

PART ONE:

**HISTORICAL
NARRATIVE**

INTRODUCTION

The Anacostia Trails Heritage Area is a dynamic region of Prince George's County bordering Washington near Bladensburg and continuing northeast to the Patuxent River in Laurel. A territory of some 83.7 square miles, it encompasses 14 municipalities as well as many neighborhoods in the unincorporated portions of the county. The Heritage Area is bounded on three sides by the county border and on the east by the Baltimore- Washington Parkway and federal property. The area is united by a shared history of settlement and trade, agricultural development, transportation innovations, and similarly close-knit communities that nevertheless each demonstrate a unique character. There are 24 listings in the National Register of Historic Places located in the Heritage Area, including five historic districts. Many more sites are designated with historic status by the county, and Laurel has eight neighborhoods – commercial and residential – that are locally protected historic districts. The area includes an important Colonial-era port and remarkable plantation-style homes and other gems of architecture, and possesses outstanding stories of ingenuity from industrialists to inventors, including the Wright Brothers. One site, Riversdale, boasts not only a woman's and a slave's story documented in family correspondence, but also a unique story in the history of art.

Today, the communities within the Heritage Area represent a rich tapestry of the traditional and the new: urban highways and pastoral settings, rail lines, waterways and subway, as well as ethnic and cultural diversity. Traversing the area by car, bus, train (subway or MARC), canoe, or a small plane taking off from the College Park Airport, the visitor can take a trip back in time or take note of vibrant, new commercial and residential redevelopment in the area. Tour guides are available to lead the way through residential streets, pointing out historic Victorian houses, bungalows, and early church and school buildings in adaptive reuse; and visitors and residents alike will want to visit a rich array of historic sites and museums that reflect both the rich past and promising future of the Anacostia Trails Heritage Area.

The special physical, cultural, and economic connections of the Heritage Area with Washington, D.C., the nation's capital, and its strategic location between the two major metropolitan areas of Baltimore and Washington and along heavily-used transportation routes have contributed significantly to the development of the northern region of Prince George's County, and particularly the communities of ATHA. Other factors that have contributed to ATHA's contemporary economic, cultural, and social

development include the rising international academic reputation of the University of Maryland; the growth in the number of large high-tech, white-collar businesses; the revitalization of major transportation centers; and ATHA's campaign to promote a greater collaborative spirit among the various local heritage tourism sites within ATHA. At the dawn of the twenty-first century, the economic, cultural and academic future of the communities that comprise the Anacostia Trails Heritage Area promises to be even brighter than it was at the dawn of the twentieth century. The groundwork laid by ATHA's efforts will enable the residents and local leaders in the various ATHA communities to learn even more of their shared history and the multiple ties that bind them, and their rich history of shared cultural, civic, educational, transportation and commercial development. In the end, it will be impossible not to be impressed with the significance of the heritage in this area, which includes a number of pioneers in fields ranging from aviation and agriculture, to transportation and heritage tourism.

History is the stories of people, their lives, and the communities they build. Each of the communities of the Heritage Area have developed their own unique character, shaped by geographical, economic, political, and other historical factors, and by the individuals who established them and directed their growth. Bladensburg has seen several transitions, from an active shipping port and Spa in a slave-based plantation society to a faltering backwater after the closing of the port to today's busy transportation crossroads; the communities of the Gateway Arts District have grown to attract a population that is vibrant and ethnically-diverse; North Brentwood and Rossville have maintained their strong identity as communities that first offered the opportunity of home ownership to African Americans shortly after the Civil War; Laurel, with its origins as a company mill-town, has become a modern city with well-preserved historic districts that draw crowds of visitors and antique shoppers; and the changes continue, as throughout the Heritage Area the population is growing with immigrants to this country who are attracted to the opportunities that the region offers, and share in turn their own ethnic traditions and proud heritage.

CHAPTER ONE

OVERVIEW OF THE ANACOSTIA TRAILS HERITAGE AREA: PREHISTORY TO CONTACT PERIOD

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Geology and the Deep Prehistory of ATHA

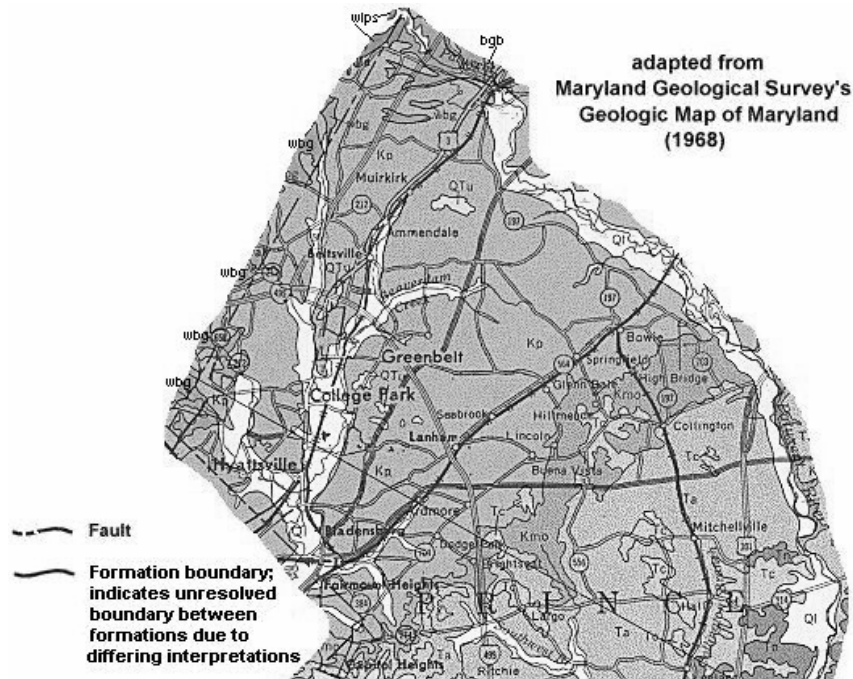
A cursory examination of a geological map of ATHA shows a surprising and deceptive lack of complexity, with perhaps three primary types of geological formations or deposits in the region.¹

The valleys of the Anacostia and Patuxent Rivers and their tributaries are filled with lowland deposits of gravel, sand, silt and clay (marked “QI” on the map). These deposits are of recent geological origin, dating from the Pleistocene (roughly 2 million years ago to 11,000 years ago) and Holocene (11,000 years ago to the present). Similar in age are isolated pockets of upland gravel, sand, silt and clay, found only on a few pieces of high ground (marked “wbg”). Although these geological deposits are not particularly old, most of the remaining portions of ATHA are much older, having their origin in the Cretaceous period (marked “Kp”). These gravels, sands and clays date to between 140 and 65 million years ago, harkening to a time when life on earth was profoundly different. Dominating these Cretaceous deposits in ATHA is a

¹ See the Prince George’s County portion of the Maryland Geological Survey’s 1968 Map of Maryland at <<http://www.mgs.md.gov/esic/geo/pri.html>>. **Note:** Each of the panelists was asked to produce an historical overview of the ATHA area, with a focus on his or her primary area of expertise. As the only archaeologist on the panel, I have taken two primary foci. The first is the prehistoric period, as archaeology provides the only evidence for this period. The second runs from roughly 1600 (just prior to European colonization) to 1696 (the creation of Prince George’s County). For prehistoric archaeologists, this era constitutes what is known as the “Contact Period,” when Native Americans and Europeans were in early contact; for historians and historical archaeologists, this is the early colonial period. Although this provides the major focus for the following essay, I have supplemented this with some limited comments on other periods, with the greatest attention to interpretive issues that might benefit from archaeology and to areas in which I have some additional background (such as maritime history).

This essay is divided into sections by chronology. Suggestions for heritage area interpretation are given in notes at the end of each section, with the relevant sites noted in **bold**.

formation that geologists call the Arundel Clay, a deposit of dark gray and maroon clays mixed with lignite that may extend as much as a hundred feet in depth. Contained within the clay are clues to what life was like on earth so long ago.



The first clear evidence of the Cretaceous in Maryland was found in Muirkirk in 1858. In an iron pit excavated into the Arundel Clay, two dinosaur teeth were found by Philip Tyson (the State Agricultural Chemist). The teeth were eventually determined to have belonged to a sauropod dinosaur, which was given the name *Astrodon johnstoni*. This discovery and its timing are early and important. The first description of a dinosaur was only published in England in 1825, and a contemporary dinosaur find from New Jersey in 1858 is often reported as the first dinosaur discovered in the United States.² The Muirkirk find, although partial, was one of the first in the country.

The discovery led to additional investigations of the Muirkirk area in 1887 by Othniel C. Marsh (Director of the Peabody Museum at Yale) and John Bell Hatcher (a geologist with the U.S. Geological Survey). Their work revealed an amazing array of dinosaur finds within the prolific Arundel Clays between Muirkirk and Beltsville. This band of Lower Cretaceous deposits became known as “dinosaur alley,” and Marsh and Hatcher’s collection was so

² Maryland Geological Fact Sheet 12: *Astrodon johnstoni*: the Maryland State Dinosaur. <<http://www.mgs.md.gov/esic/fs/fs12.html>>, December 17, 2002.

important that it is now housed at the Smithsonian Institution.³

These and subsequent finds have revealed a great deal about the Jurassic and Cretaceous periods (190-65 million years ago) in this region, a time when dinosaurs dominated the planet. Although these “terrible lizards” could be enormous, ranging up to 40 meters tall and 80 to 100 tons in weight, most were plant eaters rather than the meat eaters of people’s nightmares. *Astrodon johnstoni*, which is by an act of the legislature the “official dinosaur” of the State of Maryland, was such an herbivore. A sauropod, or “lizard-hipped” dinosaur (so named because of the shape of the pelvis), *Astrodon johnstoni* was a four-legged creature with a long neck and tail, but with a small skull and brain.⁴ Standing over 30 feet in height, a full grown *Astrodon johnstoni* had a length of 50 to 60 feet or more. It was related to the better known *Diplodocus*, and sauropods were tremendously successful, with a wide geographic distribution.⁵

Among the plants that these herbivores ate were the first flowering plants (angiosperms), which emerged during the Cretaceous and quickly became the dominant type of plant life on earth. These hermaphroditic plants evolved flowers in part in order to attract insects for pollination, and it is no coincidence that the Cretaceous also saw the development of a bewildering variety of insect types. All of these life forms, from lowly insects and flowering plants to enormous dinosaurs, were linked in an evolutionary dance and symbiosis that has left its mark in ATHA. Dinosaur bones from the period were sometimes quickly covered with alluvial sediments and, protected from scavengers and agents of decay, they eventually turned to stone and became fossilized. Plant remains also were transformed into this durable state, along with insects and other small creatures. Insects also have been preserved in amber; resinous secretions from some plants trapped these insects and later became fossilized. ATHA is one of the few places in the eastern United States where these deposits are on the surface and accessible.

The geological time capsules of ATHA also have revealed evidence of the catastrophic demise of dinosaurs at the end of the Cretaceous, approximately 65 million years ago. Recent tests have shown the presence of iridium in local deposits dating from this time period, referred to by geologists as the K-T boundary. Iridium is a heavy metal that is rare in the earth’s crust. Due to its great weight, most of the earth’s iridium was pulled by gravity down

³ Maryland Geological Fact Sheet 12.

⁴ Paleontologists divide dinosaurs into two major groups, depending upon the shape of the hips. Lizard-hipped dinosaurs included herbivores such as *Diplodocus* and meat eaters such as *Tyrannosaurus rex*. All of the other group, the “bird-hipped” dinosaurs, were herbivores, including *Stegosaurus* and *Triceratops*.

⁵ Sauropod Dinosaurs: Berkeley University web page.
<<http://www.ucmp.berkeley.edu/diapsids/saurischia/sauropoda.html>>, December 17, 2002.

into the core early in our geological history. When iridium is found in surface deposits, it usually comes either from volcanic activity (recycling iridium from the earth's core) or from extraterrestrial sources such as asteroids or meteorites (scattered across the earth in the explosion from impact or as the meteorite broke apart in earth's atmosphere). The global distribution of high levels of iridium in the K-T boundary suggests an extraterrestrial source such as a very large asteroid. This is supported by the wide distribution in K-T deposits of highly shocked quartz crystals and small spherules of glass, created when sand and silica were thrown up into the furnace-like explosion from impact. The prevailing theory for the demise of dinosaurs and the massive extinctions of the end-Cretaceous is now an asteroid strike. The impact is estimated to have come from an asteroid that was approximately 10 km in diameter and exploded with an energy 10,000 times greater than that of the current nuclear arsenal of the world.⁶

The result of this explosion was horrific. Shock waves reverberated around the earth, and debris was thrown high into the atmosphere. Larger bits of hot debris rained down on the earth, while smaller particles remained suspended in the atmosphere, blocking out sunlight and life-giving warmth. Temperatures dropped precipitously and photosynthesis slowed, with catastrophic results for biosystems. Large and medium sized animals, those over 55 pounds in weight, disappeared, along with 85 % of marine animal species, a wide variety of plankton and sponges, and many terrestrial plant species. It took another 20 million years for ecosystem diversity to recover.⁷

Prehistory

Humans have lived in or moved through the ATHA area for at least the last 11,000 years, and people may have been present in the region as early as 16,000 years ago. For the vast bulk of this time period, archaeology is our sole source of information about who these people were and how they lived. As European explorers and then colonists arrived in the area, they produced written descriptions of native peoples, but these are of uneven reliability, and

⁶ J. D. MacDougall, *A Short History of Planet Earth* (New York: John Wiley & Sons, 1996) 157-177.

⁷ Sidney Liebes, Elisabet Sahtouris, and Brian Swimme, *A Walk Through Time: From Stardust to Us, The Evolution of Life on Earth* (New York: John Wiley & Sons, 1998) 152-155, 188; MacDougall (1996) 157-177. Interpretation notes: An interpretive program in ATHA that examines dinosaurs through their fossils and explores the end of the Cretaceous might be very appealing. There are few places in the Middle Atlantic where this issue can be brought into interpretation. It is intriguing to people on a variety of levels. These include the dinosaurs themselves, the surprising vulnerability of creatures that dominated the earth for so long, and the unsettling notion that we too could be vulnerable to an external event not of our making. This realization has made us more aware of objects in space that may be on a collision course with the earth, and NASA has been active in trying to track these objects; an interpretive link with Goddard Space Flight Center and the Hubble in this area seems like a winning proposition.

they are available only for the tail end of Native American presence in ATHA. Archaeology therefore plays an important role in our understanding of Native Americans, and it must also be relied upon heavily for interpretations generated by heritage tourism.

No comprehensive archaeological survey of the entire ATHA region has ever been undertaken, but a wide variety of areas have been explored by archaeologists in one fashion or another. Some of these investigations have been generated purely out of research interests, while others have been stimulated by the need for information on specific historic sites. The bulk of the work done in the area, however, has been what is called “cultural resource management,” projects required by Federal and state law prior to construction. Many of these projects are required under the National Historic Preservation Act (NHPA) of 1966 (and amendments), which essentially requires that impacts to cultural resources (archaeological or architectural) be assessed prior to any Federally funded or permitted undertaking. Other laws that have an impact on archaeology include the National Environmental Policy Act (NEPA), the Historic Sites Act, and the Native American Graves Protection and Repatriation Act (NAGPRA). Although standards are generally set by the National Park Service and projects ultimately are reviewed by the President's Advisory Council on Historic Preservation, detailed oversight and review of most federally-mandated cultural resource management projects comes at the state level, through state historic preservation offices (SHPOs). Maryland's SHPO is the Maryland Historical Trust, part of the Department of Housing and Community Development.

Because of its oversight role, the Maryland Historical Trust (MHT) keeps records of all archaeological activity in the state. Archaeological site files at MHT record basic information about every recorded archaeological site in the state, including site location, extent, associated artifacts, and temporal and/or cultural affiliation. The precise location of sites is considered sensitive because of the threat of pot-hunting or looting, so access to these files is limited to approved researchers. Access to the files can be arranged if staff of the Anacostia Trails Heritage Area (ATHA) should need information from the files for interpretive development or other purposes. A review of MHT's files for sites within the Anacostia Trails Heritage Area, conducted for this *History Matters!* project, revealed more than 52 archaeological surveys and 78 recorded sites in the ATHA area. The bulk of them are prehistoric sites, most dating to either the Archaic period or with indeterminate dates. Some were explored many years ago, while others have been discovered more recently during investigations associated with new construction projects. Few have been subjected to comprehensive excavation. The bulk of the archaeological activity in ATHA has been survey work designed to find sites,

but survey boundaries have been defined by project or construction needs, rather than by a larger research design. The library of the Maryland Historical Trust holds copies of reports for most of the archaeological investigations in ATHA, especially those dating from the 1980s or later.

The relatively small number of explored sites and the lack of comprehensive archaeological surveys means that our understanding of the area's prehistory relies heavily upon information from the surrounding portions of the upper Chesapeake Bay. The best overview of Chesapeake prehistory is Dent's *Chesapeake Prehistory: Old Traditions, New Directions*.⁸ Dent's temporal coverage extends from the early colonial period back to the end of the Pleistocene, 11,000 years ago (11,000 BP). Also of value, although somewhat dated, is the Maryland Geological Survey's work conducted for the Maryland Department of Transportation in the late 1970s and early 1980s.⁹ In an effort to acquire baseline information on the distribution of both archaeological sites and architecture across the state, hundreds of transects were surveyed across the state. The research results were presented in three volumes, each focusing on a portion of the state (Eastern Shore, Western Shore, and the Piedmont). For the latest phase of prehistoric occupation in the area, a good overview is Clark and Rountree (1993).¹⁰ These and other works, combined with information from individual sites in the region, make it possible to outline a general cultural sequence for the prehistory of the region. This can be done reliably, as prehistoric populations of the Chesapeake were not isolated, but were instead participants in broad patterns of life that were shared by Native Americans over a wide area.

Prehistoric Cultural Sequence

The prehistory of the region has been divided by archaeologists into the following periods: the Paleoindian period (11,000-10,000 years ago or 9000-8000 B.C.); the Archaic, which is subdivided into the Early Archaic (8000-6500 B.C.), Middle Archaic (6500- 3000 B.C.) and Late Archaic (3000-1000 B.C.); and the Woodland, which is divided into the Early Woodland (1000 B.C.-200 A.D.), Middle Woodland (200 -900 A.D.), and Late Woodland (900 A.D.- ca. 1607). Some researchers also speak of the "Contact" period, denoting the period after which Indian populations had contact with

⁸Richard J. Dent, Jr., *Chesapeake Prehistory: Old Traditions, New Directions* (New York: Plenum Press, 1995).

⁹Kit W. Wesler, Gordon J. Fine, Dennis J. Pogue, Patricia A. Sternheimer, Aileen Fl Button, E. Glyn Furgurson, and Alvin H. Luckenbach, *Maryland Department of Transportation Archaeological Resources Survey*, Volume I: *Eastern Shore* (Maryland Historical Trust Manuscript Series 5, 1981); Volume II: *Western Shore* (Maryland Historical Trust Manuscript Series 6, 1981). (1981c?).

¹⁰Wayne E. Clark and Helen C. Rountree, "The Powhatans and the Maryland Mainland," *Powhatan Foreign Relations, 1500-1722* (Charlottesville: University of Virginia Press, 1993).

European explorers and settlers. Determining the precise timing of contact is problematic, but 1607 A.D., the date of Jamestown's settlement, often is used as a benchmark for the Chesapeake. These periods are summarized below:

Paleoindian period		9000 - 8000 B.C. (11,000 - 10,000 B.P.)
Archaic period	Early Archaic	8000 - 6500 B.C.
	Middle Archaic	6500 - 3000 B.C.
	Late Archaic	3000 - 1000 B.C.
Woodland period	Early Woodland	1000 B.C. - 200 A.D.
	Middle Woodland	200 A.D. - 900 A.D.
	Late Woodland	900 - 1607 A.D.
Contact period		post-1607

Increasing evidence suggests that humans were present in the Middle Atlantic before 11,000 years ago. Evidence of these “pre-Clovis” peoples comes from Pennsylvania’s Meadowcroft Rockshelter to the northwest and Virginia’s Cactus Hill to the south. These and other potentially early sites in North and South America suggest the presence of humans in the New World 16,000 years ago or earlier. No such evidence has yet emerged from the upper Chesapeake, so this early period is not discussed here. This overview begins with the end of the Pleistocene at 11,000 years ago and largely follows the conventional temporal divisions, with some minor departures that reflect our current understanding of prehistoric cultural sequences.

Paleoindian/Early Archaic (ca. 9,000-6,500 B.C.)

The Paleoindian and Early Archaic periods are treated together here because there appears to have been little change in technology or culture during this 2,500 year time span. Life during this period was heavily influenced by the significant environmental shifts that accompanied the end of the last ice age. During this ice age, global temperatures were significantly lower than those of today. Much of the world’s precipitation was frozen and did not run off into oceans. As a result, large portions of the globe’s water were locked in ice, and sea levels dropped by as much as 83 meters in this region.¹¹ The continental shelf was exposed as dry land during this marine regression, and the great estuary we know today as the Chesapeake did not exist. In its place was a river valley, with the deeply entrenched ancestral Susquehanna running through channels that today appear on navigation charts as the deepest portions of the Bay. Both the exposed continental shelf and the portions of the Potomac River and lower Anacostia River that are now

¹¹ Dent (1995) 73.

inundated would have been traversed by people during the latter portions of the Pleistocene. Indeed, these shorelines may have been among the most attractive habitats for humans, but their archaeological traces are now covered by water and sediments accumulated over the last few thousand years.

Although the Pleistocene (2 million to 11,500 years ago) was generally colder than the present geological era (the Holocene), mean temperatures fluctuated, going through warming and cooling trends. From approximately 14,000 to 13,000 years ago, Europe and North America were in a warmer period, or “interstadial” (the Bölling-Alleröd Interstadial).¹² This was followed by a 2,000 year period called the Younger Dryas, during which the climate became extremely cold and dry. Conditions approached the full glacial or ice age extremes, and cold winds whipped up soil along the western shore of the ancestral Susquehanna and dumped along the Delmarva.¹³ It was not until about 11,000 years ago that temperatures began to warm again. The ice ages came to an end and the Holocene began.

The generally colder temperatures and the proximity of ice sheets up to the end of the Pleistocene had a profound impact upon the ecology of the region. The differences can best be understood by considering the distribution of flora and fauna in today's moderate climates and comparing these with the distribution of 11,000 years ago. A traveler of today who moves from northern Canada south through New England to the Middle Atlantic will, for example, notice distinctive shifts in vegetation. Close to the Arctic Circle, tundra predominates. To the south, tundra gives way to spruce, which ultimately is replaced by pine forests in lower latitudes. Mixed deciduous forests appear only as more southerly, temperate regions are reached. During the late Pleistocene, these broad bands of vegetation were shifted more than 1,000 kilometers south by the cold. Tundra conditions existed into southern Pennsylvania as late as 9,300 B.C.,¹⁴ and the area around the Anacostia and western Prince George's County was likely covered with a mix of spruce and pine, with grasslands and some small amounts of deciduous trees in sheltered

¹² Cronin (1999).

¹³ D. M. Peteet, J. S. Vogel, D. E. Nelson, J. R. Southon, R. Nickmann, and L. E. Heusser, “Younger Dryas Climatic Reversal in Northeastern USA? AMS Ages for an Old Problem,” *Quaternary Research* 33 (1999): 219-230; D. M. Peteet, R. A. Daniels, L. E. Heusser, J. S. Vogel, J. R. Southon, and D. E. Nelson, “Late-Glacial Pollen Macrofossils and Fish Remains in Northeastern U.S.A.: The Younger Dryas Oscillation,” *Quaternary Science Review* 12 (1993): 597-612; D. M. Peteet, R. A. Daniels, L. E. Heusser, J. S. Vogel, J. R. Southon, and D. E. Nelson, “Wisconsinan Late-Glacial Environmental Change in Southern New England: A Regional Synthesis,” *Journal of Quaternary Science* 9.2 (1994): 151-154. J. E. Foss, D. S. Fanning, F. P. Miller, and D. P. Wagner, “Loess Deposits of the Eastern Shore of Maryland,” *Soil Science Society of America Journal* 42.2 (1978): 329-334.

¹⁴ Maureen Kavanagh, *Archeological Resources of the Monocacy River Region, Frederick and Carroll Counties, Maryland* (Submitted to the Maryland Historical Trust, Frederick County Planning Commission, Carroll County Planning and Zoning Commission, 1982) 8.

areas.¹⁵

Direct evidence for such ecological reconstructions is rare in the Chesapeake region, but we are fortunate in having “the longest continuous history of postglacial vegetation in the Mid-Atlantic region is contained within sediments deposited in the floodplains of Indian Creek, a tributary of the Anacostia River” near Berwyn Heights and College Park in ATHA.¹⁶ A core of soil was recovered from the black peat in an old channel of Indian Creek. The excellent pollen preservation yielded a detailed picture of changing vegetation, with a chronology provided by five radiocarbon dates. The lowest portion of the core confirms that at about 10,000 B.C. pine, fir, and spruce were the dominant trees, with increasing amounts of alder toward the end of the Pleistocene. Other arboreal pollen indicates the presence of ash, birch, hornbeam, and hazelnut. Nonarboreal plants included grasses and sedges, along with madder (Rubiaceae) and milkwort (*Polygala*).¹⁷ The spruce, fir and pine forest of 10,000 B.C. dominated for about 1,000 years, after which spruce and fir decreased markedly (while pine and ash increased). This is strongly suggests a warming trend, which is consistent with the beginning of the Holocene as described earlier. This warming trend was temporarily reversed, however, as shown by a decrease in ash and the spread again of spruce and birch. The cold snap lasted only 500 years, after which temperature once again moderated. At about 8,000 B.C. (10,000 years ago), spruce and fir disappeared, replaced largely by hemlock, along with gradually increasing amounts of black gum. The dominant forest cover was hemlock and pine, however, with relatively few herbaceous plants. This suggests a tight forest cover with relatively little open space.

Species of animals also were quite different through these time periods. The estuarine species that define the region today, particularly oysters (*Crassostrea virginica*) and blue crab (*Callinectes sapidus*), require brackish water and could not survive the relatively cold and fresh water of the Potomac. Although conventional wisdom has held that oysters would not have been seen as far up the Chesapeake Bay as the Potomac until well into the Pleistocene,¹⁸ recent coring off the mouth off the Potomac found oyster shells

¹⁵ Laurie Cameron Steponaitis, “An Archeological Study of the Patuxent Drainage, Volume I,” *Maryland Historical Trust Manuscript Series* No. 24 (Annapolis, MD: Maryland Historical Trust and the Tidewater Administration, 1983) 39; Dent (1995) 75-80; Dennis Curry, “Prehistoric Kent County,” In *Historic Houses of Kent County*, edited by Michael Bourne and Eugene Johnstone (Chestertown, MD: Historical Society of Kent County, 1998) 1.

¹⁶ Grace S. Brush, “Forests Before and After the Colonial Encounter,” In *Discovering the Chesapeake: The History of an Ecosystem*, edited by Philip D. Curtin, Grace S. Brush, and George W. Fisher (Baltimore: The Johns Hopkins University Press, 2001) 51.

¹⁷ Charles H. Leedecker, *Excavation of the Indian Creek V Site 18 PR 94 Prince Georges County, Maryland* (Washington, DC: Louis Berger & Associates, Inc., 1991); Brush (2001) 51-53.

¹⁸ Dent (1995).

dated to about 10,000 years old,¹⁹ indicating that shell fish would have been available in that area by a very early date and that an estuarine environment had developed by that time. Anadromous fish such as shad probably were not well established at this point. In their place were aquatic communities that are similar to most of today's freshwater rivers at similar latitudes, and there probably was a greater diversity of species. Terrestrial fauna included many of the species indigenous to the region today, but there were some others that have long since disappeared. The most astonishing of these were large animals adapted to colder conditions, the so-called "megafauna." These included mammoth, mastodon, musk ox, giant beaver, and peccaries, as well as camels, horses, moose, elk, and caribou.²⁰ Many of these species became extinct at the end of the ice age. Humans probably had some role in this extinction, although the extent of that impact and the relative importance of other variables such as changing climate, ecological shifts, and seasonal temperature extremes (which may have affected reproduction) are hotly debated among archaeologists and paleontologists.

No Paleoindian sites have been excavated within the ATHA area, and only three intact sites have been excavated within Maryland's portion of the Chesapeake. One of these is relatively close to ATHA, the Pierpont site. Pierpont is located at the confluence of Seneca Creek and the Potomac River, right on the Fall Line. The site is known primarily through artifacts collected from the surface, rather than through excavations, so the information is limited. Another Paleoindian site, the Catoctin Creek site, is farther upstream on the Potomac, but on the Virginia side of the river. Located on a terrace above Catoctin Creek, the site was used at least in part for stone tool manufacturing.²¹ Although Paleoindian sites are few, the presence of people throughout the area during the late Pleistocene may be inferred on the basis of individual finds of artifacts that are characteristic of the period. The most diagnostic of these artifacts are projectile points. These are almost certainly from spears or darts, as the bow and arrow was not introduced to the region until 800 A.D. The points characteristic of the period from 9,000 to 8,000 years ago are commonly called "Clovis points," after the site at which they were first recognized. Most are thin and lanceolate in shape and have a "flute" or concavity that extends from the base of the point up its flat sides. These were skillfully produced by removing flakes from stone cores. Chert, jasper, or

¹⁹ Thomas M. Cronin, *Initial Report of IMAGES V Cruise of the Marion-Dufresne to the Chesapeake Bay June 20-22, 1999* (Reston, VA: U.S. Geological Survey Open-File Report 00-306, 2000).

²⁰ O. P. Hay, *The Pleistocene of North America and Its Vertebrated Animals from the States West of the Mississippi River and from the Canadian Provinces East of Longitude 95 Degrees* (Washington, DC: Carnegie Institution, 1923) 344-354; Dent (1995) 80-81.

²¹ Dent (1995) 116-117.

flint (all of which are very fine-grained forms of quartz) were the preferred material for points, although other stone also was used. Archaeologists recognize a number of variant styles of these fluted points, although there is some disagreement upon how the projectiles they tipped were used. Some archaeologists feel that they were utilized solely on thrusting or hand-thrown spears, while others feel that there is evidence for the use of sophisticated spear-throwers (atl-atls). These devices acted as extensions of the thrower's arm and significantly increased range and striking power.

Traditional images of Paleoindians cast them primarily as hunters of big game, particularly the Pleistocene megafauna. As more sites are discovered and excavated, however, this image is shifting. Paleoindians relied heavily upon hunting a variety of small game, some of which was trapped or snared rather than dispatched with projectiles. They also fished and gathered seasonally available plant foods, including roots, nuts, and berries. It is probable that they utilized a variety of tools such as baskets and nets in procuring these foods, but these elements of their material culture were made out of organic materials that have seldom survived their long burial in the soil. What has survived best are their stone tools. In addition to fluted points, Paleoindians used sharp flakes of stone, as well as choppers, scrapers, and drills; these implements were put to work in butchering animals, scraping and curing hides, and for a variety of other purposes. Many tools are thought by archaeologists to have been multi-purpose tools (the "Swiss Army knives" of their day) and show evidence of continual re-sharpening.

Paleoindians were highly mobile, and probably moved around the region over the course of a year, taking advantage of seasonally available resources. Riverine environments such as the Anacostia and Patuxent Rivers in ATHA, as well as inland swamps, were important because they attracted a diversity of game and provided other important resources.²² Territorial bands probably split up during some parts of the year and then coalesced into larger groups for activities such as nut harvesting or for mutual support during the winter. The paucity of evidence means that we know little about what kinds of shelters they used or the more perishable elements of their material culture. Evidence from the Shenandoah Valley suggests the use of skins over a sapling framework,²³ while excavations in Maine suggest use of a lean-to covered with hides and supported by stone slabs.²⁴

Although the importance of organic materials such as wood and fibers

²² Jay F. Custer, *Prehistoric Cultures of the Delmarva Peninsula* (Newark: University of Delaware Press, 1989).

²³ William M. Gardner, *The Flint Run Paleo-Indian Complex: A Preliminary Report, 1971-73 Seasons* (Washington, DC: The Catholic University of America, 1974).

²⁴ Richard Michael Gramly, *The Adkins Site: A Paleo-Indian Habitation and Associated Stone Structure* (Buffalo, NY: Persimmon Press, 1988).

in the Paleoindian tool kit should not be overlooked, these people relied heavily upon stone. Stone sources are not consistently available throughout the Chesapeake, and it is clear that Paleoindians were attracted to rock outcroppings and potential quarry sites. These are exposed and most visible at the Fall Line along the rivers on the Chesapeake's western shore, and this is an obvious source of readily available material. One of the most extensive Paleoindian sites in the Chesapeake, Virginia's Williamson site, is located on the Fall Line near a tributary of the James River and is characterized by extensive evidence of quarrying. Some archaeologists have suggested that base camps were chosen near a stone source during the winter, and satellite sites were utilized around the base camp for activities such as quarrying, hunting, and butchering.²⁵ Others have drawn an analogy to life among Subarctic Indian groups before the introduction of snowshoes.²⁶ Prior to the development of snowshoes in relatively recent times, access to the uplands was difficult during the snowy winter months and life would have focused on the more easily traveled river bottoms. During the summer, the focus of life shifted toward resources available in inland areas.

The Fall Line area of the Potomac, which is quite close to ATHA, would have been a logical source of lithic material for Paleoindians, as well as, perhaps, a convenient point at which to cross the river. In addition, areas that had a southern exposure and provided protection from winter winds would have provided an added attraction for winter camps.²⁷ These might include south-facing slopes along the Anacostia, particularly at the confluence of the Northeast and Northwest branches of the river; unfortunately, this area is highly developed. The watershed divide between the Patuxent and Anacostia also might have been preferred. Inland swamps that attracted game were yet another favored location for Paleoindians.²⁸ A careful examination of soil maps for the area might reveal the location of such old swamps, but this was beyond the scope of this project.

The Fall Line has additional importance as the dividing line between two major physiographic provinces, the Coastal Plain and the Piedmont. Different ecosystems characterize each of these provinces, and the boundary between them is known as an "ecotone." Ecotones have long been recognized by ecologists as areas with a wide diversity and relative abundance floral and

²⁵ William M. Gardner, "Paleoindian Settlement Patterns and Site Distribution in the Middle Atlantic (Preliminary Version)," (Unpublished manuscript, 1979).

²⁶ Jack Irion, Geoffrey Melhuish, Antonio Segovia, and David M. Beard. *Archeological Investigations of the Proposed C&D Canal, Maryland and Delaware: Cultural Resource Reconnaissance and Sensitivity Survey*, vol. I. (Frederick, MD: R. Christopher Goodwin & Associates, Inc., 1995) 10.

²⁷ After McAvoy (1992) 45 and Dent (1995) 109.

²⁸ Curry (1998) 4.

faunal species. The ATHA area is situated at the edge of just such an ecotone, and this has been one of the region's strengths throughout the prehistoric and historic periods.

Through the end of the Paleoindian period and into the Early Archaic, temperatures began to warm. Sea levels gradually rose with the contraction of the ice sheets, and on land hemlock gradually replaced spruce, and boreal forests replaced grasslands. Populations of browsers such as deer, elk, and moose grew, while grazing megafauna disappeared. Although techniques for hunting and gathering must have changed slightly to accommodate these shifts, the social organization and technology of Indians in the area seems to have changed little. One area of change that may initially seem inconsequential was a shift in stone tool-making material away from the highly prized chert. Instead, many tools were made of more readily available quartz and quartzite. This seemingly minor change was significant, however, in that more local sources of stone were available, and long-term use and re-sharpening of stone tools was less important (what archaeologists term "curation"). Another shift can be seen in projectile point styles. Instead of the older fluted points, Early Archaic Indians began to produce points with notched or stemmed bases.²⁹

Middle Archaic (6,500 - 3,000 B.C.)

²⁹**Interpretation notes:** Among the individual sites in ATHA, few are very well positioned to tell the Paleoindian and Early Archaic part of the region's story. This is an important, if poorly understood and often overlooked part of the area's heritage, however, and some means of doing so should be sought. Possibilities might include additional panels, displays, or virtual interpretation at **Bladensburg Waterfront Park** and its associated trails or the **Laurel Museum**. Another possibility is the planned museum at **North Brentwood**. Undeveloped land at the **Beltsville Agricultural Research Center** or **Montpelier** would be ideal, but would require a broadened interpretive focus for each of those institutions. This period has wonderfully engaging elements upon which an interpretive program could be developed. A public program might include exhibitions (or video-taped demonstrations) of flint-knapping to produce projectile points and other stone tools. Hands-on activities could include spear throwing with atl-atls. Interpretation also might focus on other subsistence practices of Paleoindians and highlight the importance of the Fall Line, swamps and rivers as natural features and as resources utilized by people throughout prehistory and history. The concept of the ecotone might also be a useful element in interpreting natural history. Another interesting interpretive focus might examine changing environments over time. It is important to emphasize that the Fall Line and other natural features continued to be important extraction areas for later prehistoric populations, so it might not be advisable to focus exclusively on the Paleoindian inhabitants. Some of these elements may also be useful in designing **self-guided tours** of the area.

Another angle for interpretation lies with the riverine ecosystem and the importance of water in travel. No direct evidence for Paleoindian use of boats exists, but there is abundant indirect evidence of such technology. After all, humans reached Australia more than 40,000 years ago and had to cross extensive reaches of water to do so. Indeed, many archaeologists now believe that human movement into the Americas from Asia occurred not just on foot across the exposed land bridge at the Bering Strait, but also via coastal movement in boats. This aspect of maritime technology is not currently interpreted in any of Maryland's maritime museums and could be an interesting avenue for the some institution to explore.

The climate continued to moderate during the Middle Archaic, and the environment eventually reached essentially modern conditions. Sea level rose approximately 1.30 meters per century between roughly 8,000 B.C. and 4,000 B.C., after which the rate of rise slowed to 0.20 meters per century.³⁰ Despite this relatively rapid rise during the Early Archaic and much of the Middle Archaic, it took several thousand years for the Chesapeake Bay to form and take on its modern shape. The continental shelf was submerged and the ocean reached the present mouth of the Chesapeake by 8,000 B.C. By about 5,000 B.C., the estuary reached well into the Potomac River, and brackish, estuarine waters were at the Anacostia. The estuary acquired its current configuration by about 1,000 B.C., although sea level rise has continued in the present and erosion has significantly changed the shoreline of the bay since the completion of the estuary 3,000 years ago.³¹

The denser forests of this period supported large numbers of deer and turkey that were important game for Middle Archaic Indians. Perhaps as a result of shifts in hunting strategy, projectile points took on a new shape, with a base that is termed “bifurcate” by archaeologists due to its pronged appearance. It is likely that these and other variations in style over time reflect changes and experiments in hafting, or attaching the points to shafts. Many archaeologists believe that there was a pronounced shift away from the earlier reliance on hunting and that people became even more dependent upon foraging. Certainly the emerging mixed deciduous forests of the period provided expanded opportunities for gathering plant foods such as hickory and other nuts. Other food stuffs also became more abundant. Evidence from the Chesapeake is sparse, but Middle Archaic Indians in the Southeast utilized various kinds of river molluscs and seem generally to have expanded the kinds of foods they used;³² this likely was true in the ATHA area as well. As the water level rose around the growing Chesapeake Bay, Native Americans increasingly utilized resources from the swamps and marshes forming along its margins; swamps of today do not necessarily indicate where swamps were during this period, but Beaverdam Creek on the Beltsville Agricultural Research Center (BARC), north of Greenbelt, might be one such locale. Another, larger area of swamp today lies along the Patuxent River, extending roughly from just above the crossing of New Fort Meade Road down to the boundary of ATHA.

In response to the greater density and variety of resources (food, stone, and other materials) available to Middle Archaic populations, they seem to have been somewhat less mobile than earlier peoples. Populations grew

³⁰ Dent (1995) 83.

³¹ Dent (1995) 83-84.

³² Cleland (1976); Dent (1995)177.

significantly, although total estimates are unreliable. The size of social bands, not surprisingly, also seems to have grown, although the seasonal break-up and coalescence of these groups into “micro-” and “macrobands” seems to have continued.

Another reflection of the increasingly dense forest cover and the greater use of nuts and other plant materials can be seen in the Middle Archaic emergence of ground stone tools. Formed by grinding away the stone’s surface rather than flaking it, these tools included grinding stones for processing nuts and plants, and axes and adzes for woodworking. The existence of so many tools for working with wood emphasizes the important role that perishable wood and organic products must have played in everyday life. These undoubtedly ranged from bowls and baskets to nets and snares.³³

Late Archaic (3,000 - 1,000 B.C.)

In many respects, the Late Archaic represents both a culmination and an intensification of developments seen through the earlier Archaic. The frequency and range of ground stone tools, for example, expanded greatly during this period. Axes were often larger and seem designed for heavier use. Projectile points, blades, scrapers, and other flaked stone tools were made out of a wider variety of stone, including local quartz and quartzite, and materials such as rhyolite that were brought in from neighboring areas. Other ground stone items include perforated stones that have been interpreted as atl-atl (spearthrower) weights and stone netsinkers. In addition, bowls or containers made of soft soapstone or steatite appear as artifacts on Late Archaic sites. Steatite outcrops are common along the Fall Line of Western Shore rivers, especially on the Potomac, and soapstone bowls and platter-like vessels (or fragments) are widely distributed on sites of the period. Although some archaeologists believe that burn marks on such bowls indicate that food was heated in them over a fire, it seems more likely that an older technique was used, in which stones were first heated in the fire and then transferred into a liquid in the bowl, thereby heating its contents.³⁴ The same technique was used for heating foods in containers made of combustible wood, bark, or skin,

³³ Interpretation notes: As with the Paleoindian and Early Archaic periods, interpretation of the Middle Archaic phase may best be accomplished at **Bladensburg Waterfront Park** and its associated trails, the **Laurel Museum**, or the planned museum at **North Brentwood**. Undeveloped land at **BARC** or **Montpelier** would be ideal, but would require a broadened focus for these institutions. In any effort at interpretation, some attempt should be made both to place materials in time and to establish a cultural context. Interpretation also should emphasize that archaeological sites are fragile, nonrenewable resources that should be protected. It would be highly beneficial if all interpretation in ATHA that deals with archaeological materials sends a common message of stewardship. The message should avoid encouraging collecting by individuals and emphasize the need for protection of sites and their careful excavation by professionals.

³⁴ Dent (1995) 184.

as evidenced by fire-cracked rocks found on many prehistoric sites of the Archaic.

A potentially important Late Archaic site (18PR355) is located just south of the new National Archives facility in College Park, on land owned by the federal government. Projectile points of particular styles known as Clagett and Vernon types have been recovered from the site, and these points suggest a date between 3000 and 2600 B.C. Part of the site's importance lies in its location away from a river, as few interior sites from the period have been professionally excavated. In addition, an initial survey of the site indicates that buried surfaces or landforms lie intact and undisturbed a relatively rare occurrence in this area. No house patterns from the period have ever been recovered in Maryland, and any site with extensive undisturbed deposits holds the potential for yielding these kinds of remains. Such contexts also offer the possibility of recovering pollen, phytoliths and other botanical remains indicative of both environment and human activity.³⁵

On Late Archaic sites in surrounding regions, highly decorated and intricate bone tools have been found, including awls, fish hooks (some also made out of shell), and harpoons.³⁶ These latter objects, along with stone netsinkers, are suggestive of the important role of fishing during this period. Late Archaic Indians also constructed elaborate fishtraps or weirs along the region's rivers.

By the end of the period, the Chesapeake finally had reached the basic extent that it holds today, and both shellfish and anadromous fish were established in the Bay. Estuarine environments also resulted in a variety of additional plant species and attracted waterfowl and other faunal species. The list of food remains found by archaeologists on Late Archaic sites throughout the region is surprising in its breadth, including the expected deer and turkey seen earlier, as well as beaver, raccoon, opossum, gray squirrel, fox squirrel, gray fox, dog, cottontail rabbit, passenger pigeon, eastern box turtle, gulf periwinkle, soft-shell clam, ribbed mussel, oysters, stout tagellus, various kinds of snakes, hickory nuts, acorn, wild mustard, knotweed, smartweed, blueberries, cherries, and wild legumes.³⁷ Not all of these materials have been found in any given area, but they illustrate the scope of materials utilized by Middle Archaic peoples.

³⁵ Preservation Note: Any future construction in the area should be preceded by archaeological investigation, and the site points to the importance of similar studies in other areas. The survey that discovered this site was mandated by federal law, in advance of a federally funded construction project. Similar sites undoubtedly lie elsewhere within ATHA, and ATHA should encourage the development of local ordinances and zoning regulations that would require archaeological survey prior to large construction or development projects.

³⁶ Kraft (1974) 13; Cook (1976).

³⁷ Dent (1995) 187.

Spawning fish runs in the spring would have provided an important and particularly abundant source of food, and archaeological evidence strongly suggests that people had developed various means of storing these and other foods for use over extended periods of time. Fish could be dried, oysters smoked, and nuts ground and stored in containers or in pits. The ability to reliably store and stockpile foods would have eased one of the most significant constraints on population growth, which was the relative scarcity of resources during the winter months. It therefore is not surprising that we see a larger number of Late Archaic sites, suggesting continued population growth through this period. Also unsurprising is the suggestion that people became somewhat more sedentary as they focused on locally abundant food sources and stored them over the course of a year. Nevertheless, both micro and macroband sites are evident in the region, with a growing focus on both riverine areas,³⁸ suggesting an increasing focus in ATHA on the Patuxent, the Anacostia, and their tributaries.

The greater social complexity seen in the Late Archaic probably is linked to the first appearance of long-distance trade in the region. Evidence of this trade can be seen in the presence of stone points made from rhyolite (from Pennsylvania and the Blue Ridge Mountains) and argillite (from Delaware, Pennsylvania, and New Jersey). In addition, Curry notes the presence of several copper artifacts found in Kent County, Maryland, across the Bay.³⁹ These include two long, thin copper spear points and a copper hoe blade recovered at different sites. There are no local sources of copper, and these objects are typical of artifacts produced by Wisconsin's "Old Copper Culture" of the Late Archaic. The presence of both copper tools and non-native stone in the upper Chesapeake suggests trade contacts over a wide area. A logical route for such trade would have been by water, and it may be during this period that the Potomac first began to serve as an important trade corridor between the Chesapeake Bay and the Piedmont and interior.⁴⁰

Early Woodland (1,000 B.C. - 200 A.D.)

The use of ceramics is one of the most important features distinguishing the Woodland from the Archaic. Modeled from local clays, Early Woodland ceramics were tempered with materials such as crushed steatite or sand and fired at relatively low temperatures. Ceramics are highly useful to archaeologists wherever they have been used around the world. Common in most households, fragile, and easily broken, pottery sherds were

³⁸ Dent (1995); Irion et al. (1995); Curry (1998).

³⁹ Curry (1995) 8.

⁴⁰Interpretation notes: Suggestions for interpretation of the Late Archaic phase mirror those discussed for the previous two time periods. The growing importance of water for transportation and trade routes may be an element that some sites wish to highlight, especially in the Bladensburg area.

almost indestructible once they were thrown away and buried. In addition, ceramic technologies and styles changed rapidly over time, making them highly useful for dating purposes. In the Chesapeake, as in many areas, ceramics are differentiated by style and technology, and distinctive types (or wares) generally were named for the locale in which they were first found. Marcy Creek and Selden Island wares, for example, utilized crushed soapstone as a temper, while Accocek ware contained sand. Accocek ware, which is distributed along the Western Shore and on the Eastern Shore below the Choptank River, was decorated by pressing cord or nets into the clay while it was still plastic.⁴¹

Aside from their significance to archaeologists as a dating tool, ceramics had great value for Native Americans. Unlike previously available materials, pottery could be placed directly on a fire and had a profound impact upon diet. Liquids and stews could be placed in a pot and heated for much of the day. As a result, meat and other ingredients were softened, while nutrients were retained. This made for a significant improvement in the diet of older people with poor teeth and improved their health and longevity. Cooking with ceramics also made it possible for women to wean children at an earlier age and decreased the spacing between children. This apparently simple development therefore had a tremendous impact upon population growth by simultaneously increasing both life expectancy and birth rates.

These dietary consequences were compounded by a continued expansion of food sources. In addition to the faunal and floral species noted for the Late Archaic, sites from the Early Woodland have yielded remains of crabs, and it is clear that shellfish exploitation in the region expanded. The upper limit of the current distribution of oyster beds is far downstream from the Anacostia, and if salinity levels were similar in the Woodland period to today's, oysters could not have survived. Little research has been done on prehistoric salinity levels, however, and the upstream distribution of oysters may have been closer to ATHA during these periods, as less disturbed forest ecosystems of the prehistoric period prevented freshwater run-off and resulted in higher salinity levels than those of today.

There also are suggestions that people were promoting the growth of specific plants such as chenopods and brassicas.⁴² The trend toward sedentism continued, as sites grew larger and storage features became more numerous.

Trade networks that first emerged during the Archaic grew markedly during the Early Woodland. Within the Chesapeake, this is most evident in the Delmarva Adena complex. The Adena, popularly known as one of the "Moundbuilder" groups of the Ohio Valley, is more accurately an Early

⁴¹ Custer (1984) 84; Dent (1995) 227.

⁴² Dent (1995) 231.

Woodland tradition or set of ideas dating to about 2500 years ago. Distinctive Adena artifacts and burial practices have been found on a variety of sites on both sides of the Chesapeake Bay, which prompted early archaeologists and collectors to suggest that “Adena peoples” had migrated to the region from the west. It is now recognized that although the complexes are related, the Chesapeake expression represents a movement of ideas and goods rather than people. Although no Adena sites have been found in the ATHA area, sites on both sides of the Chesapeake Bay are characterized by large mortuary complexes in which burials are accompanied by elaborate grave goods. As described by Curry, these include:

large and extremely well-made points and blades of Flint Ridge (Ohio) chalcedony, tubular blocked-end pipes made from Indiana limestone and Ohio fireclay, stone effigy pipes, highly polished gorgets fashioned from shales and slates originating in Ohio and Pennsylvania, birdstones, finely made and highly polished paint cups carved from steatite and hematite or made from copper, and rolled copper beads. Perhaps most striking, beyond even the spectacular nature of these artifacts, is the origins of the materials from which they were made. Virtually all of the materials derive from the Ohio Valley and Great Lakes region, some 500 miles distant.⁴³

Archaeologists agree that this bespeaks both extensive trade routes and a higher level of social complexity than anything that preceded it. In particular, populations in the surrounding area must have been organized to support the building of mortuary complexes, and the burial of certain individuals with high status, exotic materials indicates a hierarchy within society that is different than the egalitarian organization of earlier periods. Although Adena influences disappeared from the region by 0 A.D., the new social complexity and trade contacts persisted for much longer.⁴⁴

Middle Woodland (200 - 900 A.D.)

Aside from the Adena tradition, most patterns of Early Woodland life continued in the Middle Woodland. Separation of this time span is partially a matter of convenience for archaeologists and partially based on what might be

⁴³ Curry (1998) 9.

⁴⁴ Interpretation notes: Early Woodland populations of the ATHA area were a part of this larger set of cultural shifts, and any interpretation of prehistoric life should acknowledge these important developments. Opportunities for interpretation are much the same as for earlier temporal periods.

called a homogenization of ideas and culture across the Chesapeake and beyond.⁴⁵ People continued to cluster in larger groups along waterways, while smaller camps were located inland areas, especially around swamps and other ecosystems with abundant resources. The use of plants intensified further, again with indications that some species were being encouraged (although not yet domesticated) in preference to others. Ceramic wares were continually refined, both in form and technology, and oyster shell tempers were introduced.

Some archaeologists have speculated that the traditional social systems began to collapse during the last half of the Middle Woodland, perhaps due to pressures from growing populations.⁴⁶ This is inferred from a proliferation of small base camp sites and an absence of any large concentrations of people during this period.⁴⁷

Late Woodland (900 A.D.- ca. 1607 A.D.)

The Late Woodland period witnessed significant changes throughout much of the Chesapeake. These changes were both social and technological. Ceramics continued to change, growing more sophisticated in manufacture and more durable. Shell-tempered wares in the Townsend series represent the first change of the period. It is thought that this type developed in the Delaware Valley and then spread first to the Chesapeake's Eastern Shore and then to the Western Shore.⁴⁸ This spread once again emphasizes the wider links between Native American populations over a large area, and this is supported by the development and spread of additional regional types throughout the period.

Stone projectile points from the Late Woodland are predominantly small and triangular in shape. Unlike most of the preceding "projectile points," these small triangular points frequently show edge angles, breakage characteristics, and wear consistent with their use as projectile tips. These triangular points signal one of the two most important technological changes of the period, the introduction of the bow and arrow. The bow and arrow may have originated in North America around 5,000 years ago in the Arctic and spread very slowly to other areas.⁴⁹ It does not seem to have reached the Chesapeake until about 900 A.D., but it brought with it a significant advantage for hunters. A bow was much easier to handle in dense woods or thickets than

⁴⁵ Dent (1995) 235.

⁴⁶ Custer (1989).

⁴⁷ Interpretation notes: Interpretive options for specific sites within ATHA are similar to those noted for earlier periods, with the Middle Woodland simply showing the gradual progression of cultural development in the region.

⁴⁸ Dent (1995) 244.

⁴⁹ Blitz (1988).

a spear and spear thrower, and arrows could be loosed with a greater velocity and flatter trajectory than a spear. This resulted in more successful hunting.

As an aside, the principles behind the use of spear throwers and bows could make an interesting lesson for interpretive programs, showing both the physics involved and the impact of technological change. The spear thrower or atl-atl (the Aztec term for such a device) was an important advance over the hand-thrown spear. Experimental tests suggest that it allowed a spear to be thrown with ten times the velocity and strike its target with up to two hundred times the impact of the older hand-thrown spear. This was achieved by a combination of factors. First, the spear thrower effectively extended the thrower's arm, and this increased radius imparted an increased velocity to the dart or spear. Second, the thrower could snap his or her wrist forward as the dart was released, giving the dart even greater speed. Finally, as the spear thrower was moved forward against the initially inert dart, the dart's shaft was actually compressed by the force, storing energy like a spring; this energy was released as the dart was freed and it sprang forward and away from the thrower with tremendous velocity. As impressive as this system was, the bow was even more efficient. Atl-atls use what might be termed radial acceleration, as the spear thrower and spear initially move in an arc around a center point (the thrower's shoulder) while velocity is developed. Bows are more efficient because they use *linear* acceleration; as the bow is drawn, the limbs of the bow store energy that is released once the string and arrow are released. As the bow's limbs spring back upon release, the string is pulled tight and drives the arrow straight forward. As with a spear released from an atl-atl, the initially inert arrow shaft also is compressed and then springs off the string, but the acceleration follows a straight line, and the projectile therefore leaves with even greater velocity. The lighter projectile will follow a flatter trajectory and aiming is thus simplified and made more accurate. The combination of easier handling, improved velocity, flatter trajectory and more accurate aim provided significant advantages to a hunter using the bow and arrow.

This improved technology was used on a variety of game, but deer comprised a large proportion of the meat eaten by Indians of the Late Woodland. This should not over-shadow the extensive amounts of other faunal material found in garbage deposits or middens of the period, including (in addition to species mentioned during the Archaic and earlier Woodland periods) waterfowl, bobcat, raccoon, skunk, and wolf, as well as extraordinary amounts of fish at many sites, including sturgeon, gar and other species. In addition, "almost every variety of nut available in the region is recovered on late Woodland sites, along with many starchy and oily seeds and tuberous plants", especially amaranth and chenopod.⁵⁰

⁵⁰ Dent (1995) 254.

Perhaps the second most important technological development of the Late Woodland was the eventual adoption of domesticated plants. These domesticates originated many centuries earlier in Central America, but it took time both for the idea to spread and for strains to develop that could tolerate growing conditions in the Middle Atlantic. Domesticates eventually adopted in the region included squash, beans, and maize. Archaeologists disagree on the extent to which Native American populations in this region depended upon these plants. Some feel that they comprised a relatively minor part of the diet and that cultivation was limited until Europeans appeared on the scene and created increased demand.⁵¹ Others believe that agriculture moved from the Piedmont into the Coastal Plain of the lower Chesapeake by around 900 A.D. and then became especially important from about 1330 A.D. on.⁵² It seems likely that this latter scenario is valid for much of the Western Shore, and it is borne out by an apparent shift in settlement pattern toward flat river bottom lands that were suitable for cultivation.

There is little disagreement over the growth of local populations throughout the Late Woodland or over the increasing social complexity. With improved hunting techniques and expanded opportunities for harvesting plant foods, populations continued to grow; with the shift into floodplains came the coalescence of populations into larger villages. This transition also is reflected in burial practices from about 1400 A.D. on, in which bones were gathered together for communal burial in a single large pit, or ossuary. These “communities of the dead” are a reflection of changed lifestyles of the period.⁵³ Two of these burial pits were found in 1936 quite close to ATHA on the east bank of the Anacostia near Gieseboro Point. On what is now Bolling Air Force Base at the mouth of the Anacostia, work crews digging near the air field found a 10-12 foot diameter pit. The top of the pit was shallow, buried only a foot below the ground’s surface, and it contained a layer of bones that was only a foot in thickness. However, the pit contained the remains of at least 56 individuals, according to a Smithsonian study. Shortly thereafter a second ossuary was uncovered some 150 feet away from the first and it was excavated by Smithsonian staff. A layer ranging from 6 to 18 inches contained the remains of approximately 63 people, ranging from infants to adults. A number of individuals showed evidence of tooth decay (common after the introduction of domesticated plants) and other diseases. Although no artifacts were found in the first ossuary, the second contained a few fragments of pottery and a scatter of tubular shell beads.⁵⁴ Ossuaries have been found at three more sites

⁵¹ Custer (1989).

⁵² Potter (1993).

⁵³ Curry (1999).

⁵⁴ Curry (1999) 9-15.

downstream from the Anacostia, clustered around Piscataway Creek (Moyaone, Susquehannock Fort, and Piscataway Fort), and at two sites above Washington, D.C. (the Hughes site and Selden Island).

The human remains interred in these ossuaries reflect the specific burial practices of local Native Americans during the Late Woodland. From the manner in which the bodies were placed in the grave, with bones disarticulated and placed into compact deposits, it is clear that the dead were not interred until after their bodies had decomposed, and the remains of a large number of people were then gathered together and placed in a communal pit. Several theories have been proposed to explain this burial custom, and these are reviewed by Curry in the only overview of Maryland's ossuaries.⁵⁵ Most see the practice as allowing a period of mourning for the departed, followed by a gathering together of individuals into a spiritual community of the dead. Communal interment in this view becomes both a point of closure for the living and symbolizes a sense of community among the dead. Others also see a sort of social stratification reflected in ossuaries. This comes from the understanding that chiefs, or *werowances*, were handled somewhat differently, being placed in sacred mortuary temples, while the elite and commoners were buried in ossuaries. The ossuaries for the elite and the commoner were kept separate, however, a reflection of both society and cosmology. Yet another view interprets ossuaries as a reflection and reinforcement of the developing political system. In the period during which they were used, groups were coalescing into chiefdoms, and this is seen as a way for groups to define themselves as different, as separate and distinct from other groups. In addition, the stratification of burial practices within these groups is seen as reflective of the internal political structure, not just as a social stratification.⁵⁶

In much of the region after about 1500 A.D., groups in the area were making the shift from tribal groups to what are more properly termed chiefdoms. As described by Dent, such societies were:

typically centralized and internally ranked. These are also what might be termed redistributive societies with those in power collecting as tribute part of their subjects' production. The most important position was that of paramount chief, but nominal leaders also included various subchiefs, the religious leadership, and minor councilors as well as other people in various positions of authority.⁵⁷

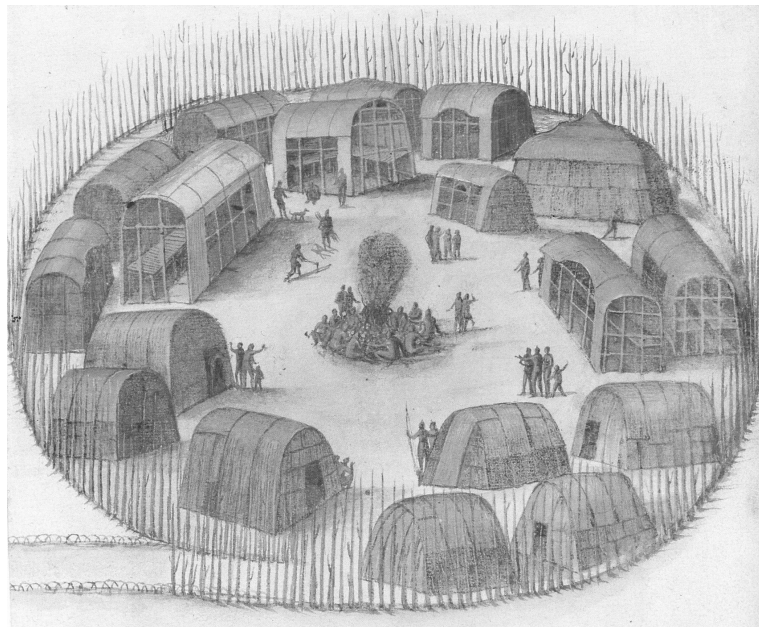
⁵⁵ Curry (1999).

⁵⁶ Curry (1999) 90-91.

⁵⁷ Dent (1995) 271.

The largest and most important chiefdoms on the Western Shore by the time the English first arrived in the area were the Powhatan Confederacy, centered around the James River and nearby tributaries, and the Piscataway, located in the region around ATHA. On the Eastern Shore, populations seem to have been smaller and less complex, but chiefdoms did exist.

The two most impressive Indian sites from this time period that have been explored archaeologically are relatively close to ATHA. The Accokeek Creek site was a major settlement of the Piscataway. Also important was the site of John Smith's "Patawomeke" (see below). Both villages had palisades around them, line of posts placed vertically into the ground as an enclosure. Five to eight inch diameter posts were placed 8-12 inches apart, and the gaps probably were covered by woven wood fences daubed with clay. Houses inside the palisade could be traced by patterns of post-holes.⁵⁸



Contemporary Drawing of an Indian Village

The Contact Period (ca. 1607 - 1632 A.D.) and Early Settlement (1632 - 1692 A.D.)

Contact Period

⁵⁸ Interpretation notes: Interpretive possibilities for **ATHA institutions** echo those outlined earlier. Ossuaries are an intriguing cultural practice that is not well interpreted anywhere in the region, but it was an important local development. A site such as **Bladensburg Waterfront Park** would benefit from the addition of interpretation for Native American history/prehistory, and could use this as a very provocative interpretive angle. It also leads into what may be the most interesting period of Native American life for most tourists, the period of contact with Europeans.

The earliest contacts between Europeans and Native Americans probably have been lost to history, but it seems likely that some contact was made prior to the English settlement of Jamestown in 1607. The earliest European reconnaissance of the Bay may have been undertaken by the Venetian-born explorer John Cabot and his son, Sebastian, who sailed south along the Atlantic seaboard from Newfoundland in 1498. Few details of the Cabots' discoveries exist, aside from secondary accounts by Sir Walter Raleigh and Richard Hakluyt, a chronicler of New World explorations.⁵⁹ Giovanni da Verrazano, an Italian sailing under the flag of France for King Francis I, made the first recorded European exploration of the Chesapeake area in 1524. Sailing northward from the Carolinas, he reportedly anchored in a small bay that he accessed through an opening in a barrier island. Later, his party explored some of the mainland and the Chesapeake Bay.⁶⁰ The earliest known map of the Chesapeake area was created by Juan Vespucci, a Spaniard, in 1526. This chart depicted the North American coast from Florida to Cape Henlopen, and it identified the Chesapeake Bay as the *Bahia de Santa Maria*. However, Vespucci's chart lacks sufficient detail to show any of the many islands that occupy the bay.

In 1561, Pedro Menéndez de Avilés landed with two ships somewhere in the Chesapeake, on Virginia's Western Shore. After making contact with the local peoples, he returned to Spain, taking with him a young man from a local village. The fascinating story of this youth, known to the Spanish as Don Luis, his conversion to Catholicism, and his efforts to return home are told by Bridenbaugh.⁶¹ In 1570, the Spanish returned Don Luis, establishing the mission of Ajacán somewhere around the York River. Don Luis turned away from the mission, returning to his people, and they destroyed the mission. The Spanish mounted a punitive expedition in 1572, but never again attempted settlement. In 1588, Vincente Gonzales became the first European to traverse the entire length of the Chesapeake estuary.⁶² These European encounters with the Chesapeake are important, because Native Americans surely knew of them and expectations may have been at least partially formed at this early date, prior to English settlement at Jamestown and St. Mary's City.

In 1607, the Virginia Company of London established the first successful English foothold in North America at Jamestown, in the southern Chesapeake. Captain John Smith led two expeditions up the Chesapeake in 1608 and 1609 and provided the first descriptions of the area, as well as a reasonably detailed map of the Chesapeake. The best transcriptions of

⁵⁹ Clark (1950) 5.

⁶⁰ Covington (1915) 204-209.

⁶¹ Bridenbaugh (1980).

⁶² Shomette (1991) 1.

Smith's descriptions are Barbour's (1986) three volume edition of the *Complete Works of Captain John Smith*, and these provide marvelous material for any interpretation of region at contact.

In the text that accompanied Smith's map of the Chesapeake, published in 1612, Smith provided a concise description of the people and terrain he encountered around the Bay on his various explorations from 1607 to 1609.⁶³ In enumerating the rivers of the Western Shore, beginning near the mouth of the Bay, Smith gave us one of the first descriptions of the area around ATHA:

The fourth river is called Patawomeke and is 6 or 7 miles in breadth. It is navigable 140 miles and fed as the rest with many sweet rivers and springs, which fall from the bordering hills. These hills many of them are planted and yeelde no lesse plenty and variety of fruit then the river exceedeth with the abundance of fish. This river is inhabited on both sides. First on the South side at the very entrance is Wighcocomoco and hath some 130 men [speaking of the number of fighting men], beyond them Sekacawone with 30. The Onawamanient with 100. Then Patawomeke with 160 able men. Here doth the river divide it selfe into 3 or 4 convenient rivers; The greatest of the last is called Quiyough treadeth north west, but the river it selfe turneth North east and is still a navigable stream. On the western side of this bought [bight or curve] is Tauxenent with 40 men. On the north side of this river is Secowocomoco with 40 men. Some what further Potopaco with 20. In the east part of the bought of the river, is Pamacack with 60 men, After Moyowances [Moyaones] with 100. And lastly Nacotchtanke with 80 able men. The river above this place maketh his passage downe a low pleasant valley overshadowed in manie places with high rocky mountaines; from whence distill innumerable sweet and pleasant springs.⁶⁴

Two important points emerge from this discussion. The first has to do with the people. The soldier in Smith was interested in the potential fighting strength of these groups, hence his estimate of the number of men each village could produce. But this listing also gives us a clear view into the structuring of villages and their location along the river. The Moyowances, more commonly called Moyaones or (later) the Piscataway, were a group living near Piscataway Creek, south of ATHA, while the Nacotchtanke ("with 80 able men") lived on the Anacostia ("Anacostia" is probably a corruption of "Nacotchtanke"). In later accounts the Nacotchtanke were referred to as "Anacostans."

The second insight is Smith's description of the landscape. He is clearly describing a delightful, navigable river, the Potomac. The "bought" he speaks of is the great curve of the

⁶³ Barbour (1986) Vol. I:148-150.

⁶⁴ Barbour (1986) Vol. I:147-148.

Potomac, with creeks ("rivers") such as Port Tobacco River. Nanjemoy Creek, Mattawoman Creek, and Piscataway Creek along the north or east side. Above the Anacostia, he describes the Fall Line of the Potomac. His description of plant foods, abundant fish, and sweet springs aptly characterize the river in the early 1600s.

Smith expanded on this description in other writings. In his *Proceedings of the English Colonie*, published in 1612, Smith described his 1608 view of the upper Potomac:

...at Moyaones, Nacotchtant and Toags the people did
their best to content us. Having gone so high as we
could with the bote, we met divers Savages in Canowes,
well loaden with the flesh of Beares, Deere, and other
beasts, whereof we had part, here we found mighty
Rocks, growing in some places above the ground as
high as shrubby trees, and diver other solid quarries of
divers tinctures...⁶⁵

Smith was describing mineral outcroppings, some of which they took samples from, in the hope of finding gold or silver. Their hopes were never fulfilled. Smith also described Native Americans who dug out some of these minerals ("like Antimony") with shells and hatchets. They would package the excavated and water-sorted material "in little baggs and sell it all over the country to paint their bodyes, faces, or Idols; which makes them look like Blackmores dusted over with silver."⁶⁶

From the writings of John Smith and others, as well as from archaeological discoveries across the region, it is possible to piece together a picture of changing aboriginal society during the Late Woodland and Contact periods. The best summary of these findings is by Clark and Rountree.⁶⁷ This discussion draws heavily upon their work. By the time John Smith encountered the people along the Maryland side of the Potomac, they were divided into ten small chiefdoms, and Smith noted the locations of their primary villages on his famous map of 1608. These socio-political groupings were each led by a chief, or *werowance*, and controlled an area around their principal settlement. Five of these groups (Anacostan [Nacotchtanke], Piscataway [Moyaones], Mattawoman, Nanjemoy, and Portobacco) had aligned themselves into a paramount chiefdom under the Piscataways. According their own oral history, by the 1630s this loose confederation recounted a ruling lineage that went back through 13 previous paramount chiefs, or *tayacs*. According to their tradition, the original *tayac* had come

⁶⁵ Barbour (1986) Vol. II:167.

⁶⁶ Barbour (1986) Vol. II:167.

⁶⁷ Clark and Rountree (1993) 112-135.

from the Eastern Shore. We do not know how these people referred to themselves, and the English accounts give a confusing mix of names for the larger group: Moyaones, Piscataways, and Conoys.

While Anacostans occupied lower ATHA as part of the Piscataway paramount chiefdom, the Patuxent River drainage was inhabited by different groups, who formed their own alliance. In the lower reaches of the river were the Patuxent; in the middle reaches were two groups, first the Assamacomoco and then, upstream, the Mattapanient; the upper portion of the Patuxent was a buffer zone or no-man's land centered around the West and Rhode Rivers. A similar buffer, centered on the Zekiah Swamp, separated the Potomac groups in the west from the Native Americans along the Patuxent. To the south and west, on the Virginia side of the Potomac, the Powhatan confederacy was dominant, although there were some independent chiefdoms such as the Patawomeke, who were located along the south bank of the Potomac around Aquia Creek and Potomac Creek. Far to the north, up the Susquehanna River, were the Iroquoian-speaking Susquehannock, who probed into the Upper and Middle Chesapeake on occasion. To the north and west were the Massawomekes, who more frequently pressed against the chiefdoms of the Potomac and Patuxent. The Massawomeks probably were another Iroquoian group, as Smith was told that they came from "the river of Cannida, and from the French to have their hatchets, and such like tooles by trade";⁶⁸ their northern origin is supported by Smith's description elsewhere (*A Map of Virginia*) of the Massawomeks' "small boats made of the barkes of trees sowed with barke and well luted with gumme."⁶⁹ This appears to be a description of birchbark canoes, a feature of northern Indians, rather than the dugout log canoes indigenous to the Chesapeake. Whatever their precise origin, the appearance of the Massawomeks in the area and their access to French trade goods indicate both the great movements that some of these people were capable of, as well as the extent and impact of European trade goods at this early date.

The relationship between the Piscataway paramount chiefdom and the Powhatans was variable, in that each attempted to expand its sphere of influence, sometimes at the expense of the other. They were sometimes friendly, but only cautiously so. The Patawomekes were caught in the middle, and shifted between the two. The relationship between the Piscataway and the Patuxent alliance was friendly and there is no record of warfare. Clark and Rountree (1993) correctly note the need for a common defense against the threat from the north and west, and later from English encroachment. All of these groups along the Potomac and Patuxent had more in common culturally

⁶⁸ Barbour (1986) Vol. I: 232.

⁶⁹ Barbour (1986) Vol. I:166.

than they had differences. Although this might have encouraged north-south trade, there was little need for it, since they all had access to similar resources. There is greater evidence for east-west trade. The Piscataways participated in a trade in prestige goods that ran east-west, with shell products coming up-river from the Chesapeake Bay and Eastern Shore, and puccoon (for making red face paint) coming down toward the Bay from groups farther upstream. The local groups mined antimony, which they used as a trade item in this east-west flow, and took advantage of the rivers as highways.⁷⁰

Early Settlement (1607 - 1692)

The first permanent English settlement in the Chesapeake was established at Jamestown in 1607, and from this point on the story of Native Americans is inextricably entwined with that of the newcomers. These newcomers left us a variety of accounts, with varying degrees of insight or reliability, and they can tell us much about the region in the several decades after 1607.

One of the best sources for the Jamestown experience is the work of John Smith.⁷¹ In addition to his own voyages of discovery, Smith recounts a whole series of contacts between the colonists and the native peoples of the Potomac and Anacostia Rivers. The Jamestown settlers were often ill-prepared for their new environment and encountered serious shortages of food. A common and frequent stratagem was to obtain food, especially corn, from the locals, either through trade or by force. This required the English to range far beyond the small stretch of the James River that they had settled, often into the Potomac and even the Patuxent. Less information is available for the Patuxent, but even it is represented in Smith's writing.

In 1620, John Pory visited the Patuxent, initially in attempt to find a place to make salt. His "observations" were related by Smith in his *Generall Historie* and provide wonderful color for possible interpretations.⁷² Pory's first meeting with Namenacus, "King of the Pawtuxent," illustrates Native American oratory at its best: "he led us into a thicket, where all sitting downe, he shewed us his naked breast; asking if we saw any deformitie upon it, we

⁷⁰ Interpretation notes: Clark and Rountree also provide a wealth of information (and notes that point to more) on life among these groups, with interesting grist for heritage tourism interpretation at any ATHA site wishing to take advantage of it. This includes evidence for food and lifestyles, the importance and evolution of pottery styles, and the occasional role of women as *tayacs* (paramount chiefs), a feature of Native American political systems not commonly recognized. Artifacts illustrating these themes can be obtained on loan from the Maryland Historical Trust (given proper exhibit conditions and security), and a variety of images from excavations and historic sources such as John White's 16th century engravings and watercolors. Smith's progress up the Potomac could be interpreted, as could subsequent English contacts with the local peoples.

⁷¹ Barbour (1986) Vols. I-III.

⁷² Barbour (1986) Vol. II: 288-291.

told him, No; No more, said hee, is the inside, but as sincere and pure; therefore come freely to my Countrie and welcome." This convinced Pory and his company, and they visited the Patuxent in their villages, observing their houses, fields, and hunting. Pory's account even gives us insight into marriage customs. Upon hearing a reading from Genesis, Pory relates that a Patuxent named Wamanato said "hee was like Adam in one thing, for he never had but one wife at once."⁷³ John Smith agreed with Pory on the friendliness of the Patuxent, saying that on his 1608 expedition he found the Patuxent "more civill than any" he encountered.⁷⁴

Other observers gave accounts of life among the people of the Potomac. Henry Spelman was captured by the Powhatans during the massacre of a Captain Ratcliffe and his company around 1610.⁷⁵ He ended up with the Patawomekes, learning their language and observing their customs, which he wrote down and had published around 1613, after his rescue by Captain Samuel Argall.⁷⁶ Although Spelman's descriptions pertain more to the Powhatans and Patawomekes than to the Piscataway, he grouped his description of their society into several major categories which provide excellent interpretive material: "Of their service to ther [sic] gods"; "Of the cuntry [sic] of Virginia"; "Of ther Tounes & buildinges"; "Ther maner of mariing"; "How the[y] name ther childre"; "Ther maner of visitinge the sicke with ye fation of ther buriall if they dye"; "Ther justis and government"; "The manor of execution"; "The manor of settinge ther corne with ye gatheringe and Dressing"; "The settinge at meat"; "The differences amonge them"; "The armor and wepon with discipline in war"; and "The Pastimes." The "kidnapping" of Spelman was not a one-sided affair, with only Native Americans doing the capturing. The English captured Pocahontas, the daughter Powhatan, while she was visiting friends among the Patawomeke in 1612.⁷⁷

Closer to ATHA, Henry Fleet (or Fleete) spent four or five years (1623-1627) as a captive of the Anacostans, learning their language and customs. He later worked as an interpreter, was involved in the Indian trade and other activities, and kept an interesting journal which is useful for the study of the early 17th century history of this area.⁷⁸

Fleet's period of captivity followed the great uprising or massacre of 1622, in which the Powhatans almost wiped out the Virginia colony. In the

⁷³ Barbour (1986) Vol. II:289.

⁷⁴ Barbour (1986) Vol. II:172.

⁷⁵ Barbour (1986) Vol. II:13.

⁷⁶ Spelman (1910); copies of his account [and others] also may be found on-line at "Virtual Jamestown" and the "Mariners' Museum" [see references cited].

⁷⁷ Barbour (1986) Vol. II:243.

⁷⁸ Fleet (1876). Fleet's captivity is the subject of a children's book that may be of interest to ATHA organizations wishing to interpret this period. Umhau and Umhau (1999).

subsequent reprisals, life became unsettled in the region, and the English increasingly sought food supplies in this area and tolerated little dissent.

In 1634, the Calverts made good their claim to the Province of Maryland by settling on the St. Mary's River, down toward the mouth of the Potomac. English settlement on both the Maryland and Virginia sides slowly worked its way up the Potomac after this, but it took some time for it to reach the ATHA area.

The major crop in both colonies during the early years was tobacco. Tobacco was in great demand in Europe during the initial years of colonization and consequently brought remarkably high prices. This kicked off what can best be likened to a gold rush, as investors sought to put as much land as they could into tobacco cultivation and reap the profits. This focus on tobacco affected the Chesapeake in a multitude of ways. Tobacco was a bulky crop, most efficiently moved by water. Water transport was all the more important in a landscape heavily dissected by deep, navigable rivers that stretched far inland. These waterways at once provided highways to the interior for ocean-going vessels, while limiting the development of interior road systems because of difficulties in bridging or fording the multitude of streams. As result, most early colonists sought land on navigable waters, building their own wharves. Deep-draft vessels called here for the tobacco harvest, bringing with them finished goods from England. This pattern effectively by-passed and negated the traditional functions of towns. As a consequence, repeated and intensive efforts at town-building met with continual failure. Tobacco was a land-hungry crop, robbing nutrients from the soil at a rapid pace, so any planter with the means sought to surround himself with property sufficiently large to provide new fields as soils became exhausted. Individual dwellings therefore often were surrounded by extensive "buffer zones," strengthening the dispersed nature of settlement. Tobacco also was a labor-intensive crop. The desire for profits combined with the labor needs of the plant to focus almost all of the attention of these planters on tobacco cultivation, to the exclusion of many other activities.

Perhaps nowhere was the neglect of cultural amenities in favor of agriculture more evident than in house construction. No 17th century buildings survive in ATHA, and only a handful are known throughout the entire state. Their perishability was a function of their construction. Rather than utilizing brick or stone foundations, the typical 17th century dwelling was constructed on posts that were set into the ground at intervals around the building's footprint. Sills and plates were attached to these posts, forming a frame that was then sided with riven clapboards. Chimneys most often were made of wood and heavily daubed with clay inside and out to preserve them from fire and the elements.

These “post-in-ground” or “earthfast” buildings were seldom large, generally measuring perhaps sixteen to eighteen feet square, with but one or two rooms on the ground floor and a loft above. Archaeologists have encountered the remains of such houses, visible primarily through stains left behind by the posts and postholes, across the length and breadth of the Chesapeake. The underpinnings of these buildings were highly vulnerable to both rot and termite infestation, and although posts could be (and were) periodically dug out and replaced, few survived into the 19th century, let alone the 20th century. Carson provides the best overview of this architecture, although examples exist throughout the archaeological literature.⁷⁹

Settlement along the Maryland side of the Potomac by 1670 is illustrated nicely, and probably fairly accurately, by Augustine Herrman’s map of 1670. Prepared for the Calverts, this map carefully depicts the general location of colonists’ plantations at that time. On the Virginia side of the Potomac, these are distributed along the shore up to about present-day Occaquan Bay. On the Maryland side, the area opposite this, downstream to Mattawoman Creek, is labeled as “Pamunkey Indian Land,” and no English settlement is shown. No settlements of any sort, English or Indian, are shown at “Turkey Bussard Point,” the confluence of the Potomac and Anacostia.

Maritime Developments During Early Settlement and the Colonial Period

Because the Bay and its extensive tributary system served transportation needs so well, road construction generally was limited to connecting plantations located a few miles inland to piers accessible by seagoing ships. In fact, cross-country travel by road was hindered by the numerous rivers and streams, which made for frequent river crossings.⁸⁰ In 1658 and 1666, Maryland passed laws which required each county to maintain ferries for making “...rivers, creeks, branches and swamps passable for horse and foote.”⁸¹ Despite the insistence upon ferry maintenance, the passage of a road law in 1666 and of a series of town acts intended to establish small urban centers, settlement remained dispersed during this period, and settlers relied heavily upon water transportation.⁸²

Although John Smith noted abundant natural resources in the Bay region in 1607, European colonists made little attempt to exploit them during

⁷⁹ Carson et al. (1981). Interpretation notes: Perhaps the best place to interpret the broader developments outlined in this section is at a spot with open ground for interpretation, such as **Montpelier, BARC**, or even the **Snow Hill Manor (ca. 1800) at Center Road & Rt. 197**. As there is no clear documentary or archaeological evidence of 17th century settlement in these areas, however, this tack may not be advisable. Further research in ATHA, particularly in early land records and elsewhere, might provide the kind of background necessary for this type of interpretation.

⁸⁰ Middleton (1953) 70.

⁸¹ Warner (1976) 63.

⁸² Wesler et al. (1981) 80.

the early years of settlement. Smith observed that the natives on the Chesapeake ate oysters in great numbers, but Maryland colonists considered oysters to be "hardship food," and gathered them only in times of crisis.⁸³ Likewise, shipbuilding was not pursued extensively in either of the Chesapeake colonies during the early years, despite enormous reserves of timber suitable for ship construction, and an ample shoreline, ideal for the location of launching ways. Governor Charles Calvert wrote in 1678 that no ships were being built in Maryland, although there was some activity in constructing shallops and canoes for local needs during this period.⁸⁴ The lack of shipbuilding activity was due largely to the wealth readily obtainable through cultivation of that "vicious ruinous plant Tobacco...", which encouraged planters to "neglect all other accessions to wealth," as Virginia's Governor Berkeley stated in 1663.⁸⁵ It is doubtful that the neglect of shipbuilding was due to the Chesapeake Bay colonists' desire to obey the English Navigation Laws, as the governor later claimed in 1670.⁸⁶ Colonists of the early Chesapeake were content to rely on ships built and owned by outsiders, from England, New England, and Holland, to carry their annual export of tobacco to market and concentrate their own efforts upon the production of the lucrative, staple crop.

An exception to the tendency of neglecting local resources lay with fishing. While avoiding shellfish, colonists relied heavily upon salted herring and in later years took advantage of the seasonal availability of anadromous fish such as shad.⁸⁷ In Virginia, in fact, perhaps the earliest conservation law in the Chesapeake was passed by Middlesex County in 1678. The law sought to curb the use of lights and "gigs," or spears, for night fishing, a practice which was believed to wound many more fish than were caught and negatively affect normal fishing with hooks and line.⁸⁸

The small craft used by colonists in these maritime pursuits undoubtedly included shallops and other vessels of European origin and design. The remains of one such vessel were investigated by Neyland in Lyons Creek, a minor tributary of the Patuxent River, in Calvert County.⁸⁹ Fragments of outer hull planking, frames, the gunwale, a stringer, the clamp, and a possible keel, suggested a clinker-built, small sloop or shallop, constructed in the Northern European tradition, either in colonial America or in Europe. From the collection of predominantly Rhenish ceramic sherds

⁸³ Wennersten (1981) 6.

⁸⁴ Goldenberg (1976) 26.

⁸⁵ Goldenberg (1976) 25.

⁸⁶ Goldenberg (1976) 25.

⁸⁷ Chowning (1995) 11-12, 19; Beverley (1705).

⁸⁸ Chowning (1995) 3.

⁸⁹ Neyland (1990).

which were associated with the wreck, Neyland placed it within the period 1690-1740.⁹⁰

Other colonial craft departed from European custom and followed local traditions. The use of dugout log canoes by native Americans was first observed by English explorers in 1585 on Roanoke Island, North Carolina, and was later recorded again by Captain John Smith during his travels on the Chesapeake.⁹¹ This native boat form was adopted widely by European settlers, few of whom possessed the specialized skills or tools necessary to build more complex craft. Using tools made from iron and steel, rather than stone, the settlers modified the traditional single log design into a two-log configuration. The two logs that formed the hull were joined along their longitudinal axes with treenails (wood pegs) and mortise-and-tenon joints.

By the late 1600s, most Chesapeake colonists owned and used log canoes for transportation, hunting, and fishing, and valued them highly, much in the same way that their inland peers regarded horses; use of a canoe without the permission of the owner was a felony in Virginia.⁹² Dugout log canoes were employed in the commercial harvesting of oysters from the early 1730s to the late 1800s, a longevity which emphasizes their enormous utility.

Fisheries

The importance of fishing in the subsistence strategies of Native Americans has already been discussed, and there is abundant evidence that early colonists found the local fisheries important. Weirs and fishpots seem to have been of particular importance. During the colonial period, the clear commercial orientation of planters, merchants and shipwrights towards the water had a counterpart in water-oriented subsistence activities. During the early part of this period, shellfish continued to be considered a crisis food by colonists on the Bay. Francis Makemie tried to encourage the harvest of the Bay's bounty in 1705, and even developed an elaborate plan to export pickled oysters.⁹³ Nonetheless, there are no records of any shipments of seafood out of Maryland between 1696 and 1715.⁹⁴ By the second quarter of the eighteenth century, however, shellfishing became an important subsistence activity among the poor and was considered an important food source for slaves on large plantations. At the same time, the unpredictable pricing of tobacco, combined with rapid increases in land prices before the Revolution, drove many poor whites to water-oriented trades. They sought employment in the shipyards of Chestertown, Oxford and other locales such as Bladensburg, or

⁹⁰ Shomette (1979) dated the vessel to 1680-1720.

⁹¹ Brewington (1963) 1.

⁹² Burgess (1975) 2.

⁹³ Wennersten (1981) 6.

⁹⁴ Middleton (1953) 224.

they went into the herring or oyster fisheries. Exports of those latter two resources to Jamaica and London had become increasingly important by mid-century.⁹⁵

Herring typically ran in the Bay from the first of April to mid-May, and were fished primarily with haul seines. Contemporary records sometimes describe the nets, with George Washington, for example, ordering from London a 75 fathom seine measuring 10 ft deep in the middle and 8 ft at the ends, with the mesh a size appropriate to herring.⁹⁶ "Virginia-cured herring" was a popular food in the late eighteenth century, and fishing rights along the shoreline of Bay properties were often sold or leased.⁹⁷ Haul seines were also used for taking croakers and spot in the late 1770s, and were the tool of choice for the annual shad runs until gill nets were introduced in 1838.⁹⁸

⁹⁵ Wennersten (1981) 6-7.

⁹⁶ Chowning (1990) 10-14.

⁹⁷ Chowning (1990) 12, 14.

⁹⁸ Chowning (1990) 9, 30.