MIDDLE ATLANTIC
ARCHAEOLOGICAL
CONFERENCE
1988

PROGRAM AND ABSTRACTS

Rehoboth Beach, Delaware
March 25-27, 1988
MIDDLE ATLANTIC ARCHAEOLOGICAL CONFERENCE
REHOBOTH BEACH, DELAWARE
MARCH 25-27, 1988

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FRIDAY AFTERNOON -- MARCH 25, 1988

1:00  President's Opening Remarks  -- Herbert C. Kraft (Seton Hall U)

Symposium: COBBLE TECHNOLOGY

Organizer and Chairman: R. Michael Stewart  (Louis Berger and Associates)

Abstract. In recent years, a good deal of experimental and archaeological data have been collected on the production of stone tools from cobbles. Papers submitted to this session explore a range of topics including: the nature of experimentally or archaeologically defined cobble/core or cobble/biface reduction sequences; the relationship between cobble/core and cobble/biface technologies within specific components, phases, or periods; change in cobble technologies over time; and the relation of cobble procurement and technology to settlement patterns. A discussion period is planned for the end of the session during which time participants will display archaeological and experimental assemblages for the audience to examine.

1:10  Introduction  -- R. Michael Stewart (Louis Berger and Associates)

1:20  Preliminary Spatial Analysis of a Quartz Cobble Quarry in Anne Arundel County, Maryland  -- Thomas R. Wheaton, Jr. (Garrow and Associates)

1:45  Expedient Cobble Technologies of the Delaware Fall Line Zone: A Comparative Study  -- Jay F. Custer (U of Delaware)

2:10  Raw Material Utilization and Cobble Reduction on Two Late Archaic Sites of Northern New Jersey  -- Leonid Shmookler (Louis Berger and Associates)

2:35  Break

2:55  Microcores and Blade-Like Flakes from Cobbles in Middle and Late Woodland Assemblages  -- R. Michael Stewart (Louis Berger and Associates)

3:20  Unique Pebble Core Technologies from the New Jersey Coastal Plain  -- Jack Creason

3:45  Talking Flakes: Analysis and Interpretation of Flaked Stone Debitage  -- Jeff Kalin (Primitive Technologies)

4:10  Discussion
Symposium: REBURIAL IN THE MIDDLE ATLANTIC STATES: LAW, POLICY, AND ETHICS

Organizer and Chairman: Paul B. Cissna (National Park Service)

Abstract. Representatives from New York, New Jersey, Pennsylvania, Delaware, Maryland, and Virginia will present brief overviews of the history of the reburial debate within their respective states. The focus will be on the nature of state policies and laws that affect the disposition of human remains recovered archaeologically; archaeological and Indian concerns; and archaeological and Indian roles in the formulation of policies and laws. These overviews will be followed by a discussion period that will explore "unwritten policies", anthropological ethics, and other related issues. Conference participation in this discussion is strongly encouraged.

8:00 Introduction -- Paul B. Cissna (National Park Service)
8:10 Virginia -- Michael Barber (U.S. Forest Service)
8:20 Maryland -- Stephen R. Potter (National Park Service)
8:30 Delaware -- Daniel R. Griffith (Delaware Bureau of Archaeology and Historical Preservation)
8:40 Pennsylvania -- Kurt Carr (State Museum of Pennsylvania)
8:50 New Jersey -- Deborah Fimbel (New Jersey Department of Environmental Protection)
9:00 New York -- Louise Basa (New York State Department of Environmental Conservation)
9:10 Discussant -- Roy Crazy Horse (Rankokus Indian Reservation, New Jersey)
9:20 General Discussion

SATURDAY MORNING - MARCH 26, 1988

Symposium: EUROPEAN/INDIAN TRADE RELATIONS

Organizer and Chairman: Herbert C. Kraft (Seton Hall U)

Abstract. Europeans were trading with the Indians along the Middle Atlantic seaboard from the sixteenth to eighteenth centuries, yet the material evidence for such interaction is scarce over much of the region. This session seeks to explore the probable areas of contact,
the kinds of objects exchanged, the temporal affiliation of various trade goods, and the reasons for their presence on certain inland sites and the relative scarcity in most coastal areas.

9:00  Introduction and Background to European/Indian Contact and Trade in the Middle Atlantic Region -- Herbert C. Kraft (Seton Hall U)

9:20  Native American Sociopolitical Complexity and Trade During the Contact Period -- Jay F. Custer (U of Delaware) and Stephen R. Potter (National Park Service)

9:40  The Contact Period in Virginia -- Howard A. MacCord, Sr.

10:00 Break

10:20  New Evidence on the Contact Period in Northeastern New Jersey and Southeastern New York -- Edward J. Lenik (Sheffield Archaeological Associates)

10:40  Evidence of European Trade Objects on Archaeological Sites in the Upper Delaware Valley and Thoughts Concerning the Impact of Trade on the Indians of Lenapehoking -- Herbert C. Kraft (Seton Hall U)

11:00  A Documentary Presence-Absence Model for Munsee Demography -- Robert S. Grumet (National Park Service)

11:20  Discussion

SATURDAY AFTERNOON -- MARCH 26, 1988

General Session: CURRENT RESEARCH IN THE MIDDLE ATLANTIC REGION

Organizer and Chairman: Jeffrey L. Hantman (U of Virginia)

1:30  A Late Archaic House Pattern from Northern Delaware -- Jay Hodny and Jay F. Custer (U of Delaware)

1:50  New Archaeological and Physical Anthropological Investigations at the Island Field Site (7K-F-17), Delaware -- Jay F. Custer and Karen Rosenberg (U of Delaware)


2:30  Ongoing Cultural Investigations at Five U.S. Army Corps of Engineers Projects in the Susquehanna River Basin, Central Pennsylvania -- April Fehr and Tom Newmann (R. Christopher Goodwin Associates)
2:50 The Mill Creek Site (18CE256): A Multicomponent Woodland Site in Northeast Maryland -- Sandy Stevens (John Milner Associates)

3:10 Break

3:30 Montpelier: The Early Years -- Michael J. Klein (U of Virginia), Scott K. Parker and Lynne G. Lewis (National Trust for Historic Preservation)

3:50 The Bessemer Site, A Late Woodland Village Site in Western Virginia -- Stephen Thompson (James Madison U)

4:10 Monocan Prehistory: Results of Recent Excavation and Survey in Central Virginia -- Jeffrey L. Hantman (U of Virginia)

4:30 Negotiating History: Burial Mounds as Cultural Memory -- Gary Dunham (U of Virginia)

4:50 Discussion

SATURDAY EVENING -- MARCH 26, 1988

8:00 Annual Business Meeting of the Middle Atlantic Archaeological Conference

SUNDAY MORNING -- MARCH 27, 1988

General Session: HISTORIC SITES ARCHAEOLOGY

Organizer and Chairman: Henry M. Miller (Historic St. Mary's City)

9:30 Archaeology of a Brigade Area at Valley Forge National Historical Park -- Allen H. Cooper (National Park Service)

9:50 Excavations at Pope's Fort: A 1645 Military Complex in St. Mary's City, Maryland -- Timothy Riordan (Historic St. Mary's City)

10:10 Militia on the Potomac "Frontier": An Analysis of Flintlock Mechanisms Recovered from Colonel Thomas Addison's "Other" Store -- Jeffrey B. Snyder, Billy R. Roulette, Jr., and John P. McCarthy (John Milner Associates)

10:20 The Archaeology of Philadelphia's Historic Waterfront -- Carmen A. Weber (Philadelphia Historical Commission)

10:40 Break
11:00 Charcoal Manufacturing in the Blue Ridge: A View from Maryland Heights -- Susan W. Frye (National Park Service)

11:20 Thomas Ogle's Tavern: A Study in Eighteenth Century Material Culture -- Ellis C. Coleman and Wade P. Catts (U of Delaware)

11:40 Thompson's Loss and Gain: A Threatened Site Regained -- Alice H. Guerrant (Delaware Bureau of Archaeology and Historical Preservation)

12:00 Archaeology at the Petersen House: Unearthing An Alternate History -- Matthew R. Virta (National Park Service)

ABSTRACTS OF PAPERS

Coleman, Ellis C., and Wade P. Catts (U of Delaware)
THOMAS OGLE'S TAVERN: A STUDY IN EIGHTEENTH CENTURY MATERIAL CULTURE
The excavation of the site of Thomas Ogle's tavern in Ogletown, Delaware, has provided the opportunity to examine in detail the material culture of an eighteenth century Middle Atlantic tavern. A considerable collection of tavern-related artifacts, ranging in date from ca. 1730 to 1780, was recovered from the sealed stratigraphic context of an infilled cellar at the site, allowing in-depth artifact analysis and vessel reconstruction. Through the use of historic records, in particular probate documents and tavernkeeper's account books, the Ogletown tavern's artifact assemblage can be compared to the historic record, providing a fuller understanding of tavern life in colonial Delaware. Additionally, several intersite analyses at both the sherd and vessel levels of investigation can be performed, comparing the Ogletown assemblage with other tavern sites from Massachusetts to South Carolina, suggesting that artifact assemblages recovered from tavern sites cross-cut regional boundaries.

Cooper, Allen H. (National Park Service)
ARCHAEOLOGY OF A BRIGADE AREA AT VALLEY FORGE NATIONAL HISTORICAL PARK
Archeological testing and block excavations were conducted at the location of a brigade encampment of the Continental Army at Valley Forge, Pennsylvania by the National Park Service. Site boundaries were defined and feature clusters were identified. Analysis of the spatial patterns of features and artifacts produced information on subsistence, behavior, and social interaction within the emerging continental military organization and with the nonmilitary population.

Cresson, Jack
UNIQUE PEBBLE CORE TECHNOLOGIES FROM THE NEW JERSEY COASTAL PLAIN
Local pebble deposits have long been recognized as significant in providing the necessary raw material for prehistoric lithic technologies in New Jersey Coastal Plain settings. High grade cobble and pebble
resources occur throughout the Coastal Plain as secondary deposits mantling upland locales, especially in the belt of hills called "cuestas" dividing the Inner and Outer Coastal Plains. Because these landforms served as natural drainage divides with a rich mosaic of microenvironments and a diversity of resources, they also were a major influence on prehistoric settlement and land use. Past and ongoing research has demonstrated patterned prehistoric adaptations to these settings throughout the known cultural continuum from the Paleoindian through Woodland periods. Peaks in exploitation occur during Paleoindian-Early/Middle Archaic, Terminal Archaic/Early Woodland, and Late Woodland episodes. Insights on material selection and specialized small pebble core technologies, employing bipolar and direct entry techniques in unifacial and bifacial reduction, will be presented. Aspects of the raw core geometry, material quality (including the preferential selection and application of heat treating techniques) are further explored as mechanisms to enhance the manipulation of small core and flake-derived products, and are key determinants in the emergence of a unique prehistoric lithic reduction technology during the Terminal Archaic/Early Woodland subphase. These technologies, including a very specialized and poorly understood complex of microtool forms, termed simply as microliths, will be the main focus of this presentation.

**Custer, Jay F. (U of Delaware)**

**EXPEDIENT COBBLE TECHNOLOGIES OF THE DELAWARE FALL LINE: A COMPARATIVE STUDY**

Cobble-based lithic assemblages from numerous Late Archaic-Early Woodland sites in the Delaware Fall Line Zone can be compared with one another and with contemporary assemblages based on the reduction of primary lithic materials. Cobble-based assemblages, derived from core/flake and bifacial reduction strategies, function primarily as expedient tools at a variety of site types including base camps, procurement sites, and transient camps. Primary lithic materials are also employed for expedient tools but are part of a core/flake technology. The incidence of retouch on expedient tools made from primary materials is higher than that seen for cobble-based expedient tools. The spatial distribution of assemblages suggests that Late Archaic-Early Woodland lithic technologies were highly embedded. Tool kit composition at any given time depended greatly on the types of lithic resources encountered during seasonal settlement rounds.

**Custer, Jay F. (U of Delaware) and Stephen R. Potter (National Park Service)**

**NATIVE AMERICAN SOCIOPOLITICAL COMPLEXITY AND TRADE DURING THE CONTACT PERIOD**

The Native American cultures of the Chesapeake and Delaware estuaries exhibited varied social and political complexity ranging from simple bands to complex chiefdoms at the time of European Contact. These varied social systems had important implications for the structure of trade relationships between Europeans and Native Americans and for the ultimate visibility of trade goods at Contact Period archaeological sites. This paper specifically compares the Native American cultures of the Delmarva Peninsula, the Susquehannocks; and the Potomac and Powhatan
chiefdoms.

Custer, Jay F., and Karen Rosenberg (U of Delaware)
NEW ARCHAEOLOGICAL AND PHYSICAL ANTHROPOLOGICAL INVESTIGATIONS AT THE ISLAND FIELD SITE (7K-F-17), DELAWARE

Recent research at the Island Field site has involved obtaining a new photographic record of the site, removal and analysis of all skeletal remains, additional excavation of some grave feature fill, and synthesis of past and new data. Two new radiocarbon dates from the site indicate that the cemetery dates to ca. A.D. 700-1000, which is later than previously thought. The late date and artifact assemblage indicate a cultural affiliation with northern Kipp Island-Point Peninsula-Owasco groups rather than Adena or Hopewell groups. Moderately heavy dental ware is associated with frequent arthritis of the temporomandibular joint. The dental analysis also shows a relatively high incidence of caries for a hunting and gathering population; however, the incidence of caries is lower than those reported for maize horticulturalists. The pattern of dental pathology and wear is consistent with local archaeological data that suggest a population heavily dependent on carbohydrates obtained from gathered plant foods.

Dunham, Gary (U of Virginia)
NEGOTIATING HISTORY: BURIAL MOUNDS AS CULTURAL MEMORY

Employing data from Virginia burial mounds, this paper expands upon current anthropological and archaeological approaches to mortuary ritual by treating the funerary complex as a device (or devices) for embodying, maintaining, synthesizing, and ultimately negotiating cultural memory. Mortuary remains do not only passively reflect society, but are also solidified eschatology, connected to a "cultural other," the past. As such, they are tropic, mediating between the past and the present, the cultural "other" and the "self." This paper examines the way in which coordination, forced closure, and control of this mediation may be used as an index for cultural complexity. In what ways can the representation or negotiation of history (memory) through mortuary remains be systematically connected to social, political, and economic power?

Fehr, April, and Tom Newmann (R. Christopher Goodwin Associates)
ONGOING CULTURAL INVESTIGATIONS AT FIVE U.S. ARMY CORPS OF ENGINEERS PROJECTS IN THE SUSQUEHANNA RIVER BASIN, CENTRAL PENNSYLVANIA

The Baltimore District U.S. Army Corps of Engineers, in cooperation with local project sponsors, have recently sponsored several archaeological projects on the west and north branches of the Susquehanna River in north-central Pennsylvania. These projects have resulted in the documentation of both prehistoric and historic cultural resources. Though most of these projects are as yet still in their initial stages of investigation, we can at this time report preliminary observations and conclusions. The results of recent archaeological investigations should interest archaeologists throughout the Middle Atlantic. Five projects are summarized in this paper: (1) Cowanesque Lake historic, (2) Cowanesque Lake prehistoric, (3) Lock Haven local
flood protection prehistoric, (4) Wyoming Valley local flood protection literature search, archival and map sensitivity and disturbance study, and (5) Harrisburg local flood protection cultural resources reconnaissance sensitivity and disturbance study.

Frye, Susan W. (National Park Service)
CHARCOAL MANUFACTURING IN THE BLUE RIDGE: A VIEW FROM MARYLAND HEIGHTS

During the late eighteenth and first half of the nineteenth centuries, ironmasters cut large tracts of mountain woodland to manufacture charcoal to fuel their iron furnaces. Left behind as a result of this process are substantial physical remains, most significantly the ubiquitous charcoal hearths and a supporting system of roads. As part of the Maryland Heights Cultural Resources Inventory initiated by the National Park Service at Harpers Ferry National Historical Park, archeological team members mapped an extensive network of charcoal hearths and road traces associated with a nearby nineteenth-century iron-making complex. This paper discusses the methodology used to record these features, the physical attributes of the charcoal hearths, how they were utilized, and overall patterning in their distribution. Also explored are the relationship of charcoal making on Maryland Heights to the overall iron-making system and the effect this industry had on later domestic settlement patterns.

Grumet, Robert S. (National Park Service)
A DOCUMENTARY PRESENCE-ABSENCE MODEL FOR MUNSEE DEMOGRAPHY

Analysis of more than 6,500 names of Munsee Indian people gathered from primary archival sources dating between 1630 and 1778 has resulted in the identification of 207 specific Munsee individuals from 2,706 personal names. Patterns of appearance and disappearance of these named individuals in the documentary record is correlated with 17 known episodes of epidemic disease and eight periods of warfare. Analysis of these data show that significant percentages of the named Munsee sample appeared and disappeared within three years of three epidemics dating to 1684, 1703, and 1759. It is suggested that this pattern reflects broader trends in Munsee demography during this period.

Guerrant, Alice H. (Delaware Bureau of Archaeology and Historical Preservation)
THOMPSON'S LOSS AND GAIN: A THREATENED SITE REGAINED

The Delaware Bureau of Archaeology and Historical Preservation recently conducted intensive testing of an eighteenth-century house site near Rehoboth Beach, Delaware. The site, known as Thompson's Loss and Gain from a 1773 resurvey of the plat, was discovered during a large area survey conducted by the Bureau in 1977 and was listed on the National Register of Historic Places in 1978. In 1983, the site area was sold for a subdevelopment, and the Bureau obtained the permission of the developer to excavate. The Bureau, with the aid of volunteers, undertook shovel testing, larger unit excavations in plow zone, backhoe stripping of the core of the site, and feature testing to recover artifact patterns across the site and to reveal the plan of the main house area. An 18 x 24 ft two-room post-in-the-ground house with
wattle-and-daub chimneys was delineated, with a small part of the surrounding yard. A two-barrel well was also encountered and completely excavated. This preliminary report will focus on the fieldwork, as artifact processing is not yet complete.

Hantman, Jeffrey L. (U of Virginia)
MONOCAN PREHISTORY: RESULTS OF RECENT EXCAVATION AND SURVEY IN CENTRAL VIRGINIA
This paper presents a synthesis of four years of excavation and survey research conducted by the University of Virginia in the Virginia Piedmont. Survey data from three county wide systematic surveys are discussed in terms of their implications for long term change (or lack of change) in settlement pattern in Monocan prehistory. Particular attention is directed to describing the results of excavations at several upland sites in the Piedmont, and at the Spessard Site, a multicomponent, stratified village site located on the James River.

Hodny, Jay, and Jay F. Custer (U of Delaware)
A LATE ARCHAIC HOUSE PATERN FROM NORTHERN DELAWARE
Recent excavations sponsored by the Delaware Department of Transportation at the Hockessin Valley site in the Northern Delaware Piedmont uncovered the remains of a house pattern. The house, which is defined by postmolds, is oval in shape and is approximately 20 ft long and 12 ft wide. An interior hearth feature is present and charcoal from the hearth has been dated to 3350 B.C. The artifact assemblage from the site is limited in number and suggests a short term occupation. The pole and frame architecture of this structure is an interesting contrast to other comparably dated semisubterranean pit house structures of nearby Coastal Plain areas.

Kalin, Jeff (Primitive Technologies)
TALKING FLAKES: ANALYSIS AND INTERPRETATION OF FLAKED STONE DEBITAGE
Analysis of flaked stone debitage is often limited by the lack of concrete comparative models. This study illustrates how experimental replication can be used to develop a data base useful for the interpretation of different manufacturing activities and the identification of different types of diagnostic debitage. In the experiments, pebbles, cobbles, and boulders were reduced into flakes and bifaces. A variety of different reduction methods and stages are illustrated and diagnostic debitage associated with each manufacturing activity is discussed.

Klein, Michael J. (U of Virginia), Scott K. Parker, and Lynne G. Lewis (National Trust for Historic Preservation)
MONTPELIER: THE EARLY YEARS
Small surveys of upland environments have become common in cultural resource management studies in the Middle Atlantic region. Although such surveys only provide a partial view of prehistoric societies, they provide a useful balance to the earlier emphasis on large, floodplain sites. This paper will concentrate on data uncovered during an intensive
survey of the 2,687 acre Montpelier estate in Orange County, Virginia. These data will be analyzed statistically, and compared with similar surveys from the central Virginia Piedmont. The general purpose of the paper will be to comment on spatial and temporal patterns of land use in the Virginia Piedmont.

**Kraft, Herbert C. (Seton Hall U)**

**INTRODUCTION AND BACKGROUND TO EUROPEAN-INDIAN CONTACT AND TRADE IN THE MIDDLE ATLANTIC REGION**

Three quarters of a century before official explorations and nationalistic claims provided the impetus for settlements in New Netherland, New Sweden, and Virginia, the Native American peoples of the Middle Atlantic region were already experiencing contact with Spanish, Portuguese, French, and Dutch adventurers, slavers, fishermen, and whalers. By the second quarter of the seventeenth century such ephemeral visits had given way to trade for profit, with profound consequences for the Indians' way of life. European cloth, glass, and metal objects of utility and vanity, exchanged for Indian maize and the pelts of beaver and otter, impacted on the Indians' social order, economy and technology, while alcohol and virulent diseases devastated the populace and contributed to the gradual extirpation of the indigenous folk.

**Kraft, Herbert C. (Seton Hall U)**

**EVIDENCE OF EUROPEAN TRADE GOODS ON ARCHAEOLOGICAL SITES IN THE UPPER DELAWARE VALLEY, AND THOUGHTS CONCERNING THE IMPACT OF TRADE ON THE INDIANS OF LENAPEHOKING**

Although more European trade materials have been found in Indian graves and refuse pits in the Minisink region than in any other sector of Lenapehoking, the quantity and variety of such trade items is very small by comparison with what has been found on contemporary Mohawk and Seneca sites in New York state, and on Conoy and Susquehannock sites in Pennsylvania. Given the ethnohistorical references and the proximity of Dutch and Swedish trading posts on the Hudson and Delaware Rivers respectively, an extensive trade should have been assumed. Since the Lenape and Minisink Indians apparently did not benefit from this relationship, it is concluded, among other reasons, that they had insufficient skins, pelts and commodities to sustain a profitable trade, therefore the Dutch focused their attention on the Mohawk Valley while the Swedes traded with the Mingoess.

**Lenik, Edward J. (Sheffield Archaeological Associates)**

**NEW EVIDENCE ON THE CONTACT PERIOD IN NORTHEASTERN NEW JERSEY AND SOUTHEASTERN NEW YORK**

Twelve Contact Period Indian sites in the northern Highland and Piedmont Regions of New Jersey and New York are analyzed with reference to their location, type and amount of European trade goods present, and the country of origin of the artifacts. These sites were small temporary camps that were occupied by small groups of people who relied upon a foraging subsistence strategy. In general, the sites had a low density of European artifacts. The data suggests that Indian contacts with Europeans were occasional or intermittent, and that these
Indian groups maintained their own level of technology and cultural lifeways during this period.

MacCord, Howard A., Sr.
THE CONTACT PERIOD IN VIRGINIA
Beginning sporadically during the sixteenth century, Europeans impinged on the Native American population of the Middle Atlantic area with a vengeance during the seventeenth century. Records are spotty for the earliest contacts, but more complete for the decades following the settlement at Jamestown. Indian reactions to the contacts took one of three thrusts: hostility, evasion, or accommodation. Numerous examples of each tactic are adduced, and some have archeological confirmation. While only a few of the pertinent archeological sites have been excavated, many are known or can be localized with some confidence. For the Indians of the interior, records are not numerous, but contacts can be deduced from the presence of European trade goods and the effects of diseases as manifest in archeological sites.

Mueller, James W., and Benjamin R. Fischler (National Park Service)
ARCHAEOLOGICAL TESTING AND EVALUATION IN DELAWARE WATER GAP NATIONAL RECREATION AREA OF PENNSYLVANIA AND NEW JERSEY, 1984-1987
An overview of the results of four years of survey-level investigations at nine construction sites in the Upper Delaware River Valley will be presented. The results will be primarily limited to temporal-spatial considerations of both the prehistoric and historic occupations along the narrow riverine corridor. Comparisons to known culture history based on the earlier Tocks Island project will be made. This project summary will be the beginning point for designing future mitigation.

Riordan, Timothy (Historic St. Mary's City)
EXCAVATIONS AT "MR. POPE'S FORT": A 1645 MILITARY COMPLEX IN ST. MARY'S CITY, MARYLAND
In 1645, following an attack by English troops on Maryland's first capital, the Governor's house was converted into a fortification. Remains of this fort, which stood for perhaps five years, were investigated in 1987. Previous excavations suggested that it consisted of a palisade line and associated moat. However, recent work along the riverside wall reveals that this portion of the fort was built in a completely different manner. In addition to architectural data, this paper also provides an overview of the rich artifact collection obtained from the moat and an overlying midden. Artifacts include clothing related materials, an extraordinary group of faunal remains and at least six previously unknown types of Terra Cotta tobacco pipes. Evidence is presented that some of these pipes were produced in St. Mary's City.

Shmookler, Leonid (Louis Berger and Associates)
RAW MATERIAL UTILIZATION AND COBBLE REDUCTION ON TWO LATE ARCHAIC SITES OF NORTHERN NEW JERSEY
The Tumbling Brook (28Mr197) and Glen (28Mr198) sites are situated
in the highlands of northern New Jersey and represent Late Archaic hunting and processing camps. The analysis of the chipped stone assemblages retrieved during the course of the 1986 Phase III investigations has indicated that the prehistoric occupants of these sites practiced two complimentary strategies of lithic material procurement and utilization. Crystalline and metamorphic materials, which occur in abundance in the underlying Pleistocene mantle, underwent all stages of reduction on the sites and were used for expedient tools. Conversely, locally unavailable cryptocrystalline lithics such as chert, jasper, and chalcedony were brought to the sites as partially decorticated cobbles and cores which were reduced further according to need. Reduction emphasized the fashioning of corrugated edges on single platform cores and creation of striking platforms with "nipped," biconvex, doubled-ridged, and winged sectional profiles. This technique appears to be responsible for high frequencies of flakes in a 11 mm to 30 mm size category. These flakes were preferentially selected for secondary modification.

Snyder, Jeffrey B., Billy R. Roulette, Jr., and John P. McCarthy (John Milner Associates)

MILITIA ON THE POTOMAC "FRONTIER": AN ANALYSIS OF FLINTLOCK MECHANISMS RECOVERED FROM COLONEL THOMAS ADDISON'S "OTHER" STORE

A large number of flintlock mechanisms and arms furniture, dating from as early as the late seventeenth century, were unearthed during data recovery excavations at Addison Plantation (18PR175), Oxon Hill, Maryland. Nearly all of the firearms assemblage was recovered during the excavation of a structure of apparent late-seventeenth-century origin that was destroyed by fire in the second quarter of the eighteenth century. This equipment appears to have been of military origin which was probably stored by Col. Thomas Addison (1679-1727) for militia use. The various flintlock mechanisms and their archaeological contexts are described. The implications of these findings for our understanding of the roles of the nascent planter elite and of the local militia on the Maryland "Frontier" are discussed.

Stevens, Sandy (John Milner Associates)

THE MILL CREEK SITE (18CE256): A MULTICOMPONENT WOODLAND SITE IN NORTHEASTERN MARYLAND

The Mill Creek site (18CE256), located near the mouth of the Susquehanna River, occupies a small late Pleistocene or Holocene terrace at the mouth of Mill Creek and the Chesapeake Bay. Limited test excavations produced over 1300 lithic artifacts and 200 ceramics. Diagnostic artifacts suggest occupations from the Late Archaic to the Late Woodland periods, with Middle and Late Woodland occupations most heavily represented. Ceramic wares include one unknown Middle Woodland ware, Mockley ware, and several Late Woodland wares including Townsend, Minquannan, Shenks Ferry, and Potomac Creek. These wares suggest cultural contacts from diverse areas within the Middle Atlantic region ranging from Virginia to Delaware and southeastern Pennsylvania to Delmarva. Lithic analysis indicates nearly 87% of the lithic debitage is from local quartz. Additional lithic materials include a variety of nonlocal cherts and jaspers (possibly from Pennsylvania), rhyolite, and
Cecil County Black Flint. Extensive curation of formal tools manufactured from these exotic lithic materials serves to emphasize the importance of these raw material types in the Middle and Late Woodland cultural systems of the area.

Stewart, R. Michael (Louis Berger and Associates)
MICROCORES AND BLADE-LIKE FLAKES FROM COBBLES IN MIDDLE AND LATE WOODLAND ASSEMBLAGES

Expended microcores and utilized blade-like flakes apparently derived from them occur in Middle and Late Woodland archaeological assemblages in coastal portions of the Delaware Valley. The cores appear to be based on cobbles and pebbles and reduced through use of the hammer and anvil technique. This paper provides descriptive and technological data for these artifacts derived from archaeological research and experimental recreations. The cores were originally thought to be forms prepared specifically for the production of blade-like flakes. Replicative experiments show that this is not the case; comparably shaped cores are consistently produced through the bipolar reduction of small cobbles or pebbles and the blade-like flakes are a fortuitous result of this process. Nonetheless, the blade-like flakes were intentionally selected by prehistoric artisans for use and characteristically exhibit unifacial edge damage. The small size of the employable margins of these artifacts imply the existence of composite tools which employed flakes mounted or hafted in series.

Thompson, Stephen (James Madison U)
THE BESSEMER SITE, A LATE WOODLAND VILLAGE SITE IN WESTERN VIRGINIA

From May through August 1987, the James Madison University Archaeological Research Center conducted excavations at the Bessemer site (44B026), a National Register Late Woodland period site on the James River in Botetourt County, Virginia. Excavations at this site were mandated by planned construction of additional lanes of U.S. Route 220 by the Virginia Department of Transportation. Over 7,000 sq m were opened up within the proposed right of way exposing the westernmost portion of a Dan River Phase village in addition to a section of a previously undocumented Page Component occupation. Numerous features, including human burials, very large (probable) food storage pits, and post molds of a village palisade and three probable houses were encountered. Ongoing analysis of site structure and ceramic, lithic, botanical, and faunal remains will focus on cultural ecological, sociopolitical, and cultural evolutionary issues relevant to Late Woodland period cultures of western Virginia.

Virta, Matthew R. (National Park Service)
ARCHAEOLOGY AT THE PETERSEN HOUSE: UNEARTHING AN ALTERNATE HISTORY

Excavations at the Petersen House (51NW65), an extant mid-nineteenth-century row house in Washington, D.C. where President Lincoln died, began as a two week rescue archaeology operation. However, what originated as the emergency salvage of an extensive refuse midden soon evolved into a months long project which has provided information suggesting a longer history of occupation on the Petersen House lot than
previously believed. Beneath the kitchen midden associated with the house there appear artifact bearing soil strata that extend to a depth of over 5 ft below the present ground surface; truly an exceptional occurrence in the highly developed downtown core of Washington, D.C. Early-nineteenth-century cultural material from the deeper strata coupled with an unaccounted for lens of burned architectural material suggests that new information can be added to the documented history for this National Historic Site.

Weber, Carmen A. (Philadelphia Historical Commission)
THE ARCHAEOLOGY OF PHILADELPHIA'S HISTORIC WATERFRONT
Excavations conducted in Philadelphia in September through December of 1987 by the Philadelphia Historical Commission, in conjunction with the Philadelphia Maritime Museum, uncovered the remains of numerous wharves as well as a previously unknown ship’s way. These wharves, and their associated landfill, represent the first opportunity to explore early land-engineering techniques along Philadelphia’s historic waterfront. Their construction, particularly as compared to similar features in New York and Baltimore, is described, and the processes involved evaluated. The exploration of the way, apparently used in ship repair and possibly construction, is fully discussed and its significance to the historical record of early shipbuilding examined.

Wheaton, Thomas R., Jr. (Garrow and Associates)
PRELIMINARY SPATIAL ANALYSIS OF A QUARTZ COBBLE QUARRY IN ANNE ARUNDEL COUNTY, MARYLAND
This paper deals with the horizontal and vertical distributions of quartz tools and debitage at an Archaic quartz quarry in Anne Arundel County, Maryland. The data are based on several hundred screened shovel test pits placed at 3 m intervals across the site, supplemented with nine test units. Although the site is a quarry, the frequency of artifacts is not as great as on better known quarries, and for this reason it has been possible to identify what are thought to be discrete work stations within the quarry. The distributions of various artifact classes within and between the hypothesized work stations are analyzed from the point of view of stage of reduction and reduction technology. Conclusions on the function of the quarry over time are presented.

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