

Archeological and Historical Data Recovery Program

Heritage Conservation
and Recreation Service
U.S. Department of the Interior
Washington, D.C.

Cover photograph:

Shell gorget (1300-1500 A.D.) from burial of youth in late teens, Averbuch Site, Tennessee. *Photo credit: Walter Smalling, Jr.*

1977

1978

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Law 93-291 to the Interior and Insular Af-
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Representatives of the United States.

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As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to insure the wise use of all these resources. The Department also has major responsibility for American Indian Reservation communities and for people who live in Island Territories under U.S. administration.

The Heritage Conservation and Recreation Service, a non-land managing agency within the Department, is responsible for assuring the identification, protection, and beneficial use of our important cultural, natural, and recreational resources. The Service offers grant assistance, technical information, and guidance to those in the public and private sectors involved in conservation or recreation projects.

U.S. Department of the Interior

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Heritage Conservation and Recreation
Service

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HCRS Publication No. 15

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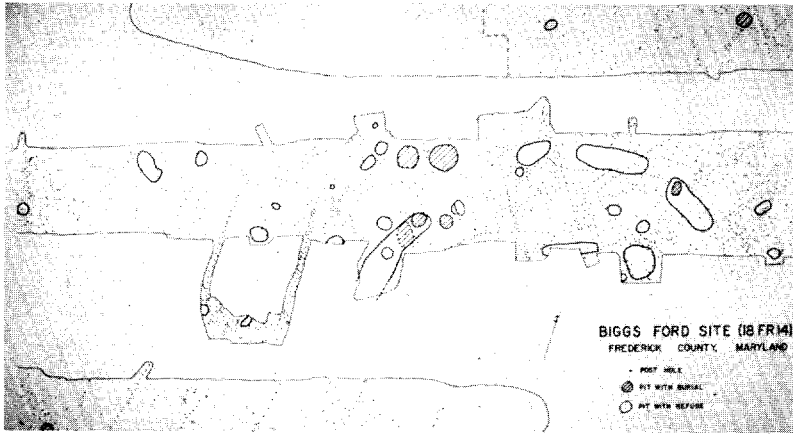


Figure 1. Biggs Ford Site, Maryland (Frederick County). Site plan shows subsurface features of a late prehistoric Indian village near the Monocacy River. *Courtesy Maryland Geological Survey, Baltimore, Maryland.*

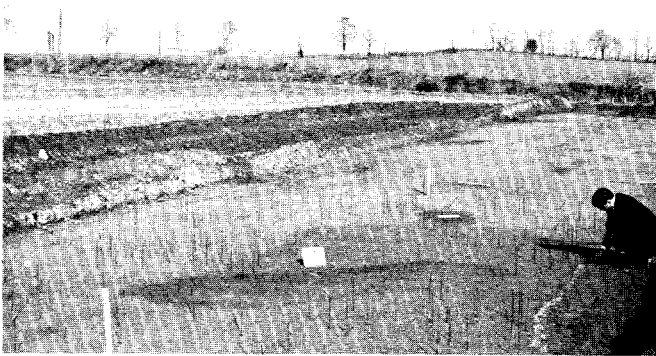


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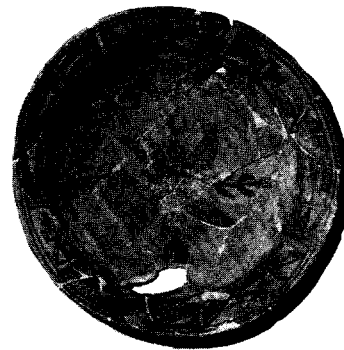


Figure 5. Walpi Pueblo, Arizona (Navajo County). Pottery stew bowl manufactured between 1800-1820, originally used by the Hopi as a serving dish. The design on the bowl bottom consists of four radially symmetrical corn plants. *Courtesy Museum of Northern Arizona, Flagstaff, Arizona.*

Introduction

Archeology, involving those remains usually hidden beneath the earth's surface, is a complex data-gathering science. And because archeological remains are considered a cultural rather than a physical resource, their importance is often misunderstood and underestimated.

Archeological remains are actually as much a physical resource as historic buildings and, as such, are as vulnerable to destruction from insensitive human activity (*Figs. 1, 2*).

Although man has inhabited North America for perhaps 27,000 years, recorded history began only with the arrival of European explorers in the 15th century A.D. Moreover, written histories may be very selective, focusing upon only the most important persons and happenings of the day. Archeological studies offer a candid, supplemental or alternative glimpse of the daily lives of people who left few, if any, written records. The remains of campsites and settlements form a revealing archeological record of the way people lived, how they adapted to their environment, and the kinds of things they valued. By studying earlier cultures, we may come to learn more about ourselves as human beings, set within the broadest possible context (*Figs. 3, 4, 5*).

For example, through archeology we learn of the coincidence of locations chosen by prehistoric man for activities vital to life. The same factors that caused early man to select a campsite—proximity to water, accessibility, transportation, trade, topographic features—seems to have appealed to his successors. Thus, we discover that many modern roads are built over prehistoric trails; even some modern cemeteries are located above ancient graveyards.

Archeology also provides a useful time scale for the study of our own environment. There is evidence that the clearing of trees and vegetation from watersheds has led to the

cutting of deep arroyos, such as Chaco Canyon, New Mexico. When the shallow streams no longer flooded and naturally fertilized the land and the water table was lowered, this once habitable area deteriorated into a wasteland that is still desolate some 500 years later.

In summary, archeological sites are a vital part of our cultural heritage which, when destroyed, irreversibly diminish our knowledge of the past. That is why the emphasis today is on the preservation and selective investigation of sites rather than on total excavation. One archeologist has likened the digging of a site to reading George Washington's letters in the National Archives, taking notes, then burning the letters. Protected from human destruction, archeological data may be studied and interpreted with fresh insights and the most up-to-date information and technology available.

Federal Leadership for the Preservation of Cultural Resources

Since World War II, massive public construction projects—highways, dams, urban renewal—have destroyed thousands of archeological sites throughout the country. With the rapid expansion of essential construction activities today, we as a Nation are losing irreplaceable information on such an enormous scale that it is impossible for the private sector alone to retard or prevent the loss. Therefore, it is fitting that the Federal Government, acting on behalf of the American people, play a major role in protecting and preserving those historic and archeological resources still intact.

The Heritage Conservation and Recreation Service (HCRS) of the U.S. Department of the Interior administers a national historic preservation program with the cooperation of other Federal agencies, State governments, and the private sector. The Service's resource programs establish guidelines and professional standards for effective preservation activities, identify and document cultural resources, offer matching grants for preservation projects, and promote greater interest and involvement in historic preservation by citizens and government.

To administer the historic preservation responsibilities of the Secretary of the Interior, the Department created the Office of Archeology and Historic Preservation (OAHP) within the National Park Service in 1967. OAHP consolidated the existing survey programs; related programs in archeology, architecture, and history; and the new programs required by the National Historic Preservation Act of 1966 and Executive Order 11593. The Governor of each State was asked to appoint an official to work with OAHP. The responsibilities of the State Historic Preservation Officers include identifying historic resources of national, State, and local significance in their jurisdictions

and nominating them to the National Register of Historic Places, preparing Statewide historic preservation plans, and administering the grant-in-aid program in their States.

In January 1978, the Department of the Interior took steps to bring several environmental programs under the direction of a single agency with the creation of the Heritage Conservation and Recreation Service. The agency's three main areas of concern are historic preservation, natural conservation, and outdoor recreation. HCRS operates in cooperation with the States and relies heavily on public participation, providing technical and information services for those involved in environmental activities. For more detailed information, write to the U.S. Department of the Interior, Heritage Conservation and Recreation Service, Pension Building, 440 G Street, N.W., Washington, D.C. 20243.

Interagency Archeological Services—Washington

One of the programs of HCRS, Interagency Archeological Services (IAS) directs and coordinates a nationwide effort to protect significant archeological and historic remains threatened by Federal construction projects, programs, or activities. IAS:

- Assists Federal agencies in the fulfillment of their Executive Order 11593 responsibilities by helping them to locate, identify, and evaluate historic properties under their jurisdiction or control, or to conduct data recovery, if necessary, under Public Law 93-291.
- Develops for the Secretary of the Interior national goals and objectives, policies, standards, guidelines, and procedures for all Federal agencies to follow in the administration of the archeological and historic data recovery program under the Archeological and Historic Preservation Act of 1974 (Public Law 93-291).
- Manages the permit system instituted under the Antiquities Act of 1906 (Public Law 59-209) to regulate data recovery projects on most federally-owned or controlled lands.
- Consults with the Advisory Council on Historic Preservation on archeological issues.
- Reports annually to Congress on the scope and effectiveness of the program.

IAS Field Offices

The Interagency Archeological Services program is administered at the field level by the three regional offices, IAS-Atlanta, IAS-Denver, and IAS-San Francisco. Each field office:

- Maintains a day-to-day liaison with other Federal agencies at the regional level in order to identify and plan for needed data recovery projects.
- Identifies firms or institutions capable of performing data recovery.
- Establishes the scope of archeological services required for projects, negotiates contracts, and reviews data recovery proposals.
- Monitors field and laboratory work.
- Reviews and approves final reports submitted following the completion of data recovery.

Because many Federal agencies whose actions may affect significant sites do not have sufficient archeological staff expertise, IAS is able to provide invaluable technical assistance nationwide. With its staff of professional archeologists in Washington and in the field, IAS is in a unique position to coordinate federally-sponsored archeological activities and to help other Federal agencies meet their responsibilities under Executive Order 11593 and Public Law 93-291.

Program Scope

Legislation

Historic preservation in the United States has been shaped by a body of more than two dozen laws that deal with archeological, architectural, cultural, and historic resources (Appendix A). Their intent is to make the Federal Government accountable for any potential impact its actions may have on the cultural environment. Laws that are particularly pertinent to archeology are summarized in Appendix B and include: the Antiquities Act of 1906 (Public Law 59-209). The Historic Sites Act of 1935 (Public Law 74-292), the National Historic Preservation Act of 1966 (NHPA) (Public Law 89-665 as amended), the National Environmental Policy Act of 1969 (NEPA) (Public Law 91-190), and the Archeological and Historic Preservation Act of 1974 (Public Law 93-291). As mentioned earlier, Executive Order 11593 assigns certain responsibilities to Federal agencies with regard to historic preservation.

Often poorly understood by agency planners, archeological resources frequently receive inadequate consideration during project planning. It cannot be emphasized too strongly in this report that the timely application of the legal requirements cited above are intended to integrate historic preservation goals with the successful completion of agency construction projects without undue costs. The harmful effects of proposed construction projects, if recognized and dealt with during the planning phase, could be avoided or, at least minimized. IAS believes the failure of agencies to follow the historic preservation compliance process is the main cause of the needless destruction of archeological resources as well as costly construction delays. Unfortunately, archeologists have long been accused of obstructing public works projects when just the opposite seems more accurate: a construction project in full compliance with the intent of Federal law is seldom delayed by the recovery of significant archeological information.

Complying with the Requirements of the Law

In order to deal responsibly with the cultural environment and to avoid delays caused by the failure to take the "preventive measures" required by law, Federal agencies should begin the compliance process in the early stages of planning for a construction project. This process consists of three major steps.

1. *Identification of Cultural Resources within the Project Area.* Executive Order 11593 requires all Federal agencies to locate, identify, and evaluate all historic and archeological resources under their jurisdiction or control that will be affected by their actions. The agency must consult with the State Historic Preservation Officer and ask the Secretary of the Interior to resolve questions of whether properties are eligible for inclusion in the National Register of Historic Places. Where properties eligible for the National Register are involved, the agency should reevaluate the proposed undertaking to consider its impact.

Archeological sites are often the most numerous cultural entities identified during inventory and evaluation. Current knowledge about the distribution of sites geographically makes detailed site predictions difficult; therefore, systematic field surveys should be undertaken for many projects, even when State plans for the protection of cultural resources called for by the National Historic Preservation Act of 1966 have been completed.

2. *Consultation with the Advisory Council on Historic Preservation.* The National Historic Preservation Act of 1966 created the Advisory Council on Historic Preservation to counsel the President and the Congress and established the National Register of Historic Places. The Federal agency must consult with the State Historic Preservation Officer to determine whether (1) its undertaking will affect a significant cultural resource in or

eligible to be entered in the National Register, and (2) if the resource will be affected, whether the effect will be adverse. The Council must be given an opportunity to comment on the proposed project.

If the Council deems there will be an adverse effect, the agency must submit a preliminary case report to the Council, outlining the project and its impact on the property. The Council staff, the State Historic Preservation Officer and the agency will then explore methods by which the adverse effects can be avoided or minimized. The final plan to avoid the property or mitigate the adverse effect must be acceptable to all three parties and must be incorporated into a legally binding Memorandum of Agreement. If no agreement can be reached, the full Council must formally comment on the matter. The Federal agency is responsible for deciding the ultimate disposition of the property. It may elect to carry out, modify or ignore the Council's recommendations. Current policy of the Council is to view its comments as not legally binding. However, if the Federal agency chose to ignore the Council's comments and subsequently had to defend its action in the courts, a position of noncompliance would severely weaken the case.

3. *Data Recovery* is defined as the scientific retrieval and preservation of archeological and historic materials and information that would otherwise be lost and the study of these resources in their original context. Because cultural resources that have been destroyed by construction or by archeological excavation cannot be replaced, their protection and conservation for long-term scientific study is always preferable (as stressed in the *Introduction* to this report) to immediate excavation. In addition, techniques for recovery are continually improving. Accordingly, data recovery through archeological salvage is undertaken only as a last resort to save important information, while allowing a construction project to proceed.

If the consultation process reveals no way to avoid damaging or destroying the cultural resources and finds that recovery of specimens and scientific information is in the public interest, the agency may use its authority under the Archeological and Historic Preservation Act to undertake archeological excavations. The agency may contract for this work directly, using up to one percent of the authorized project appropriation, or may request the Secretary of the Interior to assume responsibility for the archeological investigations on a cost reimbursable basis or through the use of discretionary funds appropriated to him for this purpose. When significant archeological sites are threatened by issuance of a Federal permit or license or in other federally-assisted projects where the one percent proviso cannot be applied, the Secretary of the Interior may elect to fund data recovery as the only prudent recourse to destruction of the resource without prior study. Data recovery, therefore, is the last step taken under preservation law and should only be conducted after a Federal agency has fully discharged its responsibilities for identifying, evaluating, and considering cultural resources in the planning process.

Program Effectiveness

Cultural Resource Management by Federal Agencies

National coordination of archeological programs is a monumental task for a variety of reasons. Although requirements that agencies consider cultural resources in their planning process have been law for years, some Federal agencies continue to regard historic preservation legislation as individual authorities rather than an integrated set of responsibilities, procedures, and managerial options. The result is fragmented planning and an incomplete response to the need to protect cultural resources affected by their projects. Conversely, several agencies such as the Corps of Engineers and the Soil Conservation Service, have taken some positive steps to begin refining guidelines to reflect the importance of considering cultural resources in planning for projects.

As a first step in the preparation of the annual report to the Congress, IAS requested all Federal agencies to provide information concerning data recovery projects conducted under the authority of Public Law 93-291 as well as survey and evaluation activities initiated during FY 1977. As reported to IAS, more than 70 data recovery projects were undertaken by Federal agencies during FY 1977 (see Appendix C); the actual number of projects may be considerably higher, but information was not available from the Soil Conservation Service, the Department of Housing and Urban Development, and the Environmental Protection Agency, all of which funded or guaranteed loans for numerous construction projects.

Several problems in coordinating a national approach to cultural resource preservation are highlighted in the agency responses. Because data recovery can only be undertaken on significant sites under the authority of Public Law 93-291, this aspect of the archeological program should depend entirely upon

the results of prior systematic survey and evaluation. Many agencies still seem to misunderstand the purpose of Public Law 93-291, viewing it as a substitute for preservation legislation when, in fact, it should be applied *only* after agencies have fully complied with the planning requirements of NHPA, NEPA, and Executive Order 11593.

Regulations and guidelines were developed by IAS during 1977 in order to clarify the relationship between planning activities required under NHPA, NEPA, and Executive Order 11593 and the data recovery authorized under Public Law 93-291. These regulations and guidelines have been discussed extensively with OMB regarding their policy and budget implications and it is anticipated that they will be published in the "Federal Register" during 1979.

Although the number of projects and total dollars committed to data recovery during FY 1977 increased during FY 1978, the *total* impact of Federal construction activities on archeological resources is unknown. Because of the difficulty of collecting information from individual agencies about their activities under Public Law 93-291, other methods of acquiring these data are being considered. In order to reduce paperwork, HCRS has eliminated the practice of making blanket requests of Federal agencies for information on their archeological activities. Beginning in FY 1979 and in following years, HCRS will derive information from existing agency notification and reporting requirements described in Sections 3a and 4a of Public Law 93-291.

However, until we have information addressing (1) the full impact of losses caused by Federal and federally-related activities on archeological and historic sites; and (2) the full extent of data recovery performed under Public Law 93-291, a meaningful statement on the level of need for the recovery of archeological and historic data by Federal agencies cannot be made.

Archeological and Historic Data Recovery in Fiscal Years 1977 and 1978

During fiscal years 1977 and 1978, IAS assumed a vital leadership role in the first of what may be many large-scale projects to mitigate the damage to significant archeological resources caused by Federal construction activities. Through the program, IAS has endeavored to provide a strong link between Federal agencies and professionals in the private sector for the protection and preservation of our cultural heritage. IAS is pleased to include several brief case studies in the annual report that specifically detail these efforts.

Data Recovery in FY 1977

During FY 1977, IAS initiated 18 data recovery projects completely funded by the Department of the Interior or jointly funded

with other agencies (Appendix D, Table 1). Four of these projects are described.

- *Rood Creek Mounds, Georgia.* Public Law 93-291 funds were used for active preservation in the case of important ceremonial mounds in southwest Georgia. Following completion of the Walter F. George Reservoir, erosion endangered several of the Rood Creek Mounds that date from about 1100 A.D. The Department of the Interior and the Corps of Engineers jointly funded the placement of heavy sheet-steel pilings, which were hammered into the lake bed just off the shoreline near the prehistoric village and its associated mounds. Fill was placed behind the pilings to strengthen the barrier, building a new, higher shoreline that sloped gently upward to each mound site. Finally, sod was laid over the sterile fill to offer effective, unobtrusive protection (Figs. 6, 7). This exemplary method of stabilization used to alleviate the adverse impact of construction should stimulate careful observation of other projects for any secondary effects construction may have on cultural resources.

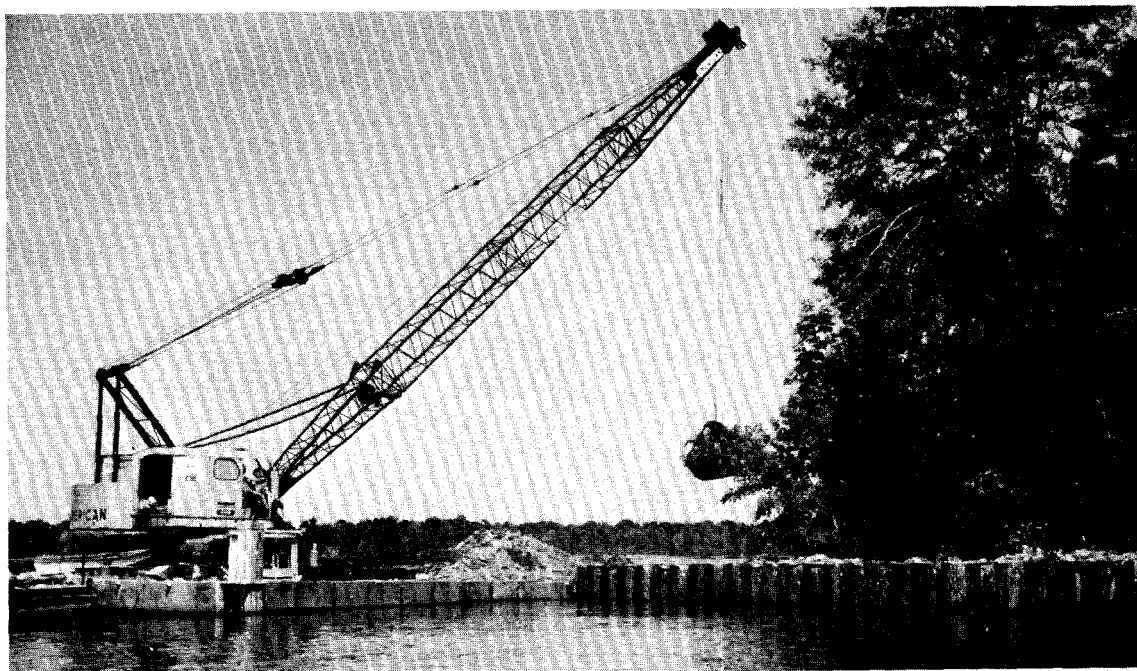


Figure 6. Rood Creek Mounds, Georgia (Stewart County). Protective stabilization work in progress. Photo credit: Walter Smalling, Jr.



Figure 7. Sheet steel pilings will protect the unexcavated ceremonial mounds at Rood Creek for possible future investigation. *Photo credit: Walter Smalling, Jr.*



Figure 8. Hog Creek Watershed, Texas (Bosque and Coryall Counties). Nearing completion of archeological investigation of Windy Rockshelter. *Courtesy University of Tulsa, Tulsa, Oklahoma.*



Figure 9. Completed investigation of the "Bee Bee Buddysite," a prehistoric burned rock midden in the Hog Creek Watershed project. *Courtesy University of Tulsa, Tulsa, Oklahoma.*

• *Hog Creek Watershed, Texas.* In central Texas, IAS initiated a project to recover archeological data that would have been lost as the result of a Soil Conservation Service project in the Hog Creek Watershed. Nine archeological sites containing remains of prehistoric Indian occupations were to be disturbed or destroyed by floodwater control construction. Five sites were under rock shelters, overhanging cliffs caused by erosion; two others were accumulations of burned rock (middens); and the remaining two were situated on terraces above the river floodplain (Figs. 8, 9).

Major objectives of the project were to develop a cultural history of the sites, showing their occupation by various groups as reflected in the archeological remains; to reconstruct environmental conditions during the different prehistoric Indian occupations; to determine at what season each locale was in use and the activities carried on; and to learn how the sites related to each other and to other known archeological sites in the region.

The analysis of plant and animal remains, for example, was expected to yield information on the climate and times of year each site was occupied and on the kinds of resources available and used by the Indians. The abundance of water, game, vegetation, and raw materials for fashioning tools were all partly responsible for the nearly continuous occupation of the region for thousands of years.

Investigators in Hog Creek have been impressed by the sheer volume of archeological materials recovered, far surpassing their expectations.

Information on climatic conditions is being derived from the study of tens of thousands of land snails found (one of the most complete layerings in the southwestern United States). Large numbers of artifacts are being analyzed by computer in an effort to characterize the various cultures that occupied the

sites. Well-preserved organic materials suitable for radiocarbon dating have also been obtained. Pollen analysis is helping to determine the changes in vegetation through time in the Hog Creek area.

Although analysis of the archeological materials is not yet complete, researchers have discovered that a gradual, yet dramatic environmental change began to take place in the area around 600-700 A.D. that continues to the present. Over the past 1300 years, the trend at Hog Creek has been away from arid conditions toward a moister climate, from grassland to light forest.

Radiocarbon dating of charcoal samples has revealed that the earliest sites at Hog Creek, the rock shelters, were probably inhabited around 500 A.D. and that Indians continued to occupy the area until about 1600 A.D. Researchers believe that prehistoric settlers used the rock shelters and the other sites for both permanent villages and intermittent camping. Activities of everyday survival—mainly deer and rabbit hunting and the collection of such foods as nuts, berries, and fruit from the prickly pear cactus—occupied most of their time. Many tools were manufactured from readily available stone materials.

Burned rock middens are among the region's most mysterious prehistoric archeological features. While theories abound about their use for hide processing, heat treating tools, and roasting ovens, the two burned rock middens discovered at Hog Creek were probably used for processing acorns. Unlike most prehistoric middens, these two contained few shells or snails, no charcoal, and few animal bones.

Although investigators expect to conclude their study of the Hog Creek Site in the early 1980's, the mass of material recovered will be available to scientific researchers in the near future. Some of the items will be placed on public exhibit at a county museum.

