and grills, and hundreds of other features such as rock borders, ditches, sidewalks, and entries. Also recorded were several dozen inscriptions in concrete, including names, addresses (local and previous), and dates. Major landscape features recorded included a golf course, three baseball fields, and eight areas with extensive garden plots (victory gardens). Around the camp perimeter, the foundations of five of the original eight guard towers are still in place. Recorded features associated with the relocation center but lying outside the Historic Site property boundary include the reservoir, sewage treatment plant, chicken ranch, hog ranch, military police compounds, two large dumps, pipelines, and a chlorination tank slab.

Between 1910 and 1935 the original town of Manzanar was a thriving agricultural settlement. Apples, pears, peaches, potatoes, and alfalfa were grown on nearly 5,000 acres surrounding the settlement. In 1914 roads were laid out and graded and by 1919 the town boasted a general store, post office, town hall, and a two-room schoolhouse. Water was supplied to the town by an open wooden flume from a nearby creek.

Features associated with the earlier town include foundations and possible structure locations and trash dumps or pits. In addition scattered trash, road alignments, and pipelines were noted. Historic vegetation associated with the early town includes remnants of pear, peach, and apple orchards, isolated fig, plum, and black walnut trees, and 12 other species of nonnative trees. Two stone cabins, remodeled for use by the relocation center, and a dam and flume, were also noted.

Five Native American Indian sites were identified; isolated flakes, flaked and ground stone tools, and sherds were noted throughout the area. Identifiable projectile points suggest use of the area between 600 B.C. and the historic period, while glass beads suggest use into the historic period. Fieldwork scheduled for the fall of 1993 will concentrate on detailed feature recording, surface artifact collection, and subsurface testing. The objectives of this work are to gather sufficient data to assess the integrity and research potential of both historic and prehistoric resources, to make informed recommendations regarding future management of these resources, and to acquire information useful in interpreting the full history of the site.

Other ongoing work includes archival research and oral history interviews with Japanese-American internees, camp staff, and residents of the earlier town. Oral history work is being conducted by California State University, Fullerton, under a cooperative agreement. Important to the work will be comparing the World War II-era Manzanar remains with those of other internment camps. Survey or anecdotal information, especially on internee adaptations, is needed. Photographs or slides would be greatly appreciated. Please contact Jeff Burton, Western Archeological and Conservation Center, P.O. Box 41058, Tucson, AZ 85717.

Annadel State Park, Sonoma County: A cultural resources inventory of Annadel State Park was performed by representatives of the Anthropological Studies Center (ASC) of Sonoma State University (SSU) under contract with the California Department of Parks and Recreation. The project was directed by Adrian Praetzellis, Director of the ASC, and J. Charles Whatford, SSU graduate Student in Cultural Resources Management. It was undertaken to provide a more comprehensive inventory of the historic-era archaeological resources and inventory of identified sites, and assessment of their interpretive potential.

By the late 1880s, rapid urban development in northern California created a demand for durable paving materials for streets. This demand for paving materials for San Francisco and other northern California cities encouraged development of quarry operations in the Sonoma Mountains of southeastern Sonoma County. These mountains contain extensive deposits of andesite and basaltic andesite which is both hard and dense, desirable characteristics for durable paving and curbing stones. Between 1887 and 1913 at least 136 million paving blocks, valued at \$5,712,000, were cut from various quarries in Marin, Napa, Solano, and Sonoma counties; the majority came from Sonoma County.

Several quarry complexes have been recorded within what is now Annadel State Park. Associated features are located across at least 1,000 acres and include many side hill quarries (those opened up in the face of a hall or slope), associated waste rock piles, primary and secondary finishing stations, loading stations, networks of dirt access/haul roads, rock and stone earthworks for tramway rail lines used to haul finished stones out to a branch line of the Southern Pacific Railroad, earthworks (berms and cuts) from this railroad right of way, structural remains, remains from a blacksmith station, caches of finished paving stones, and refuse deposits.

These paving stone quarries were most active between 1888 and 1913. At this time, it was usual for the owners of land with outcrops of basalt and andesite of suitable quality to lease portions of their land to quarry operators. The operators agreed to pay a royalty to the landowner, based on the number of paving, curbing or building blocks produced and sold from the quarry. According to Walter Bradley, geologist with the California Division of Mines, who visited the quarries in 1913, the average royalty paid by operators who were leasing was \$3.00 to \$3.50 per 1000 paving blocks. The operators hired stonecutters to work the quarries, paying them a piece rate of between \$25.00 and \$35.00 per 100. Bradley reported that one blockmaker was capable of cutting 100 to 150 paving blocks per day. The majority of these quarry workers were immigrants from northern Italy.

The local paving stone industry declined dramatically after 1913, due primarily to the increased availability of asphalt pavement technology, which was both cheaper and provided the smoother ride demanded by drivers on an ever-increasing number of automobiles. The archaeological remains left behind from the quarrying—the quarries themselves, extensive piles of stone debris from shaping the stone into paving blocks, networks of paths and roads, structural remains, privies, and refuse dumps, all potentially contain information relevant to probing the details of the history of working people which has not been written down. Many of the workers involved in this

industry did not own land at the time. Thus, most of them barely appear in the documentary record, biased as that record is towards owners of real property.

Land now within Annadel State Park contained extensive deposits of stone suitable for cutting into paving and curbing stones, and these deposits were situated near transportation routes (wagon roads to the railroad line). The presence in Sonoma County of many European immigrants provided a labor force with the skills and mobility to perform the quarrying on a piecework basis. These factors were involved in the production and shipment of millions of paving blocks for the streets of Santa Rosa, San Francisco, Oakland, San Jose and Sacramento.

Fort Ross State Historic Park: On August 21, 1993, the final reburial ceremony was held for those individuals interred in the Fort Ross colony's cemetery during the Russian-American period of occupation (1812-1841). The excavation of the cemetery and associated archival research were directed by Dr. Lynne Goldstein and Sannie Osborn of the University of Wisconsin-Milwaukee during the summer of 1990, 1991, and 1992. Each individual was reburied in its original grave during ceremonies conducted by clergy from the Russian Orthodox Church and the Orthodox Church in America.

A total of nearly 150 graves were excavated and, although preservation was poor, Dr. Douglas Owsley from the Smithsonian Institution was able to determine age and/or sex for 88 of these individuals. Preliminary data are as follows: 20 individuals were under the age of 10; 12 were between the ages of 10 and 19; and 56 individuals were over the age of 20. At least 18 of the people were male and 31 were female. Sex could not be determined for 39 individuals. The cemetery included people of Russian, Native Alaskan and Creole descent, all of whom were buried in strict accordance with nineteenth century Russian Orthodox practices. There is no evidence from either the excavation or archival record that any Native Californians were buried in the cemetery--they were probably returned to their nearby villages.

It is clear from the excavations and Owsley's analysis that the number of deaths at the colony do not match those reported in Russian American Company correspondence and church reports (existing from 1818-1967) which account for only 68 of the graves located in the cemetery: 32 men (8 Russian, 2 Creole, 20 Aleut, 1 not stated), 19 women (5 Creole, 2 Koniag, 9 Aleut, 2 not stated), 1 child (ethnicity not stated), and 17 others for which age and sex were not given. Whether these "missing" deaths occurred prior to 1818 (the beginning of the most complete archival record), were otherwise lost in their transmission, or were simply not reported, is unknown. The analysis of the burial practices at the cemetery and the settlement's social structure are continuing.

Fort Ross Hotel Trash Site, Sonoma County: In May, 1993, Glenn Farris, assisted by a small but dedicated group of volunteer archaeologists, led a brief excavation in a part of Fort Ross State Historical Park known to contain a large quantity of broken ceramics, glass and other debris. The artifacts were located adjacent to the site of the former kitchen of the Fort

Ross Hotel (near the west Sallyport to the stockade). This waystop and vacation hideaway was housed in the former Rotchev House, the home of the last commandant of Fort Ross.

A kitchen had been added to the timber house structure at an unknown time. While it may well have been built for the Rotchevs when they moved into the house in ca. 1836, it was certainly in place when the occupant subsequent to the Russians, William Benitz (at Fort Ross from 1843-1867), lived there. The overwhelming preponderance of the artifacts are clearly associated with the hotel period (1878-1903), in the form of an extensive layer of sheet rash evidently strewn in a yard hidden behind a fence and very likely overgrown with weeds. Due to the close attention given to the exotic presence of the Russians at Fort Ross, this later part of its history is often overlooked. The current project allowed us to focus on this little-known portion of the Fort Ross story.

Ceramics recovered form the site were almost all the heavy white ironstone hotel ware one would expect. Makers included William Adams, Henry Burgess, Knowles, Taylor & Knowles, Liddle, Elliot & Sons, New Wharf Pottery, and A.J. Wilkinson. There were several pieces of fine blue-on-white porcelain, and an orange-decorated, footed piece possibly of Japanese manufacture. Stoneware mineral water or perhaps soda water bottles were found. Other stoneware shards were from storage jars. Glass bottle fragments represented Adolphus Busch, Bay City Soda Works, Fletcher's Castoria, Cantrell & Cochrane, Gillets Chemical Works (Chicago), Wichman and Lutgen (bourbon), and Roth & Co. (liquor). Other glass items included tumblers, condiment bottles, mirror glass, lamp chimneys and a small amount of window glass.

A variety of gun shell casings were recovered, including Union Metallic Co., Winchester, Phoenix Cartridge Co., and United States Cartridge Co. These represented several calibres of weapons (.22, .25, .32, .38, and .44). The .44 calibre weapons were rim-fire cartridge fired from a Henry rifle known for its distinctive double pin strike. Two metal buttplates for rifles were also found.

Iron stove parts were notable in the collection. Clothing fasteners marked "Boss of the Road" from the Neustadter Clothing Company were found as well as four white prosser buttons (four-, three- and two-hole buttons) and one prosser button with a red exterior. Faunal remains included cow, pig and sheep. There were also a large number of abalone shell fragments.

The presence of a separate building used as a saloon probably kept down the number of liquor bottle fragments found in the hotel refuse, but most of the rest of the debris was perfectly consistent with hotel life and activity. The number of larger calibre rifle cartridges perhaps belied an interest in sport hunting. Further study of the artifacts recovered from other related deposits within a 100-foot radius found in previous excavations is currently underway.

U.S. Army Garrison, Presidio of San Francisco National Historic Landmark: In June of this year, a segment of the eastern exterior fortification wall of the Spanish Colonial Presidio de San Francisco was discovered during the Army's removal of underground fuel oil storage tanks. The Presidio was founded by Lt. Col. Juan Bautista de Anza in 1776 but its

exact location has never been scientifically documented. The discovery coincided with the annual gathering of Los Californianos, descendants of members of the Anza expedition, which was held at the Presidio this year and provided one of several opportunities for the public to view the site. Prior to opening the site for tours, Colonel Gregory Renn, Garrison Commander, addressed the gathering about the importance to the Army of documenting the remains of one of the earliest historic structures in San Francisco.

The Sacramento District Corps of Engineers, which is assisting the Army with the tank removal, contracted with Woodward-Clyde Consultants (WCC) to monitor all subsurface ground disturbance in archaeologically sensitive areas at the Presidio. After establishing the significance of this find, a research design was developed by WCC and the Corps with the assistance of Leo Barker of the National Park Service. Additional testing was undertaken to further expose the structure. The work has been directed by Vance Bente' of WCC with technical management by Sannie Osborn of the Corps and extensive Army support from Colonel Frank Janecek, Director, Public Works.

Continuation of the project in October involved excavation of several more exploratory trenches which located the northeast corners of both the interior and exterior walls. The exterior wall, approximately 39 inches wide, is believed to be portion of the original Presidio Quadrangle which, if conclusively demonstrated, would be substantially east of the location identified in the 1920s. According to Bente', this is a building of major importance signified by the materials, care and craftsmanship used in its construction. Ceramics include Chinese export porcelain, Mexican wheelware and Galera representing cooking and service vessels and olive oil containers, and decorated ware such as Majolica, Puebla blue on white, San Elizario Polychrome, and San Diego polychrome. Handmade roof tiles and metal artifacts have also been found. Artifacts from the June excavations are now on exhibit in the Army Museum at the presidio.

HAWAII

Kaua'i: Biosystems Analysis Inc. recently conducted two archaeological surveys on Kaua'i for the U.S. Fish and Wildlife Service in the Huleia National Wildlife Refuge and the Hanalei National Wildlife Refuge. Both projects consisted of large valleys and the surrounding hillside slopes. The historic use of each study area was documented by extensive archival research, which identified intense agricultural use of each valley region dating from the mid-nineteenth century. Archival data consisted primarily of Land Commission Awards (LCAs), granted after the Great Mahele land reforms in the mid-1850s, historic maps and informant interviews. Field survey confirmed the results of archival research. Historic site types included lo'i and 'auwai (taro pondfields and irrigation ditches), hillside agricultural and habitation terraces (rock-reinforced, rock enclosures), abandoned rice mills, historic bridges, gravesites and burial markers (Native Hawaiian, Chinese, and Euro-American), and religious sites (former churches, worship features).

SOUTHWEST

Reported by James E. Ayres

ARIZONA

Yuma Main Street Water Treatment Plant: During the summer of 1993, Archaeological Research Services, Inc., completed archaeological test excavations at the Yuma Water Treatment Plant, a facility located in part within the Yuma Crossing National Historic Landmark which is proposed for demolition and new construction of waterworks facilities. The study, directed by Lyle M. Stone and Scott Kwiatkowski, was performed for John Carollo Engineers on behalf of the City of Yuma, in cooperation with the U.S. Bureau of Reclamation, and was designed to identify and evaluate important cultural resources which could be disturbed during existing facility demolition and new construction. Twenty historic cultural features were identified and recorded during testing. Eight of these were considered to be of National Register of Historic Places quality and determined to be subject to negative impacts. These include granite masonry/lime mortar foundations for two adjacent circa 1890s residences; an extensive, highly organic soil zone or stratum which appears to have been associated with these and other nearby residences; and a complex of concrete foundations and remains which define the early (early 1890s) and subsequently modified (1949-1950) Yuma Power Plant. A summary report of findings and a work plan for data recovery have been prepared by Lyle M. Stone and Kwiatkowski and approved by the client, the Arizona State Historic Preservation Office and the U.S. Bureau of Reclamation. The data recovery program is currently in progress-concurrent with demolition--as is a proposed plan for the treatment of resources discovered during demolition monitoring and facility construction. Monitoring and attendant recording and reporting represent, in fact, elements of the approved data recovery treatment program. A report integrating all testing, data recovery and monitoring results will be prepared at the conclusion of this project.

Unpatented Erwin Hansen Homestead: During the early 1920s Erwin H. Hansen of Lakeside established a small homestead and farm on U.S. Forest Service (Apache Sitgreaves National Forests) land approximately five miles east of Show Low in southern Navajo County, Arizona. Based on archaeological test excavations in August 1993, directed by Scott Kwiatkowski and Lyle M. Stone on behalf of Phelps Dodge Development Corporation, the site consisted of a wood frame, stone masonry foundation residence, stone masonry walkways, several wood frame outbuildings, a corral, an agricultural field defined by 100+ small rock piles, several shallow depressions containing historic artifacts, and a generally light artifact scatter across the site. All features and areas were examined through systematic archaeological test excavations and the in-field documentation of surface historic artifacts. In consulting U.S. Bureau of Land Management, General Land Office records for the subject parcel

and site, it is noted that Hansen filed on 160 acres (including the study areas parcel) in 1926--the application was protested by the Forest Service on several occasions, and Hansen relinquished his application in 1932. The reason(s) for the refusal of the Forest Service to approve this homestead application are unknown, but are currently being investigated through documentary research and oral interviews with members of the Hansen family.

In completing archaeological test excavations, Archaeological Research Services, Inc. concluded that the physical elements of the national Register-eligible site had been adequately documented, and clearance for the acquisition of the property by Phelps Dodge has been recommended for approval, provided that the noted historical documentary and oral interview research are further developed, with the results being integrated with the final report of study findings.

Presidio of Tubac: During the first half of 1993, the Center for Spanish Colonial Archaeology has continued its investigations of various portions of the Spanish settlement of Tubac, Arizona. Founded during the early eighteenth century as a mission outpost, Tubac was transformed into a presidio in 1752. The settlement later became a combined military post and civilian town under Spain and Mexico. After 1856, Tubac was transformed into a center of commerce and mining. During the United States Civil War, the town was abandoned, only to be reoccupied by Federal troops who designated the outpost, "Camp Tubac." The ruins of the settlement cover about 30 acres and are partially preserved as part of Tubac Presidio State Historic Park and the Colonial Tubac Park (which is operated by the Center for Spanish Colonial Archaeology).

The area designated the East Midden has continued to produce abundant remains dating to the early period of Tubac's occupation. While clearing a segment of an eighteenth-century aqueduct (acequia), we disclosed portions of an initial period structure made from upright poles (circa 1730-1760). This building, which was later covered by the midden, contained a number of types of pottery, including Abo Polychrome, which have not been previously found in Tubac. Another important discovery was a small ceramic mold. When clay is pressed into this mold it produces a delightful cherub-like face. An additional important find was an acequia junction box which is shown on the 1766 Josef de Urrutia map.

Work was also continued at a house site located several hundred meters north of the East Midden. This area was first tested in 1987. Designated the Casa Escondida, this excavation has produced artifacts dating from the later eighteenth century through the time of the Civil War. The pre-territorial era artifacts recovered include Native plainware, majolica, Spanish and Mexican Republic coins, firearms parts, munitions, horse gear, fragments of copper cooking utensils, and a brass spoon. Anglo-American era artifacts include a penny dated 1864, several minie balls, and a series of United States' military buttons.

A third site, located just to the south of the boundary of Tubac Presidio State Historical park, was investigated during August. This building, which was once the Luis Lim Mercantile (ca. 1900-1920), produced evidence of a number of earlier structures, including a Spanish period house not shown on the

1766 Urrutia plan. The Lim household was unusual in that Luis originally emigrated form China to Mexico. He later married a Hispanic woman named Rosa and moved to Tubac at the beginning of the twentieth century. The limited testing undertaken at the Lim site has failed to produce artifacts that are generally thought to be associated with the overseas Chinese. It may be that Lim's household had already adopted a primarily Hispanic life style prior to their arrival at Tubac.

The data derived from the Tubac project is being incorporated into a larger study of the material culture and patterns of adaptation seen in civil and military sites of Northern New Spain. It is being used to develop a data base for comparison with similar remains being recovered from the Presidio of San Diego in California. The Center initiated a large-scale investigation of the later site in the Spring of 1993.

Naco: Desert Archaeology, Inc., recently conducted a cultural resource inventory at the Naco, Arizona Port of Entry proposed expansion area. Naco is located directly across the border from Naco, Sonora. Founded around 1898, the two Nacos were once busy border towns. Naco, Arizona has the distinction of being the only place in the continental United States to have been bombed by a foreign country, a result of several poorly aimed bombs during the 1929 Mexican revolution. In recent years Naco, Arizona has seen little growth, a situation that may change if the North American Free Trade Agreement passes.

Located east and north of the current National Register nominated Port of Entry, the expansion area was found to contain seven features relating to the historic use of the property. The foundations of the Copper Queen Company Store and a large adobe-walled compound associated with the store were the most visible. The Copper Queen store provided goods and services to the area beginning in 1900. Other features noted included a dump with large quantities of domestic trash dating form 1900 to the 1940s, a railroad grade, and an equipment mount.

Three standing buildings are present on the property including Naco's first bank and telegraph office. Recommended Phase II work will include an architectural evaluation of these buildings as well as testing and more extensive recording of the identified features.

NEW MEXICO

Broken Wheel Site: Carson National Forest Archaeologist Dr. Jon Nathan Young reports the discovery of the location of the famed Broken Wheel Site in the Forest. According to Jon, early in September of 1898 the artists Ernest Bluemenschein and Bert Phillips decided to do a little painting down in Mexico. They climbed in a buggy in Denver and headed south. They had come across La Veta Pass and through Fort Garland in Colorado and Questa in New Mexico. Just south of Questa, one of their surrey's wheels gave up the ghost. The artists flipped a coin and Bluemenschein lost. His was the task of riding down to Taos and having the wheel repaired. And that he did. But once he arrived in Taos, he was so taken with the spectacular scenery and the native peoples that he abandoned all thoughts

of continuing on to Mexico. He and Phillips began painting in Taos. And thus began what soon was to become the Taos Society of Artists. The Society long since has passed into the shades of history. But the seed it sowed has flowered into what -- today -- is the third largest artists colony and market in the entire world. Only those of Paris and New York City are larger.

Phillips took a photograph of the buggy and its broken wheel. In the background of that photograph loomed the distinctive peak of Flag Mountain. In July of this year -- armed with a faded copy of the original photograph -- some Friends of the Carson scrambled up and down canyon sides south of Questa trying to locate exactly the same perspective of the peak that Phillips had a century ago. Eventually they had it. And when they did -- they saw that they were standing smack in the middle of a long-abandoned road. At their feet was the same huge boulder which lay just below the buggy in the Phillips photograph. In the middle distance was the distinctive bend in the road, where the wounded wagon had come to rest -- and in the background, the mountain peak which guided them to the spot.

Trinity Site National Historic Landmark, White Sands Missile Range: White Sands Missile Range (WSMR) is sponsoring several projects concerned with inventorying and documenting the prehistoric and historic cultural resources within the missile range boundaries. Human Systems Research, Inc., (HSR), under contract with WSMR, is currently undertaking a project at Trinity Site National Historic Landmark, where the first nuclear weapon test, part of the Manhattan Project, took place on July 16, 1945. Trinity Site (LA 100,000) encompasses over 30,000 acres in the Northern Jornada del Muerto, on White Sands Missile Range, New Mexico. The primary objective of the project, directed by Morgan Rieder of HSR, is to document the remains of the intense activity that took place here in 1945. Fieldwork was begun in June of this year, and numerous instrumentation stations, experimental apparatuses, and other features associated with the test have been located. Historic ranch sites in the vicinity, evacuated for military use in 1942, are also being recorded, in order to establish the rural historic context of the area.

Other components of the project, complementary to the fieldwork, are archival research and oral history. Examination of the Trinity files in the archives at Los Alamos National Laboratory has revealed detailed instrumentation maps, construction documents, and other material that will be used to interpret the archaeological record. Meanwhile, Beth Morgan of HSR has been interviewing individuals who worked at Trinity in 1945.

The project, scheduled for completion at the end of this year, should provide valuable new perspectives on the Trinity test, as well as supplying an inventory of the archaeological remains for management and planning by White Sands Missile Range.

Ranch Oral History Project: Because of its high security and its remoteness, White Sands Missile Range (WSMR) in South-Central New Mexico boasts a surprisingly intact treasure, a

treasure which is the topic of a major oral history and architectural recording project.

In 1942, ranchers operating on what was to become the Alamogordo Bombing Range, and later, White Sands Missile Range, were asked to leave their property for the war effort. The military leased and later acquired "in fee" the lands once ranched on this 4,000 sq. mi. expanse for weapons testing.

"The families who relinquished their ranching operations to serve the war cause made a major patriotic contribution," said Peter L. Eidenbach, vice president of Human Systems Research (HSR), Inc., a partner in the WSMR Ranching Heritage Oral History Program. "White Sands Missile Range's historic ranches are closely linked to the history of space and missile development."

Among these ranches is the George McDonald Ranch, where scientists assembled the first atomic bomb for testing on July 16, 1945, an event that changed the course of history.

Major parts of ranching history, especially that of daily ranching operations in a unique part of the world, were in danger of being lost, as many of the former ranch owners are now elderly. To prevent that loss, HSR, a nonprofit, anthropological research organization, and New Mexico State University's Center for Anthropological Research, Rio Grande Historical Collections, and Farm and Ranch Heritage Center have teamed up with White Sands Missile Range to launch a program to collect and preserve the ranch history. The program will include oral history, photographic documentation, preservation of family documents, and architectural recordation of the historic ranches.

The project is funded by a \$100,000 Department of Defense legacy Program grant, through a contract with WSMR. The project will include training volunteers and family members to collect their own oral histories. Travelling exhibits for use by WSMR, NMSU, and public agencies and schools also are planned.

"The program is designed to become self-sustaining," said Eidenbach. Eidenbach and Neal Ackerly, NMSU Center for Anthropological Research director, are principal investigators for the project."

"The major benefit to the ranching families is that they will have an opportunity to revisit their family homes and to document their heritage," Eidenbach said.

The oral histories, photographs, and ranch documents collected will be archived at WSMR and at the Rio Grande Historical Collections on the NMSU campus. Fieldworkers including NMSu students began interviewing ranching families Oct. 1.

Rayado Archaeological Project: In July and August, 1993, Davit T. Kirkpatrick, Human Systems Research, Inc., Las Cruces, New Mexico, continued test excavations at the historic settlement of Rayado, Colfax County, New Mexico. Founded in the winter of 1848 by Lucien B. Maxwell and Kit Carson, Rayado eventually became the ranch headquarters for Jesus Abreu in the 1860s. The headquarters, also known as the Maxwell-Abreu Plaza, consisted of a quadrangle with three attached room blocks and a defensive wall with a gate on the east side. Abreu raised crops, cattle, sheep, and horses, which were sold to local ranches and farms, to Fort Union and other

Army posts, to ranches outside of New Mexico Territory, and travelers on the Santa Fe Trail. By the late 1880s, Jesus Abreu and his family were among the leading Hispanic families in northeastern New Mexico. The property, now owned by the Boy Scouts of America, is being developed for an interpretative living history museum. Today the south room block with two additions (Maxwell-Abreu House) and a small isolated building (the Martinez or North House) from the north room block are all that remain of the original compound. Both buildings were recently placed on the National Register of Historic Places.

Excavations in 1992 and 1993 focused on exposing subsurface architectural remains of the Abreu House. The adobe walls of the original house were built directly on the ground without any foundations, therefore little evidence remains of the missing rooms and west room block. Low stone foundations were used to support adobe walls of later rooms. Tree-ring samples taken in 1992 from primary roof beams provided construction dates of 1856+v, 1856+v, and 1957+v; nine other samples were undatable. In 1993, live trees were sampled to develop a local chronology, and additional tree-ring samples were collected from lintels with bark over doorways and windows in the Abreu House. Test excavations under the covered porch exposed a major remodeling event. Historic photographs document that the south and east porches were remodeled between 1916 and the early 1930s. For the remodeling a trench was dug adjacent to the base of the south and east walls, effectively destroying evidence of the original porches and associated artifacts. The trench, approximately 2 ft. wide and 3 ft. deep, was then filled with concrete, possibly to provide additional support for the adobe walls. The porch area was backfilled, and a concrete porch was built, reusing the original columns and railings to support the roof.

Excavations associated with a utility line exposed a buried trash deposit west of the hews. The fill included fragments of cowboy boots, shoes, irrigation boots, wool saddle blanket, ceramics, bottle and window glass, and very rusted metal fragments. Numerous fragments of butchered animal bone were also recovered.

Future excavations will focus on areas away from the building, including a *placitas* between room blocks, rock foundations possibly associated with sheds or poultry coops, and the cistern in the plaza. Excavations in these areas should provide artifacts and features that will expand our knowledge of the Abreu family and other inhabitants of Rayado.

CANADA - ATLANTIC

Reported by Robert Ferguson

NEWFOUNDLAND

St. John's: Peter Pope, Past Present Consulting, carried out a survey of vacant urban space in downtown St. John's this past summer, for the Historic Resources Division of the Provincial Department of Tourism. With the co-operation of the City of

St. John's, eleven vacant lots, parking lots and alleyways were tested, using a backhoe to open up the tests and following through with shovel and trowel work.

Thousands of artifacts were recovered, ranging in date from the 17th century to the present. Part of the point of the exercise was to learn more about the commercial history of St. John's and about the development of the waterfront. Water Street sites near the old George Neal Premises (recently demolished) and near the Murray's Premises were among the most interesting undisturbed commercial contexts, dating in each case to the late 18th century. The earliest site identified was the most extensive: what appears to have been a civil fort of the period c. 1690-1715, on Duckworth St. east, south of Fort William (now the Hotel Newfoundland). The site is well stratified and completely undisturbed, apart from a meter or so of fill deposited when the site was destroyed, probably by the French in the early 1700s.

If funding permits, some of these areas could be excavated next summer. A report is in preparation.

Old Ferolle Island French Fishing Station: A preliminary survey by Jacques Whitford Environment Limited of Old Ferolle Island off the northwest coast of Newfoundland resulted in the official recording of two archaeological sites which have been known to local residents for many years and which have been suffering from neglect and unintentional vandalism. The two sites are now afforded legal protection under the provisions of *The Historic Resources Act*. The sites offer excellent potential for further research and development for visitation, and are well situated to fill a void on the west coast of Newfoundland where previous archaeological interpretation has focused primarily on prehistoric cultural groups and the Norse.

The SW corner of Old Ferolle Island has been used as a fishing station for much of the past four hundred years by fishermen of a variety of nationalities including Basque, French, English and, perhaps, Channel Islanders. The fishing station at Old Ferolle Island required a wharf, where the fish were unloaded, a stage, where the initial processing was begun, drying facilities such as flakes or a cobble beach, storage buildings and living accommodations for the shore crew. During the fishing season the ship which brought the crew would have remained at anchor in a nearby protected harbour. Old Ferolle Harbour offered an eminently suitable location, being well protected from all winds and with as much as 20 m. depth of water in a wide channel. The island provided plenty of timber for construction and fuel; fresh water from snow banks would have been available well into the summer or a few minutes away in streams and ponds on the mainland side of the harbour. Structures found on and near the drying beaches at the SW corner of Old Ferolle Island have been interpreted as pathways, cabin foundations, ovens, dried fish storage areas, wharf foundations and gardens, all probably related to the 18th-century fishery. The pathways are among the most interesting features found: the three alignments run between 50-100 m in straight lines with one or two rows of flat slabs set 60 cm. apart. Hunting blinds were also found, probably dating to the 19th and 20th centuries. Three tent rings at the site suggest a brief Inuit occupation, perhaps during the

18th century. The artifact assemblage includes 18th-century material, some from the French Basque region and some from Normandy, and 19th-century material from Britain.

The limited field investigation, sponsored by Thomson Heritage Consultants and the St. Barbe Development Association, and supported by archival research by Dr. Selma Barkham, did not produce any evidence of early Basque occupation, possibly because Basque fishermen resided on board ship rather than at shore stations. However, there is potential for an expanded programme of investigation based on the 17th-19th-century French presence on the island and at nearby Dog Peninsula and New Ferolle Peninsula, and for an exciting and informative interpretive strategy.

NEW BRUNSWICK

Survey of Shediac Region: During the summer, Marc Lavoie, assisted by Guy Lavoie, completed a preliminary survey for historic sites in southeastern New Brunswick. Funding was secured from New Brunswick's Archaeological Services and from two federal government programmes: Challenge '93, through the Département d'Histoire et de Géographie at Université de Moncton, N.B., and Access to Archaeology (1992), through the Société historique de Grande-Digue.

In July, Guy Lavoie completed a search for documents and published sources at the Centre d'Etudes acadiennes at Université de Moncton. Information relating to the Acadian and French presence in the Cocagne, Grand-Digue and Shediac regions of New Brunswick were inventoried and organized into a valuable database. The French and Acadian presence in the region dates as early as c. 1750, and was represented by military and domestic establishments.

In August, the reconnaissance was completed. A survey of the shoreline was completed at Cocagne Cape, Cap-des-Caissies and Grand-Digue, and along both shores of the Shediac River. Traces of the military establishments on the mainland have not been located to date. However, findings relating to the return of the Acadians to the region in 1768, after the deportation in 1755, were located at Grand-Digue. English white salt-glazed stonewares and other ceramics were unearthed immediately above the sterile level in two test excavations. These finds were not associated with structural remains; undoubtedly the latter were destroyed by the natural erosion of the coast. Sites representing the native presence and more recent 19th-century settlements were also identified or relocated during the survey.

NOVA SCOTIA

Nova Scotia Railway Machine Shop: In 1992, during archaeological investigations by Jacques Whitford Environment Limited (JWEL) of the proposed CN Intermodal Terminal in Halifax, subsurface remains were encountered of a stone structure thought to be a railway machine shop dating to the 1860s operation of the Nova Scotia Railway, later the Intercolonial Railway. Recommendations were made for monitoring of construction work at the site, particularly during excavation for drainage.

In 1993, CN obtained the services of JWEL to monitor excavations. The proposed drainage pipe trench, connecting catch basins on the northeast side of the site, was found to coincide exactly with the northeast wall of the machine shop. CN engineering staff, at the request of JWEL archaeologists, redesigned the drainage layout to minimize disturbance of the machine shop foundation. The cooperation by CN personnel and the skill of equipment operations resulted in the preservation of this archaeological feature.

Several other structural features were reported to JWEL by site construction personnel. A stone foundation of a small building probably relating in function and age to the early operation of the railway terminal was only slightly disturbed. Several disused culverts were encountered and reported to JWEL; on inspection these were considered not to be of historical significance.

Grassy Island National Historic Park: A Parks Canada crew, under the direction of Robert Ferguson, returned to Grassy Island in Canso harbour to resume excavations last undertaken in 1981. The park commemorates the international fishery which was centered at Canso. Earliest documentation indicates Mi'kmaq, Basque and French people trading and fishing in the harbour prior to 1604. Following the transfer of mainland Acadia to the British crown in 1713, Canso became a major centre for New England fishermen until the town's destruction by a French force from Louisbourg in 1744.

The primary purpose of the project was to further examine the early 18th-century merchant property of Edward How as a basis for a ground interpretation programme on the island. How had owned this plot between 1732 and 1744. Previous excavations had exposed the residence and west wing, part of a storehouse, and two middens. This year's work concentrated on the east wing, the courtyard and a well. The cellar of the east wing had been cut through earlier features probably associated with How's predecessor on the property, a British officer named Alexander Cosby. Attempts by How to clean the cobbled courtyard with beach gravel had left water-worn precontact native material in this 18th-century context, providing concrete evidence of Mi'kmaq presence prior to the arrival of fishermen and traders in the 16th century.

In 1992 a coffin was salvaged from an eroding cliff at the far end of the island. The associated cemetery is believed to be contemporary with the New England settlement. A conductivity survey of the area was undertaken this year in an attempt to define the extent of threatened resources. Preliminary results indicate a number of anomalies which may be grave sites. Test excavations next year will attempt to confirm their identifications.

A small excavation was undertaken in an area which had previously revealed evidence of a temporary building from the 17th-century seasonal French fishery. This excavation was not completed, although traces of the footing for the building were found

Recording of the excavations this summer was facilitated by the use of a Wild Total Station and by photogrammetry. All plan views and profiles were photographed with control points for rectification. Working copies were made available to supervisors in the field. Photogrammetric processing will be done by the Heritage Recording Services section of Parks Canada in Ottawa. Photo maps of the property are being digitized for computer manipulation by the Halifax Office of Public Works, Government Services. The Total Station was used to record locational information on artifacts, soils, features. Survey and photogrammetry results as well as the artifact inventory data base will be combined in the GIS programme ARCINFO.

CANADA - ONTARIO

Reported by Jon K. Jouppien

Stephen Mills, field archaeologist with the Ontario Region of the Canadian Parks Service, submitted the following report outlining the 1992 projects undertaken by that office.

Fort George: Two mitigative CRM projects were undertaken at Fort George. The first involved areas adjacent to the reconstructed Blockhouses, Nos. 2 and 3. The second focused on monitoring the installation of new sleepers for the reconstructed gun platforms on the Northeast and Southwest bastions.

The objective of the two investigations were similar. Both provided the opportunity to obtain a comprehensive stratigraphic record, to verify sequences established by previous limited excavations, and to augment existing architectural detail. Additional aims were to evaluate the affects of the 1937 reconstruction activities on historic resources and to assess their potential for future study. The stratigraphic sequence observed during the excavations were integrated with those from past surveys. This has resulted in a firmer grasp of the complicated events associated with the site's reconstruction and site formation. The remains of a displaced stone feature, possibly the 1796 foundations of Blockhouse No. 3, were also recorded. Although traces of the original gun platforms were not observed, the stratigraphic sequence for the NE and SW bastions were established. They appear to be surprisingly uniform and demonstrate that deposits pre-dating the 1937 reconstruction lay only 0.20m below present grade.

Bethune Memorial House: In the final year of field work for landscape restoration at Bethune House in Gravenhurst, what is believed to be the elusive well was finally located. This feature had successfully evaded three seasons of resistivity surveys and conventional testing by hiding under an air conditioning unit and fence. The feature consists of a pit approximately 1.1m square and 2.18m deep lined with wooden cribbing. It had been filled in prior to take over of the site by Parks. At the front of the house a area beside the front steps was excavated to prepare a foundation for a lift for house access. While this research was taking place, another successful school program was held at the site in cooperation with Bethune House Interpretation staff.

Heritage Canals: Two projects were undertaken on the Ontario Region historic canals as a result of the federal Access program. At Kingston Mills on the Rideau Canal, the work which was started on the pathway around the blockhouse in 1991 was completed. A school program was run at the same time in cooperation with the Canal Interpretation Staff and a contract with the Cataraqui Archaeological Research Foundation. Ten public school classes spent a half day digging and a half day at the Cataraqui lab following classroom instruction from Interpretation staff. Several thousand late 19th century domestic artifacts were recovered from the pathway which had at one time been partially paved with brick.

At Scotts Mill on the Trent Severn Waterway, the proposed Access route to washrooms in the lock office crossed the site of the second (1892) lock office. Despite good historical documentation for the location, a few modern nails and broken window glass were the only structural remains uncovered in the test trenches.

Fort St. Joseph: A request to excavate a new flag pole site and additional fence post holes around the ruins at Fort St. Joseph was developed into a public archaeology project for Parks Day at the site in July. With the assistance of the Fort Interpretation staff both excavation and artifact processing were demonstrated to the 700 weekend site visitors. The new flag pole site revealed a possible drain on the east side of the blockhouse; several hundred artifacts were recovered from this four metre square area. At the powder magazine a military button and musket balls were recovered from beneath the 0.5m deep layers of fill which was probably brought in to level the site prior to construction.

Collections Management Unit: In April 1992, the Ontario Regional Office of the Canadian Parks Service initiated a project to review the Ontario Region collections, to access the research potential of each site assemblage and to improve storage, preservation, and access to the artifacts. The Regional collection consist of material excavated from National Historic Parks Sites and Canals in Ontario since 1976. The site assemblages range from Archaic to historic native materials, and from late 18th century Fur Trade, War of 1812, and 19th century British Forts, Canals and Victorian domestic houses including their 20th century contexts. This Threatened Archaeological Collections Project will be gradually accomplished over the next decade. Priority has been given to assemblages with preservation concerns (ie. organic or black powder artifacts) and to those with research potential related to periods of animation or display development at the Parks, Sites and Canals. Collections with native material are also receiving priority in anticipation of possible repatriation by local bands.

Work in 1992/93 has focused upon a predominantly 19th century assemblage excavated from Ft. Wellington NHS. Most of the 300,000 artifacts inventoried to date are from an incredibly well stratified latrine dating from 1839 to the early 20th century. The latrine was divided into 3 cubicles accommodating Officers, Enlisted men and the garrison wives and children. Archaeological material from the 1843-1853 Royal Canadian Rifle Regiment privy debris is currently being analyzed at Parks

Headquarters in Ottawa to elicit information related to domestic life at the Fort for site interpretation purposes. Assemblages from other areas of the site, gun platforms, palisades, earthworks, etc. are being inventoried and assigned to various phases of the site occupation, (19th century Militia Periods, Fenian raids, 20th century caretaker, etc.). Researchers interested in reviewing material from Fort Wellington and other Ontario Region assemblages are encouraged. Inquires of interest can be addressed to: Susanne Plousos, ORO Canadian Parks Service, 111 Water Street E., Cornwall, Ont. K6H 6S3.

Fort Malden: Archaeological investigations were undertaken at Fort Malden in response to a proposal to replace and install a new pathway system. Thirty-eight test pits were excavated along the route to assess the potential disturbances to belowgrade resources. The investigations revealed that the project would have minimal impact on the military components at the site but would disturb deposits dating to the Asylum Period (1859-1870) and later. Areas for further study were identified and a contract given to the Cataraqui Archaeological Research Foundation of Kingston, Ontario, to monitor the pathway installation. Stone pathways and middens, associated with the Asylum and later occupations, were identified. They were fully excavated during the construction phase of the project. A report on the findings is expected by March 1993.

Fort Wellington: During early March, the flagstone pathway between the 1838 Blockhouse and Caponniere entrance was upgraded to meet the new C.P.S. Access standards. This activity was monitored in order to examine the stratigraphic sequence for this area of the parade. Of interest was the presence of an intact, rock spall deposit, some 0.15m below surface. This layer has been observed elsewhere within the enceinte of Fort Wellington. It represents a macadamized surface fashioned from the debitage from the Blockhouse construction. Dating to 1838, it provides an important sealed context for the site. Importantly, the investigations revealed that the ca. 1963 flagstone pathway, and its subsequent alterations, have had no negative impact upon this historic deposits.

The most extensive project for the military sites archaeological unit in 1992 was at Fort Wellington in the town of Prescott, along the St. Lawrence River. Fort Wellington was originally constructed during the War of 1812 to defend the water transportation route along the St. Lawrence River into the Great Lakes. A major repair project to the fort's fraising and revetment initiated a sampling and monitoring project that lasted 23 weeks. A two phase program was designed to sample, record and monitor the total replacement of 360 linear meteres of fraising and 330 linear metres of revetment. Phase one involved excavating 2mL x 1mW x 1.5 mD test pits across the revetment on each of four curtains to assess the integrity of the resource. This phase resulted in superb stratigraphic sequences of not only successive revetment installations but of the 1838 banquette, revetment parapet configurations, and various earthwork repair events. Phase two involved monitoring the replacement operation. In addition to uncovering evidence of a probable 1838 fraising alignment and the 1813

south-west gun platform, the second phase provided ample data on which to build our first synthesis of the upper earthworks construction/repair sequences. In general, results from the project have alerted CPS planners to the substantial value remaining in this historic resource and have increased our understanding of 19th century military engineering techniques at Ft. Wellington. The entire excavation and monitoring project involved 23 weeks of fieldwork, ending in mid-December. The finishing touches to the re-landscaping of the fort is scheduled for the Spring of 1993.

Battle of the Windmill: A four week salvage excavation was undertaken at the site of the Battle of the Windmill, during June and July of 1992. The site, approximately two kilometers east of Prescott, Ontario, was the scene of a three-day battle between rebels, made up mostly of American "Patriot Hunters" bent on bringing American-style republicanism to their northern neighbors, and the British army and navy assisted by local militia units. The project was designed to test the foundation of the 65 foot high circular masonry tower (built circa 1832) prior to stabilization work at the site. The route for a proposed electrical service line was also tested. Excavation around the base of the windmill uncovered several construction / repair / occupation strata, containing several thousand artifacts relating to the structure itself and the activities performed at the site. Preliminary analysis of the finds indicate that the site was not extensively utilized during the 19th century, and that it was a popular spot for recreational endeavors for much of the 20th century. The discovery of several lead shot of varying caliber as well as a couple of percussion caps may attest to the military presence at the site during the battle and the subsequent occupation of the windmill by local militia units. Details of the building's construction sequence were also recorded. Testpits along the service corridor indicated that a building foundation may exist near the windmill. However, a change in the stabilization design eliminated the requirement for an electrical upgrade, thus protecting the foundation from any disturbance.

CARIBBEAN/BERMUDA

Reported by David R. Watters

BARBADOS

During the months of July and August, 1992, archaeological excavations continued at Codrington College, St. John, Barbados, as part of the University of North Carolina at Wilmington Summer Field School in Archaeology. The project is designed to investigate the development of seventeenth century sugar plantations in Barbados, and to model the dynamic social interactions of the various social strata present at this plantation. Secondarily, the project investigates the development of Codrington College from its 1711 beginning, looking at changes in social structure that accompanied the

shift from private sugar plantation to Society for the Propagation of the Gospel control. Twelve students and one volunteer from the United States worked at uncovering the foundations of what appears to be a nineteenth century private chapel associated with the Rio Pongas mission training school at the college. Work continued on a large seventeenth century refuse disposal area located northwest of the college buildings.

During Spring 1993, students from the University of the West Indies, Cave Hill campus, processed the 1991 collection of artifacts recovered at Codrington College. A preliminary analysis of dietary bone and unglazed red earthenwares was completed.

Excavations at Codrington College continued during July and August, 1993, when eighteen students from the U.S. worked with twenty-two students form UWI-Cave Hill. Evidence of massive dietary consumption of sea urchins, "sea eggs", was recovered from the seventeenth century trash dump. Barbados is one of the few English speaking islands in the Caribbean on which sea urchins are regularly consumed today. In addition, the foundations of the seventeenth century sugar factory were discovered and partially excavated. The location of the Codrington Pottery was discovered. The Pottery produced ceramic sugar molds and molasses drip jars during the seventeenth and eighteenth centuries. Domestic wares of low fired earthenware were also made at the Pottery. A small test at the Pottery produced an overwhelming mass of sherds and intact vessels as well as evidence of a kiln. Data obtained from future excavations at the Pottery site will help to elucidate the development of industrial and domestic ceramics on the island as well as illustrate the fusion of African design motives and English technology.

BARBUDA

David R. Watters (Carnegie Museum of Natural History) is finalizing analysis of materials from the English colonial site of Codrington Castle (BA-H7), the principal administrative and defensive structure in the village throughout the Codrington family's leasehold of Barbuda (ca. 1680-1870s). The excavation located subsurface structural remains, bottle and window glass, nails, flint modules and gun flints, kaolin pipes, and pottery (imported earthenwares and stonewares and Afro-Caribbean sherds). James B. Petersen (University of Maine at Farmington) analyzed the Afro-Caribbean ceramics; Elizabeth J. Reitz (University of Georgia) the vertebrate fauna; and Edward J. Petuch (Florida Atlantic University) the invertebrate fauna from Codrington Castle and the partially contemporaneous Highland House (BA-H1) site.

BERMUDA

Norman F. Barka and Edward Harris have initiated a long-term study of the early 17th century forts of Bermuda. In July and August, 1993, the College of William and Mary held its 13th International Field School on Castle Island. The field school was also supported by the Bermuda Maritime Museum,

the Bermuda Government Department of Parks, and the United States Navy, the latter through housing and galley facilities at the U.S. Naval Air Station, Bermuda.

On Castle Island, study commenced on the oldest standing English house in the New World, along with two of the first English masonry fortifications in America, built in the 1612-1621 period. At King's Castle, site clearing, mapping, and test excavations were carried out, along with scale drawing of above-ground walls and features. A lower battery area disclosed evidence of several building periods, including grooves chiseled out of the bedrock for gun platforms; an upper battery revealed several periods of wall and flagstone floor construction and a possible filled-in passageway which leads from the house to the upper battery. Excavations around the so-called Captain's House, built adjacent to the upper battery in 1621, yielded a surprising amount of material, including pottery, English tobacco pipes, two of the finest pieces of "Hogge Money" yet found [the first found in an archaeological context], and a rich deposit of fish and mammal

The nearby site of Devonshire Redoubt, also located on Castle Island, was cleared of tree and brush growth and mapped/photographed.

Study of these early sites will continue in 1994.

CUBA

Villa Clara Province: José Rodriguez Hernández, Chief of the Archaeology Section of the Speleology Group "CANDIL," reports on the research undertaken at a cemetery near the "El Ecó" sugar factory in the present municipality of Quemado de Güines, province of Villa Clara. The factory was founded in the 1840s, concurrent with the late introduction of sugar production in this region of Cuba (the old province of Las Villas). Police regulars in 1987 recovered the first human remains at this site, which was identified as a female negroid skeleton interred at least one hundred years ago and accompanied by furnishings typical of a domestic slave of the period. Thereafter, the Speleology Group "CANDIL" in conjunction with the Museum of that locality mapped the cemetery and explored the nearby area. During subsequent field seasons, chemical tests to determine the phosphate content of soil samples were used to select suitable locations for excavation. Successive layers of osseous remains, which were not in correct anatomical position, have been interpreted as probable evidence of (collapsed) coffin burial. At a greater depth, a female negroid skeleton showing pathological conditions was recovered, once again with the furnishings of a domestic slave. In another excavation, two skeletons, one male and one female, revealed pathological evidence of the physical labor performed by this social group. Dental mutilation of the upper incisors was observed in one instance. In conjunction with the fieldwork, church records are being reviewed for information on baptisms and deaths of the different social and racial groups existing in the region in the last century. All of these ethnic groups, and above all the African one, played an important role in the formation of Cuban culture. [Watters acknowledges Marillee Schmit's translation of the letter and report from which he abstracted this contribution].

ST. EUSTATIUS

Norman F. Barka, and two William and Mary graduate students, Marie Blake and Dana Triplett, spent one month on the island during the summer of 1993. The team processed and studied a late 18th century assemblage of artifacts excavated in the town of Oranjestad in 1991. In addition, the analysis of artifacts found in a major 5 year excavation of the center of Oranjestad was nearly completed.

ST. MAARTEN

A report written by Norman F. Barka, College of William and Mary, entitled "Archaeological Survey of Sites and Buildings, St. Maarten, Netherlands Antilles: I" was presented to STINAPA (Sint Maarten National Parks Foundation) in June, 1993. This report is the first island-wide (Dutch side) compendium of visible (above ground) archaeological/architectural sites in St. Maarten. The survey of the archaeological resources of St. Maarten will continue in 1994.

U.S. VIRGIN ISLANDS

Research Opportunity, St. John, U.S. Virgin Islands, Summer 1994: Between 1769 and 1956, on the Virgin Island of St. John, a community of free blacks existed on the arid East End of the island, independent of the plantation/slave culture. Why did this community evolve and how did it survive?

An archaeological team is needed to conduct a study of middens of this community during the summer of 1994. This study will coordinate with an ongoing research protocol (information supplied on request).

Project coordinators are prepared to assist in the following ways:

- assist in identifying the most productive sites
- facilitate access to the site: permissions, maps, etc.
- provide some local workers
- help find housing
- assist in obtaining funding
- assist in providing a place on St. John to house artifacts which are recovered.

For further information, please contact: Ann Hobbs, Box 347, St. John, USVI 00831.

MEXICO, CENTRAL AND SOUTH AMERICA

Reported by Janine Gasco

NOTE: Janine Gasco's new address for the 1993-94 academic year - 163 St. Joseph Ave., Long Beach, CA 90803

OF GENERAL INTEREST

Anthony P. Andrews has prepared an extensive "working bibliography" of articles pertaining to historical archaeology in the Maya area, and he is willing to provide copies to interested readers for a small fee to cover materials, postage, and handling. The bibliography contains approximately 340 references(it includes numerous citations from Mexican publications) and is 23 pages long.

To obtain copies write to Anthony P. Andrews, Division of Social Sciences, New College of the University of South Florida, Sarasota, FL 34243-2197. Ask for "Historical Archaeology in Maya Area: A Working Bibliography." Specify whether you would like to receive the bibliography on 1) 3.5 diskette, 2) 5.25 diskette, or 3) printed hardcopy. The diskette versions are written in WordPerfect 5.1 and will be sent to you in special diskette mailers. Send a check to Anthony Andrews for \$10.00.

BRAZIL

For the second consecutive year, Charles E. Orser, Jr., Director of the Midwestern Archaeological Research Center and Associate Professor of Anthropology at Illinois State University, conducted field research in Brazil. The research again focused on the Serra de Barriga, a large hill in northeastern Brazil, about 35 miles from the Atlantic coast. The Serra da Barriga is one of the most important archaeological and historical sites in Brazil, because it is where 17th-century slaves ran away to avoid a life of bondage. Between 1605 and 1694, the runaways built Palmares, an African kingdom of at least ten villages. These villages included Brazilian Tupi Indians, peoples of different African cultures, and even Portuguese settlers. Both Portuguese and Dutch colonial governments sent almost annual expeditions against Palmares, but the Portuguese were not able to destroy it until 1694. Today, Palmares, and its final leader Zumbi-beheaded by his Portuguese captors-are regarded in Brazil with the same reverence that we hold for George Washington. The Serra da Barriga is a national landmark administered by Brazilian Heritage.

Last year, using funds from the National Geographic Society and ISU's Office of Research, we found ten archaeological sites at the Serra da Barriga, long regarded as the site of Macaco, the capital of Palmares. The research team was composed of Orser, Dr. Pedro Paulo A. Funari, of the University of Campinas, Brazil, Dr. Michael J. J. Rowlands, of the University of London, and several Brazilian college students. This season with funds from the National Geographic Society

and the Social Science Research Council, the research team found four new sites. These sites range from prehistoric or early historic Tupi villages to an 18th-century plantation. In limited test excavations at Site 1, regarded as the main village of the Serra da Barriga, we found numerous pottery sherds, two holes that once held posts, and a hearth. Last year we found the village's wooden stockade on the perimeter of this site. Assisting this year was Julie Ruiz-Sierra, a graduate student at the University of California, Santa Barbara. She is currently preparing a master's thesis on the pottery found at the Serra de Barriga. This pottery ranges from crude, thick Indian pottery to wheel-turned, yellow-decorated majolica made in Portugal.

Our study of Palmares promises to modify the way in which we perceive the construction and maintenance of African cultures in the New World. It is clear from our research to date that the African-Indian connection was very important to the success or failure of Palmares. For example, some of the Indian material culture may bear African characteristics, and this is one important line of inquiry we are currently pursuing.

UNDERWATER NEWS

Reported by Toni Carrell

FLORIDA

Emanuel Point Shipwreck: State underwater archaeologists under the direction of Dr. Roger C. Smith have completed initial excavations on the earliest recorded shipwreck in Florida. Recently discovered during a survey of Pensacola Bay, the Emanuel Point Shipwreck was found in one of four areas thought by historians to have been the most likely landing places of the first Spanish attempt to colonize Florida by Tristan de Luna in 1559. Luna's expedition failed after a hurricane destroyed most of his fleet shortly after their arrival.

Preliminary investigations of the site revealed the undisturbed lower hull of a wooden sailing ship, and associated artifacts consistent with a 16th C. date. Test excavations continued during the summer with students enrolled in a University of West Florida field school. The work focused on the central portion of the hull, where the ship's main mast had been stepped adjacent to two bilge pumps. Artifactual materials encountered in the bilge represent well preserved floral and faunal deposits reflecting an accumulation of debris spanning the vessel's seafaring career. The most stunning and unique artifact from the ship's bilge is a small hand-carved wooden silhouette of a Spanish galleon, discovered in sediment beneath the ballast stones near the pump.

Town Point Site: located in Pensacola, this site was completely excavated this past summer by Southern Oceans Archaeological Research, a non-profit research foundation created this spring by Marianne Franklin, Bruce Terrel, Dr. Eric Weinstein and

John W. Morris III. This organization raised the funds from local businesses in order to conduct this project. Field work is complete and conservation and analysis is being conducted by SOAR. Morris was principal investigator for this project and at this time he is completing hull analysis and reconstruction. The vessel remains at this site are dated to the last one-half of the 18th C. and exhibit an interesting cross-cultural affiliation. Certain hull features are distinctly Iberian, yet the material culture assemblage is dominated by British colonial period artifacts. All recovered material will be conserved by SOAR for the State of Florida. The state will receive all conserved materials, along with a fully illustrated artifact catalogue and the complete published report. In addition to the report, SOAR will prepare an exhibit on the site for a local museum. This exhibit will include a 1:10 scale research model.

NORTH CAROLINA

North Carolina Underwater Archaeology Unit (UAU): the underwater archaeology program entitled "Hidden Beneath the Waves" is designed to provide an exciting hands-on classroom experience. Targeted for the 8th grade student, the program is a self-contained outreach kit that provides video presentations, historical research exercises, quiz games and the highlight of the program, replica artifacts from an actual shipwreck and a four-foot scale model of the wreck lying on the bottom of the Cape Fear River. A comprehensive teacher's guide allows the program to be administered solely by the classroom teacher.

"Hidden Beneath the Waves" is a cooperative venture between the Cape Fear Museum and UAU that is being developed and tested during the 1993/94 school year in the New Hanover public school system. Corporate sponsorship by Chemserve Terminal Inc. and other local businesses have provided a budget of nearly \$2,000 for the development phase. At the completion of this period, one out reach kit and, hopefully more, will be available for use in middle schools throughout the Cape Fear area. In the future, other areas in coastal North Carolina will be encourage to adapt this outreach program and tailor it to their region and maritime history.

TEXAS

Texas Historical Commission (THC): Barto Arnold, THC, announced the latest results of the Padre Island Crossbow Replicas: A Joint Project of the Texas Historical Commission, the Corpus Christi Museum, and Ships of Discovery. Two working replicas of the crossbows from the 1554 wrecks are complete and now are located at the Corpus Christi Museum where they will enhance Shipwreck! the exhibit of the 1554 fleet. David Watson, an artisan who specializes in the replication of medieval and Renaissance crossbows, manufactured the replicas. For more information on the crossbows project, contact Barto Arnold at THC or David Watson at 512/453-2628.

THC and the Minerals Management Service have cosponsored a second project the *USS Hatteras* shipwreck site. Arnold (THC) and Ric Anusckiewicz (MMS) co-direct this ongoing effort to monitor site condition and conduct incremental

recording and research. The ship, undisturbed since its sinking by *Alabama* in 1863 off Galveston, is monitored for deterioration and sediment build-up, which appears unchanged in the past 13 months. During the most recent trip to the site, September 8-9, 1993, a sediment meter was installed and a site plan initiated. The efforts of the THC and MMS were greatly facilitated by the loan of differential GPS equipment from Trimble Navigation, Inc. and a NavTrac XL with NavBeacon, which provided one meter accuracy for site relocation and a magnetometer survey.

VERMONT

Diving, Digging and Documenting: Sharing the Process of Preservation at the Lake Champlain Maritime Museum: The Lake Champlain Maritime Museum, with funding from the State of Vermont and the Lake Champlain Basin Program, has recently completed an intensive two-year study of a five-mile section of Lake Champlain between Larrabee's Point ferry crossing and Chipman's Point. This archaeological investigation was motivated, in part, by recent events which have raised concern for the management, protection and preservation of submerged cultural resources in the lake.

During the 1992 survey, utilizing remote sensing equipment and divers, the Museum's archaeologists located several significant sites from the late 18th, 19th, and early 20th centuries. Included among these features were the remains of the "Great Bridge" built in the winter of 1776-77 by American forces to span the waters between Fort Ticongeroga and Mount Independence.

Under the direction of Arthur Cohn and Dr. Kevin Crisman, a highly experienced team of archaeological divers documented the location and construction of 21 bridge-caissons. These stone-filled caissons, which resemble log cabins, provided as anchor-points for the floating platforms that comprised the bridge.

Conducted at the same time as the bridge survey, a preliminary investigation of the waters along Mount Independence's northern shore revealed a number of unique Revolutionary War artifacts. Discovered on the lakebed, in eight feet of water, lay a ten foot long cannon, weighing over 3,000 pounds; a completely intact French flintlock musket; barshot, round shot, and grape shot; grenades and mortar bombs; bayonets; spades; a pick axe; a grapnel anchor; rum bottles; and a variety of ceramics.

Because of the site's historical significance and its vulnerability to looting, the State of Vermont provided funds for the Museum to continue working on the site in 1993. At the conclusion of this year's field season, a total of nearly 900 artifacts were discovered and their precise locations on the lakebed documented. In June, the entire collection of artifacts were removed to the Maritime Museum's newly constructed Conservation Lab for preservation.

As part of the State of Vermont's and the Lake Champlain Maritime Museum's mission to educate the public about the region's rich history, the Museum's Conservation Laboratory was opened to the public at no charge. Conservators John Bratten and David Robinson and the knowledgeable laboratory

staff provided visitors with a truly unique experience, guiding them through the facility and explaining the processes used to conserve the variety of materials in this extraordinary collection. Rarely does the general public get an opportunity to see this type of work underway, much less have the chance to actually touch Revolutionary War artifacts.

Another exciting way that the Lake Champlain Maritime Museum shared this information with the public was through a special focus tour for school groups this fall.

Diving, Digging and Documenting: The Process of Nautical Archaeology was a 3-hour hands-on study of submerged cultural resources, nautical archaeology, and artifact conservation. This new and exciting program was designed to feature the nearly 900 Revolutionary War artifacts which were recovered from the shore-side waters of Lake Champlain at Mount Independence this summer.

Over 1200 students in grades 4 through 12 took advantage of this once-in-a-lifetime opportunity to work closely with historical artifacts in the intriguing new science of Underwater Archaeology. During the visit the students participated in a hands-on study of a debris field, created an artifact record by measuring and sketching the artifacts, and followed the process at the conservation lab where iron artifacts were being treated with electrolysis.

The conservation of the Mount Independence artifacts was finished at the end of October. The State of Vermont has placed the collection in storage until a visitors center at the Mount Independence site is completed.

WISCONSIN

Wisconsin State Historical Society: After a two-year absence, an anchor from the steamer Frank O'Connor was returned to the site where the ship initially sank in 1919. The anchor, illegally removed in 1991, was recovered by authorities and is now in the museum of the Cana Island Lighthouse, which overlooks the scene of the ship's fiery demise. The looting was reported to the district attorney's office by several Wisconsin divers. The defendant agreed to an out-of-court settlement requiring him to return the anchor to a public repository. The Wisconsin State Historical Society is taking steps to place the site on the National Register of Historic Places.

BERMUDA

Western Ledge Site: a late 16th C. (1584) Spanish patache. Over the past 4 years the site was completely excavated, recorded and then recovered in its entirety. This project was sponsored by the Bermuda Maritime Museum, Dr. Edward Harris, Director. Professor Gordon P. Watts, Jr., of East Carolina University's Program in Maritime History and Nautical Archaeology, served as project director and principal investigator. John W. Morris III is currently completing the hull analysis and site interpretation. Morris has constructed two 1:10 scale research models and assisted in the preparation of tow exhibits based on this site. One of the site drawings has been used by the Bermuda Monetary Fund as the motif of the

new Bermudian 50 banknote. Analysis and conservation are being conducted at the museum's conservation facility and a final report is slated for 1994. A nine paper symposium will be presented by the project staff at the 1994 SHA conference in Vancouver.

BRITISH COLUMBIA

Underwater Archaeological Society of British Columbia (UASBC): the UASBC is a non-profit society formed in 1975 to promote underwater archaeology and the conservation of submerged heritage resources in British Columbia. The range of activities of the society include surveys of both shipwrecks and submerged native sites (see IJNA 20.4, 269-280) and an education program for members and the general public. Its volunteer membership is divided into four regional branches with projects subsidized by the British Columbia Heritage Trust. The UASBC works closely with the provincial government, archaeologists and the subsea industry. Recently the British Columbia Shipwreck Recording Guide was produced by the society in conjunction with provincial archaeologists. Reports from UASBC surveys are published and presented to the provincial government and are available to the general public. A number of historic wrecks surveyed by the society are now designated heritage sites under the British Columbia Heritage Conservation Act. Future activities of the society include mapping of the Lonsdale Quay Wreck, a search for the remains of SS Trebla, and monitoring of the passenger steamer Iroquois. UASBC is also co-hosting, with Simon Fraser University, the 1994 SHA Annual Conference. For more information about UASBC write to UASBC, c/o Vancouver Maritime Museum, 1905 Ogden Ave., Vancouver, BC V6J 1A3 Canada.

NOVA SCOTIA

Nova Scotia Museum: Archaeological and historical resources in Nova Scotia are protected by the Special Places Protection Act, which prevents uncontrolled human disturbance. In light of that legislation, a shipwreck inventory project began in November, 1988, initially to provide data to back up cultural resource management. However, the inventory has expanded to take the form of the Nova Scotia Ship Inventory Database. The database includes more than 4,500 shipping casualties dating from 1583 to the present. For more information on the database contact the Curator, Special Places, Nova Scotia Museum, 1747 Summer St., Halifax, Nova Scotia B3H 3A6 Canada.

US-CANADIAN LEGISLATIVE UPDATE

The United States and Canada have formally agreed that Article II of the Treaty of Wrecking and Salvage, signed May 18, 1908, does NOT apply to historic shipwrecks. This means the treaty will not preclude either country from enforcing domestic laws and regulations pertaining to the preservation of shipwrecks on foreign nationals working within each country's jurisdiction.

INTERNATIONAL CONGRESS OF MARITIME MUSEUMS ADOPTS STANDARDS FOR RECOVERY OF SHIPWRECK ARTIFACTS

On September 10, 1993, the International Congress of Maritime Museums adopted standards for the exploration of underwater cultural sites and the acquisition, preservation, and exhibition of artifacts recovered from shipwrecks and other sites. The ICMM resolutions are as follows:

- 1. In regard to collecting policy, ICMM member museums should follow the provisions of the ICOM Code of Professional Ethics, the ICOMOS Charter, and the UNESCO Convention.
- 2. That ICMM member museums should follow sections 3.1 and 3.2 of the ICOM Code of Professional Ethics and that in particular, "each museum authority should adopt and publish a written statement of its collecting policy...(and)...museum(s) should not acquire by purchase (or donation) objects...where...their recovery involved the recent unscientific or international destruction or damage of...archaeological sites..." Museums with collections from underwater archaeological sites should each adopt and publish either a written statement of their general collecting policy or a written policy relating specifically to collections from underwater archaeological sites.
- 3. That ICMM member museums should follow Council of American Maritime Museums (CAMM) policy and "...not knowingly acquire or exhibit artifacts which have been stolen, illegally exported from their country of origin, illegally salvaged or removed from commercially exploited archaeological or historic sites" in recent times (i.e., since the 1990 full Congress of ICMM).
- 4. That ICMM members should report to the responsible authorities any illegal activities at underwater sites or auction or sale of artifacts from illegally excavated underwater sites in their countries.
- 5. That ICMM members should recognize that artifacts from underwater sites are integral parts of archaeological assemblages, which should remain intact for research and display.
- 6. That ICMM should explore ways for more member institutions to involve students from academic institutions in the study of their underwater archaeological collections.

In these resolutions a commercially exploited heritage site is one which the primary motive for investigation is private financial gain.

These resolutions are the result of a 6-year study undertaken by a committee of museum professionals and archaeologists. Maritime museums represent the largest repository of material form underwater cultural sites and the ICMM has thereby taken steps to ensure that appropriate measures are in place to guarantee the integrity of this resource.

For further information contact: Peter Neill at 212/669-9443 or Dr. Paul Johnston at 202/357-2025.

[Information taken from South Street Seaport Museum News].

MEETINGS OF INTEREST

New Directions in Maritime History, to be held December 6-10, 1993, as a joint conference of the International Commission on Maritime History and the Australian Association of Maritime History, in Fremantle, Western Australia. For information contact: Dept. of History, Univ. of Western Australia, Nedlands, WA 6009, Australia.

Maritime Archaeology of Great Britain and the British Dependent Territories, to be held in Spring/Summer 1994. The NAS, Oxford University MARE and the World Ship Trust announce a call for papers for the two-day conference. For information contact: Mensun Bound, Oxford Univ. MARE, 4 Butts Road, Horspath, Oxford OX33 1RH.

First International Conference on Fresh Water and River Archaeology, a 3 day conference in June, 1994, to be held at University College of North Wales, Bangor, in celebration of over 100 years of maritime studies at Bangor. Call for papers. The conference will be arranged according to the following sessions: lake dwellings and crannogs; lake transport; river side habitation sites; river transport; estuarine excavations; sink holes; inundated sites (i.e., reservoirs); drains, wells and cisterns; boat finds from land-fills and drainage areas. Speakers wishing to give papers should contact: Mensun Bound, Oxford Univ. MARE, 4 Butts Road, Horspath, Oxford OX33 1RH.

Australian Institute for Maritime Archaeology 13th Annual Conference, to be held on October 17-21, 1994, at the Queensland Museum in Brisbane, Australia. The theme of the conference will be Discovery, Migration, Acculturation, Exploitation or ...?, Reinterpreting Seafaring Activity within the Pacific Rim. The broad and multi-disciplinary theme is designed to attract historians and/or anthropologists with research interests in seafaring, with a view toward defining where maritime archaeological evidence can contribute to new or revised interpretations of seafaring activity within the Pacific Rim. For more information contact: Peter Gesner, Convenor AIMA Conference, Curator of Maritime Archaeology, Queensland Museum, PO Box 3300, South Brisbane 4101, Australia. 617/840-7673; fax 617/846-1918.

Institute of Archaeology: a 5 day summer school course on the archaeology of woodwork was held from July 19-23, 1993, at the Museum of London. The course used a highly practical approach with a combination of talks, hands-on workshops, and guided tours to provide an up-to-date introduction to modern approaches to the archaeology of ancient woodwork both underwater and on land. Because there is a large body of solid archaeological evidence for how many types of ships, boats, wharves and bridges, etc., were built from Roman times onwards, many of the tools, techniques and

raw materials used by early shipwrights, coopers and carpenters are known. During the course, participants tried their hand at a variety of shipwrights tools in order to gain a deeper understanding of the methods and techniques employed in the past. It was aimed at museum workers, conservators, restorers, replica builders and individuals with a strong interest in woodworking in the past. For additional information about the

course write: D.M. Goodburn, 8 Duvards Place, Borden, Sittingbourne, Kent ME9 8LJ.

M.A./Ph.D ABSTRACTS

EASTERN NORTH AMERICA

Libby, Jean

1991 African Ironmaking Culture Among African American Ironworkers in Western Maryland, 1760-1850. (M.A., School of Ethnic Studies, San Francisco State University).

This thesis investigates technological transfer (diffusion) of African ironmaking culture into western Maryland by enslaved ironworkers. The major method is comparison with ironmaking societies in West Africa at the time of enslavement, looking for similarities to furnace technology and cultural practices. African American autobiographies, archaeological data, census manuscripts, legal records, and advertisements are the primary sources used to describe the group.

Moore, Rose Lockwood

1990 Of Berry Pickers, Shanty Boys, and the Jack Pine Bird: Patterns of Settlement and Subsistence in Nineteenth-Century Oscoda County. (M.A., Anthropology, Western Michigan University, Kalamazoo).

The provisions of the Homestead Act of 1863 required a settlement pattern of dispersed single families on small tracts of land, which, in turn, affected the subsistence strategies available to the homesteaders. The interaction of federal land legislation with the ecosystem of south Oscoda County resulted in marked spatial and temporal differences between the tracts that were homesteaded as opposed to those acquired for their timber. A sample population of quarter sections was analyzed in terms of the physical and biotic environments, date of entry, and use.

Morand, Lynn Louise

1993 Craft Industries at Fort Michilimackinac, An Eighteenth-Century Fur Trade Outpost. (Ph.D., American Civilization, Univ. of Pennsylvania).

This is an historical archaeological study of the craft industries at Fort Michilimackinac, a mission, fur trade and military outpost on the eighteenth-century Great Lakes frontier. Craft industries are non-agricultural activities producing surplus goods beyond the producing household needs. Craftsmen necessary for the survival of the settlement were sponsored by the institutions in authority. Other craft activities were carried on as site activities by trader's families. Reuse and repair were common survival activities on the frontier.

Wayne, Lucy B.

1992 Burning Brick: A Study of Lowcountry Industry. (Ph.D., College of Architecture, University of Florida, Gainesville).

This study uses a combination of historical and archaeological research to document the 1740 to 1860 brickmaking industry of the Wando River basin plantations in South Carolina's Lowcountry. Using the framework of landscape archaeology, the study examines (1) the occupants' perception of the environment, (2) how the environment influenced adaptation and how these adaptations affected that environment, (3) the technologies or processes employed, (4) the role of the market-place and proximity to that market, (5) historic events which influenced development of the industry, (6) the interrelationships between the sites.

WESTERN NORTH AMERICA

Lebo, Susan Anne

1992 Specialization: Stoneware Pottery Production in Northcentral Texas, 1850-1910. (Ph.D., Anthropology, University of Washington).

Ceramic specialization, a key concept in both scientific and cultural evolutionary biology, continues to be poorly defined more than ten years after Rice (1981) published her model of ceramic specialization. This dissertation evaluates Rice's model using historical and archaeological data available for stoneware kiln sites in Northcentral Texas. Macro- and micro-analysis is conducted on stoneware sherds from seven kiln sites and five farmsteads, and on clay specimens from seven clay outcrops in order to verify the historical information and to evaluate Rice's model.

Ostrogorsky, Michael

1993 The Influence of Technology on Social Typology and Change in the Western American Mining Frontier. (Ph.D., History, University of Idaho).

This dissertation examines the development of competing schools of economic and technological organization in the mining West. In spite of the availability of a uniform industrialized material culture inventory, distinct regional models of mining frontier lifeways developed in response to differing environmental, economic, social, and ideological forces. Examining contemporary mining developments in Colorado and Alaska, this dissertation proposes a socioeconomic typology based on regional differences in the western mining frontier in adaptation of mining technology and economic organization.

Pfeiffer, Michael A.

1982 Clay Tobacco Pipes and the Fur Trade of The Pacific Northwest and Northern Plains. (M.A., Anthropology, University of Idaho).

A detailed study of tobacco pipe assemblages from the Pacific Northwest and Northern Plains, in an 1800 to 1890s time frame, demonstrates the interpretative value of this category on an intrasite, regional, and interregional basis. The detailed

analysis given the pipes and pipe assemblages provides a historical background that encompasses the artifacts, the manufacturers, the sites, the relationships of the sites, and their place in the development of these regions. These tobacco pipes reflect the marketing and trade histories of these regions as well as many of the cultural subgroups.

SOUTH AMERICA

Smith, Greg Charles

1991 Heard It Through the Grapevine: Andean and European Contributions to Spanish Colonial Culture and Viticulture in Moquegua, Peru. (Ph.D., Anthropology, University of Florida).

This is a study of the *bodegas*, or wineries, established by the Spanish in Moquegua, Peru, during the late 16th century. In the Moquegua Valley, grapes constituted a Colonial monocrop, and the wine industry provided an opportunity for interaction and acculturation. Excavated data were analyzed using Early (1580-1600), Middle (1600-1775), and Late (post-1775) temporal distinctions. Results reflect trait admixture in domestic- and industrially-related material culture, and dearth of Hispanic artifacts. Colonial culture in Moquegua appears to have been influenced strongly by a pattern of miscegenation and transculturation. After 1778, when free trade was allowed by Spain, the valley was inundated with European products.

TOPICAL

Gyrisco, Geoffrey Maitland

1982 Preservation Planning for Archaeology in Urban Areas. (Ph.D., American Civilization, The George Washington University, Washington, DC).

A model planning process is adapted as the basis for planning the preservation and study of archaeological resources in urban areas. The process has its origins in the "new archaeology," predictive surveys, and Management by Objectives. An analysis of large-scale data recovery projects, large-scale surveys, and preservation plans for six American cities and London, England, illustrate the use of the concepts of the model planning process. An initial organization of information on archaeological resources in the District of Columbia from c. 9500 BC to 1870 AD illustrates the first steps of the process.

THE SOCIETY FOR POST-MEDIEVAL ARCHAEOLOGY

The Society for Post-Medieval Archaeology was founded in 1967 to promote the study of the archaeological evidences of British and Colonial history of the post-medieval period before the onset of industrialization. To achieve this aim the Society publishes *Post-Medieval Archaeology*, an annual journal dealing primarily with the material evidence, and it holds week-end conferences in regional centres.

List of Officers and Council for 1992-1993:

President - M. Ponsford Vice Presidents - Mrs. R. Weinstein and L.A.S. Butler Secretary - D.R.M. Gaimster Treasurer - Mrs. J. Rutter Editor - J.R. Kenyon Membership Secretary - Mrs. P. Jackson

Council Members - N.F. Brannon, P. Courtney, W.C. Davey, G.J. Dawson, G. Egan, Miss D. Ford, D. Higgins, Miss S. Jennings, P. Jones, H. McBrien

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For ordinary members the annual subscription to the Society and to its journal is \$30; bone fide students under the age of twenty-five and members over sixty-five and retired pay \$15; and two members of the same household pay \$36, which sum entitles them to full privileges of membership and to one copy of *Post-Medieval Archaeology* jointly. For Institutional Members the annual subscription is \$50.

Payment of a subscription immediately confers full privileges of membership and ensures full information of the Society's future activities. All who are interested in the Society's aims are cordially invited to enroll; forms of application and bankers' orders may be obtained from Mrs. P. Jackson, Membership Secretary, SPMA, 13 Somerville Road, Bishopston, Bristol BS7 9AD, UK.

THE SOCIETY FOR HISTORICAL ARCHAEOLOGY

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1994	24 January	1994	
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