

“...a place now known unto them:”

*The Search for Zekiah Fort*

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## EXECUTIVE SUMMARY

From May 2010 until July 2011, St. Mary's College of Maryland undertook Phase I and II archaeological investigations at four properties in Charles County, Maryland, including the Windy Knolls, Steffens, Hogue, and St. Peter's Catholic Church properties. The primary purpose of these investigations was to locate and identify archaeological resources associated with the Zekiah Fort, a fortified Piscataway Indian settlement occupied from 1680 until c. 1695. All four properties are located on the west side of Zekiah Swamp between Bryantown and Beantown, Maryland. Three archaeological sites had been previously identified for three of the properties, including 18CH0093 (Steffens), 18CH0103 (Hogue), and 18CH0694 (St. Peter's). No previous investigations are known to have taken place at Windy Knolls, which was found to contain evidence for three separate occupations, including the 1680-c. 1695 Zekiah Fort (18CH0808), a c. 1830-1860 domestic occupation (18CH0808), and a late 18<sup>th</sup>-century domestic occupation (18CH0809).

The Zekiah Fort, the focus of a search with its roots in the 1930s, was the settlement where the Piscataway Indians relocated during a period of significant unrest along Maryland's 17<sup>th</sup>-century Anglo-Native frontier. Before their move to Zekiah, the Piscataway had been living at Moyaone, their capital in the vicinity of present-day Piscataway Creek. Raids of their settlements by Susquehannock and other "northern" Indian groups had escalated throughout the 1670s, with many Piscataway Indians either killed or carried away during these raids. The raids were in part retaliation for the Piscataway's role supporting the English in the 1675 siege of the Susquehannock Fort, located at the mouth of Piscataway Creek. Obligated by treaty to provide protection to the Piscataway, Lord Baltimore, the Maryland proprietor, at first encouraged the Piscataway to seek refuge on the Eastern Shore. When the Indians refused to move there, Baltimore offered Zekiah Manor, his proprietary land bordering the Zekiah Swamp, as an alternative. In June 1680, the Piscataway left Moyaone and moved onto Zekiah Manor, where they built a fort and appear to have lived for as many as 15 years before abandoning their settlement there.

A total of 2,553 shovel test pits were excavated as part of this project, including 1,362 at Windy Knolls, 1,044 at the Steffens and Hogue properties, and 147 at St. Peter's. An additional 46 5-by-5-foot test units were excavated at Windy Knolls. As a result, both the spatial and chronological boundaries for the three previously identified sites (18CH0093, 18CH0103, and 18CH0694) were more precisely defined and two previously unrecorded sites, including Windy Knolls I (the Zekiah Fort; 18CH0808) and Windy Knolls II (18CH0809), were located.

The Zekiah Fort site (also known as Windy Knolls I or 18CH0808) consists of three and possibly four concentrations of late 17<sup>th</sup>-century artifacts associated with a relatively steep and defensible knoll. The knoll is located on an unnamed stream supplying nearby Piney Branch. Recovered artifacts include lithics of European flint and native stone, Indian and European ceramics, red and white clay tobacco pipes, glass beads, bottle glass, wrought iron nails, lead shot, brass triangles, brass scrap, and animal bone as well as various other finds represented in small quantities. Indeed, given the rich assemblage of artifacts, it is possible that this site represents the residence of the Piscataway tayac and his family. Windy Knolls I also includes a later c. 1830-1860 domestic occupation associated with either the Thompson family's or Benjamin F. Montgomery's ownership of the property.

Windy Knolls II (18CH0809) is a late 18<sup>th</sup>-century domestic site, probably a quarter for enslaved laborers, situated approximately 250 feet west of 18CH0808 and close to Piney Branch. Coarse and refined earthenwares, stonewares, bottle glass, iron nails, and red brick characterize 18CH0809 and likely represent a domestic occupation associated with either Eleanor Pigeon Miles' or John Baptist Thompson's ownership of the property (or both). It is also possible, but not certain, that this site was occupied in the late 17<sup>th</sup> century and therefore also associated with Zekiah Fort.

The Steffens farm site (18CH0093) is characterized by a low density pre-Contact lithic scatter associated with springheads and a mid-19<sup>th</sup>-century domestic site, the latter probably occupied by enslaved laborers held by property owner John Francis Gardiner. The Hogue farm site (18CH0103) consists of a relatively high-density lithic scatter and other evidence confirming that the site was occupied by Native Americans from the Early Archaic through the Late Woodland periods (7500 BC-AD 1600). In addition, two and possibly three European flint fragments recovered in association with Potomac Creek ceramics suggest a post-Contact Native occupation of the Hogue farm. Archaeological site 18CH0694 (also known as Jordan Swamp I), located on the St. Peter's Catholic Church property, is similarly characterized by a lithic scatter and Potomac Creek ceramics. A single chip of European flint was recovered from 18CH0694, suggesting that this site was also occupied post-Contact. Both post-Contact sites may be associated with Zekiah Fort.

All of the archaeological sites identified as part of this project, including 18CH0093, 18CH0103, 18CH0694, 18CH0808, and 18CH0809, are eligible for listing in the National Register of Historic Places under Criterion D, sites that have yielded, or may be likely to yield, information important in prehistory or history. In addition, 18CH0808, or the Zekiah Fort site, is eligible under Criterion A for its association with Piscataway displacement following the nation's alliance with the English, and under Criterion B for its association with the Piscataway tayac. Although all four properties are privately owned, two, including the Steffens and Hogue properties, are currently in the Zekiah Rural Legacy District. The other two sites, including the Zekiah Fort, are currently not protected, although plans are underway to put protective measures in place at Windy Knolls.

All artifacts, records, and other materials from this project have been prepared for long-term curation. Copies of the records have been placed with the Maryland Archaeological Conservation Laboratory at the Jefferson Patterson Park and Museum and with the Department of Anthropology at St. Mary's College of Maryland.

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The discovery of the Zekiah Fort site in 2011 was perhaps the most important event in Maryland archaeology that year. The discovery culminated in a mid-September announcement at Mount Victoria Farm, the home of Michael J. and Laura Sullivan in Newburg, Maryland. This event was attended by Governor Martin O'Malley, President of the Senate Thomas V. "Mike" Miller, Senator Thomas M. "Mac" Middleton, and Charles County Commissioners Reuben Collins and Debra Davis. Members and leaders of the three Piscataway groups, including Chief Billy Redwing Tayac of the Piscataway Indian Nation, Tribal Chairwoman Mervin Savoy of the Piscataway-Conoy Tribe of Maryland, and Tribal Chairwoman Natalie Proctor of the Cedarville Band of Piscataway, were also present along with more than 400 guests, all of whom commemorated the meaning the Zekiah Fort settlement has for both Piscataway and Maryland history.

The event at Mount Victoria was possible because of the contributions and assistance of dozens of people, who had, beginning in 2008, supported our effort to conduct systematic archaeological surveys in the Zekiah and Wicomico drainages in search of Charles County's compelling but sometimes overlooked history. Those contributions began with the generosity of a number of landowners who welcomed us onto their properties in the search for traces of the county's early colonial history.

Mr. Michael Besche, Mrs. Virginia Besche, Mr. and Mrs. Don Eckel, Mr. and Mrs. Gaylord Hogue, Mrs. Dietrich H. Steffens, and St. Peter's Catholic Church gave us access to their properties in 2010 and 2011. Without this access, we would not have been able to examine each tract as closely as we did in our effort to document occupation in the Zekiah. In addition, many of these landowners supported our work by lending a hand in the field. In 2010, Mr. Richard Steffens, his daughter, Hope, and his brother-in-law, Mr. Chapman, spent several days with us digging shovel tests on their family's farm. At the Hogue farm, Mr. Hogue cleared paths to the Zekiah so that we could explore the landscape abutting the swamp. At the Windy Knolls property, Mr. and Mrs. Eckel regularly mowed the field where we were working, allowed us to fetch water from their well, and let us store equipment in their shed.

These landowners – the Besches, the Eckels, the Steffens, and the Hogues – joined a growing list of people who had already become part of the search for the archaeological history of Charles County, including Mr. and Mrs. Steuart Bowling, the Family of Xavier W. Garner, Sr. and Mary R. H. Garner, Mr. and Mrs. Philip Harrison, Mrs. Mary Ellen Heinze, Mr. and Mrs. Dale Howell, Mark and Barbara Hoy, Mr. and Mrs. James Jackson, Mr. and Mrs. Gary Weightman, and the American Community Properties Trust. Without all these owners' cooperation and enthusiasm, we would not have been able to begin to pull together this history as it is revealed in the land itself.

The support of Maryland's three Piscataway Indian groups, including the Piscataway Indian Nation, the Piscataway-Conoy Tribe of Maryland, and the Cedarville Band of Piscataway, was also crucial to this effort. From the beginning, Piscataway members joined our efforts, providing us with guidance in our search for places associated with the Piscataway and the English. We are especially grateful to Chief Tayac, Tribal Chairwoman Savoy, Tribal Chairwoman Proctor, Mr. Rico Newman, and Dr. Gabrielle Tayac for their interest in and support of the archaeological work.

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Michael J. and Laura B. Sullivan put this cart in motion. In 2008, Mike approached St. Mary's College about finding the site of Charles County's first courthouse (c. 1674-1727), a fairly tall order given that many people had been searching for the courthouse site since the 1930s without much luck. Undeterred, Mike assembled a team of experts to find the courthouse in time for Charles County's 350<sup>th</sup> anniversary. The success of the courthouse project spurred the search for the Zekiah Fort, with the Sullivans both leading and supporting this work every step of the way. Not only have the Sullivans personally funded this work, they have opened their farm at Mount Victoria to the archaeologists. Archaeology crew members stayed on the farm throughout the project, and many meetings were held at the Mount Victoria Lodge where members of the professional community came to brainstorm Charles County's history and archaeology. We thank the Sullivans for their commitment to this project and for their ongoing leadership and support of archaeological and historical research in Charles County.

Lorenzi, Dodds, and Gunnill has been an unwavering colleague throughout, providing critical field support for our project. In particular, registered Maryland surveyor Kevin Norris has used the engineering firm's state-of-the-art equipment to establish our archaeological grids and tie them into the state grid. Kevin also developed a fine-grained topographic map of the Windy Knolls property for us. Scott Burroughs, an environmental planner with LDG, also assisted with the development of graphics for the project. We thank Kevin and Scott, and we also thank Jim Lorenzi, who has allowed us to repeatedly call on his staff at LDG for our work in Charles County.

Dr. Bradley Gottfried, president of the College of Southern Maryland, and his staff at CSM generously made available to us temporary laboratory space at the College's La Plata campus. In this space, we were able to set up a lab processing operation within ten miles of the properties, greatly streamlining our work and allowing us to shift crews more easily as needed. We had superb space at CSM, including a laboratory classroom with running water and a secure storage area. Dr. Gottfried has been an enthusiastic supporter of this work and his own interest in Maryland history has shaped this project in critical ways.

Dennis Curry and Maureen Kavanagh, both with the Maryland Historical Trust's Office of Archaeology, spent time in the field with us, and they have also followed and advised this project from its beginning, sharing their research, ideas, and evaluations of our data. Their support and insight were critical and spurred us in our survey. Dennis and Maureen are co-discoverers of the Zekiah Fort and we thank them for their faith in our abilities. Dr. Patricia Samford and Edward E. Chaney, archaeologists with the MHT's Jefferson Patterson Park and Museum, were also part of the group effort to locate the fort site, loaning us field equipment and spending hours in the field and in meetings with us. Jennifer Cosham, MHT's Archeological Registrar, repeatedly assisted us with the preparation of archaeological site forms and with providing information on contemporary sites in the Potomac River drainage. We thank them all and Mr. J. Rodney Little, the director of the Maryland Historical Trust and Maryland's State Historic Preservation Officer.

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The Charles County Chapter of the Archeological Society of Maryland was critical to our operation. In addition to the Zekiah Fort site, in 2011 we tested the Notley Hall site, the 17<sup>th</sup>-century dwelling plantation of Governor Thomas Notley located on the Wicomico River. The Charles County Chapter of the ASM, including Carol Cowherd, Joshua Eller, Rob Gibbs, Rich Gorski, Elsie Picyk, Carole Raucheisen, Carol Starnes, and Polly Zimmerman, assisted us with the processing of the Notley Hall collection so that we could focus our energies on the Zekiah Fort site. We are indebted to them.

We had a number of visitors to our sites, eager to get some sense of the pre-20<sup>th</sup>-century landscape and to discuss how best to protect these historically important places. Our distinguished visitors included Mark Michel and Andy Stout (The Archaeological Conservancy), Frank Roylance (The Baltimore Sun), Dr. Virginia Busby (The Chesapeake Conservancy), Deanna Beacham (The Chesapeake Conservancy), Cathy Thompson (Charles County Government), Silas Hurry (Historic St. Mary's City), and Wayne Clark (Tri-County Council of Southern Maryland). Dr. Tim Horsley, an archaeological geophysicist at the University of Michigan, conducted a quick magnetometer survey of the site in March 2012.

Once in the lab, a number of our colleagues graciously and generously assisted us with artifact identification and analysis. Foremost was Ed Chaney, who reviewed all of our identifications of lithics and Native American ceramics. Dr. Helen Rountree provided valuable sources on the attitudes of Virginia Indians toward English firearms. Al Luckenbach and Taft Kiser provided critical information on the manufacture and distribution of red clay tobacco pipes. Silas Hurry provided information on molded white tobacco pipes. Both Dr. James W. Bradley (ArchLink) and Dr. Liza Gijanto (St. Mary's College of Maryland) provided information about glass beads. Dr. Randy K. Larsen (St. Mary's College of Maryland) generously tested the material composition of many of our artifacts using the St. Mary's College X-Ray Fluorescence (XRF) spectrometer. Dr. Walter Klippel (University of Tennessee Knoxville) assisted with the study of the animal bone fragments. Keith Egloff, Dr. Martin Gallivan (College of William and Mary), Dr. Carter Hudgins (Drayton Hall), Dr. Kevin McBride (Mashantucket Pequot Museum and Research Center), and Sara Rivers-Cofield (Maryland Archaeological Conservation Laboratory) provided information about the use of copper by indigenous groups, and Rico Newman provided insight about the uses of brass tacks. Al Luckenbach and Willie Graham (The Colonial Williamsburg Foundation) also suggested interpretations for the wrought nails found at the site.

Dr. Linda Coughlin and now Dr. Richard Platt, Lucy Myers, Irene Olnick, Sandy Robbins, and Chris True of St. Mary's College, as always, provided critical administrative and operational support. From securing a Memorandum of Understanding to insuring the crew was paid, such behind-the-scenes support made it possible for the crew to focus on the task at hand. We thank them for their quiet efficiency and hard work. Keisha Reynolds, Liisa Franzen, Barbara Geehan, Lee Capristo, and Nancy Abell spearheaded the effort to commemorate the discovery of Zekiah Fort at Mount Victoria, and their planning was seamless, professional, and impressive.

The work at the various sites reported in these pages could not have happened without the interest and support of a great many people. We have tried to meet their standards in the field and in this report; any errors in fact or interpretation, however, remain the responsibility of the authors.

Alex J. Flick  
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Scott M. Strickland  
D. Brad Hatch  
Julia A. King  
*St. Mary's City*



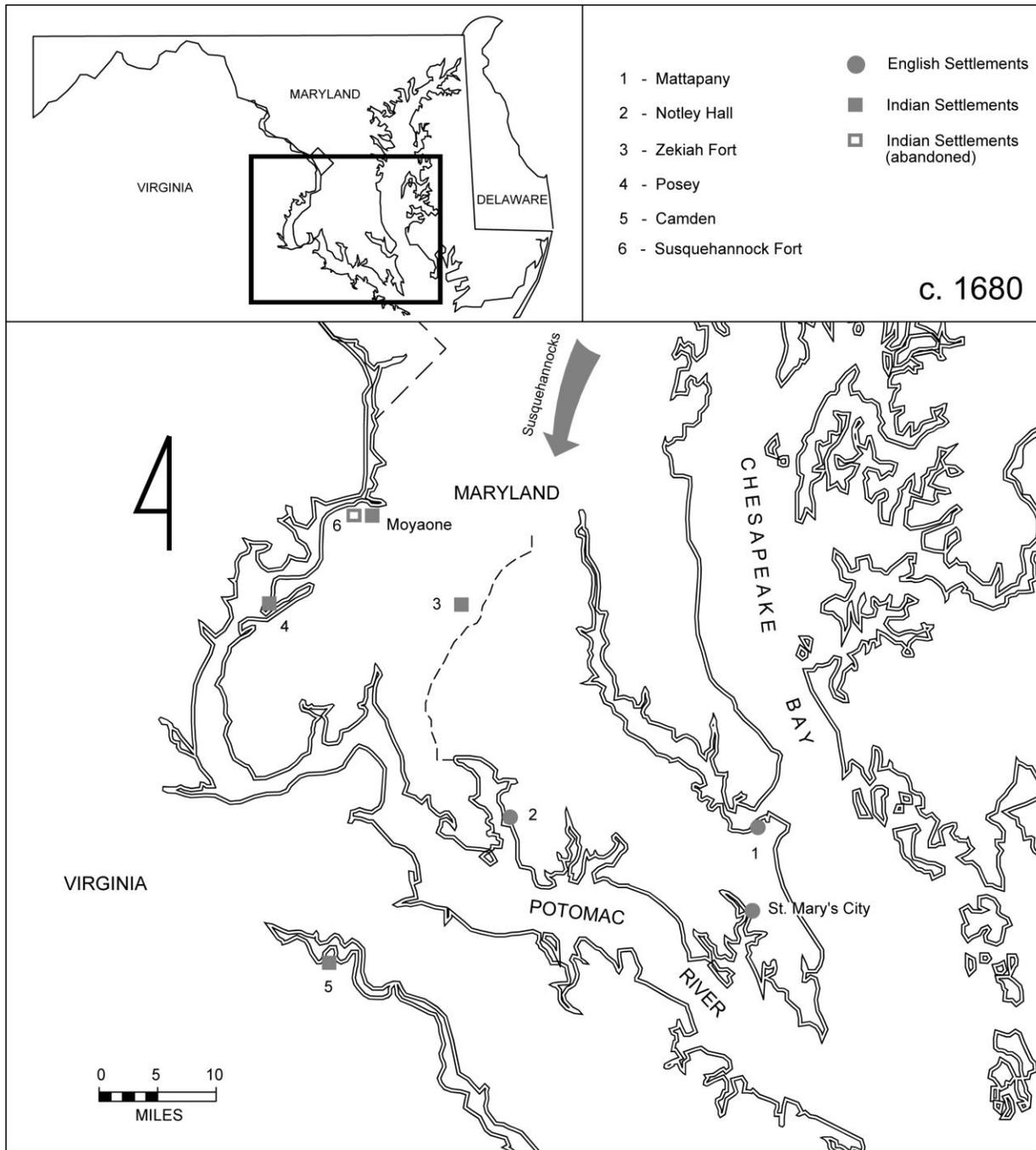
## I. Introduction

In 1675, a series of events taking place along both the northern and southern shores of the Potomac River precipitated what became known as Bacon's Rebellion in Virginia. Starting out on the Virginia side of the river, members of the Doeg Indian nation took an Englishman's hogs to settle an unpaid debt. That event escalated into a series of violent retaliations, each more deadly than the last. The deaths of a number of English settlers and local Natives along with the involvement of the local militia from both colonies ultimately culminated in the siege of the Susquehannock Indian fort on the Maryland side of the Potomac (Figure 1). Colonel John Washington of Virginia and Major Thomas Truman of Maryland led the siege, which lasted for weeks. At one point, Washington and Truman invited the Susquehannock leaders outside the fort to parley. The Susquehannock accepted their invitation but, once outside the fort, the two English leaders along with Major Isaac Allerton without provocation opened fire on the Indian leaders. When the remaining (and enraged) Susquehannock escaped the fort six weeks later, they began a series of raids along the Virginia frontier, creating the opportunity for Nathaniel Bacon's rise as the leader of a rebellion historians continue to study for interpreting Virginia's 17<sup>th</sup>-century history (Morgan 1975; Oberg 2005; Thompson 2006).

Less well known is what happened in Maryland, the site of the Susquehannock siege. The Piscataway and Mattawoman Indians, both living on the north side of the Potomac, had been squarely allied with the English forces besieging the Susquehannock fort. Their participation was obligated according to the "articles of peace and amity" a number of Indian nations, including the Piscataway and the Mattawoman, had concluded with the English in 1666. Moreover, the Piscataway had a long-standing grudge against the Susquehannock, whose members had been raiding Piscataway settlements since before contact with Europeans. But what may have seemed like a reasonable idea at the time turned out to have devastating consequences. For much of the rest of the decade, "northern" and "foreign" Indians, many probably Susquehannock, waged merciless war on the Piscataway and the Mattawoman, killing the men and taking women and children as captives in retaliation for the two nations' assistance to the English.

Those same articles of peace and amity that made allies of the Piscataway and Mattawoman also required that "in case of danger the Governor shall appoynte a place to which the Indians of the aforesaid nacons shall bring their wives & children to be secured from danger of any forreign Indians." By early 1680, it was clear that Charles Calvert, the third Lord Baltimore, governor, and proprietor, had to hold up his end of the bargain. After some discussion and negotiation with the affected nations, Baltimore directed the Piscataway to Zekiah Manor, one of two proprietary manors in Charles County. The Piscataway abandoned their capital at Moyaone (on Piscataway Creek in what is now Prince George's County) along with their corn crop already in the ground and moved to Zekiah, where they built a fort and stayed for an estimated 12 to 15 years.

Relocating to the Zekiah was a complicated move for the Piscataway. Although the area around the Zekiah had long been a part of Piscataway territory, when the group moved there in 1680 en masse and in the middle of the growing season, they were forced into restructuring their relationship with that territory. On the one hand, refuge in the Zekiah provided better protection from raiding "foreign" Indians and it placed the Piscataway in closer proximity to potential trading partners (English households and merchants). The move may have enhanced the Piscataway *tayac* or leader's position who, as will be suggested below, continued to control Piscataway wealth and access to firearms with the help of the Maryland government. On the other hand, the vacated lands around Piscataway Creek were quickly taken up by Englishmen eager to dispossess the Native population of good agricultural land. When the Piscataway returned to the area around Moyaone c. 1692-1695, they discovered just how Anglicized the area had become and just how unwelcome they were, even among supposed allies.



**Figure 1.** The political landscape of the lower Potomac River valley, c. 1680.

Zekiah Fort represents an important moment in the creation of the Piscataway Diaspora. Even before the events of the 1670s, Piscataway captured in raids by “northern Indians,” including the Susquehannock, were becoming part of the Diaspora. As the Piscataway struggled both internally and with other polities to identify territory where they could continue as an organized nation, individual Piscataway made decisions and choices leading them into new colonial contexts even as they continued to

self-identify as Piscataway. Many Piscataway, for example, remained in Maryland, variously acculturating to colonial ways, resisting them in closed communities, or creating something in-between. Others went to Pennsylvania, New York, Carolina, and points west. Well into the 18<sup>th</sup> century, the records are clear, people considering themselves Piscataway were living as far away as Canada or Ohio. But archives are a product of the society controlling them. They are not independently objective recorders but instead reflect the power of the state to determine what information is recorded and whether or not it is saved for the long term. For these reasons, tracking Piscataway history, including the history of Piscataway settlements and creation of the Diaspora, has required creative cross-disciplinary collaborations drawing on other sources, including archaeology and oral history.

The discovery of the Zekiah Fort presents an opportunity to reconsider how indigenous groups, like the Piscataway, responded to the competition for resources, including territory, in the colonial context. Along with a growing number of other post-Contact Native settlements, the material evidence recovered from the Zekiah Fort challenges earlier archaeological narratives describing a “progressive acculturation” for southern Maryland’s Native inhabitants, typically measured by the replacement of Native materials with European ones. The mix of materials recovered from Zekiah Fort as well as from other contemporary settlements suggests that the Piscataway were, in many aspects, able to maintain Piscataway practices. More precisely, however, the Piscataway were able to maintain an identity as Piscataway in part because the *tayac* (or leader) used his nation’s alliance with the Maryland government to reinforce his power as chief. The introduction and growing availability of English goods, especially guns, copper, and glass beads, brought about changes in Native culture even as they were incorporated into familiar practices, and it is these changes that served to foster a Piscataway identity.

This report describes the results of the effort to find the Zekiah Fort. For decades, local historians, archaeologists, and Piscataway groups have been interested in identifying the site of the fortified Piscataway Indian settlement at Zekiah, or Zekiah Fort as it was sometimes called by colonial authorities. Finding Zekiah Fort and placing it in its geographical, historical, and social context is critical for documenting and interpreting effects of European colonialism on indigenous Maryland societies. The Piscataway’s relationship with the English and with other indigenous nations was, in understatement, complicated. In some ways, the events of the colonial period were not unlike the ongoing negotiation for territory in which the Piscataway and other nations had been involved for centuries. Because much of what is known about Piscataway and other indigenous histories comes from the written record, the archaeological record offers an alternative but under-utilized line of evidence for exploring not just the effects of colonialism but the long term pre-colonial histories of this region. The identification of colonial-era Native settlements is one part of this process but one that should serve as a beginning rather than an end.

Specifically, this report describes archaeological investigations undertaken at four parcels, including portions of the Windy Knolls, Steffens, Hogue, and St. Peter’s Catholic Church properties, from May 2010 through July 2011. All four parcels are located south of Waldorf, Maryland and north of the Zekiah Swamp. The purpose of these investigations was to more precisely identify the chronological and spatial boundaries of three previously documented archaeological sites, including Steffens (18CH0093), Hogue (18CH0103), and Jordan Swamp I (18CH0694; St. Peter’s property), and to locate archaeological resources at the Windy Knolls property.

We were led to the three documented sites, including 18CH0093, 18CH0103, and 18CH0694, because all three had been previously reported as having relatively large numbers of Potomac Creek ceramics. Previous work at the Posey site (18CH0281), along Mattawoman Creek, and at Camden (44CE0003), along the south side of the Rappahannock River, both occupied during the second half of the 17<sup>th</sup> century, had indicated that Potomac Creek ceramics may be a likely indicator for post-Contact Native

occupation. Relocating these settlements and identifying important geographical features in the area led to the discovery of a fourth site, called Windy Knolls I (or 18 CH0808) that appears to have been the fortified Piscataway settlement at Zekiah, or the Zekiah Fort.

## II. Historical Context

### A. Middle Atlantic Prehistory

The following section has been abstracted from *Pathways to History: Charles County, Maryland, 1658-2008* by King, Arnold-Lourie, and Shaffer (2008).

The first inhabitants of Charles County arrived perhaps as early as 12,000 years ago, when regional temperatures were cooler by as much as five degrees Fahrenheit and the climate was more humid than it is today. Sea levels were up to 340 feet lower, and the Potomac River was a freshwater tributary of the Susquehanna River. The landscape consisted primarily of open grassland and of spruce, beech, birch, hemlock, and oak forests. The earliest people were highly mobile. They probably moved in small bands for at least part of the year, hunting large and small game, fishing, and gathering wild plant foods according to the season (Dent 1995:75-82, 135-145; Kraft 1977:35-69).

Archaeologists call this time the Paleo-Indian period, which began in North America about 12,000 years ago and lasted roughly 2,500 years (Table 1). Very few Paleo-Indian sites are known in Maryland, both because the population was small and because many early archaeological sites have been inundated by the rising waters of the Chesapeake Bay and its tributaries. In Charles County, archaeologists have identified – but not yet investigated – eleven Paleo-Indian sites. These sites have been identified by the recovery of distinctive stone tools or “fluted” projectile points, so-called because of the characteristic notching of stone flakes from the point’s base. These easily recognized points, which include spear tips, are found in association with Paleo-Indian sites across North America, and their relative uniformity over thousands of miles has intrigued archaeologists for decades. In Charles County, most sites dating to this period are found in the Zekiah Swamp drainage or in the Potomac River valley west of the Route 301 corridor (Barse 1985:22-26; Wanser 1982:6).

PERIOD	DATES
Paleo-Indian	10000 BC – 7500 BC
Early Archaic	7500 BC – 6000 BC
Middle Archaic	6000 BC – 3500 BC
Late Archaic	3500 BC – 1000 BC
Early Woodland	1000 BC – 200 AD
Middle Woodland	200 AD – 900 AD
Late Woodland	900 AD – 1600 AD
Contact	1600 AD – present

**Table 1.** Middle Atlantic culture periods.

Beginning about 10,000 years ago, temperatures worldwide began to warm, melting the glaciers that, on the eastern part of the continent, had reached as far south as Pennsylvania. Over the next several thousand years, glacial melt began flooding the Susquehanna River valley, creating what is now the Chesapeake Bay. As the waters rose, the Potomac and Patuxent rivers began to take their current shapes, becoming recognizable about 4,000 to 5,000 years ago. The rising sea level created rich new swamp and marsh environments throughout the region, and warming temperatures encouraged the growth of a predominantly oak and hickory forest. Unlike the forests and grasslands of the cooler Paleo-Indian period, the changing terrain offered little open space. The cause of the warming is often debated, but one thing is certain. The familiar resources of the Paleo-Indian period disappeared, and, beginning some 9,000 years ago, human communities were forced to adapt to a new environment (Colman, Halka, and Hobbs 1991; Dent 1995:82-95; Kraft 1977).

Archaeologists describe the post-Paleo-Indian period as the Archaic period, organizing it into three divisions, including the Early, Middle, and Late Archaic (see Table 1). The Early Archaic (7500 BC to 6000 BC) reflects the beginning of the Holocene geological epoch, with a cool and dry climate

becoming warmer and wetter. Hardwood forests were replacing spruce forests, and swamps were forming in areas where none had been present previously (Wanser 1982:70). These climactic and environmental changes underpinned new settlement and subsistence strategies. Evidence from sites elsewhere in the Middle Atlantic indicate “more well-defined scheduling and seasonal rounds” focused on hunting and gathering, especially deer and nuts, and much less on fish or shellfish. By the end of the Late Archaic, many archaeologists argue, “focal hunting adaptation was replaced by a broad spectrum foraging strategy” (Wanser 1982:72-73).

The new conditions may have proved advantageous to those dwelling on the inner coastal plain. Dozens of archaeological sites survive in Charles County from the Archaic period, possibly suggesting an increased population. Evidence from Charles County and other Maryland sites reveals that, during the Archaic, which lasted from 7500 BC until 1000 BC, people followed a seasonal round of hunting, fishing, and gathering not unlike their Paleo-Indian forebears. However, they developed increasingly diverse and specialized tools for harvesting a much wider range of plant and animal foods, returning on a regular basis to places where these resources were found. In addition to chipping pieces of stone to make tools such as projectile points, Archaic-period people ground stone into axes and adzes for woodworking. They also made mortars, pestles, and manos (handheld stones or rollers) and metates (stone blocks with shallow concave surfaces) for grinding wild plant foods (Dent 1995:194-215; Wilke and Thompson 1977:22).

The rising sea level increased the importance of marine resources and helped to diversify and enrich food sources. Archaeologists have uncovered evidence that fish weirs, or large nets staked in the water, were made and used during the Archaic period. Largely constructed of organic materials, these devices are seldom discovered in a preserved state, though their presence would not be surprising. Any such large-scale fishing expeditions, however, would have required substantial cooperation, not just for catching but also for processing the harvested fish (Custer 1989:204; Dent 1995:204).

The Middle Archaic, which archaeologists argue lasted from 6000 to 3500 BC, “appears to be a continuation and elaboration of trends” evident toward the end of the Early Archaic. The subsistence base appears to have become larger, an adaptive strategy that not only would have fostered population growth but would have made existing populations less vulnerable to disruptions in the availability of a particular food source. Swamps – like the Zekiah, with its rich resources – became a focus of settlement, with sites occupied longer and by greater numbers of people.

Evidence of developing trade networks appear on Archaic-period sites in the form of rhyolite, a granite-like rock found in the mountains west of the Chesapeake piedmont. Rhyolite is found on Archaic-period archaeological sites in Charles County and elsewhere in southern Maryland. Fashioned into projectile points, knives, and other tools, rhyolite probably came to the Tidewater through broad-based exchange networks characterized by hand-to-hand exchange among related parties. Alternatively (or additionally), Archaic-period people from Maryland’s coastal plain, including Charles County, may have traveled to the mountain region, collecting rhyolite and bringing it back to southern Maryland. How rhyolite ended up in southern Maryland remains a mystery, but it is clear that exchange networks fostered social interaction over considerable distances (Stewart 1989:47-78; Wanser 1982:82).

People almost certainly remained mobile throughout the Archaic period, which lasted about 6,000 years in this part of North America, but their territorial range may have decreased as they became more efficient hunters and gatherers. By the end of the period, about 3,000 years ago, many groups were making and using bowls of ground steatite, a soft, greasy-feeling stone commonly known as soapstone. Archaeological evidence suggests the bowls were used for cooking. As the population grew along with the more efficient harvesting of available plant and animal resources, including fish, additional pressure was placed on communities to harvest yet more food from the environment.

Wanser (1982:94) notes that, by the Late Archaic, the “climate was warm and dry,” an oak-hickory forest predominated, and the “Lower Potomac estuary was well developed..., with shellfish and anadromous fish plentiful.” Hunting remained important to Late Archaic people, but the primary subsistence strategy was one of intensive foraging, evidenced by a florescence of tool types. Archaeologist William Gardner (1978:31) argues that, by the Late Archaic, most groups were leaving the swamps for oysters on the coast, but Wanser’s (1982:129) analysis of collections suggests that, at least in the case of the Zekiah drainage, population there may have actually increased. Wanser acknowledged that Late Archaic-period coastal sites may be absent because they are inundated; nonetheless, the Zekiah Swamp was visited and occupied by Native peoples through the end of the Late Archaic.

During the Late Archaic (3500 BC to 1000 BC), “populations became larger, territories smaller, and more permanent habitation at certain sites was likely” throughout Eastern North America (Wanser 1982:93). Regional traditions, evident before the Late Archaic, became especially distinct. These ‘traditions,’ several of which are evident in the archaeological assemblages of the Zekiah, do not necessarily represent separate cultural groups but the “adoption of tool types from a variety of sources” (Wanser 1982:93).

At about this time – the end of the Archaic and the beginning of the Woodland period (1000 BC to AD 1600) (see Table 1) – ceramic vessels entered the archaeological record. Many were similar in size and shape to the Archaic steatite bowls, but they were made from locally-mined clay fired at relatively low temperatures. Archaeologists typically associate ceramics with more sedentary societies. These communities still hunted and gathered food from the wild, but they also grew their own crops, eventually including corn. More importantly, they produced food surpluses. Indeed, it was around this time, some 3,000 years ago, that small, below-ground pits – not unlike root cellars – were developed for storing surplus food (Dent 1995:229-230).

By the end of the Archaic, New World inhabitants, including those in what is now Charles County, were practicing a diversified hunting and gathering economy, one made possible by the rich resources of the Chesapeake Bay and its tributaries. Resources were so plentiful that the trapping of salt and freshwater fish, the hunting of small mammals, and the gathering of edible plants took place in an ever-dwindling geographical area; people could find or produce much of what they needed fairly close at hand. People remained mobile, but the range of their day-to-day roaming shrank, eventually giving rise to large, semi-permanent settlements, some of which were even fortified against other indigenous groups.

Trade and exchange were still important, and probably represented the route by which corn found its way into the diet of the Coastal Plain people, including those in Charles County. Rhyolite, the stone used for making tools, appeared in even greater quantities during the Woodland period along with other artifacts that would indicate trade. Among them are the extraordinary objects – dating from about 2,500 years ago – that are associated with the Adena “Mound Builder” tradition of the American midlands. Large blades of non-local stone, tubular stone pipes, stone gorgets (neck pendants worn for decoration and defense), copper beads, red ochre (used as a pigment for body decoration), and other unusual objects probably used for ritual or ceremonial purposes have been recovered from contemporary sites on Maryland’s western shore, but not, as yet, from Charles County (Dent 1995:231-235; Potter 1993:107-108; Stewart 1989:47-78).

The increasingly important cultivation of crops such as maize, beans, and squash didn’t occur overnight, nor did some enterprising member of the area’s Woodland peoples “discover” or “invent” agriculture. Instead, the archaeological evidence indicates that corn came late to the region, possibly around AD 800-900. The corn raised by Native American groups in what is now southern Maryland is

thought to have come from trade with Piedmont groups, with local tribes adopting its cultivation as yet another subsistence strategy (Dent 1995:251-254; Turner 1992:107).

Sometime around AD 1350, in a series of events with important implications for the Chesapeake Tidewater, native people living in what is now Montgomery and Frederick counties began abandoning their villages and moving south out of the Potomac Piedmont and onto the Coastal Plain. The reasons for their migration are unclear, but archaeologists suspect that Piedmont groups were pushed out by immigrants from the west. The Piedmont people, in turn, displaced established communities in the Tidewater. The archaeological evidence for these migrations and the subsequent population shifts hinges on two occurrences: long-occupied village sites in the Potomac Piedmont were suddenly abandoned in the 14th century, and new types and styles of ceramic ware suddenly appeared in the Coastal Plain (Potter 1993:126-138; Slattery and Woodward 1992).

Throughout much of the Early and Middle Woodland periods (c. 1000 BC to AD 800), communities in Charles County and elsewhere in the Coastal Plain were producing low-fired ceramic pots tempered with shell; that is, crushed shell fragments were added to the clay to make it malleable for making pots. Beginning in the 14th century, however, shell-tempered ceramics disappeared from the archaeological record in the Potomac River valley, replaced by ceramics tempered with sand or quartz grit. Though new to the Coastal Plain, this process was a relatively old one in the Piedmont, leading archaeologists to postulate a major migration into the Tidewater. The earliest evidence was found at the Potomac Creek site in Stafford County, Virginia, across the Potomac River from Charles County, and the Accokeek Creek site in Prince George's County, north of the Charles County line.<sup>1</sup> At both sites, immigrants from the Piedmont established new villages and fortified them against attack. Archaeologists estimate that as many as 500 immigrants may have resided in the two villages (Potter 1993:114-125; William and Mary Center for Archaeological Research 2009).

Known as the "Montgomery Hypothesis," the interpretation for a wholesale displacement of communities in both the Piedmont and Coastal Plain Potomac is complicated by the fact that, besides ceramics, other material practices in the Coastal Plain, including house forms and burial programs, do not appear to have clear origins in the Piedmont. In addition, a Piscataway description of the nation's method for identifying leaders points to an Eastern Shore origin, at least for the group's first "king." Stephen Potter has attempted to reconcile the archaeological and historical evidence and argues that the two versions of Piscataway origins may not be mutually exclusive, a discussion returned to, below.

The archaeological record in Charles County reveals the appearance of a number of sites containing sand- or grit-tempered pottery dating to the Late Woodland period (AD 800 to 1600). Many of the sites were short-term base camps from which hunting and gathering expeditions were launched. Several were large enough to warrant identification as villages or towns, as evidenced by thick deposits of oyster shell, animal bones, and stone artifacts. Anywhere from ten to 25 arbor-like structures covered in reeds and known as longhouses sheltered the residents, who were probably organized cooperatively by age and sex to produce food and life's other necessities. As at Potomac Creek and Accokeek Creek, many of these villages were fortified, with a majority of houses surrounded by a palisade of upright posts cut from sapling trees. Perhaps the region's growing population increased the competition for resources and led to inter-group hostility, thus spurring communities to protect their domestic compounds with wooden barriers (Potter 1993:149-161).

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<sup>1</sup>Although Potomac Creek ceramics are generally dated c. AD 1300-1700, in 2000, Joe Dent and Christina Jirikowic (2000) reported a radiocarbon date of AD 1150 for charcoal found adhered to a Potomac Creek ceramic fragment from the Accokeek Creek site (18PR0008).

On the eve of the arrival of the Europeans, the Native people of Charles County were living in semi-permanent dispersed villages or towns, practicing a form of slash-and-burn agriculture to clear land for planting corn, beans, and squash. Tobacco was also cultivated, primarily for ritual or spiritual purposes and not for recreational consumption. Hunting and gathering remained vitally important to the Late Woodland subsistence economy, and when residents left to hunt or fish at various times throughout the year, settlements would be temporarily vacated. The sites might be permanently abandoned once the soil in nearby fields was depleted and corn yields declined. Although each village or town had its own leader, or *tayac*, all of the Charles County settlements at this time were probably tied to Moyaone, the capital of the Piscataway chiefdom. The strength of the relationships, however, would have weakened with distance (Potter 1993:149-161).

The migrations of the 14th century in the Chesapeake Tidewater were just the beginning of major movements of people throughout the region. Iroquois groups from the northeast were pressing into southern Maryland as early as the 15th century, traveling down the Chesapeake Bay from what is now Pennsylvania and New York, raiding Algonquian communities they encountered along the Bay's western shore. The Algonquians living there withdrew up the rivers, abandoning large tracts of land as they sought refuge from the Iroquois. The remaining groups lived in or close by well-fortified village compounds. Meanwhile, from the south, Powhatan was working, by the late 16th century, to expand the reach of his power over Virginia groups in the vicinity of the James and York rivers and tributaries (Clark and Rountree 1993:112-135; Potter 1993:174-179).

Nations even less familiar than the Iroquois began to appear in the Chesapeake Bay area in the late 16th century with the arrival of, first, the Spaniards, and then the English. Although the records do not suggest any direct encounters early on between European explorers and the indigenous people of Charles County, the groups living in the region were almost certainly aware of these strange new people and their even stranger customs. The indigenous groups may have even acquired glass beads and copper through trade with other groups that had come into contact with the Europeans.

## **B. Piscataway Origins**

The Piscataway was one of two powerful chiefdoms emerging in the Potomac River drainage in the 14<sup>th</sup> century. The Piscataway controlled much of the north bank of the Potomac while the Patowomeke controlled its south bank. The Piscataway and Patowomeke had an on again-off again relationship, with relations fairly cool at the time of European contact. There were other smaller, less powerful groups in the drainage that nonetheless resisted Piscataway efforts to control them. But the fact of the matter was that even those groups outside Piscataway control nonetheless had to reckon with this powerful polity.

Because the Piscataway were the first and largest nation sent to Zekiah Fort, the following sections address Piscataway history and the circumstances that ultimately culminated in the building of the Zekiah Fort.

As previously noted, the inference that groups living in the Potomac Piedmont moved south of the Fall Line into the Tidewater hinges on two archaeological lines of evidence: the sudden abandonment of Piedmont villages in the mid-14<sup>th</sup> century and the simultaneous appearance of a new, distinct ceramic tradition on the Coastal Plain. The emergent ceramic tradition, known as the Potomac Creek complex, shares similar characteristics with wares associated with the earlier Montgomery peoples. Proponents of the Montgomery Hypothesis suggest that other Native groups to the north and west were the catalyst for this Late Woodland migration and, in turn, the Piedmont emigrants displaced then-existing Tidewater populations. According to this theory, the Montgomery peoples who migrated south coalesced into

groups and built large stockaded villages characteristic of the Potomac Creek complex, such as seen at the Potomac Creek site in Stafford County, Virginia, and the Accokeek Creek site in Prince George's County, Maryland (Potter 1993:126-132; Cissna 1986:29-31; Slattery and Woodward 1992).

Piscataway oral history, collected and recorded by Maryland officials, appears at first to contradict the archaeological evidence. The brother of the Piscataway tayac, Uttapoingassinem, in a meeting with then-Governor Philip Calvert in December 1660, described a very different set of circumstances concerning Piscataway origins:

That long a goe there came a King from the Easterne Shoare who Comanded over all the Indians now inhabiting within the bounds of this Province (nameing every towne severally) and also over the Patowmecks and Sasquehannoughs, whome for that he Did as it were imbrace and cover them all they called Uttapoingassinem this man dyeing without issue made his brother Quokonassaum King after him, after whome Succeeded his other brothers, after whose death they tooke a Sisters Sonn, and soe from Brother to Brother, and for want of such to a Sisters Sonne the Governmt descended for thirteene Generacons without Interrupcon untill Kittamaquunds tyme who dyed without brother or Sister and apoynted his daughter to be Queene but that the Indians withstood itt as being Contrary to their Custome, whereupon they chose Weghucasso for their King who was descended from one of Uttapoingassinem brothers (But which of them they knowe not) and Weghucasso at his death appoynted this other Uttapoingassinem to be King being descended from one of the first Kings this man they sayd was Jan Jan Wizous which in their language signifiyes a true King. And would not suffer us to call him Tawzin which is the Style they give to the sons of their Kings, who by their Custome are not to succede in Rule, but his Brothers, or the Sons of his Sisters (Md. Archives 3:402-403).

Anthropologist Paul Cissna (1986:31; 41-48) argues that linguistic relationships also suggest a migration from the east. His analysis of a surviving Piscataway translation of the Ten Commandments, housed at Georgetown University's Lauinger Library, suggests strong affinities with the language spoken by both the Powhatan and the Delaware.

Archaeologist Stephen Potter points out that the archaeological record (which suggests a migration from the west) and the oral history (which suggests a migration from the east) are not necessarily mutually exclusive. During the meeting of the Council where the history was related, the tayac's brother was addressing a question from Governor Calvert as to how Uttapoingassinem came to be emperor of the Piscataway, "whether by Succession or Election" (Md. Archives 3:403). Potter (1993:138) notes that, "if the brother's reply is taken to be a direct answer to a direct question, then he simply related that the position of tayac passed by inheritance through thirteen rulers, the first of whom came from the Eastern Shore."

The oral history states that there had been thirteen rulers before Kittamaquund, who killed his older brother, Wannas, and assumed the position of tayac in 1636 (Merrell 1979:555-556; Hall 1910:158-159). Assuming an average of twenty years per generation "for thirteene Generacons without Interrupcon untill Kittamaquunds tyme" (Md. Archives 3:403), this pushes Piscataway history back 260 years to 1400 AD, approximately the time of the proposed Montgomery migration as inferred from the archaeological record. The archaeological evidence suggests the origins of the Potomac Creek peoples (including those

at what is now known as the Accokeek Creek site) as mid-14<sup>th</sup> century migrants from the Potomac Piedmont, while the 1660 oral history told to Philip Calvert may describe the origins of the Piscataway chiefdom as an “intergroup alliance” forged by a king who had come from the Eastern Shore and seated himself at Moyaone (Potter 1993:138; Merrell 1979:550).

The Piscataway tayac (or “emperor” as the English often referred to the position) controlled territory ranging from St. Mary’s County north to the fall line. Subject to the tayac were werowances (or “kings” as the English would sometimes designate them), who were individual village chiefs within this region (Hall 1910:125). Matrilineal inheritance of these positions is believed to have been the norm, at least until the death of Kittamaquund (Cissna 1986:62-68; Potter 1993:190). Among the other important positions in Piscataway social organization were war chiefs, priests and shamans, and great men, who advised the tayac or werowances (Cissna 1986:68-75).

### C. European Contact

As Europeans began exploring the region’s rivers and coastal areas in the late 16<sup>th</sup> and early 17<sup>th</sup> centuries, they also had to navigate a complex Native political geography. At the time of contact, the Piscataway tayac controlled much of Maryland’s lower western shore south of the Fall Line, with the exception of independent Patuxent villages and possibly the Yaocomico, who were nonetheless influenced by the Piscataway chiefdom (Clark and Rountree 1993:112-116; Potter 1993:19-20; Merrell 1979:552, footnote 12). During Smith’s exploration of the Potomac in 1608, he gave the warrior populations for the towns he visited, each depicted on his Map of Virginia (Figure 2). While he estimated 160 Patawomeke and 40 Tauxenant (Doeg) warriors on the west or south side of the river (that is, Virginia), numbers on the Maryland side were 40 at Secowocomoco, 20 at Potopaco (Portobac), 60 Pamacacack (Pamunkey), 80 Nacotchtanke (Anacostin), and finally, 100 at Moyowances, or Moyaone, the village of Piscataway proper (Arber 1884:52).

Using estimates provided by Smith and other explorers, as well as information extrapolated from archaeological studies, anthropologists have long debated the population of the Piscataway chiefdom at the time of contact, with estimates ranging from 2,000 to 7,000 individuals. These estimates reflect a number of methodologies in calculating population, and are based on assumptions which may not always be accurate. Cissna (1986:49-53), attempting to reconcile the numbers, calculated a range of roughly 3,600 to 5,760 people living on the western shore at Contact.

These numbers must be considered in the context of major raids by the Massawomecks (Kingsbury 1933:19-20; Merrell 1979:552-554), a powerful Iroquoian group believed to be from the western Pennsylvania hinterlands. In 1607/8, Powhatan told Captain Smith that the “Pocoughtronack [or Massawomecks] [are] a fierce Nation...war[ing] with the people of Moyaoncer and Pataromerke” (Arber 1884:20). Powhatan reported that the Massawomecks, whose identity is still debated, had slain 100 Piscataway the previous year. This number pales in comparison with that relayed by Henry Fleet, who had been held captive by the Nancotchtanke (Anacostins) from 1623-1627. According to Fleet, the Massawomecks had formerly massacred 1,000 Piscataway (Neill 1876:26; Pendergast 1991:14). Although these numbers may be inflated, it is nonetheless evident that raids by these northern Indians had reduced the Piscataway population by considerable numbers and influenced subsequent political developments.

The Susquehannock, also an Iroquoian group, constituted another threat from the north. After moving to the lower Susquehanna River at the head of the Chesapeake Bay, the Susquehannock traded furs for other goods with William Claiborne, a Virginian who had established a trading post on Kent Island in the early 1630s. The Susquehannock’s increased influence in the region and their desire to

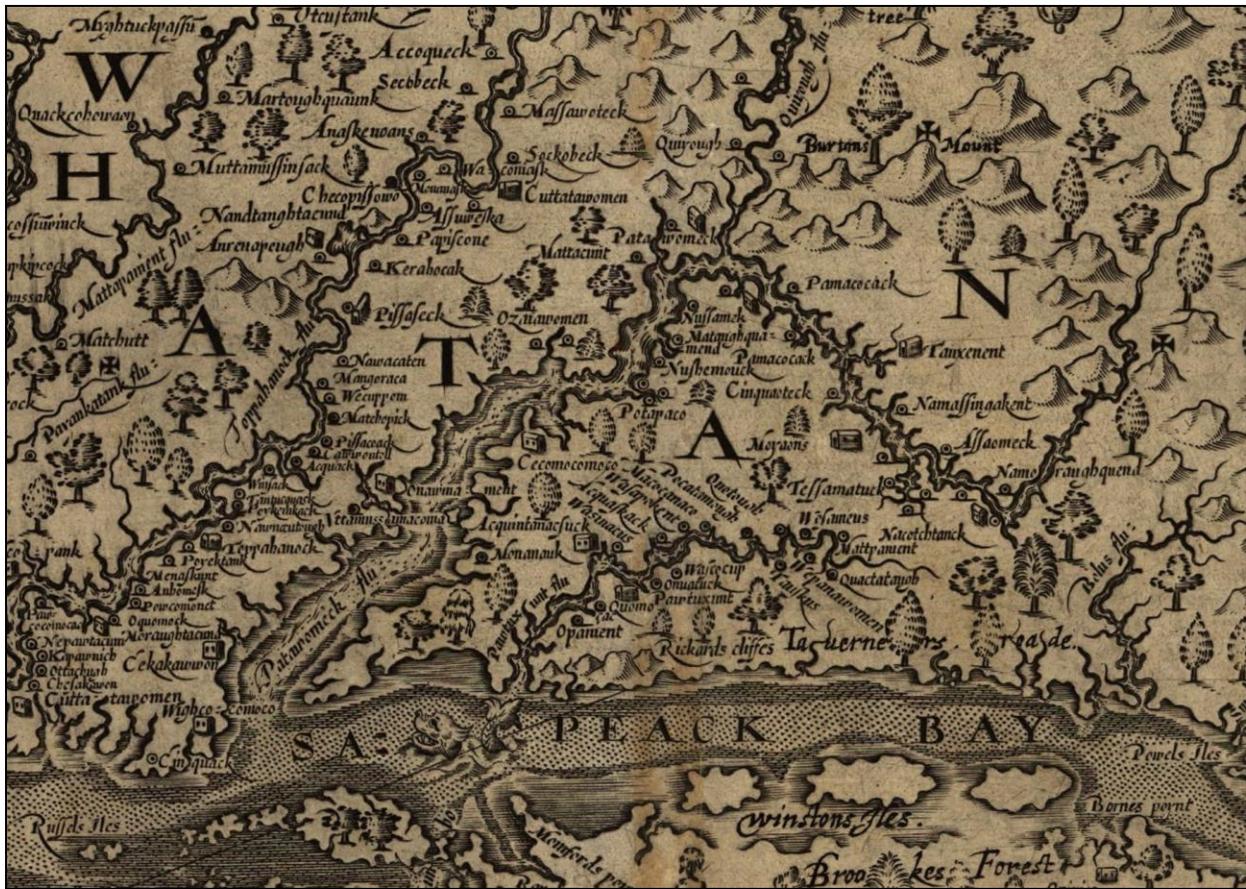


Figure 2. John Smith’s Map of Virginia, 1608 (published 1612), showing the Potomac River drainage.

protect their lucrative trade relationships brought them into conflict with the Piscataway and other groups on the lower western shore (Fausz 1984:11-13; Merrell 1979:552-553).

To the Piscataway’s south, there was Powhatan, paramount chief of a powerful nation, the Patowomeke, a group seemingly independent of Powhatan but nonetheless hostile to the Piscataway, and the fledgling Virginia colony. While Powhatan-Piscataway relations appear to have been “warily friendly,” interaction with the Patowomeke, who were situated on the “fringe” of the Powhatan and Piscataway chiefdoms, vacillated between alliance and hostility (Clark and Rountree 1993). Indeed, the Patowomeke were allied with the Virginia government in 1623 when the colonists sailed up the Potomac and assaulted Piscataway, “putt[ing] many to the swoorde” despite the Piscataway’s previously amicable encounters with Captain John Smith (Kingsbury 1935:450).

Figure 2 depicts Captain Smith’s understanding of the geopolitical realities in the Chesapeake at the time of his exploration, in 1608. His map illustrates the locations of the various settlements and nations hostile to the Piscataway. The pressures on three sides had forced the Piscataway at contact to move their ancient capital of Moyaone on the Potomac River further up Piscataway Creek to a more sheltered location. Threats from Iroquoian groups to the north and the Virginia colony and the Patowomeke to the south would influence the subsequent Piscataway response to Leonard Calvert and the Maryland colonists just a few years later (Merrell 1979:554-555).

#### **D. The Piscataway and the Founding of the Maryland Colony**

In 1634, Leonard Calvert, the appointed governor of the Maryland colony, and a band of Englishmen aboard the *Ark* and the *Dove* sailed up the Potomac to Piscataway to confer with the “emperor,” or tayac, Wannas, before identifying a place to settle. The Piscataway received the English guardedly, with bowmen at the ready. Advised by Henry Fleet, the Indian trader and translator who had previously been held captive by the Anacostin, Calvert asked the tayac where the English could take up land. Wannas’ response to Calvert was “that he would not bid him goe, neither would hee bid him stay, but that he might use his owne discretion” (Hall 1910:72). The tayac’s statement was tactfully strategic; the Piscataway, while still a significant force, could not afford another enemy, given their relations with groups to their north and south. Nonetheless, their previous encounters with the Virginians necessitated extreme caution in attempting to ally themselves with new groups (Merrell 1979:554-555).

Calvert decided it would be best to settle further downriver, purchasing land from the Yaocomico and founding St. Mary’s (see Figure 1). The Yaocomico were at the time planning to vacate their town to remove to another area which would offer greater protection from Susquehannock raids (Hall 1910:74). Governor Calvert and the English came ashore, renamed the settlement St. Mary’s, and erected a fort. They also went about establishing a system of government as set out in the Maryland Charter. Despite accounts of friendly interaction with the Yaocomico and the Patuxents, Maryland-Indian relations generally seem to have been cagey in the colony’s early years. For example, the 1638 Jesuit Letter reports that

...the rulers of this colony have not yet allowed us to dwell among the savages, both on account of the prevailing sicknesses, and also because of the hostile acts which the barbarians commit against the English, they having slain a man from this colony, who was staying among them for the sake of trading, and having also entered into a conspiracy against our whole nation (Hall 1910:119).

Tense relationship with the Indians or not, the English nonetheless continued to trade with the Natives. The same year of the Jesuit account, in 1638, the Maryland Assembly passed a law requiring colonists to obtain a license to trade with the Indians both to prevent price inflation of Indian corn and goods, and to prevent mistrusted individuals from conspiring with the Indians against the Calvert family’s nascent Maryland enterprise (Md. Archives 1:42-44). In addition, the Calvert family enjoyed revenues from the issuance of trade licenses.

By the following year, it appears that Governor Calvert was permitting the Jesuits to minister among the Natives. The 1639 Jesuit Letter describes Father Andrew White as living with the tayac at “the metropolis of Pascatoa” since June of that year (Hall 1910:124). The Jesuit letter also related the conversion of some Patuxent Indians and the Patuxent king’s gift to the Catholics of some land at Mattapany. Some of the converted Patuxents may have been living with the Jesuits at the Mattapany farm (Cissna 1986:139-140); an archaeological survey of a portion of the Mattapany tract located a potentially early, post-Contact settlement that may represent early missionary activity (Chaney 1999). By 1642, there seems to have been a significant population of non-missionary English living or trading near Piscataway. That year, Governor Calvert and the Council commissioned Robert Evelin “to take the charge and Command of all or any the English in or near ab[ou]t Pascatoway, and to leavie train and Muster them” to put the English “in a posture of defence” against the Indians (Md. Archives 3:102).

Historian James Merrell attributes the reduced tension between the Piscataway and the colonists to Kittamaquund who, in 1636, murdered his brother Wannas, the Piscataway tayac, and succeeded him

in the position. A significant contingent of Piscataway did not view Kittamaquund as a lawful ruler because of this fratricide, a reality which may have forced him to look to the English to protect and consolidate his position (Merrell 1979:555-557). In 1638, Governor Calvert referred to Kittamaquund as “my brother,” writing to Lord Baltimore that the tayac “is much your freind [sic] and servant” (Hall 1910:158). It was Kittamaquund who, in 1639, welcomed Father Andrew White, accommodating the missionary in his dwelling. The tayac also converted to Christianity, was baptized in 1640, and accepted a number of practices of the contemporary English lifestyle. In 1642, he sent his daughter, Mary, to live at St. Mary’s with Margaret Brent. Mary Kittamaquund later married Giles Brent, Margaret’s brother (Cissna 1986:140-142; Merrell 1979:555-557).

While it may appear that Kittamaquund eagerly embraced both Christianity and English custom, the picture for the rest of his chiefdom is somewhat blurry. Despite Jesuit reports of having converted a large number to Catholicism (reports which may be accurate), the Piscataway demonstrated considerable cultural continuity in the face of English attempts at “civilizing” them (Merrell 1979; Cissna 1986:142). In 1641, Kittamaquund died and missionary activity was refocused on the Indian town of Portobacco due to raids by the Susquehannock (Hall 1910:136). Before his death, Kittamaquund had conferred the power to select a new Piscataway tayac upon the English, breaking the tradition of matrilineal succession in place for thirteen generations of Piscataway leaders (Md. Archives 2:15; Merrell 1979:559). Subsequent exercise of this power by the English cast them as overseers in the Piscataway selection of a tayac rather than as active selectors. In this role, the English confirmed Kittamaquund’s selection of his daughter as successor. Many Piscataway rejected the new tayac, however, on the basis of improper selection, instead appointing Weghucasso, who the English finally recognized as the proper Piscataway ruler in 1644. This incident illustrates Kittamaquund’s polarizing effect on the Piscataway polity (Cissna 1986:144; Merrell 1979:561).

Because of continued raids and some murders on Kent Island, in 1642, Governor Calvert declared the Susquehannock, Wicomiss, and Nanticoke Indians enemies of Maryland, organizing a militia expedition to retaliate for the raids and issuing orders for the inhabitants of St. Mary’s to protect themselves (Md. Archives 3:106-108, 116-117; Md. Archives 1:196-198). The preponderance of blame went to the Susquehannock, probably due to their ongoing attacks on the English in both Maryland and Virginia (Md. Archives 3:148). These raids may have been exacerbated by Governor Calvert’s 1638 expulsion of William Claiborne, a Susquehannock ally and trader, from his post on Kent Island.

In 1644, the Maryland government received reports from the Piscataway that the Susquehannock were intending to come to Piscataway to treat. The Maryland government, fearing the Susquehannock would attempt to “confederate & unite all the Indians of these p[ar]ts in some generall league or plott for the cutting off of the English,” sent Captain Henry Fleet to Piscataway with a twenty-man militia, giving him power to either treat for peace or assault the Susquehannock, depending on their disposition (Md. Archives 3:148; Cissna 1986:145). An earlier expedition against the Susquehannock was a failure, with the Susquehannock taking several hostages and a number of arms, including two field pieces (Md. Archives 3:148-150; Kent 1984:35). The outcome of Fleet’s meeting with the Susquehannock at Piscataway is unclear but, in 1645, the Calvert family briefly lost control of the Maryland colony at the hands of Parliamentary privateer Richard Ingle. During this period, Claiborne attempted to reestablish his trading post on Kent Island. Not until 1652 was a peace treaty finally concluded with the Susquehannock at the Severn River (Md. Archives 3:277-278).

By early 1647, Leonard Calvert had regained control of Maryland. The 1648 “Act Touching Pagans” reflects continued English reluctance to provide guns and ammunition to the Indians, except at the Governor’s discretion (Cissna 1986:145-146; Md. Archives 1:233). The following year, the “Act Touching Indians” prohibited the transportation of Indians out of the province and also reiterated the

illegality of providing guns “to any Indian borne of Indian Parentage” (Md. Archives 1:250). Cissna (1986:146-147) suggests that this act may signify a significant population of people of mixed English-Indian parentage or of Indians being raised in English communities. Additionally, the “Act Concerning Purchasing Land from the Indians” annulled individual land purchases directly from the Indians (Md. Archives 1:248). All of these legislative actions, taken together, suggest that, as the English moved away from St. Mary’s and began establishing plantations, they were coming into more regular contact with the local Native population. Such acts signify the Maryland government’s attempt to regulate and normalize everyday relationships with the Indians; in other words, to extend colonial law and authority to the indigenous population.

In 1651, a group of some Mattapanian, Wocomocon (Yaocomico), Patuxent, Lamasconson, Kighahnixon, and Choptico Indians requested that some land be set aside for them (Md. Archives 1:329). Although the Choptico are believed to have been under Piscataway jurisdiction, Cissna (1986:148) believes that the joint request “may have partly represented an attempt to break from Piscataway domination and to form a confederacy with those nearest neighbors with whom there was a stronger identity;” he also stresses that the wording of the record suggests that not all members of these groups were involved. The English plan was to essentially establish a 1000-acre reservation at the head of the Wicomico River (probably somewhere between present-day Chaptico and Allen’s Fresh) on proprietary manor land, not only to protect land for the Native population but to civilize and Christianize them as well. They appointed Robert Clark “steward” and authorized him to grant 50-acre parcels to individual Indians and a 200-acre parcel to the werowance, or chief, and to hold court baron and leet (Md. Archives 1:329-331; Cissna 1986:147-149). It is unclear whether this plan ever came to fruition or not.

By 1659, rumors had reached the government at St. Mary’s that the Piscataway tayac, Weghucasso, was terminally ill or already dead (Md. Archives 3:360). The following year, the brother of the new Piscataway tayac, Uttapoinassinem, accompanied by the great men of the Portobac and Nanjemoy, visited then-governor Philip Calvert at St. Mary’s. It was at this meeting that the tayac’s brother related the Piscataway system of tayac succession to the governor (Md. Archives 3:402-403). The 1660 meeting between Governor Calvert and the tayac’s brother had another purpose, however. The Piscataway described how the “Cinigoes,” or Seneca (a catch-all term for the Five Nations Iroquois) had recently killed five Piscataway and threatened their fort for their friendly relations with the English and the Susquehannock, who were then at war with the Seneca. The tayac’s brother also requested the assistance of four Englishmen to help them rebuild and strengthen their fort (Md. Archives 3:403). This is the first mention of hostilities with the Five Nations.

Throughout the 1650s and during the early 1660s, the Five Nations launched several assaults on the Susquehannock, possibly because of Susquehannock willingness to ally with Maryland (Kent 1984:37-40). The Iroquois-Susquehannock warring stemmed from control of the fur trade and incompatible intercolonial alliances (Kent 1984:37-39). In 1661, the Susquehannock strengthened their treaty and military alliance with the Maryland government, and Governor Calvert pledged military support in helping them fortify and resist the Five Nations’ attacks (Md. Archives 3:420-421).

By 1662, the Piscataway tayac Uttapoinassinem had died. As was now the practice, Governor Charles Calvert and the Maryland Council traveled to Portobacco to select a new tayac. At that meeting, the Piscataway made known their preference for Wannsapapin, the son of Wannas,<sup>2</sup> and assured Governor Calvert that they would erect an emperor’s house at Piscataway for when the governor would return and

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<sup>2</sup> Cissna (1986) suggests that the record reflects a misunderstanding and that Wannsapapin was more likely Wannas’ sister’s son, following matrilineal rules of succession.

install the new tayac (Md. Archives 3:453-454). It was another year before Governor Calvert and the Council returned to Piscataway. Also present at the installation of the new tayac were the weroances and great men of Portobac, Mattawoman, and Chingwoatyke. However, instead of Wannsapapin, as expected, the Piscataway presented eleven-year-old Nattowaso, the eldest son of Weghucasso, to be confirmed tayac. The Piscataway described that there were two families from which tayacs were chosen, including that of Wannas and that of Weghucasso, suggesting a contentious factionalism over control of the Piscataway chiefdom (Cissna 1986:151-153; Md. Archives 3:482-483). The Piscataway also asked Calvert to protect the new tayac, which he did by ordering “that they should not presume to wrong him upon any pretence, eyther by poysoning of him, or by other indirect wayes” (Md. Archives 3:482).

By 1664, the Five Nations had begun launching attacks against the English settled along the Maryland frontier, killing some Anne Arundel County residents. Governor Calvert declared war on the Five Nations, offering a reward of 100 arms length of Roanoke to any Indian or Englishman who captured or killed a “Cinigoë” (Md. Archives 3:502-503). Troubles with the Five Nations would continue intermittently for over a decade.

### **E. The Treaties of 1666**

The Maryland government concluded a treaty with the Susquehannock in late June of 1666, during which the Susquehannock related that they had recently lost a number of warriors in skirmishes with the Five Nations Indians near the head of the Patapsco and other rivers. They also described the intention of the Five Nations to storm the Susquehannock Fort in August and, afterward, to attack the English plantations, and the Susquehannock requested military assistance (Md. Archives 3:549-550). Although the profitability of the fur trade was diminished due both to the Five Nations-Susquehannock war and overharvesting of fur-bearing animals, fighting between the Indian groups continued. After successfully repelling a 1663 Seneca attack of their fort, the Susquehannock continued to harass the Iroquois of the Five Nations, assaulting and conquering an Onondaga war party in 1666; anticipation of reprisal likely explains Susquehannock desire to reconfirm their military alliance with Maryland that year (Kent 1984:38-40, 43).

Renewal of the Susquehannock alliance in 1666 was not the only major diplomatic event of that year. A major treaty, which would restructure Indian-English relations, was signed with twelve Indian groups residing in the area claimed by the Calvert family.

Indian complaints of English encroachment were becoming common in the early 1660s as settlement pushed further west and north into what are now Charles and Prince George’s counties (Md. Archives 3:489, 534; Md. Archives 49:139). With the continuing patenting and seating of lands ever deeper in Indian territory, Anglo-Native conflict increased, threatening both the stability of the Calverts’ colonial enterprise and their indispensable alliance with the Piscataway chiefdom. Amelioration of this issue and normalization of English-Indian interaction in the colony were the impetus for the treaty (Cissna 1986:156). This agreement would have an important impact for decades on the events which were to follow and the treaty would continue to be renewed (in amended form) even after the Calverts had lost political control of Maryland.

The treaty also provides insight into the state of Indian affairs within the Maryland colony at this time. Parties to the treaty included the Piscataway, Anacostin (Nacotchtanke), Doeg, Mikikiwoman, Masquestend, Mattawoman, Chingwateick, Nanjemoy, Portobacos, Sacayo, Pangayo, and Choptico. There are only seven signers, however, for all twelve groups. Analysis of the signatory groups suggests that the Piscataway and the Sacayo, sharing two signers, were fully united, as were the Chingwateick and

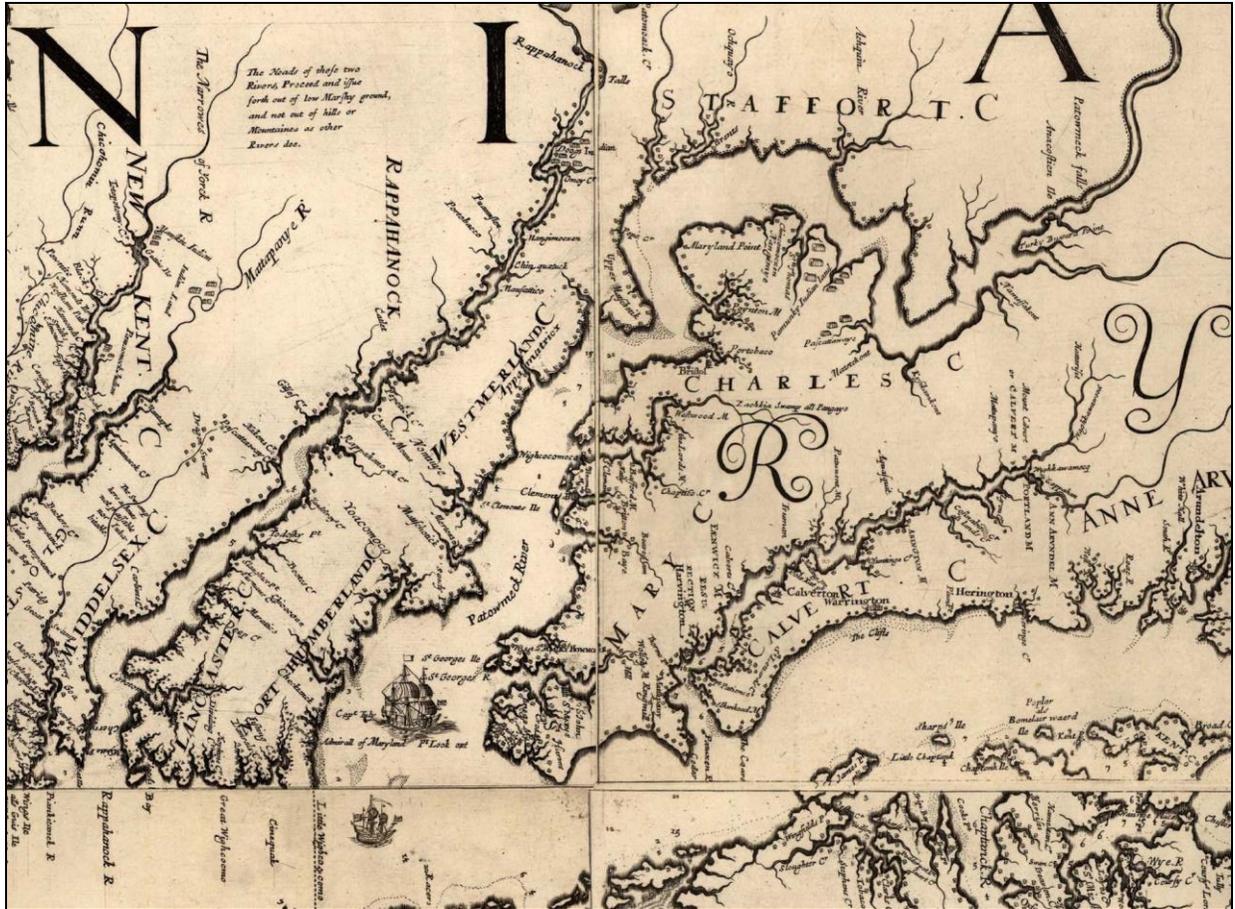
Pangayo. The Anacostin, Portobaco, Doeg, Mikikiwoman, Masquestend, and Choptico, having no one sign for them, may have been subsumed by one of the other signatory groups (Cissna 1986:157-158).

As part of the treaty negotiations, the speeches of some Indian representatives to the Assembly's Upper House (or Council) are preserved in the Maryland record. On April 12, 1666, three speakers appeared before the House: Mattagund (speaking for the Anacostin, Doeg, and Patuxent), Choatick, and Isapatawn ("for the King of Nan[jemoy]'s son"). It is possible that Choatick, who spoke before the Upper House, was the same individual as Choticke, "Counciller" for the Chingwateick and Pangayo and signer of the treaty. Mattagund addressed the Upper House by stating that "Your hogs & Cattle injure Us You come too near Us to live & drive Us from place to place We can fly no farther let us know where to live & how to be secured for the future from the Hogs & Cattle." Mattagund's speech also makes reference to "all the other Towns here," lending credence to Cissna's theory that many of the groups were not distinct "sub-tribes," but instead groups subsumed by others, possibly seasonally occupied towns of the larger groups (Md. Archives 2:14-15).

Three articles of the treaty are of special significance for this discussion. The first article formally acknowledges the governor's power to select new tayacs and also states that the tayac Nattowasso, who had taken his father's name of Weghucasso, had died and a new tayac would be appointed. As Choatick conceded in his speech, the Piscataway "own [up to] the Power that Kittamagund gave to the English to choose the Emperour of Piscataway & Submitt to it" (Md. Archives 2:15). This article (along with several others) formally subjected the Piscataway to English authority (Cissna 1986:159). The treaty's fifth article affirmed "That in Case of Danger the Governr shall appoint a place to which the Indians of the aforesaid Nacons shall bring their wives & children to be secured from danger of any forreign Indians..." (Md. Archives 2:26). Choatick's speech indicated that some Indians desired this clause of the treaty based on fears of Five Nations raids (Md. Archives 2:15).

And, finally, the tenth article made provision for the governor to establish a reservation "within which bounds it shall not be lawfull for the s<sup>d</sup> nacons to entertayne any forreign Indians whatsoever to live with them without leave from the Lord Prop<sup>r</sup> or his cheife Governor" (Md. Archives 2:26). The intention was to formally create a place where the allied Indians could expect some relief from English settlers. Two years later, in 1668, the Council ordered that no English were to take up land between the head of Mattawoman and Piscataway creeks; the reservation was formally surveyed the following year (Md. Archives 5:34; Marye 1935:239-240).

The treaty also required the Indians to agree to its terms or be declared enemies of Maryland and denied them the ability to wage war or negotiate peace without English oversight (Cissna 1986:163). Such oppressive terms may have been unacceptable to some groups, instigating a significant Indian flight from the colony. A 1669 Virginia census reveals the presence of an estimated 240 "Potopaco" in the vicinity of the Rappahannock River, likely emigrants from Maryland (Cissna 1986:164). Augustine Herrman's Map of Virginia and Maryland, completed in 1670 and published in 1673, shows the Potobac settled on the south side of the Rappahannock River, near the Nanzattico (Figure 3). If Cissna (1986:152) is correct in his assertion that the Chingwateick are the same as the "Cinquateck" on the John Smith map (see Figure 2), then it is possible that this group may have also fled Maryland with the Potobac, as there is a group called the "Chinquatuck" on the north shore of the Rappahannock near the Potobac. The Herrman map also shows the Doeg as having moved to Virginia by this time. It seems that the treaty also pushed the Anacostin further north, away from Maryland settlement, and they may have been living on Anacostin Island in the Potomac, as indicated by the Herrman map (see Figure 3) (Cissna 1990:30-31; Cissna 1986:178).



**Figure 3.** Augustine Herrman’s Map of Maryland and Virginia, 1670 (published 1673) showing the Potomac River.

By 1670, the Piscataway desired to “revive the League” with Maryland, telling the English that they were “now reduced to a small Number” (Md. Archives 5:65). Perhaps many Piscataway, like many other Maryland Indians, had fled to escape the heavy-handed terms of coexistence with the Maryland English (Cissna 1986:164-165). Others may have assimilated into English society, and Ferguson and Ferguson (1960:28-29) claim that some Piscataway had joined the Susquehannock. The records along with archaeological evidence are also clear that the Piscataway “now reduced” remained an organized nation based at Moyaone (Ferguson and Stewart 1940).

Just as many of his colonists were expanding beyond the original settlement at St. Mary’s, Governor Charles Calvert had, in 1666, moved his principal residence to Mattapany, his wife’s plantation on the Patuxent River approximately eight miles north of the colonial capital. On behalf of his father, Cecil Calvert, the second Lord Baltimore and the Maryland proprietor, Charles was also working to secure the bounds of a number of proprietary manors located across the colony. One of these manors was at Zekiah, an 8,800-acre tract abutting Zekiah Swamp southeast of present-day Waldorf. Zekiah Manor was originally laid out in 1667 but not at first developed. After some prodding by his father, however, Charles built a house at Zekiah Manor which he planned to use during the summer. The house, which was almost certainly of earthfast or post construction, was used only occasionally during this period (Maryland Historical Society 1889:284-285; King and Strickland 2009a:44-47).

Meanwhile, warfare continued between the Susquehannock and the Five Nations and, by the early 1670s, the continued fighting coupled with European diseases had taken their toll on both groups. There is some debate among scholars as to what compelled the Susquehannock to move into Maryland in 1675. The popular view maintains that the Susquehannock were defeated by the Five Nations Iroquois in 1673 or 1674, forcing them to remove to Maryland (Kent 1984:46-47; Semmes 1937:519-520). Historian Francis Jennings (1968:31-34) contends, however, that the Susquehannock move to Maryland can be explained as political maneuvering by Governor Charles Calvert to clear the way for peace with the Five Nations Iroquois in a larger scheme to claim the Dutch colony on Delaware Bay.

Whatever prompted the move, the Assembly reluctantly appointed a spot for the Susquehannock above the falls of the Potomac, hypothetically distant enough from English settlement to prevent conflict (Md. Archives 2:429-430). Despite Susquehannock agreement to remove to above the falls, however, the Indians instead moved to an abandoned fort on Piscataway Creek (Kent 1984:47; Ferguson 1941). It is unclear why they settled at this spot, although Thomas Mathews' 1705 account of Bacon's Rebellion seems to suggest that they may have sought protection under the Piscataway (Andrews 1915:18).

During the summer of 1675, a party of Doegs took some hogs from Thomas Mathews of Virginia, claiming he owed them for goods they had previously delivered. A group of Virginians pursued the Indians, eventually beating and killing them and recovering the hogs. This prompted Doeg retaliation against Mathews, and the Indians killed his son and two servants. Colonel George Mason and Captain George Brent led a posse of 30 Virginians into Maryland and to the Susquehannock Fort in pursuit of the Indians and, at daybreak the following morning, surrounded two cabins. The Doeg chief denied knowledge of the incident and when he attempted to leave, Captain Brent shot and killed him. In response, the Doeg fired a couple of shots from the cabin, prompting the English to open fire, killing ten Indians as they tried to flee. Brent's troops also took the Doeg king's eight-year-old son captive. The commotion wakened the Indians in the other cabin, who also attempted to flee. Colonel Mason and his troops indiscriminately massacred fourteen Indians of this cabin before realizing they were not Doeg, but Susquehannock allies (Andrews 1915:16-18, 105-106; Jennings 1984:145-146; Cissna 1986:167-168).

Mason and Brent's actions resulted in war with the Susquehannock, who launched a few retaliatory raids before the Virginia and Maryland governments besieged them at the fort on Piscataway Creek (Semmes 1937:522). The Virginia government appointed Colonel John Washington and Major Isaac Allerton to lead a militia of several hundred men to demand satisfaction from the Susquehannock. Virginia authorities also requested assistance in the endeavor from Maryland (Semmes 1937:522-523). The Maryland government complied, putting Major Thomas Truman in charge of two hundred fifty dragoons and ordering that "the said Indians be forthwith forced off from the place they now are and remove themselves to the place they assured the last Assembly they would goe and seate themselves" (Md. Archives 15:49).

During the siege, the Susquehannock sent out five great men to parley with the English. During the conference, the Susquehannock blamed the Seneca for the recent raids on English plantations and stated a desire for peace, producing the articles of peace and a medal given to them by the Maryland government following the 1652 treaty (Md. Archives 2:481-482). The Susquehannock leaders, who gave no provocation, were then murdered by the English commanders. The Virginia and Maryland accounts each blame the other colony's leaders for these actions, although Major Truman was the only one to suffer any consequences, being fined and impeached from the Maryland Council for his role in the slaughter (Andrews 1915:19, 106; Jennings 1984:146; Md. Archives 2:481-483, 485-486; Tyler 1893:38-43). The siege continued for six weeks after this incident. The enraged Susquehannock launched several assaults on the English, killing 50 and taking several horses (Andrews 1915:19, 106). Finally, the remaining Susquehannock escaped the siege during the night and proceeded to retaliate, massacring and

raiding the frontier English plantations, primarily in Virginia. When Governor Berkeley rejected their peace overtures, their raids on the Virginia frontier continued, precipitating Bacon's Rebellion in 1676 (Semmes 1937:531-533).

During this time, the Piscataway and the Mattawoman were squarely allied with the English forces in besieging the Susquehannock fort. In November 1675, the chief of the Mattawoman and some Piscataway Indians appeared before the Council at St. Mary's to collect compensation for their participation in the siege. Considering the chief of the Mattawoman's action in coming "to Major Truman Voluntarily and offer[ing] all his men to Serve us against the Susquehannocks...for that he continued all the time of the Warr with the English and in the pursuite of the Enemy," the Council rewarded him with twelve matchcoats, or the equivalent value of three hundred arms-lengths of roanoke (this is a value three times that traditionally given as satisfaction for the murder of an Indian by an Englishman). Individual Piscataway and Mattawoman Indians were also presented with four matchcoats for each Susquehannock prisoner they captured during the conflict (Md. Archives 15:57-58). Anticipating Susquehannock retribution, the Mattawoman king requested liberty to erect a fort for the security of his people (Md. Archives 15:58). Additionally, Maryland deputy governor Thomas Notley, in the postscript of a January 1676 letter, wrote of granting license to one Colonel Spencer of Virginia<sup>3</sup> to treat with the Mattawoman for assistance in fighting the Indians, probably the Susquehannock, then terrorizing the Virginia frontier (Md. Archives 5:154).

Piscataway and Mattawoman participation in the siege of the Susquehannock fort would have severe consequences in the following years. The Indians fully realized the potential consequences of their role in these events, and the Piscataway tayac and Mattawoman chief both objected to peace with the Susquehannock, hoping instead to fully eliminate any future threat from the group (Jennings 1984:151). As their speaker Chotike told the Maryland Council in August 1676, "they were ready" to march with the English against the Susquehannock (Md. Archives 15:126). The English were also providing military protection to the Piscataway and Mattawoman during this time, as Captain John Allen was assigned to help guard the Mattawoman fort, and rangers began ranging between the head of Piscataway Creek and Patuxent River (Md. Archives 15:92, 102).

By this time, Governor Andros of New York had brokered a peace between the Susquehannock and the Five Nations Iroquois. Following a February 1677 conference at Shackamaxon, many Susquehannock were absorbed among the Iroquoian nations, while some remained with their old allies, the Delaware. Jennings (1984:149-156) argues that these negotiations reveal the political manipulations between the colonial governments of Maryland and New York and the various Indian nations during these years. According to Jennings, Maryland's continued desire to claim lands on the Delaware Bay (now controlled by Governor Andros of New York) was the major factor preventing a Maryland-Susquehannock peace agreement. With enemy Susquehannock living among the Delaware, Maryland had an excuse to march into and gain a foothold on the disputed lands. Jennings used this to explain Andros' urgency in seeking a Susquehannock-Iroquois alliance. Since Maryland was still technically in a state of war with the Five Nations, this alliance would give the Iroquois a renewed excuse to attack Maryland if the colony marched against the Susquehannock while also eliminating Maryland's Susquehannock buffer, thus leaving the colony's frontier exposed to potentially devastating Iroquoian raids (Jennings 1984:149-156; Kent 1984:53-56).

Maryland deputy governor Thomas Notley had long realized the advantages of peace with the Five Nations, but the Iroquois' new union with the Susquehannock remnants made peace a necessity.

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<sup>3</sup> Probably Nicholas Spencer of Nomini Creek in Westmoreland County.

Finally, in May 1677, Governor Notley and the Maryland Council dispatched councilor Henry Coursey to Albany, New York, to negotiate a peace treaty with the Five Nations (Md. Archives 15:149). With New York Governor Andros acting as a middleman, a conference was arranged between the Five Nations and the Maryland envoy and a peace concluded that summer (Leder 1956:42-48). Jennings (1984:162-164) argues, however, that the articles negotiated by Coursey were flawed and that the treaty had legal loopholes which provided the Susquehannock and the Five Nations a basis for major revenge-seeking raids against the Piscataway and Mattawoman in subsequent years, despite Coursey's inclusion of them in the treaty.

Among the issues Jennings describes was Coursey's misunderstanding of the state of the Susquehannock. Despite Susquehannock diaspora and "adoption" by the Five Nations, the group maintained a distinct identity within the Iroquois. Coursey, however, thought that the Iroquois were to take responsibility for Susquehannock actions, while, from the Five Nations' perspective, the Susquehannock were free to avenge themselves as non-party to the treaty. As an Indian informant told the Maryland Council just prior to the commencement of the raids that would force the Piscataway into the Zekiah, "the Susq[uehannock] laugh and jeare at the English saying they cann doe what mischief they please for that the English cannot see them" (Jennings 1984:164; Md. Archives 15:239).

During Coursey's 1677 negotiations with the Five Nations, the Oneida admitted that a war party was already on its way to attack the Piscataway, although it is unclear whether a 1677 assault ever took place (Leder 1956:45). During this time, Charles Calvert, who had been in Maryland as governor, had returned to England following the death of his father, Cecil, in November 1675. Calvert left his son, who was just a boy, as acting governor but appointed deputies to handle governance. The first deputy governor, Jesse Wharton, a son-in-law of Calvert's, died shortly into his term. Thomas Notley, a Protestant who had become a close friend of Calvert's, was appointed to replace Wharton. When Charles returned to Maryland in late 1678 or early 1679, he resumed his position as governor. But now, Charles had inherited the title of Lord Baltimore from his father and, along with it, the proprietorship of Maryland.

Following the murder of an English family in Anne Arundel County in August 1678 allegedly by a Piscataway great man named Wassetass, the Maryland Council summoned the Piscataway tayac and great men to Manahowick's Neck, deputy governor Thomas Notley's plantation on the Wicomico River in St. Mary's County (Md. Archives 15:232; Cissna 1986:170). This murder resulted in increased ranger patrols in the northern part of Charles County led by Captain Randolph Brandt (Md. Archives 15:186-187). The meeting at Manahowick's Neck was not just to acquaint the tayac with Wassetass' role in the murder and demand justice, but also "to hold a Matchacomico of Ours and their great men together to consult & advise upon some Expedient to be taken for Our Defence against the Invasion & assaults of fforreigne Indians" (Md. Archives 15:179-180).

During the conference, the Piscataway tayac informed the governor and council that some of his Indians had recently been killed by Susquehannock or "northern Indians." Notley assured them that he would dispatch an envoy to Albany "to speake with the greate men of the Sinnequos to know of them what their designe was whither they resolved to hold their Articles with us amongst w<sup>ch</sup> One was that they should hold peace with the Piscattoways & to continue their League" (Md. Archives 15:183).

The following March, the Council received information that "there is an Indian lately come to the Pascattoway ffort from the Sinniquas." James Smallwood of Charles County was sent to the Piscataway fort on Piscataway Creek to request the Seneca Indian to attend the next Council meeting and acquaint the governor with the "present posture and condition" of the northern Indians. The Council also decided at this meeting to spare the Piscataway great man Wassetass, although his two associates were executed for

the murders. The Piscataway had much protested the execution of Wassetass, at first claiming he was dead and then refusing to deliver him to the English authorities (Md. Archives 15:232, 237).

The meeting at Notley's plantation between the Council and the Piscataway prisoner who had returned from the northern Indians reveals a great deal of information regarding the status of the Iroquois. The returning Piscataway had possibly been taken during earlier raids as a part of the Iroquoian "mourning wars" and incorporated into Iroquoian society; he described his intention to return in ten days time to live again among the Iroquois. He informed the governor and council that there were several Iroquoian towns "and a great many Indians but all peaceable and quiett excepting onely those two Townes among w<sup>ch</sup> the Susq[uehannock]s had Divided themselves" (Md. Archives 15:238-239). These two towns were among two of the Five Nations and, as the Piscataway described, the rest of the Iroquois nations sent him with a message that it was these two nations that were responsible for the recent raids. They warned that these two nations would likely continue their mischief against the Piscataway and English, but the rest of the nations desired to continue in peace (Md. Archives 15:239).

The Piscataway continued that the Iroquois nations also "seeme to blame the English very much for letting soe many of the Susq[uehannock] escape as there did for that they are of such a turbulent bloody mind that they will never cease Doeing mischiefe both to the English & Pascattoway Indians soe long as a man of them is left alive" (Md. Archives 15:239). Apparently it was at Susquehannock urging and instigation that the two other Iroquoian nations were driven to acquiescence in the raids. When the Council asked if the Susquehannock were planning to raid the Piscataway and English soon, the Indian described that another escaped Piscataway prisoner had related to him the speech of a Susquehannock great man. He said "that he was pretty well Satisfied with the Revenge he had taken of the Virginians by the help and assistance of those Indians And now did intend to fall upon the Pascattoway Indians and the English in Maryland for that he had Done little or nothing there yett but resolved now to Doe what mischiefe he could to them" (Md. Archives 15:240). The Indian also noted that a "considerable" war party was organizing and that a Susquehannock great man had murdered some Maryland English, and the Piscataway recieved the blame, possibly referring to the murder in Anne Arundel County in which Wassetass was implicated. At the conclusion of the meeting, the Council sent the returning Indian with a belt of peake (shell beads) for the leaders of the Five Nations Iroquois as a reminder of their friendship and to hopefully force them to keep the Susquehannock in check.

It was at this conference that the Piscataway requested powder and shot from the Governor and Council, reporting that they were "Daily expecting their Enemy to fall upon them and that unless his L<sup>spp</sup>: will please to furnish them for their Defence they must be forced to fall to making of Bows and arrows wherein for want of practice they have not that experience as formerly" (Md. Archives 15:242). The Piscataway already possessed guns, including arms they may have previously received from the Maryland authorities. Subsequent references to Indian use of bows and arrows as well as archaeological evidence, however, suggest that the Indians had not abandoned their traditional technology. Piscataway anticipation of the northern Indians proved well-founded and, by July 1679, there were reports of several Indians "lurking about the Plantations" in Baltimore County (Md. Archives 15:251).

That same month, the Piscataway asked the Choptico to supply them with twenty men to help them "in Conducting back an Anacostin Indian that lately came from the Sinnequos." The Choptico initially refused until Lord Baltimore granted them leave to do so. Prompted by the Indians, Calvert ordered seven Mattawoman and three Nanjemoy to accompany the twenty Choptico in escorting the Anacostin (Md. Archives 15:251-253). This exchange implies that the Choptico viewed the English governor as a greater authority than the Piscataway tayac. Additionally, it is possible (and likely) that the Anacostin was the Indian who previously appeared before the Council at Governor Notley's home and provided the English with the information on the northern Indians.

The Piscataway were understandably anxious about their security and made their feelings known to Lord Baltimore. In February 1680, Calvert and the Council ordered Colonel Benjamin Rozer, a son-in-law of Lord Baltimore, to meet with the Indians to discuss their defense. The group was of the opinion that “all the neighbouring Indians unite themselves to One place, and that Pascattoway is the most Convenient place for that purpose” (Md. Archives 15:274). The Piscataway must have wanted to meet with Calvert and the Council in person because, on 31 March 1680, both groups again met at former deputy governor Notley’s home at Manahowick’s Neck on the Wicomico River (Notley was dead by this time, having willed his plantation to Calvert). The Piscataway tayac and great men informed the Council of their urgent desire to make peace with the northern Indians and Susquehannock.

Although Coursey may have thought he was doing just that in 1677, Jennings suggests that the Maryland councilor’s ignorance of the Five Nations’ Covenant Chain, which did not recognize Maryland’s ability to negotiate peace on behalf of other Indian nations, made at least part of his negotiations meaningless. Instead, individual nations desiring peace were required to appear in Iroquoia representing themselves. The Piscataway informed the Council of their intention to send some agents with some prepared presents to the Mattwass (Delaware) Indians to cultivate their assistance in arranging a peace with the Five Nations. Their purpose in requesting the meeting was they first wanted to “acquaint his L<sup>spp</sup> with their designs before they made any progress therein, pursuant whereunto they had now made their Addresses to his L<sup>spp</sup>: desiring his Consent” (Md. Archives 15:278). Either the Piscataway took seriously their tributary status to the proprietor or they were trying to manipulate his assistance in their defense during this period.

Piscataway peace overtures to the various groups of northern Indians must have been fruitless. In May 1680, Lord Baltimore received a letter from William Chandler of Charles County describing an urgent situation. According to Chandler, two to three hundred Susquehannock and Iroquoians had constructed a fort just five hundred yards from the Piscataway fort on Piscataway Creek (Md. Archives 15:280-281). Chandler also reported that the Piscataway desired English assistance. In response, Baltimore and the Council ordered Captain Randolph Brandt and a troop of twenty men to investigate the veracity of Chandler’s account and discover the intentions of the northern Indians (Md. Archives 15:281-282).

Brandt, after meeting with the Piscataway, relayed to Baltimore and the Council at St. Mary’s that the estimated two hundred northern Indians had several times opened fire on the Piscataway fort and killed several horses. The Piscataway told Brandt that they had managed to arrange a conference with the northern Indians and when they offered a present for peace, the Susquehannock responded that “they would have revenge for their greate men killed the late warr and that they expected to have their Indians taken by [the English] to be restored.” Prior to Brandt’s arrival, however, the northern Indians had left, although the Piscataway “expect them daily with a much greater number” (Md. Archives 15:283).

Anticipating a large-scale attack, the Piscataway requested more gunpowder from the English, having expended much of what they had in the recent fighting. More importantly, they acquainted Brandt of their desire to “remooove from thence downe to Mattawoman or where your L<sup>spp</sup>: shall appoint for there they will not stay [at Piscataway Creek].” This request referred to one of the articles of the 1666 treaty: that Baltimore would appoint a place for the Piscataway to move in the event of attack (Md. Archives 15:283-284).

Baltimore at first appointed Nanticoke River, on the Eastern Shore, as the place to which the Piscataway should go, stating that the Nanticoke had invited the Piscataway to cohabit with them. Baltimore also offered to supply them with “some small store of powd<sup>r</sup> & shott w<sup>ch</sup> they requested” if the

Piscataway changed their minds and decided to stay and make a defensive stand at the fort on Piscataway Creek (Md. Archives 15:284-285).

Once Brandt received these instructions from Lord Baltimore, he acquainted the tayac and great men with plans to remove the Piscataway to the Nanticoke River. According to Brandt, the Piscataway were “very ready and willing to remove thither or any where your L<sup>spp</sup> shall appoint.” Brandt also reported that “they also Offer if y<sup>r</sup> L<sup>spp</sup> will ord<sup>r</sup> the neighbouring Indians (viz) Mattawomans, Chopticos &c: up to Piscattoway they will keepe their ground & maintaine their ffort against their Enemies, or otherwise if y<sup>r</sup> L<sup>spp</sup> will appoint a small party of English to be at their ffort for the security of their wives and Children they shall then bee encouraged to stay and make Corne” (Md. Archives 15:286).

Also at this time, on 13 May 1680, a letter received by the governor described plundering by the northern Indians in Anne Arundel County at the head of South River. Three Indians approached an Englishman near his house, asking (in English) for some bread and identifying themselves as “Senneca.” When the man went to retrieve the food as requested, the Indian called and seventeen painted Indians appeared. The Indian who originally approached the man began speaking “in the Pascattoway tongue to the s<sup>d</sup> Thomas and bid him not be afraid.” The group proceeded to pillage the man’s home, taking all they could, including the clothes he, his family, and servants were wearing. They did not, however, physically harm the man (Md. Archives 15:286). That the first Indian to approach spoke both English and Piscataway, yet identified himself as a Seneca, is of interest. Was this a tri-lingual northern Indian or a captive or deserter Piscataway now living among the Iroquois?

Shortly after this incident, the Council learned of another Indian raid in Baltimore County taking place on 19 May at the home of Thomas Richardson. Both Richardson and Captain John Waterton sent reports of the incident to Lord Baltimore. By Richardson’s account, a group of painted Indians attempted to enter his house, but fled when he shot one of them (Md. Archives 15:306). In their retreat, he says, they left “a gunn and a sword, and a Bow and arrows” (Md. Archives 15:293). Lord Baltimore sent instructions to Richardson to keep the gun, arrows, and sword so that they may be used to determine what group of Indians they were (Md. Archives 15:308). These incidents, in Anne Arundel and Baltimore counties, led to a mobilization of defenses in the two counties.

By late May, Baltimore was having second thoughts about allowing the Piscataway to remain at their fort, concluding that “if all the Choptico Indians and the Mattawomans were at Pascattoway with the Emperor they are not able to fight the Sinniquos & Susquehannoghs who are above One Thousand men” (Md. Archives 15:287). He also notified the Piscataway tayac that any depredations caused by the Northern Indians in Virginia would likely be blamed by that colony on the Piscataway. For these reasons, then, Baltimore thought it best that the Piscataway warriors move with the women and children to Nanticoke, and the proprietor offered to provide sloops for their transport. Additionally, James Smallwood was appointed post for Charles County and was charged with conveying all “public intelligence” to the Council (Md. Archives 15:288). The treaty of 1666, confirmed again in 1670, was also re-entered into the record at this time (Md. Archives 15:289-292).

At a meeting held on 1 June 1680, the Council received a report from Captain Brandt indicating that the Mattawoman refused to move from their fort and planned to stay and defend it for as long as possible and “when they can hold out noe longer, they will thrust themselves amongst the English.” The Mattawoman had told Brandt that “they are become Enemies to the Susquehannohs and all other Indians through our meanes and for that reason will not leave us” (Md. Archives 15:299). The Mattawoman also acquainted Brandt with the brutal murder of an Indian possibly by a Virginian. Brandt’s message to Baltimore indicated that the Piscataway leadership was still conferring with its people over removal to Nanticoke, an indication of a strong sentiment against the move. The Mattawoman chief informed Brandt

that “the Eastern Shore Indians are as much their Enemies as the Susquehannohs occasioned by their goeing w<sup>th</sup> us against the Nantecokes about two yeares since.” Perhaps more compelling, the Mattawoman chief “alsoe alleadged by their goeing thither [to the Eastern Shore] they should be dispossessed of their Lands” (Md. Archives 15:300).

Captain Brandt’s letter, which was written over the course of several days and is documented as a sequence of several messages, indicates that he had also received information from the upper plantations near Piscataway Creek that the Piscataway had possibly by this time (29 May 1680) abandoned the fort there, perhaps prompted by the presence of “foreign Indians.” A burial was discovered in the late 1800s near Farmington, south of Piscataway Creek and east of both Moyaone and the possible location of the later Piscataway fort; this burial contained English coins dating to 1679 and 1680. Archaeologists have suggested that this may represent a burial just prior to the Piscataway removal from Piscataway Creek to the Zekiah (Curry 1999:38).

By the end of Brandt’s communication, he had finally received a response from the Piscataway. Contrary to the previous statements of their leaders that they would be amenable to removing to the Eastern Shore, the Piscataway now told Brandt that they “are not willing to remoove to the Eastern Shore, but will rather goe for Chopticoe if with yor Lspps Likeing they taske us about the last Articles of peace” (Md. Archives 15:300).

In another letter, this one dated 8 June 1680, Brandt informed Baltimore that he had received word that the Susquehannock and northern Indians had returned and killed seven Piscataway. In his correspondence, Brandt noted that, although the Piscataway were “very Desirous” to move to Choptico, “the Indians are willing to remoove either to Mattawoman Choptico or Zachaiah as your Lspp shall appoint” (Md. Archives 15:302-303). After additional consideration, Baltimore and his Council concluded that Zekiah was the best option for the Piscataway.

## **F. Zekiah Fort**

Much of the documentary evidence pertaining to Zekiah Fort survives in the form of correspondence between Governor Calvert (Lord Baltimore) and his agents in Charles County, namely ranger Captain Randolph Brandt and militia Colonel William Chandler. Baltimore remained at his plantation in Calvert County or at other residences in St. Mary’s County during the major events at Zekiah and is not presumed to have visited the fort. Much of the information about the events taking place at the fort is based on secondhand accounts as reported by Baltimore’s agents.

The Piscataway had rejected Baltimore’s first choice of Nanticoke, on Maryland’s Eastern Shore, as a place of refuge, instead providing the governor with three locations to which they were willing to move: Mattawoman, Choptico, or Zekiah. The Mattawoman chief explained that the rejection of Nanticoke was based on fears of English seating of their lands as well as animosity between the two Native groups. If these were the same reasons the Piscataway refused to go to Nanticoke, it is unclear why Piscataway representatives originally found the idea agreeable. Perhaps Nanticoke hostility was directed only toward the Mattawoman, in which case, fear of losing their ancestral lands may have been the primary motive behind Piscataway refusal to relocate to the Eastern Shore. The three places they were willing to move to were centers of other Indian populations: the Mattawoman, Choptico, and Sacayo, respectively. These choices likely indicate Piscataway desire to boost their numbers with allied/tributary populations and hence increase their forces in the event of attack.

Whatever the cause of the refusal to go to Nanticoke, the Council convened at Lord Baltimore’s house at Mattapany on the Patuxent River on 9 June 1680 to weigh the options given to them by the

Piscataway. Upon consideration, the Council, with Baltimore's blessing, concluded "that Zachaia is the most proper place for the said Indians at p<sup>r</sup>esent to remoove themselves their wives and Children to untill such time as his L<sup>supp</sup> can come to some treaty with the Senniquos and Susquehannohs" (Md. Archives 15:303). In a commission from Baltimore, Captain Brandt was instructed to inform the Piscataway of the Council's decision, giving them leave to "remoove to Zachaia and there to seate themselves und<sup>r</sup> such ffortifications as they shall think fitt to Erect for their Safe guard and Defence." Baltimore also instructed Brandt to advise the Piscataway regarding the fort on Piscataway Creek that "it will be but discretion in them to Demolish it and not suffer it to stand for the Enemy to Enter" (Md. Archives 15:304).

On 29 June 1680, the Council had received intelligence from Colonel George Wells in Baltimore County that a sizable contingent of Susquehannock and northern Indian troops were determined to make a major assault on the Piscataway in either July or August. The Council appointed Jacob Young, a translator, to attempt to confer with the said Indians and discourage them from the attack (Md. Archives 15:310). The war parties of northern Indians which had previously attacked the Piscataway evidently remained in the area, however. In a letter written 28 June 1680, Captain Brandt reported that the Piscataway had been daily sending out scouts, and these scouts had recently "discovered the Enemy," presumably a northern Indian encampment. By Brandt's account, the Piscataway were concerned that the enemy would attack before construction of the Zekiah Fort was completed (Md. Archives 15:313). Brandt also informed Baltimore that the Mattawoman, who had remained in their own fort and were now especially exposed given the abandonment of the Piscataway fort on Piscataway Creek, requested some English arms for their defense. Lord Baltimore complied with their request (Md. Archives 15:313-314).

At this point, the historical record goes silent for several months. It is unclear whether the predicted July/August assault occurred or not, but if such an assault had occurred, it seems likely that it would have been mentioned in Council proceedings. Instead, not until the following February does discussion of the Indian situation resume in the Council. On 19 February 1681, Baltimore informed the Council that some Piscataway great men had recently met with him and notified him of their distressed condition. As the Mattawoman chief had earlier indicated, so too did the Piscataway great men attribute their present troubles squarely to their friendship and assistance with the English in the siege of the Susquehannock fort in 1675.

The Piscataway also pointed to the fact that the Mattawoman fort had been recently attacked (in early January) and that "most of the Mattawoman Indians had been lately Surprised and cutt of[f] [killed] by the Susquehannohs" (Md. Archives 15: 329). Indeed, an attack in January was an unusual event for any Indian or English nation, both sides typically avoiding the disadvantage conferred by wintry weather. Fearing an attack on the Zekiah Fort and anticipating the time "when it may be their owne turne being already at that passe that they dare not venture out of their ffort to plant their Corne for their sustenance," the Piscataway requested from Baltimore a supply of corn (Md. Archives 15:329-330). Given that the Piscataway, when they moved to Zekiah in late June 1680, had likely abandoned their corn fields around Piscataway Creek, their need for corn in February was probably no exaggeration.

With news of the massacre at the Mattawoman fort, the Council realized they needed to assist the Indians per the 1666 treaty. The Council suggested that the Choptico, Nanjemoy, and remnant Mattawoman join the Piscataway at Zekiah Fort, "being the most proper place and secure way for to Defend themselves from their Enemie, and where they may be most capable of receiveing aid and assistance from the English." If these groups did not wish to go to Zekiah, Baltimore and the Council directed them instead to Nanjemoy, placing them on the Charles County frontier (and not in Choptico, presumably nearer English plantations). The Council also agreed to send the Indians thirty pounds of powder and sixty pounds of shot, implying the Indians already had guns. They further promised twenty barrels of corn (Md. Archives 15:330). Finally, the Maryland government, began to organize and

mobilize its own military forces, appointing Edmund Dennis “Marshall of all our Military forces both horse and foote” for Charles County (Md. Archives 15:333-334).

About a month later, at a meeting at St. Mary’s City on 16 April 1681, Lord Baltimore informed the Council that he had met four days earlier (12 April) with the chiefs (“kings”) of Mattawoman and Choptico at Manahowick’s Neck, the former home of the late Governor Thomas Notley on the Wicomico River and now the residence of Baltimore’s son-in-law, William Digges. The Choptico chief informed the proprietor that five Choptico Indians had been taken from their hunting quarter on Beaverdam Manor in St. Mary’s County. If northern Indians were responsible for the seizure, it suggests that they had pushed well south of the Zekiah Fort and were then among the English plantations. The Indians again repeated what had become a mantra in their meetings with the Maryland governors: that their friendship with and assistance provided to the English against the Susquehannock six years prior had created their present situation. Baltimore ordered Captain Brandt to send the Mattawoman twelve muskets. He also recommended that the Choptico chief remove his Indians to Nanjemoy, implying that the Indians had not joined the Piscataway at Zekiah (Md. Archives 15: 335-336). Because the Choptico were proximate to English plantations, this was likely an attempt to move them to the outer bounds of English settlement. In other words, Baltimore may have been attempting to use the Indians as a buffer against northern Indian raids, something the Indians had picked up on, judging by the tenor of this meeting.

At the end of May 1681, Colonel Wells of Baltimore County dispatched a letter to Baltimore at St. Mary’s, describing a conversation he had had with translator and Indian trader Jacob Young. Young had told Wells that a party of two hundred Northern Indians, led by the King of the Mattawoman, was on its way to the Piscataway fort in the Zekiah. Young had learned of this from conversations with some Delaware Indians near the Susquehanna River. The intention of the northern Indians, according to the letter, was to “by presents to endeavour to draw the Pascattoways with them, but if they cannot to destroy them where they light of them.” Young had suggested that this may present an opportune time for Baltimore to have conference with the northern Indians upon their arrival at Zekiah Fort, also making mention that they were upset with the Maryland English over an “affront” from the “Christians” on the Eastern Shore (Md. Archives 15:359).

A 15 June 1681 letter from Colonel Chandler to Baltimore related that an Indian recently informed Major Boarman that the northern Indians had arrived at Zekiah Fort and taken some prisoners who were outside the fort. They had not yet made an assault on the Piscataway, however. Apparently, the Northern Indians sent a small contingent to “secure” the Choptico Indians as well. A Piscataway prisoner was sent to inform Boarman that the northern Indians desired a conference with the “greate men of the English” (Md. Archives 15:359).

A few days later, on 19 June 1681, the Council received another letter from Captain Brandt. Brandt and a group of rangers from Charles County had recently been patrolling and found northern Indians “in sight of the Zechaiah ffort treateing with our Indians.” Using a Piscataway translator, Brandt told the northern Indians that the English governor desired to confer with them, offering them corn and meat if they would come to St. Mary’s. Their response was that they would consider it after treating with the Piscataway. Brandt reported that the conference between them lasted another two hours during which “much Peake [shell beads] was given by our Indians to them and by them recd: and much friendship past betweene them and sundry of our Indians came frequently amongst them when this ended.” After this conference, the northern Indians asked Brandt to follow them an unspecified distance, where Brandt saw a two-hundred person encampment. According to Brandt’s account, the group held a council which lasted four hours, debating whether to send some great men to the English at St. Mary’s. Brandt failed to persuade them to do so and the group subsequently broke camp to return to their canoes at Piscataway. During Brandt’s encounter with the northern Indians, “severall of the Zechaia Indians came out of the

ffort, and when we tooke leave of them the Indians that belonged to the ffort proffered to returne, whom [the northern Indians] detened and conceive intends to take them away.” Captain Brandt then returned to Zekiah Fort and warned the Piscataway not to trust the northern Indians and that the peace brokered just hours earlier may have been a trick (Md. Archives 15:353-354).

Baltimore’s response to Brandt’s report was to keep the captain and his men ranging in Charles County, instructing him that, when he found the northern Indians, to try again to arrange a conference between them and the Maryland government. Baltimore was particularly desirous to hold the northern Indians accountable under the 1677 treaty negotiated in Albany by Henry Coursey and he instructed Brandt to propose an annual ratification with their great men at “Zachaiah a place now knowne unto them” (Md. Archives 15:354-355). Upon further developments, Baltimore concluded that the refusal of the Indians to come to a conference was “a designe...to doe what mischiefe they cann” (Md. Archives 15:384).

As if Anglo-Indian tensions in Maryland were not high enough at this point, the Council received reports of the murder of five Englishmen and a woman in St. Mary’s County, allegedly by some Choptico Indians. The offending Indians were apprehended and were to be put on trial by the English, and the Council requested the presence of the Choptico chief and great men at the trial. The Choptico Indians were also warned by Baltimore not to leave their town or come near the English plantations, the proprietor fearing retaliatory attacks which would only inflame the situation (Md. Archives 15:356). Charles County sheriff William Chandler was also ordered to warn the Piscataway, Nanjemoy, and Mattawoman not to

come to or neere any English Plantation, but keepe their severall & respective Townes or fforts for some time least the English upon the perpetration of the said late murder thereby enraged and not knowing how to distinguish their ffriends from their foes take them to be of the latter rank and Deale with them accordingly (Md. Archives 15:356).

The Indians were also reminded not to wear paint when traveling in the woods or around English plantations and that, if they encountered an Englishman, they must throw down their arms. Failure to comply with these articles of the reaffirmed 1666 treaty would place the offending Indian at risk of being treated as an enemy (Md. Archives 15:358).

The Indians accused of the murders of the English, including several Choptico and some Patuxent, were examined by the Council on 22 June 1681 and later put on trial but ultimately acquitted (Md. Archives 15:364-373, 376). Their testimony, however, implicated two Nanjemoy Indians in the affair (Md. Archives 15:376-377). It was ultimately determined several months later that the attack was committed by some Nanjatico (Nanzatico) Indians, a group located along the north shore of the Rappahannock in Virginia (see Figure 3).

Three days later, the Council received a letter from Captain Brandt at Portobacco dated 20 June 1681. Brandt reported that, earlier that day, he had been at Zekiah fort where he learned that thirteen Piscataway had been taken by the northern Indians. The northern Indians had also thrown down the fences around the Piscataway corn fields and the Indians were too fearful to venture out of the fort to make repairs. The Piscataway told Brandt that they believed a larger body of enemy Indians would arrive soon. The presence of the hostile Indians placed the Piscataway under considerable stress. “Our Indians are in a deplorable Condition,” Brandt reported to Baltimore and the Council, “but more especially them which belong to Zachaiah being destitute of all manner of ffoode” (Md. Archives 15:373-374).

Brandt's correspondence also related that three Mattawoman prisoners, taken earlier that year in January during the violent events at the Mattawoman fort, were among the foreign Indians, as were two Frenchmen who were reportedly a short distance from the main group. The ranger captain expressed confusion over the identity of the foreign Indians, stating that he is "apt to believe those Indians I treated with are not reall Sinniquos neither hath any relation to those Coll Coursey made peace with [in 1677]." A separate letter from Colonel Chandler, dated the same day, seems to confirm Brandt's suspicions concerning the identity of the raiding Indians. Chandler reported that

We are Informed by the Zachaiah Indians that these Indians that Come downe are not Sinniquos but a mixt people of severall Nations, some Susquehannohs, some Aquaiacoes, some Doags and part of two other Nations which I have forgott; Yett they be the same party that cutt off the Mattawoman ffort (Md. Archives 15:375).

Apparently, the Mattawoman prisoners of the hostile Indians had informed the Piscataway at Zekiah that "these are the party which doe them all the mischiefe, and that the Sinniquos never doe them harme." The confusion Captain Brandt and Colonel Chandler expressed highlights the inability of the English to distinguish between different groups of Indians. Chandler's letter generally corroborates Brandt's description of events, although Chandler says that twelve (not thirteen) Piscataway were taken by the foreign Indians and that the group had four (not three) Mattawoman prisoners with them. Like Brandt, he related that there were two French among the hostile Indians "and that they marry with them and are all one with them," according to the Mattawoman. Chandler also indicated that this mixed group of Susquehannock, Doeg, and Aquaiaco had left after capturing the twelve Piscataway prisoners, although the Mattawoman chief reported that he, too, expected a larger force to return within seven days (Md. Archives 15:375-376).

After the foreign Indians had departed, Chandler reported that several Piscataway had come to James Smallwood's house, "much troubled for the loss of their Indians." The Piscataway apparently told Smallwood that the foreign Indians "have served them two crooked tricks already and saith also that if your L<sup>spp</sup> would assist them they would serve them two as crooked tricks." Perhaps the treating and exchanges of peake which Brandt reported witnessing between the Piscataway and the "Northern Indians" at Zekiah were a fraudulent trick by the foreign Indians as Brandt had warned, aimed at lulling the Piscataway into a false sense of security so that several captives could be taken. Chandler's letter also indicated that some Indians may have been abandoning the forts (Zekiah and Mattawoman) at this time to seek safety among the English plantations (Md. Archives 15:375-376). That this probably happened was suggested in mid-September, when ten Piscataway were reported at Moore's Lodge, the plantation where the county's court was located (King, Strickland, and Norris 2008)..

On 30 June 1681, a Mattawoman Indian named Passanucohans, referred to as "Jackanapes" by the English, came before the Council with a proposal of possible interest to Baltimore and his advisors. Passanucohans was one of the Mattawoman taken prisoner by the foreign Indians during their January assault on the Mattawoman fort. He had returned to Maryland with his captors during the recent events at Zekiah. Passanucohans described how the foreign Indians had sent two canoes – "in one tenn Sinniquos and in the other tenn Susquesahannohs and a Pascattoway Indian whom they had taken prisoner for their guide" – down the Potomac and Patuxent rivers to capture any Indians who may have gone among the English plantations (Md. Archives 15:380). According to a July 1681 letter from Virginia, "a Mattawoman Indian, lately escaped," very likely Passanucohans, proposed to the Maryland government that the Iroquoian nations might be open to handing over the Susquehannock to the English "for a small satisfaction." The trouble with this proposal, however, would be maintaining secrecy from the Susquehannock remnants in negotiations lest they discover the plot and wage all-out war on the Maryland

English (Fortescue 1898:92). Baltimore does not seem to have acted on this suggestion, probably considering it far too risky. If such negotiations were to become known to the Susquehannock, the resulting attacks on the English would have looked too much like the rumored Catholic-Indian conspiracy to kill Maryland Protestants and would have quite possibly led to a Protestant rebellion.

Passanucohanse had previously met with Captain Brandt and, the day after the Mattawoman Indian had appeared before the Council, a letter from Brandt arrived, reporting that Passanucohanse had been taken by the "Quiaquos" (Cayugas) but then escaped during the sham treaty at Zekiah Fort several days earlier. Brandt further described that many of the "neighboring Indians" would not go out and range with his rangers, especially since one of the Piscataway great men had recently been killed by a foreign Indian scout. Brandt had again visited Zekiah Fort and the immediate area, but could not locate the foreign Indians. He also requested eight or ten carbines for his ranger troop (Md. Archives 15:382, 384).

In response, Baltimore ordered Brandt to employ ten Piscataway as scouts for finding the foreign Indians. Upon finding them, Brandt was directed to secure a peace which would include the Piscataway, Mattawoman, Choptico, and others. Baltimore also authorized Brandt and the rangers to fight the foreign Indians if they offered violence (Md. Archives 15:384-385).

On 8 August 1681, another letter from Captain Brandt (written 29 July 1681) arrived for the Council's review. Brandt informed them that recent information from Virginia suggested that the foreign Indians had a fort "above the Eastern branch [now Anacostia River] neere the ffalls of Pottomock." This fort was probably the base for launching raids in the Zekiah. Based on Brandt's prior reference to the foreign Indian's canoes at Piscataway, we can presume that the Indians were paddling down the Potomac from the Anacostia to Piscataway Creek and from there taking the path that ran from Piscataway to Zekiah Swamp (believed to be present-day MD Route 228 to Route 5). Brandt informed Baltimore and the Council that the foreign Indians had cut up some of the Piscataway's corn. They had left, however, before Brandt could arrive from ranging around Pamunkey. Brandt stated that he would remain at Zekiah Fort and wait for the foreign Indians to return (Md. Archives 15:400).

Four days later, at a 12 August 1681 Council meeting, another letter from Captain Brandt arrived, this one describing events of the preceding days. Brandt had received intelligence of the foreign Indians' return to Zekiah Fort, going there immediately with fifty horsemen. When he arrived at the fort, all was quiet, but when he called for the "Sinniquo" great men they appeared in the corn near the fort. The Piscataway fired several volleys at the Indians as they ran off, but not before briefly returning fire. Neither side suffered any casualties in this skirmish. Taking a diplomatic position, neither Brandt nor his men fired a shot in this exchange, although "they saw us and wee them." After the skirmish, Brandt and six of his troops went into the fort. The Piscataway informed the English that the foreign Indian force was an estimated 600 strong and that a major assault on the fort was anticipated that night. Brandt and the rangers remained overnight at the fort and ranged around in the morning, where they discovered a "great trac[k]" leading to the old Piscataway fort on Piscataway Creek. Although Brandt noted the damage done to the corn about Zekiah Fort, the Piscataway were mostly concerned about arms and ammunition, and "if not speedily supplied they shall loose the ffort or Quitt the same, they also desire a greate gunn to Alarm the Inhabitants upon discovery of the Enemy" (Md. Archives 15:408-409).

In a letter Lord Baltimore had sent about a month earlier (19 July) to the Earl of Anglesey in England, the Maryland proprietor wrote that, although northern or foreign Indian assaults were primarily directed at the Maryland Indians, he feared that, if the Piscataway and other groups were destroyed, the English would be the next target. While this may have been a reasonable surmise, it seems that Baltimore's primary concern at the time was preventing a Baconesque insurrection (Fortescue 1898: 88-

89). Indeed, as Baltimore was working to manage his government's working relationship with the indigenous nations, his government was under attack from his own citizens.

Josias Fendall, who had briefly served as governor from 1658 until attempting a coup in 1660, had been elected to the assembly in 1678. Fendall had been sentenced to death for his role in the 1660 coup, but the sentence was commuted provided he stay out of politics. And so Fendall did, until 1678 when he was elected to the assembly. After Baltimore refused to allow him to be seated, Fendall, along with John Coode, became very brazen about criticizing the proprietary government. Fendall and Coode were probably behind rumors of an impending Catholic-Indian alliance to kill the Protestant English and Baltimore worried, with some reason, that a rebellion to free Fendall from prison was in the works. One of the rebels, George Godfrey, was a lieutenant in the rangers and was able to use knowledge of the problems on the frontier to rally support for Fendall (Md. Archives 15:386-392; Strickland and King 2011:1, 3-5).

The unsettled state of Indian affairs as well as the Fendall-Coode controversy finally prompted Lord Baltimore to call a General Assembly after having prorogued it many times (Md. Archives 15:379). The move was probably a political one, aimed at quelling the rumors of Catholic-Indian conspiracy by involving popular (and Protestant) representatives in dealing with the situation. In an 18 August 1681 address to the Lower House, Baltimore made it clear that the Susquehannock and "other Mixt Nations" were the province's enemies, not the "Sinniquos Our friends" (Md. Archives 7:110-111). The identity of the raiding Indians continued to confuse the English, who apparently referred to the Five Nations Iroquois (the Seneca, Cayuga, Onondaga, Oneida, and Mohawk) by the catch-all term "Sinniquos." While the Seneca Nation does not seem to have taken part in these raids, members of one or two of the other Five Nations may be among the heterogeneous raiding parties erroneously referred to as "Seneca" or "Sinniquo."

Nonetheless, it seems the Lower House dragged its feet on the pressing Indian matters. Chancellor Philip Calvert would later write a vitriolic rebuke of Lower House inaction in late August and early September. His editorial describes not only inaction, but refusal to send a representative to negotiate with the northern Indians at Zekiah Fort as well as delayed offerings of cheap and ineffective solutions to subsequent Indian raids ("instead of a sufficient force to curb the Enemy," Calvert wrote, "they vote frequent Musters to be made as if the Enemy were to be frighted with Drumms & colours and some scouts or Rangers to be sent out without pay to prevent publick charge"). It seems that, at least from the Chancellor's perspective, the Upper House (or Council) was bearing primary responsibility for English policy toward the events at this time (Md. Archives 17: 37-42).

Major William Boarman appeared before the Council on 17 August 1681 with some troubling information. As he explained to the governor and councilors, Colonel Chandler had requested that Boarman meet with the Mattawoman chief, who was at his house and had something to communicate that he would only tell Boarman. When Boarman arrived at Chandler's house, the Mattawoman chief and Passanucohansé ("Jackanapes"), the Mattawoman Indian who escaped captivity among the northern Indians, were there. Passanucohansé told him that while he was captive among the northern Indians, the Piscataway/Zekiah Indians had sent a present of belts of peake and a broad axe to the Nanticoke emperor on the Eastern Shore. This gift, Passanucohansé reported, was meant to be read as a call to join the Piscataway in war against the Maryland English and their allied Indians. Not interested, the Nanticoke passed the offer to the Mattwas or Delaware Indians, who also rejected it. Finally, the basket of peake and the axe came into possession of the northern Indians, while Passanucohansé was their prisoner. He told Boarman that two nations—the Nootassens (Oneida?) and Anoondangas (Onondaga)—accepted the present and also forwarded it to the Aquiacoes, who were not interested (Md. Archives 15:418).

On 22 August 1681, translator and trader Jacob Young appeared before the Maryland Council at St. Mary's with two Iroquoian Indians, one Oneida and one Onondaga. The Indians stated their desire to continue in peace with the English and hoped to build a house on the Susquehanna River to trade with Maryland. The two Indians also informed the Council that "they are now going after the Pascattoway Indians, and Desire the English not to feare any thing for they will not molest them and since as they have brought the Pascattoways heads to be as small as a finger they will now see if they cann make an end of them." As the 1677 Fort Albany treaty had required, the Five Nations were acquainting Baltimore with their plans to war with the Piscataway. The Indian representatives also asked the Governor to recall 40 guns the colony had loaned to the Piscataway and to free some Susquehannock prisoners held captive. In addition, they desired the English not to inform the Piscataway of their coming and described their intention to build a fort "by the Pascattaways" (Md. Archives 17:3-4).

During this meeting, Jacob Young also averred that the last time the northern Indians were down, "the Pascattoways told them that...they were inclined to goe with them but the English would not lett them" (Md. Archives 17:4). When the Council inquired as to the source of the conflict between the northern Indians and the Piscataway, Young told them that "[four of the Iroquois nations] were afraid of being cutt off their trade at Albany by the Right Sinniquos [Seneca nation proper], and therefore intended to strengthen themselves as much as they could with other Nations for that they would suddenly quarrell with the Sinniquos" (Md. Archives 17:5). It seems that while the Susquehannock were warring with the Piscataway for revenge over the events of 1675, the Iroquois Nations (who, to this point, it appears, had not been too deeply involved in the offensive against the Maryland Indians) were now seeking captives to boost their populations. This seems to be in line with one of the primary goals of the Iroquoian mourning wars: war as population replenishment (Richter 1983; 1992:38-50).

The Council asked the Oneida and Onondaga representatives how many Iroquois were marching in Maryland against the Piscataway and how many Susquehannock were among them. The two Indian representatives replied that they were "in four forts," or that their warriors had come down as four nations, including 300 Onondaga, 180 Oneida, 300 Cayuga, and 300 Mohawk. These counts, whatever their accuracy, are presumed to be warrior counts (they are given as counts of "men"). Additionally, the two Indians reported that there were 14 Susquehannock with the Oneida, seven with the Onondaga, and an unknown number with the Cayuga (Md. Archives 17:5).

The following day, the Council again met, with the Choptico chief and one of his great men present at the meeting. With Major Boarman acting as interpreter, Governor Calvert asked the Choptico why they had recently abandoned their town. They responded that the Piscataway had urged them to do so, warning them that the "Senniquos" would come and destroy them (Md. Archives 17:5-6). Exactly where the Choptico went at this time is unclear, although by early November, when Lord Baltimore withdrew the English ranger garrison from Zekiah Fort, the Choptico had joined the Piscataway there (Md. Archives 17: 54). Baltimore was aware by this time of the story of the Piscataway axe sent to the Eastern Shore and cautiously prodded the Choptico for details of the Piscataway's intentions, fearing treachery. He told the two Choptico that "some English have been told by some of them that the Pascattoways were nought," that is, duplicitous, and the proprietor asked whether the two Choptico "beleive the Pascattoways are truly afraid themselves." The Choptico's replies were diplomatic, saying that "they know not what the Pascattoway Indians themselves think for that they never make them acquainted with their Designes" (Md. Archives 17:6).

After the two Choptico were dismissed, the Mattawoman chief accompanied by Passanucohansé came before the Council. Passanucohansé acquainted Baltimore first-hand with the story of the axe travelling among the Five Nations Iroquois while he was held prisoner with them. He told the Council that when the Cayuga were asked why they would go to war with the English, who "had never done them

any hurt,” they responded that “they did not intend it but ...since the Zachaiah Indians had been soe treacherous to their friends they would cutt them off and then acquaint their friends with it” (Md. Archives 17:6-7). The Mattawoman chief also told the Council that “the Pascattoway Indians lately in a Warr Dance had strictly required Secrecy among them that none should tell what they had done,” further fueling Baltimore’s suspicion of Piscataway activity (Md. Archives 17:7). Apparently a rift had developed between the Piscataway and Mattawoman at this time for reasons unknown. Continuing, the Mattawoman chief claimed that the axe ordeal involved the Nanjatico of Virginia as well as the Choptico in addition to the Piscataway. He pointed out that the belt of peake accompanying the axe depicted three hands and when the Eastern Shore Indians received it, they demanded to know “where was the other hand for the Mattawomans” (Md. Archives 17:7). Significantly, there is no record of the Oneida and Onondaga mentioning the axe episode to either Jacob Young or the Council and the Iroquoian great men would later deny the episode.

The Council concluded that the most advantageous way to proceed was to send two of their own members, including Colonel Henry Coursey and Colonel William Stevens, to Zekiah to confirm the articles of peace with the Iroquois and to confer with them regarding the axe and other issues, including the Susquehannock (Md. Archives 17:9-10). Departing St. Mary’s City on 24 August 1681 and returning by 30 August, Coursey and Stevens produced a detailed account of their proceedings with the northern Indians. The two councilors had left St. Mary’s with interpreter Jacob Young and the two Iroquois accompanying them. The following morning along the way, they met three Piscataway in the road. When the Piscataway spied the Oneida and Onondaga with the three Englishmen, two turned and ran back to alert the others in the fort while the third cocked his gun and began to take aim, although Coursey and Stevens were able to convince him not to shoot.

When they came that night (25 August) to James Bowling’s house near the Zekiah Swamp, two armed Piscataway also arrived and demanded to speak with the two “Senniquos.” Young reported to the two councilors that the Iroquois told the Piscataway that “they were come to fetch them away.” The following morning (26 August), Coursey and Stevens ordered Captain Brandt, who had been ranging in the area with a twelve-man troop, to locate the northern Indians and notify them that Maryland’s agents were nearby and ready to have conference with them. Brandt reported back the following day (27 August) that he had found and met with the northern Indians. Coursey and Stevens immediately left Bowling’s for Zekiah House, believed to have been the summer house Lord Baltimore had constructed on his manor of Zekiah in the early 1670s and also believed to be relatively close to the Zekiah Fort. The pair arrived at Zekiah House after dark that evening, meeting a group of Iroquois there and arranging a conference with the Indians the following morning (Md. Archives 17:12-14).

The Iroquois great men, however, failed to show the next day at Zekiah House (28 August), so the councilors sent for them. Their messenger relayed that that the Indians desired them to come to their fort to negotiate, evidence that the Iroquois had constructed some sort of defensive structure in the general area. Coursey and Stevens refused to go, and eight Iroquois great men finally came to Zekiah House, including two Onondaga, two Oneida, two Cayuga, and two Mohawk. When Coursey and Stevens inquired about the axe sent by the Piscataway, the two councilors later reported to Lord Baltimore, “they positively deny it and soe sayes the Young men they know nothing of it.” The Iroquois great men further declared that the “Pascattoway Indians had joined with the Susquehannohs to destroy the Anondago Indians” and, when asked by the two councilors if they would accept satisfaction on behalf of the Piscataway, the northern Indians replied “that what was done by the Pascattoways could not be wiped away, and now they had aggravated the matter by killing one of the present Troope.”

At first reading, this statement makes little sense. After all, there were Susquehannock warriors currently among the Onondaga and Oneida troops. Recall, however, the sham treaty reported by Brandt

back in mid-June between the Piscataway and Susquehannock at Zekiah Fort – the treaty broken shortly thereafter by Susquehannock capture of several Piscataway. The Piscataway later told the English that they had been served “two crooked tricks” in these supposed peace negotiations (Md. Archives 15:376). Perhaps part of the faux treaty was for the Piscataway to join the Susquehannock in making war against the Onondaga. Many Susquehannock had sought refuge among the Onondaga and other Iroquoian nations in 1675-6 after the siege of their fort in Maryland. Why would the Susquehannock want to wage war with the people among whom they were now living?

Quite plausibly, the Susquehannock tricked the Piscataway in the negotiation to fabricate an excuse for the Onondaga (and allied Iroquois nations) to participate in Susquehannock raids against the Piscataway. To that point, it does not seem that the Five Nations proper had been attacking Zekiah Fort and that English references to “Sinniquo” and “Northern Indians” were erroneously describing the parties of Susquehannock and “other mixt nations” truly responsible. With Piscataway agreement to war with the Onondaga, the Five Nations would have a pretext for attacking/capturing the Piscataway at Zekiah technically within the legal bounds of the 1677 Albany treaty. As required by the treaty, the Iroquois did send two messengers to the Maryland government (the Oneida and Onondaga accompanied by Jacob Young) to inform the proprietor of their intentions before assaulting Zekiah Fort. This suggests that they took the terms of the 1677 peace seriously, despite Baltimore’s complaint of too short a notice. Regarding the 1677 treaty at Fort Albany, historian Francis Jennings (1984:162) observed that Maryland had “underestimated Iroquois capacities for sharp legalism,” and these events lend credence to Jennings’ statement.

During the conference at Zekiah House, the Great Men also told Coursey and Stevens that some Piscataway prisoners they had taken previously had now returned to Zekiah Fort to bring their relatives with them to Iroquoia. The Englishmen again pressed for peace between the Piscataway and Iroquois, and the great men promised an answer the following afternoon. At this point the conference ended for the day (Md. Archives 17:14).

The councilors spent the night of 28 August at another English plantation, returning to Zekiah House the following morning to await the Iroquois response. Captain Brandt, who had stayed the night at Zekiah House, “acquainted [them] that there were a greate many Gunns shott in the night,” hinting at a skirmish at the fort. Messengers were sent to find the northern Indians, but they soon discovered that the Iroquois had absconded, leaving notice that their siege had ended. In the fighting the previous evening, nine Piscataway men, four women, and four girls were taken captive by the Iroquois. Another Piscataway man was killed, probably as revenge for the Iroquois scout previously killed by the Piscataway. Coursey and Stevens returned to St. Mary’s the following day to make their report (Md. Archives 17:15).

Over the next week or two following Coursey’s and Stevens’ return, reports trickled in to the Maryland government of Indian pillaging of English plantations in Charles and Anne Arundel counties (Md. Archives 17:18-21, 23-25; 7:221). Among the reports was one from Thomas Hussey at Moore’s Lodge, the site of the Charles County courthouse. Apparently some Piscataway had sought shelter from the Iroquois among the English plantations. Hussey’s report includes a statement that the raiding Indians had carried away eleven Piscataway (one man and ten women) from his plantation. In addition, Hussey had all of his linen, blankets, clothing, and rings stolen by a band of Indians. Similarly, Henry Hawkins of nearby Johnstown, just south of Moore’s Lodge, reported that a Susquehannock man who had been living at his residence was captured by a party of northern Indians (Md. Archives 17:20).

Indian raiding along the English frontier had been, in 1676, a major catalyst of Bacon’s Rebellion in Virginia, and the present situation had the potential to play into the then-circulating rumors concerning a Catholic-Indian alliance to destroy the Protestants. Fully aware of the risks at hand, Baltimore realized

he would need to consult with the elected freemen of the Assembly's Lower House on how to proceed, with regard both to the raids by the northern Indians and Piscataway relations. On 10 September 1681, the Assembly met to consider sending a force of scouts and troops to Zekiah to help defend the Piscataway. The Lower House took several days to respond to the Upper House (consisting of Lord Baltimore and his Council), ultimately reporting that "they have left the Affair of Warr or Peace in Relation to the Northern Indians to his Lordships Sole Conduct and Management and therefore think it inconvenient and improper for this house to be Consulted about any Mediums or Circumstances thereof the matter of the Protection of the said Indians" (Md. Archives 7:159, 177, 180). In other words, Baltimore and his advisors were in this alone.

While consulting with the Lower House, the Council learned of a violent attack in Anne Arundel County in which an African slave was killed and two Englishmen were gravely wounded by northern Indian tomahawks (Md. Archives 17:23-24). On 15 September, Calvert raised several county militias, authorizing their leaders "to fight kill take vanquish overcome follow pursue and Destroy [the northern Indians], and in all respects to deale and treat with them as the common Enemy" (Md. Archives 17:25).

As Baltimore considered how to protect his denizens and manage political perceptions, including a rumor that was as unlikely as it was believed, the Piscataway braced for another attack by the northern Indians. Baltimore ordered Brandt and his rangers to continue ranging on the frontier and to have twenty or thirty Piscataway accompany them should any northern Indians be discovered. He also ordered Brandt to garrison the fort with English rangers when the Piscataway men were out patrolling with him to protect the elders, women, and children at Zekiah. Interestingly, Baltimore also stated that "the Choptico Indians be required to joine themselves with the Pascattoway or Nanjemaick [Nanjemoy] Indians in one of their fforts if they expect protection from the English." This may have been another attempt to force the Choptico away from the English plantations in St. Mary's County (Md. Archives 17:27-28) and, indeed, the Choptico later join the Piscataway at Zekiah Fort (Md. Archives 17:54).

By 6 October 1681, the Piscataway remained in fear of more raids. "Mr. Robert," brother of the Nanticoke chief, had previously met with Lord Baltimore at Mattapany to inform him that the Piscataway had sent some presents with him to take to the Nanticoke on the Eastern Shore in exchange for assistance at the fort. The Nanticoke and other Eastern Shore Indians were at this time enemy to the Iroquois and appear to have been willing to assist the Piscataway. Baltimore and the Council agreed that the Nanticoke were free to send over as many men as they saw fit to aid and protect the Piscataway. The Council even organized a shallop, or small open boat with one or two sails that could also be rowed, to convey the Indians across the Chesapeake Bay. In his order granting the Nanticoke leave to assist the Piscataway, Baltimore noted that there were already thirty English troops stationed in Zekiah Fort for its protection (Md. Archives 17:33-34).

Throughout the rest of the fall and most of the winter (1681-1682), the historical record is relatively silent about events pertaining to Zekiah Fort. In February 1682, however, the Council received a letter from Henry Coursey, the councilor who had gone to Zekiah Fort in late August 1681 and who lived in Queen Anne's County on the Eastern Shore of Maryland. Coursey had received what he conceded was an admittedly unreliable report that the northern Indians were buying gunpowder and shot in New York with the intention of coming "at the Spring of the yeare when the bark would runn and make Canooes, and goe downe the Bay to my Lord, and Demand the Pascattoway Indians" (Md. Archives 17:78). Coursey claimed he found the report hard to believe, but was passing along the information anyway. He also described a discussion with an Eastern Shore Indian about the "Axe sent to Nantecoke, and of the whetting of it there," presumably in reference to the axe and belts of peake the Piscataway had earlier sent along. The Indian told Coursey that he did not know of the axe, but that it was "something he did think was done" and that "he would goe directly home and from thence to Nantecoke, and that he had

kindred there that he did verily beleive would tell him; and bring me word again, he did come but I was not at home” (Md. Archives 17:78).

On 4 March 1682, the Maryland Council wrote to New York Governor Anthony Brockhalls, imploring him to cut off trade with the Iroquois to help prevent them from launching another attack in Maryland (Md. Archives 17:85-86). Brockhalls’ response, dated 29 March 1682, suggests that the Mohawk and Seneca were not responsible for the former attacks on English plantations. The governor also indicated he would make an effort to get to the bottom of the situation while simultaneously rebuking the Maryland authorities for not regularly renewing the articles of peace as was customary (Md. Archives 17:89-90).

An order given several days later, on 14 March 1682, allowed a Virginia militia colonel to barter European goods (excluding shot, powder, or arms) with the Nanticoke for roanoke and peake. The English colonies probably wanted shell beads to make wampum belts for anticipated future diplomacy.

In May 1682, the Council received a report of illicit trading in St. Mary’s County by Dennis Husculah. Husculah, who had a plantation just east of Zekiah Swamp, claimed that merchant John Pryor of Westwood Manor was trading deerskins with the Indians of the “Indian Towne Zachajah” without a license and contrary to an act of Assembly. Based on the distances given by Husculah from his plantation to Westwood Manor and to the Indian settlement, it is unlikely that the “Indian Towne” is the same as Zekiah Fort, although it is possible that the Piscataway settlement at Zekiah was far more dispersed at this time, with the Natives using the fort only when danger was imminent. This case also implies that the Piscataway were both continuing to hunt as well as trade with nearby English despite the pressures of their move to Zekiah (Md. Archives 17:92).

By early May 1682, the Assembly was again sitting and considering the issue of the Northern Indians. A committee appointed to review the situation recommended that some members be sent to New York to renegotiate and confirm the 1677 articles of peace between Maryland and the Iroquois Nations. The committee also suggested that the Piscataway “be protected in the meantime with Arms Ammunition and Men.” The group’s report implies that the New York government had threatened to cut off trade with the Oneida and Onondaga unless they maintained peace with the Seneca (hostility between the Oneida and Onondaga on the one part and the Seneca on the other was referenced by the Iroquois great men at Zekiah House as the reason for taking Piscataway captives). The committee suggested that if peace with the Five Nations could not be achieved, then-New York Governor Brockhalls be pressured to cut off trade with the Five Nations entirely (Md. Archives 7:269-271). After a “Long and Serious debate about the Indian affair,” the Lower House endorsed many of the committee’s recommendations and desired that an envoy consisting of a member each of the Upper and Lower Houses be sent to Albany to negotiate. It was also advised that the Piscataway be invited to send an ambassador to New York with the English agents. The Lower House was also in agreement that the Piscataway should be supplied with English arms out of the public magazine (Md. Archives 7:290-291).

Henry Coursey and Philemon Lloyd were selected to make the 1682 trip to Fort Albany to procure peace with the Five Nations Iroquois (Md. Archives 17:96-97). In Baltimore’s instructions to the envoys, he implored them to remember that,

In the peace to be made for ourselves you must in noe wise neglect to include his Maj<sup>ties</sup> Subjects of Virginia, and if possible you must include the Pascattoway Mattawoman Choptico and all the rest of our ffriend Indians on both sides the bay of Chesepeake: And to effect this you must Zealously apply yourselves, because if we abandon our ffriend Indians

here we shall not onely force them to submitt to their Northern Enemys, but to Incorporate with them, and soe not onely considerably strengthen them to attempt any thing upon us when their thirst of plunder or blood shall prompt them to breake peace with us, but also add a party who will spurr them on to breake the peace in reveinge of our breach of Articles and Deserting them, as wee see the small remnant of the Susquesahannohs have done (Md. Archives 17:98).

Coursey and Lloyd in fact were able to achieve a peace with the Five Nations, including the Piscataway and other Maryland Indians who were made a part of the Iroquois covenant chain. During the Albany negotiations, Coursey and Lloyd learned from the Oneida that interpreter Jacob Young had encouraged them to make war in Maryland on both the Piscataway and the English (Brodhead 1853:328). An important clue of Young's duplicity was apparently evident when the interpreter accompanied Coursey and Stevens to Zekiah House in August 1681 to assist with translating negotiations with the Iroquois then besieging Zekiah Fort. Coursey and Stevens directed Young to ask the northern Indians why they came to war with the Piscataway despite the 1677 Albany treaty. Young briefly remained silent before stating that, "if he had thought he should have spoke of any such thing to the Northern Indians he would rather have given 10000<sup>lb</sup> of Tobacco than have come to Interprett upon that Account" (Md. Archives 7:475-476). Young was later accused by Baltimore of treason, though some Susquehannock living among the Delaware Lenape sent a message to the Maryland government via a Delaware Swede that if Young was executed, they would kill 500 Englishmen (Md. Archives 7:370-372; Jennings 1968:48-49).

Despite the successful conclusion of peace negotiations, some of the Five Nations informed the Maryland envoys that war parties had already been dispatched, asking the English to excuse them until word reached them of the peace. As late as 24 August 1682, Colonel Chandler was writing Lord Baltimore that the Mattawoman chief had recently approached him and informed him "they were not able to live in their ffort at Nanjemoy the Sinniquo Indians did soe Oppress them, and they being weeke were in Inevitable danger of being utterly destroyed." Evidently the Mattawoman had at some point moved to the Nanjemoy fort, which was still being attacked although "the English never takes any notice of them though the Enemy is almost every day upon them." The Mattawoman chief requested a ten or twelve man garrison of English troops to help the Mattawoman and Nanjemoy defend their fort or he would either be forced to remove to Zekiah Fort or give himself up to the enemy. It seems that neither the Mattawoman nor the Nanjemoy had a particular desire to move to Zekiah. Chandler's letter also described that, recently, the "Speaker of the Zachaja ffort" had come to his house, sent by the "Young Emperor" to tell him that the Piscataway had sixty or seventy deer skins to present to Baltimore and some other business to conduct with him, with the speaker requesting some English troops to defend their wives and children in the fort while they made the journey (Md. Archives 17:111-112).

Baltimore subsequently wrote to Chandler, directing him to appoint twenty men to guard Zekiah Fort so that the Piscataway could come to see the proprietor. As for the Mattawoman and the Nanjemoy, in a response similar to that previously given to the Choptico, Baltimore told Chandler to direct the Mattawoman chief to Zekiah Fort if he wanted English protection (Md. Archives 17:112-113). It is unclear whether the Mattawoman and Nanjemoy removed to Zekiah Fort, although it is possible since Baltimore declined their request for an English garrison at the Nanjemoy Fort.

At this point, the documents largely go quiet on affairs pertaining to the Piscataway at Zekiah Fort, suggesting in part that the peace negotiations with the Five Nations had succeeded in abating the raids and other forms of warfare. But, in 1684, during negotiations between Lord Howard, governor of Virginia, and the Five Nations Iroquois at Albany, the Seneca agreed to keep away from Virginia's

frontier settlements if Virginia would “send one of their allied tribes to become an Iroquois tributary” (Jennings 1984:182). For some reason, Howard must have said that he would send the Piscataway, who, although they were allied with Virginia, were a perplexing choice. The Seneca speaker must have approved, telling Howard, “You tell us, that the Cahnawaas (Conoys) will come hither to strengthen the Chain. Let them not make any Excuse” (quoted in Jennings 1984:182).

Colonel Wells, still in Baltimore County, wrote to Baltimore (who was now in England) on 7 April 1685, telling him that a Seneca Indian and a Piscataway named Isaack, who formerly lived with Colonel William Burgess, had come to his plantation with news that the Seneca war captains and commanders had come down to the head of the Susquehanna River desiring to reconfirm the articles of peace with both the Marylanders and the Piscataway. They told Wells that they desired to speak to the Piscataway great men and “that the said Isaack should returne with the Pascattowaies and live with them, and that the Sinnicos would be as Brethren” (Md. Archives 17:364).

The conference between these different parties took place at the home of Colonel Wells on 16 April 1685, with Colonels Coursey, Darnall, and Taillor representing Maryland. The Seneca began by “p<sup>r</sup>sent[ing] a belt of Peake which they laid down in testimony that the Pascattoway Indians (whom they called Gonoois), were psons with whom they had had great troubles, but thereby they did assure them of their firm renovation of peace, and future sincerity towards them” (Md. Archives 17:366). Records of the conference suggest that the Seneca, who offered several gifts of belts and necklaces of peake, beaver skins, and even an Indian boy, earnestly desired to leave the events of the preceding years in the past. They

...p<sup>r</sup>esented a Belt of Peake (necklace) signifyeing that whereas much blood had been spilt betweene them, and the Pascattoway Indians, with greate trouble labour and toile, they the s<sup>d</sup> Pascattoway Indians might now remaine secured of peace, and raigne w<sup>th</sup>out molestation in their owne territoryes (Md. Archives 17:366).

Peace was also confirmed between the Maryland government and the Seneca, with the Seneca offering the Maryland authorities belts of peake and the English offering several matchcoats to the Seneca.

On 7 August 1685, three Piscataway, including Kanhia, Pasinsiak, and Achsaminnis, arrived in Albany and presented themselves to the New York government, the obligatory channel for negotiating with the Five Nations. The Piscataway made two statements to the New York authorities:

1. Wee are come here from MaryLand To ye house of Corlaer where usually Propositions are made, & where ye Covenant fyre burns, to Speak wt al ye Indians westward about ye Covenant, doe give a Belt of 10 deep.

2. Wee are come to Stay here in Corlaers house till ye Indians as far as onndage come here to Speak wt us about ye Covenant, and desyre yt arnout ye Interpreter may goe & fetch ym. doe give 4 faddom of wampum to greese his horses leggs (Leder 1956:83).

The actual negotiations between the Piscataway and Five Nations have not been recorded, but that formal peace was concluded (with all nations) can be presumed based on subsequent relations between the groups.

Three years later, in March 1689, Baltimore's deputy governors responded to provincial disturbances by sending "tenn or twelve men and Armes to goe to the piscattaway fort to desire the Indians to keep the fort till things were settled" (Md. Archives 8: 4). The "piscattaway fort" is believed to be the Zekiah Fort (although this is not certain) and seems to suggest that the Indians had by this time moved out and dispersed from the fort to some degree, though the structure was still standing.

Shortly thereafter, in late July/early August 1689, Lord Baltimore lost control of Maryland in an uprising of disaffected rebels (Carr and Jordan 1974). The rebels, or Protestant Associators as they called themselves, seized control of the government, setting up shop at Mattapany, Lord Baltimore's plantation on the Patuxent. Despite the tayac's testimony denying the rumored Catholic-Indian conspiracy, the Piscataway were probably perceived by the new anti-proprietary government and the Protestant populace as allies of the deposed Lord Baltimore and not necessarily of Maryland. It is unclear why the Piscataway had remained at Zekiah even after the threat of Iroquoian raids had ended, but proximity to the English and the Maryland government may have facilitated a mutually beneficial trade. With a new group of anti-proprietary Protestants in charge, however, and Lord Baltimore back in England, permanently as it turned out, Piscataway ties to Lord Baltimore were probably looked upon unfavorably and subsequent descriptions of interaction between the group and the Maryland English suggest much conflict.

In 1692, a royal government replaced the interim government of the Protestant Associators and the Anglican Church was declared the official religion of Maryland. This newly appointed royal government prohibited Englishmen from taking liquor to the Piscataway fort or other Indian settlements, albeit at the tayac's request (Md. Archives 8:328). It seems that, by the 1690s, a number of factors were pulling the Piscataway apart. The tayac told the Maryland government that the Piscataway youth no longer respected the elders and were often making forays into Virginia, bringing back prisoners (Cissna 1986:175-176; Merrell 1979:569). The tayac had also hinted in an earlier meeting that some were abandoning the group.

In June 1694, three Piscataway appeared before the Council at a meeting in Battle Town (Calvert County's court house, located on Battle Creek and the Patuxent River) to give an account of the murder of an Englishman in Charles County. The Council subsequently sent several men to the "Piscataway fort" to demand custody of the murderers (Md. Archives 20:68-73). It is possible, though uncertain, that this is a reference to Zekiah Fort. Several days later, three Piscataway delivered the suspect to Westwood House, the plantation dwelling of John Bayne, an official of the royal government (Md. Archives 20:73-76). Twelve years earlier, the Piscataway had been trading with John Pryor at Westwood House, a place obviously known to the group, located on the east side of Zekiah Swamp, just north of present-day Allen's Fresh (Alexander *et al.* 2010).

It is unclear exactly when or why the Piscataway abandoned Zekiah (or why they had stayed to begin with), but it is almost certain that sometime between 1692 and 1695, the settlement had been vacated (an interpretation supported by the archaeology). In 1695, the Jordan tract, on which the fort was located, was patented to William Josephs. That same year, Governor Nicholson refused the tayac's gifts and ordered the Council to devise a plan to "deprive the Indians beyond Mattawoman Creek of their lands" in order to make way for English settlement (Merrell 1979:569). This suggests that at least some Piscataway had, by this time, returned to their ancestral lands in what is now Prince George's County, probably in an attempt to distance themselves from a seemingly hostile Maryland government and the growing encroachment of the English.

Abandonment of Zekiah Fort meant Piscataway Diaspora. Evidence suggests that they attempted to return to their ancestral and supposedly treaty-guaranteed lands on Piscataway Creek. As Cissna points out, however, both land patents and archaeological evidence indicate that, by the 1690s, Piscataway

reservation lands had been seized by Englishmen (Cissna 1986:176-177). The incompatibility of the English system of land tenure with traditional Piscataway subsistence practices brought the two groups into conflict and further fueled strife and discontent among the Piscataway. Some probably left the nation to join other groups, as appears to have been happening throughout the 1670s and 1680s, either voluntarily or by force/capture. The tayac and a number of Piscataway soon left Maryland for Virginia on their own, while others remained in the colony, some assimilating with the English and others likely continuing traditional practices in isolated or fringe communities.

## **G. Piscataway Diaspora**

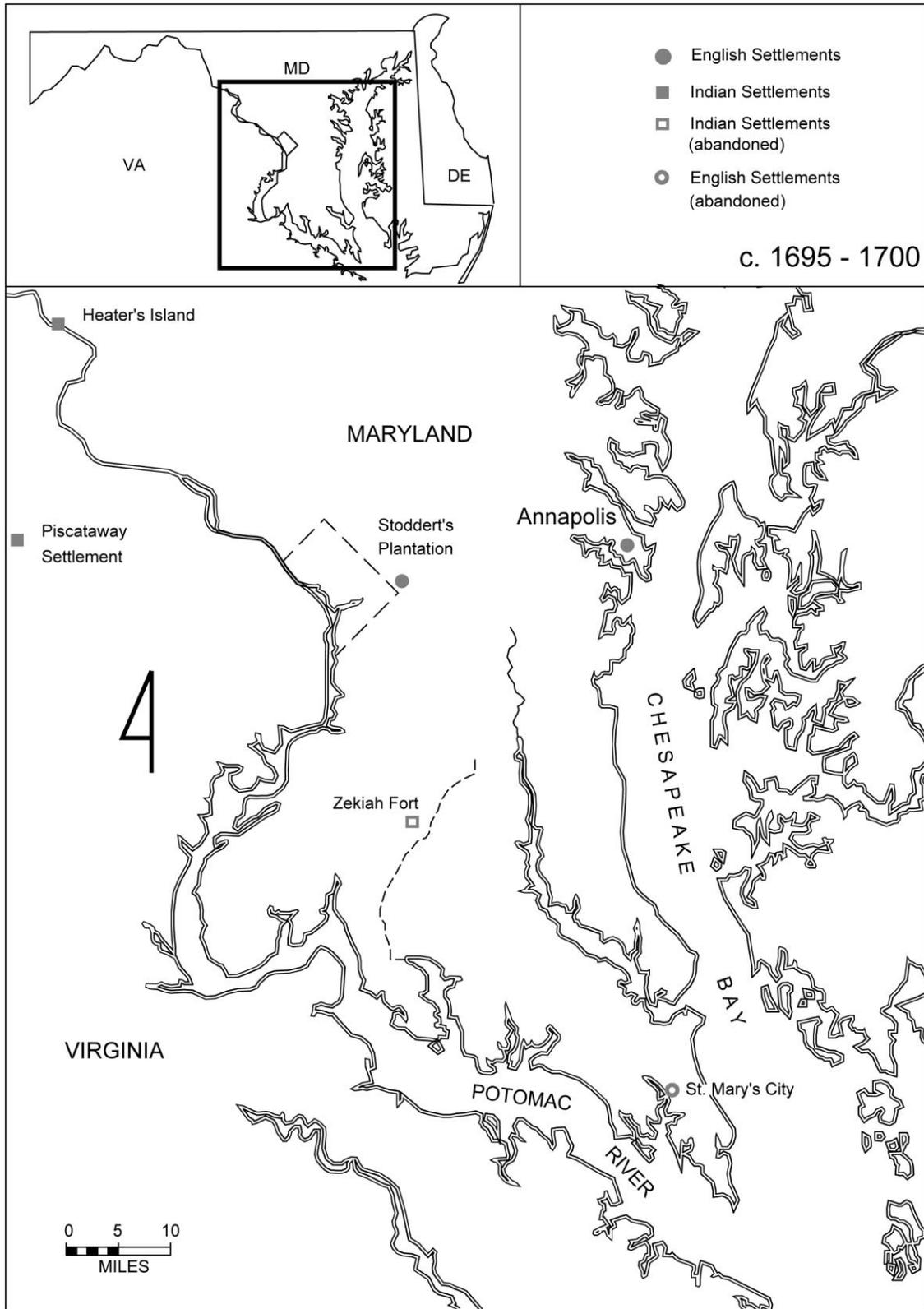
Although the exact date the Piscataway abandoned Zekiah is unknown, evidence suggests that, sometime in the early-to-mid 1690s, the group returned to what is now Prince George's County. Some October 1697 depositions before the Council by William Hutchinson and John Hawkins mention each of these men living "neer the Piscattoway ffort for some years" and interacting on occasion with the Piscataway (Md. Archives 23:226). The will of John Hawkins' father, Henry, written in 1698, describes a piece of land called "Hawkin's Lot" as the tract "wheron sd son John now lives" (Cotton 1906:187).<sup>4</sup> This tract of land was located in Prince George's County, north of Piscataway Creek. Hutchinson also owned several parcels of land in the area of Piscataway Creek, which suggests that the group had indeed returned to this general area.

Throughout 1696, some Piscataway had been making forays into Virginia and the tayac and a large contingent would soon move there (Figure 4). Some Choptico and Pamunkey as well as some Piscataway remained in Maryland during this time (Cissna 1986:178-179). In 1697, James Stoddert, who was living along "the Easterne branch of Potomack in Prince Georges County," or the Anacostia River, reported that, in February of that year, several Indians who lived "near the mountains" had come to his house to trade. "At this time," Stoddert noted, "there were some families of the Piscattoway Indians had their Cabins at my house" (Md. Archives 19:522). Cissna (1986:179) interprets this passage as referring to a Piscataway winter hunting quarter, using this as evidence of continuity of the traditional seasonal round; the passage also suggests that Piscataway had indeed remained in Maryland in February 1697. By May, however, the records indicate that the Piscataway, Mattawoman, and Choptico, at least as organized polities, were beginning to withdraw into the mountains of Virginia (Md. Archives 19:557).

By June, a group of Piscataway including the tayac and great men had left Maryland and settled in Virginia "betwixt the two first mountaines above the head of occoquam river lying neare sixty or seaventy miles beyond the Inhabitants where they have made a fort & planted a Corne feild" (Md. Archives 19:520). The Maryland government, which just two years earlier had worked to deprive Indians of land, now sent Major William Barton to find out why the tayac had left Maryland and to determine his interest in returning. The tayac told Barton that the Piscataway had had much conflict with their English neighbors while in Maryland and were being blamed for killing livestock and a host of other problems. The English were also destroying Piscataway corn, tearing down their fences, buying up their lands, and

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<sup>4</sup>This Henry Hawkins is the same Henry Hawkins living at Johnstontown, south of the county's court house at Moore's Lodge. As noted earlier, Hawkins at one point had a Susquehannock Indian living with him; by 1681, Hawkins also owned Fair Fountain, a tract several miles north of the court house where a tenant appears to have been involved in trade with the local Native population.



**Figure 4.** The political landscape of the lower Potomac River valley, c. 1695-1700.

threatening them. Upon his return, Barton reported to the Maryland Council that the tayac and great men were strongly opposed to returning to Maryland, although they “desire to live peaceable there & to passe too & froe without trouble as formerly and that the English should be welcome to come to their ffort as often as they please” (Md. Archives 19:520-521). Major Barton also reported that while the tayac and great men opposed a Piscataway return, “the greatest part of the Indians are inclinable to returne back to Maryland, especially the Comon sort of men & woemen & that severall of them are already come back & more resolved to come suddenly provided they may live peaceably & quietly & that they see the English are not angry with them” (Md. Archives 19:521).

One of the primary catalysts for Piscataway abandonment of Maryland was the murder of one of James Stoddert’s African slaves on 3 April 1697 (Md. Archives 19:568-569). It is unknown who committed the murder, but the Piscataway tayac feared his people would be blamed by the Maryland government, as they were already being accused of mischief in Virginia. A 29 June 1697 letter from George Brent to the Maryland governor provides much more detail on the situation. Brent reported that he had recently met with an Indian named Choptico Robin, who told him that several months earlier an Indian named Esquire Tom was at the falls of the Potomac with a group of Piscataway and Seneca. Among the group was a Susquehannock great man named Monges, who secretly gave Esquire Tom a large belt of Peake and told him “that his Nation was Ruin'd by the English assisted by Piscattoways, & tht now they were no People, that he had still tears in his Eyes when he thought of it and...he must take his Revenge in private by his money & therefore if this Esq Tom would kill some English where he Could...and most probable to be lay'd upon the Emperors People, he would give him great Rewards...for tht the English would ffirst bleed & then Revenge it upon his Indian Enemies also this Esq Tom promiseth to do” (Md. Archives 23:187-188). Esquire Tom told Choptico Robin that the murder was to be committed in Maryland, but since Robin claimed that he had not participated, he could not confirm that Esquire Tom was responsible for the murder of Stoddert’s slave. Nonetheless, Esquire Tom was guilty of the Virginia murders, according to Robin. Choptico Robin did state confidently, however, that it was the murder of Stoddert’s slave that “Caused both the [Piscataway] Emperor & Pomunkey Indians to ffly to Virga tht the Emperr sate down there where now he is but the sd Pomunkeys soon Return'd to Maryland” (Md. Archives 23:188).

The Maryland government was anxious to get the Piscataway to return, at the very least so they could keep tabs on them. Virginia records report that, in July 1697, the Piscataway tayac entertained a number of Seneca Indians at his settlement in Virginia and the two nations declared that they were “now all one people” (Cissna 1986:183-184). Maryland eventually succeeded in getting the Piscataway to agree to resettle either at Piscataway Creek or Rock Creek. Virginia officials were also trying to get the Piscataway to return to Maryland. Cissna describes a series of murders in both Stafford County, Virginia and Prince George’s County, Maryland for which the Piscataway received blame and efforts to bring them back to Maryland were likely an attempt to better control the group’s actions (Cissna 1986:184-185). The Maryland government even considered capturing and holding hostage the son of the Piscataway tayac, who was at Choptico, in an effort to gain leverage in their dealings with the group (Md. Archives 25:76).

It is unclear whether the Piscataway returned to Piscataway Creek or Rock Creek as Maryland desired. Several Pamunkey, who had been with the Piscataway in Virginia, returned to live near English plantations “att Pomunkey” (Md. Archives 22:328-329; Cissna 1986:186). It is likely that some Piscataway also returned to Ssuthern Maryland, as the tayac’s son was staying at Choptico and, as Major Barton noted earlier when visiting the group in Virginia, many of the “Comon sort” were eager to return to their homeland and some already had.

By 1699, many Piscataway, including the tayac, had moved to Conoy Island (later known as Heater's Island) in the Potomac River, near Point-of-Rocks, Maryland (see Figure 4). This site is well above the fall line and distant from the English settlements. By this time, the Piscataway were most frequently referred to as the Conoy (Cissna 1986:191-1912). Virginia's governor, hoping to arrange a meeting with the Piscataway tayac and learn of the group's disposition toward Virginia, sent two emissaries to visit the group on Conoy Island. Burr Harrison and Giles Vandercastle made the long journey through the Virginia wilderness to meet with the tayac in April 1699. The two Virginians described an unfinished fort on the northern edge of the island, about fifty to sixty meters on a side. They estimated the Piscataway population to be about eighty bowmen/warriors (300 people total) and learned from the tayac that there were also "Genekers" (Seneca) who sometimes lived with them "when they are at home." Eighteen cabins were described inside the fort, with another nine outside. The tayac and great men also declined the governor's request to meet with him in the Virginia capital, as they "were very Bussey and could not possibly come or goe down." Instead, they invited the governor to the island, affirming that they desired to live in peace (Palmer 1875:62-65).

Later that year, in November, another pair of Virginians, David Straughn and Giles Tilltet, traveled to Conoy Island to meet with the Piscataway tayac. The tayac told them that the Piscataway were anticipating an attack by the French-allied "Wittowees," who had been seen in the area by some Piscataway women. The pair also confirmed that some Seneca were living at the fort and that the Susquehannock occasionally came to the island (in peace) as well. When asked if he would come live among the English again, the tayac responded that he would be willing to, but was afraid that the foreign Indians would follow them and commit mischief or violence against the English for which the Piscataway would be blamed. The tayac stated that, despite fears of Witowee attacks, the Piscataway would stay at the fort for now (Palmer 1875:67).

In 1700 and 1701, John Ackatamaka, or Othotomaquah, the Piscataway tayac, sold some tracts of land between Mattawoman and Piscataway creeks to Englishmen.<sup>5</sup> Around this time, the Maryland government was attempting to establish a reservation for the Piscataway, promising that the English would vacate the area if the Piscataway would return (Md. Archives 24:72-72; 79). The Maryland government was also appointing Indian-English "mediators" for Indian groups in Maryland at this time, likely to keep a watchful eye on Indians on the planned reservations. This act recognized four groups of Southern Maryland Indians at this time: Choptico, Piscataway, Accokeek, and Pamunkey (Cissna 1986:188).

A large contingent of the group remained on Conoy Island, however, and it is unlikely that the reservation was established as planned. The Maryland government appeared to have gotten tayac Othotomaquah to agree to return to Southern Maryland with his group in July 1700, but over a year after this agreement, the Piscataway still had not returned (Cissna 1986:188; Md. Archives 24:147-148). The Maryland government appeared mistrustful of the tayac at this time, ordering rangers to protect the colony's frontier (Md. Archives 24:147-148).

In September 1704, the Piscataway on Conoy Island were visited by Colonel Smallwood, an Indian interpreter named Robin, and a small troop of men. Smallwood learned that 57 Piscataway had died during a smallpox outbreak, including tayac Othotomaquah (Md. Archives 26:376-377), and the group was to select a new tayac (Cissna 1986:189). Smallwood reported that "they had left their Forte," leaving much corn unharvested, although this may have been temporary, as the group remained on the

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<sup>5</sup> The deed can be found in Prince Georges County Land Records, Liber A folio 413, MSA CE 65-1.

island and in the area (Md. Archives 26:377). Some Piscataway may have left the island after the smallpox epidemic, going to live at Conejoholo on the Susquehanna River (Cissna 1986:192).

Many Piscataway continued on the island, however. In 1712, the Piscataway still at Conoy Island were visited by Christoph von Graffenreid, a Swiss colonist looking to establish a community in the New World. Graffenreid described visiting the island of “Canavest” (phonetically similar to “Ganowese,” or Conoy, the Iroquoian term for the Piscataway) where a group of Indians were then living. A Frenchman from Canada named Martin Chartier had married an Indian woman and was present on the island when Graffenreid arrived there. The Piscataway built several bark canoes for Graffenreid and his group and took them down the Potomac (Todd 1920:247, 383-385, 391).

Sometime between Graffenreid’s 1712 visit and 1718, the group abandoned Conoy Island and resettled in Pennsylvania. According to a brief oral history of Piscataway chief Old Sack recorded in 1743, his predecessors had “brought down all their Brothers from Potowmeck to Conjoholo,” indicating that the Piscataway who had left Conoy Island at this time may have joined previous migrants at Conejoholo for a brief period (quoted in Kent 1984:70). By 1718, the Piscataway had resettled at Conoy Town on the Susquehanna River where they remained until European encroachment in 1743 again forced them to move to either the Juniata River or Shamokin (Van Doren and Boyd 1938: 67-69; Cissna 1986:192-193).

The Piscataway appear to have maintained close ties to the Nanticoke during this time and, following their move into the Pennsylvania colony, were party to numerous treaties between the colonial government and the Indian nations throughout the 18<sup>th</sup> century. At this time, the Piscataway were under the influence of the Five/Six Nations Iroquois and maintained extensive contact with many mid-Atlantic Indian groups.

During the negotiations for these treaties, concerns of the Piscataway/Conoy were sometimes raised. At the 1744 Treaty of Lancaster, for example, the Piscataway described “that they were ill used by the white People,” forcing them to move from Conoy Town and requesting “some small Satisfaction for their Land” (HSP 1938:67). At the same meeting, Iroquoian speaker Canassatego conferred with commissioners from Virginia on behalf of the Piscataway. Canassatego told the commissioners that “among these Tuscaroraes there live a few Families of the Conoy Indians, who are desirous to leave them,” asking the commissioners for safe passage of these Piscataway on the road through Virginia (HSP 1938:77). Canassatego’s request reveals that some Piscataway had resettled south of Maryland among Tuscarora remnants who had not migrated north to join the Five/Six Nations at the conclusion of the Tuscarora War several decades earlier. Canassatego referred to a recent agreement with the Cherokees necessitating the reopening of a Virginia road to Iroquoian messengers. The Pennsylvania governor responded on behalf of the Virginia commissioners, stating that they “would prepare Passes for such of the Conoy Indians as were willing to remove to the Northward” (HSP 1938:78).

At the 1761 Treaty of Easton, Piscataway and Nanticoke-specific concerns were again addressed with the colonial Pennsylvania government:

We the Seven Nations, especially the Nanticokes and Conoys, speak to you. About Seven Years ago we went down to Maryland, with a Belt of Wampum, to fetch our Flesh and Blood, which we shewed to some Englishmen there, who told us they did not understand Belts, but if we had brought any Order in Writing from the Governor of Pennsylvania, they would let our Flesh and Blood then come away with us but as this was

not done, they would not let them come Now we desire you would give us an Order for that Purpose (HSP 1938:260).

Both the Lancaster and Easton treaties demonstrate the geographical extent of Piscataway diaspora. Not only did some Piscataway migrate north into Pennsylvania, some split and went south to live among the Tuscarora (remaining there as late as 1744), while some also stayed behind in Maryland (as evidenced by the 1761 Easton treaty).

In August 1769, a conference was held at Shamokin by Colonel Francis of Pennsylvania for the condolence of Seneca George, “a leading Chief, and faithful Friend of the English,” whose son had recently been murdered by an Englishman. Attending along with Seneca George were an Onondaga chief, the “Conoy King,” and roughly fifty more Indians, “principally Nanticokes and Conoys.” These Indians were described as “inhabiting in and near Shanango,” in New York. When Seneca George became too “oppressed with grief” during the proceedings, the Conoy King spoke on his behalf (Pennsylvania Gazette 1769).

Cissna notes that some Piscataway may have made their way to Otsiningo, New York after leaving Juniata. At a major Indian conference held with Sir William Johnson in 1770, 193 of the estimated 2,300 Indians in attendance were believed to be Piscataway and Nanticoke and, in 1779, when the Otsiningo Indian settlement was abandoned, 120 Nanticoke and 30 Piscataway were counted on a census at Fort Niagara (Cissna 1986:199-200). Some of these Nanticoke and Piscataway would later move with the Six Nations to a reservation in Canada, while others migrated west with other Indian groups (Cissna 1986:200).

Piscataway representatives were also part of the Northwest Indian council held at the rapids of the Miami River in Ohio in 1793. White settlers had begun settling on Indian territories north of the Ohio River by this time and President George Washington hoped to peacefully end US-Indian hostilities in the area while also securing Indian land concessions. Washington commissioned Benjamin Lincoln and two others to negotiate a peace with the Indian Confederacy with the goal of pushing the boundary line further into Indian territory, effectively forcing the Indians further west. At a meeting at the mouth of the Detroit River, a Wyandot messenger presented Lincoln with a document outlining the position of the Northwest Indian Confederacy, which demanded adherence to the Treaty of Fort Stanwix, recognizing the Ohio River as the boundary between white settlement and Indian lands. Among the tribes signatory to this document were the “Connoys,” who signed with a Turkey (Massachusetts Historical Society 1836:109-176; for “Connoys,” see 143).

These negotiations fell through, however, and hostilities between the groups resumed with a US offensive led by General Anthony Wayne. According to oral history, some of the Piscataway joined other Native groups fighting against Wayne’s forces during his Fallen Timbers campaign in 1794 (Tayac 1988:7).

While some Piscataway migrated north with Iroquois groups and others west with other nations through the 18<sup>th</sup> century, others remained in Maryland. Cissna (1986:205-206) describes some land transfers in 1713 and 1717 between Englishmen and Piscataway. The aforementioned 1761 Treaty of Easton also makes reference to both Nanticokes and Conoys returning to Maryland in a failed effort to “fetch [their] Flesh and Blood,” a reference to their relatives remaining in Maryland (HSP 1938:260). The colonial records also contain numerous references to Choptico and Pamunkey Indians remaining in the colony into the 18<sup>th</sup> century. References to the remnant Piscataway in the 18<sup>th</sup> century may be scarce because the tribal leadership, including the tayac and great men, had left the colony. Major Barton’s visit to the group in Virginia in 1697 had revealed that the tayac and great men “utterly refuse[d]” to return,

while “the greatest part of the Indians are inclinable to returne back to Maryland, especially the Comon sort of men & woemen” and some of them already had (Md. Archives 19:521). Because the Maryland government largely ceased interaction with Piscataway leadership after their move to Pennsylvania, this likely explains the dearth of documentary references to the group’s remaining members.

Archaeologist and ethnohistorian Thomas Davidson (1998:135-136) notes that “most of the tribal chiefs...reacted to [the] loss of power and autonomy by leaving the Maryland colony” and those who remained could either maintain Indian identity on reservation lands or move off reservations and find a place in English society. He also argues that the Maryland government did not regard “Indian” as a racial classification, instead deeming it a cultural, and thus mutable, trait (Davidson 1998:135-136). The implication of this is that once a Maryland Indian stopped acting in a manner the English viewed as overtly “Indian” – demanding treaty rights, etc. – they effectively ceased to be so in the eyes of the colonial government, which often defaulted their racial classification to white or black based on the community to which they had closest ties. This administrative erasure of Indian identity continued into the 19<sup>th</sup> century and would have long-lasting effects on the Piscataway and other Native groups who remained in Southern Maryland (Davidson 1998), and suggests the quiet kind of cultural violence precipitated by the records and archives of colonial powers.

## **H. Zekiah Manor**

As noted at the beginning of this report, the archaeological investigations described in this document were undertaken on four properties, including the Windy Knolls, Steffens, Hogue, and St. Peter’s Catholic Church properties. All four properties are located on what was once known as Zekiah Manor, one of two manors in Charles County reserved for the use of Cecil Calvert, the second Lord Baltimore (King and Strickland 2009a). Baltimore had instructed his agents in Maryland to create for him at least two tracts of 6,000 acres each in every county. These tracts were to be erected into manors, and lands within the manors leased for five years at a time to tenants. But Baltimore’s agents in Maryland had only sporadically followed through on the proprietor’s wishes and, in March 1673, Baltimore directed his eldest son, Charles, then governor, “to Cause the said Mannors to be duly & Exactly Recorded in the Secretaries office in Maryland and a true Coppy thereof sent to his Lopp” (Md. Archives 15:31).

Of such importance to Lord Baltimore were these manors that he also asked Charles, who had been in Maryland since 1661, to insert the names of all proprietary manors onto Augustine Herrman’s Map of Maryland and Virginia before it was printed in 1673 (see Figure 3). Governor Calvert was sensitive to his father’s concerns, reporting to Lord Baltimore often about the standing of the proprietary manors in Maryland and Charles’s ongoing efforts to develop the manors, to have their boundaries perfected, and to have squatters evicted.

By 1667, two manors had been erected for Lord Baltimore in Charles County, including Zekiah and Pangayah manors (Figure 5 shows the reconstructed bounds of Zekiah Manor). How much use Governor Calvert made of the two manors, at least initially, is unknown (Calvert’s principal residence, Mattapany, described as a “fair house of brick and timber” by John Ogilby, was at the mouth of the Patuxent in what is today St. Mary’s County). Some of Calvert’s friends, including William Boarman and his son-in-law Benjamin Rozier, were in the area, and it is not unreasonable to speculate that Calvert visited these men from time to time.

By 1672, it appears that Governor Calvert was spending time in the Zekiah region, possibly at the instigation of his father who, in his later years, was increasingly concerned with having the manors surveyed and settled. That year, the governor informed his father that



I am now buildinge vpon yor Lordpps Mannor of Sachay where I Resolve to live in the Summer time. Itt is a very good part of the Country for health, And much Cleered for husbandry the which I am now vpon, It is thought there is at least five hundr Acres of Cleere Ground. My Resolution is to build a bricke house for little Cis the next yeare... I Chose this Mannor to begin vpon, because yor Lopp has two Mannors together Sachaye & pangey... (MHS 1889:272).

Governor Calvert appears to have been responding to Lord Baltimore's expressed desire to confirm the status of the proprietary manors. Not only did Calvert describe an already cleared tract to his father, he noted that he was building his own house and planned the following year to build a brick house for 'little Cis,' Calvert's eldest son and Lord Baltimore's grandson and namesake (MHS 1889:272).

True to his word, Governor Calvert wrote to his father a year later, reporting that he had "already built a Country house for summer time at Zachya," but "according to the fashion of the building of this Country," probably in wood. Calvert goes on to tell Lord Baltimore that building in Maryland was "very Chargeable" and that he was "loth to bestow much more of it, least (though the place be so healthfull) when I have Done Cis should not like it." Calvert closed his report on Zekiah by telling his father that he planned to have Stephen Goffe, apparently recommended by his father, reside "this summer neare Zachiah that he may be neare me" (MHS 1889:284-285).

"Summer houses" were coming in vogue in England among the gentry. In his book on armories, Randle Holme (1688) noted that summer houses were "places to which the Gentry resort, and abide there dureing the Summer season, for their Recreation and pastime." A 17<sup>th</sup>-century summer house or gazebo was recently unearthed in the Lisburn Castle Gardens in Ireland, and was found to contain a tiled basement floor, a fireplace, and two small ovens. Artifacts, including a decorative brooch and a gaming piece, suggest that the building was used for summertime socializing by the family that owned the property (Lisburn City Council 2007). As important social artifacts, summer houses have been plumbed for what their construction and use might suggest about architecture, leisure, and gender in the early modern period (Lipsedge 2006). For Charles Calvert to tell his father that he was building a house for use during the summer time would have almost certainly conveyed certain images to the senior Calvert, who had never been to Maryland but who would have been, as a member of the English nobility, intimately familiar with the notion of retreats and summer houses.

Governor Calvert's principal residence in Maryland at the time was at Mattapany, a "fair house of brick and timber" located near the mouth of the Patuxent in what is today St. Mary's County. Archaeological investigations at Mattapany have uncovered the brick foundations of a relatively large structure, probably at least two-and-one-half stories in height on a raised basement (Chaney 1999). Analysis of the intact masonry and brick assemblage suggests that even the proprietor's son had a hard time finding a brickmaker and mason with much more than passing skills in Maryland. Calvert spent most of his time at Mattapany, it is clear from the Council records, but his position so close to the Patuxent concerned him and, apparently, his father, too. At some point during his residency, Calvert erected a substantial palisade around a portion of the dwelling's yard and, from time to time, posted a guard at the colony's magazine, which was kept nearby (Chaney 1999; King and Chaney 1999, 2004; Pogue 1987).

So it is not especially surprising that, on at least one occasion, Governor Calvert suggested that his house at Zekiah would provide him with a sense of security he did not always have at Mattapany. When in one of his letters, Lord Baltimore warned his son that some unscrupulous souls had designs on

his son's life, Calvert told his father that he would "remove up to Zachiah" for his protection and be cautious of the ships he boarded (MHS 1889:277).

Although Calvert regularly used Mattapany as a meeting place, only one meeting of the government took place at Calvert's Zekiah house. Anne Brown (1965:4) reports that a court of chancery met "at our manor house of Zekiah" in April 1673. The location of this citation is unclear, but the court of chancery did meet in June 1673 in the "Charles County Cort house." At that time, the court was meeting in private homes, and it is entirely possible and even likely that this June meeting took place at Calvert's Zekiah residence.

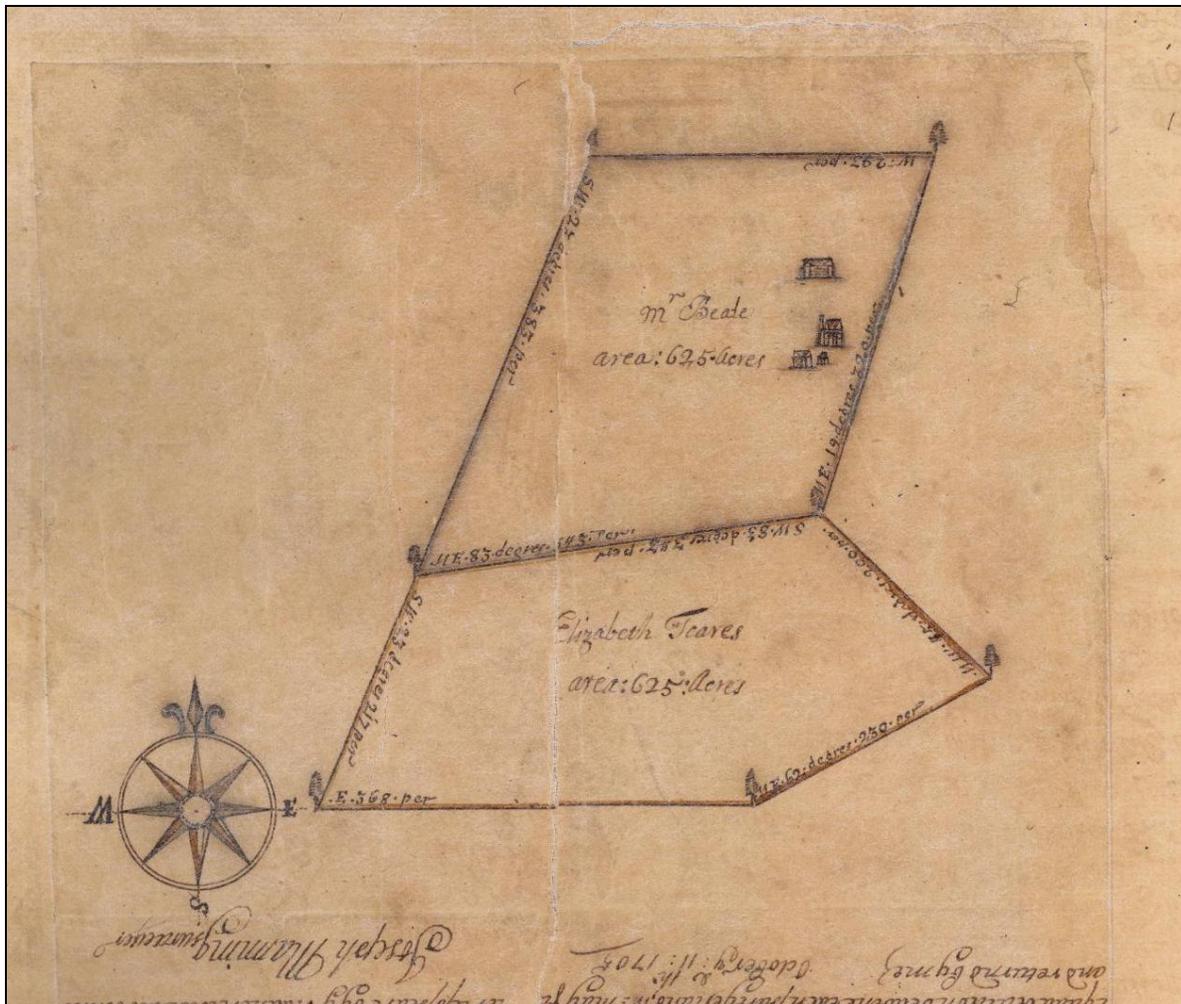
Soon after Calvert had finished Zekiah House, his life changed significantly. His father, the second Lord Baltimore, died in late 1675. Calvert now became the third Lord Baltimore, but without the close contacts and relationships his father had cultivated in England for more than four decades. Calvert returned to England following his father's death, spending at least 29 months there and possibly as many as 31, away from his Maryland holdings. More than his father, who had never come to Maryland, Charles Calvert had feet literally in both worlds, but in many ways, this strained Calvert's abilities to govern.

When Calvert returned to England in 1676, the governor had left behind a colony experiencing considerable unrest, especially due to growing tensions between colonists wishing to establish plantations and indigenous groups who had been promised certain securities by the proprietary family. This tension was exacerbated by the ongoing raids of the 'foreign' or northern Indians, and it didn't help that many Marylanders made little effort to distinguish 'friend' Indians from sworn enemies (Rice 2009:146-147). After Calvert returned to Maryland in late 1678 or early 1679, he appears to have spent little time at his "summer house." Instead, Calvert was spending more time at Manahowick's Neck, his friend Thomas Notley's plantation at the mouth of the Wicomico. When Notley died, he left the plantation to Calvert, who renamed it Notley Hall and moved his step-daughter and son-in-law into the elaborate dwelling located there (Bauer and King 2012).

Although Calvert does not appear to have spent much time on Zekiah Manor after 1675, the "summer house" appears to have remained standing and habitable. In August 1681, Colonel Coursey and Colonel Stevens, the two negotiators for the proprietary government in events involving "northern Indian" raids on Zekiah Fort, met with Seneca Indians at "Zekiah House," and a contingent of rangers had spent the night there. This "Zekiah House" is believed to have been Calvert's summer house. Avocational historian Anne Brown (1965) speculated that her parents' house at Western View off Hawkins Gate Road may have been Calvert's summer house, but a review of published photographs suggests not (Currey 2000; King, Arnold-Lourie, and Shaffer 2008).

Finding the summer house on the 8,000-acre-plus Zekiah Manor was believed to be key to finding Zekiah Fort, and we began searching land records related to the property. In 2008, we rediscovered an intriguing plat in the Charles County court records (Figure 6). Prepared in 1705, the plat depicted His Lordship's Favor, a 1,250-acre parcel on Zekiah Manor that had been transferred from Lord Baltimore to William Boarman in 1699. The surveyor whose name is affixed to the plat, Joseph Manning, was also responsible for the famous Charles County court house plat, which had been completed in 1697. Previous work at the site of the court house has strongly suggested that Manning depicted buildings realistically (King, Strickland, and Norris 2008).

The 1705 plat depicts four structures, including one building with a gable-end chimney and three structures that appear unheated. The heated building, almost certainly a dwelling, appears to have a chimney of brick construction. Given the place and the period, the presence of a masonry chimney is unusual. Recall Governor Calvert's comment to his father in 1673 about how "very Chargeable" it was to



**Figure 6.** Plat of His Lordship’s Favor, Zekiah Manor, 1705 (Courtesy Maryland State Archives).

build in Maryland as he abandoned his plan to build a brick house at Zekiah for his son. Twenty years later, in 1705, the rebuilding campaign Carson *et al.* (1981) have identified for the Chesapeake had not yet begun. Research indicates that none of the owners of the property after 1699 lived at His Lordship’s Favor (King and Strickland 2009a), making a dwelling with a brick chimney, presumably for a tenant or a servant, even more unusual. The presence of at least three outbuildings suggests a level of investment in this property that would also be unusual for a tenant.

In 2009, we located the dwelling complex shown on the 1705 plat adjacent to a large ravine on the west side of Piney Branch, not too far from the Windy Knolls property and from Zekiah Fort. The limited testing conducted at the site generated no artifacts that could be irrefutably dated to the 1670s, although if it is the case that Baltimore made little use of Zekiah House, sample size could be a mitigating factor (King and Strickland 2009a).

Whether or not the dwelling site found at His Lordship’s Favor is Zekiah House or not, its discovery and work at other locations in the Piney Branch drainage suggest that this area, which had never really been systematically surveyed, deserved a closer look.

### **III. Project Area**

The purpose of the present project was to locate settlements associated with the 1680 Zekiah Fort as well as any other archaeological sites that might be encountered as part of the survey. As described in the next chapter, the search was narrowed to an area west of Zekiah Run between Piney Branch and Jordan Swamp in Charles County, Maryland. Four parcels, including the Windy Knolls, Steffens, Hogue, and St. Peter's properties, were investigated as part of the present project (Figure 7). All four parcels lie within the Potomac River drainage, classified by the Council for Maryland Archeology as Maryland Archaeological Research Unit Number 10 (Figure 8). All four parcels are located within a five-mile radius south of Waldorf.

This chapter begins with a description of the project area's general environmental setting followed by a closer examination of each parcel.

#### **A. Environmental Setting of the Project Area**

The Zekiah Run, Piney Branch, Jordan Swamp, and numerous unnamed streams and creeks that feed these waterways are all non-tidal freshwater streams that ultimately flow in a southeasterly direction into the Wicomico River at Allen's Fresh, approximately 20 miles south of the project area. Although historical documents are clear that Natives and colonists alike moved up and down the Wicomico River and Zekiah Run drainages, the people living at Zekiah Fort had much closer access to the Potomac River by traveling overland to Piscataway Creek, a significantly shorter distance of only about 12 miles. This they probably did along a path that was, in the early historic period, referred to as the coach road and that, today, roughly follows Maryland Route 5 (to Waldorf) and, from there to Piscataway Creek, Maryland Route 228.

The Zekiah Swamp is one of the larger swamps in Maryland and is considered one of the state's most ecologically important areas. The Zekiah is a hardwood freshwater swamp consisting of a braided stream "lying on a wide flat valley floor with steep valley walls" (Wanser 1982:21). The swamp begins well north of the project area in what is now Cedarville State Forest in southern Prince George's County and extends approximately 21 miles to Allen's Fresh. Geologists suspect that Zekiah Swamp has been a swamp since early in the Holocene and was not formed as a result of sea level rise (Wanser 1982:21; Hack 1957:828-829). Indeed, shovel testing along the swamp's marshy edges suggest that sea level rise has had a negligible impact on the swamp's form, at least in the La Plata area (King and Strickland 2009b:29).

The Zekiah was especially attractive to Native Americans throughout the Archaic period (7500 BC-1000 BC) because of the variety of resources found there. The proximity of streams and runs, wetlands, lowlands, and uplands, all supporting a variety of plants and animals that would have been attractive to hunting and gathering groups, made the Zekiah a rich area for human habitation.

The Zekiah Swamp is located in the southern part of Maryland's western shore, a region known for its relatively mild year-round climate with four well-defined seasons. Nonetheless, the Allegheny Mountains to the west and the Chesapeake Bay to the east act as significant "moderating influences" on local weather conditions, with relatively dramatic differences reflected in average seasonal temperatures and rainfall within the region. The average annual temperature for Ronald Reagan National Airport, the closest point to the project area, is 58.2° F. High temperatures occur in July, the warmest month, and average 78.9° F. Low temperatures occur in January, the coldest month, and average 36° F (National Climate Data Center 2012). These averages mask what Wanser (1982:21) describes as a "startling variability" in the growing season: the number of frost-free days in the Zekiah Swamp is about 190 while

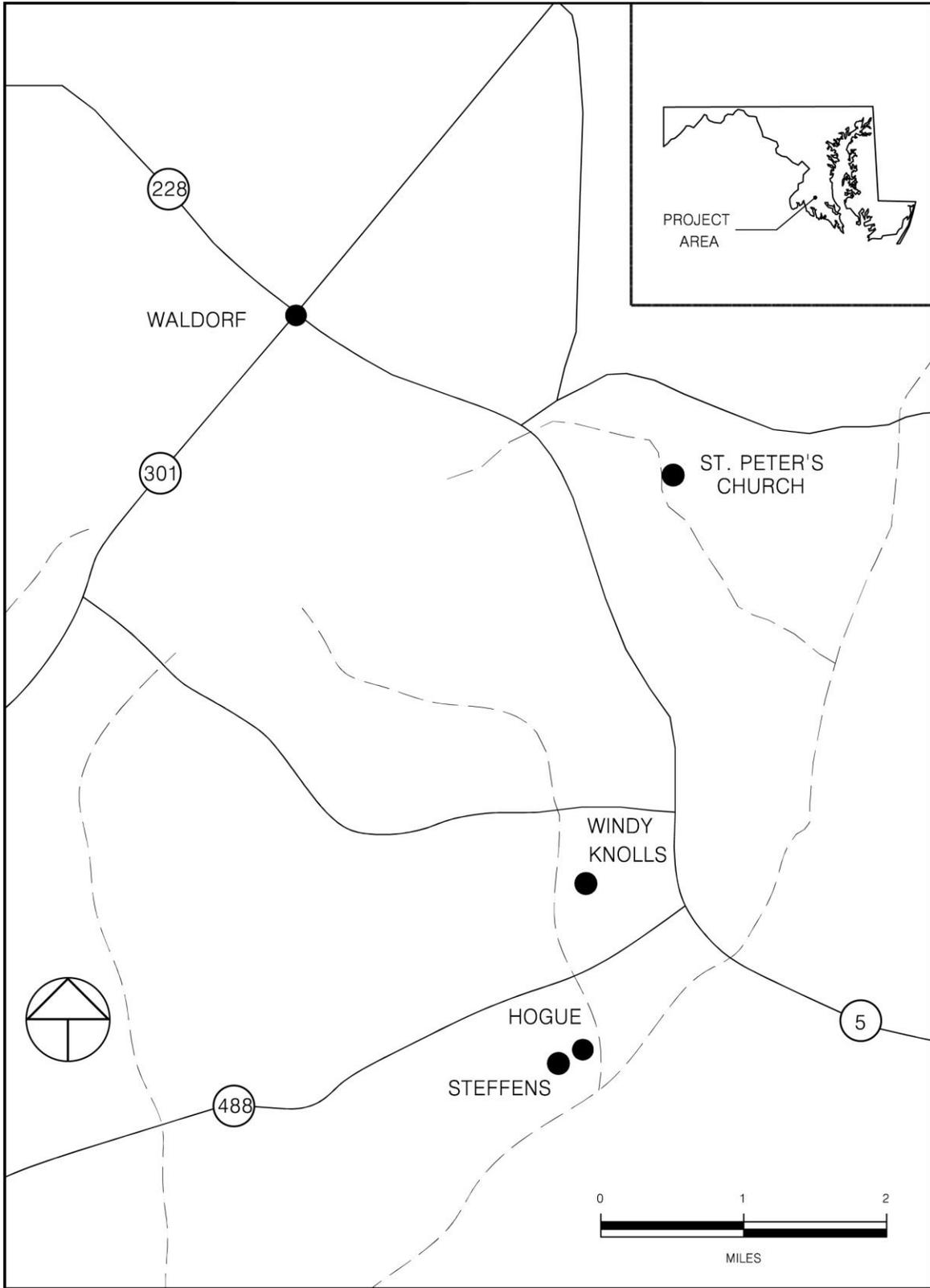
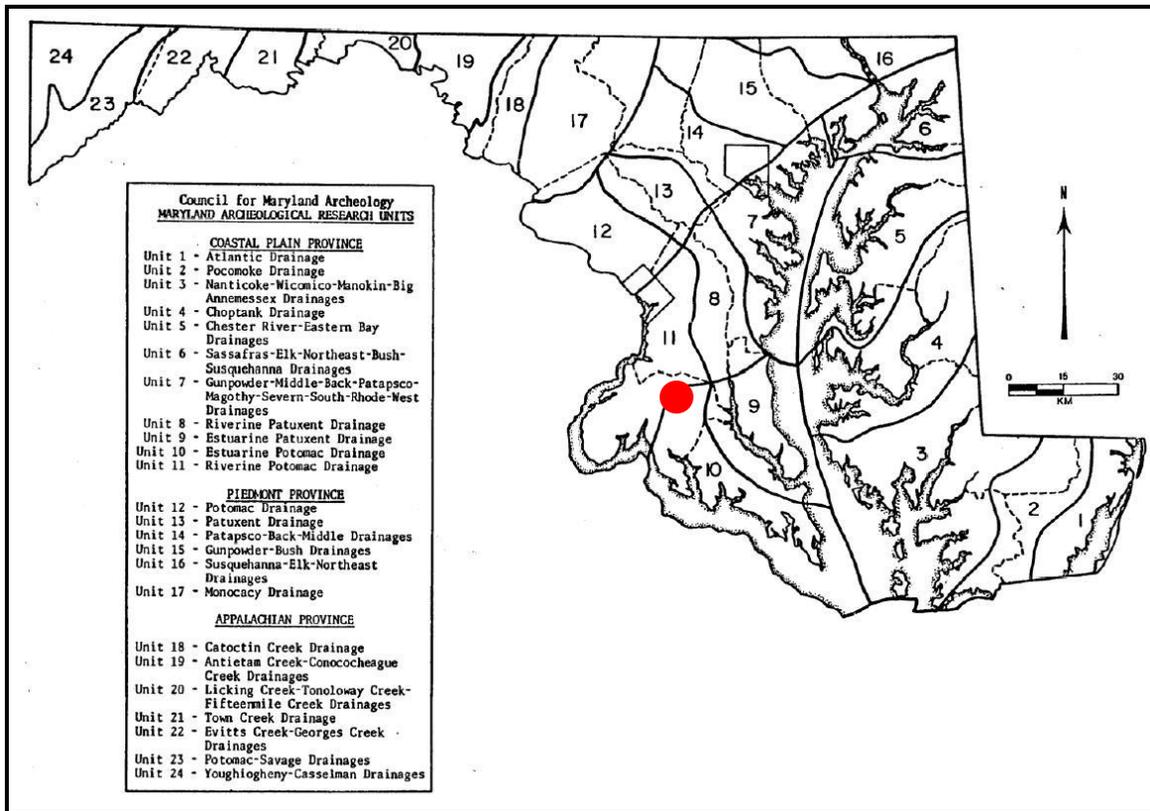


Figure 7. Project area.



**Figure 8.** Council for Maryland Archeology Regional Research Units.

in southeastern St. Mary’s County, about 40 miles away and much closer to the Chesapeake Bay, the number is about 230, or a 20 percent longer growing season.

The Allegheny Mountains also act as a storm barrier, with what Wanser (1982:21) describes as a “rain shadow effect,” with a decrease in average annual precipitation from west to east. In other words, the Zekiah receives greater precipitation than southeastern St. Mary’s County, with an average of 44 inches of precipitation per year. August is the area’s wettest month and December its driest. Still, rainfall for the Zekiah Swamp is fairly consistent throughout the year, with average monthly rainfall totals of at least three inches or more eleven out of the 12 months of the year.

Although pine trees are a common sight in the region today, the result of extensive land clearance beginning in the late 18<sup>th</sup> century, hardwood forests predominated in colonial southern Maryland. These forests included oak, chestnut, and hickory trees. These and other nut-producing trees, including butternut and walnut, would have provided mast for deer, turkey, and squirrel in the early and mid-fall. The wooded swamps bordering Zekiah Run, Piney Branch, and Jordan Swamp include river birch, sweet gum, black gum, red maple, willow oak, and swamp oak along with a thick understory attractive to wildlife. Grasses and other wild plants, including fruit- and seed-producing species, were also found in the area.

Wanser (1982:31) lists 24 native mammals in the Potomac estuary at the time of European Contact, including white-tailed deer, opossum, gray fox, red fox, raccoon, river otter, Eastern mink, beaver, muskrat, two species of mouse, one species each of mole, shrew, vole, rat, and lemming, squirrel,

woodchuck, weasel, rabbit, bear, wildcat, wolf, and elk. Deer, rabbit, raccoon, muskrat, and squirrel would have been especially plentiful in the project area.

Birds, including black and wood duck, eagle, turkey, woodcock, bobolink, and dove, are found in the project area. Freshwater species of fish are found in the project area but, in general, the diversity of fish is much lower than along the Potomac and Patuxent shorelines. Other marine animals, including oysters and clams, plentiful in the Potomac and Patuxent, are not found in the project area.

While the project area appears to have been rich in wild plant and animal resources, at the time the Zekiah Fort was occupied, corn, a New World domesticate not native to the Middle Atlantic was also a critically important foodstuff. Varieties included a “Virginia gourdseed” and smaller “flint corn” types (Percy 1977). For both colonial and indigenous populations, ground preparation for the planting of corn began in the late winter or early spring months when the ground was sufficiently thawed. Documents indicate that, among the colonists, it could take one person five and a half days just to prep one acre of land to be planted. Since the colonists essentially adopted Native strategies for the cultivation of corn, at least in the 17<sup>th</sup> century, this estimate probably reflects a similar process for the Piscataway. Virginia gourdseed corn was typically planted from the middle of April through the end of May, and could take up to six months to reach maturity and ripen, typically ready for harvest in late September or early October. Smaller flint corn varieties had a shorter growth period to maturity and were planted from April and into June and had a shorter growth period to maturity. Flint corns can often be harvested within four months of planting. Along with corn, Native populations would plant other crops as well, such as beans, pumpkins and squash. Beans would be planted among the corn so that the corn stalks could be used to support the bean vines (Bidwell and Falconer 1941; Percy 1977).

When the Piscataway abandoned their settlement at Moyaone for Zekiah at the end of June 1680, the growing season was well underway. Leaving Moyaone at the very end of June, the Piscataway almost certainly gave up the crop then growing at Moyaone. The Piscataway were in an especially precarious position, dependent on the English not just for protection but for food as well. How the Piscataway procured enough food for sustenance goes unremarked in the documents, although in late February 1681, some Piscataway great men described their distressed condition to Lord Baltimore and requested a supply of corn. The Piscataway also reported that they were preparing to plant corn at about that time, in keeping with beginning the work required to prepare fields for planting: trees would have to be girded and removed, and the ground thoroughly prepared in advance of planting.

At the time the Piscataway moved into the Zekiah, the area had been occupied by the Sacayo or Zekiah Indians, a group related to the Piscataway but nonetheless identified as distinct at the time the 1666 articles of peace and amity were negotiated. When Zekiah Manor was created in 1667, Native people living in the area were aware of the Calvert family’s effort to erect the manor. Prior to 1673, when Zekiah Manor was resurveyed, Charles Calvert directed the surveyors to consult with Indians in the area about the manor’s boundary (Md. Archives 73:100). Calvert had also reported to his father in 1672 that the land was “much Cleered for husbandry” (MHS 1889:272), suggesting that Indians were present in enough numbers before the Piscataway move to Zekiah to have modified the natural landscape.

## **B. The Windy Knolls Property**

The Windy Knolls property is located 4.5 miles southeast of Waldorf near the intersection of Leonardtown Road (Maryland Route 5) and La Plata Road (Maryland Route 488) (see Figure 7). The property is at the end of Windy Knolls Place approximately two-thirds of a mile west of Zekiah Swamp. Windy Knolls was selected for survey based on a combination of environmental factors and two suggestive documentary references, discussed in more detail below. Today, the property is divided into

three parcels owned by three separate parties. The area surveyed as part of this project included approximately 63 acres.

The Windy Knolls parcel consists of relatively flat low-lying land ranging in elevation from 160 to 170 feet above mean sea level, punctuated by two steep, eroded knolls, the tops of which range in elevation from 190 to 200 feet above sea level (Figure 9). The property's southern knoll is bracketed by an unnamed tributary of Piney Branch. The unusual path of this unnamed tributary begins as a perennial spring flowing in a southerly direction for approximately 1700 feet before turning 90 degrees to the west and flowing for another 1800 feet until its intersection with Piney Branch. This configuration provides the southern knoll with both natural topographic defenses and a perennial water source.

Historically, the surveyed portion of the Windy Knolls parcel has been in agricultural use although, beginning in the 1970s, the southern knoll was developed with a single family home. USDA photographs indicate that, in 1963 and probably for many years, even the knoll slopes were cultivated (Figure 10). The property is accessed by old farm roads. One of these roads provides access to the

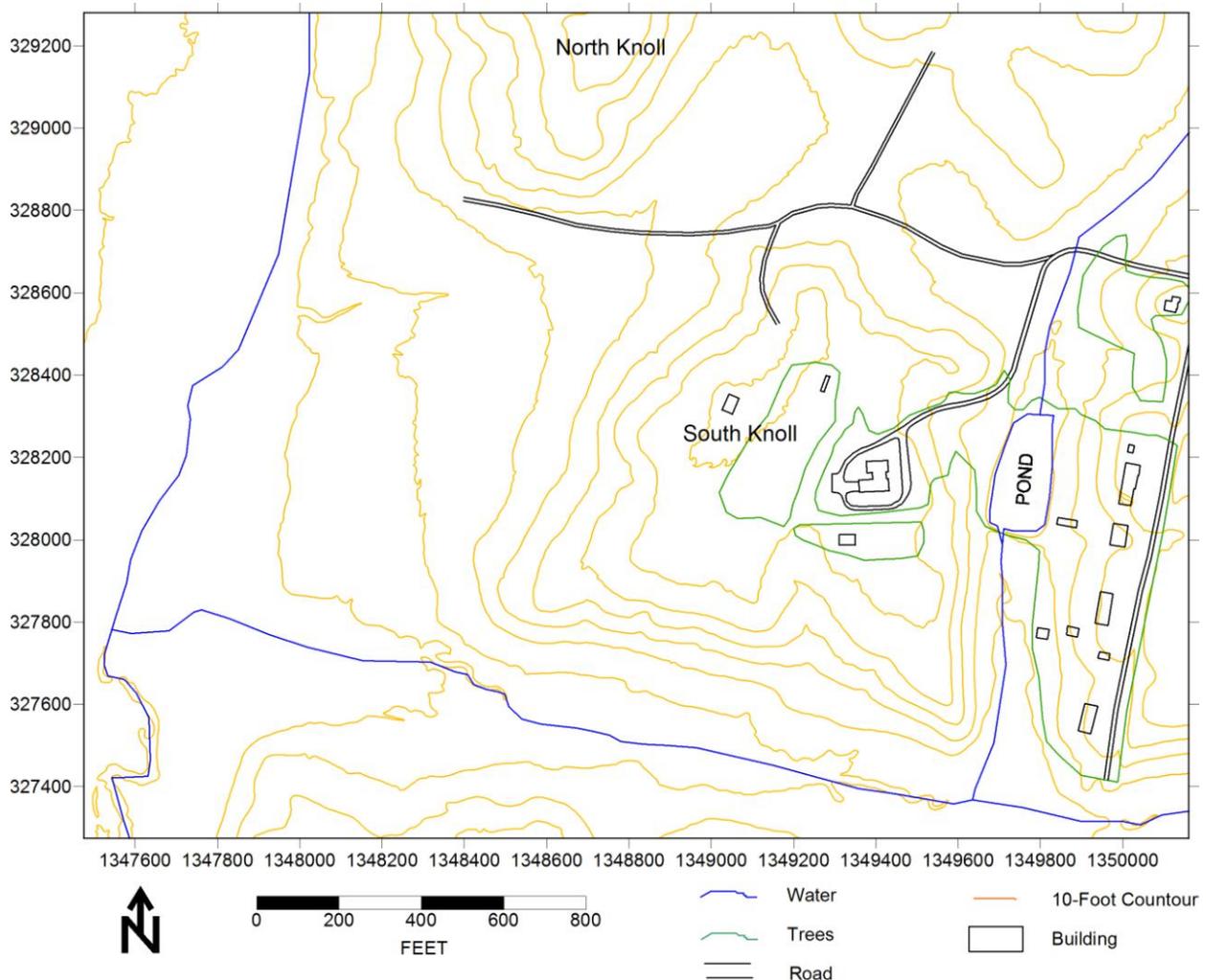


Figure 9. The Windy Knolls property.



**Figure 10.** 1963 USDA aerial photograph of the Windy Knolls property. Notice that most of the slopes are plowed, along with the two barns (Courtesy USDA SCS).

southern knoll along its northwest edge and is probably the access route historically. The former agricultural fields have reverted to woodland and the property is occasionally used by hunters. Two tobacco barns, one abandoned but standing and one collapsed, exist on the property. The abandoned barn is located atop the southern knoll, while the collapsed barn is located in a small clearing just beyond the northern limit of shovel testing. An additional cultural feature, a hand-dug drainage ditch, runs toward Piney Branch. Because the ditch makes a ninety degree turn at one point, it may have demarcated a field edge and was likely the product of enslaved labor (Figures 11 to 16 depict field conditions at the Windy Knolls property).

The soils in the Windy Knolls project area are predominantly Grosstown Series, including Grosstown Gravelly Loam (GgB) and Grosstown-Marr-Hoghole Complex, with slopes ranging from 5 to 40 percent (Figure 17). Grosstown Series soils are generally well-drained soils well-suited for the cultivation of corn, soybeans, and hay. The top of the southern knoll contains Beltsville Series soils, which are even more preferred for the cultivation of corn as well as tobacco and other crops. It is in association with the Beltsville soils on this hilltop that the most intensive area of site occupation was

identified. Finally, Marr Series soils are also found in the study area. These soils are also well-drained and desirable for the cultivation of crops including tobacco, soybeans, hay, and other crops.

The Windy Knolls property was once part of a larger, 1,500-acre tract called “Jourdan” (often spelled Jordan, Jorden, or Jourden) and a part of Zekiah Manor (see Figure 5). The Jordan tract was first patented in 1695 to William Joseph, a former governor of Maryland during proprietary rule.<sup>6</sup> Rent Rolls for Port Tobacco Hundred indicate that the property was surveyed as early as 1692, though the patent and certificate were recorded in 1695. Jordan was described as being a half mile north of the “coach road,” probably what is today Maryland Route 5 (all transfers described in the following section are summarized in Table 2) Joseph did not reside on the property, nor did he hold the property for long; in November 1696, he sold the entire tract to John Smith.

Smith began selling off portions of the Jordan tract in 1713, starting that August with a transfer of 100 acres in the southwest corner of the entire tract to John Pigeon. This deed describes the southwest corner of the Jordan tract as being “on a hillside in an old Indian field.” Although it is not uncommon for early deeds to mention old Indian fields or paths, the reference is nevertheless intriguing. At some point, John Pigeon appears to have transferred the property to his son, John Henry Pigeon. John Henry’s widow, Mary, sold the property to her daughter, Eleanor Pigeon Miles in March 1775.

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<sup>6</sup> Lord Baltimore’s government was overthrown in 1689; by the time the Jordan tract was patented, Maryland had become a royal colony.



**Figure 11.** Perennial spring located on the Windy Knolls property.



**Figure 12.** Northeast face of south knoll, Windy Knolls property.



**Figure 13.** Unnamed tributary along base of the south knoll, Windy Knolls property.



**Figure 14.** c. 1970 house located on south knoll, Windy Knolls property.



**Figure 15.** Abandoned tobacco barn located on south knoll, Windy Knolls property.



**Figure 16.** Man-made ditch, Windy Knolls property.

Smith began selling off portions of the Jordan tract in 1713, starting that August with a transfer of 100 acres in the southwest corner of the entire tract to John Pigeon. This deed describes the southwest corner of the Jordan tract as being “on a hillside in an old Indian field.” Although it is not uncommon for early deeds to mention old Indian fields or paths, the reference is nevertheless intriguing. At some point, John Pigeon appears to have transferred the property to his son, John Henry Pigeon. John Henry’s widow, Mary, sold the property to her daughter, Eleanor Pigeon Miles in March 1775.

Eleanor Miles sold the property to John Baptist Thompson on April 14, 1794, along with other nearby and adjacent properties in her possession, including part of Lot 22 of Zekiah Manor (known as the Miles/Reeves Partnership) and part of His Lordship’s Favor. Thompson had acquired other parcels in the area, including land to the south known as Thompson’s Fertile Meadows as well as additional portions of His Lordship’s Favor (including the portion containing archaeological site known as His Lordship’s Favor (18CH0793; King and Strickland 2009a), on the south side of Piney Branch). The Miles/Reeves Partnership was patented to

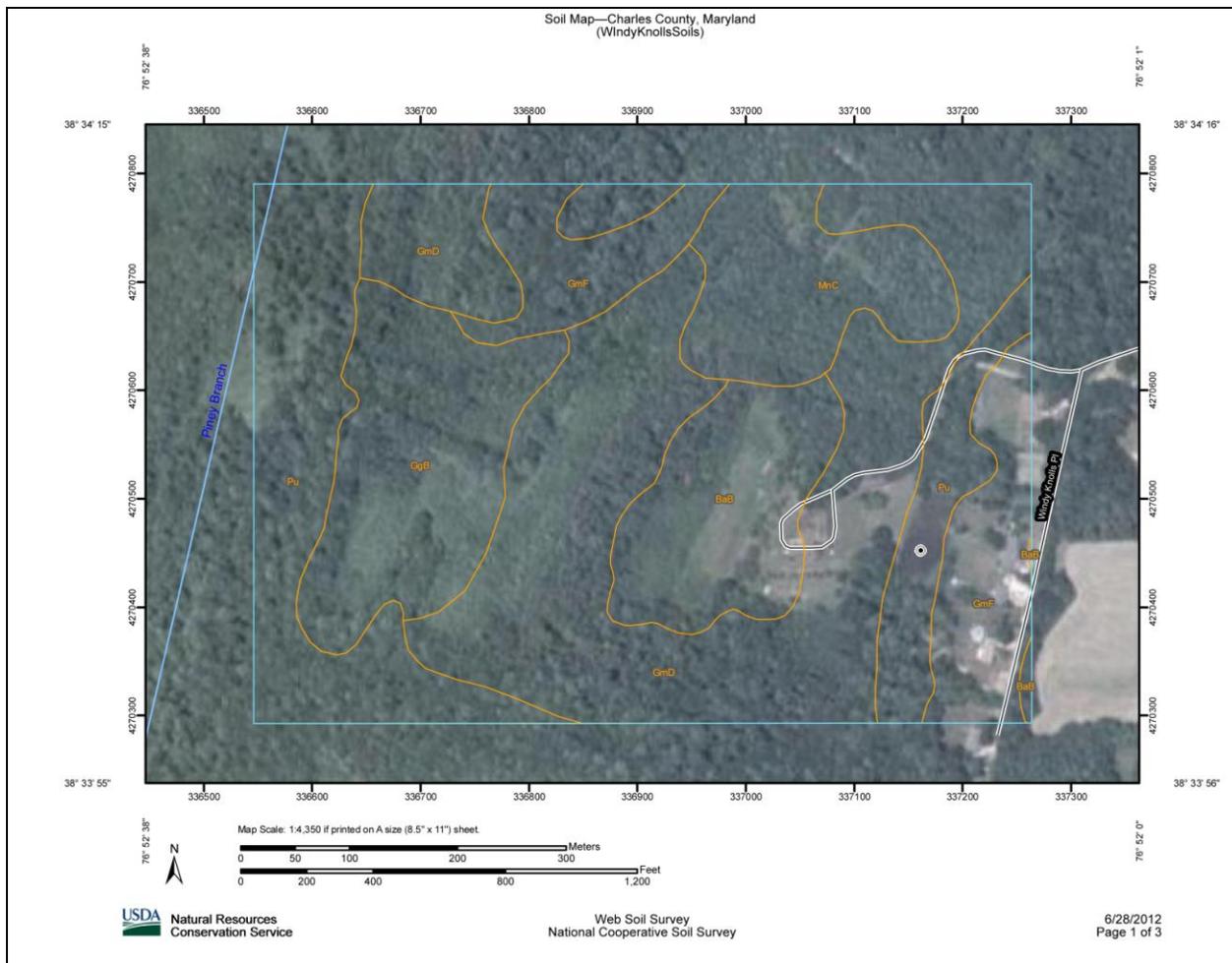
Date	Owner	Reference
1695	William Joseph	MSA S1587, Pat Rec. 23/276-277
November 11, 1696	John Smith	MSA CE82-18, CCLR Q 13
August 20, 1713	John Pigeon	MSA CE82-21, CCLR D 2/48
February 6, 1739	Mary Pigeon (daughter-in-law)	MSA CE82-35, CCLR S 3/709 (mention)
March 13, 1775	Eleanor Pigeon Miles (granddaughter)	MSA CE82-35, CCLR S 3/709
April 14, 1794	John Baptist Thompson	MSA CE82-40, CCLR N 4/400
Unknown Date	Henry A. Thompson	MSA CE52-16, CCLR BGS 6/271 (mention)
Unknown Date	Richard T. Boarman/R.H. Edelen (Trustees)	MSA CE52-16, CCLR BGS 6/271 (mention)
Unknown Date	Benjamin F. Montgomery	MSA CE52-16, CCLR BGS 6/271 (mention)
March 7, 1883	Heirs of Benjamin F. Montgomery	MSA CE52-16, CCLR BGS 6/271
October 22, 1892	Adrian Posey	MSA CE52-23, CCLR JST 5/322
January 2, 1908	J. Milton Bean	MSA CE52-37, CCLR FDM 18/671
September 10, 1910	Francis A. & Sarah E. Boarman	MSA CE52-41, CCLR HCC 22/269
May 15, 1920	J. Milton & Leah E. Bean	MSA CE52-55, CCLR WMA 36/440
April 27, 1927	James P. & Samuel G. Ryon	MSA CE52-66, CCLR WMA 47/50
November 21, 1935	James P. & Ula J. Ryon	MSA CE52-81, CCLR WMA 62/66
May 17, 1961	James E. & Bernice E. Richards	MSA CE52-172, CCLR PCM 153/392
April 25, 1974	Joseph T. & Mary A. Hayden and John H. & Dorothy E. Wade	MSA CE52-361, CCLR PCM 342/53
November 1, 1974	Besche Oil Company, Inc.	MSA CE52-381, CCLR PCM 362/83
June 21, 1978	Virginia B. Besche	MSA CE52-606, CCLR PCM 587/28
February 10, 1987	Gilbert E. & Babetta J. Norwood	MSA CE52-1211, CCLR DGB 1192/100
December 29, 2005	Donald K. & Suzanne C. Eckel	MSA CE52-5656, CCLR SLH 5638/40

**Table 2.** Chain of title for Windy Knolls property.

Eleanor Miles, Henry Reeves, and Richard Carnes in 1793 (Md. Archives, MSA S1195, Charles County Land Records [CCLR], Pat. Cert 727). The 1793 patent for the Partnership/Lot 22 states that the property was first surveyed in 1714, but does not say if it was patented to anyone at that time.

It is unclear to whom the property was conveyed following Thompson's death in 1814, but it is likely that it went to his wife, Eleanor Middleton Thompson, who retained title to portions of His Lordship's Favor in the late 1820s (King and Strickland 2009a). By 1879, the property was in the possession of Henry A. Thompson; Henry may have been related to John and Eleanor but he was not their son. At his death in that year, Henry Thompson left the property in the hands of Richard T. Boarman and R.H. Edelen as trustees.

The property was sold by the trustees to Benjamin F. Montgomery. Montgomery's heirs inherited the property on March 7, 1883; they sold the property to Adrian Posey on October 22, 1892. Posey then sold the property to J. Milton Bean on January 2, 1908. Bean relinquished the property from



**Figure 17.** Soil types at the Windy Knolls property; BaB: Beltsville silt loam, 2 to 5 percent slopes; GgB: Grosstown gravelly silt loam, 2 to 5 percent slopes; GmD: Grosstown-Marr-Hoghole complex, 5 to 15 percent slopes; GmF: Grosstown-Marr-Hoghole complex, 15 to 40 percent slopes; MnC: Marr-Dodon complex, 5 to 10 percent slopes; Pu: Potobac-Issue complex, frequently flooded.

September 10, 1910 to May 15, 1920 when it was sold to Francis A. and Sarah E. Boarman, before Bean repurchased the property.

Bean sold the land again on April 27, 1927 to James P. and Samuel G. Ryon, who each held a one-half interest in the property. Samuel died in 1935 and the entire interest of the property was placed in James Ryon's name and his wife's, Ula. The Ryons sold the property to James E. and Bernice E. Richards on May 17, 1961. By this time, the property was referred to as "Howell's Run," another name for Piney Branch. The Richards sold the land to Joseph T. and Mary A. Hayden and John H. and Dorothy E. Wade on April 25, 1974, who then sold the property to Besche Oil Company, Inc. on November 1, 1974.

The Besche Oil Company subdivided the property into three parcels. Virginia Besche acquired one of these parcels, comprising 49.731 acres, on June 21, 1978 and built a brick, one-story ranch house on a portion of the lot. Five acres (including the house) were later subdivided from Virginia Besche's

original parcel and sold to Gilbert E. and Babetta J. Norwood in 1987. The current owners of this five-acre lot, Donald K. and Suzanne C. Eckel, acquired the property on December 29, 2005.

**C. Thomas A. Dyson’s “Indian Town”**

What had in part driven testing of the Windy Knolls parcel was a reference in the 1798 Federal Direct Tax Assessment describing property in the name of Thomas A. Dyson as “Indian Town” (see Chapter IV). At the time of this tax assessment, Dyson, who was then sheriff for Charles County, was holding the property for the State of Maryland because of tax delinquencies (Table 3). The property was described as being part of the Jordan tract and part of Lot 22 of Zekiah Manor. The property is located just north of the Besche Oil Company property and can be found on Tax Map 25, Parcel 50. The Dyson tract was not surveyed as part of this project, but is included in this discussion because of its unusual name in the Federal Direct Tax.

<b>Date</b>	<b>Owner</b>	<b>Reference</b>
1695	William Joseph	MSA S1587, Pat Rec. 23/276-277
November 11, 1696	John Smith	MSA CE82-18, CCLR Q 13
October 20, 1715	John Moore	MSA CE82-22, CCLR F 2/81
July 31, 1756	Samuel Hanson	MSA CE82-31, CCLR A 1-1/2/516
October 1, 1779	Richard Carnes	MSA CE82-36, CCLR V 3/400
June 5, 1786	Hezekiah Reeves	MSA CE82-37, CCLR Z 3/267
Pre-1798	Richard Carnes	MSA CE82-42, CCLR IB 3/13-16 (mention)
October 1798	Thomas A. Dyson	MSA CE82-42, CCLR IB 3/13-16 (mention)
May 25, 1799	Hezekiah Reeves	MSA CE82-42, CCLR IB 3/13-16
January 26, 1801	Thomas Isaac Reeves	MSA CE82-42, CCLR IB 3/360
November 21, 1816	Thomas W. Reeves	MSA CE82-48, CCLR IB 11/450
January 25, 1830	Aquilla Turner	MSA CE82-56, CCLR IB 19/4
1863	Kitty Ann Turner (later McPherson)	MSA CM412-18, CC Wills, JS 17/321
Pre-1901	W.B. McPherson (widower)	MSA CE52-31, CCLR BGS 12/25 (mention)
May 29, 1901	Phillip E. & Joseph D. Sembly	MSA CE52-31, CCLR BGS 12/25
December 13, 1958	Albert S. & Dorothy L. Tucker	MSA CE52-158, CCLR PCM 139/246
June 27, 1960	Wilson B. & Orrine F. Jameson	MSA CE52-168, PCSM 149/274
December 29, 1960	Waldorf Estates, Inc.	MSA CE52-171, PCM 152/169
October 19, 1961	Alfred H. & Mary W. Smith	MSA CE52-175, CCLR PCM 156/3
June 10, 1987	Alfred H. Smith Jr.	MSA CE52-1244, CCLR DGB 1225/160
November 6, 2006	Waldorf Estates Property, LLC	MSA CE52-6505, CCLR SLH 6497/437

**Table 3.** Chain of title for Thomas A. Dyson’s “Indian Town” property.

This property was, like the Windy Knolls property, acquired by John Smith from William Joseph in 1696. John Smith sold this portion of the larger Jordan tract to John Moore on October 20, 1715. The property is described only as running next to George Askin’s land. Askin had also acquired a portion of the Jordan tract from Smith, and this property was located just north of Billingsley Road in what is now the Broadview Run subdivision and well beyond our survey area. The property sold to Moore remained in

his possession until 1756, when he sold it to Samuel Hanson. Hanson owned the property for 23 years before selling it to Richard Carnes in 1779.

Carnes sold the property in 1786 to Hezekiah Reeves. Carnes subsequently (in 1793) entered into a partnership with his neighbor, Eleanor Pigeon Miles (owner of the nearby Windy Knolls property), as well as Henry Reeves for the adjacent tract, known as the Miles and Reeves Partnership or Lot 22 of Zekiah Manor. The property came back into the possession of Carnes sometime before 1798, when it was seized by the state for debts owed by Carnes. As a result of the state seizure of the property, its title was held by the Charles County sheriff, Thomas A. Dyson, by a writ of *fieri facias* (a term meaning state seizure and sale to recoup debts owed). The property was then put up for auction to repay debts.

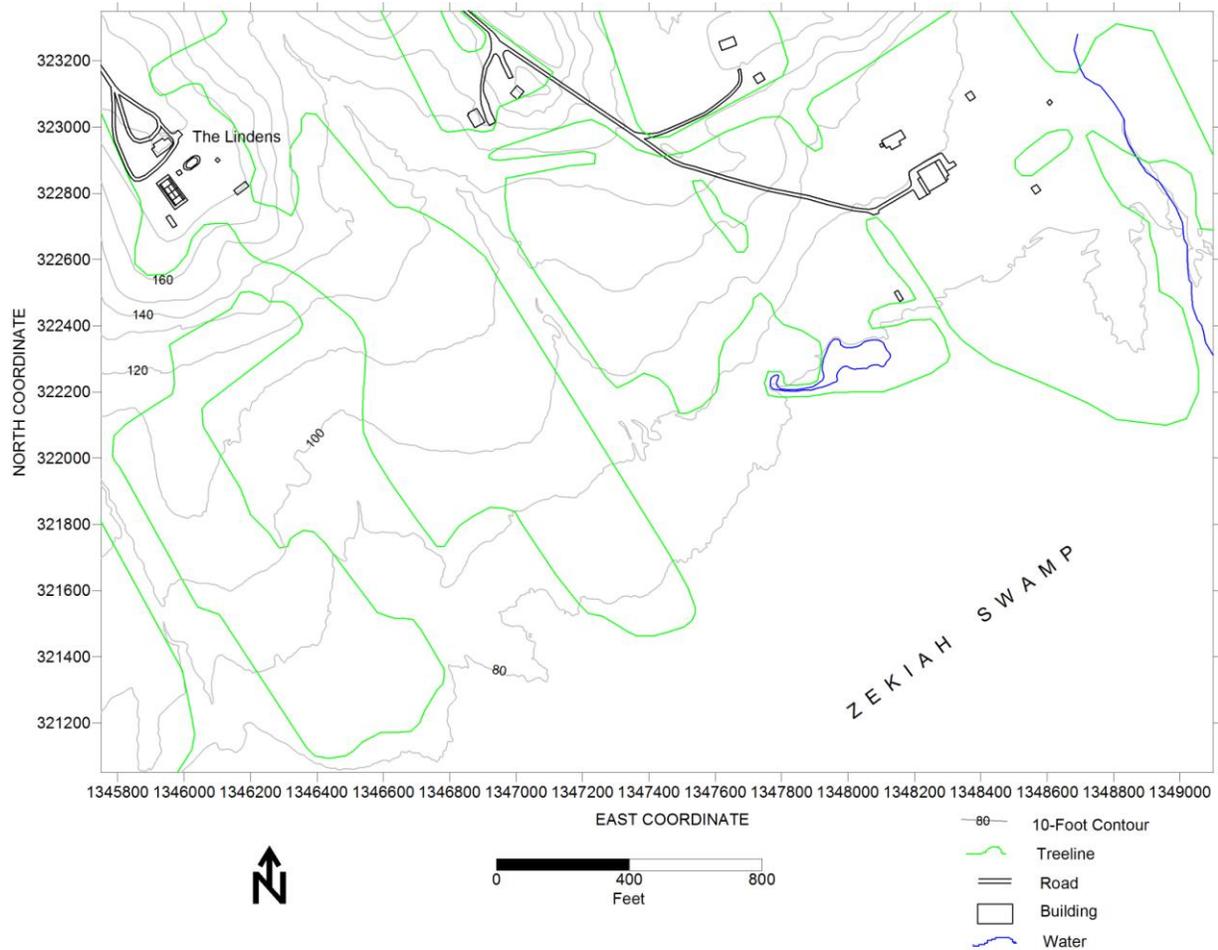
During the time the property was in possession of the state, in 1798, the Federal government was in the process of conducting a tax assessment of every landowner and slaveholder in order to raise funds for a possible war with France (Watson 2007). The Federal Direct Tax of 1798 for Charles County was split into three separate tax assessments, one for slaves, one for landowners of two acres or less, and one for land owners of more than two acres. These assessments were completed in order by the different township parishes (based on the different hundreds) and compiled as an alphabetical list. A reference for Thomas A. Dyson was found in the slave owner's assessment, listed for an unrecognized parish and labeled "Indian Town." The only recognized parishes in Charles County at the time were Durham, Port Tobacco, William and Mary, Bryantown, Newport, Benedict, and Pomonkey. The reference for "Indian Town" was located in the records after properties listed for Port Tobacco Hundred East and before properties listed for Durham, suggesting that it was in the vicinity of these two parishes.

Dyson's "Indian Town" does not include any mention of slaves, despite being found in the slaveholders' assessment. All other names listed in this part of the tax assessment include this vital information. It may be possible that this information was withheld or otherwise not listed because the property in question was being held by Dyson on behalf of the state and therefore was, as state property, not taxable.

The issue of debt was resolved when William Cartwright paid off all the debts at auction and Hezekiah Reeves became the owner of the property on May 25, 1799. Reeves sold the property to his nephew, Thomas Isaac Reeves, on January 26, 1801. The deed transfer indicates that Thomas Isaac Reeves was living on the property and that the property had been occupied by a tenant named David Rhod Osborn. Thomas Isaac Reeves sold the land to Thomas W. Reeves on November 21, 1816. Thomas W. Reeves sold the property to Aquilla Turner on January 25, 1830.

Turner died in 1863, leaving the property to his daughter, Kitty Ann. Kitty Ann's widower, W.B. McPherson, inherited the property following her death. McPherson died sometime before May 29, 1901 when the property was sold by his heirs to Phillip E. and Joseph D. Sembly. The property then became known as "The Sembly Farm," as it is labeled on a plat made on November 11, 1958. On December 13, 1958, the Sembly family sold the property to Albert S. and Dorothy L. Tucker.

The property switched hands numerous times in the early 1960s, beginning with a sale to Wilson B. and Orrine F. Jameson on June 27, 1960. The Jamesons sold the property that same year to Waldorf Estates, Inc. Waldorf Estates, Inc. sold the property to Alfred H. and Mary W. Smith on October 19, 1961. The property was then sold to Alfred H. Smith, Jr. on June 10, 1998, whose heirs sold the property to the current owners, Waldorf Estates Property, LLC, on November 6, 2006.



**Figure 18.** The Steffens (18CH0093) and Hogue (18CH0103) properties.

#### **D. The Steffens and Hogue Properties**

The Steffens and Hogue properties, which share a legal boundary and are therefore discussed in this report together, are located approximately three miles northeast of La Plata along MD Route 488 (see Figure 7). The two properties are of interest because of the large numbers of Potomac Creek ceramics previously reported for both farms. Wanser (1982:183) also reported seeing a “colono-ware” ceramic from the Hogue property. Although Amy Publicover’s (2010) study found few 17<sup>th</sup>-century European artifacts in extant collections associated with either property, we nonetheless focused our efforts on learning more about the two properties.

Both the Steffens and Hogue properties consist mostly of relatively flat, open agricultural fields abutting Zekiah Run and Piney Branch (Figure 18). These fields range in elevation from 70 to 150 feet above mean sea level, increasing in elevation as one moves to the northwest. Approximately 1400 to 1800 feet west of the Zekiah (the distance varies over a distance of approximately two-thirds of a mile), the two properties begin a fairly steep rise in elevation to a maximum height of 180 feet above sea level.



**Figure 19.** The Lindens, c. 1840, built by John Francis Gardiner.

At Steffens, the property owner's house, built in 1840 by John Francis Gardiner and known as The Lindens, overlooks the agricultural fields from this upland perch (Figure 19).

The surveyed areas, comprising approximately 86 acres, include the relatively flat lowlands at the base of the hill and a small portion of the upland knoll. The study area is bounded on the south by Zekiah Run, on the east by Piney Branch, and on the west by an unnamed stream that serves as the west property boundary for the Steffens farm. The surveyed areas are dissected by streams fed by freshwater springs. Although there are no buildings in the surveyed lowlands at Steffens, at the Hogue farm, a number of structures stand in the area. These include a modern residential dwelling and a number of modern agricultural sheds and stables (Figures 20 through 24 depict field conditions at the Steffens and Hogue properties).

The soils in the lowest lying areas of both parcels consist of Issue Series while those along the slopes are predominantly Grosstown Series (Figure 25). Issue Series soils are occasionally flooded silt loams suitable for some agricultural uses, especially for the cultivation of hay and as pasture. Grosstown Series soils are well-drained and are primarily used for the cultivation of corn, soybean, or hay. At the time of the survey (June 2010), the Steffens property was in use with a mature crop of wheat while the Hogue property was used as a residence and for the keeping of Arabian horses and cattle.

Documentary research indicates that the Steffens farm was a part of His Lordship's Favor while the Hogue Farm was part of Thompson's Fertile Meadows and Moreland's Chance/Howell's Delight.



**Figure 20.** Wheat field surveyed at the Steffens property, facing south toward Zekiah Run.



**Figure 21.** A small knoll surveyed at the Hogue property.



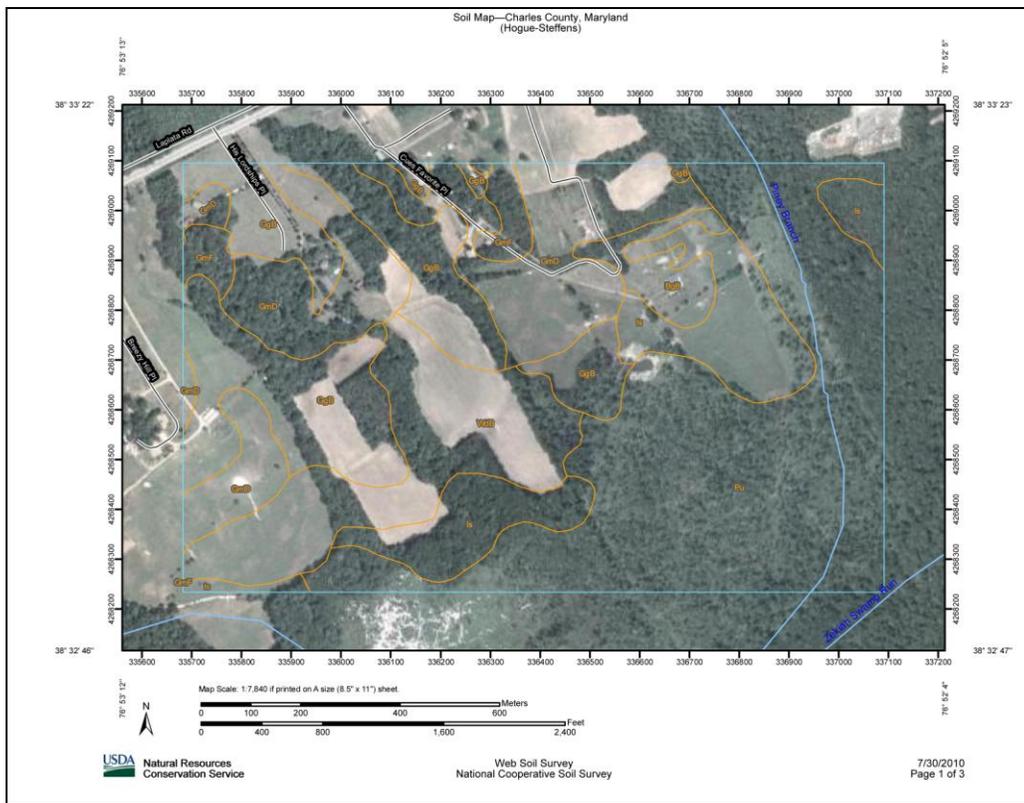
**Figure 22.** View of fields at the Hogue property.



**Figure 23.** View of lower-lying areas near Zekiah Run at the Hogue property.



**Figure 24.** View of fields along Piney Branch, Hogue property.



**Figure 25.** Soil types at the Steffens and Hogue properties; BgB: Beltsville-Grosstown-Woodstown complex, 0 to 5 percent slopes; GgB: Grosstown gravelly silt loam, 2 to 5 percent slopes; GmD: Grosstown-Marr-Hoghole complex, 5 to 15 percent slopes; GmF: Grosstown-Marr-Hoghole complex, 15 to 40 percent slopes; Is: Issue silt loam, occasionally flooded; Pu: Potobac-Issue complex, frequently flooded; WdB: Woodstown sandy loam, 2 to 5 percent slopes.

<b>Date</b>	<b>Owner</b>	<b>Reference</b>
August 20, 1699	William Boarman	MSA S11-39 & 46, Pat. Rec. DD 5/186 & WD 500 (mention)
September 2, 1699	Hugh Teares	MSA S11-39 & 46, Pat. Rec. DD 5/165 & WD 500 (mention)
February 20, 1700	Elizabeth Teares	MSA S11-39, 46 & SM16-17, Pat Rec. DD 5/186, WD 500 & Prerogative Court 11/189,204
October 2, 1739	William Middleton (husband of Elizabeth Teares)	MSA S1218-224, Unpat. Cert. 217
Pre-1755	James Keech	MSA CE82-31 & 35, CCLR Liber A1-1/2 folio 327/368/460 ; Liber S#3 folio 164 (all mention)
<b>Tract 1 (176 acres)</b>		
May 6, 1755	Henry Hawkins	MSA CE82-31, CCLR Liber A1-1/2 folio 327/368
July 31, 1756	John Duncastle	MSA CE82-31, CCLR Liber A1/2 folio 518
July 6, 1763	Daniel Jenifer	MSA CE82-33, CCLR Liber L#3 folio 342/636
<b>Tract 2 (84 acres)</b>		
March 17, 1756	John Duncastle	MSA CE82-31, CCLR Liber A1-1/2, folio 460
July 6, 1763	Daniel Jenifer	MSA CE82-33, CCLR Liber L#3 folio 342/636
<b>Tracts 1 &amp; 2</b>		
June 24, 1767	Thomas Thornton	MSA CE82-34, CCLR Liber O#3 folio 217
<b>Tract 3 (110 acres)</b>		
June 1, 1771	Thomas Thornton	MSA CE82-35, CCLR Liber S#3 folio 164
<b>Combined Tracts of Thomas Thornton</b>		
April 10, 1779	John Brooke	MSA CE82-36, CCLR Liber V#3 folio 347
Unknown Date	Richard A. Thompson	MSA CE82-62 & C2271, CCLR Liber IB 25 folio 50 & Land Com. Liber WM 1 folio 241 (mention)
Around 1840	John Francis Gardiner (portion)	MSA C2271, Land Com. Liber WM 1 folio 241 (mention)
1878	Francis D. Gardiner	Probate Record Liber 1869-1878 folio 453
December 31, 1923	Imogene T. Gardiner	MSA CR80-3 & CE52-60, CC Wills, Liber CHP 1 folio 616 & CCLR Liber WMA 41 folio 469.
February 11, 1949	Deitrich H. Steffens	MSA CE52-107CCLR Liber PCM 88 folio 102
June 17, 1993	Deitrich H. Steffens Revocable Trust	MSA CE52-1859, CCLR Liber DGB 1840 folio 159
June 19, 2008	Margaret S. Steffens	MSA CE52-6679, CCLR Liber SLH 6661 folio 155

**Table 4.** Chain of title for the Steffens property (His Lordship's Favor).

His Lordship's Favor was first created and granted by Lord Baltimore to William Boarman on August 20, 1699 (all transfers described in the following section are summarized in Table 4). Before then, the land forming His Lordship's Favor was an un-subdivided part of Zekiah Manor. Boarman transferred His Lordship's Favor almost immediately when he sold it to Hugh Teares later that same year (1699).

Teares did not enjoy his property for long. He died in January 1700 and left the property to his wife, Eleanor, and his daughter from a previous marriage, Elizabeth. Elizabeth owned the southern half of the property, containing the Steffens farm, while Teares' widow owned the northern half. Elizabeth married William Middleton sometime around 1710; an unpatented certificate was issued in William Middleton's name for the property in 1739. Sometime between 1739 and 1755 a portion of the property was in the tenure of James Keech. James Keech subdivided the property into three separate tracts, which he sold, respectively, to Henry Hawkins, John Duncastle, and Thomas Thornton between 1755 and 1771. The tract sold to Henry Hawkins was sold to John Duncastle in 1756. John Duncastle sold both of his

tracts to Daniel Jenifer on July 6, 1763. These tracts were in turn sold to Thomas Thornton, the purchaser of Keech’s third parcel, in 1767.

Thomas Thornton combined all three of the tracts, totaling 370 acres (only a portion of the original Elizabeth Teares/Middleton tract) and sold them to John Brooke in 1779. It is unclear what happened to the property after it was acquired by Brooke, but the property eventually came into the possession of Richard A. Thompson, who owned a number of tracts in the Zekiah Manor vicinity in the early to mid-19<sup>th</sup> century. His ownership of the property is found in a deed from John Francis Gardiner to Aloysius Bowling in 1842. John Francis Gardiner, who built The Lindens, had acquired many of the tracts once owned by Thompson. Gardiner died in 1878 and the property was acquired by Francis D. Gardiner. Francis in turn left it to his nephew, Joseph D. Gardiner, at his death.

Francis D. Gardiner died in 1901, leaving the property to his wife, Imogene T. Gardiner, who formally recorded the deed in 1923. Imogene T. Gardiner sold the property to Deitrich H. Steffens in 1949, and the property remains in the Steffens family to this day.

The Hogue property, directly east of the Steffens property, traces its history to two tracts, including Moreland’s Chance/Howell’s Delight and Thompson’s Fertile Meadows (Table 5). The first record of Moreland’s Chance dates to 1747, when John Moreland is recorded as the owner. A deed recorded that year from Moreland to his son-in-law, Paul Howell, does not note when Moreland originally acquired the property. The property was repatented to Samuel Howell, Paul Howell’s son, in 1790 under the name “Howell’s Delight.” Howell’s Delight stayed within the Howell family until 1848 when it, along with part of Thompson’s Fertile Meadows, was sold to John F. Gardiner and Aloysius Bowling. Gardiner had previously, about 1840, acquired the adjacent Steffens property.

Date	Owner	Reference
Unknown	John Moreland (Moreland’s Chance)	CCLR Liber Z#2 folio 188 (mention)
1747	Paul Howell (son in law of Moreland)	CCLR Liber Z#2 folio 188
1790	Samuel Howell (Howell’s Delight)	Patented Certificate 558
Unknown	Gustavus Howell	CCLR Liber WM 3 folio 160 (mention)
Unknown	John H. Howell (son of Howell)	CCLR Liber WM 3 folio 160 (mention)
1848	John F. Gardiner	CCLR Liber WM 3 folio 160
Unknown	Francis D. Gardiner	CCLR Liber JST 3 folio 388 (mention)
1890	Mary C. Gardiner	CCLR Liber JST 3 folio 388
1917	James Burch & M. Ethel Middleton	CCLR Liber CP 31 folio 486
1924	Mary & Joseph Howard	CCLR Liber WMA 42 folio 488
1924	Lewis Swann	CCLR Liber WMA 42 folio 601
1945	J. Holt & Elizabeth Evans	CCLR Liber WMA 81 folio 574
1947	Maurice, George, & Lawrence Young	CCLR Liber WMA 85 folio 433
1949	Agnes Richards	CCLR Liber PCM 88 folio 92
1949	George & Lelia Young	CCLR Liber PCM 88 folio 95
1964	Mary Gwynn	CCLR Liber PCM 173 folio 594
1965	Theresa and Severson Banks	CCLR Liber PCM 173 folio 597
1997	Gaylord Hogue & Bobby Coe Hogue	CCLR Liber DGB 2396 folio 152

**Table 5.** Chain of title for the Hogue property.

The property later known as Thompson’s Fertile Meadows was originally granted to Walter Moreland in 1755 as Lots 6 and 20 of Zekiah Manor, according to a patent to John Baptist Thompson in 1806. Walter Moreland also appeared as the owner of these lots per a plat of Confiscated British Land on

Zekiah Manor in 1789. Thompson renamed the property Thompson’s Fertile Meadows, and it eventually came into the hands of his son, Richard A. Thompson, who was acquiring land in the area. A portion was sold to Aloysius Bowling in 1842, also described as being part of His Lordship’s Favor.

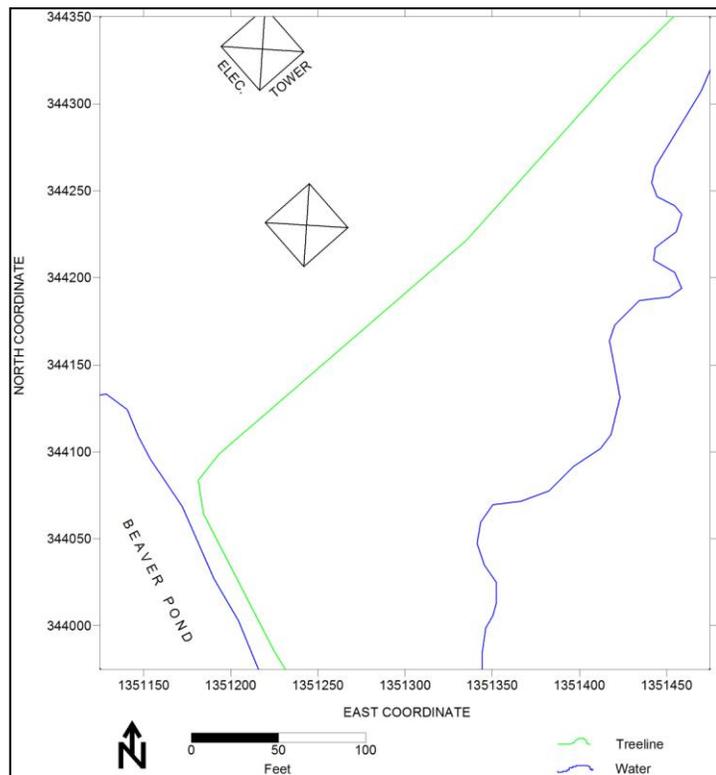
The combined portions of Howell’s Delight and Thompson’s Fertile Meadows were in the hands of Francis D. Gardiner sometime between 1848 and 1890. In 1890 Francis sold the property to Mary C. Gardiner, calling the tract “His Lordship’s Favor.” By this time, the names, Thompson’s Fertile Meadows and Howell’s Delight, had disappeared from the title of the property. Mary C. Gardiner sold the property to James Burch and M. Ethel Middleton in 1917.

Throughout the early to mid-20<sup>th</sup> century, the property switched hands among several different owners. Burch and Middleton sold the property to Mary and Joseph Howard on September 11, 1924. The Howards sold the property weeks later to Lewis Swann. Swann sold the property to J. Holt and Elizabeth Evans in 1945. Holt and Evans sold the property to Maurice, George, and Lawrence Young in 1947. In 1949, the Youngs sold the property to Agnes Richards, who on the same day sold the property to George and Lelia Young. George and Lelia Young sold the property to Mary Gwynn in 1964, and Gwynn sold it six months later to Theresa and Severson Banks. The Banks sold the property to the current owners, Gaylord and Bobby Coe Hogue, on June 18, 1997.

### E. The St. Peter’s Catholic Church Property

The St. Peter’s parcel was selected for investigation because previous survey work in the area had identified a small occupation characterized by, among other things, Potomac Creek ceramics. Today, the area consists of a mostly wooded knoll overlooking an unnamed small stream feeding Jordan Swamp (see Figure 7; Figure 26). Elevations in the area of the site range from 160 to 180 feet above mean sea level to approximately 140 feet above sea level. A portion of the surveyed area is clear, lying in the right-of-way for a power utility corridor. A beaver pond sits just outside of the site area on its west side. From this portion of the property, passing cars on Maryland Route 5 were visible; the highway is located approximately two-thirds of a mile from the site (Figure 27 through 30 depict field conditions at the St. Peter’s Catholic Church property).

The soils in the immediate surveyed area are classified as part of the Grosstown-Woodstown-Beltsville complex (GWB), moderately well-drained soils with slopes of 5 to 15 percent (Figure 31). The mapped area of GWB soils, however, consists of only 3.4 acres, which correlate well with the site area of approximately three acres. Although suitable for cultivation, these soils are considered highly erodible and require



**Figure 26.** The St. Peter’s Catholic Church property/Jordan Swamp I site.



**Figure 27.** Unnamed stream, the Jordan Swamp I site.



**Figure 28.** Beaver pond, the Jordan Swamp I site.



**Figure 29.** Powerlines, the Jordan Swamp I site.



**Figure 30.** View of Maryland Route 5 from the Jordan Swamp I site.



**Figure 31.** Soil types at the St. Peter’s Catholic Church Property/Jordan Swamp I; BaB: Beltsville silt loam, 2 to 5 percent slopes; BcA: Beltsville-Aquasco complex, 0 to 2 percent slopes; GmD: Grosstown-Marr-Hoghole complex, 5 to 15 percent slopes; GmF: Grosstown-Marr-Hoghole complex, 15 to 40 percent slopes; GwD: Grosstown-Woodstown-Beltsville complex, 5 to 15 percent slopes; HgB: Hoghole-Grosstown complex, 0 to 5 percent slopes; Is: Issue silt loam, occasionally flooded; LQA: Lenni and Quindocqua soils, 0 to 2 percent slopes; LsB: Liverpool silt loam, 2 to 5 percent slopes; Pu: Potobac-Issue complex, frequently flooded; UdB: Udorthents, loamy, 0 to 5 percent slopes; WdB: Woodstown sandy loam, 2 to 5 percent slopes.

careful management. Review of the soils map shown in Figure 31 reveals little else in the immediate vicinity suitable for cultivation – most of the area is sloped, in some cases steeply so, or prone to flooding. The majority of the soil is of the Potobac-Issue complex, which is frequently flooded. The closest Beltsville soils (other than those in the immediate survey area) are located approximately 800 feet northeast of the site. This rather substantial distance suggests that the site at St. Peter’s was not occupied primarily for food production but perhaps as a short-term winter hunting quarter.

The site known as Jordan Swamp I or 18CH0694 currently sits on an undeveloped parcel along a portion of Jordan Swamp. The property was once known by the name Mistake, and was first patented to Luke Gardiner in 1714 for 200 acres (Table 6). Luke Gardiner sold the property to Bowling Speake in 1718, and Speake had the property resurveyed for 572 acres in 1742.

Date	Owner	Reference
1714	Luke Gardiner	MSA S1587, CCLR Pat. Rec. Liber EE 6 folio 192
September 8, 1718	Bowling Speake	MSA CE82-23 & S1195-752, CCLR Liber H 2 folio 203 & Pat. Cert. 742.
September 13, 1755	William Speake	MSA S538-43, Prerogative Court Wills Liber 29 folio 546
<b>Tract 1</b>		
January 14, 1754	James Montgomery	MSA CE82-31, CCLR Liber A 1-1/2 folio 263
April 1, 1780	Bernard Montgomery (son)	MSA C681-8, CC Wills Liber AF 7 folio 461
May 14, 1798	Matthias Redmond	MSA CE82-41, CCLR Liber IB 2 folio 369
1804	Thomas A. Dyson	MSA CE82-44, CCLR Liber IB 6 folio 95 (mention)
April 10, 1804	Thomas C. Reeves	MSA CE82-44, CCLR Liber IB 6 folio 95
<b>Tract 2</b>		
November 8, 1763	Elizabeth Askin	MSA CE82-33, CCLR Liber L 3 folio 448
Pre-1803	Thomas Contee	MSA CE82-44, CCLR Liber IB 6 folio 69 (mention)
March 21, 1803	Thomas C. Reeves	MSA CE82-44, CCLR Liber IB 6 folio 69
<b>Tracts 1 &amp; 2</b>		
December 23, 1948	Archdiocese of Washington	MSA CE52-106, CCLR Liber PCM 87/591

**Table 6.** Chain of title for the St. Peter’s Catholic Church property.

In 1754, Bowling Speake sold a portion of the property to James Montgomery, who left that portion to his son, Bernard, in 1780. Bernard sold the property in 1798 to Matthias Redmond. Redmond had the property seized from him by the state in 1804 for unpaid taxes. The property was held for the state by Thomas A. Dyson, then sheriff of Charles County, not unlike the situation for the previously discussed “Indian Town.” To pay off Redmond’s debt, the property was sold at auction to Thomas C. Reeves that same year.

Bowling Speake died in 1755 and left part of the property to his son, William Speake. William further divided his portion of the property into at least two tracts. Of these two tracts, one is part of the property now owned by the Catholic Church. William Speake sold this portion to Elizabeth Askin in 1763. Sometime between 1763 and 1803 this portion of the property came into the possession of Thomas Contee. Contee sold this land to Thomas C. Reeves in 1803. Reeves left his property to the Catholic Church at his death in 1825. He is buried at the old St. Peter’s cemetery at the intersection of Poplar Hill and Gardiner Road in Waldorf. At the time, the church in this area was known as Upper Zachia Parish. Reeves had set up a chapel by at least 1808, when it was mentioned in “An Act to confirm a certain Road...” as Upper Zachia Church (Md. Archives 596:53). The road is described as running “near Thomas C. Reeves’s, and thence running, as the road now runs, through the said Reeves’s land the upper Zachia church.” This church is also known as Reeves’ Chapel following Reeves’ death. Another church that became St. Peter’s Catholic Church was built on the Reeves property in 1860. This served as the main church until 1941.

After the American Revolution, the Catholic Church in the United States was administered through the newly created Archdiocese of Baltimore in 1789. This served as the sole diocese of the United States until 1808, and the sole diocese in the Maryland region until 1947. The Archdiocese of Washington was created in 1947, and the St. Peter’s property was put into the name of its Archbishop, Patrick A. O’Boyle, on December 23, 1948.

## IV. Previous Archaeological Investigations

A number of archaeological investigations have been conducted in the project area, the earliest of which dates to the late 19<sup>th</sup> century. These projects can be divided into two types: (1) surveys focused on the documentation of archaeological sites throughout the entire Zekiah Run drainage and (2) surveys done in compliance with Federal or state historic preservation laws. Surveys conducted along the Zekiah Run and its tributaries were primarily designed to document pre-Contact Native settlement in this area. Surveys undertaken for compliance purposes have been more limited in geographical scope and have been focused on areas slated for development, including the St. Charles community, the Charles County Sanitary Landfill, and roadways and gravel mining areas. All of these surveys have generated important data that have helped to shape the direction of the present project.

### A. Previous Archaeological Investigations

One of the earliest surveys recorded for the project area was undertaken sometime around 1883. Dr. Elmer R. Reynolds (1883:310-311), a co-founder of the Anthropological Society of Washington, described a place he called “Indian Hill” as an “old Indian town ... situated on the head waters of the Wicomico River, twenty-five miles from its junction with the Potomac.” This places “Indian Hill” in the general vicinity of the project area, but Reynolds’ ambiguous description makes it impossible to pin down the location. Artifacts reported by Reynolds in association with Indian Hill included polished axes, finely-finished pestles, stone arrows, spearheads, knives, round stone spheroids, and beads of stone, bone, shell, and glass. He also described “Bead Hill,” which he suggested was an Indian cemetery “nearby, where “glass beads...had been plowed out of the Indian cemetery.” These beads, Reynolds (1883:311) noted,

...were of that rare, ancient type known to archaeologists as Venetian *polychrome*, and were probably from the Murano factory. These were of various sizes, and, as their name indicates, of beautifully interwoven compound colors, among which red, white, blue, and green predominated. In shape they were mostly of an oblong pattern [emphasis original].

At the very least, Reynolds’ distances suggest that he was in the vicinity of the project area and his descriptions, especially of “Bead Hill,” may very well refer to the Windy Knolls property. The property at that time was owned by Benjamin Franklin Montgomery (d. 1883), but Reynolds makes no reference to any landowners. And, as will be seen below, the colors of the beads Reynolds described do not precisely match the colors of those beads recovered from Windy Knolls I.

A half century later, in an essay published in the *Maryland Historical Magazine* in 1935, historian and avocational archaeologist William B. Marye (1935) carefully reviewed early court and land records in an effort to locate the Zekiah Fort. Marye concluded that the fort was almost certainly located west of Zekiah Run, probably at its intersection with Kerrick Swamp or “not ... more than two and a half miles above the junction of the two swamps.” Marye used the 1682 court case, described earlier, in which Dennis Husculah had accused merchant John Pryor (who was then living at Westwood Manor) of illegally trading for deer skins with the Indians (Md. Archives 7:92, 94). Using Augustine Herrman’s Map of Maryland and Virginia, which depicts Westwood Manor at the head of the Wicomico, as well as deeds for properties owned by Husculah, Marye was able to place Husculah’s description of “Zacahay Town” in the vicinity of Kerrick Swamp. Marye assumed that Zekiah Town and Zekiah Fort were one and the same.

A little over 20 years later, two avocational archaeologists, Carl Manson and R.B. Looker, undertook a survey of open agricultural fields along the Zekiah (Figure 32; Looker and Manson 1960; Looker and Tidwell 1963). Manson and Looker found many sites, most represented by stone tools and only a few ceramics. In some cases, the two archaeologists reported finding what they described as “early historic wares,” leading them to suggest possible locations for the Zekiah Fort. Their first choice for the fort was Western View Farm (18CH0001), located approximately one mile north of the junction of Zekiah Run with Kerrick Swamp and well within the range specified by Marye. Their second choice was Hawkins Gate (18CH0004), located on the north side of Kerrick Swamp, and their third choice was Prospect Hill (18CH0006), located on the south side of Kerrick Swamp. These latter two sites are also within the limits previously identified by Marye. Unfortunately, Manson and Looker did not identify the types of historic ceramics they observed or otherwise describe them, and the collections do not survive.

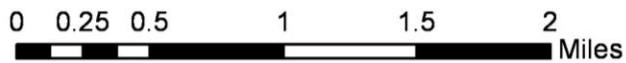
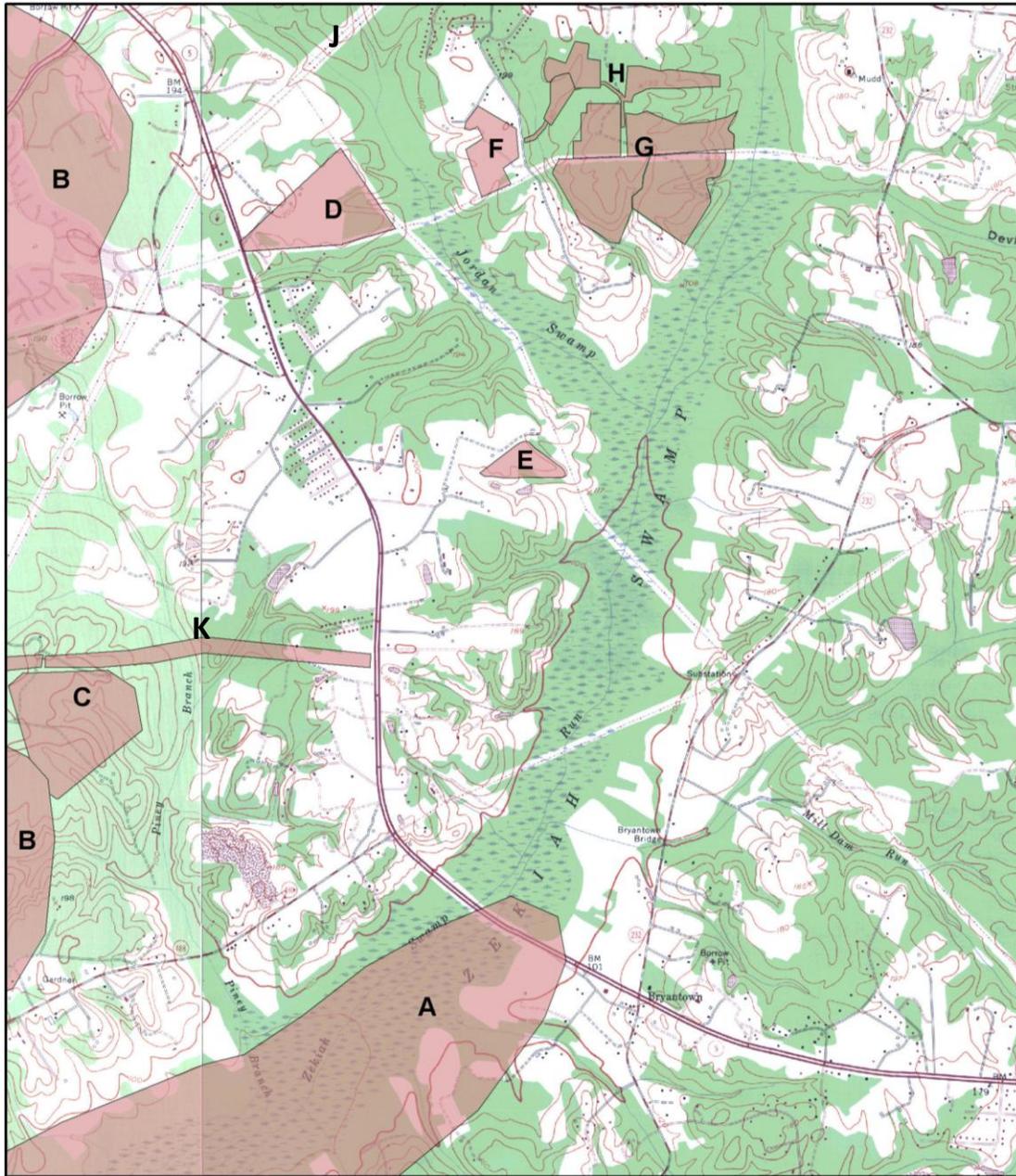
In 1969 and 1970, Joseph Hickey (1970:2), then a graduate student in the Department of Anthropology at George Washington University, visited sites in the Zekiah Run drainage as part of his effort “to establish a [prehistoric] cultural sequence for Charles County.” Hickey visited Prospect Hill and undertook additional testing. Hickey found nothing to indicate that Prospect Hill was occupied during the 17<sup>th</sup> century. Hickey also examined extant collections as part of his master’s thesis.

Following Hickey’s work, American University archaeologist Charles W. McNett, who had been one of Hickey’s thesis advisors, visited the Steffens and Hogue properties in January 1972. Archaeological sites 18CH0093 and 18CH0103 were first reported to the Maryland Geological Survey during the early 1970s, although McNett noted that the site had been, about 1937, collected by avocational archaeologist R. G. Slattery; Slattery had donated the collection to the Smithsonian Institution (USNM Catalog Number 417531-5). McNett and William Gardner examined Slattery’s materials at the Smithsonian and later reported that this site “is one of the few Zekiah Swamp sites with any pottery at all” (Gardner and McNett 1975). They noted that the majority of the pottery was sand-tempered and appeared to be Potomac Creek.

18CH0103 was recorded a little over a year later, in June 1973, by Charles Pettit and Carl Manson. In 1976, avocational archaeologist R.E. McDaniel visited the site with Charles Pettit. In a subsequent letter, McDaniel (1976) described two concentrations of artifacts at the site, one considerably larger than the other with the two separated by about 100 yards. They reported collecting “about thirty points and as yet, unknown number of scrapers, blades, and choppers... Point styles run from a perfect Palmer through LeCroy, side-notched, stemmed, and up to the Piscataway. No quartz triangles.” The larger concentration contained pottery with “grit or crushed quartz temper.”

At about the same time McDaniel was visiting 18CH0103 on what is today the Hogue property, in the mid-1970s, Brad Marshall (1976) undertook archaeological investigations on behalf of St. Charles Communities, a land development company then in the process of building a large planned unit development southwest of Waldorf. Marshall’s survey, which was focused on property west of Piney Branch and north of La Plata Road (Maryland Route 488), included approximately 8,000 acres and was “extremely cursory” (LeeDecker and Wuebber 1988:6), involving minimal field testing. Marshall reported finding five 19<sup>th</sup>-century domestic sites and little else.

In 1981, as part of a larger project surveying artifact collections in southern Maryland, archaeologist Jeff Wanser (1982) reported seeing little in existing collections to suggest the location of the 17<sup>th</sup>-century fort. Wanser also reexamined collections associated with 18CH0103 and 18CH0093. These collections included materials in the state’s possession (now housed at the Maryland



**Figure 32.** Areas of previous archaeological survey in the project area; A: Hickey (1970); B: Marshall (1976); C: LeeDecker and Wuebber 1988a; D: Ballweber (1990); E: Ballweber (1997); F, G, H: Hopkins (2006, 2007), Wall and Kollman (2007), Wall and Schmidt (2008), Wall, Schmidt, and Kollman (2007a, b); J: Barse, Eichinger, and Scheerer (2000); K: Billingsley Road (just north of C): LeeDecker and Wuebber (1988b).

Archaeological Conservation Laboratory in St. Leonard, Maryland), at the Smithsonian Institution, and in the private possession of collectors R. E. McDaniel and Robert Ogle.<sup>7</sup> From this review, Wanser concluded that 18CH0103 and 18CH0093 reflected occupation from the Early Archaic through the Late Woodland (7500 BC-1600 AD) with the bulk of the occupation at both sites appearing to be of Middle and Late Archaic date (6000 BC-1000 BC). Wanser (1982:183) did report seeing a single fragment of colonoware reportedly recovered from 18CH0103.

At the same time Wanser was preparing his review of artifact collections, archaeologist Joseph M. McNamara (1981) identified a pre-Contact site (18CH0231) in the northeast corner of a field proposed for the surface mining of gravel. In addition to the recovery of four projectile points, quartz, quartzite, jasper, chert, and rhyolite lithic debris was observed. The site was outside the area of proposed mining and is believed to remain intact.

In 1987, an archaeological survey was done in advance of development of the Charles County Sanitary Landfill (LeeDecker and Wuebber 1988a). Located on the south side of Billingsley Road, the Sanitary Landfill is west of Piney Branch and, as it turns out, only a few thousand feet away from the Zekiah Fort site. The testing strategy consisted of the excavation of shovel test pits placed at 75-foot intervals within the landfill's proposed footprint; fill from the shovel tests was screened through ¼-inch mesh. Three archaeological sites were identified, including 18CH0334, 18CH0335, and 18CH0336. Both 18CH0334 and 18CH0335 were lithic scatters of quartz and quartzite flakes and other debitage. No diagnostic artifacts were recovered from either site. Site 18CH0336 was a rural farmstead characterized by both above-ground features and subsurface deposits. Known as the "Old Collier Place," 18CH0336 included the remains of a chimney at least partially built with "conglomerate rock" and machine-made brick along with a nearby well. Subsurface testing yielded pearlware and whiteware ceramic fragments, indicating the site was occupied sometime in the early 19<sup>th</sup> century, possibly by Eleanor Middleton Thompson. The site appears to have been abandoned in the mid-20<sup>th</sup> century, probably when the property passed through several hands before being acquired by the Washington Lumber and Turpentine Company (LeeDecker and Wuebber 1998:18-19).

At about the same time the Landfill tract was surveyed, LeeDecker and Wuebber (1988b) also completed a Phase I survey of Billingsley Road from the Landfill's entrance to Maryland Route 5. The testing strategy consisted of the excavation of two transects parallel to the road's right-of-way centerline. Each transect was offset 50 feet from the centerline, and STPs were placed at 75-foot intervals. A single site, 18CH0337, was identified during a walkover survey through a cultivated field at the eastern terminus of the alignment, immediately adjacent to Route 5. A subsequent systematic walkover survey of this field at 15 foot intervals revealed a very light lithic scatter extending over an area of approximately 150 by 200 feet. Artifacts consisted of a broken stemmed point, an early- to middle-stage biface fragment, a chunk fragment, and 21 flakes. LeeDecker and Wuebber (1988b) concluded that the point's overall appearance is similar to a number of stemmed point types that generally fall within the Late Archaic.

In 1991, a Phase I archaeological survey of the Billingsley Road corridor, from US Route 301 to the Charles County Sanitary Landfill was undertaken. The survey consisted of both pedestrian survey and shovel testing. Only one non-diagnostic prehistoric artifact was recovered during this project (R. Christopher Goodwin & Associates, Inc. 1991).

In 1990 and again between 2006 and 2008, a number of Phase I archaeological surveys were undertaken in advance of gravel-mining operations in the Jordan Swamp vicinity, including the Welsh

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<sup>7</sup> Robert Ogle has since donated his collection to Historic Londontowne.

tract (along Maryland Route 5) and properties along Gardiner Road (Ballweber 1990; Hopkins 2006, 2007; Wall and Kollman 2007; Wall and Schmidt 2008; Wall, Schmidt, and Kollman 2007a, b). The survey of the Welsh property, including approximately 74 acres located between Jordan Swamp and Maryland Route 5, yielded “no significant cultural resources” and a few isolated finds (Ballweber 1990). Six additional surveys located east of Jordan Swamp revealed five lithic scatters and a “historic” site (Hopkins 2006, 2007; Wall and Kollman 2007; Wall and Schmidt 2008; Wall, Schmidt, and Kollman 2007a, b), none of which were found to be eligible for the National Register of Historic Places.

In 1997, a survey was undertaken of the Middleton Farm, located on the west side of Jordan Swamp near its intersection with Zekiah Run. Investigations included surface collection and limited shovel testing (Ballweber 1997). Ballweber (1997) identified a widely scattered assemblage of lithic artifacts, which are believed to be “the residual remains of previously recorded [archaeological site] 18CH339.” The artifacts recovered included flakes, bifaces, and projectile points of quartz, quartzite, and rhyolite. Ballweber identified the points as Halifax, Bare Island, Piscataway, and Brewerton, all types spanning the Middle to Late Archaic.

Historic artifacts were also recovered, consisting of redware, annular ware, porcelain, whiteware, buff-pasted earthenware, light blue bottle glass, clear bottle glass, milk glass lid liner fragment, clay pipe stem fragments, and brick fragments. These were scattered across the project area. Only two clay pipe stem fragments were reported, although the bore diameters were not noted (Ballweber 1997).

A Phase I archaeological survey designed to locate historic properties in areas of the proposed Route 301 Bypass near Waldorf identified the Jordan Swamp I site (18CH0694) (located on the St. Peter’s Catholic Church property). The site, which is located at the “terminus of a colluvial toe-slope that extends down to Jordan Swamp,” is of interest to this project for the site’s relatively large numbers (16) of Potomac Creek ceramic fragments. Seven shovel tests were excavated in the area of the site, yielding flakes, fire-cracked rock, projectile points, and the Potomac Creek ceramic fragments, suggesting a site measuring approximately 30-by-25 meters (100-by-80 feet). Quartz artifacts predominated, although quartzite, chert, jasper, and rhyolite are also represented in the collection. A Late Woodland quartz Levanna (triangular) point was recovered from one of the shovel tests. Jordan Swamp I was interpreted as a “hamlet, representing the settlement of a small single or extended family domestic group. Such settings may reflect refuge settlement during the Late Woodland to early Contact period” (Barse, Eichinger, and Scheerer 2000). Indeed, based on our work at Jordan Swamp1 in 2011 (see Chapter VIII), the site could very well have been occupied when the Zekiah Fort was occupied.

In 2009, a Phase I archaeological survey of the northern portion of the tract known as His Lordship’s Favor was undertaken by St. Mary’s College of Maryland in an effort to locate a complex of structures depicted on a 1705 plat (see Figure 6; King and Strickland 2009a). The survey area was located approximately 1000 feet south of the now-developed landfill. Shovel tests were placed at 100-foot intervals over an area measuring approximately 15 acres, with intervals reduced to 25 feet in areas where colonial artifacts were encountered. The building complex (18CH0793) depicted on the survey plat was relocated and, based on the recovered artifacts, appears to have been occupied no earlier than the last decade of the 17<sup>th</sup> century (and possibly later) and abandoned c. 1725 (King and Strickland 2009a).

Significantly, Potomac Creek ceramics were the most numerous ceramic type recovered from the shovel tests at His Lordship’s Favor, including four fragments. These ceramics were found in association with European materials and suggest one of three possibilities: the ceramics may represent a small hamlet or settlement on this knoll pre-dating the English occupation of His Lordship’s Favor but contemporary with the Zekiah Fort occupation, or they may indicate that, once Zekiah Fort was abandoned, at least

some Piscataway remained in the area and lived with or traded with the occupants of 18CH0793. It is also possible that the Potomac Creek ceramics pre-date the colonial occupation.

A second site (18CH0799) was also located during the 2009 survey and identified as a mid-20<sup>th</sup>-century domestic occupation associated with a farmstead of that date depicted on a USGS map. This farmstead was located just outside of the landfill's south boundary.

None of these sites, including those with Potomac Creek ceramics, appeared as a likely candidate for the Zekiah Fort site.

## **B. The Present Search for the Zekiah Fort**

Finding the Piscataway fort at Zekiah has been a goal of archaeologists and historians for at least 80 years, beginning in 1935 with William Marye's (1935) effort to review land records for clues as to the settlement's location. As noted, Carl Manson and R. B. Looker identified sites they thought were likely candidates for the fort. The search has been impeded, however, by a number of factors, the primary one concerning the nature of the archaeological signature of post-Contact Native sites in Maryland. In her master's thesis, archaeologist Norma Baumgartner-Wagner (1979:52-58) suggested that post-Contact Native sites in Maryland are difficult to identify in the archaeological record because of their dispersed, low density character. More specifically, Baumgartner-Wagner (1979:54) suggested that post-Contact Native sites have not been found because "we [have not been] looking for the correct artifact assemblages."

Archaeological investigations at the Posey site, located along Mattawoman Creek in Charles County, provided an opportunity to evaluate Baumgartner-Wagner's observations. The Posey site, which was occupied from c. 1660 until 1685, is characterized by thousands of artifacts, suggesting that at least some post-Contact Native sites have left a rich, definitive archaeological signature. But the Posey site, which contains European materials, was initially misidentified as an early 17<sup>th</sup>-century site, in large part because the European materials were not more precisely identified (Barse 1985:146-159; Potter 1993:205-206). A reevaluation of the Posey site material revealed two things: that the comparatively few European artifacts recovered from the site dated no earlier than the second half of the 17<sup>th</sup> century and that at least some post-Contact Native sites would be characterized by a preponderance of Potomac Creek ceramics.

Another challenge to finding the Zekiah Fort concerned the level of development in the Zekiah Run drainage, given the waterway's relatively close proximity to Waldorf and La Plata. Indeed, the project area is within a few miles of Waldorf and several adjacent parcels have been intensively developed, including, for example, the nearby Charles County Sanitary Landfill and a number of residential subdivisions. Also of concern are the high number of parcels in the project area that have been mined for their gravel deposits; some of this mining activity dates to the mid-20<sup>th</sup> century before laws, regulations, and policies had been put in place to protect cultural resources. Any archaeological sites once located in these areas would have been destroyed.

In 2008, Michael J. Sullivan, a businessman, Charles County native, and historian, assembled a group of researchers in an effort to continue the search for the Zekiah Fort settlement. The group included archaeologists and students from St. Mary's College of Maryland, archaeologists from the Maryland Historical Trust (MHT), and representatives of the Piscataway Indian Nation and Piscataway-Conoy Tribe of Southern Maryland. A number of meetings were held at Sullivan's home at Mount Victoria near Newburg, where discussion focused on reviewing and evaluating what was already known about

archaeological resources within the Zekiah Swamp drainage and the obstacles to discovery experienced by earlier surveyors.

MHT archaeologists Dennis Curry and Maureen Kavanagh had previously developed environmental parameters for a settlement that they estimated housed anywhere from 90 to 300 people. The greatest demand (other than for fresh water) was for land with suitably productive agricultural soil. Building on Marye's (1935) work, Curry and Kavanagh focused their effort in the vicinity of Kerrick Swamp, suggesting that the Prospect Hill (18CH0006) site had the right combination of environmental variables, and they identified it as a high priority location for further testing. Prospect Hill had originally been identified by Manson and Looker (Looker and Manson 1960) as their third choice for the fort's location, although Hickey's (1970) work had failed to generate firm evidence for a colonial occupation at Prospect Hill.

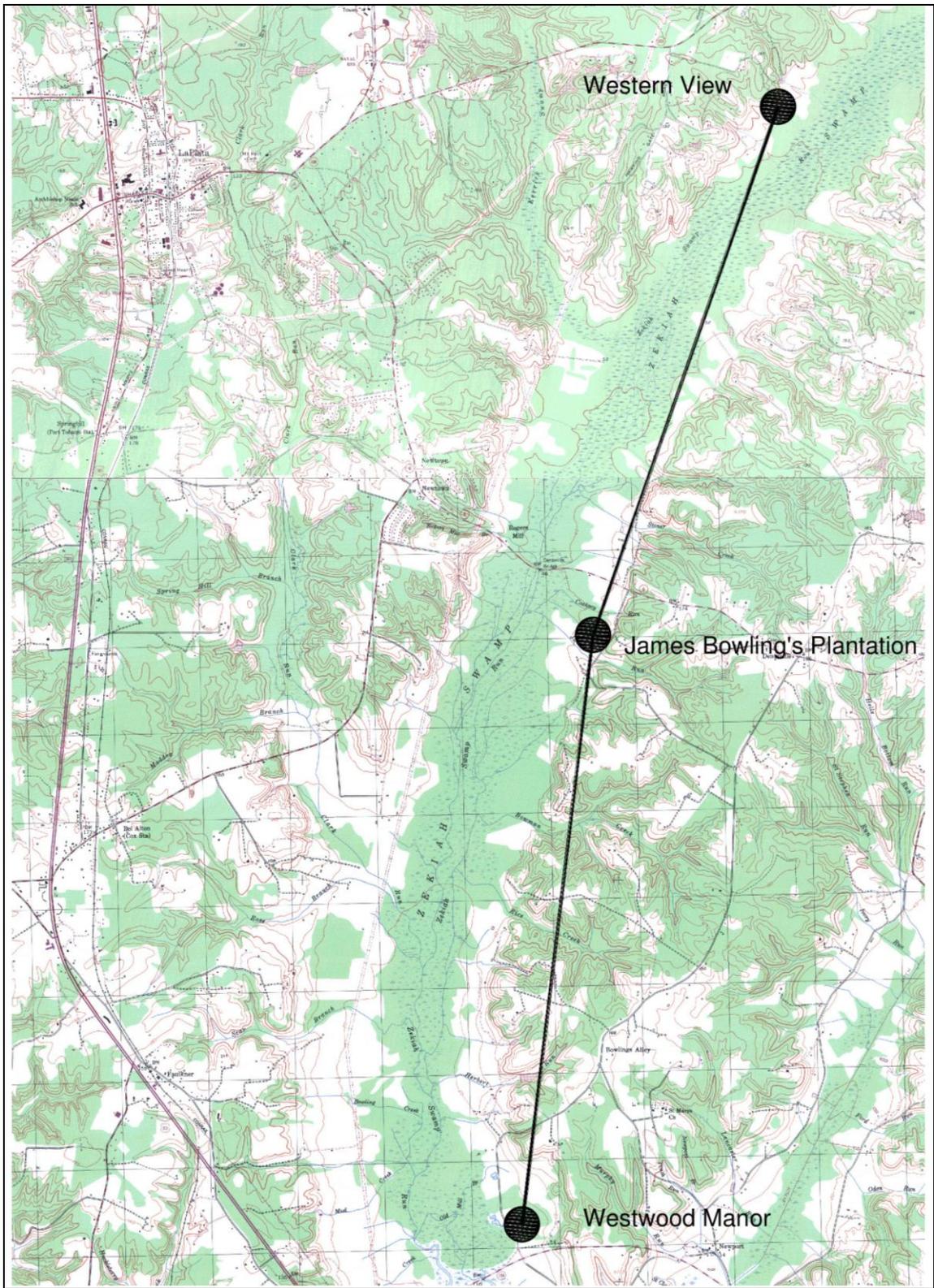
As part of this focus on Prospect Hill, one of us (Strickland) reviewed Marye's findings with regard to the 1682 court case involving Dennis Husculah and his report of illegal trade between the Indians at "Zekiah Town" and merchant John Pryor. Since Marye's work in the early 20<sup>th</sup> century, access to early Maryland land and court records has been dramatically facilitated by the Maryland State Archives, which has placed the majority of its records online. Geospatial digital technologies have also allowed a much better positioning of the landmarks given in the 1682 court case. The location of one of those landmarks, Westwood House, was identified in 1996 when a couple encountered a buried 17<sup>th</sup>-century cellar in their yard. Philip and Sandra Harrison carefully removed materials from the portion of the cellar impacted by the construction of their new house. Later, the Harrisons loaned the materials to St. Mary's College of Maryland, where they have been analyzed by anthropology students from the College (Alexander *et al.* 2010). The students' research suggests that this site was the place where John Pryor, the merchant accused by Dennis Husculah of trading with the Indians for deerskins, was operating. With this new information, Strickland was able to identify the Western View (18CH0001) property as the best fit based on the 1682 court case (Figure 33).

Strickland then conducted detailed title searches for the properties in this area, including Prospect Hill and Western View, searching land records for any mention of the Zekiah Fort. As part of this effort, we became increasingly convinced that Zekiah Fort would probably be found on Zekiah Manor.<sup>8</sup> Western View was the only potential fort location identified by Manson and Looker that fell on these manor lands. Hawkins Gate (or Fair Fountain), located between Western View and Prospect Hill, had been patented earlier to Josias Fendall, an avowed enemy of the proprietor. Although Fendall was not living there in the 1660s and 70s, archaeological investigations undertaken at Hawkins Gate in 2009 and 2010 suggest that there was an English household on the property and that members of this household probably interacted with Natives in the area. South of Hawkins Gate, portions of Prospect Hill had also been granted by the proprietor as early as the 1660s, although the property does not appear to have been occupied by English colonists until the mid- to late 18<sup>th</sup> century. None of the deeds for Western View, Hawkins Gate, or Prospect Hill mention any kind of fort or Native use of the property.

Although the Western View parcel appeared the most promising based on the documents (both representing a good fit with the distances given in the 1682 court case and located on Zekiah Manor, Lord Baltimore's property), artifacts from Western View that are today in the collections of both the Maryland Archaeological Conservation Laboratory (MAC Lab) and the Smithsonian Institution were not as convincing. The few materials at the MAC Lab suggest an Archaic period occupation of the property

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<sup>8</sup> Wayne Clark, director of the Tri-County Council of Southern Maryland, was also convinced that the fort would be found on the Calvert family's manorial holdings.



**Figure 33.** Projected location of “Zekiah Town” described by Dennis Husculah, 1682.

while the three white clay tobacco pipe stems in the collection at the Smithsonian have bore diameters of 5/64ths-inch, suggesting an 18<sup>th</sup>- and not a 17<sup>th</sup>-century occupation. In addition, we were unable to secure permission to test the fields at Western View and knowledge of the site there remains limited, although we do not think the property was used in the 17<sup>th</sup> century.

Strickland continued his study of the Zekiah Manor tract, with the team now convinced that Lord Baltimore's manor land offered the best option for identifying the Piscataway fort. Strickland was able to use a post-Revolutionary War map (prepared by the State of Maryland for confiscating British lands, including that owned by the Calvert family) to reconstruct the original boundaries of Zekiah Manor (see Figure 5; King and Strickland 2009a). Zekiah Manor comprised approximately 8,800 acres, much of it minimally developed by Charles Calvert. There is evidence to indicate that, when the Manor was established, a group identified as Zekiah ("Sacayo") was living in the area. Indeed, sometime before 1673, when Lord Baltimore needed to prove the boundaries of Zekiah Manor, he instructed his agents to confer with "such persons as well Indians as English as may be able to give testimony concerning the ancient reputed bounds of the Indian lands Pangaya and Zachaia, which had been surveyed and erected into Manors for the Proprietary" (Md. Archives 73:100).

In 1673, Calvert built his summer house on Zekiah Manor. Although it does not appear that Calvert made much personal use of this dwelling after 1675, the building appears to have remained habitable at least through 1681, when Colonel Henry Coursey and Colonel William Stevens hosted their negotiations with the northern Indians at "Zekiah House" in August 1681. It was at Zekiah House that, during the negotiations, Captain Randolph Brandt reported hearing "guns shot in the night" at Zekiah Fort. In 2009, we revisited the plat prepared in 1705 of His Lordship's Favor (see Figure 6). The plat depicts what appears to be a dwelling and several service buildings. While the house shown does not appear especially large, it has glass windows, a brick end chimney, and three dependencies, indicating a relatively substantial and even high-end complex relatively deep in the Zekiah. By 1705, Baltimore's summer house, if it was still standing, would have been more than 30 years old with no reported use or mention in the documents since 1681. Nonetheless, this relatively fancy dwelling is very unusual and we remain puzzled by who built and lived in this house (King and Strickland 2000a).

At the end of 2008, as the historical research was proceeding, Charles County resident and native Steuart Bowling contacted us about materials he had collected from the Hawkins Gate site (18CH0004), property formerly owned by Mr. Bowling's grandparents. Mr. Bowling allowed us to borrow his extensive collection of materials, which included artifacts ranging in date from the Archaic period through the 20<sup>th</sup> century. Of special interest to us were the large numbers of plain Potomac Creek ceramics and 17<sup>th</sup>-century white clay tobacco pipes. Seventeenth-century European ceramics, on the other hand, were almost completely absent. Only two ceramic fragments could be assigned with any confidence to the 17<sup>th</sup> century. Mr. Bowling's collection was not unlike the materials recovered from the aforementioned Posey site (18CH0281), with its high counts of Potomac Creek ceramics and both white and red clay tobacco pipes (Harmon 1999), making Bowling's collection and the Hawkins Gate site of considerable interest.

During the summer of 2009, we initiated the fieldwork portion of this search, first testing the property represented on the 1705 plat of His Lordship's Favor (King and Strickland 2009a). Although the colonial site identified at His Lordship's Favor does not appear to have been occupied earlier than the last decade of the 17<sup>th</sup> century (and perhaps as late as c. 1705), its function remains somewhat mysterious. The title search for this property indicates that none of its owners lived on the land, raising questions about just who built and was living in the structure. Further, if the complex dates as early as c. 1690, it was built when Indians were still at Windy Knolls I/Zekiah Fort, and may have been built to take advantage of potential trade relationships.

We then moved to the Prospect Hill property, on the south side of Kerrick Swamp at its intersection with Zekiah Run. This was the site identified by Dennis Curry and Maureen Kavanagh as a high priority for testing. Our Phase I survey of the property's lower fields reaffirmed the Archaic-period occupation of that portion of the farm; we were also able to rule out 17<sup>th</sup>-century settlement (King and Strickland 2009b), although the recovery of a single fragment of Potomac Creek ceramic may suggest some use of the property in the Late Woodland or early post-Contact periods.

We next crossed Kerrick Swamp, moving to the Hawkins Gate property, including the area where Steuart Bowling reported he had found many of the white clay tobacco pipes we saw in his collection. Although the Hawkins Gate farm is now subdivided, Mr. Bowling owns the parcel with a portion of the site on it (Bauer and King [2013]). We confirmed an occupation of this portion of the property from c. 1660 through 1695, interpreting it as an English tenant household. One of us (Flick) has since suggested that the Hawkins Gate property could be the site of "Zekiah Town," mentioned by Dennis Husculah in 1682. If so, Husculah's distances as presented in the court case of that year would make sense. The property, which belonged first to Josias Fendall and then to Henry Hawkins, would have presented an ideal location for trade with the Zekiah Indians.

The following summer, in 2010, we shifted our focus north along the Zekiah, in part because Wanser's (1982) survey of existing collections indicated that a significant number of Potomac Creek ceramic fragments had been recovered from properties in the area of Piney Branch near its intersection with Zekiah Run. Although this site was, by several miles, well beyond the distance given by Husculah in 1682, we nonetheless began reviewing the Maryland state archaeological site files for sites in this area containing Potomac Creek ceramics, 17<sup>th</sup>-century European artifacts, or both (Publicover 2010). Two sites, both located south of Piney Branch, were reported as having comparatively large quantities of Potomac Creek ceramics while a third, Jordan Swamp I (18CH0694), located several miles north along Jordan Swamp, had yielded about a dozen Potomac Creek ceramic fragments. All three sites, including the Steffens (18CH0093), the Hogue (18CH0103), and the Jordan Swamp I (18CH0694) sites, are discussed in this report and are now believed to be outlying hamlets associated with the Piscataway occupation at Zekiah Fort.

In late 2010, while studying the 1798 Federal Direct Tax for Port Tobacco, one of us (Sullivan) came across a reference to a property in the possession of Thomas A. Dyson described as "Indian town." Strickland subsequently found that Dyson (who had served as Sheriff of Charles County) had, as part of a case involving non-payment of taxes, held control of a property on Zekiah Manor adjacent to His Lordship's Favor. In addition, one of the deed calls for His Lordship's Favor refers to an "old Indian field." Strickland plotted the Dyson tract and found that it was located on the east side of Piney Branch just north of His Lordship's Favor. Dyson's "Indian Town" is located north of the Windy Knolls parcel and remains unsurveyed, but its interesting name, "Indian Town," propelled us to look more closely at the properties in this area.

Careful inspection of the topographic and natural resource attributes of the Windy Knolls property revealed a parcel of land that would have been favorable for both settlement and defensive purposes. The property is surrounded on three sides by small creeks, and one of these creeks was and still is fed by a perennial spring. The creeks surround two relatively steep knolls approximately 25 feet higher in elevation than the surrounding farmland. Soils along the top of the south knoll and at its base consist of Beltsville and Grosstown series, respectively, both suitable for the cultivation of corn. Although the site is not far from Maryland Route 5, which is believed to follow the approximate location of a pre-Contact Native path, the location is suitably hidden and easily defended.

Could the Windy Knolls property be the site of Zekiah Fort? It certainly seemed to us to have potential. In February 2011, we initiated shovel testing of the Windy Knolls property. On the very first day, we recovered fragments of Potomac Creek pottery, white clay tobacco pipe stems, and two glass beads. This report describes the results of the extensive testing that took place at the site from February until July 2011, and why we think this site is the Zekiah Fort.

## V. Methods

The archaeological methods we used in the survey of the four properties are all relatively standard in the region. In addition to careful documentary research, detailed in Chapters II and III, and a review of previous archaeological work, detailed in Chapter IV, we embarked on an archaeological program that included both shovel testing and the excavation of larger test units. Mindful of the destructive nature of archaeological excavation, we kept detailed sets of records; these records along with the artifacts have been processed and organized for the benefit of future researchers interested in examining how we came to our results.

### A. Shovel Testing Program

For all four properties discussed in this report, including Windy Knolls, Steffens, Hogue, and St. Peter's Church, we used a shovel testing strategy for locating and identifying areas of archaeological significance. This is the method we have consistently used since our initial work in the region beginning in 2008 (King, Strickland, and Norris 2008; King and Strickland 2009a, b; Strickland and King 2011). Although shovel testing can be "labor intensive" (Lightfoot 1986:484), especially when compared with pedestrian survey, in areas where ground visibility is limited or where buried deposits exist, shovel testing provides the best and most efficient means for recovering sub-surface information (see also Lightfoot 1989). Further, because all of our project areas include a mix of agricultural fields and wooded lots, and because most farmers and other land managers today avoid wide-scale plowing as part of best management farm practices, we early on instituted a program of systematic shovel testing as the strategy best suited for locating archaeological sites.



**Figure 34.** Excavating a shovel test.

Shovel test pits – round test pits approximately one foot in diameter and from one-half to two feet deep – are useful for documenting soil stratigraphy and recovering artifact samples and distributional information from across broad areas. Shovel tests are generally not excavated on steep slopes, or in areas with visible surface water. Soil is typically screened through ¼-inch hardware cloth and all artifacts, bone, and shell are retained; charcoal is counted and discarded in the field (Figures 34 and 35). Each shovel test is carefully recorded, including a Munsell soil color description of the soil strata encountered and a list of the artifacts recovered from each shovel test. After recordation, the shovel tests are backfilled. All measurements for the present shovel testing project were made in feet and tenths of feet. Figures 36-38 show the location of shovel tests excavated at the various properties.

For three of the properties, including Windy Knolls, Steffens, and Hogue, shovel tests were initially excavated at intervals of 50 feet. In areas where we recovered Indian ceramics (in particular, Potomac Creek varieties) or other potentially diagnostic artifacts, we reduced our interval levels to 25 feet. At the St. Peter's Catholic Church property, where a number of Potomac Creek ceramics had previously been recovered in association with the Jordan Swamp I site (18CH0694), we



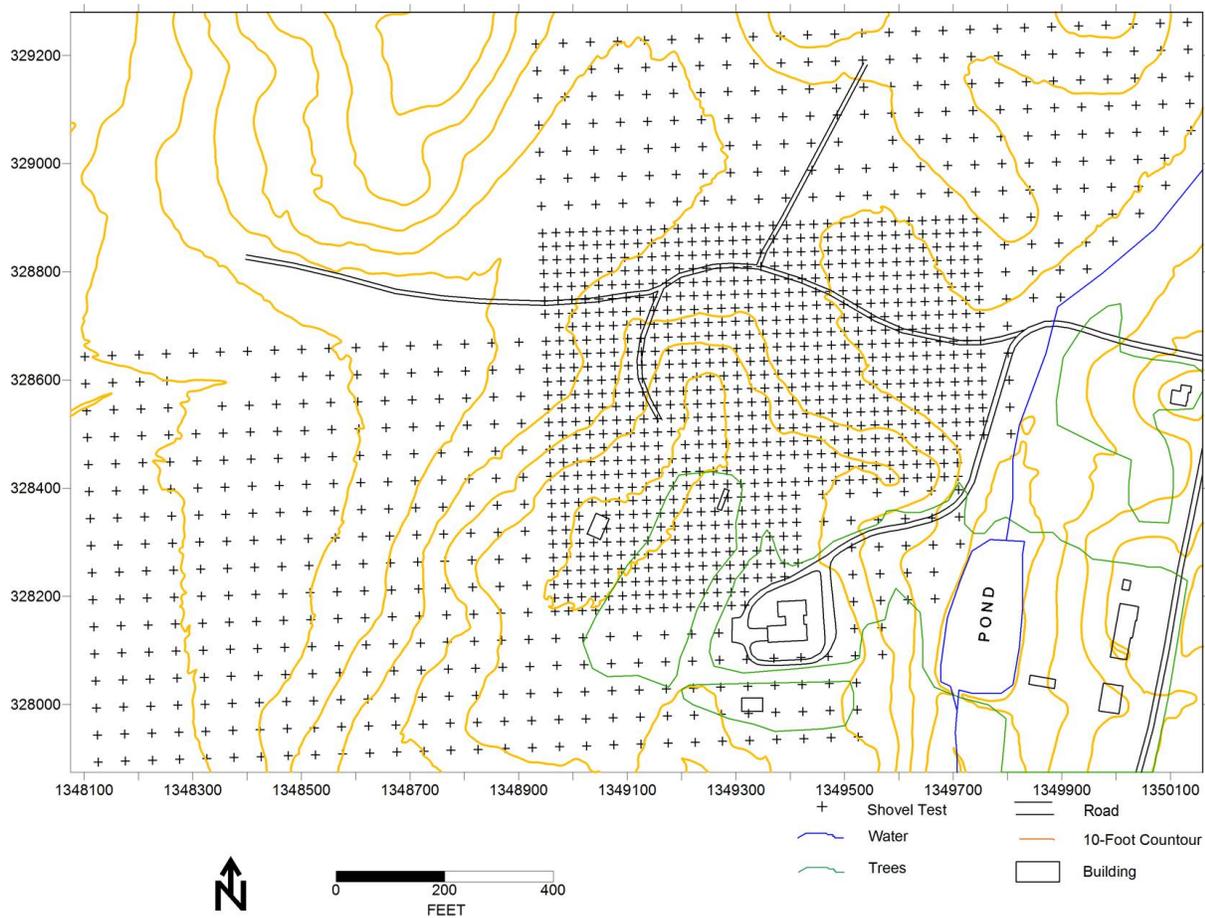
**Figure 35.** Screening shovel test fill.

initiated shovel tests at 25-foot intervals. Working at such a close interval (25 feet) allowed us to increase artifact samples, to identify sub-surface features, and to more precisely determine the site's horizontal and vertical boundaries. Because of time constraints and because of the research design, we did not reduce interval distances for lithic materials or post-Revolutionary artifact types (see below for discussion).

We were able to take advantage of new technologies for establishing horizontal and vertical control at our projects and all of our shovel tests are tied into the Maryland State Plane Coordinate System (or Maryland state grid). Surveyor Kevin Norris and his colleagues at Lorenzi, Dodds, and Gunnill have assisted us with putting in very precise grids established along the State Coordinate system. Norris uses a Real Time Kinematics (RTK) surveying system to locate state plane coordinates in each of our survey areas; the RTK system provides accuracy by computing the error between the GPS-determined location of a fixed site with the site's known location and transmitting these real-time correction factors via a cellular modem and the internet to a network of RTK base stations (Figure 39). Once points on the State Plane were located on the ground, the archaeological grids were established by placing pin flags at systematically spaced intervals, usually every 50 feet.

Unfortunately, while the RTK system is unparalleled in its precision in open fields and other open areas with good internet connections, the system loses some of its accuracy in wooded areas. In those cases, once the easily obtained points in the open fields were set and tied into the state grid, we used a standard transit to carry lines from these points into the wooded portions of the properties. This effort sometimes requires considerable clearing of the baseline and additional clearing of transect lines by the crew.

Because almost all of the Windy Knolls property is wooded, the established shovel test grid was set almost entirely with a standard transit. Given the lengthy distances as well as the steep slopes that had

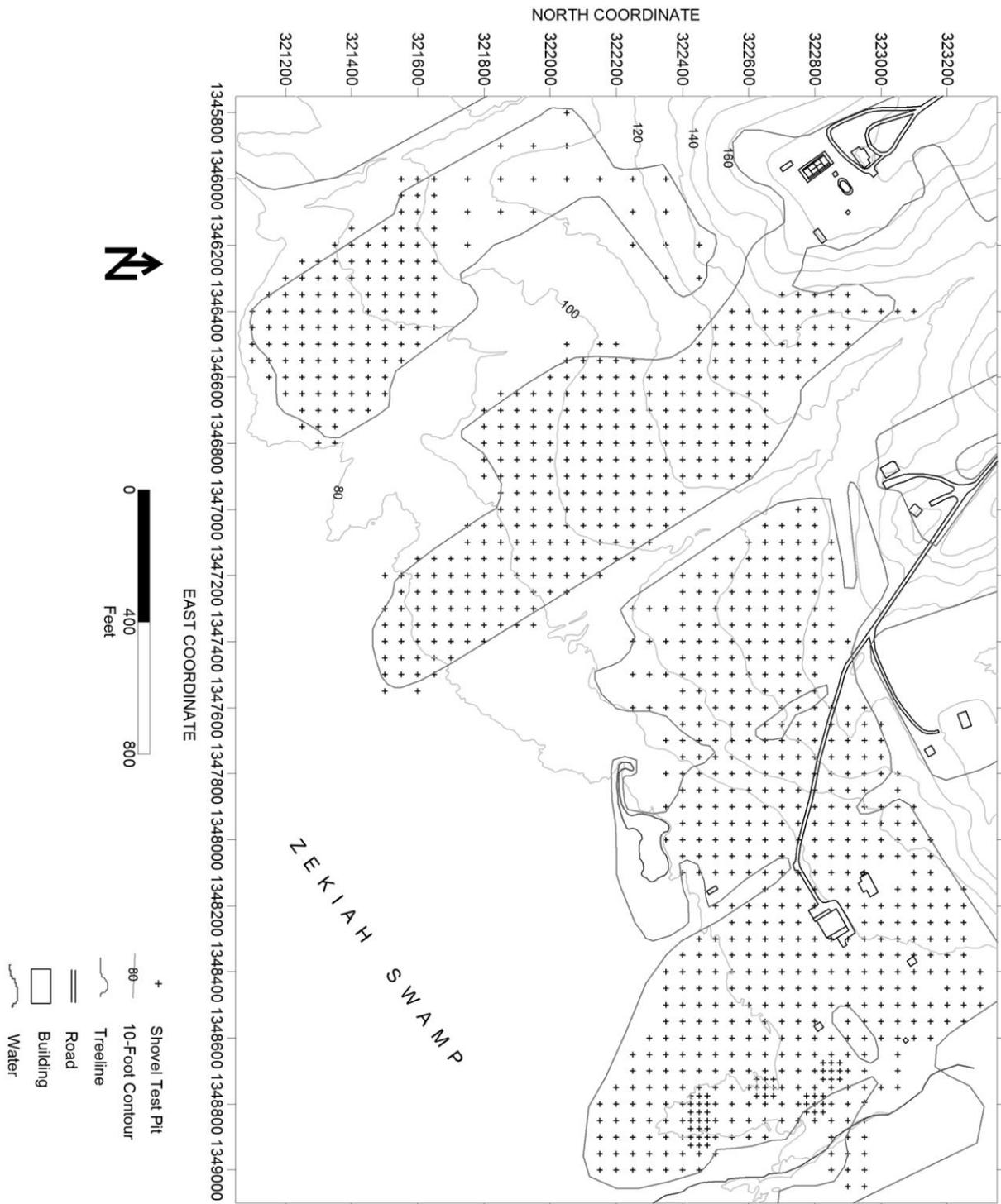


**Figure 36.** Location of shovel tests at the Windy Knolls property.

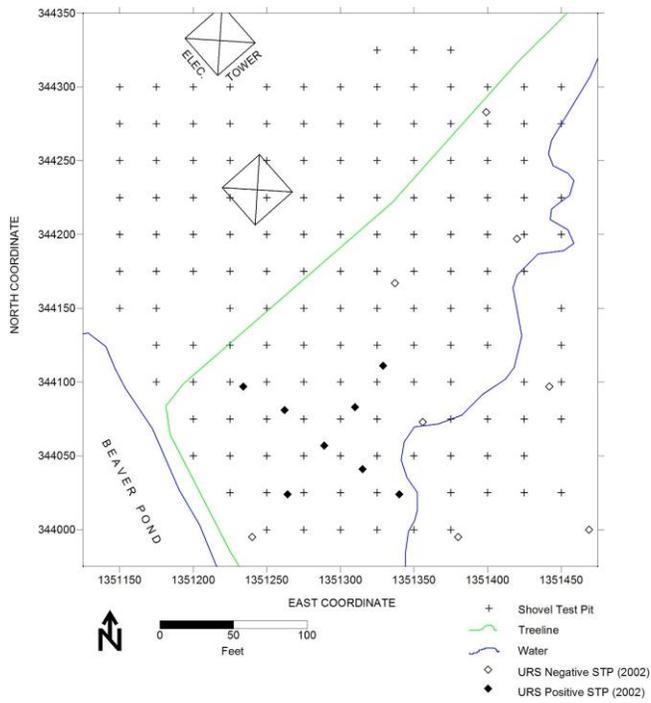
to be negotiated at Windy Knolls, the shovel test grid was found to be off by an angle rotation of 1.91 degrees. The maps in this report have been adjusted to reflect this correction. Details on how the correction was made can be found in the field survey logs in the field records. Only the shovel test grid at Windy Knolls required correction; the test unit grid is precise.

## **B. Test Unit Excavation**

At Windy Knolls, in areas where concentrations of colonial artifacts were encountered, we excavated 46 five-by-five-foot test units (Figures 40 and 41). As noted, these test units were set after corrections to the shovel testing grid had been made. The test units were designed to generate a larger sample of artifacts from the site and to allow the collection of information about the nature of features and other subsurface deposits. Test unit numbers were designated by combining the last three digits of both the North and South coordinate from the southwest corner of each unit. Each unit was excavated using shovels and trowels (Figure 42). Soils were screened through ¼-inch hardware cloth and all cultural materials were retained (Figure 43). Column samples of one cubic foot in volume were collected from the northeast corner of each unit, separately screened through ¼-inch hardware cloth, and then water-screened through 1/32-inch fine screen. Units were subsequently photographed and plan drawings were



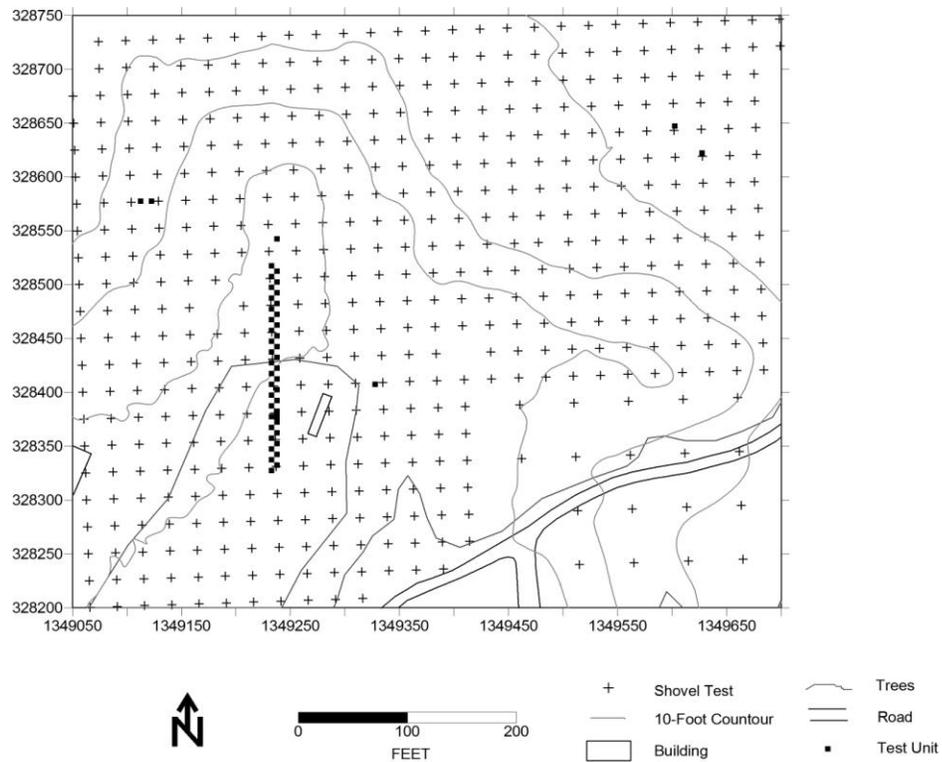
**Figure 37.** Location of shovel tests at the Steffens (18CH0093) and Hogue (18CH0103) properties.



**Figure 38.** Location of shovel tests at the St. Peter's Catholic Church/Jordan Swamp I property.



**Figure 39.** Using the RTK system to establish the archaeological grid.



**Figure 40.** Location of test units, Windy Knolls I.



**Figure 41.** Overall view of test units, Windy Knolls I.



**Figure 42.** Excavating test units at Windy Knolls I.



**Figure 43.** Screening plow zone from test units at Windy Knolls I.

prepared as appropriate. Additional information about each unit was recorded on provenience cards, survey logs, and stratum registers. All 46 test units were backfilled at the completion of the project.

In order to examine the preservation of bone and similar organic material on the site, soil samples from each excavated context were collected in the field and the acidity of the soil was tested at the University of Tennessee using a Spectrum Technologies FieldScout SoilStik pH meter, producing measurements to the nearest hundredth. The acidity of soil has been shown to correlate significantly with the preservation of bone on archaeological sites (Cornwall 1956:204-208; Gordon and Buikstra 1981; Miller 1984:202-205).

### **C. Laboratory Methods**

All artifacts and records were processed according to state standards (Seifert 2005) in a temporary field lab provided by the College of Southern Maryland in La Plata and in the Anthropology Lab at St. Mary's College of Maryland. Artifacts were washed or otherwise cleaned, dried, bagged, labeled, and cataloged using standard practices and systems, and the collections were prepared for long-term curation. Spreadsheets containing the artifact catalogs were developed for reporting and computer mapping purposes, and artifact distribution maps were produced using the Surfer © computer mapping software (Golden Software 2002). Copies of all records as well as the artifacts have been placed at the Maryland Archaeological Conservation Laboratory, the state's archaeological repository at the Jefferson Patterson Park and Museum.

Because of the high number of flakes recovered during the project and our desire to standardize cataloging terminology, we used the cataloging system developed by the Jefferson Patterson Park and Museum for lithics. Catalogers organized materials according to both stone type and stage in the reduction process. Primary, or initial reduction, flakes were defined by the presence of more than 50 percent cortex and a high thickness to length ratio. Secondary, or bifacial thinning flakes, were defined by a cortex of less than 50 percent, multiple flake scars, and a low width to length ratio. Shatter is a type of detached piece which does not show evidence of a striking platform and may either indicate a less-skilled knapper or the effects of post-depositional processes (i.e.-plowing, trampling, etc.) on a site (Andrefsky 2004:81). Tertiary, or retouch/sharpening flakes, were defined by small size, lack of cortex, and a roughly equal width to length ratio. Lithic tools were defined as retouched flakes, bifaces, or other artifacts that showed evidence of utilization. Projectile points consisted of finished bifaces with a recognizable morphology. Finally, a core is a piece of stone from which one or more detached pieces (flakes or shatter) have been struck.

For all of the properties surveyed in both 2010 and 2011, the crews excavated a total of 2,553 shovel tests, including 1,362 at Windy Knolls, 445 at Steffens (18CH0093), 599 at Hogue (18CH0103), and 147 at St. Peter's Catholic Church (18CH0694). In terms of areal measurements, the area surveyed at Windy Knolls included approximately 63 acres, Steffens/Hogue (combined) approximately 86 acres, and St. Peter's Catholic Church/Jordan Swamp approximately three acres. In addition, 46 five-by-five-foot test units were excavated at Windy Knolls I.

The results of this work are reported in the following chapters, which have been organized by property.

## **VI. The Windy Knolls Property: The Windy Knolls I (The Zekiah Fort) and Windy Knolls II Sites**

A total of 1,362 shovel test pits and 46 5-by-5-foot test units were excavated at Windy Knolls (see Figures 36 and 40), revealing the presence of two archaeological sites on the property named Windy Knolls I and Windy Knolls II. Windy Knolls I includes a late 17<sup>th</sup>-century settlement approximately 18 acres in size that we have identified as the Zekiah Fort (18CH0808). A very low density c. 1830 domestic occupation probably associated with an enslaved household was also located within the site boundaries of the fortified settlement. The second site, Windy Knolls II, includes a single-component late 18<sup>th</sup>-century domestic occupation associated with either enslaved laborers or possibly a property owner (18CH0809). In addition, two early to mid-20<sup>th</sup>-century abandoned tobacco barns remain on the property, one standing and one collapsed. These barns have not been recorded as part of this project.

### **A. The Windy Knolls Property Shovel Test Results**

The shovel tests and the test units at Windy Knolls indicate that the property's stratigraphic record is characterized by a topsoil, plow zone, and subsoil. Topsoil (which is not present in all areas) consists of a dark yellowish brown silty loam averaging 0.1 foot in thickness. Plow zone at the property ranges from yellowish brown to dark yellowish brown sandy loam with a thickness of from 0.7 to 1.1 feet. In areas at the bases of the two knolls, the plow zone overlies an older plow zone of generally dark yellowish brown sandy loam ranging from 0.9 to 1.0 foot in thickness. At Windy Knolls I, or the Zekiah Fort site, the quantity of artifacts tends to be larger in the older plow zone (at the northeast base of the south knoll), suggesting that the deflation of the plow zone took place after the 17<sup>th</sup>-century site was abandoned, probably beginning sometime in the 18<sup>th</sup> century with the increased use of wide-scale plowing in the region. Subsoil generally consists of yellowish brown sandy clay mottled with approximately 20 to 40 percent dark yellowish brown sandy loam. As expected, the plow zone tends to be thinner or deflated at the top of the two knolls on the property.

The 1,362 shovel tests excavated at the Windy Knolls property yielded 810 artifacts with an artifact count ranging from zero to 64 artifacts per shovel test (Table 7). These materials include 489 artifacts recovered from Windy Knolls I or the Zekiah Fort site (including the site's c. 1830 component) (18CH0808), 272 from the late 18<sup>th</sup>-century domestic occupation (18CH0809), and 49 recovered from outside designated site boundaries; the latter are considered random finds and have been recorded as 18CHX0067. Materials recovered from the shovel tests include lithics, tobacco pipes, ceramics, bottle glass, nails, brick, and other artifacts; these materials range in date from before Contact with Europeans through the 20<sup>th</sup> century. These artifacts are discussed in more detail, below, and a detailed catalog of all of the artifacts recovered from the Windy Knolls property can be found in Appendices I, II and III.

The boundaries of the two archaeological sites (Windy Knolls I or 18CH0808 and Windy Knolls II or 18CH0809) were determined by examining maps of the distributions of artifacts (Figures 44 to 47). Figure 44 displays the distribution of native lithic or stone artifacts at the Windy Knolls property, including flakes and tools of quartz, quartzite, chert, and rhyolite (European flint has been excluded from this distribution map). Overall, the density of lithic materials of native stone within the property is low, especially when compared with other areas in the Zekiah drainage, where the density can be three to seven times greater (compare with the Hogue site, described in Chapter VII, below, and the Prospect Hill site [King and Strickland 2009b]). This low density suggests that the property did not see the kind of use in prehistory that the Hogue or Prospect Hill sites did. Lithic materials recovered from the shovel tests at Windy Knolls are primarily concentrated along an unnamed stream ultimately draining into Piney Branch. This unnamed stream flows over the perennial spring that has long been recognized as a source of fresh water.

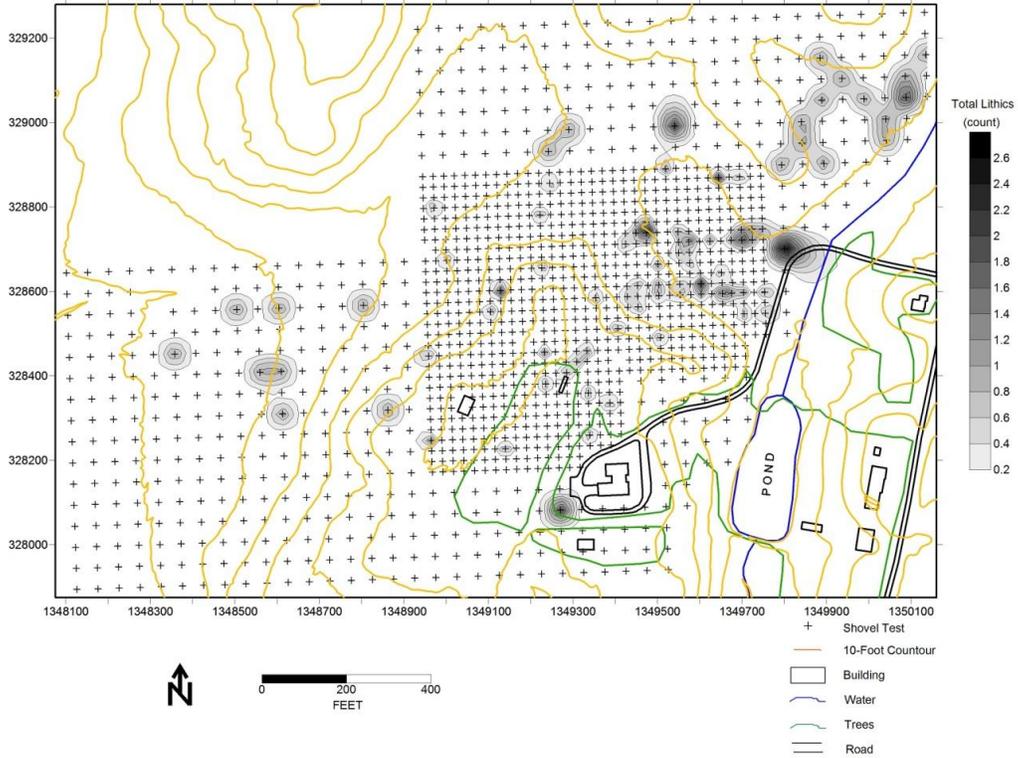
	Count
Biface, native stone	3
Debitage, native stone	54
Shatter, native stone	11
Debitage, European flint	16
European gunflint	2
<b>Total Lithics</b>	<b>86</b>
Indian-made ceramic	21
European coarse earthenwares	8
Rhenish Brown stoneware	1
English Brown stoneware	1
Refined earthenwares	37
Unidentified stoneware, modern	3
<b>Total Ceramics</b>	<b>71</b>
White clay tobacco pipe	24
Terra cotta tobacco pipe	4
<b>Total Pipes</b>	<b>28</b>
Glass bead	9
Bottle glass, colonial	14
Bottle glass, modern	201
Flat glass, modern	8
<b>Total Glass</b>	<b>232</b>
Lead shot	1
Unidentified lead fragment	2
Iron nail, unidentified	8
Iron nail, unidentified square	29
Iron nail, wrought	10
Iron staple/screw/barbed wire	14
Iron concretion fragment	17
Unidentified iron fragment	51
<b>Total Metal</b>	<b>132</b>
Animal bone	8
Oyster shell	7
<b>Total Fauna</b>	<b>15</b>
Brick	128
Coal	5
Concrete fragment	1
Fire-cracked rock	16
Fossil rock	2
Bog iron	25
Slag	1
Other modern (aluminum, asphalt, plastic)	68
<b>Total Artifacts</b>	<b>755</b>

**Table 7.** Total artifacts recovered from shovel tests, Windy Knolls property.

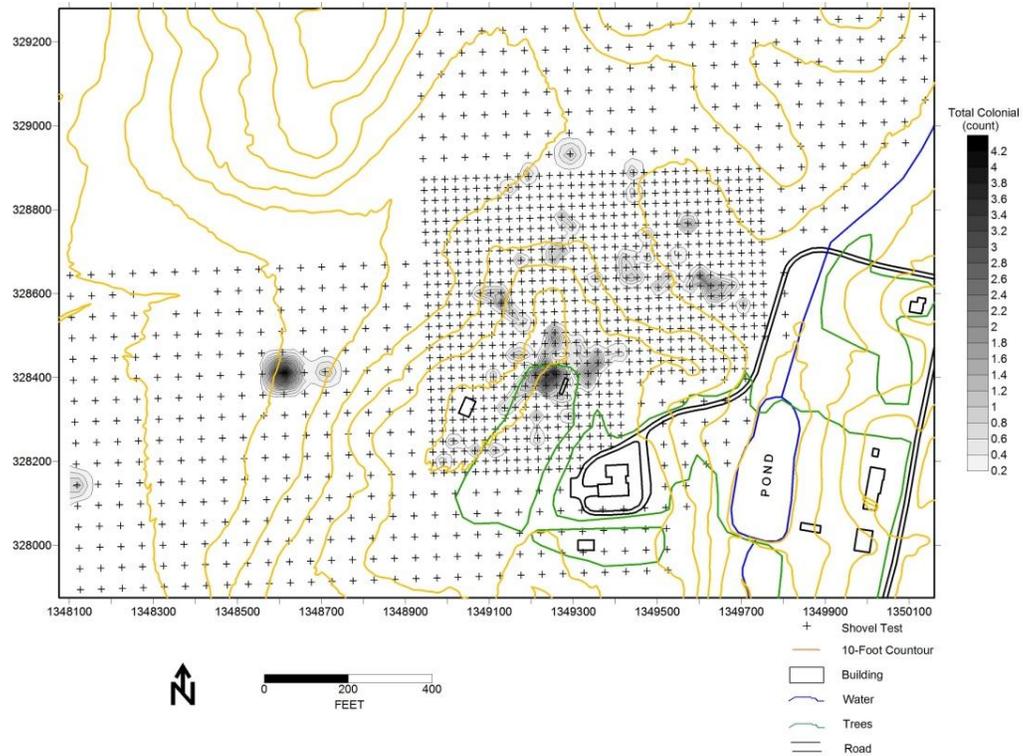
Figure 45 summarizes the distribution of colonial-period artifacts recovered from the Windy Knolls property, including red and white tobacco pipes, Native and colonial ceramics, colonial bottle glass, and European flint. This map depicts a colonial-era settlement measuring approximately 900 feet north-south by 900 feet east-west, with a total area of 810,000 square feet or 18.6 acres. A heavy concentration of materials is evident at the top of the property's south knoll with a second, less dense concentration along the knoll's northwest slope. The topography in that area suggests the location of a path to the knoll top, and a 19<sup>th</sup>-/20<sup>th</sup>-century farm road trace exists in the area today. A third concentration of material extends along the northern base or toe of the knoll for approximately 650 feet.

Figure 45 also depicts a fourth concentration of colonial artifacts west of the property's south knoll, and this concentration appears to be associated with the late 18<sup>th</sup>-century quarter site. Figure 46, which shows the distribution of refined earthenwares at the site, including creamware, pearlware, whiteware, and other diagnostic ceramics, reveals a heavy if discrete concentration of these materials in the same location. The shovel test pit containing many of these materials, N328450/E1348600, yielded a total of 64 artifacts, the greatest number of artifacts recovered from any of the shovel tests at the Windy Knolls property. The majority of these materials appear to be late 18<sup>th</sup>-century in date, although some materials could date as early as the late 17<sup>th</sup> century (discussed in more detail below). Conspicuously absent from this site, however, are fragments of dipped and white salt-glazed stoneware, suggesting that the surveyed area was not occupied throughout most of the 18<sup>th</sup> century.

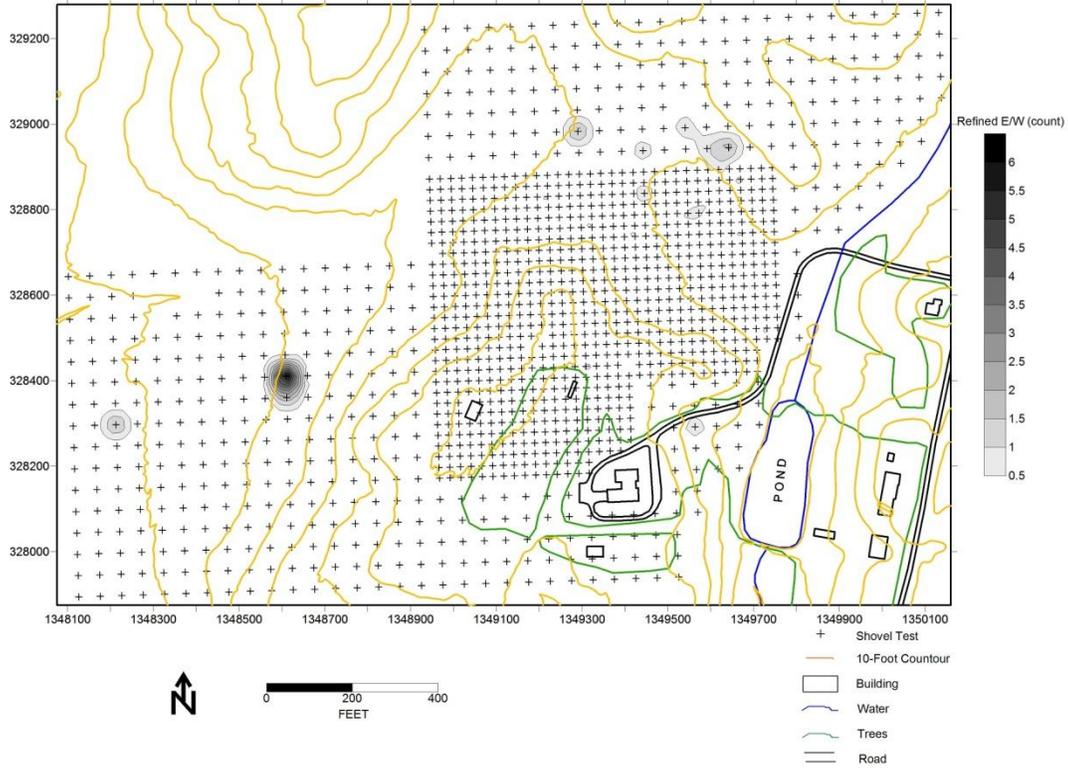
Figure 46 also reveals a lighter scatter of 19<sup>th</sup>-century material at the northern base of the south knoll. Diagnostic materials recovered from this scatter include primarily whiteware, suggesting an occupation of this portion of the property no earlier than c. 1830. This scatter, which is not far from the unnamed stream and perennial spring on the east side of the project area, appears to represent a post-colonial domestic occupation, possibly associated with Aquilla Turner's ownership of the property. Figure 47, which shows the distribution of brick at Windy Knolls, suggests the locations of structures standing at both the late 18<sup>th</sup>-



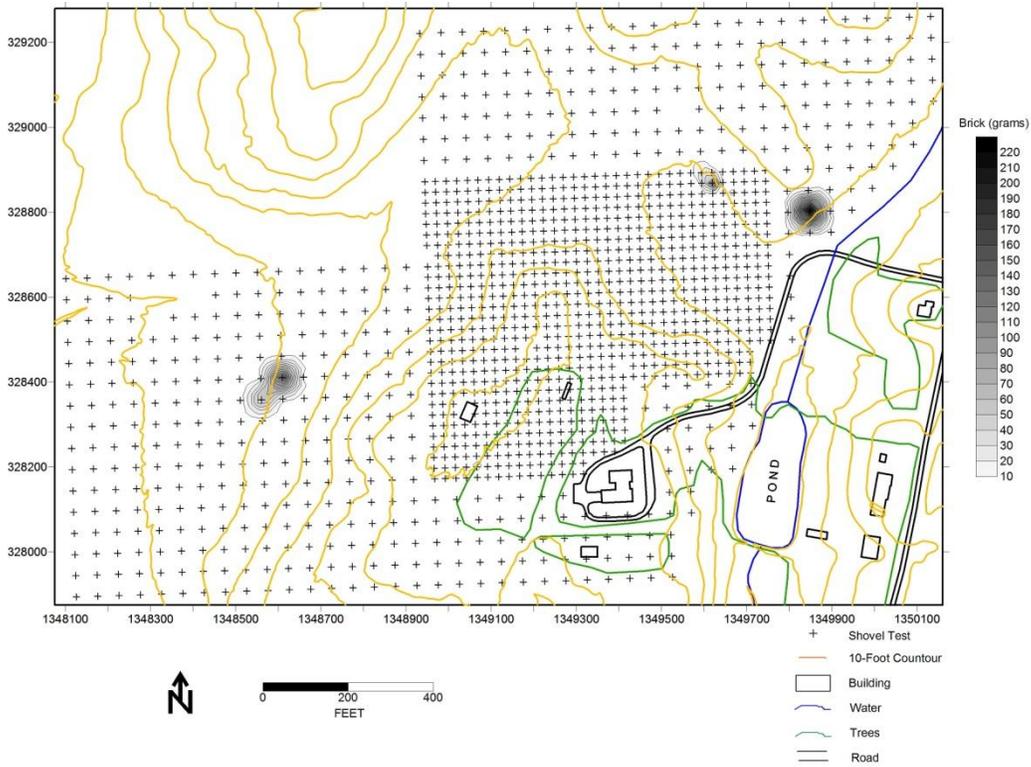
**Figure 44.** Distribution of lithics from shovel tests, Windy Knolls property.



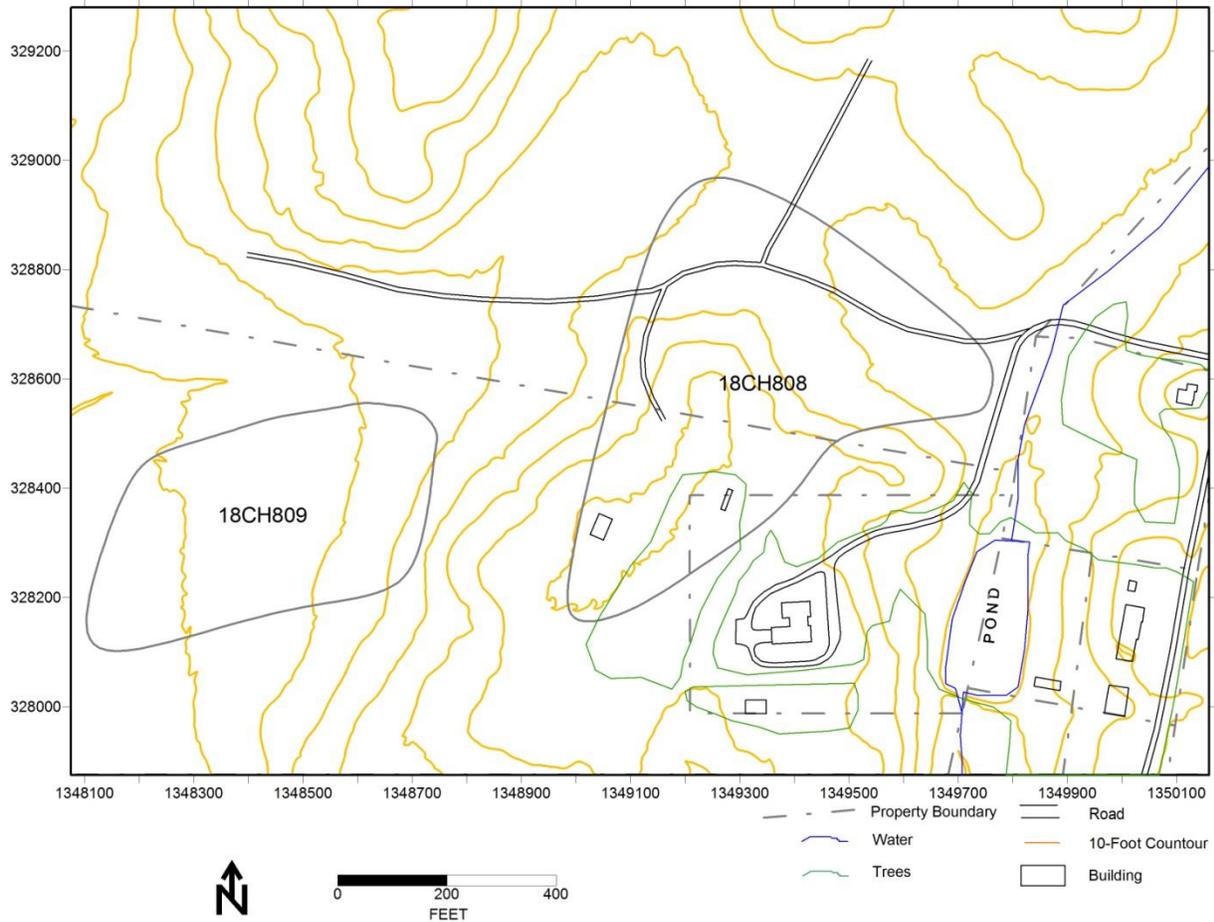
**Figure 45.** Distribution of colonial artifacts from shovel tests, Windy Knolls property.



**Figure 46.** Distribution of refined earthenwares from shovel tests, Windy Knolls property.



**Figure 47.** Distribution of brick from shovel tests, Windy Knolls property.



**Figure 48.** Site boundaries for Windy Knolls I (18CH0808) and Windy Knolls II (18CH0809).

century and the c. 1830 sites. The relatively low quantity of brick recovered, however, indicates that the buildings located at these two sites were almost certainly of frame construction with, at most, brick piers or foundations. Although not evident in these distribution maps, the test units excavated at the top of the knoll yielded a very low density of 19<sup>th</sup>-century artifacts that may suggest some domestic use of the knoll top during that time.

Figure 48 depicts our interpretation of the two archaeological sites' boundaries based on the artifact distributions. Our interpretation of the two sites' edges, however, requires some clarification. These boundaries reflect the extent of artifact distributions, and only artifact distributions, associated with each site. It is not only conceivable but likely that the two sites did not necessarily "end" at these borders. It is also possible, for example, that the concentration of colonial artifacts observed for Windy Knolls II (18CH0809) (and discussed above) may be related to the Windy Knolls I site's late 17<sup>th</sup>-century occupation and therefore associated with the Zekiah Fort site. Future managers of the property should recognize that the two sites' boundaries are not necessarily hard and fast. Nonetheless, establishing these boundaries serves to focus our analysis and the discussion that follows.

## **B. Windy Knolls I/The Zekiah Fort Site (18CH0808)**

As discussed above, the preliminary distribution maps allowed us to identify the primary areas of occupation at the Windy Knolls property. The property's early colonial site, designated Windy Knolls I and believed to be the Zekiah Fort site (18CH0808), appears to measure 900 feet east-west by 900 feet north-south, or approximately 18.6 acres in size and, as we hope to demonstrate in this section, was occupied from 1680 until c. 1695. The site includes a later domestic occupation dating c. 1830; this occupation may represent traces of a quarter for enslaved laborers. The later site appears to be located predominantly at the base of the south knoll and measures approximately 200 feet north-south by 300 feet east-west, or about 1.5 acres in size. A very light scatter of 19<sup>th</sup>-century artifacts, however, was recovered from the larger test units located at the top of the south knoll; evidence for this 19<sup>th</sup>-century scatter was missing from the shovel tests.

A total of 12,467 artifacts were recovered from the excavations at Windy Knolls I. The 942 shovel test pits excavated within the assigned boundaries of the site yielded 489 artifacts; while the 46 5-by-5-foot test units yielded an additional sum of 11,978 artifacts, including 6,502 materials recovered through dry-screening and 5,476 recovered from the water-screened column samples.

Although similar types of materials were recovered from both the shovel tests and test units, the methods of recovery differed, and therefore the information potential of each data set is different. The shovel test data, for example, provides valuable information about the spatial structure of the site, while the test unit data was designed to collect information about the types and quantities of artifacts used and discarded at the site as well as the presence of sub-surface features. For these reasons, in this report, we have elected to organize the discussion generally by recovery method and then by artifact category. Exceptions to this process are noted where appropriate. Future researchers will no doubt organize the data in ways most useful for addressing their research questions.

In this section, we refer to the Windy Knolls I (18CH0808) site primarily as Windy Knolls I rather than as the Zekiah Fort. We do this because it is through this section that we build our argument and our interpretation that this site represents an important component of the c. 1680 Zekiah Fort settlement.

### ***Shovel Test Results***

As noted, a total of 489 artifacts were recovered from the 942 shovel tests excavated within the assigned bounds of Windy Knolls I (Table 8). Artifact counts ranged from zero to 33 artifacts per shovel test with a mean recovery rate of approximately two artifacts per shovel test. Fully 75 percent, or 711, of the shovel test pits produced no artifacts.

The shovel test pits within the identified boundaries of the Windy Knolls I site yielded 77 lithic artifacts, with quartz and quartzite forming the largest category of worked stone recovered from the site followed by European flint (see Table 8). Table 9 presents the distributions of native stone types by step in the reduction process. Quartz forms more than half of the native stone type, followed by chert at approximately 29 percent. Only one primary flake (of quartz) is present in the assemblage. The majority of the stone artifacts consist of secondary or tertiary flakes. The few native lithic materials recovered from Windy Knolls I suggest that what little stone was used at the site was quarried and initially modified elsewhere before being brought to Windy Knolls for finishing.

	<b>Count</b>
Biface	3
Debitage, native stone	48
Shatter, native stone	8
Debitage, European flint	16
European gunflint	2
<b>Total Lithics</b>	<b>77</b>
Indian-made ceramic	21
European coarse earthenwares	5
Refined earthenwares	25
Unidentified stoneware, modern	3
<b>Total Ceramics</b>	<b>54</b>
White clay tobacco pipe	24
Terra cotta tobacco pipe	4
<b>Total Pipes</b>	<b>28</b>
Glass bead	7
Bottle glass, colonial	12
Bottle glass, modern	84
Flat glass, modern	7
<b>Total Glass</b>	<b>110</b>
Lead shot	1
Unidentified lead fragment	2
Iron nail, unidentified	8
Iron nail, unidentified square	20
Iron nail, wrought	10
Iron staple/screw/barbed wire	4
Iron concretion fragment	11
Unidentified iron fragment	35
<b>Total Metal</b>	<b>91</b>
Animal bone	8
Oyster shell	6
<b>Total Fauna</b>	<b>14</b>
Brick	65
Concrete fragment	1
Fire-cracked rock	15
Fossil rock	1
Bog iron	25
Slag	1
Other modern (aluminum, asphalt, plastic)	7
<b>Total Artifacts</b>	<b>489</b>

**Table 8.** Total artifacts recovered from shovel tests, Windy Knolls I.

The density of native lithic materials recovered from the Zekiah Fort site averages approximately .05 artifacts per shovel test (based on a total site shovel test count of 711). Compare this figure with a similar calculation for the Hogue site (18CH0103, discussed in more detail in Chapter VII), which appears to have been occupied throughout the Archaic and Woodland periods, albeit not necessarily continuously. A total of 481 lithics were recovered from the Hogue site, yielding an average of 1.40 lithic artifacts per shovel test, nearly thirty times the number of native lithic materials recovered from Windy Knolls I shovel tests.<sup>9</sup> The Prospect Hill site, located south of Windy Knolls at the junction of Zekiah Run and Kerrick Swamp, was occupied primarily during the Archaic period. Investigations at Prospect Hill yielded an average of 1.8 lithic artifacts per shovel test (King and Strickland 2009b:20). These numbers support the observation of the short-term nature of the Zekiah Fort occupation; these also indicate that the Zekiah Fort site does not appear to have been extensively occupied during the Archaic or Woodland periods.

Eighteen fragments of European flint were also recovered, including two professionally-made European spall-type gunflints, one of a honey-blond color with a carefully retouched heel (presumably French) and the other of a gray flint. European flint formed nearly one-quarter of the lithic assemblage, although none of these fragments, other than the two gunflints, appear to have been fashioned into or reused as tools.

A total of 24 white and four red clay tobacco pipe fragments were also recovered from the shovel tests at Zekiah Fort, with white, presumably European-made pipes outnumbering red pipes by six to one. Two white clay bowl fragments have evidence of rouletting or incised decoration near their rims and one white clay tobacco pipe is heavily burned. Of the 24 white clay tobacco pipes, only six had measurable bores, including one of 5/64ths-inch; one of 6/64ths-inch; three of 7/64ths-inch; and one of 8/64ths-inch. While the number of measurable pipe stem bores from the shovel test data alone is too small for preparing stem bore diameter histograms (Harrington 1954) or calculating the Binford (1962) pipe stem date, the pipe stems with

<sup>9</sup> This density is based on a shovel test count of 354.

	Primary Flake	Secondary Flake	Tertiary Flake	Shatter	Tool/ Biface	<b>Total</b>	<b>Percent</b>
	1	14	8	8	2	<b>33</b>	<b>55.9</b>
Quartzite	-	3	4	-	1	<b>8</b>	<b>13.6</b>
Chert	-	10	7	-	-	<b>17</b>	<b>28.8</b>
Rhyolite	-	-	1	-	-	<b>1</b>	<b>1.7</b>
Total	<b>1</b>	<b>27</b>	<b>20</b>	<b>8</b>	<b>3</b>	<b>59</b>	
Percent	<b>1.7</b>	<b>45.8</b>	<b>33.9</b>	<b>13.6</b>	<b>5.1</b>		

**Table 9.** Lithic debitage recovered from shovel tests by stone material type, Windy Knolls I; European flint is not included.

7- and 8/64ths-inch diameters along with the presence of red clay pipes point to a late 17<sup>th</sup>-century occupation.<sup>10</sup> None of the red clay fragments have mold marks to indicate manufacture using European molds, although one stem has a particularly smooth and refined fabric. Nor are any of the red clay tobacco pipe fragments recovered from the shovel tests decorated.

Twenty-one Indian-made and five European colonial ceramic fragments were recovered from the Windy Knolls I shovel tests. Ceramics of Indian manufacture primarily consist of Potomac Creek ware, accounting for 18 of the 21 sherds. Potomac Creek ceramics are associated with the Late Woodland through the early historic periods (1300-1700 AD) (Egloff and Potter 1982, but see Dent and Jirikowic 2000). Two of the Potomac Creek fragments have evidence of cord-marking, a form of decoration that archaeologists believe was becoming less prevalent by the early 17<sup>th</sup>-century (Egloff and Potter 1982). The remaining three Native-made ceramics are unidentified. Interestingly, one of these sherds is thin and highly smoothed or burnished and may represent a colonoware vessel.

Colonial European ceramics include Merida Micaceous II, North Devon Gravel-Tempered, black lead-glazed coarse earthenware, and an unidentified lead-glazed earthenware with an interior slip, possibly of Dutch origin. Merida Micaceous II wares have been recovered on sites in Maryland dating to the second half of the 17<sup>th</sup> century, including Patuxent Point (c. 1658-1695; King and Ubelaker 1996), the Clifts Plantation (c. 1675-1730; Neiman 1980), Mattapany (1666-1740; Chaney 1999), and St. Mary's City (1650-1700) (Cranfill 2006:100). North Devon Gravel-Tempered ceramics are commonly found on sites in the Chesapeake region dating to the second half of the 17<sup>th</sup> century (Noël Hume 1969:133). The buff-to-orange-pasted black lead-glazed earthenware may be an example of reverse Staffordshire slipware, which was first produced in England in the mid-17th century. Archaeologists generally agree, however, that Staffordshire slipware was not commonly available in the Chesapeake region until c. 1680 (Barker 2001; Grigsby 1993; Noël Hume 1969).

Of the 54 total ceramics, slightly more than half (or 28) date to the 19<sup>th</sup> and 20<sup>th</sup> centuries. These ceramics include cream-colored ware, pearlware, whiteware, and three fragments of modern stoneware. Two of the whiteware sherds have a blue edge decoration. These later ceramics are not associated with the fort occupation but do suggest that, in the decades preceding the Civil War, a household of relatively low visibility existed in this area.

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<sup>10</sup> Previous research at 17<sup>th</sup>-century sites in St. Mary's City has found that red clay pipes are rarely if ever found there in contexts post-dating 1660 (Miller 1983). Red pipes were found in a small but significant quantity at the Clifts site in Westmoreland County, Virginia, first occupied c. 1670 (Neiman 1980) and at the King's Reach site in Calvert County, Maryland, first occupied 1690. At sites occupied by Native households, however, red pipes are found in relatively high numbers into the last quarter of the 17<sup>th</sup> century.

Twelve dark green colonial bottle glass fragments were recovered from the shovel tests at Windy Knolls I, and most appear to come from round wine bottles. Of the colonial glass, one includes a base fragment, nine are body fragments, and two have an unidentified form. Ninety-one fragments of 19<sup>th</sup>- or 20<sup>th</sup>-century glass were also recovered. Seven are flat and are possibly from window glass. The remainder of the glass is either colorless, green/teal, or manganese tinted bottle glass.

Shovel testing at Zekiah Fort produced a total of seven glass beads, all of which are round and medium-sized. Two, sometimes called “Cornaline d’Aleppo” or “green-heart” type, are characterized by an opaque redwood exterior with a transparent dark green to apple green core. One of the red-on-green varieties appears to have three very thin, faint stripes extending through the core parallel to the perforation.

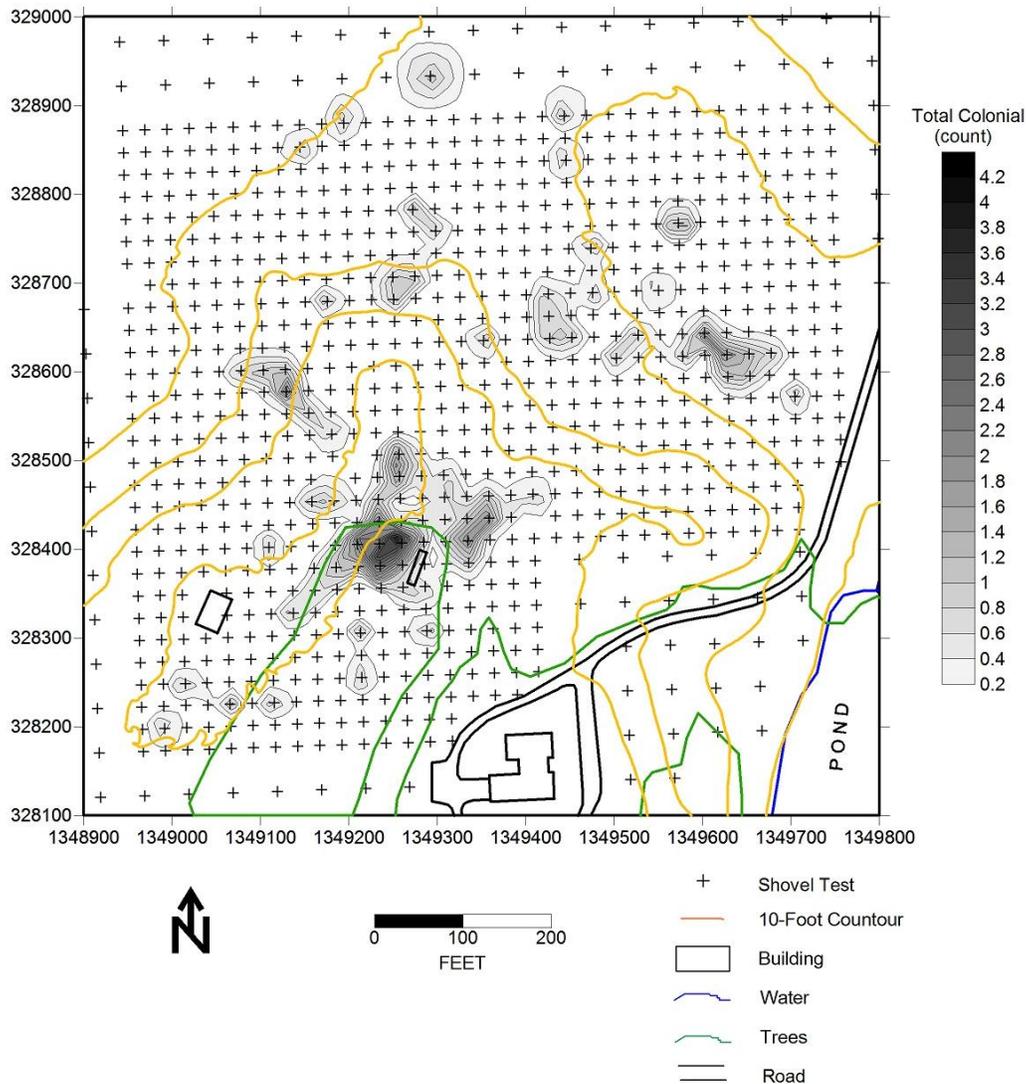
Of the 38 nails and nail fragments recovered, only ten are identifiable and all ten appear to be of wrought manufacture. One of these specimens is whole or complete, measuring close to 2.6 inches in length with a rosehead. The remaining shovel test nail assemblage consists of 20 unidentifiable square nails and eight unidentified types, two of which may be wire nails associated with the still-standing barn.

A total of 65 red brick fragments weighing 522.6 grams were recovered. One brick weighing 40.5 grams was recovered from a shovel test and a small red brick fragment with remnants of mortar was recovered nearby, both located north of the colonial concentrations near a farm path.

Animal bones were surprisingly few in number, especially given the results of the test unit excavations, which are described in more detail below. Only eight bone fragments with a combined weight of less than one gram and six oyster shell fragments with a combined weight of around 38 grams were recovered from the shovel test pits.

Artifact distribution maps were also produced for the materials recovered from shovel tests within the Windy Knolls I site proper (Figures 49 to 57). Figure 49 shows the distribution of the total number of colonial artifacts, including red and white tobacco pipes, colonial and Native ceramics, European flint, glass beads, and wrought nails. A number of concentrations of materials are evident, with the highest density of artifacts located at the top of the property’s south knoll. At the base of the knoll, a number of lower density concentrations are evident and may represent the locations of individual houses associated with the fort occupation. A third concentration is located along the knoll’s northwest slope in an area where a 19<sup>th</sup>-/20<sup>th</sup>-century farm road survives; this portion of the knoll offers the best access to the hilltop, and it may be that the farm road follows a path used by the site’s occupants, including the Piscataway as well as English rangers during the late 17<sup>th</sup> century.

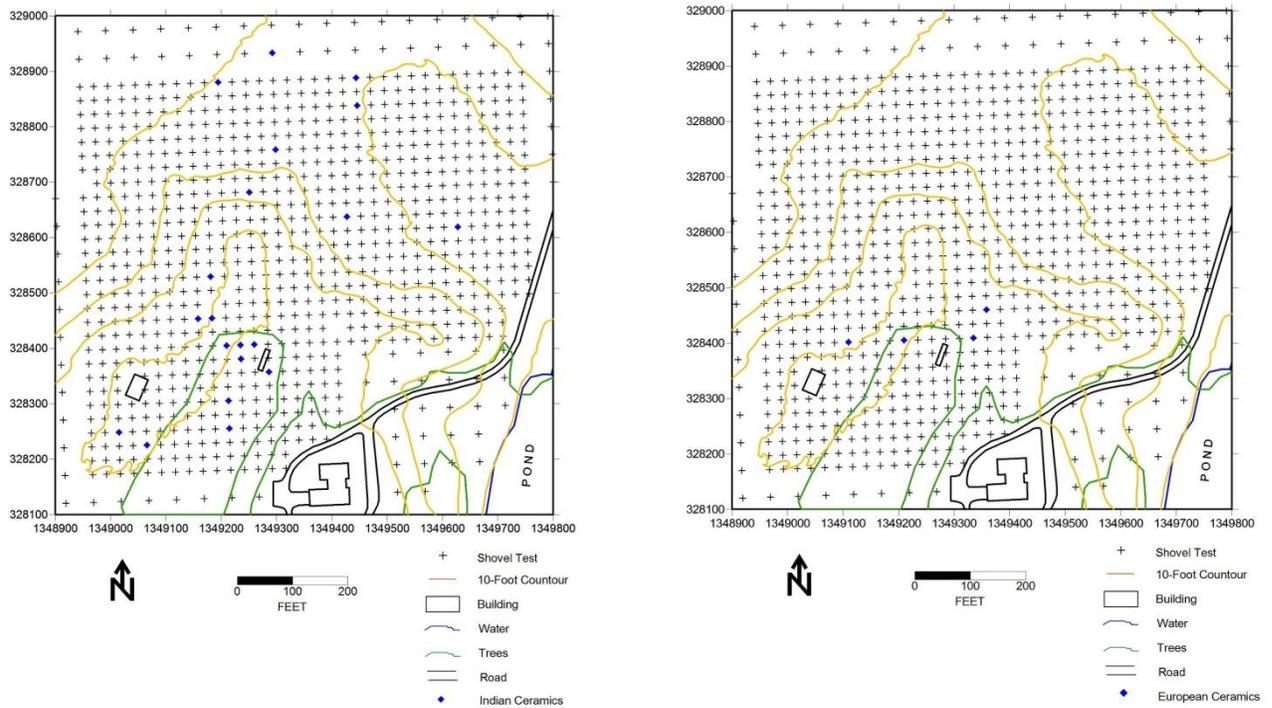
Figure 50 shows the distribution of Native-made and European ceramics (because of the low density of many categories of recovered materials, this map and selected others represent distributions as artifact plots rather than as contour maps). Native ceramics are distributed relatively evenly across the entire site, while the few European ceramics recovered are generally restricted to the top of the knoll (one European ceramic fragment was recovered elsewhere). Conversely, Indian-made red clay tobacco pipes were recovered primarily from the hilltop while European pipes were found distributed across the site (Figure 51). Colonial bottle glass (Figure 52), glass beads (Figure 53), and European flint (Figure 54) also appear to be evenly distributed across the site area. The few animal bone fragments recovered from the shovel tests were found concentrated at the top of the knoll (Figure 55), while the few oyster shell fragments recovered came from the base of the knoll (Figure 56). Finally, the distributions of “square” nails (most of which are probably wrought, although it is possible that cut nails are represented in these totals) may indicate that wooden structures of some kind stood on the site (Figure 57).



**Figure 49.** Distribution of colonial artifacts from shovel tests, Windy Knolls I.

Acknowledging that these counts are small (as shovel test data often is), these distributions nonetheless demonstrate the presence of a fairly intensive occupation dating to the second half of the 17<sup>th</sup> century. The site’s topography, including its defensible location, nearby source of potable water, relatively productive agricultural soils, location on Zekiah Manor, and the types of artifacts recovered all point to Windy Knolls I as the Zekiah Fort. Given the ambiguity of the documents, however, and the possibility that “Zekiah Town” (mentioned by Dennis Husculah in 1682) and “Zekiah Fort” were two different settlements (an issue we return to in the conclusion), we made the decision to undertake additional testing at the site with larger, five-by-five-foot units placed in areas of artifact concentration. Not only would we increase our artifact sample (dramatically so, as it turns out), we hoped to identify and document sub-plow zone features at the site. We were especially interested in identifying archaeological traces of any fortifications at the settlement.

The historical documents are clear that some kind of fortification was erected at Zekiah Fort, but the records reveal little about the precise nature of that fortification. Perhaps the best model for Zekiah Fort is provided by the documentary and archaeological evidence of the Susquehannock Fort, erected by



**Figure 50.** Distributions of Native and colonial ceramics from shovel tests, Windy Knolls I.

the Susquehannock in 1675 on Piscataway Creek, not far from Moyaone, the capital of the Piscataway chiefdom. A drawing found in the British Public Records Office (Figure 58) reveals a square structure of close-set palisades with what may be bastions at each of the four corners. Twelve Indian houses are shown inside this enclosure. An outer enclosure, also of close-set palisades, surrounds the fortification; this outer enclosure does not appear to have bastions. Archaeological excavations conducted by Alice Ferguson (1941) in the 1930s uncovered such a square palisade structure complete with corner bastions (at least on the sides that had not eroded into Piscataway Creek), although no evidence was uncovered for the outer wall.

The Piscataway, who had assisted the English with their siege of the Susquehannock Fort in early 1676, would have had ample opportunity to study this fort. The Piscataway's settlement at Moyaone was also fortified; when Lord Baltimore directed the Piscataway to Zekiah in 1680, he advised the tayac and his great men to destroy their fort at Moyaone so that it could not be reused by Piscataway enemies. The site of the Moyaone settlement has yet to be investigated archaeologically. A portion of a fort built by the Piscataway at Heater's Island in 1699, however, has been identified archaeologically, and the limited evidence uncovered there suggests a square structure with corner bastions (Curry n.d., 2008).

Dennis Curry (personal communication, 2009) has researched contemporary Native forts, including the Susquehannock Fort in Maryland and others reported from elsewhere in the Northeastern United States. Curry found that most of these forts were square in shape, typically with corner bastions, and that the average size of the fortifications was approximately 150 feet by 150 feet. Curry cautions that the range in size of individual fortifications is variable, but his findings suggest that a reasonable working model of the Zekiah Fort would include a structure of wooden palisade construction, probably square in

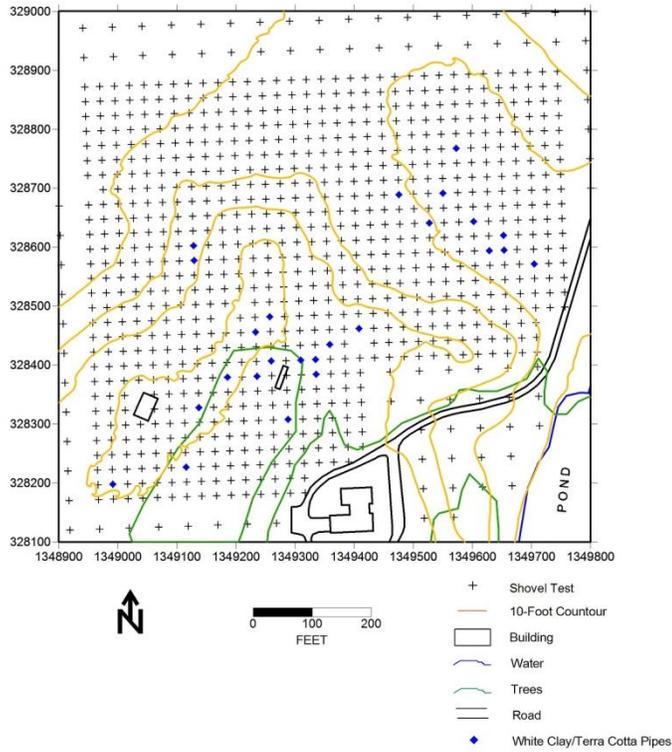


Figure 51. Distributions of red and white tobacco pipes from shovel tests, Windy Knolls I.

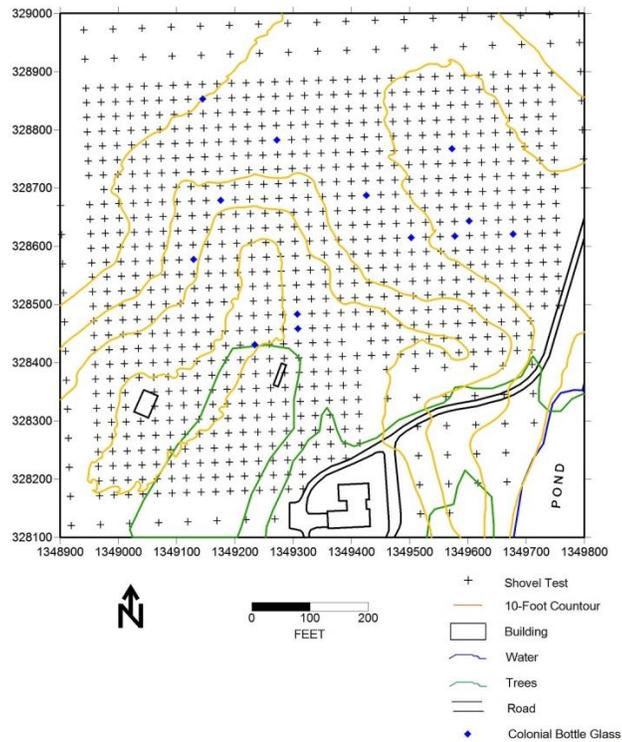


Figure 52. Distribution of colonial bottle glass from shovel tests, Windy Knolls I.

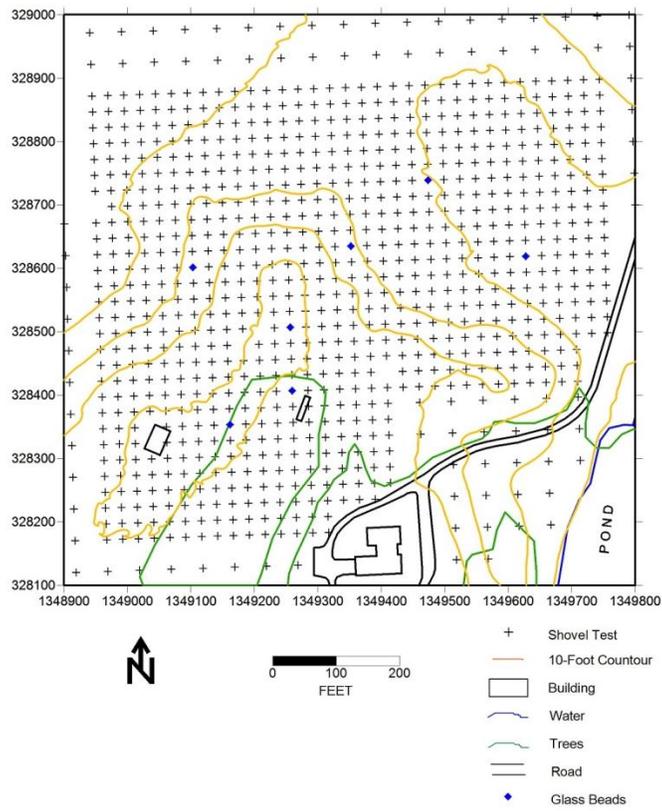


Figure 53. Distribution of glass beads from shovel tests, Windy Knolls I.

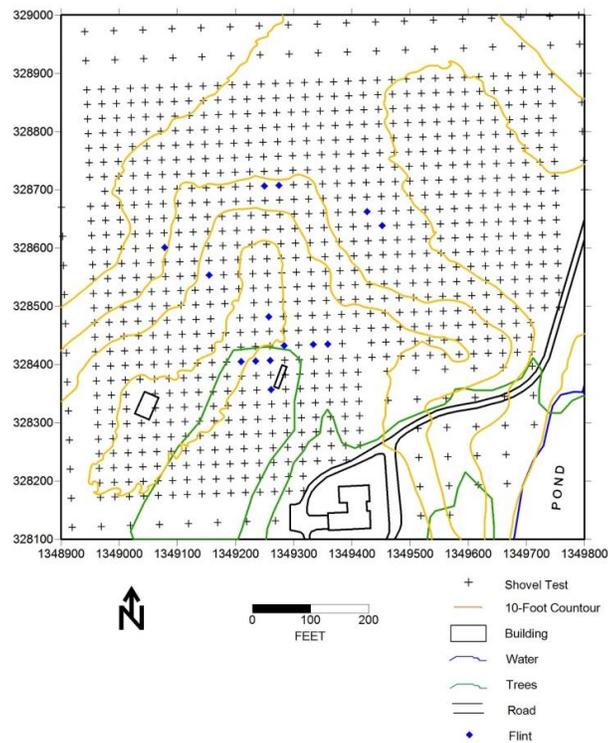


Figure 54. Distribution of European flint from shovel tests, Windy Knolls I.

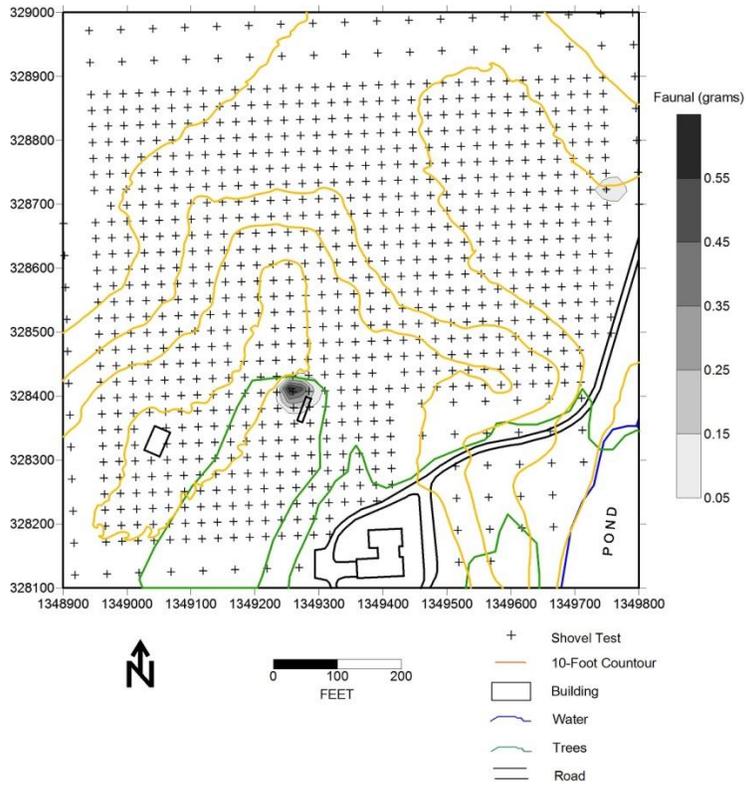


Figure 55. Distribution of animal bone fragments from shovel tests, Windy Knolls I.

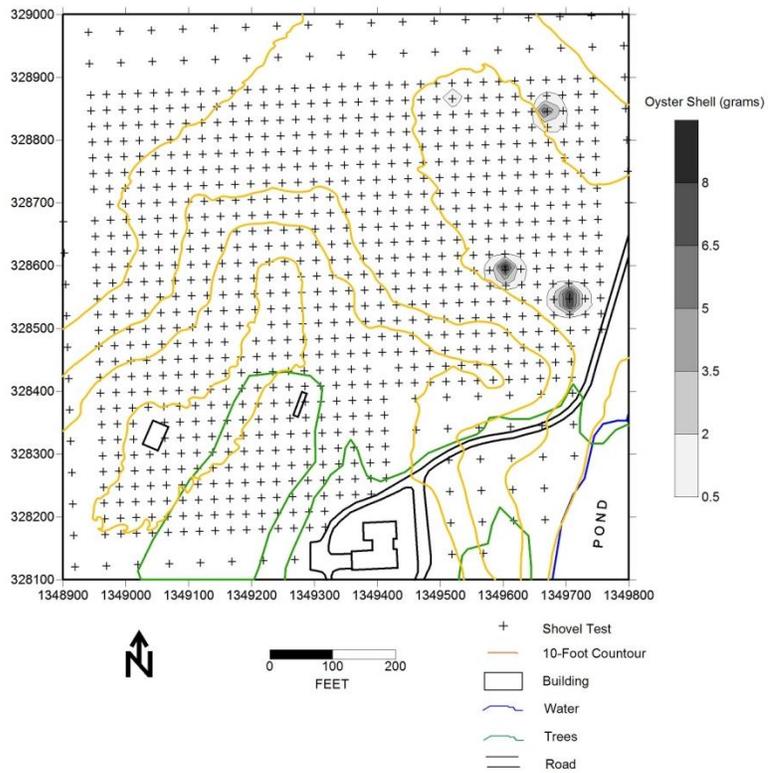
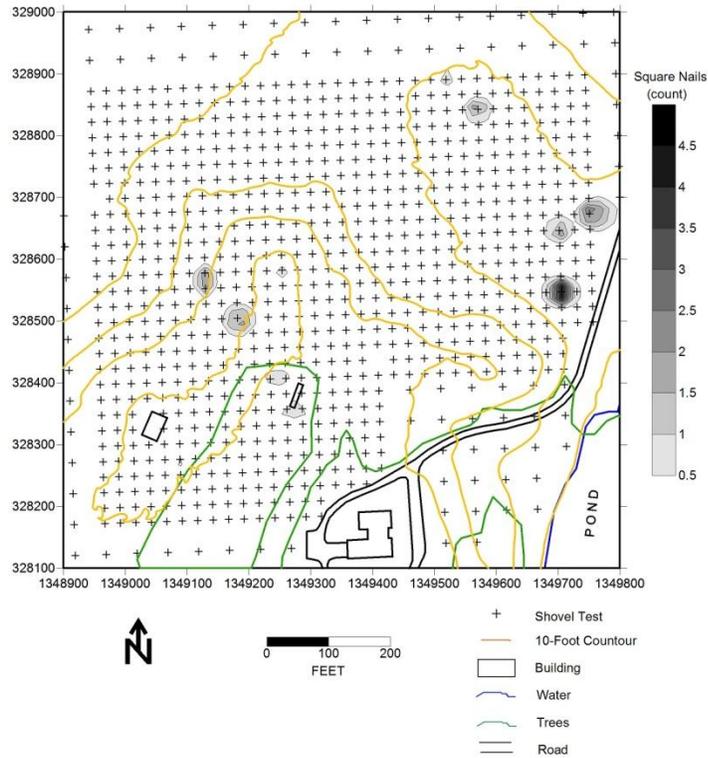
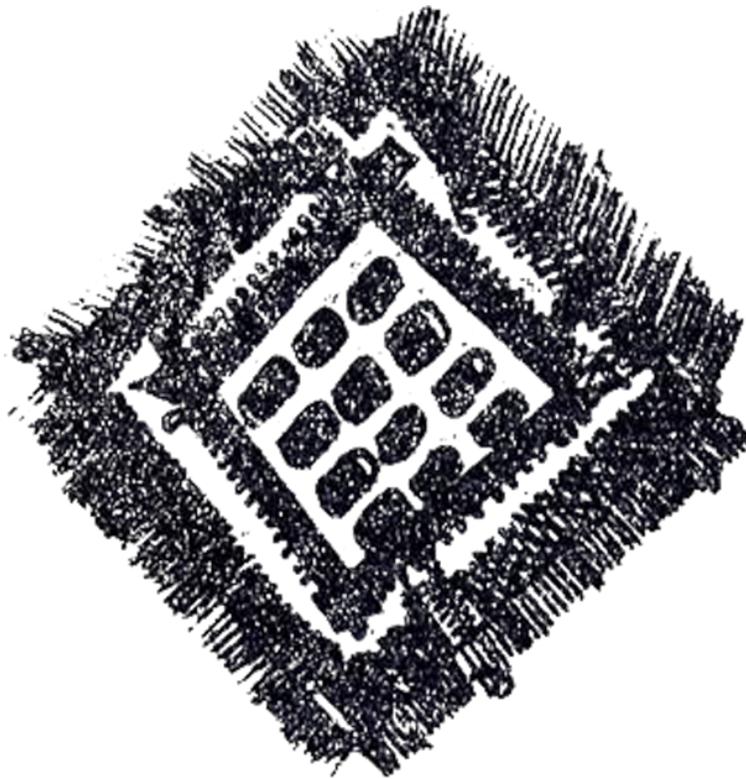


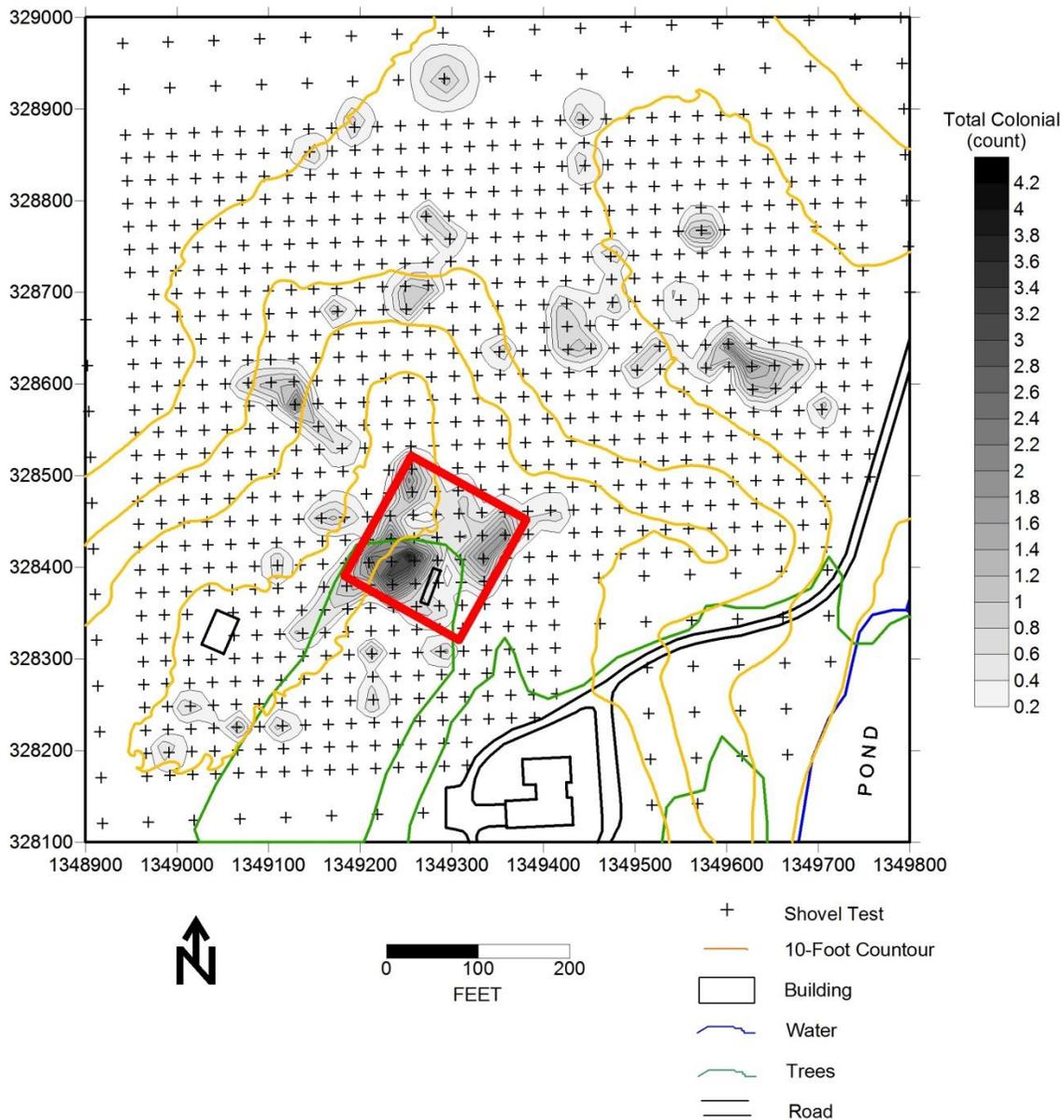
Figure 56. Distribution of oyster shell fragments from shovel tests, Windy Knolls I.



**Figure 57.** Distribution of square iron nail fragments from shovel tests, Windy Knolls I.



**Figure 58.** A contemporary drawing of the 1675 Susquehannock Fort (British PRO).



**Figure 59.** Conjectured fort location, Windy Knolls I.

shape with corner bastions approximately 150-foot square. With Curry’s analysis and this model in mind, we re-examined the distribution map of total colonial artifacts and found that, not only was the concentration on top of the hill relatively square in shape, it measured approximately 150 feet by 150 feet (Figure 59). Using this model as our guide, we decided to excavate a trench comprised of 5-by-5-foot test units alternating on either side of the E1349235 line in an effort to cross areas we thought might contain evidence for a fortification at the site.

***Test Unit Results***

Forty-six five-by-five-foot test units were excavated in an effort to increase the artifact sample size and to identify subsurface features associated with the site’s late 17<sup>th</sup>-century occupation (see Figure

40). Forty-two units were placed at the top of the knoll (Test Units 325230 through 540235), forming a trench of alternating five-by-five-foot units that we hoped would cross a portion of a fortification structure. Two additional test units (575110 and 575120) were placed along the knoll's northwest slope and two units (620625 and 645600) were placed at the northeast base of the knoll. A single unit, 405325, was offset to the east of the trench on the other side of the shipping container.

All of the 42 test units excavated on the knoll top consisted of a plow zone overlying subsoil. The plow zone in this area is relatively uniform in composition, consisting of a dark yellowish brown sandy loam to sandy clay loam. In some units, the plow zone was mottled with a very small amount (about one percent) of yellowish brown clay. Plow zone thickness ranged from 0.53 to 1.78 feet in depth, with an average thickness of 0.91 foot across the top of the knoll.

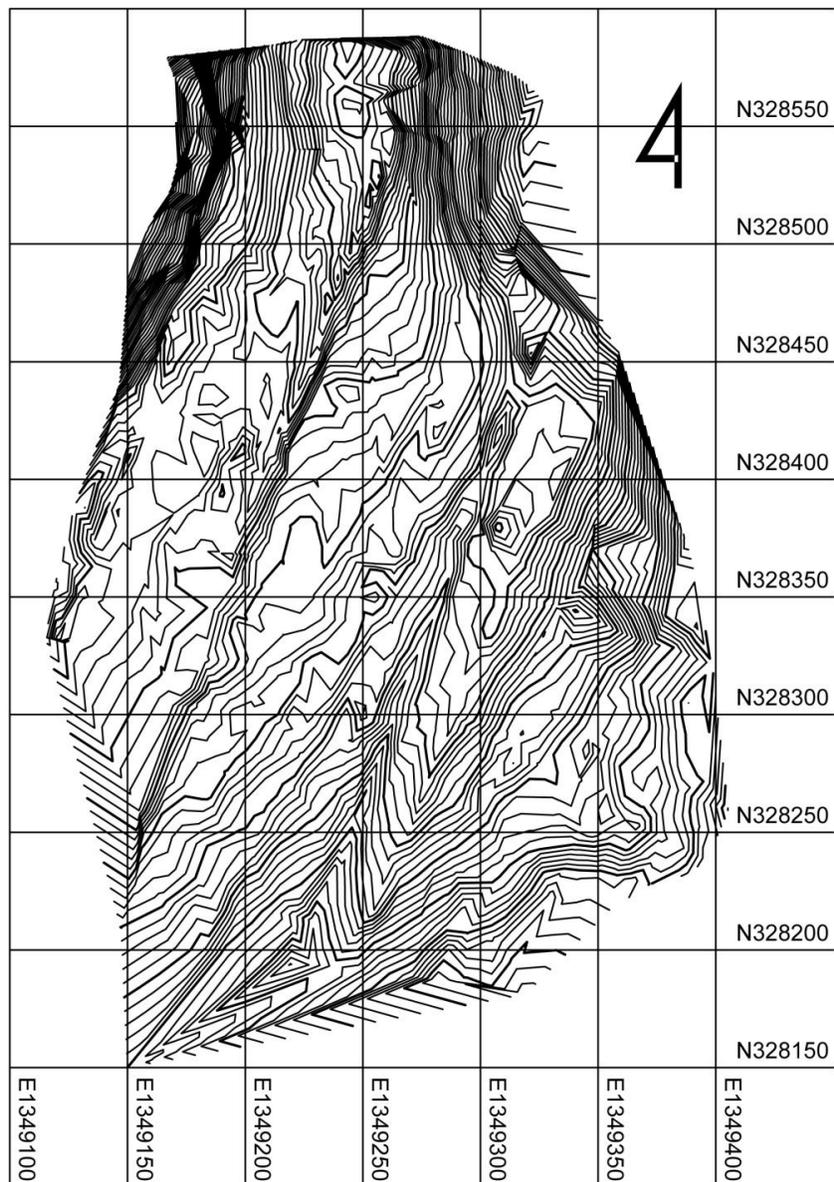
The test units on the top of the knoll with a thicker deposit of plow zone, including Test Units 445230, 455230, 460235, 465230, 475230, and 485235, were clustered in a portion of the site containing a visually evident berm on the ground's surface. Figure 60 shows a contour map of the knoll top created using 0.1 foot contours, clearly depicting the berm as well as the knoll's sloping edges and the beginnings of drainage swales leading to steeper ravines. The berm appears to be a dead furrow, a raised ridge often found along the edge of agricultural fields and created through the act of plowing. This feature runs along the same orientation as the plow scars observed in the bottom of the test units. The berm's location in the center of the knoll top (rather than along its edges), however, is unexpected and deserves further investigation. If the five units located along the berm are excluded from these calculations, the thickness of the plow zone on the knoll top ranges from 0.53 to 1.07 feet in depth, with an average depth of 0.85 foot.

Indeed, almost all of the 42 test units excavated on the knoll top revealed multiple plow scars running at an angle of approximately 30 degrees east of north. Numerous root molds were also found in the test units and at least three features appear to be 20<sup>th</sup> century in date, including a post hole and mold probably dug with a posthole digger. Although no obvious evidence was recovered for a palisade, palisade ditch, or other type of fortification feature, features dating to the late 17<sup>th</sup> century appear to be present. Figure 61 shows units with features presumed to be 17<sup>th</sup> century in date. Units with possible early features include Test Units 340235, 345230, 405325, 465230, and 470235. Future testing at the site, however, may reveal that these deposits are modern or natural features.

Test Unit 340235 contained a feature that may represent traces of a post hole and post mold (Figure 62). The inclusion of gravel in both features could suggest some depth, especially given that, while some gravel was observed in the overlying plow zone, it was rarely in large amounts.

Test Unit 345230 consisted of a complex of modern features in the eastern half of the unit. Along the unit's west wall and intruded by the modern feature is an earlier, possibly colonial feature (Figure 63). A large portion of this feature consists of a dark yellowish brown loam mottled with at least six percent flecks of fired clay and charcoal. It is entirely possible that this feature is modern and represents modern burning activities on the property. The complete absence of fired clay and charcoal flecks in the overlying plow zone, however, as well as a feature initiation at the base of plow zone suggests some antiquity for this feature.

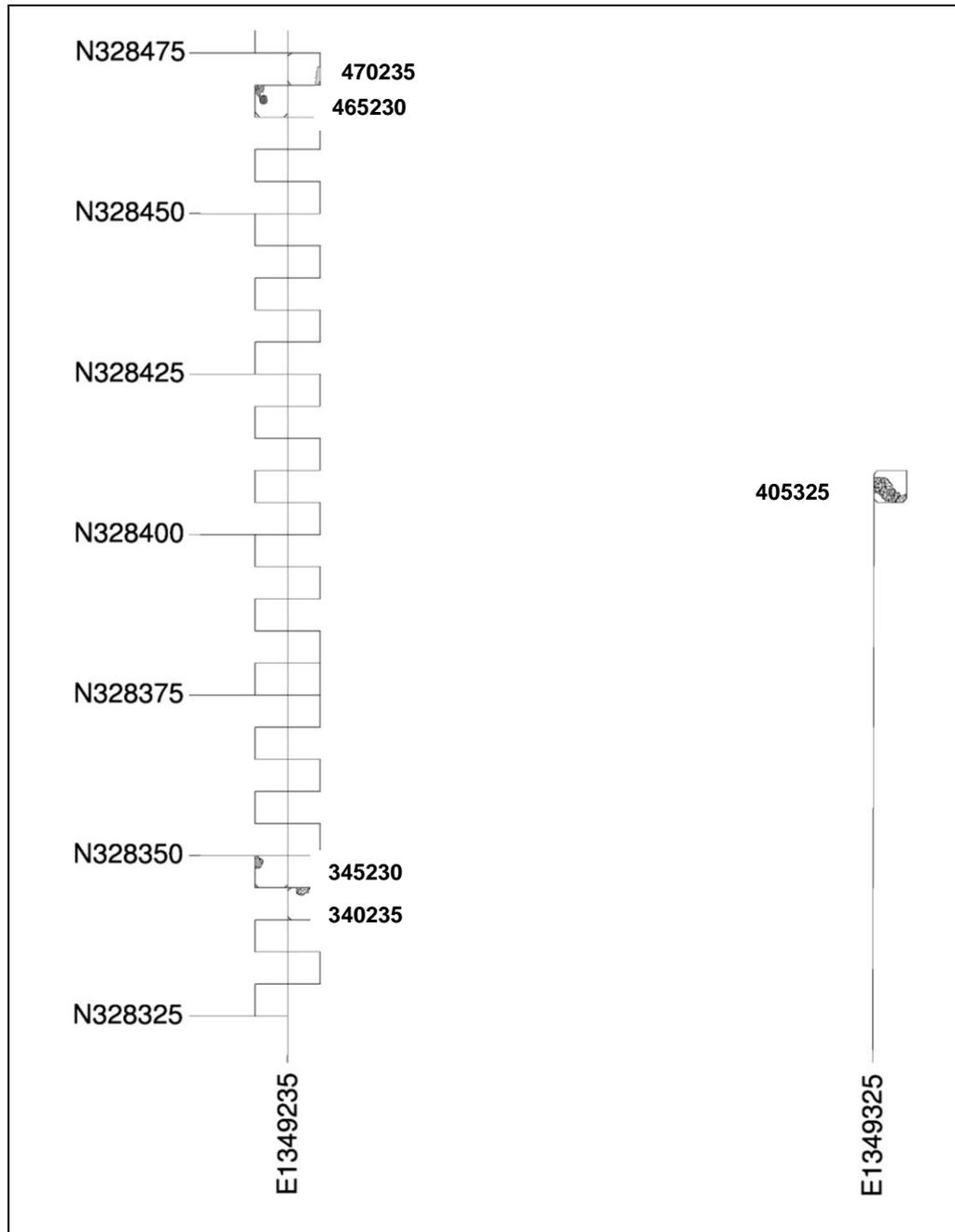
Test Unit 405325 consisted of a feature irregular in shape and characterized by heavy amounts of pea- to fist-sized gravel (Figure 64). This unusual deposit may be a natural formation, such as a tree fall, although the source of the gravel is unclear and suggests some depth.



**Figure 60.** Contour map of the south knoll top, Windy Knolls I.

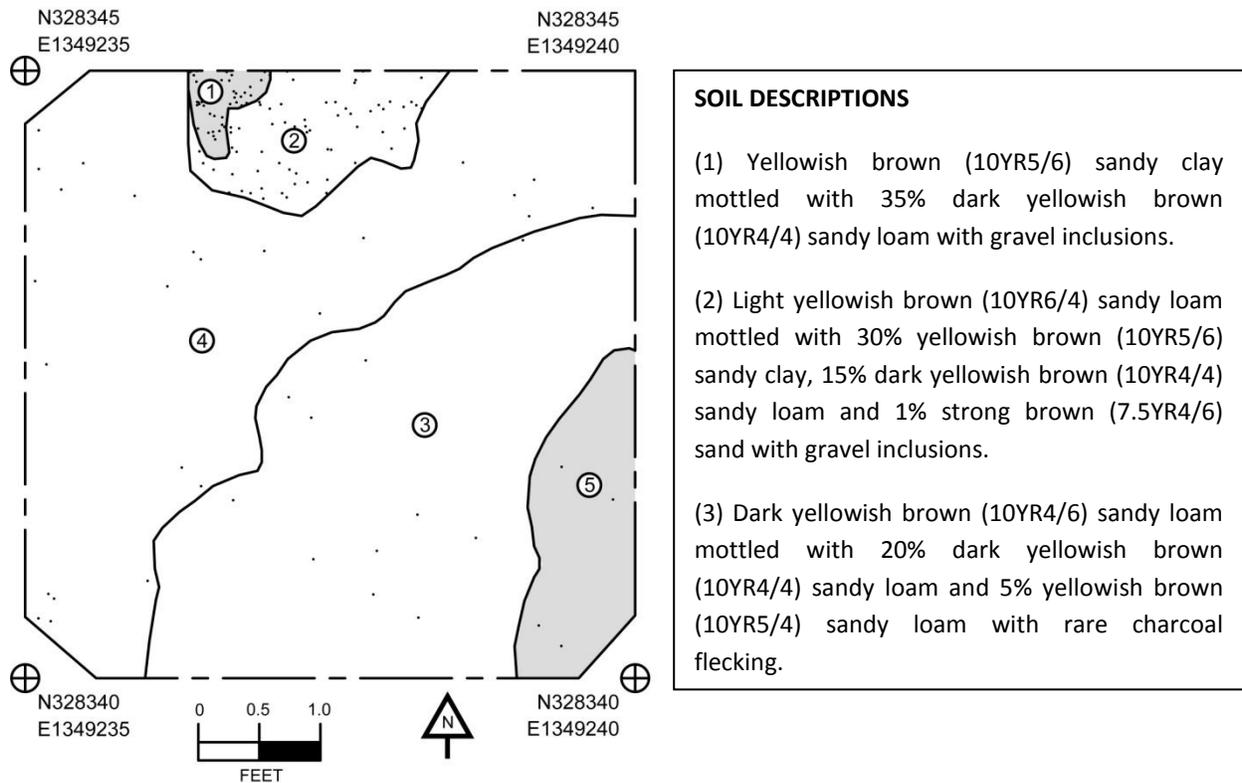
Test Unit 465230 contained a set of features of which portions are traces of root molds and at least one plow scar (Figure 65). One feature, roughly circular in shape and measuring approximately one foot in diameter, may represent the remains of a colonial-era post.

Test Unit 470235 contained root molds and at least one plow scar (Figure 66). A second feature in the unit's southeast corner was initially interpreted as a plow scar, but the feature's unusually dark and loamy fill differed from that we had seen for all of the other plow scars on the site. We used a soil corer to measure the feature's depth and found it extended at least 0.4 foot below the base of plow zone, suggesting this feature is not a plow scar.



**Figure 61.** Plan view of possible 17<sup>th</sup>-century features, south knoll top, Windy Knolls I; the five units with features are discussed in the text.

More than a dozen small, circular features averaging two to four inches in diameter were mapped and have since been interpreted as root molds. It is also possible that these features represent traces of small sapling posts for houses or other structures. To that end, we plotted these features in an effort to detect any patterns in plan. The distribution of these features appears random, leading us to conclude that these features are most likely root molds.



**Figure 62.** Plan view of Test Unit 340235, Windy Knolls I.



**Figure 63.** Plan view of Test Unit 345230, Windy Knolls I; the grayish brown feature in the center and east side of the unit is 20<sup>th</sup> century in date; the feature in the northwest side is characterized by a dark yellowish brown (10YR3/6) sandy loam mottled with 20% yellowish brown (10YR5/4) sandy loam with 6% fired clay and charcoal flecks, and may be 17<sup>th</sup> century in date; north is at top of picture.

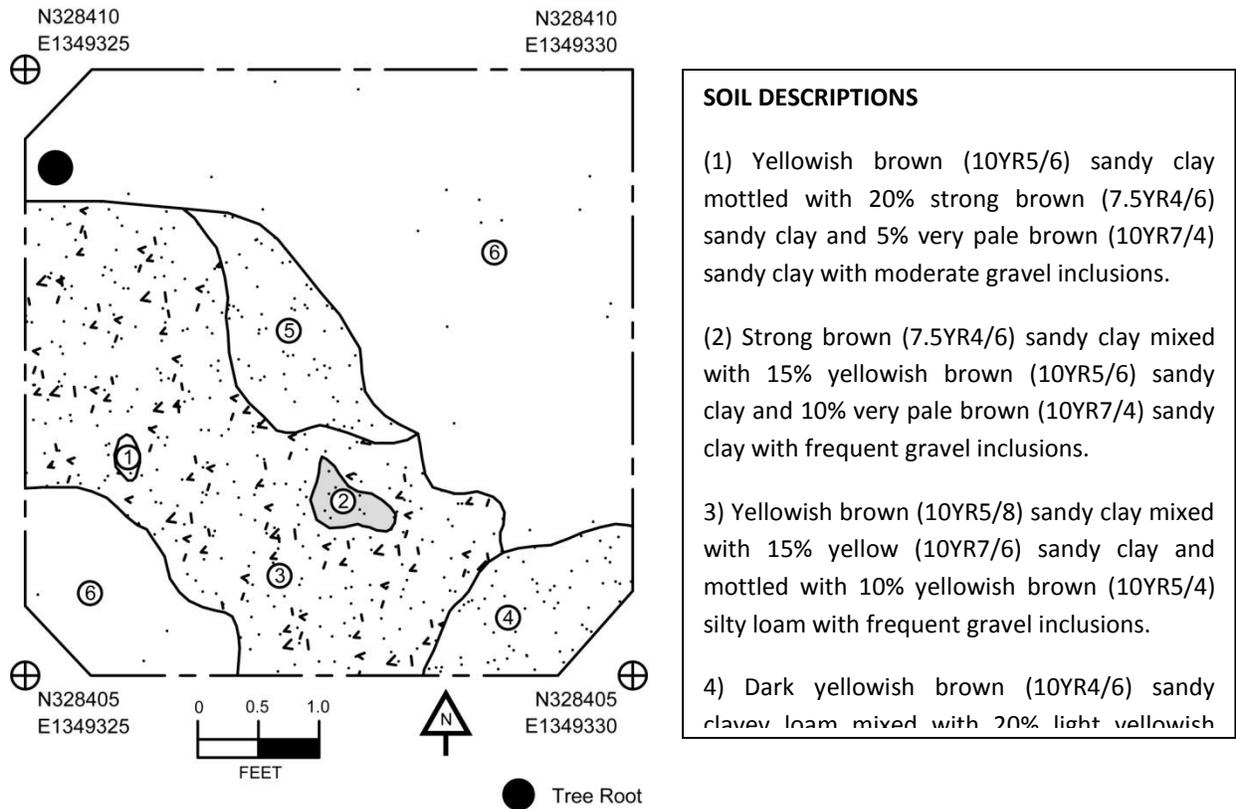
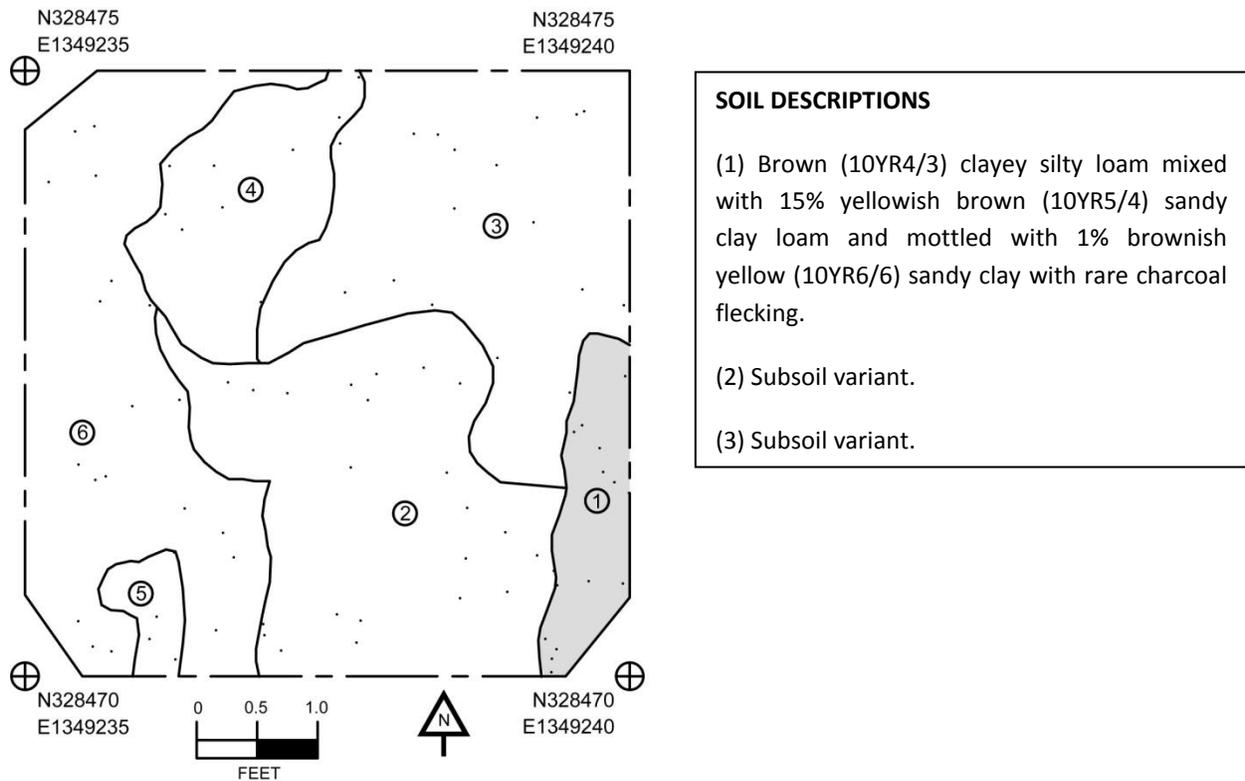


Figure 64. Plan view of Test Unit 405325, Windy Knolls I.



Figure 65. Plan view of Test Unit 465230, Windy Knolls I; the linear feature in the northeast section is a plow scar remnant; the complex of features in the west half includes a circular feature of dark yellowish brown (10YR4/4) silty loam mottled with 5% brownish yellow (10YR6/6) clayey loam with charcoal and fired clay flecking and a partially uncovered feature of dark yellowish brown (10YR4/4) silty loam mottled with 5% brownish yellow (10YR6/8) silty loam with charcoal flecking and inclusions; north is at top of picture.



**Figure 66.** Plan view of Test Unit 470235, Windy Knolls I.

Two test units (Test Units 575110 and 575120) were excavated on the northwest slope of the knoll, just west of the old farm road ascending the knoll. Although this area is not level with a noticeable slope, shovel tests excavated in this area had generated a number of artifacts. The plow zone from the two units ranged from brown to dark yellowish brown silty sandy loam with large amounts of gravel. The plow zone ranged in thickness from 0.7 foot on the east side of Test Unit 575120 to 1.19 feet on its west side and 1.28 feet in depth on the east side of Test Unit 575110 to deeper on the west side. What may be a modern post hole and mold was found in Test Unit 575110; no other features were observed in either unit.

Two units, Test Units 620625 and 645600, were excavated at the base of the knoll on its northeast side, and both units were considerably deeper than the units at the top of the knoll. Both contained a modern plow zone overlying an early plow zone. The modern plow zone in both units consists of a yellowish brown sandy loam mixed with about 20 percent gravel. This plow zone measures 0.8 to 0.97 foot in thickness. The early plow zone consists of a dark yellowish brown sandy loam mottled with five to ten percent yellowish brown sandy loam. The early plow zone in Test Unit 620625 was approximately one foot in thickness, while the early plow zone in Test Unit 645600 averaged about 0.6 foot in thickness. The early plow zone in Test Unit 645600 also contained a moderate amount of gravel. The modern plow zone in Test Unit 620625 contained only eight artifacts, while the early plow zone yielded eight times that number, supporting our interpretation based on the shovel test evidence that the early plow zone contains the original site midden. Test Unit 645600, however, was the opposite, with the bulk of the artifacts (31) in the top layer; the early plow zone contained only twelve artifacts.

A total of 11,978 artifacts (including animal bone and oyster shell) were recovered from the 46 test units excavated at Windy Knolls I. The artifacts, listed in Table 10 (see also Appendices II and III),

Artifact Type	Test Units, Plow Zone Samples		Test Units, Column Samples	
	N	%	N	%
Lithic flake/shatter, native stone	126	1.9	47	0.9
Projectile point/tool, native stone	9	0.1	0	-
Other stone fragment	3	0.04	1	0.02
European flint debitage	345	5.3	41	0.8
Gunflint	19	0.3	0	-
Ochre	2	0.03	0	-
Fire-cracked rock	118	1.8	10	0.2
<b>Total Stone</b>	<b>622</b>	<b>9.6</b>	<b>99</b>	<b>1.9</b>
Potomac Creek	262	4.0	15	0.3
Moyaone	74	1.1	0	-
Yeocomico	10	0.2	1	0.02
Camden	3	0.04	0	-
Townsend	3	0.04	0	-
Colonoware	2	0.03	1	0.02
UID wares	104	1.6	2	0.03
<b>Total Indian Ceramics</b>	<b>458</b>	<b>7.0</b>	<b>19</b>	<b>0.4</b>
Colonial earthenwares	91	1.4	8	0.1
Colonial stonewares	17	0.3	0	-
Miscellaneous post-colonial	15	0.2	2	0.03
<b>Total European Ceramics</b>	<b>123</b>	<b>1.9</b>	<b>10</b>	<b>0.1</b>
Tobacco pipe, terra cotta	135	2.1	25	0.5
Tobacco pipe, white clay	409	6.3	19	0.3
<b>Total Tobacco Pipes</b>	<b>544</b>	<b>8.4</b>	<b>44</b>	<b>0.8</b>
Glass bead	241	3.7	48	0.9
Glass button	2	0.03	0	-
Bottle glass, colonial	139	2.1	9	0.2
Bottle glass, modern	18	0.3	8	0.01
<b>Total Glass</b>	<b>400</b>	<b>6.2</b>	<b>65</b>	<b>1.1</b>
Copper alloy objects	65	1.0	1	0.02
Lead/pewter objects	48	0.7	15	0.3
Silver objects	1	0.2	0	-
Iron nails	285	4.4	2	0.03
Iron objects (other than nails)	242	3.7	100	1.8
<b>Total Metal</b>	<b>641</b>	<b>9.9</b>	<b>118</b>	<b>2.2</b>
Faunal (animal bone)	3,185	49.0	4,806	87.8
Oyster shell	256	3.9	22	0.4
Shark tooth	1	0.02	0	-
<b>Total Fauna</b>	<b>3,432</b>	<b>52.9</b>	<b>4,818</b>	<b>88.2</b>
Brick/daub	137	2.1	68	1.2
Bog iron, fossil rock, mica	116	1.3	219	4.0
Other modern material	17	0.3	6	0.1
<b>Total Artifacts</b>	<b>6,502</b>		<b>5,476</b>	

**Table 10.** Total artifacts recovered from test units, Windy Knolls I.

include materials recovered both through dry-screening (1/4-inch mesh) and water-screening (fine mesh). Similar types of materials were recovered from both the dry- and water-screening process, although, not surprisingly, in very different proportions. Nearly 46 percent of the total artifact assemblage comes from the water-screened column samples, and these samples represent just four percent of the total excavated area for the test units. As noted in Chapter V, each column sample was first dry-screened through 1/4-inch mesh (and these materials analyzed with the rest of the 1/4-inch dry-screened contexts) and then water-screened through fine mesh. The quantities of materials recovered from the water-screened samples, then, suggest just how much is missed when relying solely on 1/4-inch mesh, even for “disturbed” plow zone deposits. Not surprisingly, the majority of the materials recovered from the water-screened column samples are artifacts small in size, including beads, shot, animal bone, and tiny European flint flakes.

The following discussion focuses primarily on the material recovered from the dry-screening process. Most projects in the region, especially those which make the excavation of plow zone an important strategy for the recovery of data, collect data using soils screened through 1/4-inch mesh. Few of these institutions water-screen plow zone samples, making the water-screened plow zone samples from the Windy Knolls I site almost unique and not readily comparable to assemblages from other sites. This is not completely the case: a similar strategy was used for the excavation of the plow zone at the Posey site (18CH0281), a late 17<sup>th</sup>-century Native site on Mattawoman Creek, providing comparative material for assessing the distributions of artifacts at Windy Knolls I.

### *Native Stone Lithics*

Lithic or stone artifacts form nearly 10 percent of the total dry-screened test unit assemblage, including flakes or debitage, tools, and fire-cracked rock (see Table 10). Artifacts of native stone (including fire-cracked rock) form 4.4 percent of the total assemblage and those of European flint form 5.6 percent of the assemblage.

Native stone artifacts from the test units (that is, the non-European flint lithic assemblage) include primary, secondary, and tertiary flakes, utilized flakes, shatter, bifaces/tools, and fire-cracked rock (Table 11). Native stone consists primarily of quartz, although quartzite and local chert are also represented in the assemblage. Other types, including rhyolite, jasper, sandstone, slate, and groundstone, are represented by only one or two specimens.

	Primary Flake	Secondary Flake	Tertiary Flake	Shatter	Utilized Flake	Tool/ Biface	<b>Total</b>	<b>Percent</b>
Quartz	1	6	17	53	-	4	<b>81</b>	<b>59.1</b>
Chert	-	8	15	14	2	-	<b>39</b>	<b>28.5</b>
Quartzite	-	2	1	5	1 retouched	2	<b>11</b>	<b>8.0</b>
Rhyolite	-	-	-	-	-	1	<b>1</b>	<b>0.7</b>
Jasper	-	-	-	1	-	-	<b>1</b>	<b>0.7</b>
Sandstone	-	-	-	-	-	1	<b>1</b>	<b>0.7</b>
Slate	-	-	-	-	2	-	<b>2</b>	<b>1.5</b>
Ground stone	-	-	-	-	-	1	<b>1</b>	<b>0.7</b>
<b>Total</b>	<b>1</b>	<b>16</b>	<b>33</b>	<b>73</b>	<b>5</b>	<b>9</b>	<b>137</b>	<b>137</b>
<b>Percent</b>	<b>0.7</b>	<b>11.7</b>	<b>24.1</b>	<b>53.3</b>	<b>3.7</b>	<b>6.6</b>		

Table 11. Native stone lithics from dry-screened test units, Windy Knolls I (18CH0808); not including European flint.

The most common form of debitage recovered from the test units (not including fire-cracked rock) was shatter, predominantly quartz followed by chert and some quartzite (see Table 11). The high number of shatter fragments has been used elsewhere to argue the deterioration of Native stone working skills, as “less skilled flint-knappers may remove a flake that breaks into two or more fragments upon impact” (Andrefsky 2004:81). It is equally likely, however, that post-depositional processes such as trampling and plowing, which can also cause flakes to shatter (Andrefsky 2004:81), are responsible for the high proportion of shatter, especially considering the highly fragmented nature of other artifacts recovered from the Windy Knolls I test units.

Tertiary flakes are the next largest category of material, comprising roughly 24 percent of the native stone artifacts recovered from the test units. Tertiary flakes likely represent maintenance, curation, or the modification of finished tools. Both the relatively small amount of tertiary flakes and the dearth of primary and secondary flakes suggest that little lithic manufacture was occurring on site. The presence of tertiary flakes and the generally well-worked state of the few tools recovered, however, suggests that Native stone-knapping skills had hardly been lost. Because there is little evidence to suggest an earlier occupation of the site area, most of the stone tools are presumed to have been associated with the 17<sup>th</sup>-century occupation. It is possible that some points and bifaces were curated or found and repurposed, but the presence of trimming flakes still attests to continuance of stone-knapping, if limited, by the Piscataway occupants of the site.

A total of twelve tools of native stone were also recovered from the test units (Figure 67 shows some of these tools). These tools include one quartz triangular projectile point of typical Late Woodland form, one quartz point stem or biface, two quartz and one quartzite biface fragments, one quartzite projectile point (possibly used as a knife), one quartzite retouched “chunk,” two utilized chert fragments (one flake and one shatter), one rhyolite biface midsection (possibly a drill), one possible hammerstone fragment of a fine-grained sandstone, and a single fragment of a possible ground stone tool.



**Figure 67.** Selected stone tools from test units, Windy Knolls I; clockwise from top left: quartz triangular point (Lot 259), quartz biface (Lot 253); quartz biface or point (Lot 273).

At Windy Knolls I, debitage and tools were recovered at the rate of three artifacts per test unit (137 artifacts from 46 units), or only about a quarter of the counts observed for Posey. At Camden, a town site located

As noted earlier in this chapter, when compared with the Hogue and Jordan Swamp I sites, the Windy Knolls I shovel tests yielded a surprisingly small number of lithic tools and debitage. This pattern is also evident in the test unit data. While test units were not excavated at either Hogue or Jordan Swamp I, test units excavated at the Posey site provide an important assemblage for comparison. As noted earlier, the Posey site is a Mattawoman settlement occupied sometime between 1650 and 1685 and was tested using a similar methodology as that employed at Windy Knolls I.

At the Posey site, lithics, including flakes, cores, and tools (and excluding European flint and fire-cracked rock), were recovered at the rate of 11.4 artifacts per test unit (423 artifacts from 37 units) (Harmon 1999).<sup>11</sup> At

<sup>11</sup> The Posey site was excavated using a metric grid; however, the test units at Posey measured 1.5-by-1.5-meters, or approximately 4.9-by-4.9-feet.

on the south side of the Rappahannock River in Virginia and occupied at about the same time as Posey, the recovery rate of lithics has been estimated at 9.3 artifacts per five-by-five-foot test unit (MacCord 1969).<sup>12</sup> This could suggest that, after about 1680, at least some Native groups were depending less on stone tools for everyday activities, including hunting, cutting, and scraping. It could also mean, however, that the Piscataway, now forced into a new pattern of mobility, adjusted their tool kits accordingly.

One hundred eighteen fragments of quartzite fire-cracked rock were also recovered from the Windy Knolls I site. This distribution amounts to 3.5 fragments of fire-cracked rock per test unit on the knoll top; compare with Posey at 5.6 fragments of fire-cracked rock per test unit (Harmon 1999). At Windy Knolls I, the majority of fire-cracked rock fragments are concentrated on the knoll top in an area measuring at least 50 feet north-south. The fire-cracked rock in this area is roughly correlated with total artifacts and, in particular, animal bone fragments.

### *Gunflints and Flint Debitage*

European flint formed the largest category of stone recovered from the test units excavated at Windy Knolls I, comprising nearly three-quarters of the total lithic assemblage recovered from the test units. At the Posey site, European flint comprised less than 20 percent of the total stone artifact assemblage (Harmon 1999:102). At Camden, MacCord did not separate flint from the more generalized category of chert, but he did report some “chips” of what he described as the same material as the gunflints found, suggesting native working or retouching of gunflints. However, both quartz and what MacCord describes as “greenstone” significantly outnumbered the chert in proportion of debitage (MacCord 1969:6). European flint comprises a much more substantial proportion of the overall lithic assemblage at Windy Knolls I than at either Posey or Camden.

As with the native stone, flint debitage was classified as secondary or tertiary based on presence (secondary) or absence (tertiary) of cortex (no primary flakes were recovered) (Table 12). About 70 percent of the flint artifacts were classified as tertiary, including mostly small flakes or shatter probably indicative of later-stage gunflint or tool manufacture, gunflint resharpening, or other retouch.

	Test Unit	STP	Water screen	Total
Secondary	71	5	6	<b>82</b>
Tertiary	266	9	34	<b>309</b>
Gunflint/Tool	19	2	-	<b>21</b>
Core/possible core	6	-	-	<b>6</b>
Retouched flake	2	-	-	<b>2</b>
<b>Total</b>	<b>364</b>	<b>16</b>	<b>40</b>	<b>420</b>

**Table 12.** Flint artifacts and debitage recovered from Windy Knolls I.

Among the earliest firearms used by European colonists in the Americas was the matchlock, a gun which operates by bringing a slow-burning match into the pan containing gunpowder, causing the gun to fire (Peterson 2000:14-15). There were numerous issues with the matchlock, including the weapon’s inefficiency, the problem of accidental discharge with a constantly lit match, and ineffectiveness in bad weather, to name a few.

By the second decade of the 17<sup>th</sup> century, improved ignition mechanisms including the wheellock and flintlock were replacing the matchlock in the American colonies (Peterson 2000:19-22). The popular 17<sup>th</sup>-century English flintlock used a more sophisticated mechanism than its matchlock predecessor. A piece of flint, held in a spring-loaded cock, would strike a steel frizzen causing it to fall backward and expose a pan of powder. The resulting shower of sparks would thus ignite the powder in the pan, causing

<sup>12</sup> The stone artifacts recovered from Camden were not recorded in detail and are no longer available for study, so this information must be used with caution.

the gun to fire (Peterson 2000:28). Flint and other siliceous stones have sufficient hardness to shear small flakes off of a fragment of steel. The force of friction is so great in this process that these small metal chips instantly become molten (Witthoft 1966:17). In other words, sparks are produced. Flint's suitability for creating sparks when struck against steel led to its use in the firearm ignition mechanism replacing the matchlock.

Archaeologist John Witthoft (1966) developed the general typology for gunflints still in use by archaeologists. This typology has undergone subsequent refinements, providing archaeologists with some general insights into the manufacture and trade of these artifacts (Blanchette 1975; White 1975; Kent 1983). Archaeologist Barry Kent (1983:32) has argued that the earliest gunflints were expedient flakes, or, as he describes, "the fortuitous chip of the right size." It is possible that this type of flint remained in use both by Englishmen and Natives even after professionally-made flints became available but could not be immediately procured. Such "chip" flints, as they are called, are also likely underreported in the literature given their lack of standardized form.

Kent rejected Witthoft's claim that bifacial gunflints were manufactured in Europe before 1800. The absence of bifacial gunflints in colonial contexts combined with their regular occurrence on Indian sites suggests that these were gunflints of Native manufacture (Kent 1983:33-34). Probably the earliest professionally-made recognizable gunflints of European manufacture were what Witthoft (1966:25-28) referred to as "Dutch" gunflints. Though Witthoft suggested Dutch origins for these flints, subsequent research has shown that this type of gunflint was being produced in England, Denmark, and France by the mid-17<sup>th</sup> century (White 1975). These gunflints, commonly referred to as gunspalls, were usually detached from cores with a hammer and are usually characterized by a pronounced bulb of percussion, varying degrees of retouch on the heel, and a wedge-like shape when viewed in profile.

The French would later develop a method of producing gunflints from a blade struck from a core. Such flints are distinguished by the presence of a beveled edge between a roughly parallel face and back, as opposed to the wedge-shape which typically characterizes gunspalls (Hamilton and Emery 1988:10-15). While these flints appear in small numbers on 17<sup>th</sup>-century colonial and Indian archaeological sites as early as the 1660s (Blanchette 1975; Kent 1984:252), they do not appear to supplant the gunspall as the common gunflint until about the mid-18<sup>th</sup> century. English-made blade gunflints were not manufactured until very late in the 18<sup>th</sup> century and do not appear in any appreciable quantity in the American archaeological record until the 19<sup>th</sup> century (White 1975:68-70; Hamilton and Emery 1988:14).

Nineteen gunflints were recovered from the test units at Windy Knolls I; in addition, two gunflints were recovered from the shovel tests and are considered in this analysis (Figure 68). Of these 21 gunflints, only 11 are positively identifiable. Nine are of the gunspall type, while two are bifacial gunflints. The gunspalls generally range in color from gray with white inclusions to a dull brown and show varying degrees of heel retouch. A single gunflint fragment, recovered from a shovel test, appears to be a French gunspall. It is honey-colored (or "blonde") and displays very careful flaking of the heel.

One of the bifacial gunflints is of the typical square-ish shape with rounded corners and edges on all sides (see Figure 85). It was made of a white chert with black and reddish-brown specks and is believed to be a non-local native stone. Two flakes of a seemingly similar chert were also recovered from the site and may indicate that this gunflint was made, or at least retouched, at the site. The other bifacial gunflint was made of European flint and is small and rounded (see Kent 1983:35, Figure 2f).

Of the nine gunflints not positively identifiable, many may have simply been expedient chips or flakes with a usable edge, while others may have been gunspalls heavily battered through use as strike-a-lights or rendered unrecognizable through other repurposing.



**Figure 68.** Gunflints and debitage from test units, Windy Knolls I; the specimen in the lower right hand corner is of non-local Native chert; all other specimens in this figure are believed to be of European flint.

Using data from several 17<sup>th</sup>-century Susquehannock and Iroquoian sites (among others), Kent created a frequency seriation which documents trends in the use of each of these gunflint types (Kent 1983, esp. 30-31). These data offer a useful basis of comparison for the Zekiah Fort site (Table 13). Two of Kent's conclusions are particularly pertinent. He notes that, on Indian sites in the northeast, "the manufacture and use of bifacial gunflints rapidly decreased after 1675 and...by 1700 [bifacial gunflints] were quite rare" (Kent 1983:34). This decline coincides with an increase in the use of gunspalls on Seneca sites between 1675 and 1687 (data is not available for Susquehannock sites during this time period) (Kent 1984:251).

Fully acknowledging the problems of seriating an object across cultural groups (disparate trade networks, choices, etc.), the gunflints from Windy Knolls I and other sites in the Chesapeake region seem to conform to the chronological trends of gunflint usage noted by Barry Kent (see Table 13). Proportions of gunflint types for Zekiah most closely resemble those noted for Snyder-McClure, a Seneca site in New York occupied circa 1687 to 1710. Data from Windy Knolls I also corroborate Kent's observation that Native use of the bifacial gunflint began to wane after 1675, around the time the gunspall is seen in greater numbers. Gunflint data from sites in the Chesapeake, although limited, seems to fit the usage patterns noted by Kent. Select late 17<sup>th</sup>-century Native sites outside of the general mid-Atlantic region with significant gunflint assemblages, including Monhantic Fort, a Mashantucket Pequot fort in Connecticut, and the Fredricks site, an Occaneechi Town in North Carolina, also appear to conform to the trends (see Table 13).

While the bifacial gunflint appears to decline in use in the late 17<sup>th</sup> century for sites in the east, Native-made bifacial flints continued to be used well into the 18<sup>th</sup> century on sites further west. For example, bifacial gunflints (some of which appear morphologically similar to the bifacial white chert

Site	Date	Affiliation	Bifacial	Gunspall	French	English	N= <sup>13</sup>
Roberts (36LA1) <sup>14</sup>	1625-1645	Susquehannock	100	-	-	-	2
Little Marsh Creek (44FX1471)	1625-1650	Doeg	100	-	-	-	1
Haverstick (36LA6)	1630s	Susquehannock	100	-	-	-	9
Strickler (36LA3)	1645-1665	Susquehannock	94	2	4	-	139
Posey (18CH282)	1650-1685	Mattawoman?	100	-	-	-	2
Camden (44CE3)	1650-1690	Matchotick?	100?	-	-	-	9
O. Leibhart (36YO9)	1665-1674	Susquehannock	95	5	-	-	19
B. Leibhart (36YO170)	1676-	Susquehannock	91	7	2	-	54
Boughton Hill, NY	1670-1687	Seneca	46	50	4	-	169
Beale, NY	1670-1687	Seneca	39	53	8	-	61
Monhantic Fort, CT	1675-1680	Pequot	71	29	-	-	55
Kirkwood, NY	1670-1687	Seneca	58	38	4	-	26
Rochester Junction, NY	1675-1687	Seneca	60	37	3	-	126
Windy Knolls I (18CH0808)	1680-1695	Piscataway	18	82	-	-	11
Fredricks, NC	1680-1710	Occaneechi	21	68	11	-	180
Snyder-McClure, NY	1687-1710	Seneca	20	77	3	-	61
Heater's Island (18FR72)	1699-1712	Conoy	-	96	-	4	28
Conestoga Town (36LA52)	1695-1740	Susquehannock	2	88	10	-	101
Conoy Town (36LA57)	1718-1743	Conoy	-	100	-	-	6

**Table 13.** Gunflints from East Coast Indian sites. The Windy Knolls I total includes gunflints from test units (19) and shovel tests (2); adapted from Kent 1983:30-31.

gunflint found at Zekiah) have been found on 18<sup>th</sup>-century Osage sites in Missouri. Some gunflints recovered from Osage sites even seem to indicate Native reworking of European gunspalls and French blade gunflints into the familiar square, bifacial Native form (Hamilton and Emery 1988:231-235). Among the unrecognizable gunflints of European flint from Zekiah, some showed evidence of multiple edges. Some of these may have been used against a frizzen.

<sup>13</sup> Totals include only positively identifiable gunflints (“chip” flints are not included).

<sup>14</sup> Sources: Kent 1983:30; Potter 1993:204-205; Harmon 1999; MacCord 1969; Curry n.d.; Williams 2010; Davis, Stephens, Livingood, Ward, and Steponaitis 1998.

The professionally-made European spall-type gunflints were probably supplied to the Piscataway either directly from the Maryland government or through the Charles County rangers. The colony had supplied the Piscataway with at least forty guns and furnished them with powder and shot on a number of occasions. It is likely that flints were also provided, either from the magazine at Mattapanoy or from the rangers themselves. In the postscript of a May 1680 letter to Lord Baltimore, Ranger Captain Randolph Brandt asked, “If your L<sup>ship</sup> please to spare us some powd<sup>r</sup> and Bullets with a few flints to have ready in store for the County, Cap<sup>t</sup> Jones Mast<sup>r</sup> of the Bristoll Shipp is intended with a Sloope for our parts in some few Daies by whom should be glad to receive the same, not knowing how soone we may have occasion” (Md. Archives 15:287). Though gunflints are not often mentioned in Piscataway requests for additional supplies of powder and ammunition (indeed, they are rarely mentioned in colonial inventories or account books [Miller and Keeler 1978]), Brandt’s letter makes it clear that flint supplies did occasionally run thin on the frontier.

In such cases, the Piscataway probably made their own gunflints, whether bifacial or convenient chips. The presence of a few cores of European flint at Windy Knolls I attests to the fact that someone – whether Piscataway or a garrisoned ranger remains unknown – was making their own gunflints at the site. Evidence suggests that colonists and Indians alike manufactured their own gunflints when ready-made ones were not available. At the St. John’s site (18ST0001-23) in St. Mary’s City, for example, archaeologists recovered 95 “crudely made gunspalls” from the site, along with wasted cores and debitage, suggesting on-site production by colonists unskilled in gunflint manufacture (Miller and Keeler 1978). These are what Kent referred to as “chip” gunflints. Similarly, at the late 17<sup>th</sup>–/early 18<sup>th</sup>-century Fendall site (18CH0805) on the west bank of the Wicomico River, a chunk of gray European (presumably English) flint still bearing a significant portion of cortex was collected (Strickland and King 2011:22). Some sizable flakes had been struck off of this core, most likely for use as gunflints. This flint cobble may have been collected from discarded ship’s ballast, as a “discharged...cargo of ballast...chiefly composed of [European] flint” was reported off Lancaster’s landing, or at nearby Rock Point (Reynolds 1883:308).

The Piscataway, too, may have acquired the raw materials for gunflint manufacture from discarded ship’s ballast, although, like the Osage in Missouri, they may have also reworked professionally made gunspalls obtained from the English into bifacial gunflints, scrapers, or other tools. Some of the larger flakes or core fragments of European flint with cortex remaining from Windy Knolls I show apparent similarity to the cobble recovered from the Fendall site noted above. Evidence from other sites in the region suggests that Indians were producing both “chip” and bifacial gunflints. Potter (1993:204-205) describes three gunflints from the Little Marsh Creek site (44FX1471) in what was traditionally the area of the Doeg Indians in Fairfax County, Virginia. The gunflints include a bifacial example, a chip flint of local chert, and a chip flint of European flint. At the Posey site, Harmon (1999:110-112) reported two bifacially-worked gunflints as well as a large secondary flake with edge wear which he attributed to use as a cutting implement.

At Heater’s Island, the Potomac River site where the Piscataway settled in 1697, the bifacial gunflint seems to have disappeared, as Kent observed. Curry, however, reports a single quartz gunflint in the spall form, which he suggests may be of Native manufacture (Curry n.d.). James G. Gibb has also recovered what may be a quartz gunflint of native manufacture from a Contact-period component at Port Tobacco, Maryland. Because quartz is not a particularly suitable material for producing sparks, such gunflints may represent either experimentation or use of substandard material during a time when better material was not available. The fact that the Heater’s Island quartz gunflint is reported in gunspall form and not bifacial form is interesting, however. If this object was, indeed, produced by the Piscataway, members of the group must have learned how to produce professional spalls in the European style. At Windy Knolls I, however, Indian-produced gunflints still retained the bifacial or “chip” forms.

The amount of debitage of European flint material at Windy Knolls I is also suggestive of gunflint manufacture or other flint-working activities at the site. At least six European flint fragments are identified as cores or possible cores. Of these, only two still bear cortex. As noted, one appears similar to a cobble recovered from the Fendall site in the Wicomico drainage and may indicate the collection and working of discarded European ballast flint by the Piscataway.

In 1679, when the Piscataway Great Men met with the Maryland Council at Notley Hall, Governor Thomas Notley's impressive mansion on the south bank of the Wicomico River, the Indian leaders told Lord Baltimore that, if he did not provide them weapons, "they must be forced to fall to making of Bows and arrows wherein for want of practice they have not that experience as formerly" (Md. Archives 15:242). A common assumption is that the Piscataway (and more generally, eastern Indians) had forgotten how to make stone tools and abandoned traditional bows and arrows after being introduced to "superior" European weapons. The archaeological evidence, however, tells a much more complicated story.

There is little evidence that Windy Knolls I has a pre-Contact or even pre-1680 component, and the recovered lithics are believed to be associated with the 1680-c.1695 occupation of the site. If our chronology is correct, the presence of a single quartz triangular point, some bifaces, and a share of tertiary flakes (primarily of quartz) suggests continued production of stone tools, although the low numbers of secondary flakes may suggest that primary reduction of cobbles was occurring off-site. Even if these tools were not being manufactured by the Piscataway but were instead curated, the retouching and maintenance of many of these tools as evidenced by tertiary flakes does not seem to suggest deterioration of knapping skills (contrast this with the "crudely made" points at the Little Marsh Creek site [Potter 1993:204]).

That European flint comprises so substantial a portion of the lithic assemblage at Windy Knolls I indicates that the Piscataway, who had early on acquired guns from the Maryland colonists, were also producing their own gunflints. In addition to the professionally-made European gunspalls found at the site, two bifacial gunflints of native stone were recovered. It takes no small amount of skill to produce such an implement and, although the Native manufacture of bifacial gunflints is believed to have been sharply on the decline among northeastern Indian groups after 1675, their presence at Zekiah attests to the fact that knapping skills had not simply disappeared.

On Seneca sites in New York, the introduction of guns and the use of brass for arrow points did not cause a forsaking of traditional stone implements, nor did it lead to an immediate deterioration of knapping skills. Instead, the two technologies were both used well into the second half of the 18<sup>th</sup> century based on individuals' "active decisions about how to practice stone tool manufacture" (Krohn 2010:65). It was these individual decisions which may have driven the Piscataway's continued practice of knapping stone arrow points and other tools, while at the same time adapting to new technologies and materials, such as employing existing skills in working bifacial gunflints. Despite what Merrell (1979:550) describes as the "stable, conservative" nature of Piscataway culture, individuals may have responded to cultural stress during their time at Windy Knolls I, or the Zekiah Fort, in varied ways. Crudely knapped points from other local Contact-period sites (for example, Little Marsh Creek) suggest that, in some cases, traditional native skills *did* deteriorate after contact. The variation in skills observed in the examples of Native-made gunflints at Zekiah Fort suggests that Piscataway knapping skills were not necessarily equal. While some maintained traditional knapping abilities, others may have adopted new materials to a greater degree and either saw their skills decline or concluded that there was no need to teach the traditional stone-working skills. This hypothesis may be tested as more data from the site, particularly broader spatial or household data, becomes available.

## *Ceramics*

Ceramics have long been considered by archaeologists as important artifacts for documenting past lifeways. It is an archaeological truism that, while whole ceramic vessels break easily, once in the ground, ceramic fragments tend to be fairly resilient, surviving hundreds and sometimes thousands of years. At Windy Knolls I, a total of 610 ceramic fragments of both Native and European manufacture were recovered from the test units, including 581 sherds from the dry-screened contexts and 29 additional fragments from the water-screened column samples. As expected for a plow zone context, all of these fragments were small in size with no obvious cross-mends. Almost one-fifth of the recovered ceramics could not be identified to type due to the fragments' small size. Analyzing the fragments by vessel except at a most basic level was also challenging. Nonetheless, the recovered ceramics, especially when compared to ceramic assemblages from the Posey and Camden sites, provide important information about the experiences of those living at Windy Knolls I in the 1680s and 90s.

Although the ceramic fragments recovered from Windy Knolls I were presumably used by the same group of people, that is, the fort's occupants (although within-group differences no doubt existed), both the ceramics' origins and their use varied in important ways. Native ceramics, which accounted for the majority of ceramic fragments recovered from the site, were hand-built, low-fired, and unglazed, and were typically conical in form. Ethnohistorical accounts suggest that, at least among the Powhatan, women produced the pots. Making pots requires skill and potters probably learned their craft from their mothers and passed their knowledge along to their daughters. A female potter would have had to know where to find and mine suitable clay, how to add any appropriate temper, and then work the clay into finished form. After the unfired pot had dried for a day or two, the potter would build a fire and further bake the vessel to make it harder (Rountree 1998:16). Whether all women produced pots is unclear, and archaeological evidence suggests that pots were traded among Native groups. Indeed, Native potters produced pots (some in European forms) that found their way through trade into English households beginning in the 17<sup>th</sup> century (de Dauphine 1934; Davidson 2004; Rountree and Turner 2005:187).

European ceramics were produced through a completely different process. Ceramics in Europe were typically made by male craftsmen organized into guilds. These vessels were produced for both the local and Atlantic markets. Those vessels destined for Maryland would be sold or traded by merchants, often through an extension of credit. Trade with Native Americans, including the Piscataway, would have required a license from Lord Baltimore. Where exactly the Piscataway acquired European ceramics is not known, but there is a strong likelihood that, when the Piscataway were at Zekiah Fort, one source included the merchant John Pryor's store at Westwood Manor, at least in the early 1680s.

The ceramic types and counts recovered from the test units at Windy Knolls I are presented in Table 14 (see also Figure 69-71). Native-made ceramics account for nearly 81 percent of the total ceramic assemblage (refined earthenwares and modern ceramics are excluded from this calculation). Native ceramics include predominantly Potomac Creek wares. Other Native ceramic types include Moyaone, Yeocomico, Townsend, Camden, and colonoware, all present as minority types. Of all the identifiable Indian ceramics recovered, fragments with evidence for cord-marking account for only 8 percent of the total Native ceramic assemblage (28 of 354 Native ceramics, or those for which surface treatment was evident).

	N	%
Potomac Creek, plain	239	42.2
Potomac Creek, cord-marked	23	4.1
Moyaone, plain	36	6.4
Unidentified sand-tempered, plain	33	5.8
Unidentified sand-tempered, cord-marked	5	0.9
Possible Townsend, plain	3	0.5
Possible Yeocomico, plain	10	1.8
Unidentified shell-tempered	88	15.5
Possible Camden, plain	3	0.5
Possible Colonoware	2	0.4
Unidentified ceramics	16	2.8
<b>Total Native Ceramics</b>	<b>458</b>	<b>80.9</b>
Merida Micaceous II	60	10.6
Unglazed coarse earthenware	11	1.9
Tin-glazed earthenware	10	1.8
Unid. lead-glazed coarse earthenware	7	1.2
Possible North Devon gravel-tempered	2	0.4
Possible Borderware	1	0.2
Possible Rhenish Brown stoneware	1	0.2
English Brown stoneware	16	2.8
<b>Total European Ceramics</b>	<b>108</b>	<b>19.1</b>
<b>Total 17<sup>th</sup>-Century Ceramics</b>	<b>566</b>	
Refined earthenware	15	-

**Table 14.** Total ceramics recovered from dry-screened test units, Windy Knolls I.

no earlier than 1690 and abandoned c. 1725 (although this interpretation is problematic) (King and Strickland 2009a). The Potomac Creek ceramics recovered from His Lordship's Favor may represent a slightly earlier occupation associated with Windy Knolls I, although it is possible that the early 18<sup>th</sup>-century household acquired Native ceramic vessels from Piscataway or other Native people in the area.

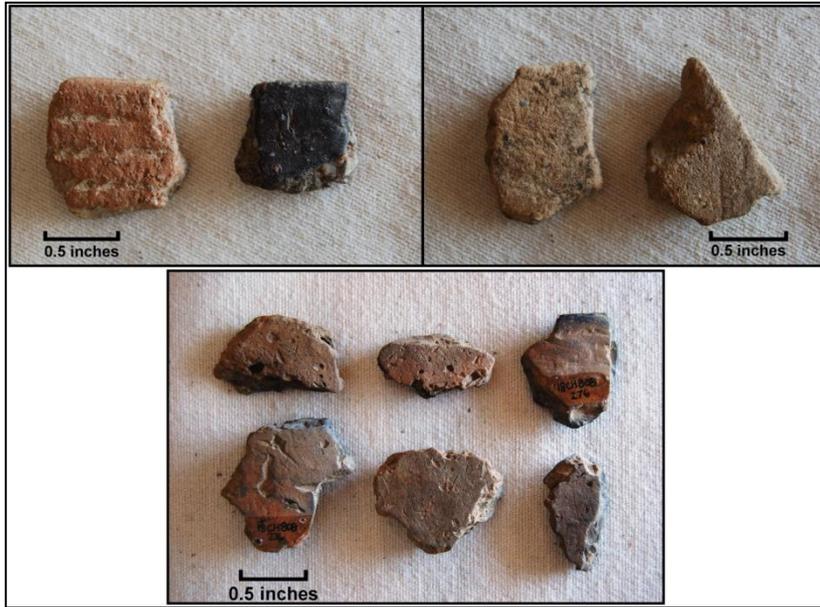
Moyaone, a variant of Potomac Creek ceramics with a fine-grained sand and mica temper (Potter 1993:123), is represented in the collection by 36 sherds, all plain, comprising 6.4 percent of the total late 17<sup>th</sup>-century ceramic assemblage from Windy Knolls I. An additional 33 plain and five cord-marked sand-tempered ceramics, all very small in size, may also be Moyaone. While previous research has indicated that Moyaone ceramics were produced until 1650, its presence at Windy Knolls I suggests it was produced at least into the second half of the 17<sup>th</sup> century.

Other ceramics of Native manufacture include a significant number of shell-tempered wares, approaching nearly one-fifth of the collection, most of which are unidentified. Ten possible Yeocomico and three possible Townsend plain wares were identified among the shell-tempered ceramics recovered from the dry-screened test units. Yeocomico, which has been dated to c. 1500-1700 AD, is found in

Potomac Creek ceramics consist of 239 plain and 23 cord-marked fragments and constitute nearly half of the entire test unit ceramic assemblage. As noted earlier, Potomac Creek ceramics have a crushed quartz or sand temper and are generally associated with Late Woodland and early historic period occupations (1300-1700 AD) (Egloff and Potter 1982)<sup>15</sup> and are found in both Maryland (most commonly on sites in the western shore Coastal Plain) as well as in Virginia (Stephenson, Ferguson, and Ferguson 1963). Archaeologists have found that, through time, cord-marking on Potomac Creek wares became less prevalent and, by the early 17<sup>th</sup>-century, Potomac Creek plain had become the dominant form (Egloff and Potter 1982).

Potomac Creek ceramics were also found at the His Lordship's Favor (18CH0793) site, the early 18<sup>th</sup>-century colonial settlement directly across Piney Branch from Windy Knolls I. There, four Potomac Creek fragments were recovered from shovel testing undertaken in 2009, and all four fragments are plain. His Lordship's Favor has been identified as a possible slave or tenant occupation dating

<sup>15</sup> Dent and Jirikowic (2000) report a radiocarbon date of 1100 AD calculated for a charcoal sample recovered from a Potomac Creek ceramic fragment in the Accokeek Creek collection curated at the University of Michigan.



**Figure 69.** Selected Native ceramics from test units, Windy Knolls I; top row: Potomac Creek rim, cord-marked (Lot 279); Potomac Creek rim, plain (Lot 276); Moyaone body fragment, plain (Lot 238); Moyaone body fragment, plain (Lot 243); second row: shell-tempered body fragments, plain (Lot 276); third row: shell-tempered body fragments, plain (Lot 276).

town previously mentioned. Camden ware dates to the last quarter of the 17<sup>th</sup>-century and may be derived from Potomac Creek wares (MacCord 1969).

Maryland predominantly in Charles, St. Mary's and southern Calvert counties (Yeocomico wares are also found in the Northern Neck of Virginia). Townsend wares, which were produced from c. 950 AD through the early historic period, appear throughout the Coastal Plain region in Maryland on both the eastern and western shores and in Virginia. It is possible that the remaining 88 unidentified shell-tempered wares are either Yeocomico or Townsend, but the ceramics are too small to allow a conclusive determination.

Three possible Camden ware sherds were recovered from the test units. Camden ware is an untempered ceramic first identified at the Camden site, the Rappahannock River Indian



**Figure 70.** Possible Colonoware from test units, Windy Knolls I; possible rim fragment (Lot 304).

Archaeologists working in St. Mary's City have identified only a single possible Colonoware fragment, which they have described as a possible pipkin rim sherd from a plowed 17<sup>th</sup>-century context (Miller 1983) and archaeologists at the Jefferson Patterson Park and Museum have recently identified colonoware fragments from an early 18<sup>th</sup>-century feature located along the Patuxent (Patricia Samford, personal communication, 2012). Wanser (1982:183) reported seeing a Colonoware sherd associated with a collection recovered from the Hogue site (see Chapters IV and VII). In contrast, hundreds of Colonoware fragments have been reported for sites located along the Potomac River in Virginia, especially in the 18<sup>th</sup> century (Veech 1996).

Three possible fragments of Colonoware were recovered from the test units at Windy Knolls I, including one from a water-screened column sample (see Figure 70). Colonoware was originally described by Ivor Noël Hume in 1962 as a locally-made, hand-built, low-fired earthenware, often of European vessel form, with a smooth or burnished surface (Noël Hume 1962; Henry 1980). Colonowares can be either temperless or contain some crushed shell temper and they appear exclusively in post-Contact contexts. Archaeologists have long debated whether these wares are the ceramic products of Native Americans or enslaved Africans, although there is general agreement among Chesapeake archaeologists and historians that Indians were the principal makers of colonoware in this region during the first century of colonization (Mouer *et al.* 1999:83-115). Interestingly, colonowares are relatively rare in Maryland for any time period.

All three possible Colonoware fragments from the Windy Knolls I site are small in size. One fragment is less than ¾-inch in maximum length, possibly shell-tempered, and with a flat bottom and smooth angular sides. The second fragment is an unglazed micaceous red earthenware with a reduced gray core that may be from a vessel with a flat base. The sherd is 7/8-inch in diameter. The third possible colonoware fragment, recovered from a water-screened column sample, is a sand- and shell-tempered rim or base sherd. None of these fragments is fully convincing in large part because of their small size, but their forms suggest that Colonowares may in fact have been present at Windy Knolls I.

European colonial ceramics account for just over 18 percent of the total test unit ceramic assemblage (see Table 14). Datable European ceramics include 60 fragments of an orange micaceous ware, probably Merida Micaceous II, an unglazed ceramic identifiable by mica inclusions that gives the surface a “sparkling” appearance. These wares, which are typically utilitarian in form, are of Hispanic manufacture and are recovered from contexts dating from 1550 to 1650 on Spanish colonial sites in the Americas, though Merida type wares are produced up to the present (Deagan 1987:40-41). Merida Micaceous II wares appear on Chesapeake sites in post-1650 contexts, including at Patuxent Point (1658-1690s; King and Ubelaker 1996), Mattapany (1663-1690; Chaney 1999), Clifts Plantation (1670-1729; Neiman 1980), and St. Mary’s City (Cranfill 2006). A number of other unidentified, unglazed red- to orange-pasted coarse earthenwares were also recovered, though it does not appear that these ceramics are micaceous.



**Figure 71.** European ceramics from test units, Windy Knolls I; top row, possible Rhenish brown stoneware (Lot 235); tin-glazed earthenware; tin-glazed earthenware; middle row: Merida Micaceous II; Merida Micaceous II ; bottom row, English brown stoneware rim (Lot 277); Merida Micaceous II (Lot 249).

Ten plain tin-glazed earthenware fragments were recovered from the test units. Of these, four have a pinkish paste. None appear to have a lead-backed exterior. Tin-glazed earthenwares appear throughout the 17<sup>th</sup> century into the third quarter of the 18<sup>th</sup> century, when refined earthenwares were introduced (Noël Hume 1969; Shlasko 1989; Austin 1994). The small size of these sherds and the absence of any identifiable decoration make it difficult to assign more precise dates to them.

Two sherds identified as possible North Devon earthenware were also recovered from test units at the site. One of these appears to have some gravel temper, while the other, a very small fragment, is of indeterminate temper. North Devon wares are common on 17<sup>th</sup>-century English sites in Maryland, and include vessels used for both utilitarian and food consumption purposes. The presence of this ware type often suggests a mid- to late 17<sup>th</sup>- or early 18<sup>th</sup>-century date range (Noël Hume 1969:133).

A single sherd of possible Border ware was recovered from the test units. Border ware is typically found in 17<sup>th</sup>-century contexts in the Chesapeake, and was initially used as an indicator of pre-1650 occupation (Miller 1983). Additional research, however, has revealed that Border ware was produced into the early 18<sup>th</sup> century, when its popularity began to decline in response to competition from tin-glazed earthenware and the introduction of white salt-glazed stoneware (Pearce 1992:102). In Maryland, Border ware appears on the King's Reach site, which dates from 1690 to 1715 (Jefferson Patterson Park and Museum [JPPM] 2012).

Surprisingly, only one possible sherd of Rhenish Brown stoneware, a German stoneware commonly found on 17<sup>th</sup>-century sites, was recovered from the site. Traded widely at the beginning and middle of the 17<sup>th</sup>-century, Rhenish Brown was being replaced by the development of English stoneware at the end of the century (Noël Hume 2001). At the Windy Knolls I site, English Brown stoneware is the predominant stoneware recovered from the test units, totaling 16 sherds. Developed by John Dwight in the 1670s in Fulham, near London, English Brown stoneware appears to have been acquired by colonial American households no earlier than 1690 (Green 1999:4, 19, 109-130; Noël Hume 1969:114).

The distribution of ceramics at Zekiah Fort looks nothing like that observed for nearby contemporary English settlements, including Westwood Manor (Alexander *et al.* 2010), Moore's Lodge (King, Strickland, and Norris 2008), His Lordship's Favor (King and Strickland 2009a), and Fendall (Strickland and King 2011). All four of these sites are located along the Wicomico River or Zekiah Run, with presumably similar geographical proximities to European goods. These sites include almost no Native ceramics; they also include Staffordshire slipwares and Manganese mottled wares, types usually found on English settlements occupied during the last quarter of the 17<sup>th</sup> century. Instead, the ceramics at Windy Knolls I follow trends more like those observed for the Posey (18CH0281) and Camden (44CE0003) sites, two Native settlements located in Maryland and Virginia, respectively, although with important differences.

As part of this analysis, we compared the types and distributions of ceramics from the Windy Knolls I site with those recovered from Posey and Camden. Both Posey and Camden were occupied before Windy Knolls I, from possibly as early as 1650 until 1685 or later.<sup>16</sup> Posey, as noted earlier, is located on Mattawoman Creek and is believed to be a Mattawoman settlement. Camden, located on the south side of the Rappahannock River in Caroline County, Virginia, may have incorporated Maryland Indians that had left that colony under colonial pressures.

One of the most striking differences among the three sites is in the sheer number of ceramic fragments recovered from each (Table 15). Several thousand ceramic fragments were recovered from both the Posey and Camden sites, while the ceramic total for the Windy Knolls I test units was well under a thousand fragments. Put another way, ceramic fragments were recovered from the Windy Knolls I site at an average rate of 12.1 fragments per test unit, while averages of 78.1 and 131.7 ceramics per test unit were recovered from the Posey and Camden sites, respectively. The difference may be explained in part by the length of time each site was occupied. The Posey site was occupied for as many as 25 or 30 years, and Camden may have been occupied for as long as four or five decades. In contrast, the Windy Knolls I site was occupied anywhere from 12 to 15 years. Even accounting for length of occupation, however, the Posey and Camden sites still seem to have significantly more ceramic fragments than the Windy Knolls I site.

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<sup>16</sup> While it is clear that both Posey and Camden were contemporaneous, the dates of occupation for both are fairly broad. It is possible that neither was occupied until 1660 and both were abandoned as early as 1680. This is particularly the case with Posey (King *et al.* 2006).

	<b>Windy Knolls I</b>	<b>Posey 1650-85</b>	<b>Camden 1650-90</b>
Potomac Creek	46.3	88.9	98.4
Moyaone	6.4	0.4	-
Unidentified sand-tempered	6.7	-	-
Possible Townsend	0.5	-	0.1
Possible Yeocomico	1.8	4.7	0.05
Unidentified shell-tempered	15.5	-	-
Possible Camden	0.5	3.2	1.1
Possible Colonoware	0.4	0.2	-
Unidentified ceramics	2.8	-	-
<b>Total Native Ceramics</b>	<b>81.7</b>	<b>97.5</b>	<b>99.7</b>
<b>Total European Ceramics</b>	<b>18.3</b>	<b>2.4</b>	<b>0.3</b>
<b>Total 17<sup>th</sup>-Century Ceramics</b>	<b>561</b>	<b>2891</b>	<b>7245</b>
Native ceramics per 25 sq. ft	9.8	76.3	131.3
European ceramics per 25 sq. ft	2.3	1.8	0.4
Number of test units	46	37	55

**Table 15.** Ceramics from the Windy Knolls, Posey (MD; 18CH0281), and Camden (VA; 44CE0003) sites.

miles south at the intersection of Kerrick and Zekiah swamps. This property, known as Hawkins Gate (today) or Fair Fountain (historically), was owned first by Josias Fendall and later by Henry Hawkins. Neither man lived on the property, but archaeological evidence recovered from the Hawkins Gate site (18CH0004) indicates a tenant was there between c. 1660 and 1695. At least one feature there may be a filled cellar. Indian-made products were found at Fair Fountain, including tobacco pipes and Potomac Creek pottery. Copper scrap was also found, although in a very small quantity when compared with Windy Knolls I (see below) (Bauer and King [2013]).

Proximity, however, does not explain the exclusive use of English goods at Heater’s Island. Located more than 75 miles by land from Moyaone, Heater’s Island was as far away from the English as the Piscataway could get without leaving the colony. Yet the Piscataway were clearly using English goods. If Piscataway women were still making ceramics while at Heater’s Island, the evidence is altogether missing. If the Piscataway at Heater’s Island were acquiring Indian-made ceramic vessels through trade, that evidence is also missing from the archaeological record.

This trend of a replacement of Native ceramics with European ceramics appears to fit models of what archaeologist Diana Loren (2008) has critiqued as “progressive acculturation,” with increasing numbers of artifacts of European manufacture used to measure the “rates” of acculturation of Native people. European ceramics or not, however, the Piscataway at Heater’s Island were clearly challenging English authority and English culture by shunning or otherwise distancing themselves from English control or interaction. Rather than a sign of cultural disintegration, the increasing use of English ceramics may be more a sign of geographical displacement and adjustment in the struggle for what was at the heart of the colonial project: territory.

When the assemblages from the Windy Knolls I, Posey, and Camden sites are compared, they exhibit certain important similarities: a preponderance of ceramics of Native manufacture, with Potomac

All three Native sites contain some European ceramics, but the Windy Knolls I assemblage contains significantly more as a percentage of the total ceramics than either Posey or Camden. Very few European ceramics were recovered from Posey or Camden, while 18.3 percent of the total ceramic assemblage from the Windy Knolls I test units is composed of colonial European wares. By contrast, the ceramic assemblage from Heater’s Island, which was occupied by the Piscataway from 1699 until 1712, is comprised almost entirely of European wares (Curry, personal communication, 2011).

Proximity to English merchants and their goods may explain the increase in European ceramics at Windy Knolls I. The nearest known English residence to the site was located four

Creek varieties in the majority. The assemblages also exhibit important differences. While Potomac Creek ceramics account for the overwhelming majority of ceramic fragments recovered from Posey and Camden, at Windy Knolls I, Potomac Creek comprises just under half of the total ceramic assemblage. Moyaone ware, absent from Camden and present in only trace amounts at Posey, forms 6.4 percent of the Windy Knolls I assemblage. Shell-tempered wares, almost completely absent at Camden, were recovered from both Windy Knolls I and Posey, but almost four times as many shell-tempered wares were recovered from Windy Knolls I than from Posey. European ceramics, which accounted for only a very small percentage of the ceramics at each site, occurred in significantly greater proportion at Windy Knolls I.

The differences evident among these three assemblages are no doubt linked to geography and the dates and lengths of occupation for each site. Other social and cultural factors, however, should not be discounted. Archaeologists believe that the Posey site was occupied by Mattawoman Indians while the Camden site was occupied by Potobacs, many who may have come from Maryland. The Windy Knolls I site was a predominantly Piscataway settlement. Although it is always dangerous to look for archaeological “signatures” or “index fossils” linked to social groups, these variations may very well be related to differences and variations in the social and material experiences of these three groups.

### ***Tobacco Pipes***

Tobacco consumption had been an important ritual practice in Native North America long before it became a fashionable and recreational vice in England in 1570. *Nicotiana rustica*, the tobacco variety believed to have been smoked in eastern North America prior to European colonization, was a sacred herb consumed in stone and clay pipes (Erichsen-Brown 1989:313). Father Andrew White, the Jesuit missionary who accompanied the colonists to Maryland in 1634, described the use of tobacco at a ceremonial gathering involving a group believed to be the Yaocomico Indians, a Piscataway-affiliated group living near what would become St. Mary’s City. White witnessed the Natives gather around a fire to smoke from a large Native-made tobacco pipe in what may have been some sort of purification ritual (Scharf 1967:92).

A space being cleared, some one produces a large bag; in the bag is a pipe and some powder which they call *potu*. The pipe is such as our countrymen use for smoking tobacco, but much larger. Then the bag is carried around the fire, the boys and girls following, and in an agreeable voice singing alternately, Taho! Taho! The circle being ended, the pipe is taken from the pouch with the powder. The *potu* is distributed to each of those standing around, and lighted in the pipe, and each one smoking it, breathes over the several members of his body and consecrates them (White 1847:24)

The event White described bears some resemblance to the calumet dance described by French adventurers in the Great Lakes region in the mid-17<sup>th</sup> century (Brown 1989). Europeans, on the other hand, did not incorporate pipes into spiritual practices as Native Americans did. While they embraced tobacco as a medicinal substance, Europeans adopted it primarily as a social activity and, in the Chesapeake, a cash crop (Main 1982). Tobacco pipes were perhaps even used as status symbols signaling wealth and class (Graham *et al.* 2007).

A total of 544 tobacco pipe fragments were recovered from test unit excavations at Windy Knolls I, including 135 red clay pipes and 409 white clay pipes (Table 16). Tobacco pipes formed 8.4 percent of the total dry-screened test unit artifact assemblage (see Table 10). The white clay tobacco pipes are typical of those found on colonial sites in Maryland dating to the late 17<sup>th</sup> century (Davey and Pogue 1991), while the red clay pipes, albeit highly fragmented, are somewhat atypical.

<b>Red</b>	Stem	66
	Bowl/heel	69
	Other	0
	<i>Sub-total</i>	<i>135</i>
<b>White</b>	Stem	187
	Bowl/heel	222
	Other	0
	<i>Sub-total</i>	<i>409</i>
<b>Total</b>		<b>544</b>

**Table 16.** Tobacco pipes from dry-screened test units, Windy Knolls I.

Test units produced 59 decorated red and white clay tobacco pipe fragments. Slightly more than one-quarter or 25.2 percent of the red pipes (34) are decorated, while only 6.1 percent (26) of the white clay pipes are marked or decorated.

The 34 decorated red clay tobacco pipe fragments depict predominately rouletted designs although, in most cases, fragments are too small to suggest a specific motif, such as the classic running deer (Figure 72). Single and double banded rim rouletting is common as well as unidentified diagonal dentate rouletting. Only one red clay fragment appears to have been incised, although the possible motif is unidentified. A serrated fossil shark's tooth found at the site may have been used to create rouletting on pipes during the manufacturing process (Figure 73) (Potter 1993:226, 228). No evidence of wasters generated during the tobacco pipe manufacturing process were recovered from Windy Knolls I, however, suggesting that this shark's tooth may have served another purpose.



**Figure 72.** Red clay tobacco pipes from test units, Windy Knolls I; top row, l-r: rim fragment with rouletting around the rim and unidentified rouletted decoration (Lot 253); rouletted rim fragment; bowl fragment with rouletted decoration (Lot 244); bowl fragment with hollow-reed impressed decoration (Lot 246); bottom row, l-r: rim and bowl fragment with rouletted decoration with white infill (Lot 254); European-style heel with rouletted “Z” or “N” design (Lot 241); bowl fragment with rouletting (Lot 251); “agatized” stem fragment (Lot 256).

Three red clay pipe bowl fragments were decorated using a hollow-reed. Small irregular circles impressed in a linear fashion were found on two buff- to gray-pasted bowl fragments, both with relatively large ochre inclusions and thick walls (see Figure 72). The presence of a third reeded bowl piece with a slightly different fabric and sized-reed indicates that there were at least two hollow-reeded pipes at Windy Knolls I. This third specimen has a row of smaller, oval circles impressed into a dark reddish brown red



**Figure 73.** Fossil shark's tooth from test unit, Windy Knolls I (Lot 217)

clay bowl fragment. While hollow-reeded red pipes were not uncommon in the Chesapeake, a comparable specimen resembling the fabric and pattern of circles has yet to be found.

In the case of the red pipes, workmanship varies from crude to fine with both refined and unrefined clays present in the assemblage. A “firing cloud,” remnants of the firing process, was observed on one locally-made stem fragment, suggesting this particular pipe was fired in a poor kiln (Lauren McMillan, personal communication, November 2011). Red clay pipes with finer and cleaner fabrics are also represented in the assemblage. One of the larger-sized bowl fragments has an extremely smooth surface and a hard fabric not unlike that of a European white clay pipe. The specimen has a finely rouletted design (Henry 1979:30) and may have been decorated using a sharp metal tool.

At least three red clay pipe fragments resemble European pipe forms, two of which are heeled and one of which is heelless. One red clay pipe stem features a rouletted “Z” or “N” on the bottom of a small heel (see Figure 72). The pipe is of reddish brown clay and the heel has a flat circular base that flares slightly outward. The second heeled red pipe is undecorated and is made of gray clay with a shallower, deformed heel that narrows toward the base (see Figure 72). Both heeled fragments were recovered in the same area from the knoll in Test Units 355230 and 360235.

A red clay pipe marked with a rouletted “X” on the bottom of its heel was recovered at Pope’s Fort in St. Mary’s City in contexts that pre-date Windy Knolls I. This specimen, however, is also rouletted along the juncture, unlike the example with the “Z” design at Windy Knolls I. Other terra cotta pipes with rouletting along the juncture were recovered in Virginia at the Hallowes site across the Potomac River. Recent research indicates Hallowes was occupied around the same time as Pope’s Fort near the mid-17<sup>th</sup> century (McMillan 2011).

One unmarked red clay pipe stem has large ochre inclusions similar to those found in two of the hollow-reed impressed bowl fragments. The thick stem, while highly eroded, appears to be “agatized,” or made of mixed clays (see Figure 72). It does not resemble the thick “barber-pole” mixed clay stems attributed to the Virginia pipemaker known as Bookbinder, nor does it match the agate pipes produced by Emmanuel Drue in Anne Arundel County, Maryland (Luckenbach 2002). The specimen recovered at Windy Knolls I is characterized by tightly swirled buff to brownish-pink clays that appear as thin, wavy striations stretched parallel to the stem (see Figure 72). Its highly eroded fabric makes it difficult to identify as Drue-type yet, besides Bookbinder, no other pipemakers are known to have produced agatized pipes (Al Luckenbach, personal communication, October 2011).

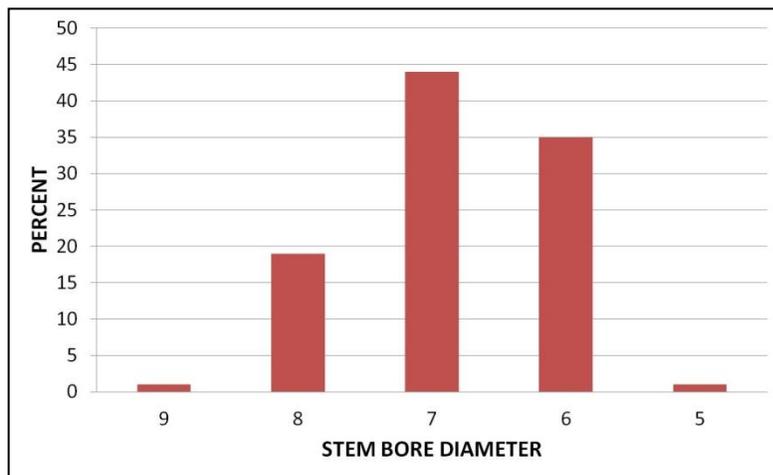
For the white pipes, rouletting is the predominant decoration on the white clay pipes. Twenty-three fragments display evidence of single band rim rouletting or incision. In addition, three stems are marked with “Bristol-diamond” rouletting, one of which has a maker’s mark (Figure 74). The mark appears to be “IS” and is probably that of John Sinderling, a Bristol-based pipemaker who produced pipes from 1666 until 1699 (Hurry and Keeler 1991:59). The “IS” mark has also been found at Patuxent Point (18CV0271; 1658-c. 1690), St. John’s (18ST0001-23; 1638-c. 1715), and Hawkins Gate/Fair Fountain (18CH0004; c. 1660-1695) (Bauer and King [2013]).

A white clay bowl impressed with an incuse serif letter “E” was also recovered from Zekiah Fort (see Figure 74). This mark is probably that of Llewellyn Evans, a Bristol pipemaker who produced pipes



**Figure 74.** White clay tobacco pipes from test units, Windy Knolls I; top row, l-r: bowl fragment with incuse serif letter “E,” probably Llewellyn Evans (Lot 239; rim fragment with rouletting; bowl fragment with stem-and-leaf motif, possibly Dutch (Lot 258); stem fragment with Bristol-style rouletting (Lot 276); bottom row, l-r: stem fragment with Bristol-style rouletting and maker’s mark, “IS,” probably John Sinderling (Lot 244).

the heeled fragments lack an attached bowl. Perhaps significantly, three of the four fragments without heels (and also without bowls) were recovered from one unit (Test Unit 370235A). No examples of spur heels were evident.



**Figure 75.** Distribution of pipe stem bore diameters from test units, Windy Knolls I.

recovered from the test units at Windy Knolls I (N=129) are shown in Figure 75. When compared with Harrington’s (1954) set of histograms, the Windy Knolls I pipe distribution roughly matches that shown for the period 1680-1710. The Binford (1962) date, however, skews early at 1670, a full decade before the

from 1661 through 1689 (Walker 1977:1131-1132; 1428). Cavallo (2004) has found, however, that, in southern Maryland, Evans’ pipes, which are common on sites in the region, almost always appear in post-1680 deposits.

Most white clay pipe fragments are of likely English manufacture except for one which may be of Dutch manufacture. The bowl fragment consists of a simple stem and leaf motif and lacks elaborate embellishments that would help date the specimen (Figure 74).

In examples where the heel portion of the bowl survives, five heeled and four heel-less white clay tobacco pipes are found in the test unit collection, none decorated. Most of the heeled specimens have a round, flat heel that does not protrude far from the bowl. Unfortunately, all of

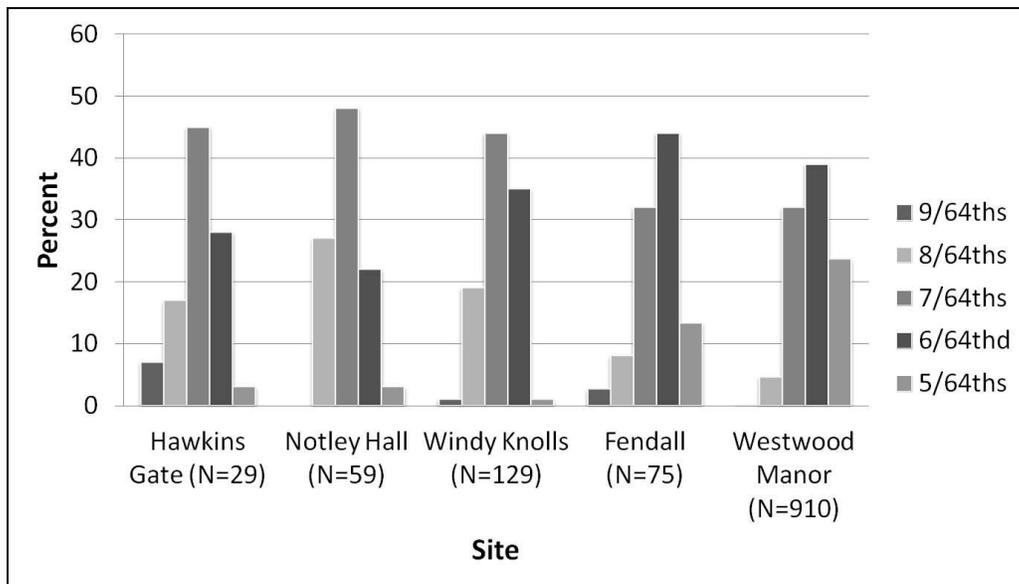
Although archaeologists caution against too much reliance on the distribution of pipe stem bore diameters for dating purposes, pipe stem evidence, when used carefully, can suggest chronological parameters for individual sites, especially when compared with nearby contemporary sites. Comparative analyses can reveal local trends in the distributions of pipe stem bore diameters and, perhaps more critically, variations from these trends. This is the case for the Windy Knolls I site.

The distributions of measurable pipe stem bore diameters

site's initial occupation. Part of the discrepancy may be related to sample size. Noël Hume (1969:300) has argued that 1,000 measurable pipe stems is the minimum number required for producing more or less consistent dating results.

Cultural preference may also account for the early Binford date at Windy Knolls I. Binford's formula is based on European tobacco consumption patterns, and Windy Knolls I was occupied by the Piscataway and related groups. Both European and Native American cultures used tobacco but in different ways. Indians viewed tobacco smoking as the consumption of a sacred herb, incorporating it into religious and spiritual ceremonies (King and Curry 2009:28). Europeans embraced tobacco smoking as an everyday recreational and social activity. Indeed, Graham *et al.* (2007) have argued that embedded in the size of bore diameters is not just chronology but economic and social class, at least among Europeans. They argue that the colonial European elite desired longer stemmed (and therefore smaller bore) white clay pipes to distinguish themselves from the lower sorts. While tobacco pipes may not have been very expensive, colonists may have perceived longer, "fashionable" pipes as indicators of social standing. It is plausible that, for those for whom tobacco consumption was not recreational or about fashion, including the Indians, shorter stemmed and consequently larger bore pipes were perfectly suitable and maybe even more desirable.

Heater's Island, the place the Piscataway moved to in 1699, produced a comparable number of measurable pipe stems (N=151) with a Binford date of 1692. The Piscataway were at Heater's Island until c. 1712. Dennis Curry (personal communication, August 11, 2011) has suggested that the date may be skewing early because the Piscataway may have been forced to curate pipes at Heater's Island, given their relative isolation from English markets, although, overall, the Heater's Island assemblage contains a rich assemblage of goods of European manufacture.



**Figure 76.** Comparison of pipe stem bore diameters, multiple sites, Windy Knolls I; Hawkins Gate: c. 1660-1695; Notley Hall: c. 1665-1695; Fendall: c. 1670-1715; Westwood Manor: c. 1680-1715.

To explore whether cultural factors other than chronology were operating at Windy Knolls I, the distribution of stem bore diameters from the assemblage was compared with the pipe stem distributions from four other sites in the Zekiah and Wicomico drainages (Figure 76; readers are advised that the pipe

stem samples represented in this chart were collected through a variety of techniques). The assemblages are arranged chronologically from earliest (Hawkins Gate/Fair Fountain) to latest (Westwood Manor). The Windy Knolls I site was occupied the shortest amount of time (approximately 15 years) and the Fendall site the longest (approximately 45 years). Other than the Windy Knolls I site, all assemblages derive from sites occupied by English households.

These distributions suggest that sites occupied after 1700, including Fendall, Moore's Lodge, and Westwood Manor, have significantly higher percentages of tobacco pipe stems measuring 5/64ths-inch. The three sites abandoned before 1700, including Hawkins Gate/Fair Fountain, Notley Hall, and Zekiah Fort, have four percent or fewer pipe stems measuring 5/64ths-inch. Comparing the pipe stem bore diameter distributions of the last three sites, the distributions do suggest that Zekiah Fort was occupied later than both Hawkins Gate/Fair Fountain and Notley Hall.

As noted in the ceramics discussion, literally thousands more artifacts were recovered at the Posey and Camden sites than at Windy Knolls I. Nonetheless, the number of tobacco pipe fragments recovered from the Windy Knolls I site is larger than the numbers recovered from both Posey and Camden. At Windy Knolls I, tobacco pipe fragments, including white and red varieties, were recovered at the rate of 11.8 fragments per test unit, representing twice as many as recovered from Camden (5.9) and almost 50 percent more than at Posey (8.1). Whether the variation is random, linked to chronology, or indicative of Native cultural preferences is unclear.

At both the Posey and Camden sites, the overwhelming majority of tobacco pipes are red, presumably of Native manufacture. At Windy Knolls I, the majority are white, or of European manufacture. Further, at least some of the red pipes at Windy Knolls I were either made in a European mold or made to mimic a European form, perhaps as part of an effort to produce pipes attractive to colonial consumers. What is perhaps most remarkable, however, is not that so many pipes are white, but that so many are red. A number of archaeologists have pointed out that, on English sites at least, by the late 17<sup>th</sup> and early 18<sup>th</sup> century, locally-made pipes (including those made by Natives and colonists) were almost completely replaced by imported pipes (Cox et al. 2005). Locally-produced or red pipes are absent in post-1660 contexts at St. Mary's City, the colonial capital (Miller 1983). Red clay pipes continue to be found in post-1660 settlements beyond the capital's boundaries, but in decreasing amounts, both in terms of counts and proportions (King and Chaney 2004:211-214). By 1690, when the King's Reach site was first occupied (by an English household), red clay pipes appear to have been very rare: only eight red pipes have been identified out of 5,414 pipe fragments, and only three of these pipes appear to have been handbuilt.

The tobacco pipe assemblage recovered from the Windy Knolls I site indicates that the site's occupants consumed tobacco using both red and white pipes. As dating tools, the pipe assemblage points to a late 17<sup>th</sup>-century occupation. The distribution of the measurable bore diameters of the white clay tobacco pipes suggests a post-1680 date when calibrated against Harrington's histograms. The probable LE pipe also points to a c. 1680 date of occupation. Nonetheless, the Binford date skews nearly a decade earlier. The Binford date may be skewing early, however, based on cultural preferences or choices, as fashion-conscious Englishmen chose longer, perhaps more expensive pipes with smaller bores from which to smoke their tobacco.

The increased number of tobacco pipe fragments at Windy Knolls I could suggest a growing consumption of tobacco, possibly for recreational purposes or through increased ritual practices. Through the sheer numbers of tobacco pipe fragments recovered from Windy Knolls I are higher than at Posey or Camden, the numbers are still relatively low when compared with contemporary English sites.

## ***Bottle Glass***

Colonial bottle glass is by far the predominant glass type recovered from Windy Knolls I, ranging from zero to 20 fragments per unit and averaging close to three fragments per unit. While originally manufactured for the distribution of wine, these containers could also be reused as storage vessels for other liquids and, at least at the Windy Knolls I site, bottle glass fragments may have been repurposed as tools.

Barry Kent (1984) suggests the contents of wine and liquor bottles were consumed by Indians near the trading center where the bottles were initially obtained. This assumes that empty bottles were not trade items. Regardless of whether they were acquired with or without wine, the bottles that survived the trip back to Windy Knolls probably arrived empty and were likely reused to store such things as water, grease, or tallow, or perhaps to redistribute alcohol from casks (Kent 1984:228-229).

Alcohol was introduced into Native American cultures at the onset of colonization as a bartering good frequently exchanged for furs. Many Natives came to value alcohol as a powerful, disorienting substance and it was often integrated into existing spiritual rituals (Mancall 1997:68). During the 17<sup>th</sup> century, Native groups began experiencing the devastating effects of alcohol. Indian nations including the Virginia Powhatan (Rountree 1993:202), Pennsylvania Susquehannock (Kent 1984:228), and Maryland Piscataway saw the excessive consumption of alcohol undermine their sense of community and erode their traditional values (Mancall 1997). In 1692, the Piscataway tayac, believed to have then been living at Zekiah Fort, expressed concerns regarding excessive alcohol consumption among the young men in his nation and the disruption it caused. In response to the tayac's complaint, the Governor and Council put in place a ban on "carrying sending or conveying any Rum or Other strong Liquors to the Piscataway Fort, or Other Indian Town, to sell give or dispose thereof to the Indians" (Md. Archives 8:328). A similar request for prohibition was made several years earlier by the King of the Choptico, Tom Calvert, concerning his group at Choptico Town (Md. Archives 8:53).

The test units at Windy Knolls I produced 134 colonial wine bottle glass fragments. Five additional fragments may derive from case bottles or even from window glass. Of the colonial bottle glass, four are small base and/or kick-up fragments with no apparent pontil marks and three are finished rims with an applied string rim. String rims, located just below the bottle's lip, protrude out from the neck of the container and were used to secure the cork. Wire or twine would have wrapped around the stopper and tied underneath the string rim to anchor it down (Noël Hume 1969:71).

The quantity of bottle glass does not necessarily indicate much in the way of alcohol consumption at Windy Knolls I. Indeed, the assemblage includes a minimum number of four vessels, although more are likely. Perhaps significantly, the largest proportion of bottle glass came from the units at the northeast base of the knoll, not far from the adjacent spring, suggesting the wine bottles may have been used to collect and store water.

Some of the bottle glass recovered from the Windy Knolls I site may have been worked or "flaked" by the Piscataway. Two bottle glass fragments recovered from adjacent units appear to be flakes, suggesting glass working may have taken place nearby (Figure 77). One flake has a pronounced bulb of percussion with a flake detached from the other side; however, it does not appear to have been retouched. The second flake is a slightly curved fragment that has a lighter green color and thinner body with evidence of a striking platform and bulb of percussion. It is unclear whether these fragments were produced as part of an intentional use of glass as a raw material to make tools, although a glass projectile point was recovered from the Camden site in Virginia (MacCord 1969).



**Figure 77.** Possible flakes from the working of bottle glass, from test units, Windy Knolls I (left: Lot 262; right: Lot 269).

Evidence of glass working was also found among the 183 green bottle glass fragments recovered from Heater's Island (18FR72), with four appearing to be worked and/or utilized. Two endscrapers, one small spokeshave-like scraper, and a sherd with a sharp cutting edge were recovered from a 100-foot area on the island (Dennis Curry, personal communication, 2011). The two possible glass flakes at Windy Knolls I and worked/utilized fragments at Heater's Island may illustrate the progression or at least the practice of glass working among the Piscataway from the late 17<sup>th</sup> through early 18<sup>th</sup>

centuries. Then again, because relatively few glass flakes and no glass tools were recovered at Zekiah, it is also plausible that these flakes do not confirm the presence of onsite glass working. It is possible that these two small fragments broke during another process, such as plowing.

Only a relatively small portion (26 fragments) of test unit glass is modern. Of these, most were bottle glass although three flat, possible window glass fragments and one colorless table glass with an unidentified floral molded motif were also recovered. No colonial window glass was recovered.

### *Glass Beads*

Beads are an often widely exchanged material that can be well-preserved in the archaeological record and easily identified. An array of shapes, sizes, and styles of beads appear on Native American and European sites in a variety of contexts both secular and sacred. Indeed, in Maryland, beads have been found in association with Indian ossuaries (Curry 1999), Native dwellings (Harmon 1999), African slave quarters (Yentsch 1994:194), and English domestic and public spaces (Miller, Pogue, and Smolek 1983; King, Strickland, and Norris 2008). Bead analysis can be particularly useful in identifying and understanding the changes brought about by colonization (Blair, Pendleton, and Francis 2009; Wood 2000; Marcoux 2008).

An understanding of the role of beads in ceremonial practices can provide the insight needed to deconstruct complex thought-worlds (Miller and Hamell 1986; Hamell 1992). Beads can also be used to interpret economic conditions by considering their consumption and exchange (Miller, Pogue, and Smolek 1983; Busby 2010:513-526; Gijanto 2011). Furthermore, a chronological assessment of bead types and quantities can be, depending on the context, particularly useful in dating an archaeological site (Kidd and Kidd 1970; Stone 1974; Kidd 1979; Karklins and Sprague 1980; Deagan 1987).

Native Americans manufactured beads from stone, bone, shell, and native copper long before overseas explorers, traders, and missionaries with glass beads reached the shores of North America. Shell beads known as wampum or peake (both short for *Wampumpeake*) and roanoke are the two most historically significant Native-made bead varieties in the Chesapeake Bay region. Wampum, in particular, was highly ritualized among Indians in both political and religious spheres in the Eastern Woodlands. Strings of shell beads, sometimes crafted into belts, were exchanged in ceremonial contexts to declare war, promise peace, call diplomatic meetings, use for bride price, display status, and reward deserving individuals.

Relations with Europeans transformed the ways in which Indians acquired and used beads, and vice versa. During the 17<sup>th</sup> century, Europeans in the Chesapeake adapted Native-made shell beads as a medium of exchange initially for the acquisition of Indian goods, including furs and corn (maize) (Miller, Pogue, and Smolek 1983:128). At his death in 1679, Maryland deputy governor Thomas Notley had in his possession “A p[arcel] of Beades,” probably glass, as well as “A pcell of Roanoke.” One Maryland colonist reported that, “to speak of the Indian money of those parts, it is of two sorts, Wompomeag and Roanoke...Wompomeag is of the greater sort, and Roanoke of the lesser, and the Wompomeag is three times the value of Roanoke; and these serve as Gold and Silver doe here” (cited in Klein and Sanford 2004). Other accounts describe colonists who, recognizing the economic value of beads but ignoring their cultural values, resorted to dishonest and at times illegal actions to acquire them. In 1643, for example, an Englishwoman was accused of “lyen wth an Indian for peake or Roanoke” (Md. Archives 4:258). In 1686, an Englishman was accused of robbing the grave of a Nanticoke King for a large quantity of roanoke beads (Md. Archives 5:282).

While European participation in shell bead exchange may have eroded some of the beads’ symbolic significance, the Piscataway continued to incorporate beads into everyday and special practices as powerful materials well into the 18<sup>th</sup> century. One of the most interesting examples may be the wampum belts that, in 1681, reportedly accompanied an English broad axe sent by the Piscataway to various nations, including the Seneca and Onondaga, as an invitation to war. One belt depicting three hands marked an alliance between the Maryland Piscataway and Choptico and the Virginia Nanzatico (Nanjatico) who together sought the assistance of other nations in fighting the Maryland English (Md. Archives 17:7; 15:418).

Glass beads, first introduced into the Americas by Christopher Columbus in 1492, are sometimes seen as commonplace objects, as “trinkets and baubles,” although the manufacture of glass beads was not inexpensive. To Native groups, however, they were embraced, at least initially, as what Christopher Miller and George Hamell (1986) describe as “other-worldly” materials steeped with deep, symbolic meanings:

In the Woodland Indian mythic world, crystal, shell, and reflective metals were obtained by real human man-beings through reciprocal exchanges with extremely powerful Other World Grandfathers... [who] were related to humans as personal guardian spirits or as patrons of animal-medicine societies, and their gifts often assured long life, physical and spiritual well-being, and success, especially in the conceptually related activities of hunting, fishing, warfare, and courtship. Consequently, those substances were prominent in myths and in rituals of creation and re-creation, resuscitation, and the continuity of life. On the other hand, as other-worldly items, those substances were charged with great power (Miller and Hamell 1986:318).

Indigenous people were eager to acquire glass beads. Glass beads shared the reflective quality (luster), form, and origin of indigenous shell and stone beads, and were easily incorporated into Native practices. The archaeological record affirms the desirable qualities of beads, including glass beads, by the great quantities – sometimes in the tens of thousands – found in association with post-Contact Native American burials (Kent 1984; Curry 1999; Blair, Pendleton, and Francis 2009).

An early regional study of the types and distributions of glass beads recovered from nineteen sites in the Chesapeake Bay region found that, at least among Europeans, beads were used as both trade items with Native groups and as adornment by colonial settlers. Still, the study seemed to reveal, the exchange

of beads between Natives and colonists was limited, with the few Native burials containing large quantities of glass beads representing exceptions (Miller, Pogue, and Smolek 1983). This observation was interpreted as a reflection of the region's depletion of fur supplies and the rise of a tobacco-centered economy. In short, trade with indigenous people was reduced from what it had been at first Contact. Further, Miller, Pogue, and Smolek (1983) concluded that a shrinking Native population in the Tidewater region (including the Potomac, Rappahannock, and James river basins) also limited exchange between English and Natives. Finally, the authors concluded that Native groups ascribed greater symbolic value to shell beads than they did to glass beads, and this significance could not be transferred to European beads.

Three decades have passed since Miller, Pogue, and Smolek (1983) conducted their study, with much more data since becoming available, including from sites occupied by Native people. The nearly 300 glass beads recovered from all contexts from the Windy Knolls I site as well as shell and glass beads recovered from other Native contexts provide an opportunity to evaluate and refine those findings and, in so doing, reveal more about Native lifeways in the Potomac River drainage during colonial occupation.

Three main types of glass beads were manufactured in Europe during the 16<sup>th</sup> and 17<sup>th</sup> centuries, including drawn, wire wound, and blown. Venetian beadmakers, who dominated much of the world's glass bead industry for centuries, first produced drawn beads around 1490, making them available for Europe's earliest colonial expeditions (Pendleton and Francis 2009:55). In the 17<sup>th</sup> century, however, a number of bead makers left Italy to set up glass factories in other European countries (Rogers 1937:34; Moore 1924:33; Gibson 1980:120-122), and glass beads were soon being manufactured by artisan guilds based in Venice, Amsterdam, and France (Pendleton and Francis 2009:53).

To produce a drawn bead, the artisan heated glass at the end of a hollow iron rod, or "pontil," in a furnace. Once the glass reached a molten state, it was literally blown into a bubble from the opposite end of the hollowed pontil. A second rod was then pressed into the molten glass and, using the two attached pontils, the glass was stretched into a tube-like form. The type of bead produced in this example is known as a "simple" bead. This bead construction is a monochrome type and lacks decorative embellishments like spots or stripes (Kidd and Kidd 1970:221-222).

To construct a bead with more than one layer, such as the beads recovered from Zekiah Fort with a red exterior and green interior core, a green glass bubble was first dipped into a pot of red molten glass and then stretched into shape, cooled, and cut. To make a striped bead, the glass bubble was inserted into a container lined with "canes," or rods of glass. The bubble was blown until the canes attached to it. The bubble and its connected canes were placed in the furnace for a second heating to insure adherence, and then stretched, cooled, and cut as previously described (Kidd and Kidd 1970:221-222). Beads with more than one layer of glass are examples of "compound" bead forms.

After being heated, shaped, cooled and cut, glass beads were typically finished. Smaller "seed" beads (4 millimeters or less) were often rounded off using the *a ferrazza* method, where the cut segments were stirred over heat. Larger beads were smoothed by either grinding their edge or reheating the bead through a process known as *a speo*, or tumbling. *A speo* means "by the spit" in Italian and describes a technique where individual beads would be mounted on tines attached to a spit and twirled over a fire (Pendleton and Francis 2009:53).

During the *a speo* process some beads would melt or fuse together to produce one singular conjoined "bi-lobed" or even "tri-lobed" form. This final heating could also cause the beads to "sag" or have a "tail" end (Gijanto 2011). Examples of such deformities, including conjoined, sagging, and tail-ended beads, were recovered from the Windy Knolls I site. Several specimens also have distinct

protruding ends, possibly the result of overheating during tumbling which could have caused the ends of individual beads to pucker out (Hopwood 2009:67).

Tool segmentation may also explain glass beads exhibiting puckered ends (Hopwood 2009:67). During this process, the cooled stretch of glass was rolled across a grooved stone mold to form pinches and bulges. Doing so allowed them to be cut, or segmented, as single or multiple beads (Pendleton and Francis 2009:53). Finishing *a speo* made it possible to round off rough edges but could not erase the marks left by some tools used to cut the beads (Hopwood 2009:67).

The investigations at the Windy Knolls I site recovered a total of 289 glass beads from the test unit excavations, including 241 beads from the dry-screened plow zone deposit and 48 from the water-screened column samples (Table 17).<sup>17</sup> Water-screening the plow zone significantly enhanced bead recovery. Dry-screening recovered roughly 0.2 glass beads per square foot of plow zone (241 beads divided by 1150 square feet), while water-screening generated on average one glass bead per square foot of plow zone (48 beads divided by 46 square feet). This suggests that, if all of the plow zone had been water-screened, we could have potentially recovered 1,390 beads from the 46 excavated units (one bead times 1150 square feet plus 241 beads). Interestingly, not a single shell bead was recovered from any context at the Zekiah Fort.

<b>Zekiah Fort Glass Bead Assemblage</b>			
	<b>Normal</b>	<b>Seed</b>	<b>Total</b>
1/4-inch test unit	231	10	241
Water screened	13	35	48
<b>TOTAL</b>	<b>244</b>	<b>45</b>	<b>289</b>
<b>Heater's Island Glass Bead Assemblage</b>			
	<b>Normal</b>	<b>Seed</b>	<b>Total</b>
1/4-inch test unit	217	182	399

**Table 17.** Bead types recovered from test units, Windy Knolls I, and Heater's Island (18FR0072).

perforation, were measured, when possible, using digital calipers. Maximum bead diameters were recorded in millimeters and described using Kidd and Kidd size designations: very small (under 2 mm); small (2-4 mm); medium (4-6 mm); large (6-8 mm); or very large (8-10 mm) unless otherwise noted.

The bead assemblage from the Windy Knolls I site includes 31 Kidd and Kidd type categories (33 if the water-screened samples are included) (Table 18; Figures 78 and 79). Nonetheless, the Windy Knolls I glass bead assemblage is fairly homogeneous with over 95 percent of the glass beads either simple black or red-on-green types.

Not surprisingly, vagaries inherent in the bead making process make standardization of bead size and shape (especially for smaller beads) difficult. Standardized sizes were achieved in the 19<sup>th</sup> century

The bead assemblage was organized using Kidd and Kidd's (1970) system of classification for glass beads. The typology<sup>18</sup> describes the process of manufacture, shape, size, decoration, diaphaneity, and color of the beads. Common names for certain bead types (e.g., seed beads and Cornaline d'Aleppo) are also noted where applicable. During the course of the study, several varieties were encountered which did not match the basic Kidd and Kidd categories. These beads were incorporated into the Kidd and Kidd typology as best fit but were marked with an asterisk to indicate variation and described accordingly (e.g., a variant of Kidd IVa1 is described as Kidd IVa\*).

Bead diameters, both perpendicular and parallel to perforation, were measured, when possible, using digital calipers. Maximum bead diameters were recorded in millimeters and described using Kidd and Kidd size designations: very small (under 2 mm); small (2-4 mm); medium (4-6 mm); large (6-8 mm); or very large (8-10 mm) unless otherwise noted.

<sup>17</sup> An additional seven glass beads were recovered from the shovel tests at Windy Knolls I.

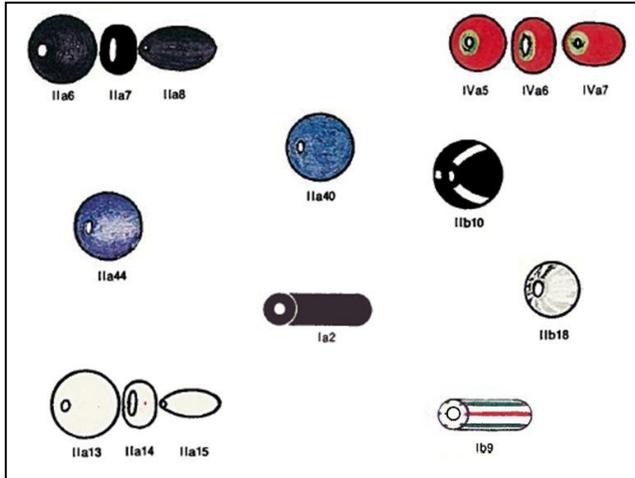
<sup>18</sup> The bead descriptions found in the original catalog are augmented with Kathleen Deagan's (1987) definitions of shapes and exact diameter and lengths to increase the comparative value of this report.

QTY.	TYPE	DESCRIPTION	Notes
5	Ia2	medium tubular opaque black	
1	Ia2	large tubular opaque black	
1	Ib9	large tubular opaque white with alternating redwood and green stripes	
1	IIa6	small round opaque black	Seed bead
17	IIa6	medium round opaque black	
70	IIa6	large round opaque black	
5	IIa7	small circular opaque black	Seed bead
2	IIa7	small circular opaque black	
27	IIa7	medium circular opaque black	
21	IIa7	large circular opaque black	
2	IIa8	large oval opaque black	
1	IIa15	large oval opaque white	
1	IIa40	large round opaque robin's egg blue	Robin's egg blue
1	IIa44	medium round translucent cerulean/cobalt blue	
1	IIa44	large round translucent cerulean/cobalt blue	
2	IIa44	large circular translucent cerulean/cobalt blue	
1	IIa*	small round opaque pale blue	Large seed bead
1	IIa*	very large fused opaque black	Fused
1	IIa*	very large fused opaque black	Fused; burned
1	IIb10	medium round opaque black with three white stripes	
2	IIb18	medium light gray with 13 thin opaque white stripes	Gooseberry
33	IVa5	medium round opaque redwood on black/transparent apple green core	Cornaline d'Aleppo
12	IVa5	large round opaque redwood on black/transparent apple green core	Cornaline d'Aleppo
3	IVa6	small circular opaque redwood on transparent apple green core	Cornaline d'Aleppo; seed bead
19	IVa6	medium circular opaque redwood on black/transparent apple green core	Cornaline d'Aleppo
4	IVa6	large circular opaque redwood on black/transparent apple green core	Cornaline d'Aleppo
1	IVa7	medium oval opaque redwood on transparent apple green core	Cornaline d'Aleppo
1	IVa7	large oval opaque redwood on transparent apple green core	Cornaline d'Aleppo
1	Iva*	small circular opaque redwood with possible remnants of translucent apple green core	Cornaline d'Aleppo (possible)
1	Iva*	large round opaque redwood on opaque dark redwood	Cornaline d'Aleppo (possible); burnt
2	Iva*	very large fused redwood on black/transparent apple green core	Cornaline d'Aleppo; fused

**Table 18.** Glass bead types recovered from Windy Knolls I.

(Francis 2009a:62). With so many varieties, bead researchers sometimes differ on what size constitutes a “seed” bead, with suggestions ranging from 2.0 mm up to 5.0 mm. For this analysis, beads measuring 4 mm or less are described as seed beads. Glass beads measuring over 4 mm were likely worn on strands and only secondarily as embroidered decorations (Davis *et al.* 1998).

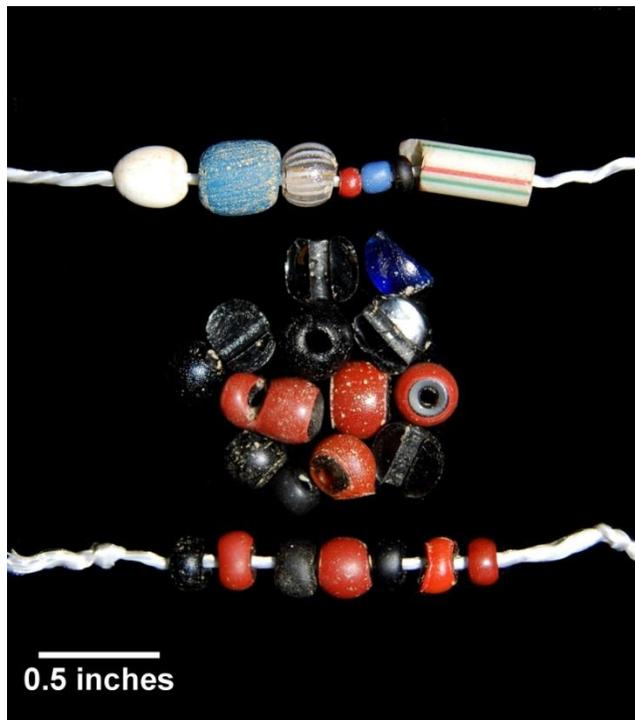
The glass beads recovered from the Windy Knolls I site reveal a preference for black and red colors and for a round, circular, or oval shape (see Figures 78 and 79). Black monochrome beads comprise nearly two-thirds or 61.8 percent (N=153) of the entire dry-screened assemblage. Of these



**Figure 78.** Glass bead types from Windy Knolls I using Kidd and Kidd typology.

large-sized round beads. Together, Cornaline d' Aleppo and opaque black bead types represent almost 95 percent of the glass beads recovered from the dry-screened deposits.

Only five blue glass beads were recovered from the Windy Knolls I excavations, including one large opaque "robin's egg" blue bead (Kidd I1a40) and four translucent cerulean/cobalt blue beads (I1a44). It is characterized by an unstable surface of tiny bubbles that stretch parallel to the perforation



**Figure 79.** Glass beads from test units, Windy Knolls I.

beads, only six are tubular in form; most are round, circular, or oval and the majority are large, or greater than 6 mm in diameter. Only one black seed bead was recovered from the dry-screened test units. A single black bead was recovered that exhibits three white stripes.

The second largest category of glass bead is a red-on-green type, popularly called "Cornaline d' Aleppo," comprising nearly one third or 32 percent of the dry-screened assemblage (N=71) (see Figures 78 and 79). These composite drawn beads consist of two layers: an outer layer of opaque redwood-colored glass and a core of transparent apple green glass.

The core can appear black but on closer examination, all the examples recovered from Windy Knolls I are green. Most are medium- or

large-sized round beads. Together, Cornaline d' Aleppo and opaque black bead types represent almost 95 percent of the glass beads recovered from the dry-screened deposits.

forming thin striations. The bubbles were produced chemically and may have been a design feature either for decoration or to make the glass appear opaque; or they may have been simply accidental and a byproduct of low quality glass material (Francis 2009c:77).

The test units at Windy Knolls I produced two colorless, transparent round beads with 13 white stripes (Kidd Type I1b18). Also known as a "gooseberry" bead, this type has been found in contexts throughout the Middle Atlantic and southeastern U.S. from the late 16<sup>th</sup> through the mid-18<sup>th</sup> centuries (Deagan 1987; Lapham 2001). Given its broad time span, bead shape may be especially significant for dating this type. Early 16<sup>th</sup>-century gooseberries appear to be oval, followed by spherical and, by the 18<sup>th</sup> century, barrel (Smith 1983:150). Both gooseberry examples from Windy Knolls I are round, or spherical.

Only one plain white bead was recovered from the dry-screened contexts at Windy Knolls I, although five came from the

water-screened column samples. Three are oval opaque white beads (Kidd Type IIa15) and three circular opaque white seed beads (Kidd IIa14).

A single opaque white tubular bead with alternating green and red stripes (eight stripes total) was found at Zekiah Fort and matches Kidd and Kidd type Ib9.

Only ten of the 241 beads recovered through dry-screening are seed beads, or under 4 millimeters in diameter. In the case of the water-screened samples, 35 of the 48 recovered beads are of the seed bead variety, it is clear but not surprising that seed beads are under-represented in the dry-screened assemblage. Both black and red on green Cornaline d'Aleppo types predominate among the seed beads, but the numbers are reversed: opaque black beads include eleven specimens while Cornaline d'Aleppo beads include 20 examples. Other seed beads include three opaque white and one opaque pale blue variety.

In four cases, two beads of a similar variety were found fused together, forming bi-lobed beads (see Figure 79). Three of the conjoined examples did not separate completely during the tumbling *a speo* process. The fourth conjoined bead is badly burned and appears to have fallen into a fire, so its shape is not necessarily a product of bead manufacture.

Kidd and Kidd (1970:222) suggest that imperfectly shaped beads are not uncommon on indigenous sites and may indicate a preference for eccentric varieties. But the presence of deformed beads in a predominately "normal-shaped" assemblage does not necessarily suggest that Native consumers were specifically seeking out flawed beads. Bead types resembling those found at Windy Knolls I, some of which have *a speo* deformities, were recovered at a late 17<sup>th</sup>-/18<sup>th</sup>-century West African site known as Juffure (Gijanto 2011). Gijanto suggests the presence of *a speo* flawed beads in the Juffure collection indicates a general preference for *type* over quality. At Juffure, certain bead types appear to have been so popular that many were willing to acquire poorly manufactured versions. This may have been the case at Windy Knolls I.

The Windy Knolls I bead assemblage reveals both similarities and differences with collections recovered from contemporary Native settlements elsewhere in Maryland, including the Posey site (18CH0281), 18PR0248, Heater's Island (18FR0072), and Chicone (18DO0011). Comparative analysis in this case is admittedly problematic: the recovery methods used at Windy Knolls I involved not only test unit excavation but water-screening of column samples, maximizing the size of the assemblage. Water-screening was used at the Posey site, but not at 18PR0248, Heater's Island, or Chicone. Nonetheless, some patterns are evident among these assemblages.

Acknowledging these differences in recovery strategies, glass beads appear to predominate at Windy Knolls I, 18PR0248, and Heater's Island, all sites known to have been occupied by the Piscataway, and at Chicone, a Nanticoke settlement on Maryland's Eastern Shore. In contrast, only four glass beads were recovered from the extensive testing at the Posey site, where water-screening of column and feature samples was, as at Windy Knolls I, also used. Shell beads predominated at Posey, and yet not a single shell bead was recovered from Windy Knolls I. Archaeologists believe that the Posey site was occupied by people who considered themselves Mattawoman. And, although the Mattawoman were connected to the Piscataway, documents suggest that Mattawoman-Piscataway relations were sometimes strained.

At the four sites where glass beads were recovered in quantity (Windy Knolls I, 18PR0248, Heater's Island, and Chicone), simple black and red compound beads dominated the assemblages. Nineteen of the 23 beads recovered from 18PR0248 are black and the remaining four are red-on-green (Vrabel and Cissna n.d.). At Heater's Island, black beads form 35.1 percent of the assemblage from that

site (N=140) and red-on-green beads form 40.6 percent of the assemblage (N=162) (Dennis C. Curry, personal communication, 2011). At Chicone, the Nanticoke town on Maryland's Eastern Shore, 25 of the 42 glass beads recovered there are black (Busby 2010:513).

As at Windy Knolls I, blue beads are rare or absent at these sites. Not a single blue glass bead was reported for 18PR0248 (Vrabel and Cissna n.d.) or Heater's Island, and only one was found at Chicone (Busby 2010:517). Similarly, gooseberry-type beads, rare at Windy Knolls I with only two examples, were absent at 18PR0248, Heater's Island, and Chicone. White glass beads were not recovered from 18PR0248 or Chicone, but 47 round opaque white seed beads (Kidd and Kidd Type IIa13) and three medium-sized white beads were recovered from Heater's Island. At Posey, three of the four glass beads are white (Kidd and Kidd Type IIa13).

The Windy Knolls I bead assemblage is significantly different from those assemblages recovered from sites occupied by colonists. For one, colonial sites in Maryland tend to yield far fewer glass beads in general, although this may be a function of recovery strategy. Extensive excavations at the St. John's site, in St. Mary's City, however, have only yielded just over 300 glass beads, and fully half of those that have been reported are of the robin's egg blue Kidd Type IIa40.<sup>19</sup> These beads may have been used at St. John's for the personal adornment of the site's occupants and not for trade with Natives, at least not with the Piscataway. Further, St. John's was occupied throughout the 17<sup>th</sup> century (1638-1715), while Windy Knolls I was only occupied from 1680 through the early to mid 1690s. It should be noted, however, that blue beads were recovered from the Ferguson Ossuary/Piscataway Fort site (18PR0042) on Upper Piscataway Creek, where they were described as the "most abundant trade object" (Ferguson 1940:11; Curry 1999:29-30).

Inferring trade or other connections between the people living at the various sites or settlements considered here must be approached cautiously. The historical record leaves little doubt that all of these groups were in some form of contact in one way or another, but how that contact or interaction manifested in the material record is often unclear. For example, the people at Windy Knolls I from 1680 until the mid-1690s and the people at Heater's Island from 1699 until 1712 were the same group: the Piscataway as an organized nation, yet the distributions of glass bead types at the two sites are different, albeit not radically so. This difference may be linked to chronological variation, factors external to the Piscataway, or changes within Piscataway social or cultural practices. Windy Knolls I, 18PR0248, and Heater's Island, with their preponderances of black and red beads, may be alike because of their Piscataway affiliations. These sites seem to resemble the distribution of beads Busby (2010:35) identified for Chicone, and documents (including an "oral history" of Piscataway tayac succession; Md. Archives 3:402-403) suggest important social and cultural connections between the Piscataway and the Nanticoke who lived at Chicone, connections persisting well into the 18<sup>th</sup> century and probably later. That said, the Posey bead assemblage, occupied by people also connected to the Piscataway, looks nothing like Windy Knolls I, 18PR0248, or Heater's Island. While it is the case that the Mattawoman had a vacillating relationship with the Piscataway (Clark and Rountree 1993:115), the stark differences between the two sites is striking.

The complete absence of shell beads from the Windy Knolls I site, especially given the recovery strategies, is puzzling. Documents place shell beads or wampum at Zekiah Fort on at least one occasion when, in 1681, Captain Randolph Brandt reported to Lord Baltimore that the Seneca were treating with the Piscataway at Zekiah Fort and that "much Peake was given by our Indians [Piscataway] to them and

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<sup>19</sup> These counts are based on data reported in Miller, Pogue, and Smolek (1983) and on information provided by Historic St. Mary's City Laboratory Director Silas Hurry about subsequent excavations at St. John's.

by them [northern Indians] recd” (Md. Archives 15:353). It is possible that shell beads were more valued than glass beads and would therefore be rare in the archaeological record (White 1847:22; see also Miller, Pogue, and Smolek 1983). Still, the quantity of shell beads recovered from the Posey site indicates that shell beads, if present, would have been readily recoverable through both dry- and water-screening.

As in all cultures, color and color symbolism was an important element in Native life. Studies of color symbolism in both Iroquois and Algonquian cultures have revealed the ways in which indigenous groups used and experienced color and its meanings for both ceremonial and daily life (Miller and Hamell 1983; Hamell 1992; Williamson 2007:247-254; Zawadzka 2011). Black, red, and white were core cultural colors that dominated the ceremonial lives of Algonquian- and Iroquois-speaking groups. The glass bead assemblages with their uneven distributions of color found at early colonial settlements, including at Windy Knolls I, may reflect the material expression of color symbolism.

Christopher Miller and George Hamell (1986:325) suggest that white was associated with aspects of life and knowledge; black with the absence of either cognition or animacy, or both, including death or mourning; and red with the emotional aspect of life that mediated between white and black. In her study of the Powhatan, anthropologist Margaret Williamson (2007:247-248) stressed the significance of color combinations, especially white and red, and black and red. Williamson found that in battle and ritual, black was more often combined with red than it was with white. For occasions involving governance, red and white were the dominant color combination. Black represented permanence and authority while white was a signal of peace, change, action and power. Red was ambiguous and could take on its meaning from the colors around it.

While no systematic research has yet been undertaken to address the color symbolism among the Piscataway or affiliated groups, both documents and archaeological evidence suggest a preference for black, red, and white. The Piscataway valued the symbolic and ritual use of white shell beads to treat with other Nations for peace (Md. Archives 15:353), maintain existing relations (Md. Archives 15:241), and incite war (Md. Archives 17:7; 15:418). A black or red sign could be used to signify the wrongful death of an individual. Mattagund, speaking on behalf of the Anacostians, Doegs, and Patuxents during the negotiation of a treaty with the English, asked that, “if an Indian kill an English [man] let him be delivered up but let it be Charactered so that the Indians may know it by a black or red sign” (Md. Archives 2:15). When asked by the Lower House of the Assembly to clarify what the meaning or purpose of the “Black & Red signe was,” the Upper House responded

The meaning of the Indians touching the Black or Red signe signifying Death or Iniury, was tht they did desire[,] That as the English haue Lawes written wch they understood, Soe uppon the Agreements now to bee made[,] They doe desyre That they may have a Stick or some such thing marked wth a black Character, wch they may shew to their people, & tell them, That that signifies, that there is a Law made by Agreemt, That whosoeur shall from henceforth kill a man, shall dye for it. And soe for other agreemts eyther wth Red or white Characters (Md. Archives 2:71-72).

The color symbolism embodied by the “Death or Iniury” stick with its black mark underscores the importance of color among the Maryland Indian nations. Black, red, and white were colors of obvious importance to the Piscataway, and the predominance of black and red glass beads at the Windy Knolls I site may indicate how these objects were used to communicate matters of serious import to Piscataway people.

## *Glass Buttons*

Two black glass buttons were recovered from the test units at Zekiah Fort, one of which retains an iron wire ringlet, or shank (Figure 80). Black glass buttons were most prevalent during the early to mid-17<sup>th</sup> century, diminishing through the last half but still appearing in small numbers (Baart 1987:6-7; Bradley 1987:159). Although they were sometimes called ‘Jesuit’ or ‘cassock’ buttons, in New York, black glass buttons are often a Dutch trade item and were used primarily as ornaments rather than as fasteners (James Bradley, personal communication, October 2011).



**Figure 80.** Glass buttons from test units, Windy Knolls I (left: Lot 245; right: Lot 243).

Five black glass buttons with metal shanks were recovered from Posey, with one of these buttons having a white star painted on its upper surface (Harmon 1999:142). A similar button decorated with the same star design was recovered from Burle’s Town Land site (18AN0826) in Anne Arundel County (Luckenbach 1995:8, 14-15). No

glass buttons, black or otherwise, were recovered from 18PR0248, Heater’s Island, or Chicone, although sample size may be an issue.

Twelve black glass buttons were recovered in an Occaneechi burial at the Fredricks site in North Carolina. Many of the buttons still had an iron wire eyelet and all measured between 11.6 mm and 14 mm in diameter. Ten of the buttons were found around the neck of the interred. Given their context at the Fredricks site, archaeologists believe they were either strung on a necklace, used as ornaments sewn onto Indian fabric, or served as a fastener on European clothing (Davis et al. 1998).

Black glass buttons were an outdated style by European standards around the mid-17<sup>th</sup> century. It appears however, at least at Windy Knolls I and at Fredricks, these ornaments were desired and acquired by the resident Natives. The wire shanks may have made them desirable for particular purposes.

## *Copper Artifacts*

Native Americans had exploited indigenous sources of copper long before the arrival of colonists, who provided a ready supply of European copper and brass. Documentary and archaeological evidence suggests that, during late prehistory and early contact, copper was an indicator of high social status. The metal, because of its metaphysical association and its relative rarity in the Chesapeake (Miller and Hamell 1986:325; Potter 2006:218), “both reflected and created status. There was no material good in Algonquin society that was superior...in value to copper” (Mallios and Emmett 2004:1). Large copper gorgets and rolled copper beads are often found in high-status protohistoric burials in the Chesapeake, their value as badges of prestige confirmed by ethnohistorical accounts (Potter 2006; Potter 1993:217-219). Numerous accounts of early colonial explorers suggest that the Chesapeake Natives were generally covetous of copper and brass trade goods.

Scholarship has also suggested that Powhatan attempted to control the supply of prestige goods, including copper and shell beads, to affirm his position and reinforce social stratification within his Virginia chiefdom (Potter 2006). When European colonists realized the value of copper to Chesapeake Natives, supply increased dramatically, upsetting social monopolies on the metal and perhaps serving to devalue it (Potter 2006; Mallios and Emmett 2004). Consequently, Potter (1993:209) argues that copper appears in the archaeological record more frequently on later Contact-period sites in this region, no longer

just in the form of status symbols, but also as utilitarian objects and discarded scrap. The ready supply of copper served to undermine the power of Powhatan and, by implication, all Algonquian chiefs who used their control of prestige items like copper to maintain power.

The excavations at Zekiah Fort produced a total of 65 copper alloy artifacts from the dry-screened test units (Table 19; Figure 81). Of these, the overwhelming majority consist of scrap material, some of which displayed evidence of use by folding, rolling, etc. This scrap material was likely used in the production of items such as triangular projectile points or tinkling cones, examples of which were recovered from the site, including four brass triangles and one tinkling cone. In addition, three U-shaped brass staples or staple fragments were recovered, with one fragment bearing cut marks. A single round, domed button was recovered, as were several round upholstery tacks. A thin, solid copper or brass cylinder was also found, although this object is believed to be a modern central electrode to a spark plug.

	Count	Percent
Point	4	6.2
Tinkling cone	1	1.5
Round button	1	1.5
Upholstery tack	5	7.7
Staple	3	4.6
Scrap	50	76.9
Cylinder (modern)	1	1.5
<b>Total</b>	<b>65</b>	

**Table 19.** Copper alloy artifacts from dry-screened test units, Windy Knolls I.

Copper scrap pieces offer important insight into Piscataway activities at Zekiah Fort. This material can be organized into a few categories, including formal objects (including triangles and tinkling cones), utilized scrap (including copper pieces which show evidence of folding, rolling, etc.), and non-utilized scrap (often flat, discarded pieces of sheet copper). The high proportion of discarded scrap may support Potter’s assertion regarding the devaluation of the spiritual and prestige value of copper by the second half of the 17<sup>th</sup> century. Other evidence, however, may indicate the opposite: although much more copper was recovered from Windy Knolls I than from earlier settlements occupied by Native people, copper

artifacts at Windy Knolls I were only found on the knoll top in association with other prestige-type goods. We explore the application of Potter’s (1993:209) interpretation for the role of copper in post-Contact Powhatan society to the Piscataway situation in our conclusion.



**Figure 81.** Copper alloy artifacts from test units, Windy Knolls I; top row, l-r: tinkling cone (Lot 237); perforated triangle fragment (Lot 258); perforated triangle (Lot 244); perforated triangle, bent (Lot 234); bottom row, l-r: tack (lot 255), triangle fragment, no perforation (Lot 254); scrap (Lot 258); rivet, possibly from a kettle (Lot 247).

Interestingly, less than ten percent of the copper alloy scrap recovered from the Windy Knolls I site is in the form of a recognizable object, in contrast with the Posey and Heater’s Island sites. A number of pieces of “utilized” or worked scrap, however, may indicate that the Piscataway were experimenting with ways to employ sheet copper and cut-up brass kettles. For example, a riveted piece of scrap was recovered from the site (see Figure 81). While this may be an unusable kettle scrap, the rivet appears to be a thin, rectangular scrap (a possible staple) folded in half, punched through the copper alloy sheet, and clinched. Two similar examples of smaller, long-but-thin diamond-shaped scraps folded over themselves may be rivets intended to join sheets of copper. Bradley (1987:133) notes that there is evidence of Onondaga

Lot	Height		Base		Thickness		Perforation diameter	
	<i>inches</i>	<i>mm</i>	<i>inches</i>	<i>mm</i>	<i>inches</i>	<i>mm</i>	<i>inches</i>	<i>mm</i>
234	0.896	22.77	0.418	10.62	0.018	0.46	0.113	2.87
244	0.698	17.75	0.598	15.19	0.031	0.79	0.059	1.51
254	0.882	22.42	–	–	0.014	0.36	–	–
258	0.656	16.67	–	–	0.017	0.45	0.094	2.38

Table 20. Copper alloy triangle measurements, Windy Knolls I.

“experimentation with joining pieces of copper through the use of rolled ‘laces’ and possibly simple rivets.”

The four triangles recovered from the site range in (base-to-tip) height from 16.7 to 22.8 mm, averaging 19.9 mm (Table 20). This average is slightly smaller than the 26 measurable triangles from the Heater’s Island site (1699-1712), which average 25.4 mm in height. Predictably, the two triangles from Windy Knolls I with measurable bases also have a smaller average width (12.9 mm) than those from Heater’s Island (15.6 mm), although this is a very small sample size (Curry, n.d.).

All specimens were made from a relatively thin-gauge sheet metal, averaging about a half-millimeter in thickness, and all are isosceles in shape. Three of the four had roughly centralized perforations which were likely drilled or punched through the metal with an awl or similar implement. Curry (n.d.) notes that most of the perforated Heater’s Island triangles appear to have been drilled, although a few display a burred edge around the hole on one side, characteristic of punching. Only one of the Windy Knolls I examples displays this burred edge, suggesting the other two were drilled. Additionally, one of the perforated points is folded twice, once at the tip and again at the perforation. The folds are at such an angle that a profile view of the artifact is triangular in outline.

It is possible that European brass kettles served as the raw material for the triangles and cones from Windy Knolls I, as kettle bodies were often less than a millimeter thick (Bradley 1987:197). This is consistent with much of the copper alloy recovered from the site. Archaeologists believe that, throughout the 17<sup>th</sup> century, Natives in the northeast and mid-Atlantic cut up brass kettles to make tools and ornaments (Potter 1993:209; Bradley 1987:130-5). Others have argued, however, that this was not just an Indian practice. At Fort Pentagoet (1635-1654) in Maine, Englishmen were cutting up brass kettles to make expedient tools for their own purposes and for manufacturing items such as tinkling cones to trade with the Natives (Faulkner 1986:86-90). Whatever the source of such implements, the presence of significant amounts of Native pottery at Windy Knolls I would have rendered brass kettles in their traditional role as cooking vessels unnecessary.

Similar brass triangles were recovered from the Posey site and were believed to have been incorporated as ornaments for clothing or, if un-perforated, as an intermediary step in the production of tinkling cones (Harmon 1999:113-115). While some of these triangles may have been used for decorative purposes, multiple lines of evidence also point to their use as arrow points. A number of historical accounts make reference to Native Americans using brass as projectile points. For instance, Captain John Underhill reported Connecticut Natives cutting arrow points from brass kettles during the Pequot War in 1637 (Orr 1897:69). Some depositions before the Maryland Council in 1742 also claim that the Eastern Shore Indians were stockpiling guns and “a large Quantity of poisoned Arrows pointed with Brass” (Md. Archives 28:260, 265). Archaeological work has also produced a number of brass triangles from several sites which retain remnants of their hafting to a wooden arrow shaft or foreshaft preserved through

contact with the copper. Several of these hafted triangles have been recovered from Susquehannock sites in the lower Susquehanna River valley, a Delaware Indian site in Croton, New York, and a number of other sites in the northeast (Curry n.d.; Veit and Bello 2001:49-50). Perforated points were lashed to the arrow shaft with either plant fibers or animal sinew, while unperforated triangles may have been held in the split shaft with a native-made glue or a cord/sinew wrapping around the shaft just below the base of the triangle, creating a “vice grip of the split shaft on the point” (Kent 1984:190-193).



**Figure 82.** Perforated iron triangle from test unit, Windy Knolls I (Lot 245).

A perforated, triangular iron object was also recovered from the Zekiah Fort site (Figure 82). Although somewhat larger than the brass points, this too may have served as a projectile point. While the iron point may have been too heavy to effectively tip an arrow, it may have served as a spear point. Indeed, the 1642 Jesuit letter relates a story of an Anacostan Indian being ambushed by a group of Susquehannock, who “with a strong and light spear of locust wood...with an oblong iron point, pierced him through from the right side to the left...with a wound two fingers broad at each side” (Hall 1910:138). Two iron projectile points, including one triangular and one conical, were also recovered from the Posey site (Potter 1993:205). The use of iron as a material for making projectile points suggests that various metal types were employed for such purposes.

Archaeological evidence indicates that, in some regions, metal points may have begun to replace stone points through the 17<sup>th</sup> century. Archaeologist Barry Kent provided estimated brass-to-stone point ratios for 17<sup>th</sup>-century Susquehannock Indian sites in Pennsylvania. Brass points began to appear in very low numbers during the Washington Boro phase (1600-1625) of Susquehannock culture history, with a ratio of about one for every 200 stone points. By the Strickler phase (1645-1665), the brass-to-stone ratio was about 1:1, with isosceles brass points most common. At sites of the Leibhart phase (1665-1680), Kent found, that brass points outnumbered those of stone by about 2:1 with unperforated points predominating, although by Conestoga (1690-1763), perforated points were the norm (Kent 1984:18, 191-192).

Based on the very limited archaeological evidence available, the Piscataway may have followed a similar trend during the 17<sup>th</sup> century of replacing stone arrow points with those of copper. Four brass points were recovered from the Windy Knolls I site along with a single quartz triangular point. Although this is a very small sample, it could suggest a preference for brass points, although the relative dearth of points, brass and stone, when compared to the presence of flint and shot at the site may be indicative of a preference for guns. The supplanting of stone points by brass among the Piscataway, however, is further evidenced by the data from Heater’s Island. Curry (n.d.) reports that, while 35 brass points were recovered from Heater’s Island, only ten stone points were found, ranging in date from Late Archaic to Late Woodland. Of these ten, only three Madison-type points are possibly associated with the Piscataway occupation from 1699 to 1712, although Curry (n.d.) believes that they more likely represent earlier (pre-Piscataway fort) activity on the island. With brass-to-stone point ratios of 4:1 at Windy Knolls I and 35:3 or 35:0 at Heater’s Island, it seems safe to say that, by the latter part of the 17<sup>th</sup>-century, brass was the preferred material for projectile points. The reasoning behind this preference, be it convenience, functionality, effectiveness, etc., remains open to interpretation.

Bearing in mind the small sample size of four, the brass points from Windy Knolls I may also imply standardization of the isosceles triangle form by the time the fort was occupied. In his study of

brass points found at settlements occupied by the Onondaga Iroquois, James Bradley found that,

Early in the [17<sup>th</sup>] century, there seems to have been little uniformity and perhaps some experimentation with shapes. Stemmed, barbed, and even pentagonal-shaped points were made along with triangular ones. By the second quarter of the [17<sup>th</sup>] century, however, copper points were almost exclusively made in an isosceles triangular form and remained that way for the rest of the century (Bradley 1987:134).

The exceptions, Bradley notes, are rolled conical brass points which persisted throughout the century as a minority form. Kent, too, notes that pentagonal points have been found on Susquehannock sites and a “tanged, somewhat bifurcate-base brass point” was found at Washington Boro (1600-1625). However, by the Stickler (1645-1665) and Leibhart (1665-1680) phases, isosceles triangles predominated. At Conestoga (1690-1763), isosceles triangles were also the norm, although they tended to be closer to equilateral than those of Strickler and Leibhart (Kent 1984:191-192). It seems, based on these studies of Onondaga and Susquehannock culture history and change, that the advent of the brass point was marked by a period of experimentation with various shapes. This was then followed by a general standardization of the isosceles form.

If this model is applied to southern Maryland, we may look first to the Posey site, believed to date c. 1650-1680. Excavations at Posey produced a two-layer (folded) point with “a deep basal notch terminating in a round perforation near the center” (Harmon 1999:113) as well as a small, equilateral point and several common isosceles forms. The two unusual examples may suggest some experimentation of point form at Posey before subsequent standardization of the isosceles form by the time Windy Knolls I (1680-c.1695) and then Heater’s Island (1699-1712) were occupied. A necessary caveat is that Posey is located in what is believed to have been Mattawoman territory and, as such, may not be directly comparable to Piscataway sites despite geographic proximity and historically documented interaction between the groups. Enough archaeological evidence does not yet exist to construct a model of material culture history for the Piscataway proper as has been done for the Onondaga or Susquehannock, and caution should be used in generalizing between the Piscataway and nearby groups, no matter the probable similarity in material culture. For example, archaeologists have found that brass points in coastal southern New England are generally isosceles or concave-base triangles, while those from sites of enemy groups in the middle Connecticut Valley are typically rolled, conical points (McBride 2011, personal communication).

Brass points, similar in shape to those recovered from Posey, Windy Knolls I, and Heater’s Island, have also been recovered on Maryland’s Eastern Shore. An eroding feature discovered at site 18TA0218 on the east side of Poplar Island in Talbot County produced two isosceles points cut from brass. Also recovered from this feature were three chert triangular points, a serrated jasper triangular point, a piece of North Italian slipware, and a medallion from a Rhenish brown stoneware bellarmine. Just offshore of the eroding feature, another sherd of North Italian slipware was discovered, as was a late-16<sup>th</sup>/early-17<sup>th</sup> century Spanish costrel. The feature is believed to date to the 1630s (Lowery 1995:60-62) although, based on the types of artifacts reported, it could date as late as c. 1650-1660.

Despite the generally standard isosceles shape of brass points distributed over a wide geographic area, from both sides of the Chesapeake Bay and as far north as New York, these objects have not shown up in the archaeological record across the Potomac River in Virginia. At the Camden site (44CE0003; c. 1650-1690) on the south bank of the Rappahannock River, no brass points were recovered, despite the presence of scrap and other ornaments and the possibility that at least some of the people living at

Camden had come from Maryland. A glass triangular point found at the site attests to manufacture of points from European materials, but it does not appear that the site's inhabitants were using brass for this purpose (MacCord 1969).

Although data is far too limited at this point to develop a chronology for the use of brass points by Maryland Indians, the presence of unusual point forms at Posey combined with relatively consistent forms of isosceles triangles at later sites like Windy Knolls I and Heater's Island suggests that Southern Maryland Indian groups, including the Piscataway, may have gone through similar phases of experimentation and standardization of brass point form as did the Onondaga and Susquehannock to their north. Further archaeological investigation is needed, however, to confirm this.

In a broader sense, what does the presence of brass points at Windy Knolls I tell us about the Piscataway living there in the 1680s? From the few English accounts of actual battle at Zekiah Fort, it seems that the Piscataway relied heavily on guns. In August 1681, they "fired several volleys" at some hostile Indians in their corn around the fort and told Captain Brandt afterward that they needed more arms and ammunition (Md. Archives 15:408-409). Later that month, two Iroquoian Indians asked Lord Baltimore to take back from the Piscataway the "40 Gunns [he had lent them] to hunt withall w<sup>ch</sup> they now vse in the warr" (Md. Archives 17:4). In late August 1681, Captain Brandt also reported hearing "a greate many Gunns shott in the night" while staying at Zekiah House, near the fort (Md. Archives 17:15). It seems that the Piscataway preferred to fight using European firearms.

The traditional bow and arrow was not altogether abandoned, however, even though the Piscataway great men complained to the Maryland Council in 1679 that, if they were not provided with lead shot and powder (implying they already had guns), then "they must be forced to fall to makeing of Bows and arrows wherein for want of practice they have not that experience as formerly and soe consequently must inevitably Suffer" (Md. Archives 15:242). Some archaeological evidence suggests that Native stone knapping abilities did deteriorate after the introduction of European firearms. At the Contact-period component of the Little Marsh Creek site in Virginia (in traditional Doeg territory), several "crudely made" triangular stone points were recovered along with a few Native-made gunflints (Potter 1993:204-205). The brass points from Windy Knolls I suggest that if the Piscataway had forgotten how to make stone arrow points (debatable given that a well-made triangular quartz point was recovered from the site), they had certainly not abandoned the bow and arrow, adapting instead to a new material.

In 1692, a Choptico Indian reportedly shot some horses and several sheep using "Indian Arrow[s]." The accused Indian, "Tom," was seen with a bow and arrow shortly after the events (Md. Archives 13:259). While guns may have been used as the primary weapon in warfare, traditional bow and arrow usage may have continued in hunting (although there are several references of Indians hunting with guns). Given the necessity of obtaining flints, powder, and shot for the gun to function and the sometimes unpredictable supply of these things, perhaps the Piscataway found it prudent to perpetuate bow-hunting technology. In any case, the presence of brass points at Windy Knolls I and subsequent Piscataway sites clearly refute the notion that the introduction of the European firearm resulted in the wholesale abandonment of traditional bow and arrow technology.

Five brass tacks were also recovered from the Windy Knolls I site. These tacks were commonly found in use on European furniture and horse saddles (Maryland Archaeological Conservation Laboratory 2003). At Windy Knolls I, the tacks may have been repurposed by the Natives as decorative implements. There are several examples of 19<sup>th</sup>-century Plains Indians decorating clothing and belts (Koch 1977) as well as gunstocks with similar implements. It is possible that 17<sup>th</sup>-century eastern tribes may have used brass tacks in similar fashion. Mr. Rico Newman of the Piscataway-Conoy Tribe of Maryland observed

that brass tacks have been used by Native Americans to adorn war clubs. It is difficult to say with certainty how the Piscataway at Windy Knolls I would have used these tacks, but the evidence suggests a generalized function in ornamentation of clothing and other personal objects or weaponry. The tacks were likely acquired either through trade with colonists or obtained from the horse saddles of rangers who visited the fort.

*X-Ray Fluorescence.* The four copper triangles, one cone, and ten scrap samples recovered from the Windy Knolls I site were submitted to Dr. Randy Larsen in the Department of Chemistry at St. Mary's College of Maryland for X-ray fluorescence (XRF) testing. This process was used to determine whether these artifacts are pure copper (and therefore American) or a copper alloy (and therefore European). As archaeologist Laura Galke (2004:100) noted, limited testing of two tinkling cones and a single triangle from the Posey site (18CH0281) showed that the two cones were made from a copper-zinc alloy (brass) "necessarily derived" from European sources, but the single triangle tested consisted of pure copper which may have been obtained from either European *or* American sources.

While the artifacts recovered from the Windy Knolls I site were presumed to be brass obtained through trade with Europeans, XRF analysis was performed to test this assumption. As a basis for comparison, three samples of native copper sourced from locations around the Great Lakes region were also used (one sample was provided by the Maryland Archaeological Conservation Laboratory and two others were in the possession of one of the authors). Two additional pieces of copper scrap recovered from other archaeological sites in the Zekiah/Wicomico drainage were also tested for comparison. One came from Fair Fountain (18CH004), a 17<sup>th</sup>-century English tenant household near the junction of Kerrick Run and the Zekiah, and the other from the Fendall site (18CH805), the plantation of 17<sup>th</sup>-century governor Josias Fendall located on Charleston Creek on the Wicomico (Strickland and King 2011). It should be noted that the artifacts were tested prior to conservation treatment, and so corrosion may have been responsible for some variability in results. However, the goal of testing was simply to determine whether the composition of the artifacts was pure copper or an alloy.

Bearing in mind that the artifacts had not undergone conservation treatment prior to testing, we can draw only very general conclusions from the results. XRF analysis revealed that the samples from Windy Knolls are, indeed, a copper alloy. All of the triangles and scrap tested showed the presence of zinc in levels ranging from 2.435 to 8.618 percent, as well as varying levels of other elements indicative of an alloyed metal, probably a low-zinc brass. This means that the copper alloy artifacts from Windy Knolls I were obtained from European sources and are not native copper. The scrap sample from the Fair Fountain site also appear to be of similar composition to much of the scrap from the fort, while the scrap from the Fendall site appeared to have a slightly higher zinc content than both the Windy Knolls I and Fair Fountain samples.

### ***Lead Artifacts***

A total of sixty-one lead, pewter, or lead alloy artifacts were recovered from the Windy Knolls I site, including 48 from dry-screened test units and thirteen from water-screened column samples. Among these artifacts were thirty-one pieces of lead shot, including 19 from test units and twelve from water-screened samples. Lead ammunition recovered from the site consisted solely of buckshot and birdshot; no larger musket balls were recovered.

Twenty-five pieces of shot had measurable diameters while the other six were modified or fragmented in some way, preventing measurement (Figure 83). Shot recovered from the dry-screened



**Figure 83.** Lead shot from test units, Windy Knolls I.

plow zone contexts averaged 0.324 inches (8.23 mm) in diameter, while water-screened samples included many more bird shot, averaging 0.175 inches (4.46 mm) in diameter.

According to Hamilton (1980:130), the diameters of lead shot recovered from Fort Albany, a post of the Hudson's Bay Company occupied from 1676 until 1720, clustered in the ranges of 0.29 to 0.30 inches and 0.36 to 0.38 inches. Comparing these measurements

(accounting for windage) to bore sizes of arms typical of the period, archaeologists believe that the English pistol and English carbine were the most popular firearms at Fort Albany (Hamilton 1980:130). Lead shot would likely have been used with these firearms.

Measurable shot from Windy Knolls I clustered into similar groups of 0.29 to 0.34 inches and 0.36 to 0.38 inches (rounding to the nearest hundredth). However, a small cluster of bird shot ranging in size from 0.20 to 0.23 inches was also recovered, as were two shot even smaller than this. Because no musket balls were recovered from the site, it is not possible to approximate the bore size of the firearms being used. Nonetheless, documentary evidence suggests that the Piscataway at Zekiah were provided with muskets by the English. On 16 April 1681, Lord Baltimore ordered that Captain Brandt return twelve muskets he had recently received from the Mattawoman back to the group to aid them in their defense (Md. Archives 15:336). Although the Mattawoman had not joined the Piscataway at Zekiah, Lord Baltimore was supplying the latter arms as well and it is likely that the Piscataway, too, were provided with muskets. Judging from Captain Brandt's June 1681 letter, it seems that the rangers were using English carbines while patrolling Charles County's frontier (Md. Archives 15:382). It is possible that the Piscataway had acquired and were using English carbines as well. Regardless of the guns being used, Lord Baltimore and the Maryland government made provision on several occasions to supply the Piscataway with powder and shot (Md. Archives 15:330; 7:269, 290).

The shot recovered from the Windy Knolls I site can be classified into a few different types based on method of manufacture. Most commonly, shot was cast in a mold, a relatively common method of manufacture in the 17<sup>th</sup> century. Twelve of the twenty-five measurable shot were cast. Cast shot is recognizable based on the presence of a mold seam and, often, a sprue nib (Hamilton 1980:128; Faulkner 1986:84). Interestingly, cast shot generally comprised the larger examples, averaging 0.314 inches in diameter, greater than the 0.275 inch average for all shot recovered at Zekiah. Unsurprisingly, this group of shot clustered more neatly based on diameter than other types of shot, given the relative standardization of size provided by a mold.

Rupert shot was also present in the shot assemblage from the site, albeit in smaller numbers than cast shot. The method of manufacture for Rupert shot was first outlined in a 1665 article by Prince Rupert entitled *To make small shot of different sizes communicated by his Highness PR*. The article describes a method of dropping heated lead through a brass colander into a bucket of water, producing shot characterized by a small dimple on one side (Hamilton 1980:132; Faulkner 1986:84; Dewhurst 1963:371-372). At least five shot from the Windy Knolls I site possess the dimple characterizing Rupert shot. These examples are bird shot, with an average diameter of 0.190 inches, although four of them cluster between 0.198 and 0.213 inches with a single smaller outlier of 0.131 inches.

In addition to cast and Rupert shot, an additional eight shot with measurable diameters were of indeterminate manufacture. Many of these pieces had roughly graded or pitted surfaces and lacked either

the mold seam and sprue nib characteristic of cast shot or the typical Rupert dimple. These examples are also more roughly spherical than their cast or Rupert counterparts and may represent expedient shot made either by the Piscataway, rangers, or colonists on the Maryland frontier. Hamilton (1980:130) notes, that on the frontier, “men...shot what was at hand...and rammed down the barrels anything which they could get in the bore.” He further described various processes of tumbling or chewing spare lead to a roughly rounded shape to produce improvised shot (Hamilton 1980:132). This shot of indeterminate make also varied more widely in size than cast or Rupert shot, averaging 0.270 inches in diameter with a range of 0.156 to 0.338 inch.

A few examples of lead shot appear to have been worked or altered in different ways. Two pieces of shot, for instance, have V-shaped cuts. The function of these objects is unclear, but they may have functioned as net sinkers. Additionally, another piece of shot was compressed and partially flattened.



**Figure 84.** Possible lead net-sinker from test units Windy Knolls I (Lot 245).

Another lead object appears to be a bead or cylindrical net-sinker made of rolled lead (Figure 84). This object, along with altered shot and the numerous unidentified fragments of lead or lead alloy suggest experimentation with this material in crafting Native objects.



**Figure 85.** Possible lead cross fragment from test units Windy Knolls I (Lot 247).

One artifact of particular interest is what appears to be the detached arm of a lead, tau-style cross (Figure 85). The object’s shape can best be described as approximating a whale’s tail with slightly raised edges outlining one side (except the edge which would have attached to the rest of the cross). It appears to have been purposefully and carefully detached from the central part of the cross.

European religious artifacts are not unusual on Native sites in the mid-Atlantic; a Jesuit ring was recovered at Heater’s Island and nine religious medals and several copper crosses were found at Conoy Town (Kent 1984:286). Documentary evidence attests to the extensive interaction and material exchange between Jesuit missionaries and the Maryland Natives, including the Piscataway, during the 17<sup>th</sup> century. The presence of religious materials on Native American archaeological sites, however, is not necessarily evidence of an indigenous embrace of Christianity. Instead, the Piscataway and others used European religious objects in decidedly Native ways. For instance, the 1640 Jesuit Letter recounted the story of a Maryland Indian (presumably Piscataway) who obtained prayer beads from a Jesuit priest, but “having changed his mind” about Christianity, was known to grind them up and smoke them in his pipe with tobacco, claiming he was “eating up his ‘Ave Marias’” (Hall 1910:134).

Likewise, the presence of a lead cross fragment at Zekiah does not necessarily indicate Piscataway acceptance of European religious values. Because the item appears to have been purposely detached from the rest of the cross, it likely served a Native function. The rest of the lead cross may have been used as raw material to create shot, net sinkers, or other objects. Interestingly, the cross fragment recovered at Zekiah is rather similar in shape to a number of pendants of catlinite, shell, and other materials recovered from Indian sites in the Susquehanna Valley, including the Conoy Cemetery site (see Figures 38, 39, 112 in Kent 1984:168, 173, 404, and respectively). Unlike the cross fragment from

Zekiah, however, many of these pendants are latitudinally or longitudinally drilled. Nonetheless, the similarity in shape is intriguing and may have had some significance, though much more research is necessary to test this hypothesis.

In addition, twenty-two unidentified fragments of lead or lead alloy were recovered from test units, and another single example from water screening. Among these artifacts were examples which showed evidence of having been folded, melted, and cut. This suggests experimentation and utilization of lead and lead alloys for Native purposes at Windy Knolls I. Similar working of lead into objects of indigenous use was noted by Bradley (1987:153) on 17<sup>th</sup>-century Onondaga sites in New York. A single pewter object, bent at a nearly 90-degree angle and believed to be a handle of some sort, was also recovered from the site.

### *Silver Artifact*

One of the most unusual artifacts recovered from Windy Knolls I is a silver scabbard hook (Figure 86). Scabbard hooks were used to fasten a scabbard, or sheath (typically leather) for the blade of a sword or bayonet, to a sword belt. These objects are not uncommon on archaeological sites in the Chesapeake, with at least two known from Maryland. Examples include one from the Old Chapel Field site (18ST0386; c. 1636-1660) at St. Inigoes Manor and one from the Burle's Town Land site (18AN0826; c. 1650-1680s) in Anne Arundel County. Both specimens, however, are copper alloy or brass. Silver scabbard hooks appear to be relatively rare, at least archaeologically.



**Figure 86.** Silver scabbard hook from test unit, Windy Knolls I (Lot 242).

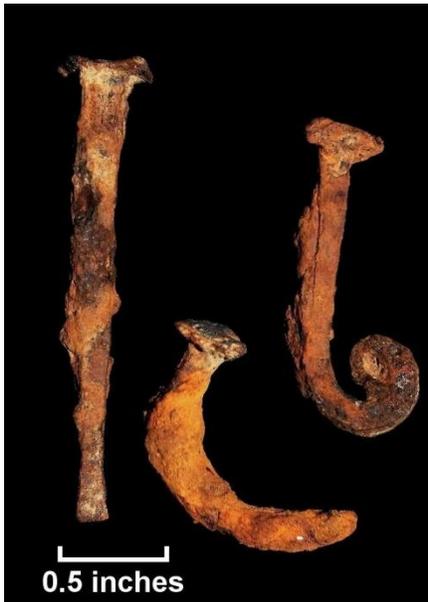
The Windy Knolls I scabbard hook is slightly less than 1.75 inches in length with an elaborate Baroque design. At the top is a molded grotesque-like face with some kind of hair or head treatment. The face is not bearded. The length of the hook is well formed and decorated, with the initials of the maker – either a conjoined “AB” or “HB” (probably the former) – prominently displayed at the hook’s end. Who “AB” (or “HB”) was remains unknown, although there are suggestions that the maker was a silversmith in Salisbury in the 17<sup>th</sup> century. The Windy Knolls I artifact has been shown to a number of curators on both sides of the Atlantic, with most confirming a mid- to late 17<sup>th</sup>-century date based on the style, but none have seen a comparable example. At best, the scabbard hook was probably produced for a gentleman, or someone who could have afforded in silver what most people had in brass.

A scabbard hook of this type would be unusual at a contemporary colonial site, and its presence at Windy Knolls I is puzzling. The hook could have been lost by any one of Baltimore’s rangers who are known to have visited the settlement throughout 1680 and 1681 and were, for brief period, quartered there. It is also possible that the hook was not lost but had come into the possession of one of the fortified settlement’s residents. While Natives most often wanted firearms, in 1680, an unspecified “Indian” attacking a plantation in Baltimore County “left a gunn and a sword, and a Bow and arrowes, and a matchcoate” when the planter and his brother fended off the attack (Md. Archives 15:293). It is also possible that the hook, which was broken when it was recovered, may have been exchanged in its broken condition with a Native resident at the settlement. Porter (2006) has previously suggested that Rhenish brown stoneware jugs, with their facial masks, may have had a different meaning and use for Native groups in the Potomac River drainage.

## *Iron Artifacts*

A total of 629 iron artifacts were recovered from the test units at the Windy Knolls I site, including 527 from dry-screened deposits, and 102 from the water-screened column samples. This count includes some modern materials (e.g., staples, screws, and barbed wire) as well as unidentified iron concretions.

Nails formed the largest category of iron artifact recovered. Two possible iron knives and a gun trigger were also recovered in addition to an unidentified square-bodied “s-shaped” iron fragment which may have functioned as a handle.



**Figure 87.** Iron nails from test units, Windy Knolls I.

Of the 284 nails recovered from the dry-screened test units, nearly 70 percent were identified as wrought, and 72 or one-quarter had shafts with square cross-sections, a characteristic of both wrought and cut nails (Figure 87). Fourteen are so fragmented and corroded that they cannot be identified. Indeed, most of the iron nails are in poor condition, although three nails, all of which were likely burned, are relatively well-preserved. Some nails show signs of clinching – that is, their ends were bent or curled around – and were likely used as fasteners.

Wrought nails were the only types of nails available throughout the 17<sup>th</sup> and 18<sup>th</sup> centuries (Noël Hume 1969:252). Nails with identifiable heads at Windy Knolls I are most commonly “rose head” style. Of the wrought nails, 17 are whole or complete and ranged in length from one inch to 2.3-inches, with an average of 1.8 inches. How these nails were used is unclear; architectural historian Willie Graham and archaeologist Al Luckenbach (personal communication, 2012) have both suggested that the relatively short size of the nails indicates that they were not used for heavy framing but perhaps for the construction of boxes.



**Figure 88.** Iron knife fragment from test unit, Windy Knolls I (Lot 247).

At least one iron knife fragment and possibly two were recovered from the test units (Figure 88). Iron knives are not uncommon on Native American sites, and they were a standard trade item, much like axes, copper kettles, and firearms acquired from Europeans. As a lighter, more portable tool, knives may have even been more highly valued than axes (Bradley 1987:140). Knife fragments were also recovered from both the Posey and Camden sites.

The knife part which protrudes from the blade and attaches to the handle is known as the tang. The tang of the knife recovered at 18CH808



**Figure 89.** Possible iron trigger from test unit, Windy Knolls I (Lot 276)

is tapered and has a single medium-sized collar which is situated between the tang and the blade. On northern Onondaga sites, James Bradley (1987:141) found tapered tangs to often be representative of Dutch trading while flat tangs and folding blades are typically attributed to trade with the French.

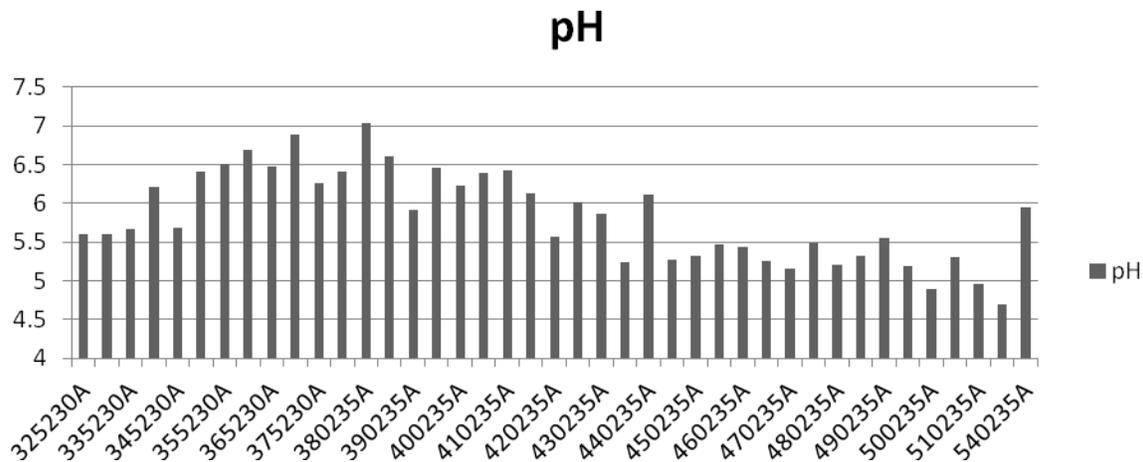
A relatively flat iron fragment with similar dimensions to the known knife part may be part of a knife blade. The specimen, however, is highly corroded and cannot be positively identified.

A possible iron gun trigger or frizzen was recovered from Test Unit 575110A (Figure 87). This artifact measures 2.66 inches (6.77 cm) in length and consists of a longer, flat segment above the curved portion what appears to be the trigger. This flat segment was the internal triggering mechanism. The curved portion appears to be the visible part of the trigger which would be pulled by the gunman's finger to discharge the firearm. The lower tip of this portion of the trigger is bent back around itself, and as illustrations in Peterson (2000) suggest, this is a not uncommon characteristic of late 17<sup>th</sup>- and 18<sup>th</sup>-century English firearms (see Peterson 2000: 29, Plate 31; 45, Plate 52 for examples). Further analysis of this artifact after conservation treatment may offer more qualitative insight.

#### *Animal Bones*

The largest category of archaeological material recovered during test excavations at the Windy Knolls I site included faunal or animal bone remains. These bones provide important information about the use of animals by the Piscataway, and yet bone tends not to preserve well in plow zone contexts. So it is surprising that animal bone fragments account for 48.9 percent (or 3,175 fragments) of the dry-screened test unit assemblage and 87.7 percent (or 4,796 fragments) of the water-screened sample. This section of the report describes the animal bone collection recovered from Windy Knolls I. We began by considering soil pH and artifact density and condition in order to address preservation issues and taphonomy. Second, the identified faunal remains are used to discuss what appears to be a mixed subsistence pattern adopted by the Piscataway at Windy Knolls I. These analyses are based on three sets of data recovered from the 46 units excavated at the site: the first includes soil samples collected for soil chemistry analysis; the second includes faunal remains collected from plow zone contexts screened through ¼-inch mesh; and the third includes faunal remains collected from the water-screened column samples.

*Taphonomy.* Soil acidity is a major factor affecting the preservation of organic remains at archaeological sites. The more acidic the soil, the less favorable preservation conditions are. Miller (1984:203-205) found that plow zone deposits in southern Maryland tend to have a pH around 5.3, which is highly destructive of faunal remains. The ideal pH for bone preservation is around 7.8; in the Chesapeake region, this benchmark is rarely reached. Exceptions include sealed features containing oyster shells which neutralize acidity (Miller 1984:204; Scudder 1993). For this project, we collected soil samples from the 42 units excavated at the top of the knoll, and each sample was tested for pH. The soil acidity for the plow zone at Zekiah Fort ranged from a pH of 4.03 to 7.03 with an average reading of 5.67, typical for sites in the region (Figure 90).



**Figure 90.** pH readings for test units from the knoll, Windy Knolls I.

Another process affecting the assemblage is plowing. The greatest impact plowing has on bone preservation as well as on artifacts of all kinds is in its fragmentation. In general, assemblages from plow zone contexts tend to be highly fragmented with a high number of unidentifiable bones (Lyman and O’Brien 1987:495-497).

Taxon	Common Name	Weight per fragment (g)
Artiodactyla	Hoofed animal	1.07875
Bos taurus	Cow	2.613333333
Canis familiaris	Dog	0.585
Gastropod	Snail	0.006666667
Lepisosteus osseus	Longnose gar	0.02
Odocoileus virginianus	Deer	0.632727273
Oyster Shell	Oyster	0.101304348
Scalopus aquaticus	Eastern mole	0.18
Sciurius sp.	Squirrel	0.22
Sus scrofa	Pig	0.41
Silvilagus floridanus	Eastern cottontail	0.07
Testudines	Turtle	0.267777778
Urocyon cineoargentus	Gray fox	0.025
Vulpes fulva	Red fox	0.71
Cyprinidae	Probably minnow	0.12
UID Mammal		0.325082742
UID		0.101387612
<b>Average weight</b>		<b>0.120937304</b>

**Table 21.** Average weight per bone fragment based on taxon, Windy Knolls I.

Compounding this problem is the fact that people often broke bones to extract marrow and grease. This problem is clearly evident in the Windy Knolls I assemblage when considering bone size. Bone weight was used as a proxy for size with results relevant for bone identification. The average weight for a bone fragment in this assemblage identifiable below the class level was 0.57g, while the overall average weight for all fragments was 0.12g (Table 21). These very low weights reveal a highly fragmented assemblage due to both pre-depositional and post-depositional processes, including marrow and grease extraction and plowing.

A third taphonomic process affecting this assemblage is heat alteration. Burning usually occurs at temperatures of up to 500°C and alters bone by removing the organic material; burning generally changes the color of the bone to brown or black. Calcining of bone occurs at temperatures over 500°C and can shrink the bone and make it more brittle

accounting for about one-third of the total count. It is likely that the bone in this assemblage was burned prior to deposition (rather than after) given that very few of the other artifacts exhibit any evidence of heat alteration. Additionally, due to the acidic nature of the soil, it is not surprising that the majority of the bone is burned, as burned bone tends to preserve better under acidic conditions than non-burned bone (Sobolik 2003:22).

Bone type	No. identified below class
Teeth	65
Turtle Shell	54
Dense Elements	9
Other	46

**Table 22.** Number of bones identified below class based on bone type, Windy Knolls I.

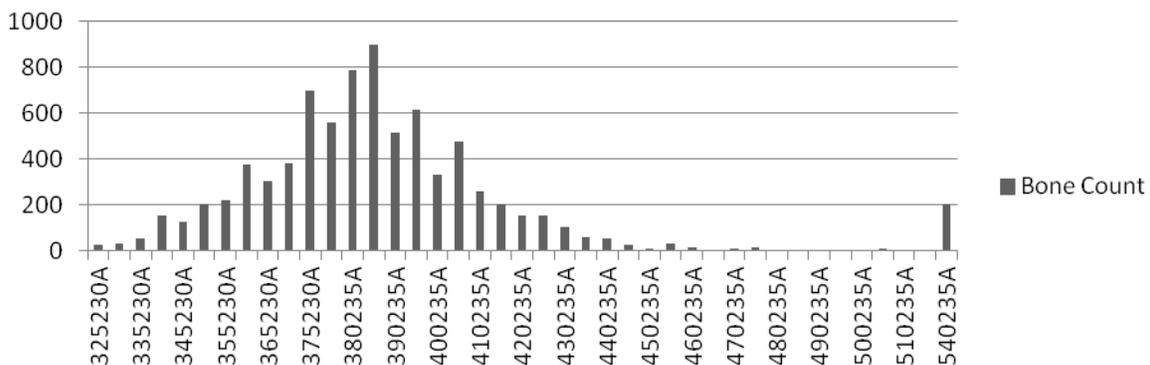
carpal bones, or turtle carapace fragments (Table 22).

The taphonomic processes affecting this assemblage lead to two hypotheses that can be easily tested with the data. First, due to preservation and fragmentation issues, the majority of identifiable bones should be elements that are particularly dense, and thus resistant to soil acidity and fragmentation, such as teeth, or they should be unique and easily identifiable elements, such as turtle shells (Reitz and Wing 1999:117-118). The data appear to support this hypothesis since the vast majority of elements that were identified below the class level were either tooth fragments,

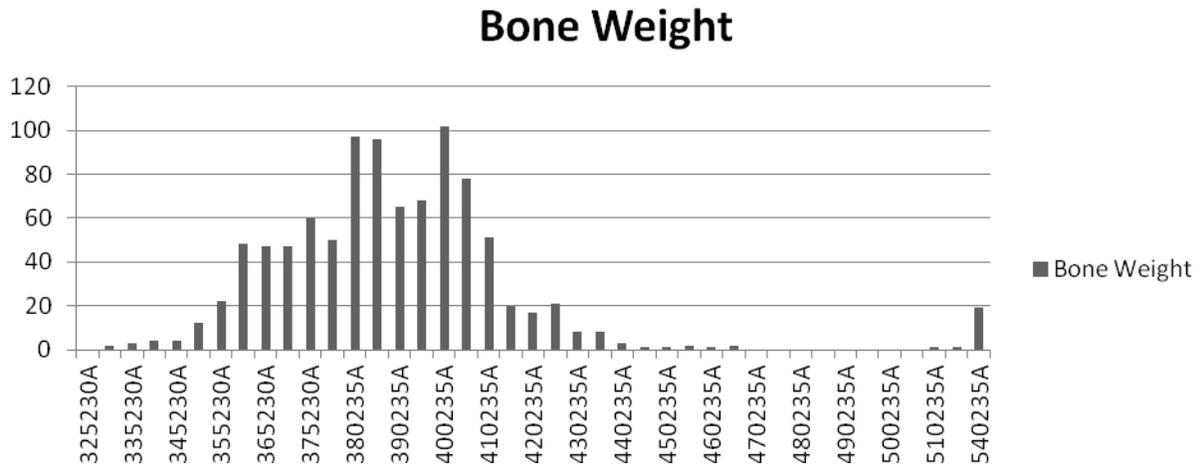
The second hypothesis assumes that site pH should be directly related to the amount of bone recovered. This was tested by graphing the pH from the units in the main excavation trench and comparing these pH values to bone counts and weights from the same units (see Figure 90; Figures 91-93). The overall pattern indicates a correlation among the variables, indicating that higher bone counts and weights correspond to higher pH values. Upon further examination, the largest bone concentrations on the site occur in units with pH values above 6.2. This correlation may indicate that bone preservation is better in these units because of proximity to a feature that is neutralizing the soil pH or it may show that more bone was deposited in the area of these units, thus lowering the acidity. In fact, when the artifact counts are plotted in relation to pH and bone weight, they tend to correlate very well, indicating that the units with high pH are areas of high deposition, lending support to the proposition that the bone deposited in the plow zone may be the reason for lower acidity.

*Analysis.* With all of the preservation biases in this assemblage, plow zone zooarchaeology may seem like an exercise in futility. Nonetheless, it has been shown at other sites in the Chesapeake region that the analysis of faunal remains from the plow zone can provide useful information if sample bias is understood (Barber 1978; Landon and Shapiro 1998). The Posey site, which has been discussed in

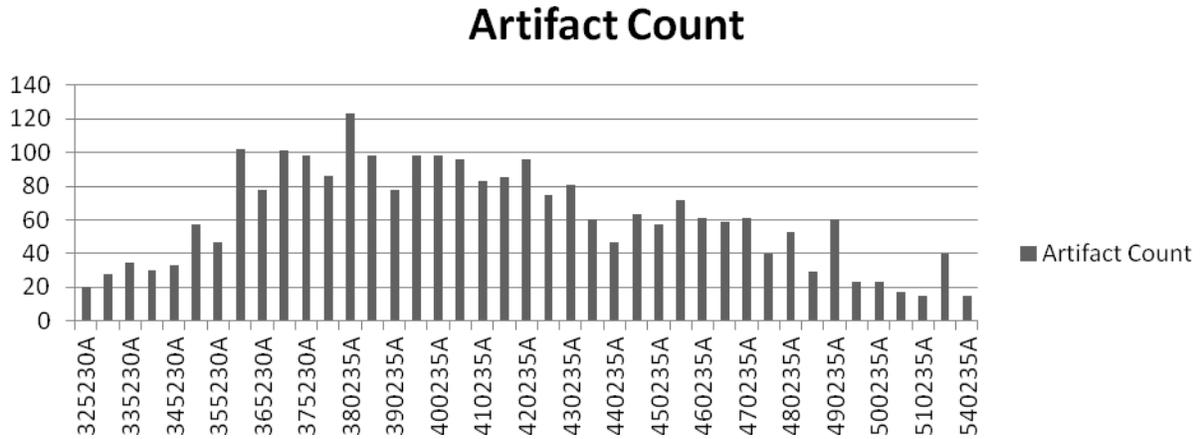
## Bone Count



**Figure 91.** Bone fragment counts for test units from the knoll top, Windy Knolls I.



**Figure 92.** Bone weights for test units from the knoll top, Windy Knolls I.



**Figure 93.** Artifact counts for test units from the knoll top, Windy Knolls I.

comparison with Windy Knolls I throughout this report, shares a similar context, period of occupation, and preservation issue. Posey is located approximately 20 miles west of Windy Knolls I and has been interpreted as a Native American occupation, probably Mattawoman, dating from 1650-1680 (Harmon 1999). The animal bone from Posey also comes from plow zone deposits, all pieces were highly fragmented, and a significant proportion of the assemblage had been heat altered. Despite these biases, Landon and Shapiro (1998:17) were still able to demonstrate that the assemblage was significantly different from that of an English household of the same period and showed many of the elements of an expected Native diet. Landon and Shapiro's (1998) study serves as an important comparative data set for the Windy Knolls I assemblage, especially since it dates to a slightly earlier period and allows for the examination of change in diet over time. Additionally, the analysis of the Posey site fauna illustrates that plow zone zooarchaeology can be interpretively powerful if research questions are formulated while being mindful of the limitations of an assemblage.

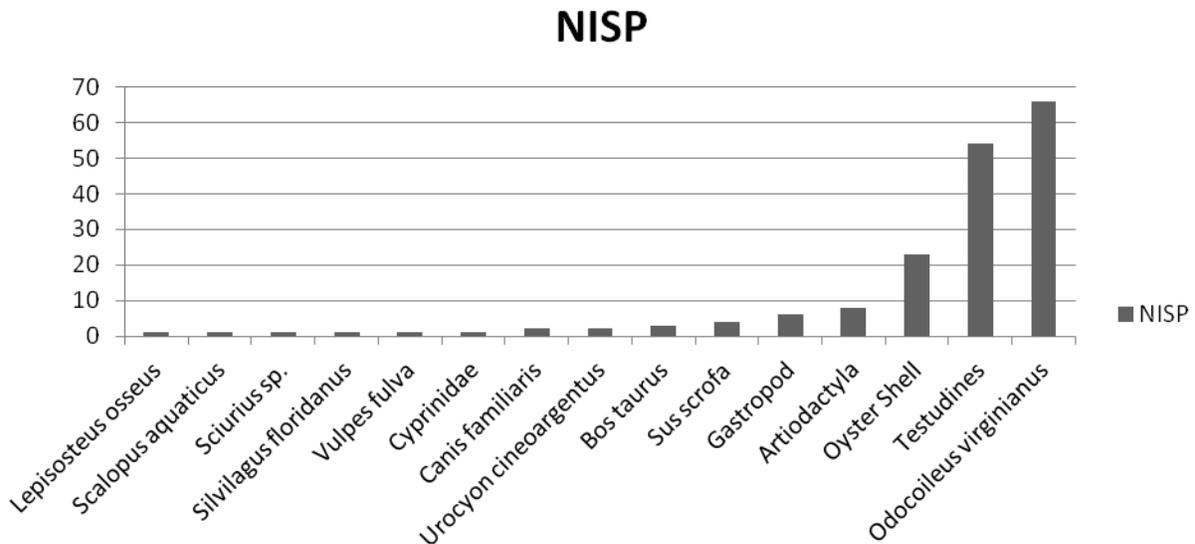
Taxon	Common Name	NISP	MNI	Biomass (kg)	Weight (g)
Artiodactyla	Hoofed animal	8	-	0.183	8.63
Bos Taurus	Cow	3	1	0.168	7.84
Canis familiaris	Dog	2	1	0.03	1.17
Gastropod	Snail	6	-		0.04
Lepisosteus osseus	Longnose gar	1	1	0.001	0.02
Odocoileus virginianus	Deer	66	5	0.756	41.76
Crassostrea virginica	Oyster	301	-		359.66
Scalopus aquaticus	Eastern mole	1	1	0.006	0.18
Sciurus sp.	Squirrel	1	1	0.007	0.22
Sus scrofa	Pig	4	1	0.041	1.64
Sylvilagus floridanus	Eastern cottontail	1	1	0.002	0.07
Testudines	Turtle	54	-	0.189	14.46
Urocyon cineoargenteus	Gray fox	2	1	0.002	0.05
Vulpes fulva	Red fox	1	1	0.019	0.71
Cyprinidae	Probably minnow	1	1	0.006	0.12
UID Mammal		423		2.211	137.51
UID		7394			749.66
<b>Total</b>		<b>8269</b>	<b>15</b>	<b>3.621</b>	<b>1326.07</b>

**Table 23.** Taxa from Windy Knolls I.

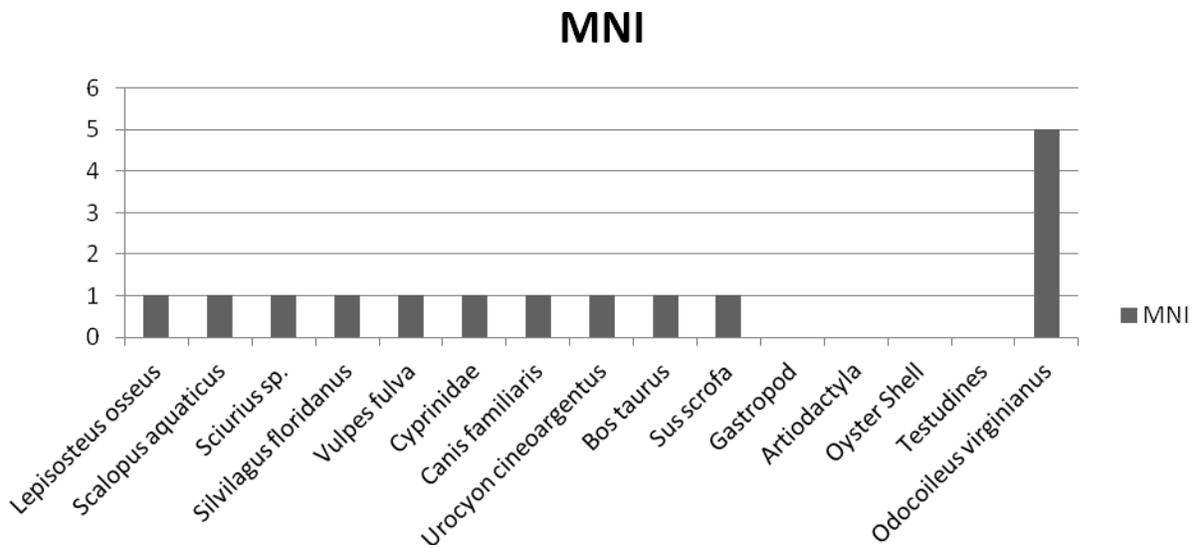
The faunal assemblage consists of a total of 8,269 bone and shell fragments (Table 23). The Windy Knolls I assemblage was analyzed using standard zooarchaeological methods. Fragments were identified to species, where possible, and element, portion, and side of the bone were recorded. Bone modification, such as butchering marks and burning were noted and all bone was weighed. NISP (number of identified specimens present), MNI (minimum number of individuals), and biomass were all calculated for the assemblage (White 1953; Reitz and Cordier 1983; Reitz et al. 1987; Reitz and Wing 1999:72). Of the total, only 452 fragments (or five percent of the assemblage) are identifiable below the class level. When oyster shell is excluded from these totals, only 151 fragments are identifiable below the class level (or less than two percent of the assemblage). Nevertheless, at least nine species of mammal, two species of fish, one species of reptile, and two species of invertebrate are represented in the collection.

The secondary data generated from this assemblage (NISP, MNI, and biomass) all show deer to be the most important contributor to diet at the site with turtle, cow, and pig also contributing significantly (Figures 94-96). These measures of dietary contribution, however, should be critically examined before they are interpreted. For example, the most commonly used measure for dietary contribution, biomass, relies upon a biological relationship between bone weight and the meat it supports (Reitz and Cordier 1983; Reitz et al. 1987; Reitz and Wing 1999:72). It is an average, and requires an assemblage to have at least some elemental diversity. The elemental distribution within the Zekiah assemblage, however, is skewed heavily toward bones that preserve well in acidic soils, which are not elements that support a great deal of meat. In fact, the majority of the assemblage is composed of teeth, which support no edible meat, unless the gums are taken into account. Therefore, biomass does little to aid in the interpretation of this assemblage.

The MNI for this assemblage is a somewhat better indicator of meat contribution at Zekiah, but only if the size of the animals in question are taken into consideration. Still, the MNI is also flawed in this case because of the high degree of fragmentation present and the small sample size of only 15 total individuals. Thus, MNI is ruled out as a unit of comparison within and among sites. NISP shares the same problems of fragmentation with MNI for determining dietary preference at the site (Reitz and Wing 1999:



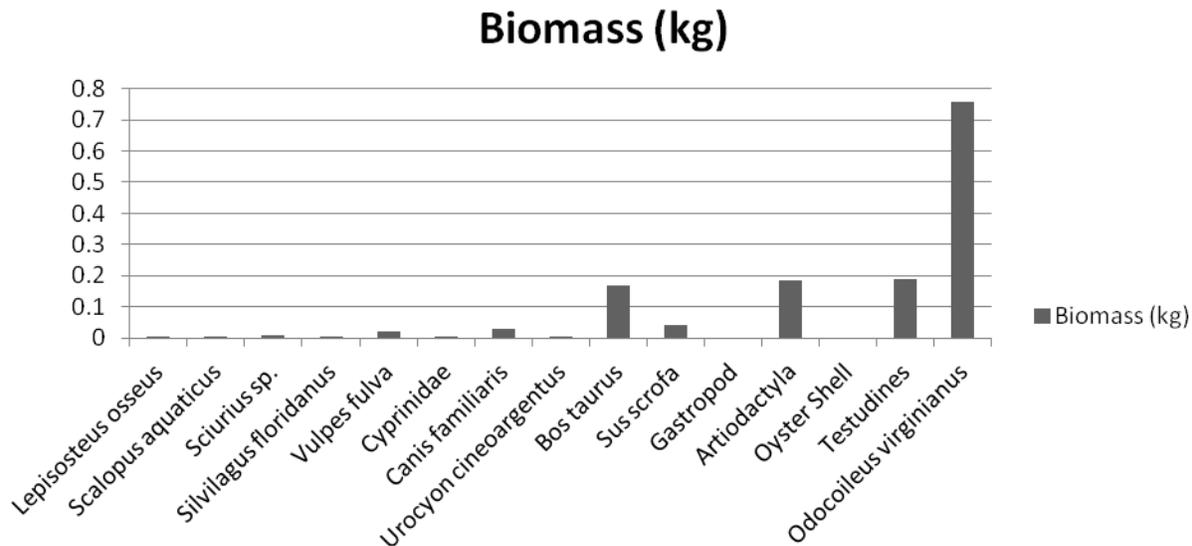
**Figure 94.** NISP for bones identified below class, Windy Knolls I.



**Figure 95.** MNI for bones identified below class, Windy Knolls I.

192, 195). Additionally, fragmentation greatly affects the utility of NISP for comparison between sites, since taphonomic processes may degrade bone differently at different sites.

Given the numerous preservation and sample problems that affect this data set, it is evident that secondary data derived from the assemblage will misrepresent the use of animals by the Piscataway at Windy Knolls I. Instead, a simple analysis of the presence or absence of certain species can offer insight into the subsistence experience of the people at Windy Knolls I when placed in the proper historical context (Table 24). The comparison of species present at the Posey site, which dates slightly earlier, with



**Figure 96.** Biomass for bones identified below class, Windy Knolls I.

those at Windy Knolls I reveals a difference in subsistence strategy that may be related to change through time. When this variation is viewed in relation to the circumstances for the Piscataway relocation to Zekiah Fort, it becomes evident that subsistence strategies for the Piscataway Indians were almost certainly impacted as a result of the stress they experienced from raiding northern Indians.

The faunal remains from Posey represent a broad range of wild species that occur with frequency in the area, including deer, mink, squirrel, raccoon, muskrat, duck, gar, perch, catfish, sucker, and turtle (see Table 24). The only domesticated animal represented at Posey is pig, which could have easily been hunted like deer, since the Chesapeake husbandry system led to large numbers of feral swine roaming the forests (Anderson 2004:108; Miller 1988:194; Carr, Menard, and Walsh 1991:47-48). Despite the presence of pigs at the site, it would probably not have significantly affected the diet of the Native Americans living at Posey, at least from a meat subsistence perspective, since the inhabitants of the site would have probably acquired pork and treated it in a similar way to deer hunted in the woods or dogs that scavenged the village (Anderson 2004:213). However, the effects of feral and free-ranging livestock on Native American plant-based subsistence practices would have been significant due to crop destruction (Anderson 2004:188-189). Indeed, crop destruction by livestock was a common complaint of the Indians to the Maryland government.

The faunal remains from Windy Knolls I contain many of the same major species as the Posey site, including deer, squirrel, pig, turtle, gar, and oyster (Table 24). However, the Zekiah assemblage also contains fox, both gray and red, domestic dog, and cow. There are also no birds represented in the Zekiah assemblage, and only two fish species. Overall, the Windy Knolls I faunal assemblage appears less diverse than the Posey site assemblage. This lack of diversity is probably a result of geographical location, since Posey is located adjacent to Mattawoman Creek (and not far from the Potomac) while the Windy Knolls I is located inland along small tributaries draining into Zekiah Run. The residents of the Posey site would have had greater access to numerous fish species and waterfowl compared with the occupants of Windy Knolls I, which does not have a large body of water nearby. The livestock species present in the Zekiah assemblage may be the most important difference between the two sites, especially

Species	Common Name	Posey	Windy Knolls I
Gastropod	Snail	X	X
Lepisosteus osseus	Longnose gar	X	X
Odocoileus virginianus	Deer	X	X
Crassostrea virginica	Oyster	X	X
Sciurus sp.	Squirrel	X	X
Sus scrofa	Pig	X	X
Testudines	Turtle	X	X
Castomidae	Sucker	X	
Chelydra serpentina	Snapping turtle	X	
Chrysemys picta	Painted turtle	X	
Clam Shell	Clam	X	
Crab	Crab	X	
Cygninae	Aquatic bird	X	
Emydidae	Marsh turtle	X	
Ictaluridae	Catfish	X	
Morone americana	White perch	X	
Mussel Shell	Mussel	X	
Mustela vison	American mink	X	
Ondatra zibethicus	Muskrat	X	
Procyon lotor	Raccoon	X	
Terrapene carolina	Box turtle	X	
Bos taurus	Cow		X
Canis familiaris	Dog		X
Cyprinidae	Probably minnow		X
Scalopus aquaticus	Eastern mole		X
Sylvilagus floridanus	Eastern cottontail		X
U. cinereoargenteus	Gray fox		X
Vulpes fulva	Red fox		X

**Table 24.** Presence and absence of species, Windy Knolls I and Posey (18CH0281).

prominent members within the indigenous community (Anderson 2004:107, 201). The push toward “civilizing” indigenous people through the use of livestock was met with great resistance early on, especially since there was little cultural precedent in Native societies for dealing with livestock (Anderson 2004:15-42, 175-208).

The adoption of cattle and swine by the occupants of Windy Knolls I may have been a response to the documented food crisis at the site in 1680 and 1681 (with beef provided by Lord Baltimore), a means of negotiating with the Maryland government for protection from raiding northern Indians, or both. In 1681, Captain Randolph Brandt described the Piscataway as in “a deplorable Condition ... being destitute of all manner of ffoode (Md. Archives 15:373-374). But while the Piscataway were in crisis at Zekiah Fort in the earliest years, after 1682, conditions had improved and records suggest that the Piscataway remained at the fort through the early to mid-1690s. It is impossible to determine if the cow and pig bones recovered at Windy Knolls I date to the early years of the site’s occupation or were, in fact, a regular part of the diet. Given that evidence suggests the area where the majority of bone was recovered may have been the residence of the tayac, the presence of English livestock may indicate that Piscataway leaders were possibly conspicuously, and knowingly, signaling their alliance with the Maryland colonists through the ownership of a domesticated animal or two. The use of cattle particularly, which were often

since the presence of both cows and pigs at Zekiah indicate a change, perhaps temporary, in Native subsistence practices and possibly a rearrangement of cultural roles within the community.

The introduction of domesticated livestock to the New World created a crisis within Native American societies in both the Chesapeake and New England. Native Americans found it difficult to grapple with the idea of animals as personal property and, as a result, numerous social and cultural problems arose out of contact with European domesticates (Anderson 2004:175-208). On the other hand, the European colonizers in the Chesapeake and New England saw domestic animals as symbols of “civilized life” (Anderson 2004:123, 209-242). Strong efforts were made to introduce livestock to Native peoples and to force the adoption of livestock husbandry on them both as a means of conversion to Christianity and assimilation to European ways. These efforts took the form of laws that gave Indians cattle as payment for wolf bounties in Virginia and the presentation of cattle as gifts to

less feral than hogs and required more attention, may have made the Piscataway appear more “civilized” to the Marylanders and would have placed the residents of Windy Knolls I in stark contrast to the northern Indians who had not adopted livestock husbandry and still engaged in “barbaric” practices, such as raiding. It is also possible and perhaps more likely that the cow and pig bones recovered from Windy Knolls I derive from provisions made for the rangers who, from time to time during the first two years’ of the fort’s occupation, were garrisoned there, or even for the Natives themselves.

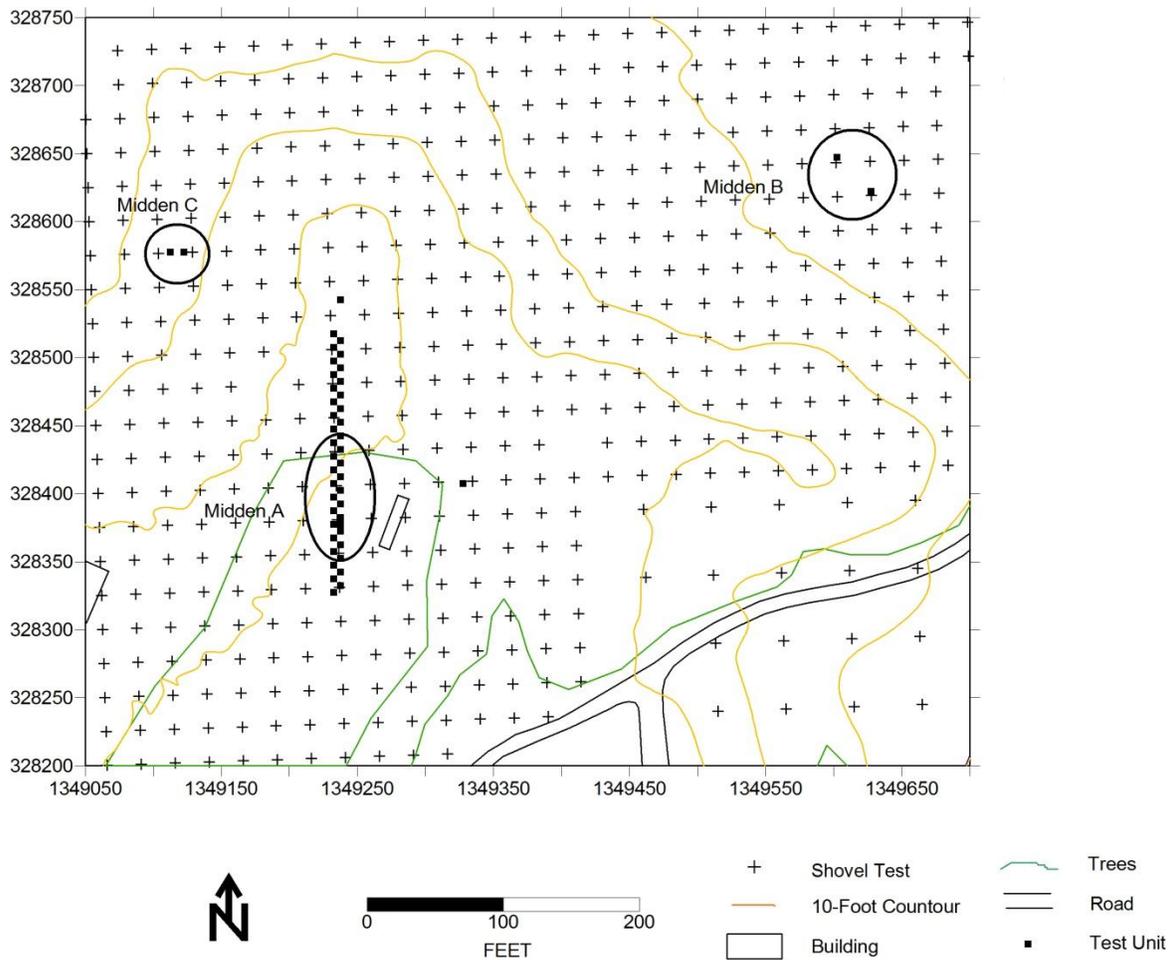
Not surprisingly, given the site’s location, test units at Windy Knolls I produced a low number of oyster shell fragments (see Table 23). The shell comes from *Crassostrea virginica*, a species native to the Chesapeake region and which grows in water with salinity levels between 5 and 40 parts per thousand (National Research Council of the National Academies 2004). Although Windy Knolls I is at the headwaters of the Wicomico, the closest source of brackish water to the site is the Patuxent River, specifically at the mouth of Swanson Creek near Benedict (approximately ten miles). Augustine Hermann’s map shows English settlement in this area of the Patuxent River by 1670 (see Figure 3). The road leading from Bryantown to Benedict probably followed a former Indian path, much like many old roads in Southern Maryland, and perhaps served as access to the Patuxent for the Piscataway at Zekiah Fort. The next nearest source of brackish water is the Wicomico River, at the mouth of Chaptico Bay, approximately fifteen miles from the site. The shells found at 18CH0808 may have come from either of these sources, both still a relatively healthy environment for oysters today, although not in larger aggregations (Lippson 1979; Department of Natural Resources 2003).

Clearly, the Piscataway maintained good relations with the Maryland government, evidenced by the fact that Lord Baltimore supplied them with ammunition and corn on numerous occasions and provided military protection both before and after the relocation to Zekiah Fort. Perhaps the adoption of livestock – if that is what was indeed happening – was a way of reminding the Maryland government that the Piscataway were treaty allies of the Maryland English. Despite the visible presence of cows and pigs at Windy Knolls I, however, the Piscataway still maintained familiar subsistence practices through the use of deer, turtles, and other locally available wildlife. The continued acquisition and consumption of wild game in addition to the incorporation of English domestic meats in the diet acted as a means of negotiating the political landscape of Maryland for the Piscataway at Zekiah Fort.

### ***Midden Analysis***

For decades, archaeologists working in Maryland have recognized the importance of plow zone contexts for documenting the structure and spatial organization of a particular site (King and Miller 1987). At Windy Knolls I, the distribution of test units was designed primarily to collect artifact samples in various areas of the site and to search for evidence of subsurface features, including any fortification that may have stood at the settlement. Our strategy was also shaped by both time limitations and concerns about site preservation, especially given the unavoidably destructive nature of archaeological excavation. While our units were not placed primarily for the collection of spatial data, spatial variations are nonetheless evident in the distributions of artifacts at the site. Sample size no doubt accounts for some of this variation, but it is also likely that the variations may be linked to important social and cultural factors. In this section, we draw on both the shovel test and test unit data to examine the Windy Knolls I site’s spatial structure.

The shovel test data (discussed earlier) revealed concentrations of colonial materials at the top of the knoll, at the northeast base of the knoll, and along the knoll’s northwest slope. All three areas generally yielded the same types of materials, albeit in different proportions. Without question, the largest concentration of material is located at the top of the knoll. Interestingly, however, the concentration of



**Figure 97.** Midden areas selected for further analysis, Windy Knolls I.

materials along the knoll’s northwest slope, while not large in area, has the greatest density of artifacts, more than two times as many as on the knoll top.

To explore the nature of these differences and identify others, we quantified artifacts from the three areas, calling them Middens A, B, and C (Figure 97). Midden A includes materials recovered from 19 test units located at the top of the knoll between the N328355 and N328445 lines. Midden B includes materials recovered from two test units located at the bottom of the knoll, and Midden C includes the two test units located along the knoll’s northwest slope.

Not surprisingly, the midden with the greatest number of test units – Midden A – yielded the largest quantity of artifacts. Midden A also exhibits considerable diversity in the number and types of materials recovered, especially when compared with Middens B and C. Given the fairly dramatic difference in sample size between Midden A and Middens B and C, we have attempted to control for these differences in the samples by standardizing the quantities in two ways: first, we have represented selected categories of artifacts as percentages and, second, we have calculated densities of recovered materials per 25 square feet of plow zone. Table 25 represents selected categories of domestic material

	Midden A <sup>20</sup>		Midden B <sup>21</sup>		Midden C <sup>22</sup>	
	N	%	N	%	N	%
Red pipes	77	10.2	1	2.0	11	6.0
White pipes	225	29.9	13	26.5	49	26.8
Potomac Creek ceramics	109	14.5	15	30.6	22	12.0
Moyaone ceramics	30	4.0	5	10.2	7	3.8
Colonoware	1	0.1	0	-	0	-
Shell-tempered ceramics	47	6.2	2	4.1	28	15.3
Unidentified ceramics	9	1.2	0	-	2	1.1
European ceramics	51	6.8	1	2.0	12	6.6
Bottle glass	40	5.3	10	20.4	27	14.8
Nails	164	21.8	2	4.1	25	13.7
TOTAL	753		49		183	
Number of test units	19		2		2	
Artifacts per unit	39.6		24.5		91.5	
Native ceramics per unit	10.3		11.5		29.5	
European ceramics per unit	2.7		0.5		6	
Tobacco pipes per unit	16		7		30	
Beads per unit <sup>23</sup>	7.7		6		11.5	
Bone per unit	144		2.5		50	

**Table 25.** Selected artifact categories from Middens A, B, and C, Windy Knolls I.

and nails, and Table 26 lists lithics, brass, and gun-related artifacts. Finally, Table 27 summarizes the variations among the three middens.

Of the three middens, Midden A has the highest percentages of tobacco pipes (in sum, fully 40 percent of Midden A's assemblage), including both red (10.2 percent) and white (29.9 percent) pipes, and the highest percentage of iron nails (21.8 percent). Midden A also has the highest density of animal bone (144 fragments per 25 square feet of plow zone). All four brass triangles and the single iron triangle were recovered from Midden A. Midden A also yielded the lowest percentage of Native-made ceramics (just under 26 percent).

Midden B, located at the base of the knoll, has the lowest density of total artifacts per 25 square feet of plow zone (less than 25 artifacts). Midden B has the highest percentage of Native ceramics (primarily Potomac Creek and Moyaone varieties) and colonial bottle glass (20.4 percent) and the lowest percentages of European ceramics, nails, and lithics (not including European flint). Midden B also has a relatively low percentage of tobacco pipes and virtually no animal bone. Midden B yielded the lowest number of glass beads per 25 square feet of plow zone.

Midden C, located along the knoll's northwest slope, has the highest density of artifacts recovered from any of the middens; at 92 artifacts per 25 square feet of plow zone, this density is more than twice that of Midden A. Native ceramics account for 30 percent of this density at 30 fragments per 25 square feet of plow zone. Of special interest is the relatively high percentage of shell-tempered wares recovered from Midden C, with these wares forming more than 15 percent of the total artifacts shown in Table 25. This percentage is more than twice the percentage of shell-tempered wares found in Midden A. Midden C also had the highest density of both glass beads (11.5) and flint (16; more than twice that of Midden A) per 25 square feet of plow zone.

<sup>20</sup> Midden A includes Lots 240 through 258, or 19 units.

<sup>21</sup> Midden B includes Lots 278 through 281, or two units.

<sup>22</sup> Midden C includes Lots 276 and 277, or two units.

<sup>23</sup> Includes beads recovered from water-screened column samples: Lots 240 through 258 and 288 through 306.

	Midden A	Midden B	Midden C
Projectile Point	1	1 <sup>24</sup>	0
Native Stone	164	5	19
Gun flint/chert	9	0	0
Flint debitage	142	17	32
Gun part	0	0	0
Shot <sup>25</sup>	7	2	0
Brass Triangle	4	0	0
Iron Triangle	1	0	0
Other Brass	6	0	0
Brass Scrap	32	0	4
No. of test units	19	2	2
Native stone per unit	8.6	2.5	9.5
Flint per unit	7.9	8	16
Brass per unit	2.2	0	2

**Table 26.** Lithic, copper alloy, and gun artifacts, Middens A, B, and C, Windy Knolls I.

Acknowledging the problem of sample size, Midden A, with its higher frequencies of tobacco pipes, especially locally-made pipes, very high density of animal bone, and brass triangles, appears to represent activities of a high status, possibly ceremonial or ritual nature involving the consumption of tobacco and animal meat. The consumption of tobacco, for example, for spiritual or even political purposes might explain the large numbers of tobacco pipe fragments, especially those of local, and presumably Native, manufacture. The high density of animal bone suggests the importance of the consumption of meat in this space. Among the Powhatan, chiefs acquired and controlled animal meats which were often redistributed through feasting rituals, and a similar practice has been documented for the Piscataway. The high numbers of animal bone in this area clearly reflect the consumption of food in quantity.

Midden B, located at the northeast base of the knoll adjacent to the spring, may represent materials from one or two households located in this vicinity. The prevalence of Native-made ceramic vessels suggests primarily domestic functions. The glass bottle fragments in this location may derive from bottles used to collect water from the spring. Indeed, it is possible that this area was both a residence and a staging area for the collection of water. Further, the area located at the northeast base of the knoll would have been a potentially defensive position for the Piscataway, providing an opportunity to see anyone approaching the spring or the fort from the northeast, where the path back to Moyaone (now Maryland Route 5) lay.

Midden C is an unusual midden located in an unusual spot: along the knoll's northwest slope. Indeed, excavating the two test units that make up Midden C's assemblage was somewhat challenging given the sloped nature of the ground's surface. Whatever the source of Midden C's artifacts, it seems unlikely that a house was situated here. Nor does it appear that the refuse represents discard from activities taking place on the knoll top, given the differences in midden composition. The distribution of total colonial artifacts in this area (recovered from shovel test pits; see Figure 49) shows a clean gap between the two areas, suggesting that Midden C did not result from materials falling, rolling, or tossed down the slope. Midden C, however, is located adjacent to an old farm road, dating to at least the mid-19<sup>th</sup> century, which provided access to the knoll's top. The road bed follows the best grade for ascending and descending the hill. In fact, it is likely that this old farm road either existed or was created during the time Windy Knolls I was first occupied.<sup>26</sup>

<sup>24</sup> Rhyolite biface.

<sup>25</sup> Includes dry- and water-screened samples.

<sup>26</sup> The modern paved road, located on the east side of the project area (see Figures 9 and 49) was constructed using heavy equipment to cut and modify the grade on that side of the knoll.

	Midden A	Midden B	Midden C
Highest percentage tobacco pipes	X		
Highest percentage red pipes	X		
Highest percentage white pipes	X		
Highest percentage nails	X		
Highest density animal bone	X		
Triangles	X		
Highest percentage Native ceramics		X	
Highest percentage Potomac Creek		X	
Highest percentage Moyaone		X	
Lowest percentage Euro. ceramics		X	
Lowest percentage tobacco pipes		X	
Lowest percentage nails		X	
Lowest density animal bone		X	
Lowest density native lithics		X	
Highest percentage shell-temp. cer.			X
Highest density total artifacts			X
Highest density Native ceramics			X
Highest density glass beads			X
Highest density flint			X

**Table 27.** Summary of differences, Middens A, B, and C, Windy Knolls I.

testing suggests that the Windy Knolls I site contains important information for reconstructing Piscataway social and cultural life at an especially important moment in colonial and Piscataway history.

### *Summary*

Based on the artifacts recovered from the Windy Knolls I site, the site is without question of significance to early Maryland and Middle Atlantic history. The artifacts, landscape, and other material features of the site have the potential to expand our understanding of indigenous life in this important period. But, is Windy Knolls I indeed the site of the historically documented Zekiah Fort? This is an important question to resolve, given that Zekiah (or “Sacayo”) Indians were living in the area in the 1660s and possibly earlier. Sorting out these chronological issues are key to documenting changing circumstances of life in this period.

The artifacts recovered from Windy Knolls I clearly indicate a fourth quarter of the 17<sup>th</sup>-century occupation. English brown stoneware, first available in the region no earlier than 1690, formed 13 percent of the European ceramic assemblage, or 16 sherds out of 123. Only one sherd of “possible” Rhenish brown stoneware was recovered from the site. Rhenish brown stoneware is commonly found on 17<sup>th</sup>-century sites in Maryland, but its presence drops off by the end of the century. For example, no Rhenish brown stoneware was observed in the Westwood Manor collection, a site at Allen’s Fresh at

Midden C may represent a nearby area of activity by people on their way to or from the knoll top. This space may have been where the site’s residents encountered visitors. Midden C contained 50 percent more glass beads than Midden A, beads possibly lost in formal exchanges between the site’s occupants and visitors. Midden C also contains an exceptionally high percentage of shell-tempered wares, and these ceramics may have been brought to the site by visitors or by members of the other nations joining the Piscataway at Zekiah Fort for defense. The numbers of both native stone and European flint flakes in Midden C further suggest that a considerable amount of stone-working took place in this area.

The patterns revealed through this midden analysis are intriguing, no doubt subject to change as more evidence is recovered. It is also possible that Midden A can be broken into smaller spatial components for analysis. Nonetheless, the limited

the mouth of Zekiah Run first occupied no earlier than the late 1670s and possibly as late as c. 1680 (Alexander *et al.* 2010).

The tobacco pipes recovered from Windy Knolls I also point to a late 17<sup>th</sup>-century occupation. The distribution of pipe stem bore diameters generally align with Harrington's 1680-1710 date and, when compared with the distribution of pipe stem bore diameters from other settlements in the Zekiah Run and Wicomico River drainages, a c. 1680 initial date of occupation appears reasonable. It should be noted, however, that the Binford date for the tobacco pipe assemblage is early, calculated as 1670. Contrast this with the Binford pipe stem date for Westwood Manor, which was calculated at 1695. Westwood Manor, however, was occupied for at least 20 years longer than the Zekiah Fort (late 1670s/c. 1680 until 1715). In addition, Westwood Manor was occupied by an elite family, beginning with the Gerards and then the Baynes. It is possible that the Westwood Manor residents purposely selected tobacco pipes with longer stems (and therefore smaller bores) as a fashion statement. Other materials recovered from Westwood Manor indicate an effort to appear fashionable on Maryland's colonial frontier (Samford 2011; Alexander *et al.* 2010).

The colonial bottle glass recovered from Windy Knolls I, including those fragments which can be identified by form, consists primarily of round wine bottle glass. Only five fragments could derive from case bottle glass – flat-walled, square-sided vessels often found on English sites dating to the 17<sup>th</sup> century – but this is not certain given the small size of the fragments.

The site's landscape reveals a settlement in a defensive position. Located less than a half-mile from the path back to Moyaone, Windy Knolls I is nonetheless not easily accessible. The settlement sits at the top and the base of a fairly steep knoll, averaging 25 feet in height and surrounded on three sides by streams and creeks. Indeed, one of the reasons the site has survived despite its rich underlying gravel deposits is the difficulty vehicles would have crossing wetlands and valleys to access the gravel.

Adding to the argument that the settlement's occupants selected the site for its defensive position are the many gun-related artifacts recovered from the excavations, including 21 gunflints, dozens of fragments of flint debitage, a gun trigger, and 31 pieces of lead shot. These materials are high by any standard, including when compared with Posey, Camden, or English households in the area. Only the armory at Mattapan generated more gun-related materials, primarily lead shot (Chaney 1999).

Finally, the site is also located on and adjacent to areas with soils good for agricultural purposes, including Beltsville and Grosstown Series soils, and could have supported a sizable settlement.

Nonetheless, it is the case that, despite the excavation of 42 test units in an area we predicted would contain the fort, we found little that indicates the traces of a palisade or other type of fortification. Indeed, we found very few features that we could conclusively identify as 17<sup>th</sup> century in date. Seventeenth-century features at the Posey site on Mattawoman Creek, however, were similarly difficult to identify, and perhaps what this assemblage does is suggest that our notions of what a fort may have looked like are not fully formed. Indeed, the existence of a literal fortification where people could gather and take a defensive position appears clear in the archives concerning Zekiah Fort. By 1682, however, there are virtually no reports of attacks or other depredations at the settlement. Nonetheless, at least some of the Piscataway remained in this area into the 1690s. But, while the material culture on the knoll top contains large numbers of prestige goods – brass, glass beads, bone from animal meat, and gun-related artifacts – the sheer numbers of artifacts are relatively small when compared with the slightly earlier settlements at Posey and at Camden. For these reasons, we interpret the settlement on the knoll top as probably the fortified residence of the tayac and his household. Families living nearby could come to the fort in times of alarm and if circumstances warranted.

### C. The Windy Knolls II Site (18CH0809)

Archaeological survey of the Windy Knolls property revealed the presence of a second site near the south toe of the north knoll. This site, known as Windy Knolls II (18CH0809), is located approximately 250 feet west of Windy Knolls I on relatively level ground (see Figure 48). Piney Branch lies approximately 200 feet to the west. Today, the site, which measures approximately 300 feet north-south by 550 feet east-west, is mostly wooded, although formerly it was in agricultural use. A man-made ditch, probably dug in the 19<sup>th</sup> century by enslaved laborers, is located within the bounds of the site and runs roughly north-south through the heaviest concentration of domestic material before making a 90-degree turn and running west toward Piney Branch (see Figure 16). This ditch may have marked the boundary of a former agricultural field or property line.

The artifacts recovered from Windy Knolls II indicate it is a late 18<sup>th</sup>-century domestic quarter, possibly for enslaved laborers who worked on the property. The site also yielded materials which may indicate a 17<sup>th</sup>-century component associated with Windy Knolls I, or perhaps the occupants of Windy Knolls II collected materials from Windy Knolls I. In addition to the late 18<sup>th</sup>-century quarter and the possible association with Windy Knolls I, Windy Knolls II yielded a significant amount of modern material, including bottle glass and plastic, recovered near a ravine along the northern edge of the site. Discarded material was observed in both the ravine (which runs west toward Piney Branch) and on its edges and appears to indicate dumping of both industrial or agricultural and domestic refuse, ranging from empty 55-gallon steel drums to large amounts of bottle glass.

The site's stratigraphy consists of a thin layer of topsoil overlying a plow zone of yellowish brown sandy loam. The plow zone averages 1.0 to 1.1 feet in depth across the site, although in some areas it can be as deep as 1.3 feet. The plow zone at Windy Knolls II tends to be thicker than the plow zone found on the surrounding knoll tops, in large part because of erosion and plow zone deflation. Subsoil consists of a brownish yellow sandy clay.

Artifacts recovered from the shovel test pits at Windy Knolls II are presented in Table 28. Nearly 300 artifacts were recovered from the site, with more than half consisting of modern material related to the site's periodic use for dumping.

A small, low-density scatter of lithic debitage was recovered within the site's bounds, and the lithic scatter appears unrelated to the late 18<sup>th</sup>-century occupation of the site. Just six pieces of debitage were recovered, including three chert secondary flakes, one rhyolite and one chert tertiary flake, and a single quartz shatter. This material may indicate pre-Contact activity in the site area or may be related to the 17<sup>th</sup>-century occupation of nearby Windy Knolls I.

Seventeen ceramic fragments were recovered from Windy Knolls II, although none are of Native manufacture. Refined earthenwares comprise the majority of the small ceramic assemblage. Four fragments of creamware and seven of pearlware or possible pearlware were recovered. Only one pearlware fragment appears decorated but, because the sherd is small, the decoration or motif cannot be discerned, although a straight blue line appears to be part of the design. Creamware was first available in the colonies after 1760 and pearlware by 1780. Although no whiteware was recovered from the site, a single piece of white ironstone was. Ironstone, also known as white granite, was most common in the United States after 1840 (Godden 1999:162).

Other ceramics recovered from Windy Knolls II include three coarse earthenware and two stoneware fragments. The coarse earthenwares include an unglazed body sherd, a green-brown lead-glazed rim sherd, and a brown lead-glazed body sherd. None of these ceramic fragments were of an

	Count
Flake, chert or rhyolite	5
Shatter, quartz	1
<b>Total Lithics</b>	<b>6</b>
Coarse earthenware	3
Rhenish brown stoneware	1
English brown stoneware	1
Refined earthenwares	12
<b>Total Ceramics</b>	<b>17</b>
Glass bead, black	2
Bottle glass, colonial	2
Bottle glass, aqua-colored	1
Bottle glass, modern	99
Other glass, modern	12
<b>Total Glass</b>	<b>116</b>
Square nail, possibly wrought	8
Unidentified iron fragment	16
<b>Total Iron</b>	<b>24</b>
Brick	61
Coal fragment	5
Oyster shell	1
Roofing shingle fragment	7
Plastic fragment	34
Mirror fragment, modern	1
<b>TOTAL ARTIFACTS</b>	<b>272</b>

**Table 28.** Total artifacts recovered from shovel tests, Windy Knolls II.

materials indicates that the site was not occupied during the first half of the 18<sup>th</sup> century. The presence of the Rhenish brown and English stoneware fragments, however, as well as the two black glass beads raises questions about this site's association with Windy Knolls I. Rhenish brown stonewares are rarely recovered on sites post-dating the 17<sup>th</sup> century, although only one possible fragment of Rhenish brown was recovered from Windy Knolls I. On the other hand, a number of English brown stoneware fragments were recovered from the nearby 17<sup>th</sup>-century site. The two simple black glass beads recovered from Windy Knolls II (one from the core of the site and the other along the site's western edge) are similar in size and form to the black beads recovered from Windy Knolls I.

As noted, Windy Knolls II is believed to have been a domestic quarter for enslaved laborers. Diagnostic ceramics suggest the site was occupied sometime between 1760 and, at the latest, the opening years of the 19<sup>th</sup> century. The ironstone fragment could suggest occupation through the first half of the 19<sup>th</sup> century, although it is also possible and probably likely that this sherd is related to the later dumping at the site. Documentary evidence indicates that the two owners of the property during this period owned slaves. A 1795 Bill of Sale records that John Baptist Thompson, who had acquired the property the

identifiable or diagnostic type. The two stoneware fragments include a single fragment each of Rhenish brown and English brown stoneware. Rhenish brown stoneware was produced in the Rhine River region of Germany and is commonly found on 17<sup>th</sup>-century English colonial sites in the Chesapeake. English brown stoneware appeared in the colonies c. 1690 and continued to be produced throughout the 18<sup>th</sup> century.

Eleven of the 17 ceramics recovered from the site were recovered from a single shovel test pit (N328450/E1348600). This shovel test, which also produced relatively large quantities of other domestic and architectural material, including a black glass bead, a colonial bottle glass fragment, three square nail fragments, and over forty fragments of red brick weighing 161.1 grams, was located over an as-yet-unidentified feature. The plow zone encountered in this shovel test pit was slightly deeper than the plow zone in surrounding shovel tests, measuring approximately 1.3 feet in depth. Below the plow zone was a level of fill consisting of a dark yellowish brown (10YR4/4) sandy loam; excavation was suspended at approximately 2.0 feet below the ground's surface, indicating the feature extends at least 0.7 feet below the base of plow zone. While the function of the feature is unknown, the relatively high quantities of domestic and architectural artifacts may suggest a cellar, borrow pit, or other type of pit associated with the quarter.

Conspicuously absent from the shovel tests at Windy Knolls II are fragments of tobacco pipes, tin-glazed earthenwares or delft, Staffordshire slip-decorated wares, Rhenish blue and gray stonewares, and white salt-glazed stonewares. The absence of these

previous year from Eleanor Miles, sold four slaves, including Charles, Henry, Anny, and Nanny, to Miles for £250 (Charles County Land Records 1792-1796, Liber N4, [MSA CE82-40], 335). It is possible that any one of these men or women lived at the quarter that stood at Windy Knolls II.

The site’s location is not unexpected for a slave quarter. Slave quarters elsewhere in the Zekiah drainage have been identified in similar settings. The site of a mid- to late-18<sup>th</sup>-century slave quarter on the Hanson farm (Moore’s Lodge), south of La Plata, was found along the base of a slope adjacent to a freshwater spring near the fields where the laborers worked. The dwelling at the Hanson farm appears to have been positioned to keep its enslaved occupants invisible to the owner and, in so doing, affording the quarter’s residents a degree of privacy from the watchful eye of the master (King, Strickland, and Norris 2008:33). A late 18<sup>th</sup>-century quarter was also found in a similar setting at Prospect Hill (King and Strickland 2009b). The site of a slightly later quarter was discovered on the Steffens farm, along a gently sloping agricultural field which leads to the edge of the Zekiah’s main run. This quarter, which is described in more detail in Chapter VII, was associated with the Lindens farm and sited near but not visible from the owner’s dwelling.

Three of the artifacts recovered from Windy Knolls II, including the two black glass beads and the two stoneware fragments, are of special interest and may suggest some association with Zekiah Fort. Shovel tests at Windy Knolls II were excavated at intervals of 50 feet, making it difficult to conclude whether or not this area, while clearly occupied in the late 18<sup>th</sup> century, is also associated with the occupation of Zekiah Fort. Nonetheless, the evidence is intriguing, and given that as many as 90 to 300 people were congregated at the fort during times of alarm, it is feasible that Windy Knolls II represents a multi-component site. Even if the potentially earlier artifacts were materials found and curated by the site’s late 18<sup>th</sup>-century occupants, this area, and indeed all of the area between Piney Branch and the freshwater spring, was part of the Zekiah Fort landscape.

**D. Random Finds (18CHX0067)**

	<b>Count</b>
Chert secondary flake	1
Quartz shatter	2
Fire-cracked rock	1
Glass, brown bottle	1
Glass, colorless bottle	4
Glass, colorless window (modern)	1
Glass, light bulb	1
Barbed wire fragment	10
Iron crescent wrench, broken	1
Iron knife w/ plastic handle	1
Iron nail, possibly cut	1
Iron concretion	6
Plastic fragment	1
Roofing shingle	14
Brick	2
Fossil rock	1
<b>Total</b>	<b>48</b>

**Table 29.** Total artifacts recovered from shovel tests, Random Finds.

A total of 255 shovel tests at the Windy Knolls property were located outside of the boundaries drawn for both the Windy Knolls I and Windy Knolls II sites. The overwhelming majority of these shovel tests – 235 – contained no artifacts. The remaining 20 shovel tests contained a total of 48 artifacts, none of which are associated with either Windy Knolls I or Windy Knolls II. Using the Maryland Historical Trust’s Maryland Random Finds Numbering system (see Shaffer and Cole 1994:40), these unassociated artifacts have been designated 18CHX0067.

Aside from one chert secondary flake, two quartz shatter, one fire-cracked rock fragment, and a fossil rock, items designated as random or isolated finds are mostly modern (Table 29). Some of these materials are probably related to 20<sup>th</sup>-century farming of the area; other material appears to represent dumping on the property.

## VII. The Steffens and Hogue Farms

As part of the search for Zekiah Fort, systematic surveys were conducted at three other properties in the area. Archaeological sites at each of the properties were reported to have previously yielded Potomac Creek ceramics, which we were convinced would be a critical marker of 17<sup>th</sup>-century Native settlement. In addition, Wanser (1982:183) had reported a colonoware fragment in a collection from one of the properties. Although our investigations revealed that the fortified settlement was not located on any of these three properties, the testing did indicate that, during the 17<sup>th</sup> century, Native households were located on these properties and that they were probably occupied in the 17<sup>th</sup> century.

This chapter describes the results of our survey at the Steffens and Hogue farms, which were conducted primarily in the two properties' lowlands abutting Zekiah Run. The investigations on these portions of the Steffens and Hogue farms confirmed the presence of a relatively large Native American archaeological site occupied over the course of many centuries. In addition, a fairly discrete concentration of materials associated with a 19<sup>th</sup>-century domestic occupation was identified at the Steffens farm.

Although Native American artifacts were recovered from both the Steffens and Hogue farms, the largest concentration of materials (and therefore the most intensive occupation) appears along Piney Branch. Native American ceramics were only found during our project in a fairly small area on the east side of the Hogue property. Although previous researchers have reported that Potomac Creek and other grit-tempered ceramics were found in considerable quantity at the Steffens farm, our investigations there recovered only lithic materials and not a single ceramic fragment.

### A. Stratigraphy

The stratigraphy at the Steffens farm consists of a yellowish brown to dark yellowish brown sandy clay loam plow zone overlying a subsoil of yellowish brown to strong brown sandy clay. The plow zone ranges in depth from 0.6 to 1.2 feet below the surface with an average depth of about 0.8 feet. The plow zone excavated from most shovel tests includes 10 to 35 percent gravel.

The stratigraphy at the Hogue farm also consists of a plow zone of yellowish brown to dark yellowish brown sandy loam mixed with from 10 to 40 percent gravel. The plow zone ranges in depth from a shallow 0.3 feet along the hill top to 1.7 feet in the lower end of the field.

### B. Artifacts

Out of the 445 shovel test pits excavated on the Steffens property, 179 yielded artifacts. Artifact counts ranged from zero to 40 per shovel test, with a total artifact count of 398 and an average of 0.4 artifacts per shovel test (see Table 30; Appendix IV). Lithic artifacts, including stone flakes, shatter, and fire-cracked rock, form approximately 58 percent of the total artifact assemblage. No Indian-made ceramic fragments were recovered. Historic-period artifacts consist of a discrete cluster of early to mid-19<sup>th</sup>-century materials.

Of the 229 recovered lithic artifacts, more than 200 consist of waste flakes or shatter generated in the manufacture of stone tools (Table 31). Quartz was the predominant material, comprising 75.6 percent of the debitage assemblage, followed by quartzite (11.1 percent) and chert (6.7 percent), and rhyolite (6.7 percent).

	Count
Biface/core/point	6
Flakes	130
Shatter	93
<b>Total Lithics</b>	<b>229</b>
Unid. lead-glazed earthenware	3
Unid. refined earthenware	6
Porcelain	1
North American salt-glazed stoneware	1
<b>Total Ceramics</b>	<b>11</b>
Bottle glass	11
Flat glass	2
<b>Total Glass</b>	<b>13</b>
Brick/daub	65
Coal	1
Copper-alloy button	1
Fire-cracked rock	13
Unid. iron/gravel concretion	52
Unid. iron nail	3
Oyster shell	6
Misc. (modern materials, fossil rock, non-cultural rocks)	4
<b>Other Materials</b>	<b>145</b>
<b>TOTAL</b>	<b>398</b>

**Table 30.** Total artifacts recovered from shovel tests, Steffens property.

no Indian-made ceramics were recovered during our project. This finding suggests that, while surface collections can be an important source of information about an archaeological site, they must still be used with caution. It is also the case, according to the Steffens family, that the farm has been previously collected, extensively so. Collectors rarely recover flakes and shatter, however, so that material provides a clearer picture of lithic density at the site. Indeed, when compared with the materials recovered from the Hogue property (a property that has also been extensively collected), the density of stone artifacts at Steffens does appear lighter.

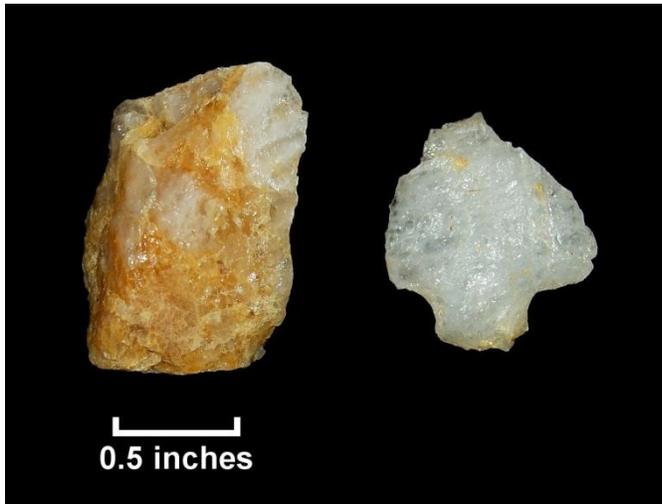
No diagnostic lithic materials were recovered from the site, although a few tools were found, including a quartzite projectile point tip and a stemmed quartz projectile point base fragment (Table 31; Figure 98). Additionally, two quartz bifaces were recovered. Four of the flakes (two quartz, one quartzite, and one rhyolite) showed evidence of utilization and another four (three quartz and one quartzite) were retouched. A total of thirteen fragments of fire-cracked rock were recovered.

Shatter was the largest category of debitage, accounting for 41.3 percent of the recovered stone artifacts. The presence of quartz and quartzite cores and primary flakes indicates that raw materials were being processed and reduced from local cobbles on-site, while the proportion of mostly smaller tertiary flakes also implies on-site finishing or tool maintenance. The majority of the rhyolite recovered was in the form of tertiary flakes, suggesting that this “exotic” (or non-local) material was brought to the site as blanks or in some pre-reduced form for later finishing. The presence of cores and primary flakes as far west as the Steffens property indicates that primary reduction of local materials was occurring at a distance from the heavier concentrations of artifacts on the site’s eastern edge.

Although Wanser (1982) indicated that Potomac Creek and other Late Woodland/Contact-period ceramics were found in considerable quantity at the Steffens property,

	Core	Primary Flake	Secondary Flake	Tertiary Flake	Shatter	Total	Percent
Quartz	1	9	24	50	86	170	75.6
Quartzite	1	2	6	13	3	25	11.1
Chert	–	1	5	5	4	15	6.7
Rhyolite	–	–	4	11	–	15	6.7
<b>Total</b>	<b>2</b>	<b>12</b>	<b>39</b>	<b>79</b>	<b>93</b>	<b>225</b>	
<b>Percent</b>	<b>0.9</b>	<b>5.3</b>	<b>17.3</b>	<b>35.1</b>	<b>41.3</b>		

**Table 31.** Lithic debitage recovered from shovel tests, Steffens property.



**Figure 98.** Stone tools recovered from shovel tests, Steffens property; left: quartz biface (Lot 118); right: quartz projectile point base (Lot 14).

One North American salt-glazed stoneware body fragment was found in association with the majority of the refined earthenwares. American-made “blue and gray” stoneware was ubiquitous through the 19<sup>th</sup> century (Noël Hume 1969:101). Three unidentified black lead-glazed coarse earthenware sherds and a single sherd of undecorated porcelain were also recovered. Approximately one-third of the brick (n=148.9 grams) and two of the three iron nails were also recovered from this general area. Although not



**Figure 99.** Nineteenth-century artifacts recovered from shovel tests, Steffens property; left: North American salt-glazed stoneware (Lot 167); top row, l-r: polychrome painted whiteware (Lot 175); blue painted pearlware (Lot 169); bottom row, l-r: unidentified refined earthenware base (Lot 171); black lead-glazed earthenware (Lot 167).

Artifact counts ranged from zero to 26 items per shovel test, with nearly three-quarters of the total artifact assemblage consisting of lithics or stone artifacts. Fourteen Native ceramics were also recovered, and two and possibly three fragments of European flint and a wrought nail suggest a post-Contact component at the site. Although no diagnostic projectile points were recovered as part of our survey, Wanser’s

Other materials recovered from the Steffens property include a small assemblage of early to mid-19<sup>th</sup>-century materials (Figure 99). Refined earthenwares constitute the bulk of the limited ceramic assemblage and include one fragment each of creamware, pearlware, and whiteware along with three unidentified refined earthenware fragments. Four of the refined earthenware fragments are undecorated, although their small size does not foreclose the possibility that these pieces came from decorated vessels. The possible pearlware fragment does exhibit a hand-painted cobalt design, although the piece is too small to suggest a dateable motif. The whiteware body fragment is also hand-painted with a floral polychrome pattern of light green leaves with a thin pinkish-red line.

in the core of the domestic site, two lead-glazed coarse earthenwares (similar to the one recovered in the primary concentration) and a very small amount of brick (around 12 grams) were recovered some 500-feet downhill from the domestic quarter with no other historic materials.

Additional historic-period materials (e.g., glass, copper alloy button, refined and coarse earthenwares, and brick) were dispersed across the agricultural fields do not cluster together in any quantity to indicate another domestic dwelling.

Following the testing at the Steffens farm, we moved to the Hogue farm (18CH0103), where we excavated 599 shovel test pits. These shovel tests yielded 942 artifacts, or approximately 1.6 artifacts per shovel test (Table 32; see also Appendix V).

	Count
Biface/Core	11
Drill/Scraper/Point	9
Flakes	457
Unidentified greenstone fragment	1
Flake, European flint	3
Shatter	194
<b>Total Lithics</b>	<b>675</b>
Native ceramics	14
Refined earthenware	3
Semi-porcelain	1
Unidentified stoneware, 19th/20th-century	1
<b>Total Ceramics</b>	<b>19</b>
Bottle glass	53
Flat glass, colorless	1
Glass slag, blue	1
<b>Total Glass</b>	<b>55</b>
Iron nail, unidentified	6
Iron nail, wire	3
Iron nail, wrought	1
Other Iron, modern (e.g., barbed wire and staple)	15
Metal fragment, serrated	1
Unidentified iron fragment	25
<b>Total Metal</b>	<b>51</b>
Brick/daub	84
Fire-cracked rock	42
Turtle shell fragment	1
Other, modern (plastic, asphalt)	4
Other rock, non-cultural	11
<b>Other Materials</b>	<b>142</b>
<b>TOTAL</b>	<b>942</b>

**Table 32.** Total artifacts recovered from shovel tests, Hogue property.

	Core	Primary Flake	Secondary Flake	Tertiary Flake	Shatter	Tool	Total	Percent
Quartz	5	6	78	157	175	6	<b>427</b>	<b>63.3</b>
Quartzite	2	6	43	72	11	4	<b>138</b>	<b>20.4</b>
Rhyolite	–	–	5	63	2	2	<b>72</b>	<b>10.7</b>
Chert	–	–	6	13	5	–	<b>24</b>	<b>3.6</b>
Chalcedony	–	–	1	4	–	–	<b>5</b>	<b>0.7</b>
Jasper	1	–	–	–	1	–	<b>2</b>	<b>0.3</b>
Silicified Sandstone	–	–	–	1	–	–	<b>1</b>	<b>0.1</b>
European Flint	–	–	3	–	–	–	<b>3</b>	<b>0.4</b>
Unidentified Rock	–	–	1	1	–	–	<b>2</b>	<b>0.3</b>
Possible Greenstone	–	–	–	–	1	1	<b>1</b>	<b>0.1</b>
<b>Total</b>	<b>8</b>	<b>12</b>	<b>137</b>	<b>311</b>	<b>195</b>	<b>12</b>	<b>675</b>	
<b>Percent</b>	<b>1.2</b>	<b>1.8</b>	<b>20.3</b>	<b>46.1</b>	<b>28.9</b>	<b>1.8</b>		

**Table 33.** Lithic debitage recovered from shovel tests, Hogue property.

(1982) review of materials previously collected from the site coupled with our survey indicate that this portion of the Hogue farm has been occupied for thousands of years, probably intermittently, with the most intense occupation dating to the Late Woodland.

Stone artifacts included 675 lithics and 42 fragments of fire-cracked rock. The overwhelming majority of lithics, more than two-thirds or 68.1 percent, consist of debitage or waste flakes (Table 33). Twelve tools include three bifaces, six projectile points, two scrapers, and a drill (Figure 100). Most tools were made of locally available quartz or quartzite, although two projectile points were made from rhyolite. One utilized flake was also found, and four flakes showed evidence of retouch. Debitage was primarily quartz with significant amounts of quartzite, rhyolite, and chert, and negligible amounts of other materials.

With over 80 percent of the lithic material identified as either quartz (63.5 percent) or quartzite (20.2 percent), it is clear that, through time, the residents of the site relied primarily on locally available materials to produce stone tools. Seven cores of quartz and quartzite were also recovered, as well as six primary flakes of each, suggesting that primary reduction of cobbles was taking place on site and, indeed, quartz raw materials may have been collected from nearby sources. If this is the case, it is likely that all stages of lithic reduction were occurring at 18CH103, as the presence of a high percentage of tertiary flakes attests to later-stage reduction or retouch.



**Figure 100.** Quartzite tools and points recovered from shovel tests, Hogue property; l-r: possible Broad Spear type (Lot 156), Bare Island or small Savannah River (Lot 147), biface.

rhyolite—which offers more substantial data than does the jasper assemblage—suggests that exotic materials were regularly worked or preformed before being carried to the site.



**Figure 101.** Flint fragments recovered from shovel tests, Hogue property; clockwise from left: Lot 214, Lot 221, Lot 327.

another suggested Flint Ridge as a source; and another said absolutely not. An effort to resolve the question using XRF analysis was inconclusive.

European flint, which was used in flintlock firearms, was often obtained by Native Americans through trade with Europeans or by collecting flint nodules discarded as ballast material by European ships. The dozens of fragments recovered at the Windy Knolls I (18CH0808) site indicates that the Piscataway had access to and acquired considerable quantities of flint, and the two European flint fragments recovered from the Hogue farm are indeed similar to those recovered from Windy Knolls I. At least one pile of discharged ballast flint has been reported for the Wicomico River near Rock Point, and there is evidence that Natives exploited this resource for tool manufacture (Reynolds 1883:307-308). The two pieces of European flint recovered from the Hogue property all have cortex remaining, suggesting that this material was not brought to the site in finished form and may indicate that the post-Contact

Ninety percent of the rhyolite recovered from the Hogue farm is in the form of tertiary flakes, indicating that primary reduction of rhyolite cobbles was not occurring at the site. Instead, large chunks of rhyolite were probably reduced or shaped into blanks or performs at the western Maryland location from which the material was originally quarried. Rhyolite work at Hogue, then, consisted mainly of secondary or late-stage reduction of the material—the finishing or resharpening of tools, for instance. A single jasper core found at the site hints that “exotic” or non-local material other than rhyolite may have been brought to the site in raw form. However, the

Two flakes of what appear to be European flint and a third that may be European or American, all bearing some cortex, were also recovered from the site (Figure 101). Although there are known sources of gray flint in North America, at least two secondary flakes recovered from the Hogue property are likely of European provenance. The third specimen may also be European, although its color does not match known European examples.

During the survey of the Steffens and Hogue properties (and before the discovery of Zekiah Fort), we consulted with a number of colleagues about the three flint fragments, which we had tentatively identified as European. Surprisingly, there was little consensus among our colleagues about whether or not these fragments are of European origin. Some said they are all European; others said no, none are European; still

residents of the site were exploiting European ballast discharge rather than acquiring and reworking finished flint objects through trade.

Only two diagnostic projectile points were recovered (see Figure 100). One was a quartzite Bare Island (or possibly a small Savannah River) point, dating to the Late Archaic period (3500 BC-1000 BC). The other diagnostic point, also Late Archaic in date, is a possible quartzite Broad Spear type. The other points, two quartz and two rhyolite, were not identifiable. One of the rhyolite points has been heavily reworked. Other tools recovered include two quartz unifacial scrapers, a tool made from a retouched flake and potentially used for a number of purposes (animal skin processing, wood working, etc.). Three bifaces and a drill were also found at the site.

Fourteen ceramic fragments were recovered from the Hogue property during shovel testing, including one Pope's Creek, ten Potomac Creek, and three unidentified fragments (Figure 102). Pope's Creek, a sand-tempered ware often found with a cord-marked exterior, dates to the Early Woodland (1000 BC-200 AD). In the Potomac and Patuxent drainages, Pope's Creek ceramics have been more tightly radiocarbon-dated to between 500 BC and 50 BC (Curry and Kavanagh 1994).



**Figure 102.** Native ceramics recovered from shovel tests, Hogue property; top row: all Potomac Creek; bottom row: unidentified fragment; Pope's Creek; Potomac Creek; Potomac Creek.

The ten Potomac Creek ceramics found at the Hogue property are associated with the Late Woodland period (1300-1700 AD) (Egloff and Potter 1982), with Potomac Creek ceramics found in Maryland throughout the Western shore Coastal Plain. No rim or basal sherds were recovered and only one piece is cord-marked; the remaining nine fragments are plain, which suggests a later occupation. At the Windy Knolls I site, Potomac Creek ceramics formed the largest category of Native ceramics recovered, and only ten percent of the Potomac Creek assemblage bearing traces of cord-marking. This is not that different from the proportion represented in the Hogue collection, although the Hogue sample is

much smaller in size and these observations must be used cautiously.

In his study of extant collections from the lower Potomac, Wanser (1982) reported a total of 58 Indian-made ceramics from the Hogue property. Potomac Creek formed the highest numbers with 15 cord-marked and 32 plain sherds identified. Wanser also observed a single sherd of possible Colonoware. As noted in the discussion on Native-made ceramics recovered from the Windy Knolls I site, colonoware is rare on Maryland sites from any time period and its appearance at the Hogue property would indicate a post-Contact occupation. Wanser also reported Accokeek Creek ceramics for the site, which date to the Early Woodland (900 BC-300 BC).

In addition to Native-made ceramics, five European ceramic types are found in the collection, including two undecorated pearlware, one undecorated whiteware, one undecorated semi-porcelain, and one unidentified 19<sup>th</sup>/20<sup>th</sup>-century stoneware fragments. These ceramics indicate some use of the property at the end of the 18<sup>th</sup> century continuing to the present.

Shovel testing produced 55 glass fragments, none of which are colonial. The heaviest concentration of brick is attributed to a single burnt red brick fragment (n=57.4 grams) which appears to be associated with a standing shed located southeast of the residential house.

Modern materials related to the keeping of horses and cattle, including eleven barbed-wire fragments, make up a small concentration in an area situated near Piney Branch. At the time of excavation, the pastures in the project area were fenced off using electrical or barbed-wire fences. In a forested area looking out into a pasture, 27 fragments of colorless or amber bottle glass, one white semi-porcelain body sherd, and several unidentified iron fragments were recovered likely indicating an area used for refuse.

### **C. Artifact Distributions**

Our survey of the Steffens and Hogue farms revealed a large, multi-component site stretching across both properties, with the most intensive occupation along the west side of Piney Branch. Figure 103 shows the distribution of lithic artifacts across both properties, revealing a heavy concentration of materials along Piney Branch and along the toe of the hillside on the Hogue farm. Nonetheless, less dense concentrations of lithics occur along the unnamed stream separating the Steffens and Hogue farms and a second unnamed stream along the west edge of the Steffens property. Unfortunately, a lack of diagnostic material makes it difficult to determine the dates of these occupations, but Wanser's (1982) earlier study and the few diagnostic artifacts we recovered indicate that the area was used beginning in the Early Archaic.

Figure 104 shows the distribution of Native-made ceramics across both properties. While the density is not high (hence the use of piece plotting), ceramic fragments occur along the west bank of Piney Branch with a few scattered along the toe of the hill.

Figure 105 shows the shovel test locations from which the flint fragments were recovered; although the number is small, the distribution generally corresponds with the distribution of ceramics.

Figure 106 shows the distribution of fire-cracked rock across both properties. Like the waste flakes generated during the process of stone tool manufacture, fire-cracked rock is not temporally diagnostic, but it can suggest areas of habitation based on where fires were presumably maintained. Fire-cracked rock is concentrated in the general area of shovel tests from which the pottery fragments were also recovered. A discrete cluster of FCR also appears on the northern edge of the site's tested area, at the base of the aforementioned rise—also in an area of high-density debitage. FCR also co-occurs with lithics at the Steffens property around springheads.

Finally, Figure 107 shows the distribution of 19<sup>th</sup>-century materials across both properties. While 19<sup>th</sup>-century artifacts form a light scatter across both farms (not an unusual occurrence), a dense concentration along the hillside just below The Lindens house suggests the location of a probable slave quarter.

When Wanser (1982) conducted his survey of artifact collections from southern Maryland, he found that the Steffens and Hogue properties had been occupied, probably intermittently, for centuries beginning in the Early Archaic (7500 BC). The properties' period of most intensive occupation appears to have been during the Late Archaic (between 3500 BC and 1000 BC). The evidence suggests that the properties were occupied less intensively beginning about 1000 BC until Contact. An Adena point reported to have been recovered from the Hogue property suggests that, between 400 BC and 100 AD, the

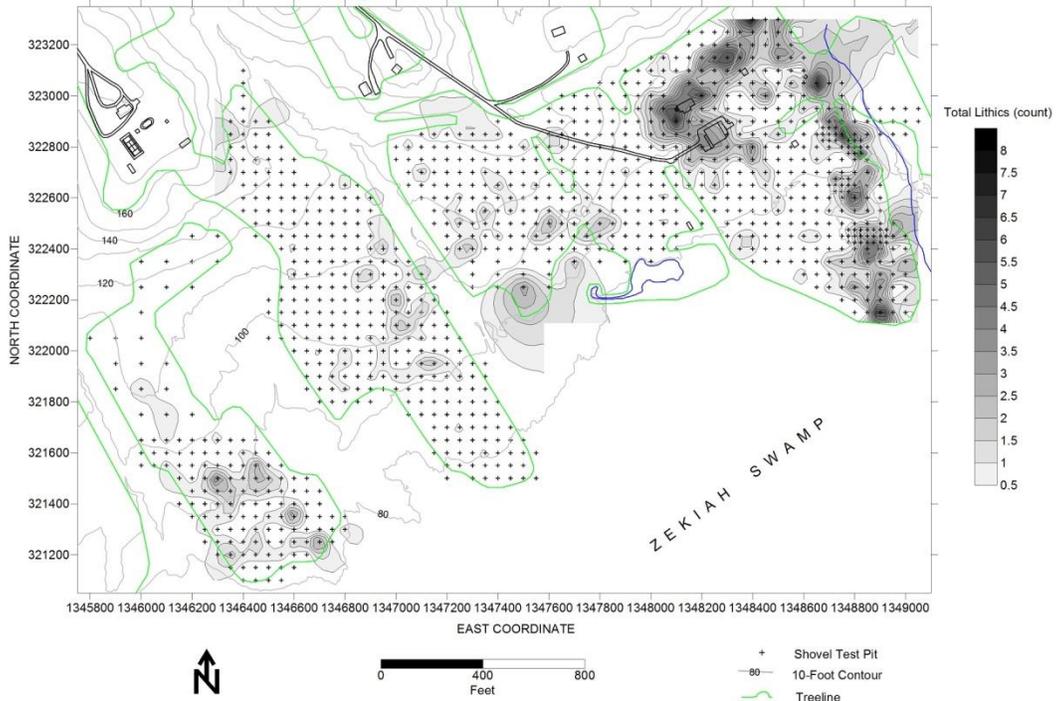


Figure 103. Distribution of lithic artifacts, Steffens and Hogue properties.

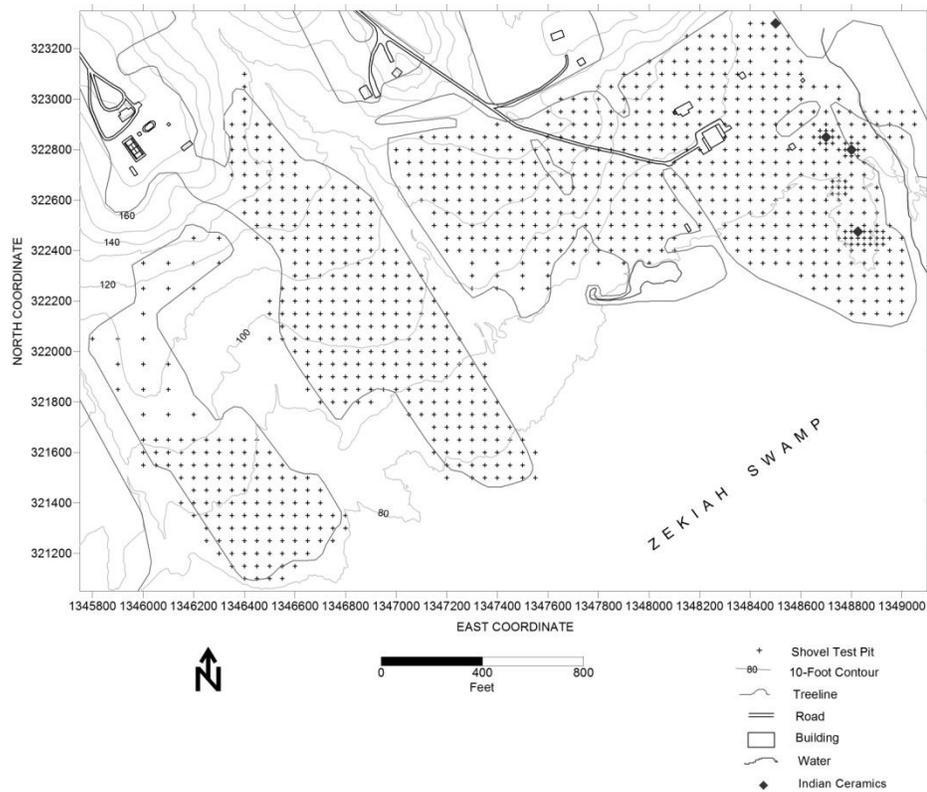
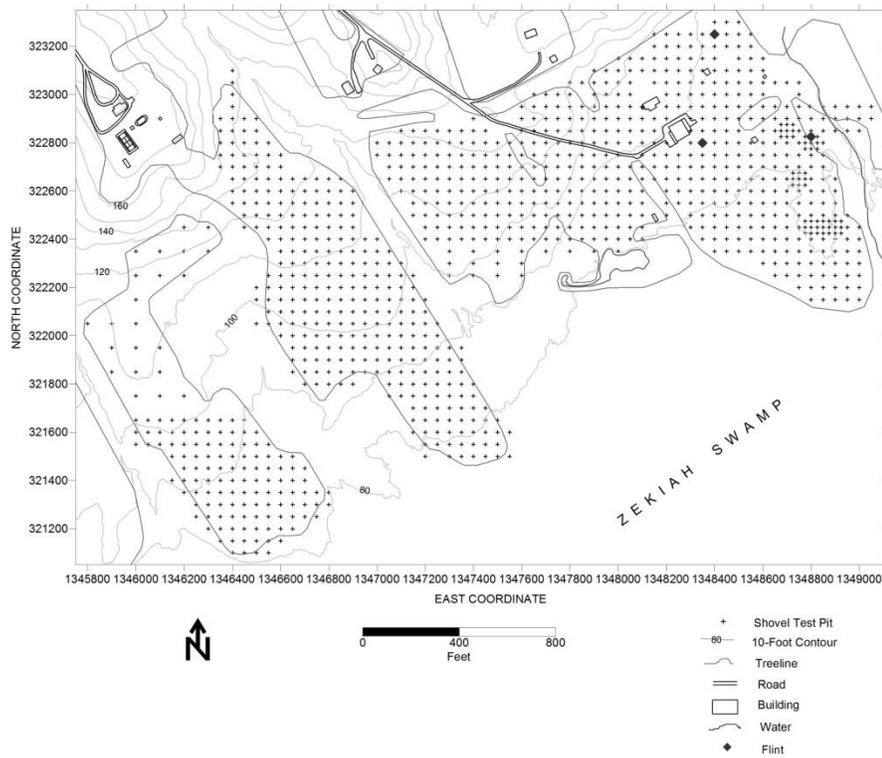
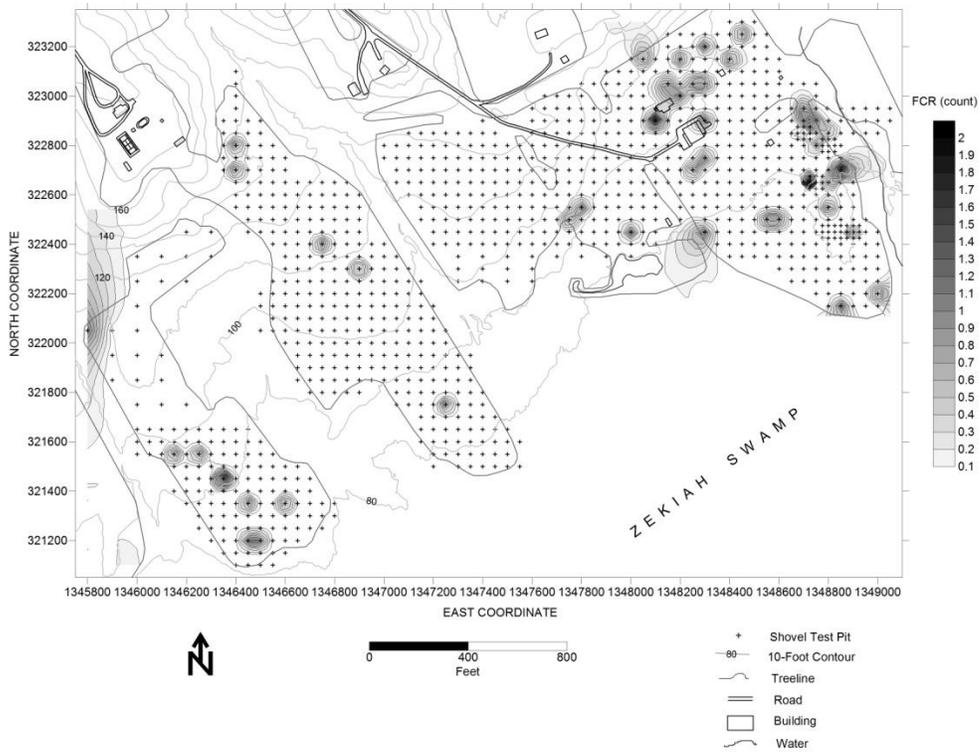


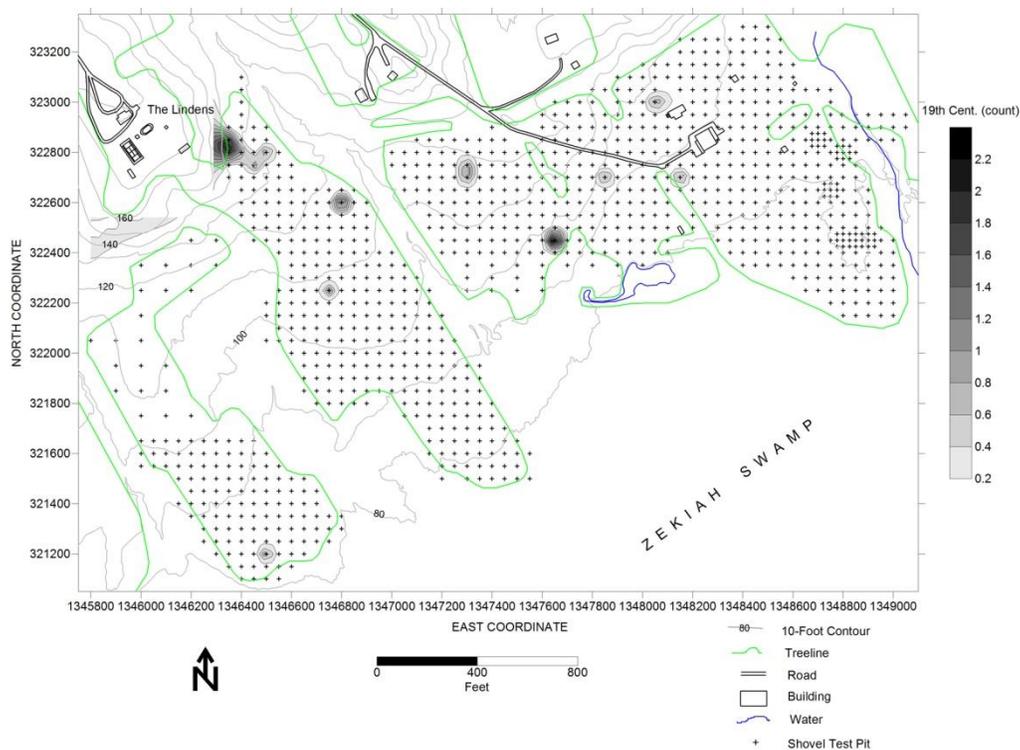
Figure 104. Distribution of Native ceramics, Steffens and Hogue properties.



**Figure 105.** Distribution of European flint, Steffens and Hogue properties.



**Figure 106.** Distribution of fire-cracked rock, Steffens and Hogue properties.



**Figure 107.** Distribution of 19<sup>th</sup>-century artifacts, Steffens and Hogue properties.

site's occupants were involved in some capacity with the long-distance trading networks that brought exotic stones from the interior to the Coastal Plain. Occupation appeared to have intensified at the site, given the large numbers of Potomac Creek ceramics recovered, suggesting a use of the property beginning as early as 1300 AD. Finally, a single sherd of colonoware reported by Wanser for a collection from the Hogue property, presumably because the fragment had a plain surface, little to no tempering, and possibly a form mimicking a European vessel.

Our work failed to generate the range of diagnostic types Wanser saw in his survey. The recovery of two Late Archaic projectile points during our project, however, supports Wanser's observations that the site was used during that period. Our work also affirms use of the property in the Middle (200 AD-800 AD) and Late (800 AD-1600AD) Woodland, based on the recovery of Native ceramics.

Wanser's earlier observation of a colonoware ceramic fragment in a collection from the Hogue property along with our recovery of three secondary flakes of European flint and a single wrought nail points to a post-Contact occupation of the property. Indeed, the Potomac Creek ceramics we recovered and those which Wanser observed for the Hogue property could very well have been used and discarded in a post-Contact context.

If this is the case – and we recognize that this interpretation makes a number of assumptions – it is possible and even likely that the Hogue property contains a post-Contact occupation related to Zekiah Fort, located just over a mile north of the site on the east bank of Piney Branch. Such a pattern of settlement would be in keeping with the Piscataway practice of dispersed households comprising

settlements. It would also help to explain why the Windy Knolls I assemblage, while rich in artifacts, does not contain the quantities of materials seen at Posey or at Camden.

In addition to the Native occupations found on both properties, what appears to be a slave quarter was located just below The Lindens on the Steffens property (see Figure 107). This concentration of domestic materials along a slope belong the standing 19<sup>th</sup>-century house at the Steffens property was likely a quarter for enslaved laborers attached to the Gardiner farm. Archaeological and documentary evidence suggests that, by the mid-1800s, the Steffens property was part of a plantation owned by John Francis Gardiner. The still-standing house known as The Lindens (see Figure 19) was completed in 1840 for Gardiner, with a brick bearing Gardiner's initials and the date, 1840, found in the chimney stack. This side-passage double parlor frame dwelling of Greek Revival-style was typical of the houses southern Maryland farmers were building during the first half of the 19<sup>th</sup> century, although The Lindens is a relatively late example. The house also retains considerably sophisticated interior finishes. Additions and modifications to the structure were made in 1880 and again in 1950, but the form of the building remains essentially intact (Rivoire 1989).

How John Francis Gardiner came into possession of the property is not completely clear. He appears to have been born in Bryantown and, at the time of his father's death, was living on a farm at Newport, near Allen's Fresh. He may have acquired The Lindens property through marriage, purchase, and/or inheritance. When the U.S. Federal Census was taken in 1840, however, the year that Gardiner built The Lindens, he held 16 slaves. By 1860, Gardiner owned 25 slaves, 20 of whom were 18 years of age or older (U.S. Bureau of the Census 1860). It is likely that some or all of these individuals lived in slave quarters at The Lindens, probably in the quarter represented by the early to mid-19<sup>th</sup>-century artifacts in the field below the house.

## VIII. Jordan Swamp I/St. Peter's Catholic Church Property

Jordan Swamp I (18CH0694), located on the St. Peter's Catholic Church property near the head of Jordan Swamp, was first identified in 2000 during a highway planning survey conducted by the Maryland State Highway Administration (Barse, Eichinger, and Scheerer 2000). The site was interpreted as a possible refuge-type settlement or hamlet occupied during the very Late Woodland (900 AD-1600 AD) or initial Contact period. Significantly, Jordan Swamp I yielded 16 fragments of Potomac Creek ceramics, all with fine temper and well-smoothed to polished surfaces, and is, along with the Hogue farm, one of only a handful of sites in this area characterized by Potomac Creek.

A total of 147 shovel tests were excavated at Jordan Swamp I, confirming Barse, Eichinger, and Scheerer's (2000) finding of a relatively small site. Our expanded testing indicated, however, that the site was occupied earlier than the Late Woodland/Contact periods, with evidence of human use of the site from perhaps as early as the Early Archaic (7500 BC) and definitely by the Middle Woodland (200 AD-900 AD) period. The site appears to measure approximately 350 by 300 feet, or about two acres in size. Combining our findings with those from the earlier project, Jordan Swamp I appears to have been a small settlement intermittently occupied over the course of several centuries with the most intensive occupation taking place during the Late Woodland. The recovery of a single flake of European flint also suggests post-Contact use of the site.

### A. Stratigraphy

The stratigraphy at Jordan Swamp I consists of a layer of yellowish brown to dark yellowish brown silty loam measuring from 0.4 to 0.9 feet in thickness overlying a layer of brownish yellow to light yellowish brown silty clay ranging from 0.1 to 0.5 feet in thickness. In the northwest area of the project area, this second layer can sometimes contain charcoal flecks. In some areas there is a topsoil of very dark grayish brown silty loam measuring no more than 0.2 feet in thickness.

Barse, Eichinger, and Scheerer (2000) concluded that the Jordan Swamp I site was probably never plowed, although pre-Contact cultural materials are found in both the top and lower levels. The possibility that this field was once plowed or in agricultural use cannot be ruled out given that the area consists of three to four acres of prime agricultural soil, some along slopes. Evidence recovered from Windy Knolls I indicates that slopes were indeed plowed in this region. However, as noted in the description of the project area, with the exception of the three to four acres of prime soil containing the Jordan Swamp I site, the majority of surrounding soils are generally of poor quality for cultivation. Given the lack of post-colonial artifacts, it is likely that this area was not plowed during the historic period.

### B. Artifacts

The 2010 program of shovel testing recovered a total of 145 artifacts, with shovel tests yielding between zero and 11 artifacts, or about one artifact per shovel test (Table 34; Appendix VI). The almost complete absence of modern materials suggests that this site was little used in the 18<sup>th</sup>, 19<sup>th</sup>, and 20<sup>th</sup> centuries.

The 2010 program of shovel testing recovered a total of 127 stone artifacts (Table 35), including nine fire-cracked rock.<sup>27</sup> Excluding the fire-cracked rock, this material consists primarily of quartz (78.8

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<sup>27</sup> This is in addition to the 71 stone artifacts (of which 21 are fire-cracked rock) recovered by Barse, Eichinger, and Scheerer (2000); the artifacts collected in 2000 are not included in this table.

	<b>Count</b>
Biface/Core	4
Flake, Primary	84
Flake, European flint	1
Projectile Point	3
Scraper	1
Shatter	25
<b>Total Lithics</b>	<b>118</b>
Mockley, net-impressed	1
Potomac Creek, plain	2
Potomac Creek, cord-marked	1
<b>Total Ceramics</b>	<b>4</b>
Bottle glass, colorless	1
Daub	8
Fire-cracked rock	9
Iron nut & bolt, modern	1
Other rock, non-cultural	3
Snail shell	1
<b>Other Materials</b>	<b>23</b>
<b>18CH694 TOTAL</b>	<b>145</b>

**Table 34.** Total artifacts recovered from shovel tests, Jordan Swamp I.

(2002:150) dates the Kanawha point from 6000 to 5500 B.C. Halifax points are side-notched points which date to the Late Archaic, and Dent notes that they are most common between 6000 and 5000 years ago (Dent 1995: 174-175).

Levanna points like the one recovered from the 2002 investigations at 18CH694 are small, triangular points and are believed to have served as genuine arrow points. They are common during the Late Woodland period and were manufactured into the Contact period.

Nine fragments of fire-cracked rock were recovered, as well as eight pieces of daub.

Although Barse, Eichinger, and Scheerer (2000) report 16 fragments of Potomac Creek ceramics, our work recovered only four Native-made ceramics, including three from shovel tests and one from the

percent), with small amounts of quartzite (11.9 percent), chert (3.4 percent), and rhyolite (3.6 percent) also present (Table 30). Three flakes were utilized and four others showed evidence of retouch. As mentioned previously, a single flake of gray European flint was also found (Figure 108).

In addition to the lithic debitage, a total of seven stone tools were recovered from the site, including three bifaces, one scraper, and three projectile points (Figure 109 shows a sample of the stone tools recovered from Jordan Swamp I). Of the three points, two were recovered from shovel tests. One of these is a possible Halifax point of quartzite, while the other is a non-diagnostic quartz point fragment with a missing base. The third, a possible Kanawha point of rhyolite, was surface collected from the site. Additionally, one of the retouched quartz flakes may have been an unfinished triangular point, although this is questionable. A single quartz Levanna point was reported during the previous archaeological work at Jordan Swamp I by Barse, Eichinger, Scheerer (2002:4.8).

Kanawha points are bifurcate-base points which are typical of the Early Archaic period. Dent (1995:168) notes that bifurcate points appeared about 9000 years ago. Hranicky

	Core	Primary Flake	Secondary Flake	Tertiary Flake	Shatter	Tool	<b>Total</b>	<b>Percent</b>
Quartz	1	8	19	38	23	4	93	78.8
Quartzite	–	2	7	3	1	1	14	11.9
Chert	–	–	1	3	–	–	4	3.4
Rhyolite	–	–	–	3	1	2	6	5.1
English Flint	–	–	–	1	–	–	1	0.8
<b>Total</b>	<b>1</b>	<b>10</b>	<b>27</b>	<b>48</b>	<b>25</b>	<b>7</b>	<b>118</b>	
<b>Percent</b>	<b>0.8</b>	<b>8.5</b>	<b>22.9</b>	<b>40.7</b>	<b>21.2</b>	<b>5.9</b>		

**Table 35.** Lithic debitage recovered from shovel tests, Jordan Swamp I.



**Figure 108.** Tertiary flint fragment recovered from shovel test, Jordan Swamp I (Lot 73).



**Figure 109.** Stone tools recovered from shovel test, Jordan Swamp I; l-r: rhyolite biface (Lot 43); quartz biface (Lot 33); rhyolite Kanawha point (Lot 75); quartz point, possibly Halifax (Lot 64).

surface (Figure 110). These fragments include a single body sherd each of Mockley net-impressed, Potomac Creek cord-marked, and Potomac Creek plain from the shovel tests. The surface-collected ceramic fragment appears to be Potomac Creek plain. The Mockley ceramic indicates that the Jordan Swamp I site was probably used during the Middle Woodland (200 AD-900 AD), while the Potomac Creek ceramics confirm the observations made by Barse, Eichinger, and Scheerer (2000).



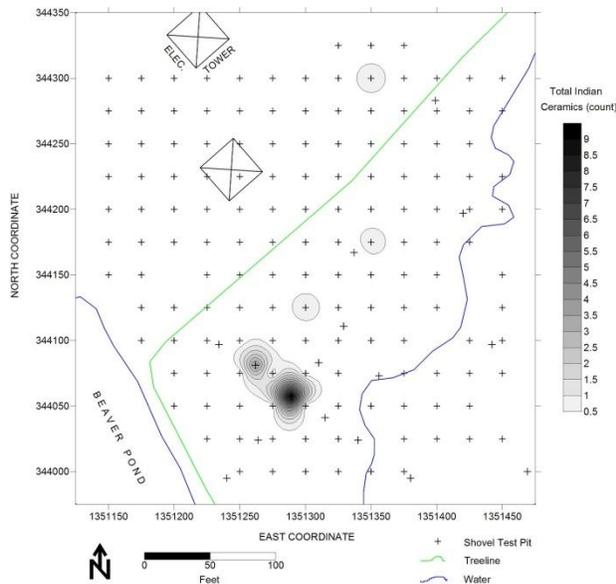
**Figure 110.** Native ceramics recovered from shovel test, Jordan Swamp I; l-r: Potomac Creek cord-marked (Lot 73); Potomac Creek (Lot 76); Mockley (Lot 43).

### C. Artifact Distributions

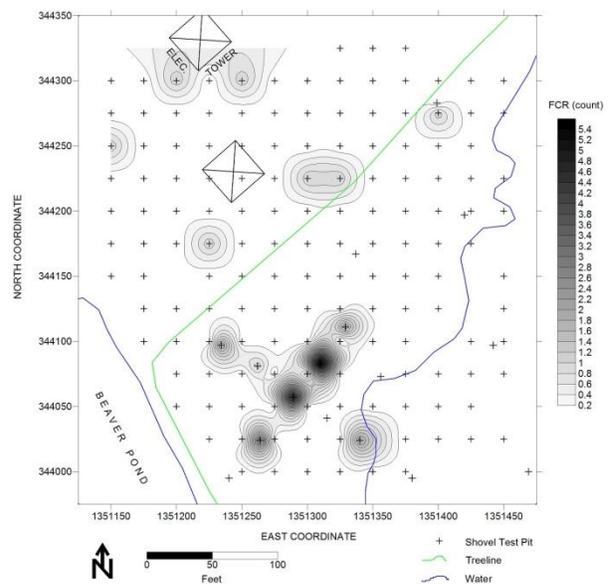
The shovel testing undertaken in 2010 revealed concentrations differing somewhat from those identified in 2000. We also discovered as part of our testing that the Jordan Swamp I site appears to be larger than previously determined. While this is not especially surprising given the greater number of shovel tests that we excavated, what is unusual is that we found no ceramic fragments at all in the area where the previous workers had found a high concentration. This may be due in part to differences in the grid systems used. Our efforts to relocate the

earlier grid system were based on identifying certain topographic features in the 2000 report and then relocating them on the ground.

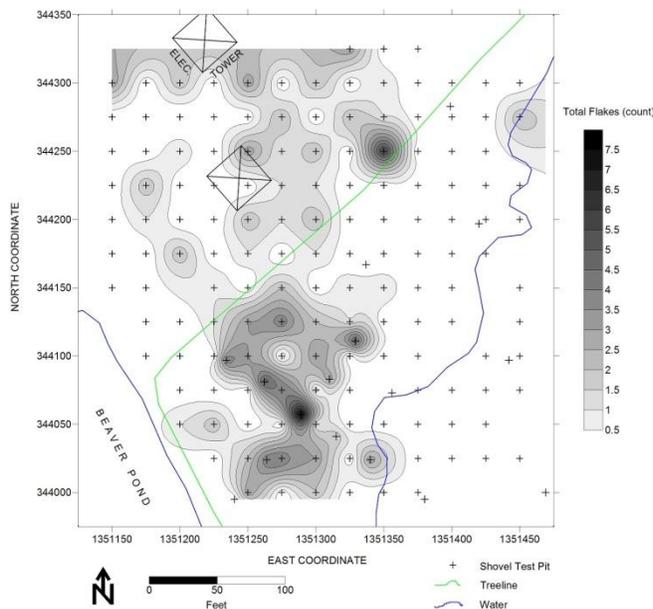
During the earlier investigation, Barse, Eichinger, and Scheerer (2000) found that the distribution of both Native ceramics and fire-cracked rock was heaviest on the knoll overlooking the beaver pond (Figures 111 and 112). Barse, Eichinger, and Scheerer (2000) had suggested a hearth nearby. The concentration of lithic materials (Figure 113) indicates that stone tool maintenance also took place in this



**Figure 111.** Distribution of Native ceramics, Jordan Swamp I.



**Figure 112.** Distribution of fire-cracked rock, Jordan Swamp I.



**Figure 113.** Distribution of lithics, Jordan Swamp I.

area. The expanded shovel testing reveals that ceramics, lithics, and fire-cracked rock are found in a larger scatter surrounding the concentration overlooking the beaver pond.

When the shovel testing results from the 2000 investigation are combined with the results from our work in 2010, what emerges is a relatively small site, measuring approximately two acres in size on a knoll overlooking what is today a beaver pond and was probably in earlier times a source of fresh water for the site's occupants. The presence of beaver in the area today, represented by their handiwork with the pond and a sighting of at least one animal during our fieldwork, may have been part of the draw. In addition, while the soils in this part of the greater project area are relatively poor for agriculture, the site itself is located within a patch of desirable Beltsville soils.

Our work revealed some use of this location beginning in the Early Archaic, with at least intermittent use in the Late Archaic and Middle Woodland. The bulk of the diagnostic artifacts, however, indicate an occupation sometime after 1300 AD. The recovery of a single flake of European flint and the predominance of smoothed Potomac Creek ceramic fragments suggest a Contact period habitation, a possibility also suggested by Barse, Eichinger, and Sheerer (2000). Indeed, it is possible that the shell-tempered ceramic recovered by the excavators in 2000 may also be late in date, given the relatively high

numbers of Yeocomico and other shell-tempered wares recovered from Windy Knolls I, the site we have interpreted as the Zekiah Fort (see Chapter V).

While it is hard to know from the available evidence what the landscape at Jordan Swamp I looked like in the 17<sup>th</sup> century, during our fieldwork, we were able to see Maryland Route 5 in the distance. Our view was afforded by the cleared terrain for the large power lines that cross the site's northwest edge. Located less than 4000 feet from the site, Maryland Route 5 generally follows what was described in the late 17<sup>th</sup> century as a coach road and, before that, was almost certainly a pre-Contact transportation route. Jordan Swamp I provided relatively easy access to that route, and was situated on a patch of good soil with access to animals, including deer, beaver, and possibly wild cat, desired by early Maryland Indians.

## IX. Conclusion

When in late 2008 we began our systematic search for evidence of the 1680 fortified Piscataway Indian settlement at Zekiah, little was known about the nature of 17<sup>th</sup>-century occupation in this part of southern Maryland. Very little systematic work had been done at the scale necessary to identify early settlements, European or indigenous. Our project focused on the careful systematic survey of a number of parcels which previous researchers had identified as having a high potential for containing evidence of the Zekiah Fort. In addition, we identified other areas of high potential based on work at the Posey site (18CH0281), a probable Mattawoman settlement located near Mattawoman Creek aboard what is today the Naval Surface Warfare Center – Indian Head Division, and at Camden (44CE0003), an Indian town located on the south side of the Rappahannock River in Caroline County, Virginia. Aside from the search for the fort and its associated settlements, we also focused on a number of properties occupied by European colonists, including Moore’s Lodge, Fair Fountain/Hawkins Gate, Westwood Manor, Sarum, Notley Hall, and the Josias Fendall/William Digges Plantation.

This work – much of it undertaken by students at St. Mary’s College of Maryland – has generated a rich record of the 17<sup>th</sup>-century landscape and provided the foundation for a re-interpretation of life in the Wicomico River and Zekiah Swamp drainages during the first century of colonial occupation. This re-interpretation has revealed a world that involved ongoing, everyday Anglo-Native interaction, but it was also a world where identities were increasingly based around forming notions of race and ethnicity. Although our original goal was to find a discrete settlement we could point to as “the Zekiah Fort,” in fact, these discoveries have shown how deeply connected and related many spaces, whether on the knoll top or farther away at the Steffens/Hogue properties, whether Native or English, were with one another, from the space of the individual to the greater landscape of the Wicomico and Zekiah. This work has revealed just how significant and compelling the region’s overlooked colonial history really is.

Much of this work has been reported elsewhere (Alexander *et al.* 2010; King, Strickland, and Norris 2008; King and Strickland 2009a, b; Strickland and King 2011; Bauer and King 2012, [2013]). This report has focused on three settlements located along both Piney Branch and Jordan Run. All three settlements were occupied by Native people, and two, including the Steffens (18CH0093)/Hogue (18CH0103) site and Jordan Swamp I (18CH0694), appear to have been visited as early as 8000 years ago, when temperatures were cooler and the Zekiah an area rich in resources. These settlements represent the “persistence” many researchers see in Native settlements occupied for centuries. The third, the Windy Knolls I site (18CH0808), however, was not occupied until 1680, unusual for Native settlement in the Zekiah.

Windy Knolls I is almost certainly the location of the “literal” Zekiah Fort. The site is located in an area with easily defended features, including a steeply sided knoll nearly thirty feet high surrounded on three sides by woodland creeks. A perennial spring and good soils both on top of the knoll and in the fields below made it suitable for habitation for a large group of people, estimated between 90 and 300 souls. Diagnostic artifacts recovered from Windy Knolls I, including English Brown stonewares and tobacco pipes, together with the general absence of Rhenish Brown stonewares and case bottle glass, point to an occupation beginning c. 1680 and continuing into the 1690s.

Testing did not reveal evidence of a palisade ditch or other features associated with a fortified structure, but this is probably a function both of the limited nature of the testing program in 2011 and our equally limited understanding of Native life during this period. Indeed, an important finding of our project concerns just how much of this site is found in the plow zone and not in artifact-rich features, at least in the places we tested.

Even without concrete evidence of a palisade, the excavations do suggest that firearms were present at the site. The recovery of 21 gunflints (an extraordinary number by any measure, especially given the limited testing), dozens of flint waste flakes, and pieces of lead shot suggest that the settlement's residents were well armed. The sheer quantities of gun-related artifacts, especially for a settlement occupied for such a short period, are nothing short of remarkable when compared with contemporary sites occupied by European or Native residents.

The quantities of artifacts recovered from Windy Knolls I, while high, are not as high as would be expected from a settlement presumably housing as few as 90 people or as many as 300 for ten to fifteen years. When compared with the Posey and Camden sites, the material recovered from Windy Knolls I is far less in sheer quantity: hundreds of ceramics, for example, as opposed to thousands. Yet, many of the materials recovered from Windy Knolls I are prestige items and point to what appears to be the residence of a high status individual or group of individuals. Nearly 300 glass beads, four brass points and an iron point, and dozens of other brass artifacts and scrap were recovered from the test units excavated at Windy Knolls I. Of special interest are the thousands of fragments of animal bone recovered from the top of the knoll, including both indigenous and domesticated species. The quantity of bone is especially striking given how acidic the soils in southern Maryland are and the fact that animal bone is typically not recovered in large quantity from plowed contexts. Bone counts averaged 179 fragments per 25 square feet of plow zone. At the Posey site, a considerable amount of bone was also recovered, but the overall density was less than half that found for Windy Knolls I, averaging approximately 70 fragments per 25 square feet of plow zone.

From the evidence at hand, it appears that Windy Knolls I may have been the location of the tayac's residence, including immediate and extended family members. The density of high status goods including brass and glass beads and the apparent consumption of quantities of animal meat support this interpretation. These materials suggest that the individuals living here had access to prestige items. The paucity of these kinds of materials in the units located at the base of the knoll, and their virtual absence from the nearby Steffens/Hogue and Jordan Swamp I sites (which we suggest were occupied post-Contact and while the fort existed) suggest that the Piscataway tayac was perhaps more successful than his werowance counterparts in Virginia in controlling desirable prestige items. Recall that Stephen Potter (2006) has argued that the easy availability of copper from colonial sources may have contributed to the destabilization and ultimately erosion of chiefly authority in early colonial Virginia. Various generations of the Piscataway tayac may have been able to avoid that fate, or slow it considerably or control its course, through strategies that involved collaboration with English leaders to restrict or otherwise control trade in prestige goods.

To this list we would also add firearms, an item sought by Native people from the outset. By the second half of the 17<sup>th</sup> century, an Englishman in Virginia could report that Virginia Indians "think themselves undrest & not fit to walk abroad, unless they have their gun on their shoulder, & their shot-bag by their side" (Banister 1970:382).<sup>28</sup> The archaeological evidence recovered from Windy Knolls I suggests that, along with copper and glass beads, the tayac also controlled those firearms Lord Baltimore's government had dispensed to the group. It is only the tayac or his great men that ask for firearms at meetings of the Council, and it is unlikely that Baltimore would have dealt with anyone other than the tayac or his representatives for distributing firearms. Nonetheless, the records are clear that the tayac had the kind of access to English guns that the "Comon sort of men & woemen" did not, and no doubt he used this access as a way to reinforce his power. Piscataway access to firearms may have been key to Piscataway survival in a colonial context, for defense and for reinforcing the authority of the tayac.

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<sup>28</sup> I am indebted to Helen Rountree for providing this reference.

While the fortification at Zekiah Fort was critical during the first two years' of the site's occupation, after about 1682, the raids the Piscataway had suffered from various northern Indian groups had abated. Indeed, what is of interest is the fact that the Piscataway and other Natives at Zekiah Fort remained in the area through the decade and into the 1690s. Zekiah Fort may have transformed from a settlement chosen for defense to one maintained for relatively easy access to trading opportunities with Europeans. This trade may have been facilitated by the individual living at Fair Fountain (or Hawkins Gate), the small English household located on the east side of Kerrick Swamp just under six miles from the Indian fort. The household at Fair Fountain had first been established about 1660, and the relatively high counts of Potomac Creek ceramics and a single fragment of brass scrap have led excavators to interpret this interior settlement as one in seemingly closer contact with local Indians (Bauer and King [2013]). The Fair Fountain property was owned by Josias Fendall and, later, Henry Hawkins. Hawkins acquired the property in November 1681, when Fendall was run out of the colony for treasonous activity. Hawkins was living at Johnstown, located approximately five miles south of Fair Fountain and near the Charles County Court House. Fair Fountain would have been a wise investment on the part of Hawkins, suggesting a strategy for acquiring desirable commodities in the Charles County interior.

The Hogue/Steffens properties and the Jordan Swamp I sites, both known and intermittently occupied by Native people for millennia, also appear to have been occupied during the 17<sup>th</sup> century given that European flint fragments and plain Potomac Creek ceramic fragments<sup>29</sup> were recovered from both sites and a wrought nail was also recovered from the Hogue property. It is possible that both sites represented single households or, at most, a small hamlet associated with the Zekiah Fort. Given that Piscataway pre- and early Contact settlement patterns were often dispersed within a general settlement area, it is possible that, when the threat of further raids and attacks had passed, many Piscataway resumed this pattern by dispersing to nearby productive agricultural land. This interpretation is not wholly satisfactory, given the topographic and environmental differences between Hogue/Steffens and Jordan Swamp I, but it suggests a model for further research.

One of the questions raised by our work concerns the clearly declining numbers of Native-made artifacts paired with ever-growing numbers of those of European origin. Although Stephen Silliman (2005) has persuasively argued that an emphasis on an artifact's origin has, in the past, led researchers to develop what Diana Loren (2008) describes as models of "progressive acculturation," with culture change represented by the rates of replacement of Native objects with European-made ones, the fact remains that Native materials *do* appear to decrease through time, at least when comparing indigenous settlements from southern Maryland. While the Posey site, occupied c. 1660 until 1680, yielded an assemblage overwhelmingly Native in its composition, many more European goods, including ceramics, tobacco pipes, bottle glass, and even domesticated meats, were in circulation at Zekiah Fort between 1680 and the mid-1690s. At Heater's Island, where the Piscataway stayed for about twelve years beginning in 1699, archaeologists recovered almost all European artifacts from the fortified settlement. These patterns have led some archaeologists to conclude that, by the end of the 17<sup>th</sup> century and beginning of the 18<sup>th</sup>, many Indians were becoming "acculturated," using material goods virtually indistinguishable from their English neighbors.

Even a cursory reading of the Maryland records, however, suggests that this trend of increasing numbers of European goods does not represent assimilation or acculturation, or at least not as a wholesale process (some individuals may have chosen to assimilate). Instead, it appears that, as the Piscataway

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<sup>29</sup> Potomac Creek ceramics were produced as early as 1300 AD, so their presence may also signal pre-Contact occupation. However, Potomac Creek ceramics were also produced through the 17<sup>th</sup> century.

acquired more and more European goods and produced fewer and fewer Native goods, they were also increasingly shunning the English. This is especially evident in 1697 when the Piscataway leave Maryland altogether for Virginia. When the Maryland government lobbied the Piscataway to return, they politely refused, inviting Governor Francis Nicholson to feel free to visit them at any time at their settlement near Occoquan. When the Piscataway did eventually return to Maryland, in 1699, they located in an area just beyond the western edge of European settlement at Heater's Island, about as far away from the English as they could get and remain in the colony.

There is also evidence to suggest that at least some of the Piscataway then living in Virginia were not as committed to remaining in that colony and willing to return to Maryland. Even though the tayac and his great men were reported to have been strongly opposed to returning to Maryland, Major William Barton informed Nicholson's government that "the greatest part of the Indians are inclinable to returne back to Maryland, *especially the Comon sort of men & woemen* & that severall of them are already come back & more resolved to come suddenly provided they may live peaceably & quietly & that they see the English are not angry with them" (emphasis added; Md. Archives 19:521).

The increasing acquisition of European goods, evident at Zekiah Fort and, later, at Heater's Island, then, may be read as artifacts of displacement and the change and adjustment that accompanies displacement rather than of acculturation. From the beginning of colonization, the Calvert family and the various tayac families worked to incorporate the other into their respective frames of reference, both gaining and losing advantage, depending on the circumstance. Not all English shared the Calvert family's policy of accommodation and (vice versa) not all Native groups shared the Piscataway tayac's policy of accommodation of the English. Some voted with their feet, leaving the colony; still others (English and Native) engaged in individual and group acts of violence.

Accommodation did not mean automatic adoption of English ways. As early as 1635, Father Andrew White was certain that the Piscataway and other nations would embrace what to the Jesuit missionary were clearly superior, civilized practices and lifeways. The anonymous author of *A Relation of Maryland* noted that, "in many things[, the Natives] shew a great inclination to conforme themselves to the English manner of living." That same author undermined his argument, however, when he later described a Wicomesse Indian telling Governor Leonard Calvert "since that you are heere strangers, and come into our Countrey, you should rather conforme your selues to the Customes of our Countrey, then impose yours upon us."

And, indeed, the material culture, increasingly "English" as it may have been, especially by the end of the 17<sup>th</sup> century, remained, in use, Native. The artifacts recovered from Zekiah Fort (Windy Knolls I) show that lithic technologies were changing, but that the process was much more complicated than the abandonment of stone tools or simple 'cultural devolution.' The Piscataway may have, in 1679, told the Maryland Council that they were requesting additional supplies of firearms in part because they were no longer practiced at making stone weapons, but that statement should probably not be taken at face value. To be sure, the stone artifacts recovered from Windy Knolls I suggest that, while some tools were "crudely" made, others were not. The Piscataway's statement to the Council may have been not unlike what is seen in the faunal remains recovered from Windy Knolls I – a possible effort, in diplomatic negotiations, to represent to the English an "abandoning" of earlier practices, perhaps to curry favor for political purposes that is not borne out in the archaeological record.

The people at Windy Knolls I were still using Native-made pots, vessels presumably made by women who had been trained by their mothers and other women. The dominance of grit- and sand-tempered Potomac Creek wares and sand-tempered Moyaone wares was expected, but the relatively high percentage of shell-tempered wares was not. It is unclear how to read these differences, including the

variation in the distribution of these ceramic types across the site, but the differences could be, in part, related to members of different groups. We recognize that linking ethnicity or any other social variable to pottery styles can be fraught with assumptions; at the very least, the ‘group’ could be no greater than females trained in various pottery traditions.

The events of the 1670s, especially the 1675 siege of the Susquehannock Fort, placed the Piscataway and other treaty nations in a precarious position. By abandoning Moyaone, the Piscataway were, in 1680, forced into a new pattern of mobility, relocating to a site that had never been, in the short- or the long-term, a place of residence (although archaeological evidence indicates Late Woodland settlement elsewhere in the Zekiah drainage). That the Piscataway remained at Zekiah Fort after 1682 suggests that the group found value in their new location, and the settlement’s situation on Zekiah Manor no doubt afforded the nation (or, perhaps, the tayac and other leaders) a measure of protection under the Calvert family not readily available in other locations. But, in 1689, all of that changed when Lord Baltimore lost control of the colony. Baltimore’s government was replaced by a royal government generally hostile to local nations, which were seen as obstacles to English expansion. Following the settlement that Baltimore worked out with the royal government in 1692 concerning the Calvert family’s land holdings in Maryland, at least some of the Piscataway abandoned Zekiah, returning to their homeland at Piscataway Creek. They were not there long, however, before deciding to leave Maryland altogether for Virginia.

As part of the events that led to the creation of the Zekiah Fort, the Windy Knolls I, Steffens/Hogue, and Jordan Swamp I sites have provided additional insight not just to the conflicts of the 1670s and 1680s, but the material conditions of life for indigenous people in the Potomac drainage at the end of the 17<sup>th</sup> century. The archaeological evidence recovered from all three settlements provides a unique perspective on the spatial and material circumstances of life of the Piscataway and other Maryland western shore nations, circumstances that have received surprisingly minimal study. The evidence suggests that Native people maintained their identity through strategies incorporating new forms and objects into familiar (“traditional”) practices. The record supports a history of Native resilience in a colonial environment and reveals how the Piscataway shaped their short- and long-term survival in the zone of Contact. But not all individuals and groups reacted similarly, as evidenced by the differences seen, for example, between Windy Knolls I and Posey, or between sites in Maryland and those in Virginia. With the rich documentary record that exists for the lower Potomac River valley along with a growing archaeological awareness of pre- and post-Contact Native sites, possibilities emerge for writing new narratives of contact, territory, and colonialism.

As part of this project, we identified three additional domestic sites, including the Windy Knolls II site (18CH0809), which was occupied in the late 18<sup>th</sup> century, and the Windy Knolls I (18CH0808) and Steffens (18CH0093) sites, both of which were occupied in the mid-19<sup>th</sup> century. The evidence suggests that these sites represent the quarters of enslaved laborers. While the connections between the 17<sup>th</sup>-century Indian settlements and these later occupations may seem weak – other than sharing the same landscape, there are probably few direct connections – all of these sites speak to greater issues raised by the colonial project. The understudied archaeological record of Charles County, Maryland, one of the most historically rich counties in the entire Chesapeake region, has the potential to reveal these connections, and, ultimately, to link those stories to the present. The events recounted in this report and the thousands of events yet to be discovered in the archives and in the ground have shaped both the county and the greater region of which it is a part. It is who we are.

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**APPENDIX I.  
ARTIFACTS RECOVERED FROM SHOVEL TESTS,  
THE WINDY KNOLLS PROPERTY (18CH0808; 18CH0809; 18CHX067)**

Appendices I-VI list the artifacts recovered from the surveys undertaken at the Windy Knolls, Steffens, Hogue, and Windy Knolls properties. Additionally, materials recovered through random surface collection are included. **North** refers to the north coordinate of each shovel test or location of the artifact if surface collected. **East** refers to the east coordinate. The proveniences listed in this table are organized by north coordinate and then by east coordinate and coordinates are based on the Maryland state grid.

**Site Number** refers to the numerical designation assigned the site by the Maryland Historical Trust. If a shovel test pit was excavated in an area where no artifacts were recovered and the test pit is not included in a site, no site number is assigned. Artifacts recovered outside of the site boundaries are assigned an “X” number, in this case, 18CHX0067. **Lot** refers to the lot number assigned each provenience generating archaeological materials. The lot number is unique by site, and each site begins its lot number listing at “1,” unless prior survey of the area produced artifacts. In such cases, lot numbers are continued from those assigned during the property’s original survey. Lot numbers for site 18CH0808 may appear non-sequential due to additional shovel testing after artifact cataloging had begun. Deposits without artifacts were not assigned a lot number.

Site	Lot	North	East	Artifacts
18CH0808	N/A	329200	1349800	No Artifacts
18CH0808	N/A	329200	1349850	No Artifacts
18CH0808	N/A	329200	1349900	No Artifacts
18CH0808	N/A	329200	1349950	No Artifacts
18CH0808	N/A	329200	1350000	No Artifacts
18CH0808	132	329200	1350050	2 colorless bottle glass body fragments
18CH0808	N/A	329200	1350100	No Artifacts
18CH0808	N/A	329200	1350150	No Artifacts
18CH0808	N/A	329150	1349800	No Artifacts
18CH0808	N/A	329150	1349850	No Artifacts
18CH0808	133	329150	1349900	1 quartz biface
18CH0808	N/A	329150	1349950	No Artifacts
18CH0808	N/A	329150	1350000	No Artifacts
18CH0808	N/A	329150	1350050	No Artifacts
18CH0808	N/A	329150	1350100	No Artifacts
18CH0808	134	329150	1350150	1 quartzite fire-cracked rock (263.5 grams)
18CH0808	135	329100	1349800	1 red brick fragment (2.1 grams)
18CH0808	N/A	329100	1349850	No Artifacts
18CH0808	N/A	329100	1349900	No Artifacts
18CH0808	136	329100	1349950	1 possible chert fire-cracked rock (223.0 grams)
18CH0808	N/A	329100	1350000	No Artifacts
18CH0808	N/A	329100	1350050	No Artifacts
18CH0808	137	329100	1350100	1 quartzite secondary flake or shatter

18CH0808	N/A	329100	1350150	No Artifacts
18CH0808	N/A	329050	1349800	No Artifacts
18CH0808	N/A	329050	1349850	No Artifacts
18CH0808	138	329050	1349900	1 quartzite fire-cracked rock (11.8 grams)
18CH0808	N/A	329050	1349950	No Artifacts
18CH0808	139	329050	1350000	1 quartz secondary flake
18CH0808	N/A	329050	1350050	No Artifacts
18CH0808	140	329050	1350100	1 possible chert secondary flake; 1 quartz tertiary flake; 1 rhyolite tertiary flake
18CH0808	N/A	329050	1350150	No Artifacts
18CH0808	N/A	329000	1348950	No Artifacts
18CH0808	N/A	329000	1349000	No Artifacts
18CH0808	N/A	329000	1349050	No Artifacts
18CH0808	N/A	329000	1349100	No Artifacts
18CH0808	N/A	329000	1349150	No Artifacts
18CH0808	N/A	329000	1349200	No Artifacts
18CH0808	N/A	329000	1349250	No Artifacts
18CH0808	141	329000	1349300	1 quartz secondary flake; 1 pearlware refined earthenware body spall; 1 creamware refined earthenware body spall
18CH0808	N/A	329000	1349350	No Artifacts
18CH0808	N/A	329000	1349400	No Artifacts
18CH0808	142	329000	1349450	1 red pasted, black lead-glazed earthenware body spall; 1 iron concretion fragment
18CH0808	N/A	329000	1349500	No Artifacts
18CH0808	143	329000	1349550	1 quartzite fire-cracked rock (104.8 grams); 1 quartz secondary flake; 1 whiteware refined earthenware body spall
18CH0808	N/A	329000	1349600	No Artifacts
18CH0808	N/A	329000	1349650	No Artifacts
18CH0808	144	329000	1349700	2 lightly tinted flat glass, possibly window glass, patinated; 1 red brick fragment (0.4 grams)
18CH0808	N/A	329000	1349750	No Artifacts
18CH0808	N/A	329000	1349800	No Artifacts
18CH0808	145	329000	1349850	1 chert secondary flake
18CH0808	N/A	329000	1349900	1 chert rock, non-cultural (discarded)
18CH0808	N/A	329000	1349950	No Artifacts
18CH0808	N/A	329000	1350000	No Artifacts
18CH0808	146	329000	1350050	1 quartz tertiary flake
18CH0808	N/A	329000	1350100	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328950	1348950	No Artifacts
18CH0808	N/A	328950	1349000	No Artifacts
18CH0808	N/A	328950	1349050	No Artifacts
18CH0808	N/A	328950	1349100	No Artifacts
18CH0808	N/A	328950	1349150	No Artifacts
18CH0808	N/A	328950	1349200	No Artifacts
18CH0808	147	328950	1349250	1 chert tertiary flake, possibly non-cultural

18CH0808	148	328950	1349300	1 possible crushed quartz-tempered unidentified Indian ceramic sherd, burnt
18CH0808	149	328950	1349350	1 iron concretion fragment
18CH0808	N/A	328950	1349400	No Artifacts
18CH0808	150	328950	1349450	1 buff pasted creamware body spall; 1 iron concretion fragment
18CH0808	N/A	328950	1349500	No Artifacts
18CH0808	N/A	328950	1349550	No Artifacts
18CH0808	151	328950	1349600	1 unidentified whiteware refined earthenware body spall
18CH0808	152	328950	1349650	1 unidentified whiteware refined earthenware rim sherd, flat vessel; 1 unidentified whiteware refined earthenware body spall; 1 manganese-tinted bottle glass body fragment; 1 slight blue/green-tinted flat glass fragment, possibly window glass
18CH0808	N/A	328950	1349700	No Artifacts
18CH0808	N/A	328950	1349750	No Artifacts
18CH0808	N/A	328950	1349800	No Artifacts
18CH0808	153	328950	1349850	1 quartzite fire-cracked rock
18CH0808	N/A	328950	1349900	No Artifacts
18CH0808	N/A	328950	1349950	No Artifacts
18CH0808	N/A	328950	1350000	No Artifacts
18CH0808	154	328950	1350050	1 quartzite fire-cracked rock
18CH0808	N/A	328950	1350100	No Artifacts
18CH0808	N/A	328900	1348950	No Artifacts
18CH0808	N/A	328900	1348975	No Artifacts
18CH0808	155	328900	1349000	2 unidentified iron clay/stone fragments, possible bog iron
18CH0808	156	328900	1349025	7 unidentified iron clay/stone fragments, possible bog iron
18CH0808	N/A	328900	1349050	No Artifacts
18CH0808	N/A	328900	1349075	No Artifacts
18CH0808	N/A	328900	1349100	No Artifacts
18CH0808	N/A	328900	1349125	No Artifacts
18CH0808	N/A	328900	1349150	No Artifacts
18CH0808	N/A	328900	1349175	No Artifacts
18CH0808	157	328900	1349200	1 unidentified Indian ceramic body sherd with minor sand temper
18CH0808	N/A	328900	1349225	No Artifacts
18CH0808	N/A	328900	1349250	No Artifacts
18CH0808	N/A	328900	1349275	No Artifacts
18CH0808	N/A	328900	1349300	No Artifacts
18CH0808	N/A	328900	1349325	No Artifacts
18CH0808	N/A	328900	1349350	1 quartz rock, non-cultural (discarded)
18CH0808	N/A	328900	1349375	No Artifacts
18CH0808	N/A	328900	1349400	No Artifacts
18CH0808	N/A	328900	1349425	No Artifacts
18CH0808	158	328900	1349450	1 unidentified Indian ceramic body sherd
18CH0808	N/A	328900	1349475	No Artifacts
18CH0808	N/A	328900	1349500	No Artifacts

18CH0808	159	328900	1349525	1 chert tertiary flake; 1 unidentified square nail fragment
18CH0808	N/A	328900	1349550	No Artifacts
18CH0808	N/A	328900	1349575	No Artifacts
18CH0808	160	328900	1349600	1 red brick fragment, burnt (40.5 grams); 2 colorless bottle glass body fragments with slight manganese tint
18CH0808	161	328900	1349625	1 unidentified whiteware refined earthenware body spall, possibly creamware; 1 hand-blown colorless glass fragment; 1 red brick fragment (10.9 grams)
18CH0808	N/A	328900	1349650	No Artifacts
18CH0808	N/A	328900	1349675	No Artifacts
18CH0808	N/A	328900	1349700	No Artifacts
18CH0808	N/A	328900	1349725	No Artifacts
18CH0808	N/A	328900	1349750	No Artifacts
18CH0808	162	328900	1349800	1 quartzite fire-cracked rock
18CH0808	N/A	328900	1349850	No Artifacts
18CH0808	163	328900	1349900	1 chert tertiary flake
18CH0808	N/A	328900	1349950	No Artifacts
18CH0808	N/A	328900	1350000	No Artifacts
18CH0808	N/A	328900	1350050	No Artifacts
18CH0808	N/A	328875	1348950	No Artifacts
18CH0808	164	328875	1348975	10 unidentified iron clay/stone fragments, possible bog iron
18CH0808	N/A	328875	1349000	No Artifacts
18CH0808	165	328875	1349025	1 unidentified iron clay/stone fragment, possible bog iron
18CH0808	166	328875	1349050	2 unidentified iron clay/stone fragments, possible bog iron
18CH0808	N/A	328875	1349075	No Artifacts
18CH0808	N/A	328875	1349100	No Artifacts
18CH0808	N/A	328875	1349125	No Artifacts
18CH0808	167	328875	1349150	1 dark green colonial bottle glass body fragment
18CH0808	N/A	328875	1349175	No Artifacts
18CH0808	N/A	328875	1349200	No Artifacts
18CH0808	N/A	328875	1349225	No Artifacts
18CH0808	168	328875	1349250	1 quartz shatter; 1 iron concretion fragment
18CH0808	169	328875	1349275	1 unidentified iron fragment, appears to be part of a rounded/circular object
18CH0808	N/A	328875	1349300	No Artifacts
18CH0808	N/A	328875	1349325	No Artifacts
18CH0808	170	328875	1349350	1 fossil rock
18CH0808	N/A	328875	1349375	No Artifacts
18CH0808	N/A	328875	1349400	No Artifacts
18CH0808	N/A	328875	1349425	No Artifacts
18CH0808	N/A	328875	1349450	No Artifacts
18CH0808	N/A	328875	1349475	No Artifacts
18CH0808	N/A	328875	1349500	No Artifacts
18CH0808	171	328875	1349525	1 oyster shell fragment (1.6 grams)

18CH0808	N/A	328875	1349550	No Artifacts
18CH0808	N/A	328875	1349575	No Artifacts
18CH0808	N/A	328875	1349600	No Artifacts
18CH0808	172	328875	1349625	9 handmade red brick fragments (136.7 grams)
18CH0808	173	328875	1349650	1 quartz secondary flake; 1 possible quartzite fire-cracked rock (38.7 grams)
18CH0808	174	328875	1349675	1 handmade red brick fragment (2.3 grams); 1 white refined earthenware rim sherd, possibly creamware
18CH0808	175	328875	1349700	1 quartz secondary flake
18CH0808	N/A	328875	1349725	No Artifacts
18CH0808	N/A	328875	1349750	No Artifacts
18CH0808	N/A	328850	1348950	No Artifacts
18CH0808	176	328850	1348975	1 iron clay/stone fragment, possible bog iron
18CH0808	N/A	328850	1349000	No Artifacts
18CH0808	N/A	328850	1349025	No Artifacts
18CH0808	N/A	328850	1349050	No Artifacts
18CH0808	N/A	328850	1349075	No Artifacts
18CH0808	N/A	328850	1349100	No Artifacts
18CH0808	N/A	328850	1349125	No Artifacts
18CH0808	N/A	328850	1349150	No Artifacts
18CH0808	N/A	328850	1349175	No Artifacts
18CH0808	N/A	328850	1349200	No Artifacts
18CH0808	177	328850	1349225	1 unidentified white refined earthenware rim sherd with blue decorated edge, flatware (modern)
18CH0808	N/A	328850	1349250	No Artifacts
18CH0808	N/A	328850	1349275	No Artifacts
18CH0808	N/A	328850	1349300	No Artifacts
18CH0808	N/A	328850	1349325	No Artifacts
18CH0808	N/A	328850	1349350	No Artifacts
18CH0808	N/A	328850	1349375	No Artifacts
18CH0808	N/A	328850	1349400	No Artifacts
18CH0808	N/A	328850	1349425	No Artifacts
18CH0808	178	328850	1349450	1 Potomac Creek plain body sherd; 2 unidentified white refined earthenware body spalls
18CH0808	N/A	328850	1349475	No Artifacts
18CH0808	N/A	328850	1349500	No Artifacts
18CH0808	N/A	328850	1349525	No Artifacts
18CH0808	N/A	328850	1349550	No Artifacts
18CH0808	179	328850	1349575	3 unidentified square nail fragments, possibly wrought
18CH0808	N/A	328850	1349600	No Artifacts
18CH0808	N/A	328850	1349625	No Artifacts
18CH0808	N/A	328850	1349650	No Artifacts
18CH0808	180	328850	1349675	2 red brick fragments (14.5 grams); 1 oyster shell fragment (8.5 grams)

18CH0808	N/A	328850	1349700	No Artifacts
18CH0808	N/A	328850	1349725	No Artifacts
18CH0808	N/A	328850	1349750	No Artifacts
18CH0808	N/A	328850	1349800	No Artifacts
18CH0808	N/A	328850	1349850	No Artifacts
18CH0808	N/A	328850	1349900	No Artifacts
18CH0808	181	328850	1349950	1 red brick fragment (5.4 grams)
18CH0808	N/A	328850	1350000	No Artifacts
18CH0808	N/A	328825	1348950	No Artifacts
18CH0808	182	328825	1348975	1 quartz secondary flake; 1 iron clay/stone fragment, possible bog iron
18CH0808	N/A	328825	1349000	No Artifacts
18CH0808	N/A	328825	1349025	No Artifacts
18CH0808	N/A	328825	1349050	No Artifacts
18CH0808	N/A	328825	1349075	No Artifacts
18CH0808	N/A	328825	1349100	No Artifacts
18CH0808	N/A	328825	1349125	No Artifacts
18CH0808	183	328825	1349150	1 large unidentified iron fragment
18CH0808	N/A	328825	1349175	No Artifacts
18CH0808	N/A	328825	1349200	No Artifacts
18CH0808	N/A	328825	1349225	No Artifacts
18CH0808	N/A	328825	1349250	No Artifacts
18CH0808	N/A	328825	1349275	No Artifacts
18CH0808	N/A	328825	1349300	No Artifacts
18CH0808	N/A	328825	1349325	No Artifacts
18CH0808	N/A	328825	1349350	No Artifacts
18CH0808	N/A	328825	1349375	No Artifacts
18CH0808	N/A	328825	1349400	No Artifacts
18CH0808	N/A	328825	1349425	No Artifacts
18CH0808	N/A	328825	1349450	No Artifacts
18CH0808	N/A	328825	1349475	No Artifacts
18CH0808	N/A	328825	1349500	No Artifacts
18CH0808	N/A	328825	1349525	No Artifacts
18CH0808	N/A	328825	1349550	No Artifacts
18CH0808	184	328825	1349575	2 handmade red brick fragments (1.1 grams)
18CH0808	185	328825	1349600	1 unidentified white refined earthenware body sherd
18CH0808	N/A	328825	1349625	No Artifacts
18CH0808	N/A	328825	1349650	No Artifacts
18CH0808	186	328825	1349675	1 unidentified white refined earthenware body sherd
18CH0808	187	328825	1349700	1 oyster shell fragment (0.6 grams); 1 slag fragment
18CH0808	N/A	328825	1349725	No Artifacts
18CH0808	N/A	328825	1349750	No Artifacts
18CH0808	N/A	328800	1348950	No Artifacts

18CH0808	188	328800	1348975	1 unidentified iron clay/stone fragment, possible bog iron
18CH0808	N/A	328800	1349000	No Artifacts
18CH0808	N/A	328800	1349025	No Artifacts
18CH0808	N/A	328800	1349050	No Artifacts
18CH0808	N/A	328800	1349075	No Artifacts
18CH0808	N/A	328800	1349100	No Artifacts
18CH0808	189	328800	1349125	1 unidentified iron or iron concretion fragment
18CH0808	N/A	328800	1349150	No Artifacts
18CH0808	N/A	328800	1349175	No Artifacts
18CH0808	N/A	328800	1349200	6 chert rocks, non-cultural (discarded)
18CH0808	190	328800	1349225	1 quartz biface or core
18CH0808	N/A	328800	1349250	3 chert rocks, non-cultural (discarded)
18CH0808	191	328800	1349275	1 dark olive green colonial wine bottle glass body fragment
18CH0808	N/A	328800	1349300	2 chert rocks, non-cultural (discarded)
18CH0808	N/A	328800	1349325	No Artifacts
18CH0808	N/A	328800	1349350	No Artifacts
18CH0808	192	328800	1349375	1 red brick fragment (10.7 grams)
18CH0808	N/A	328800	1349400	No Artifacts
18CH0808	N/A	328800	1349425	No Artifacts
18CH0808	1	328800	1349450	4 chert rocks, non-cultural (discarded); 1 aluminum pie pan fragment
18CH0808	N/A	328800	1349475	No Artifacts
18CH0808	N/A	328800	1349500	No Artifacts
18CH0808	N/A	328800	1349525	No Artifacts
18CH0808	2	328800	1349550	1 unidentified white refined earthenware body sherd; 1 handmade red brick fragment, mortar on one side (3.6 grams)
18CH0808	193	328800	1349575	1 unidentified white refined earthenware body sherd; 1 unidentified iron fragment
18CH0808	N/A	328800	1349600	No Artifacts
18CH0808	N/A	328800	1349625	No Artifacts
18CH0808	N/A	328800	1349650	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328800	1349675	No Artifacts
18CH0808	N/A	328800	1349700	2 chert rocks, non-cultural (discarded)
18CH0808	N/A	328800	1349725	No Artifacts
18CH0808	N/A	328800	1349750	No Artifacts
18CH0808	N/A	328800	1349800	No Artifacts
18CH0808	194	328800	1349850	33 red brick fragments (252.5 grams)
18CH0808	N/A	328800	1349900	No Artifacts
18CH0808	N/A	328800	1349950	No Artifacts
18CH0808	N/A	328775	1348950	No Artifacts
18CH0808	N/A	328775	1348975	No Artifacts
18CH0808	N/A	328775	1349000	No Artifacts
18CH0808	N/A	328775	1349025	No Artifacts
18CH0808	N/A	328775	1349050	No Artifacts

18CH0808	N/A	328775	1349075	No Artifacts
18CH0808	N/A	328775	1349100	No Artifacts
18CH0808	N/A	328775	1349125	No Artifacts
18CH0808	195	328775	1349150	1 colorless bottle glass fragment
18CH0808	N/A	328775	1349175	No Artifacts
18CH0808	N/A	328775	1349200	No Artifacts
18CH0808	N/A	328775	1349225	No Artifacts
18CH0808	N/A	328775	1349250	No Artifacts
18CH0808	N/A	328775	1349275	No Artifacts
18CH0808	196	328775	1349300	1 Potomac Creek plain body sherd
18CH0808	197	328775	1349325	1 white refined earthenware body sherd, pearlware; 1 colorless bottle glass body fragment, thin
18CH0808	N/A	328775	1349350	No Artifacts
18CH0808	N/A	328775	1349375	No Artifacts
18CH0808	198	328775	1349400	2 colorless bottle glass body fragments
18CH0808	N/A	328775	1349425	No Artifacts
18CH0808	N/A	328775	1349450	No Artifacts
18CH0808	199	328775	1349475	1 quartzite tertiary flake or biface
18CH0808	N/A	328775	1349500	No Artifacts
18CH0808	N/A	328775	1349525	No Artifacts
18CH0808	N/A	328775	1349550	No Artifacts
18CH0808	200	328775	1349575	1 white clay tobacco pipe bowl fragment, undecorated; 1 dark green bottle glass fragment/chip, possibly colonial
18CH0808	N/A	328775	1349600	No Artifacts
18CH0808	N/A	328775	1349625	No Artifacts
18CH0808	N/A	328775	1349650	No Artifacts
18CH0808	N/A	328775	1349675	No Artifacts
18CH0808	N/A	328775	1349700	No Artifacts
18CH0808	N/A	328775	1349725	No Artifacts
18CH0808	N/A	328775	1349750	No Artifacts
18CH0808	N/A	328750	1348950	No Artifacts
18CH0808	N/A	328750	1348975	No Artifacts
18CH0808	N/A	328750	1349000	No Artifacts
18CH0808	N/A	328750	1349025	No Artifacts
18CH0808	N/A	328750	1349050	No Artifacts
18CH0808	N/A	328750	1349075	No Artifacts
18CH0808	N/A	328750	1349100	No Artifacts
18CH0808	N/A	328750	1349125	No Artifacts
18CH0808	3	328750	1349150	3 brown bottle glass fragments (modern)
18CH0808	N/A	328750	1349175	No Artifacts
18CH0808	N/A	328750	1349200	2 chert rocks, non-cultural (discarded)
18CH0808	N/A	328750	1349225	No Artifacts
18CH0808	N/A	328750	1349250	No Artifacts

18CH0808	N/A	328750	1349275	No Artifacts
18CH0808	N/A	328750	1349300	5 chert rocks, non-cultural (discarded)
18CH0808	N/A	328750	1349325	No Artifacts
18CH0808	N/A	328750	1349350	No Artifacts
18CH0808	N/A	328750	1349375	No Artifacts
18CH0808	N/A	328750	1349400	1 chert rock, non-cultural (discarded)
18CH0808	201	328750	1349425	1 unidentified white refined earthenware rim sherd, possibly creamware; 1 colorless bottle glass body fragment (modern)
18CH0808	4	328750	1349450	1 possible chert secondary flake; 3 chert rocks, non-cultural (discarded)
18CH0808	202	328750	1349475	1 quartz tertiary flake; 1 quartzite biface; 1 quartzite secondary flake; 1 red-painted black Cornaline D'Alleppo glass bead (0.25"x 0.20"); 1 unidentified iron fragment, flat
18CH0808	5	328750	1349500	5 chert rocks, non-cultural (discarded); 1 colorless bottle glass body fragment (modern); 1 unidentified iron fragment
18CH0808	N/A	328750	1349525	No Artifacts
18CH0808	6	328750	1349550	2 chert rocks, non-cultural (discarded); 1 quartzite fire-cracked rock (20.4 grams)
18CH0808	N/A	328750	1349575	No Artifacts
18CH0808	N/A	328750	1349600	No Artifacts
18CH0808	N/A	328750	1349625	No Artifacts
18CH0808	N/A	328750	1349650	2 chert rocks, non-cultural (discarded)
18CH0808	203	328750	1349675	1 unidentified white refined earthenware body sherd possibly pearlware, burnt
18CH0808	7	328750	1349700	1 quartz tertiary flake; 2 chert rocks, non-cultural (discarded)
18CH0808	204	328750	1349725	1 quartzite fire-cracked rock (23.7 grams)
18CH0808	8	328750	1349750	1 quartz shatter; 1 chert rock, non-cultural (discarded); 3 handmade red brick fragments (12.0 grams)
18CH0808	N/A	328750	1349800	1 chert rock, non-cultural (discarded)
18CH0808	205	328750	1349850	1 handmade red brick fragment (1.5 grams)
18CH0808	206	328750	1349900	2 unidentified iron fragments
18CH0808	N/A	328725	1348950	SKIPPED
18CH0808	207	328725	1348975	1 iron staple; 1 iron screw, 3" length
18CH0808	N/A	328725	1349000	No Artifacts
18CH0808	N/A	328725	1349025	No Artifacts
18CH0808	N/A	328725	1349050	No Artifacts
18CH0808	N/A	328725	1349075	No Artifacts
18CH0808	N/A	328725	1349100	No Artifacts
18CH0808	208	328725	1349125	1 colorless bottle glass body fragment
18CH0808	N/A	328725	1349150	No Artifacts
18CH0808	N/A	328725	1349175	No Artifacts
18CH0808	N/A	328725	1349200	No Artifacts
18CH0808	N/A	328725	1349225	No Artifacts
18CH0808	209	328725	1349250	1 English flint fragment
18CH0808	210	328725	1349275	1 English flint fragment

18CH0808	N/A	328725	1349300	No Artifacts
18CH0808	N/A	328725	1349325	No Artifacts
18CH0808	N/A	328725	1349350	No Artifacts
18CH0808	N/A	328725	1349375	No Artifacts
18CH0808	N/A	328725	1349400	No Artifacts
18CH0808	211	328725	1349425	1 chert tertiary flake, possibly non-cultural; 1 iron stone/concretion fragment
18CH0808	N/A	328725	1349450	No Artifacts
18CH0808	N/A	328725	1349475	No Artifacts
18CH0808	N/A	328725	1349500	No Artifacts
18CH0808	N/A	328725	1349525	No Artifacts
18CH0808	N/A	328725	1349550	No Artifacts
18CH0808	212	328725	1349575	2 quartzite tertiary flakes
18CH0808	N/A	328725	1349600	No Artifacts
18CH0808	213	328725	1349625	1 quartz secondary flake or shatter
18CH0808	N/A	328725	1349650	No Artifacts
18CH0808	214	328725	1349675	1 quartz tertiary flake
18CH0808	215	328725	1349700	2 quartz secondary flakes
18CH0808	216	328725	1349725	1 quartz secondary flake
18CH0808	217	328725	1349750	1 colorless glass fragment; 1 possible bone fragment, calcined (0.2 grams)
18CH0808	218	328700	1348950	1 quartz rock, non-cultural (discarded); 2 brown bottle glass fragments, modern
18CH0808	219	328700	1348975	1 unidentified iron fragment
18CH0808	220	328700	1349000	1 quartz shatter, possibly non-cultural; 1 quartz rock, non-cultural (discarded)
18CH0808	N/A	328700	1349025	No Artifacts
18CH0808	N/A	328700	1349050	No Artifacts
18CH0808	N/A	328700	1349075	No Artifacts
18CH0808	N/A	328700	1349100	No Artifacts
18CH0808	N/A	328700	1349125	No Artifacts
18CH0808	N/A	328700	1349150	2 chert rocks, non-cultural (discarded)
18CH0808	221	328700	1349175	1 dark green colonial bottle glass body fragment
18CH0808	N/A	328700	1349200	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328700	1349225	2 chert rocks, non-cultural (discarded)
18CH0808	9	328700	1349250	1 Potomac Creek plain body sherd, thin
18CH0808	N/A	328700	1349275	No Artifacts
18CH0808	N/A	328700	1349300	4 chert rocks, non-cultural (discarded)
18CH0808	N/A	328700	1349325	No Artifacts
18CH0808	N/A	328700	1349350	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328700	1349375	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328700	1349400	4 chert rocks, non-cultural (discarded)
18CH0808	10	328700	1349425	1 dark olive green colonial wine bottle glass body fragment
18CH0808	N/A	328700	1349450	8 chert rocks, non-cultural (discarded)

18CH0808	11	328700	1349475	1 quartzite rock, non-cultural (discarded); 1 white clay tobacco pipe bowl fragment, undecorated
18CH0808	12	328700	1349500	3 chert rocks, non-cultural (discarded); 4 unidentified iron concretions
18CH0808	13	328700	1349525	2 chert rocks, non-cultural (discarded); 2 colorless bottle glass fragments, modern
18CH0808	14	328700	1349550	1 possible chert tertiary flake; 7 chert rocks, non-cultural (discarded); 1 white clay tobacco pipe stem fragment, 7/64" bore diameter; 1 light blue-tinted glass fragment; 4 colorless bottle glass fragments, modern
18CH0808	N/A	328700	1349575	1 charcoal fragment (discarded in field)
18CH0808	N/A	328700	1349600	8 chert rocks, non-cultural (discarded)
18CH0808	N/A	328700	1349625	No Artifacts
18CH0808	N/A	328700	1349650	3 chert rocks, non-cultural (discarded)
18CH0808	N/A	328700	1349675	No Artifacts
18CH0808	15	328700	1349700	1 green bottle glass fragment, modern
18CH0808	16	328700	1349725	1 unidentified iron fragment
18CH0808	17	328700	1349750	4 unidentified iron fragments
18CH0808	18	328700	1349800	3 chert rocks, non-cultural (discarded); 1 quartz secondary flake; 1 quartz tertiary flake; 1 possible quartz fire-cracked rock (2.4 grams); 2 possible unidentified nail fragments; 1 handmade red brick fragment (0.6 grams)
18CH0808	N/A	328675	1348950	No Artifacts
18CH0808	N/A	328675	1348975	No Artifacts
18CH0808	N/A	328675	1349000	No Artifacts
18CH0808	N/A	328675	1349025	No Artifacts
18CH0808	N/A	328675	1349050	No Artifacts
18CH0808	N/A	328675	1349075	No Artifacts
18CH0808	N/A	328675	1349100	No Artifacts
18CH0808	N/A	328675	1349125	No Artifacts
18CH0808	N/A	328675	1349150	No Artifacts
18CH0808	N/A	328675	1349175	No Artifacts
18CH0808	N/A	328675	1349200	No Artifacts
18CH0808	19	328675	1349225	1 quartz shatter; 1 chert rock, non-cultural (discarded)
18CH0808	N/A	328675	1349250	No Artifacts
18CH0808	N/A	328675	1349275	1 chert rock, non-cultural (discarded); 1 quartz rock, non-cultural (discarded)
18CH0808	N/A	328675	1349300	No Artifacts
18CH0808	N/A	328675	1349325	No Artifacts
18CH0808	N/A	328675	1349350	No Artifacts
18CH0808	N/A	328675	1349375	No Artifacts
18CH0808	N/A	328675	1349400	No Artifacts
18CH0808	20	328675	1349425	4 chert rocks, non-cultural (discarded); 1 English flint fragment
18CH0808	N/A	328675	1349450	2 chert rocks, non-cultural (discarded)
18CH0808	N/A	328675	1349475	No Artifacts
18CH0808	21	328675	1349500	1 quartz shatter

18CH0808	N/A	328675	1349525	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328675	1349550	No Artifacts
18CH0808	22	328675	1349575	1 quartzite fire-cracked rock
18CH0808	N/A	328675	1349600	No Artifacts
18CH0808	N/A	328675	1349625	No Artifacts
18CH0808	N/A	328675	1349650	No Artifacts
18CH0808	N/A	328675	1349675	No Artifacts
18CH0808	23	328675	1349700	1 colorless bottle glass fragment
18CH0808	N/A	328675	1349725	No Artifacts
18CH0808	24	328675	1349750	1 unidentified nail head; 4 possible square nail fragments; 4 possible modern window glass fragments
18CH0808	N/A	328650	1348950	No Artifacts
18CH0808	N/A	328650	1348975	No Artifacts
18CH0808	N/A	328650	1349000	No Artifacts
18CH0808	N/A	328650	1349025	No Artifacts
18CH0808	N/A	328650	1349050	No Artifacts
18CH0808	N/A	328650	1349075	No Artifacts
18CH0808	N/A	328650	1349100	No Artifacts
18CH0808	N/A	328650	1349125	No Artifacts
18CH0808	N/A	328650	1349150	No Artifacts
18CH0808	N/A	328650	1349175	No Artifacts
18CH0808	N/A	328650	1349200	No Artifacts
18CH0808	N/A	328650	1349225	No Artifacts
18CH0808	N/A	328650	1349250	No Artifacts
18CH0808	N/A	328650	1349275	No Artifacts
18CH0808	N/A	328650	1349300	9 chert rocks, non-cultural (discarded)
18CH0808	N/A	328650	1349325	No Artifacts
18CH0808	25	328650	1349350	1 red-painted black Cornaline D'Alleppo glass bead (0.25" x 0.19")
18CH0808	N/A	328650	1349375	No Artifacts
18CH0808	N/A	328650	1349400	1 chert rock, non-cultural (discarded)
18CH0808	26	328650	1349425	1 Potomac Creek cord-marked body sherd; 1 unidentified iron fragment, flat
18CH0808	27	328650	1349450	4 chert rocks, non-cultural (discarded); 1 English flint fragment
18CH0808	N/A	328650	1349475	No Artifacts
18CH0808	N/A	328650	1349500	2 chert rocks, non-cultural (discarded)
18CH0808	28	328650	1349525	1 white clay tobacco pipe bowl fragment, undecorated
18CH0808	N/A	328650	1349550	3 chert rocks, non-cultural (discarded)
18CH0808	N/A	328650	1349575	No Artifacts
18CH0808	29	328650	1349600	21 chert rocks, non-cultural (discarded); 1 terra cotta pipe stem fragment, Indian manufacture, 9/64" bore diameter; 1 dark olive green colonial bottle glass body fragment; 1 unidentified iron fragment; 1 iron concretion
18CH0808	N/A	328650	1349625	No Artifacts
18CH0808	30	328650	1349650	1 chert secondary flake; 5 chert rocks, non-cultural (discarded)

18CH0808	N/A	328650	1349675	No Artifacts
18CH0808	31	328650	1349700	4 chert rocks, non-cultural (discarded); 3 unidentified square nail fragments; 2 unidentified iron fragments
18CH0808	32	328650	1349725	1 colorless bottle glass body fragment
18CH0808	33	328650	1349750	4 colorless bottle glass body fragments; 1 brown bottle glass body fragment; 1 concrete fragment (83.4 grams); 1 white plastic fragment, thin
18CH0808	N/A	328650	1349800	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328625	1348950	No Artifacts
18CH0808	N/A	328625	1348975	No Artifacts
18CH0808	N/A	328625	1349000	No Artifacts
18CH0808	N/A	328625	1349025	No Artifacts
18CH0808	N/A	328625	1349050	No Artifacts
18CH0808	222	328625	1349075	1 English flint fragment
18CH0808	223	328625	1349100	1 round black glass bead half, broken (0.29"x 0.27")
18CH0808	224	328625	1349125	1 quartz tertiary flake; 1 quartzite fire-cracked rock (98.0 grams); 1 white clay tobacco pipe stem fragment, 6/64" bore diameter
18CH0808	N/A	328625	1349150	No Artifacts
18CH0808	N/A	328625	1349175	No Artifacts
18CH0808	N/A	328625	1349200	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328625	1349225	No Artifacts
18CH0808	N/A	328625	1349250	No Artifacts
18CH0808	N/A	328625	1349275	No Artifacts
18CH0808	N/A	328625	1349300	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328625	1349325	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328625	1349350	No Artifacts
18CH0808	N/A	328625	1349375	No Artifacts
18CH0808	N/A	328625	1349400	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328625	1349425	1 chert rock, non-cultural (discarded)
18CH0808	34	328625	1349450	1 quartz primary flake
18CH0808	N/A	328625	1349475	No Artifacts
18CH0808	35	328625	1349500	1 possible chert secondary flake; 1 chert rock, non-cultural (discarded)
18CH0808	N/A	328625	1349525	No Artifacts
18CH0808	36	328625	1349550	1 possible chert tertiary flake; 3 unidentified iron/iron concretion fragments
18CH0808	37	328625	1349575	1 dark olive green colonial wine bottle glass body fragment
18CH0808	38	328625	1349600	1 quartz shatter; 1 quartz secondary flake; 1 iron/iron concretion fragment
18CH0808	39	328625	1349625	1 Potomac Creek plain body sherd; 1 round black glass bead half, broken (0.25" length); 4 unidentified iron/iron concretion fragments
18CH0808	40	328625	1349650	1 chert rock, non-cultural (discarded); 1 white clay tobacco pipe stem fragment, 8/64" bore diameter
18CH0808	41	328625	1349675	1 chert rock, non-cultural (discarded); 1 dark olive green colonial bottle glass possible base fragment, possibly worked
18CH0808	N/A	328625	1349700	No Artifacts

18CH0808	42	328625	1349725	1 dark brown bottle glass fragment, modern; 1 green bottle glass rim fragment, modern
18CH0808	43	328625	1349750	4 colorless bottle glass fragments, modern; 2 brown bottle glass fragments, modern; 1 unidentified iron nail fragment; 1 unidentified iron fragment
18CH0808	N/A	328600	1348950	No Artifacts
18CH0808	N/A	328600	1348975	No Artifacts
18CH0808	N/A	328600	1349000	No Artifacts
18CH0808	N/A	328600	1349025	No Artifacts
18CH0808	N/A	328600	1349050	No Artifacts
18CH0808	N/A	328600	1349075	No Artifacts
18CH0808	N/A	328600	1349100	No Artifacts
18CH0808	225	328600	1349125	1 white clay tobacco pipe stem fragment, unmeasurable bore; 1 green bottle glass fragment, thin and heavily patinated, possibly colonial; 2 wrought iron nail fragments
18CH0808	N/A	328600	1349150	No Artifacts
18CH0808	N/A	328600	1349175	No Artifacts
18CH0808	N/A	328600	1349200	No Artifacts
18CH0808	N/A	328600	1349225	No Artifacts
18CH0808	44	328600	1349250	1 wrought iron nail fragment
18CH0808	N/A	328600	1349275	No Artifacts
18CH0808	N/A	328600	1349300	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328600	1349325	No Artifacts
18CH0808	45	328600	1349350	1 quartzite fire-cracked rock; 1 chert rock, non-cultural (discarded)
18CH0808	N/A	328600	1349375	No Artifacts
18CH0808	N/A	328600	1349400	4 chert rocks, non-cultural (discarded)
18CH0808	46	328600	1349425	1 possible quartz shatter
18CH0808	N/A	328600	1349450	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328600	1349475	1 chert rock, non-cultural (discarded)
18CH0808	47	328600	1349500	1 possible quartzite fire-cracked rock
18CH0808	N/A	328600	1349525	No Artifacts
18CH0808	48	328600	1349550	1 quartzite fire-cracked rock; 7 chert rocks, non-cultural (discarded)
18CH0808	N/A	328600	1349575	No Artifacts
18CH0808	49	328600	1349600	2 chert rocks, non-cultural (discarded); 1 chalcedony rock; 1 oyster shell fragment (11.9 grams)
18CH0808	50	328600	1349625	2 chert rocks, non-cultural (discarded); 1 white clay tobacco pipe stem fragment, unmeasurable bore
18CH0808	51	328600	1349650	15 chert rocks, non-cultural (discarded); 2 possible chert secondary flakes; 1 quartz rock, non-cultural (discarded); 1 white clay tobacco pipe bowl fragment with incised rim
18CH0808	52	328600	1349675	1 possible quartz shatter
18CH0808	53	328600	1349700	1 chalcedony tertiary flake, possibly flint; 9 chert rocks, 1 burnt; 2 colorless glass fragments
18CH0808	N/A	328600	1349725	No Artifacts
18CH0808	54	328600	1349750	1 quartz secondary flake; 1 brown bottle glass fragment, modern; 1 asphalt roof shingle fragment; 1 asphalt fragment

18CH0808	55	328600	1349800	1 quartz rock; 2 chert rocks; 5 colorless bottle glass fragments, modern; 5 brown bottle glass fragments, modern; 1 brown bottle glass rim fragment; 1 plastic fragment, thin
18CH0808	N/A	328575	1348950	No Artifacts
18CH0808	N/A	328575	1348975	No Artifacts
18CH0808	N/A	328575	1349000	No Artifacts
18CH0808	N/A	328575	1349025	No Artifacts
18CH0808	N/A	328575	1349050	No Artifacts
18CH0808	226	328575	1349075	1 unidentified iron concretion fragment
18CH0808	227	328575	1349100	1 possible quartz shatter
18CH0808	228	328575	1349125	1 wrought iron nail, whole, 3.57" length; 1 wrought iron nail fragment
18CH0808	229	328575	1349150	1 English flint fragment
18CH0808	N/A	328575	1349175	No Artifacts
18CH0808	N/A	328575	1349200	No Artifacts
18CH0808	N/A	328575	1349225	No Artifacts
18CH0808	N/A	328575	1349250	No Artifacts
18CH0808	N/A	328575	1349275	No Artifacts
18CH0808	N/A	328575	1349300	No Artifacts
18CH0808	56	328575	1349325	1 colorless bottle glass fragment, modern
18CH0808	N/A	328575	1349350	No Artifacts
18CH0808	N/A	328575	1349375	No Artifacts
18CH0808	N/A	328575	1349400	No Artifacts
18CH0808	N/A	328575	1349425	No Artifacts
18CH0808	57	328575	1349450	1 possible chert secondary flake
18CH0808	N/A	328575	1349475	No Artifacts
18CH0808	N/A	328575	1349500	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328575	1349525	No Artifacts
18CH0808	N/A	328575	1349550	No Artifacts
18CH0808	N/A	328575	1349575	No Artifacts
18CH0808	N/A	328575	1349600	No Artifacts
18CH0808	N/A	328575	1349625	No Artifacts
18CH0808	N/A	328575	1349650	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328575	1349675	No Artifacts
18CH0808	N/A	328575	1349700	1 white clay tobacco pipe stem fragment, 6/64" bore diameter
18CH0808	N/A	328575	1349725	No Artifacts
18CH0808	N/A	328575	1349750	2 colorless bottle glass fragments, modern
18CH0808	N/A	328550	1348950	No Artifacts
18CH0808	N/A	328550	1348975	No Artifacts
18CH0808	N/A	328550	1349000	No Artifacts
18CH0808	N/A	328550	1349025	No Artifacts
18CH0808	N/A	328550	1349050	No Artifacts
18CH0808	N/A	328550	1349075	No Artifacts

18CH0808	N/A	328550	1349100	No Artifacts
18CH0808	N/A	328550	1349125	No Artifacts
18CH0808	N/A	328550	1349150	No Artifacts
18CH0808	60	328550	1349175	1 Potomac Creek plain body sherd
18CH0808	N/A	328550	1349200	No Artifacts
18CH0808	N/A	328550	1349225	No Artifacts
18CH0808	N/A	328550	1349250	No Artifacts
18CH0808	N/A	328550	1349275	No Artifacts
18CH0808	N/A	328550	1349300	No Artifacts
18CH0808	N/A	328550	1349325	No Artifacts
18CH0808	N/A	328550	1349350	3 chert rocks, non-cultural (discarded); 1 quartz rock, non-cultural (discarded)
18CH0808	N/A	328550	1349375	No Artifacts
18CH0808	N/A	328550	1349400	2 chert rocks, non-cultural (discarded)
18CH0808	N/A	328550	1349425	No Artifacts
18CH0808	N/A	328550	1349450	3 chert rocks, non-cultural (discarded)
18CH0808	61	328550	1349475	2 barbed wire fragments
18CH0808	N/A	328550	1349500	3 chert rocks, non-cultural (discarded)
18CH0808	N/A	328550	1349525	No Artifacts
18CH0808	62	328550	1349550	12 chert rocks, non-cultural (discarded); 1 fossil rock
18CH0808	N/A	328550	1349575	3 chert rocks, non-cultural (discarded)
18CH0808	N/A	328550	1349600	4 chert rocks, non-cultural (discarded)
18CH0808	N/A	328550	1349625	No Artifacts
18CH0808	N/A	328550	1349650	2 chert rocks, non-cultural (discarded)
18CH0808	N/A	328550	1349675	No Artifacts
18CH0808	63	328550	1349700	1 chert tertiary flake; 5 chert rocks, non-cultural; 1 quartz rock, non-cultural; 8 unidentified nail fragments, probably square, heavily corroded; 1 unidentified iron fragment; 1 red brick fragment (2.1 grams); 2 oyster shell fragments (15.5 grams)
18CH0808	N/A	328550	1349725	No Artifacts
18CH0808	64	328550	1349750	1 quartz shatter; 6 chert rocks, non-cultural (discarded)
18CH0808	65	328550	1349800	1 brown bottle glass fragment, modern; 1 colorless bottle glass fragment, modern
18CH0808	N/A	328525	1348950	No Artifacts
18CH0808	N/A	328525	1348975	No Artifacts
18CH0808	N/A	328525	1349000	No Artifacts
18CH0808	N/A	328525	1349025	No Artifacts
18CH0808	N/A	328525	1349050	No Artifacts
18CH0808	N/A	328525	1349075	No Artifacts
18CH0808	N/A	328525	1349100	No Artifacts
18CH0808	N/A	328525	1349125	No Artifacts
18CH0808	N/A	328525	1349150	No Artifacts
18CH0808	66	328525	1349175	3 square nail fragments
18CH0808	N/A	328525	1349200	SKIPPED

18CH0808	N/A	328525	1349225	No Artifacts
18CH0808	67	328525	1349250	1 round black glass bead half, broken (0.3"x 0.35"); 1 lead shot (0.3" diameter)
18CH0808	68	328525	1349275	1 unidentified white refined earthenware body sherd, burnt
18CH0808	N/A	328525	1349300	No Artifacts
18CH0808	N/A	328525	1349325	No Artifacts
18CH0808	N/A	328525	1349350	No Artifacts
18CH0808	N/A	328525	1349375	No Artifacts
18CH0808	69	328525	1349400	1 chert tertiary flake
18CH0808	N/A	328525	1349425	No Artifacts
18CH0808	N/A	328525	1349450	No Artifacts
18CH0808	N/A	328525	1349475	No Artifacts
18CH0808	N/A	328525	1349500	No Artifacts
18CH0808	N/A	328525	1349525	No Artifacts
18CH0808	N/A	328525	1349550	No Artifacts
18CH0808	N/A	328525	1349575	No Artifacts
18CH0808	N/A	328525	1349600	No Artifacts
18CH0808	N/A	328525	1349625	No Artifacts
18CH0808	N/A	328525	1349650	No Artifacts
18CH0808	N/A	328525	1349675	No Artifacts
18CH0808	70	328525	1349700	1 brown bottle glass fragment, modern
18CH0808	71	328525	1349725	3 white refined earthenware handle fragments; 1 colorless glass fragment, flat
18CH0808	72	328525	1349750	1 colorless glass fragment
18CH0808	N/A	328500	1348950	No Artifacts
18CH0808	N/A	328500	1348975	No Artifacts
18CH0808	N/A	328500	1349000	No Artifacts
18CH0808	N/A	328500	1349025	No Artifacts
18CH0808	N/A	328500	1349050	No Artifacts
18CH0808	N/A	328500	1349075	No Artifacts
18CH0808	N/A	328500	1349100	No Artifacts
18CH0808	N/A	328500	1349125	No Artifacts
18CH0808	N/A	328500	1349150	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328500	1349175	SKIPPED
18CH0808	N/A	328500	1349200	No Artifacts
18CH0808	N/A	328500	1349225	No Artifacts
18CH0808	73	328500	1349250	2 chert rocks, non-cultural (discarded); 1 white clay tobacco pipe stem fragment, 7/64" bore diameter; 1 honey-colored French gunflint (fragment/broken)
18CH0808	N/A	328500	1349275	No Artifacts
18CH0808	74	328500	1349300	1 dark olive green colonial bottle glass body fragment
18CH0808	N/A	328500	1349325	No Artifacts
18CH0808	N/A	328500	1349350	No Artifacts
18CH0808	N/A	328500	1349375	No Artifacts

18CH0808	N/A	328500	1349400	No Artifacts
18CH0808	N/A	328500	1349425	No Artifacts
18CH0808	N/A	328500	1349450	2 chert rocks, non-cultural (discarded)
18CH0808	N/A	328500	1349475	No Artifacts
18CH0808	75	328500	1349500	1 chert rock, non-cultural (discarded); 1 possible chert secondary flake
18CH0808	N/A	328500	1349525	No Artifacts
18CH0808	N/A	328500	1349550	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328500	1349575	No Artifacts
18CH0808	N/A	328500	1349600	2 chert rocks, non-cultural (discarded)
18CH0808	N/A	328500	1349625	No Artifacts
18CH0808	76	328500	1349650	1 chert rock, non-cultural (discarded); 26 colorless glass fragments, modern
18CH0808	N/A	328500	1349675	No Artifacts
18CH0808	N/A	328500	1349700	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328500	1349725	No Artifacts
18CH0808	N/A	328500	1349750	No Artifacts
18CH0808	N/A	328500	1349800	2 chert rocks, non-cultural (discarded)
18CH0808	230	328475	1348950	1 possible quartz shatter, stone has a glassy/flint-like texture
18CH0808	N/A	328475	1348975	No Artifacts
18CH0808	N/A	328475	1349000	No Artifacts
18CH0808	N/A	328475	1349025	No Artifacts
18CH0808	N/A	328475	1349050	No Artifacts
18CH0808	N/A	328475	1349075	No Artifacts
18CH0808	N/A	328475	1349100	No Artifacts
18CH0808	N/A	328475	1349125	No Artifacts
18CH0808	77	328475	1349150	1 Potomac Creek plain body sherd; 2 unidentified iron fragments (broken in field)
18CH0808	78	328475	1349175	1 Potomac Creek plain body sherd; 1 unidentified iron fragment
18CH0808	N/A	328475	1349200	No Artifacts
18CH0808	79	328475	1349225	1 quartz tertiary flake, possible biface; 1 white clay tobacco pipe stem fragment, unmeasurable bore; 2 unidentified iron fragments
18CH0808	N/A	328475	1349250	No Artifacts
18CH0808	N/A	328475	1349275	No Artifacts
18CH0808	80	328475	1349300	1 dark olive green colonial bottle glass body fragment
18CH0808	81	328475	1349325	1 possible chert tertiary flake
18CH0808	82	328475	1349350	1 buff-to-orange-pasted black lead-glazed earthenware body sherd, possibly Staffordshire reverse slipware
18CH0808	N/A	328475	1349375	No Artifacts
18CH0808	83	328475	1349400	1 white clay tobacco pipe stem fragment, unmeasurable bore (probably 7/64")
18CH0808	N/A	328475	1349425	No Artifacts
18CH0808	N/A	328475	1349450	No Artifacts
18CH0808	N/A	328475	1349475	No Artifacts
18CH0808	N/A	328475	1349500	No Artifacts

18CH0808	N/A	328475	1349525	No Artifacts
18CH0808	N/A	328475	1349550	No Artifacts
18CH0808	N/A	328475	1349575	No Artifacts
18CH0808	N/A	328475	1349600	No Artifacts
18CH0808	N/A	328475	1349625	No Artifacts
18CH0808	N/A	328475	1349650	No Artifacts
18CH0808	N/A	328475	1349675	No Artifacts
18CH0808	N/A	328475	1349700	No Artifacts
18CH0808	N/A	328450	1348950	No Artifacts
18CH0808	N/A	328450	1348975	No Artifacts
18CH0808	N/A	328450	1349000	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328450	1349025	No Artifacts
18CH0808	N/A	328450	1349050	No Artifacts
18CH0808	N/A	328450	1349075	No Artifacts
18CH0808	N/A	328450	1349100	No Artifacts
18CH0808	N/A	328450	1349125	No Artifacts
18CH0808	N/A	328450	1349150	No Artifacts
18CH0808	N/A	328450	1349175	No Artifacts
18CH0808	N/A	328450	1349200	No Artifacts
18CH0808	84	328450	1349225	2 olive green colonial bottle glass fragments; 1 unidentified iron fragment
18CH0808	85	328450	1349250	1 oyster shell fragment (<0.1 grams)
18CH0808	86	328450	1349275	1 English flint fragment
18CH0808	87	328450	1349300	1 chalcedony secondary flake; 1 blue-painted unidentified white refined earthenware rim sherd, thin
18CH0808	88	328450	1349325	1 English flint fragment; 1 red brick fragment (0.6 grams)
18CH0808	89	328450	1349350	1 English flint fragment; 1 white clay tobacco pipe bowl rim fragment, incised or rouletted
18CH0808	N/A	328450	1349375	No Artifacts
18CH0808	N/A	328450	1349400	No Artifacts
18CH0808	N/A	328450	1349425	No Artifacts
18CH0808	N/A	328450	1349450	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328450	1349475	No Artifacts
18CH0808	N/A	328450	1349500	No Artifacts
18CH0808	N/A	328450	1349525	No Artifacts
18CH0808	N/A	328450	1349550	3 chert rocks, non-cultural (discarded)
18CH0808	N/A	328450	1349575	No Artifacts
18CH0808	N/A	328450	1349600	No Artifacts
18CH0808	N/A	328450	1349625	No Artifacts
18CH0808	N/A	328450	1349650	No Artifacts
18CH0808	N/A	328450	1349675	No Artifacts
18CH0808	N/A	328450	1349700	No Artifacts
18CH0808	N/A	328425	1348950	No Artifacts
18CH0808	N/A	328425	1348975	No Artifacts

18CH0808	N/A	328425	1349000	No Artifacts
18CH0808	N/A	328425	1349025	No Artifacts
18CH0808	N/A	328425	1349050	No Artifacts
18CH0808	N/A	328425	1349075	No Artifacts
18CH0808	90	328425	1349100	1 red-pasted unidentified lead-glazed coarse earthenware body sherd with interior slip
18CH0808	N/A	328425	1349125	No Artifacts
18CH0808	N/A	328425	1349150	No Artifacts
18CH0808	N/A	328425	1349175	No Artifacts
18CH0808	91	328425	1349200	1 Potomac Creek plain body sherd; 1 red-pasted Merida micaceous undecorated body sherd; 1 English flint fragment; 1 unidentified iron fragment
18CH0808	92	328425	1349225	1 Potomac Creek plain body sherd; 1 English flint fragment, possible gunflint; 1 wrought nail fragment with head
18CH0808	93	328425	1349250	1 Potomac Creek plain body sherd; 1 Potomac Creek cord-marked body sherd; 1 white clay tobacco pipe bowl fragment, burned; 1 round black glass bead half, broken (0.3"x 0.25"); 1 English flint fragment; 1 wrought iron nail fragment; 1 unidentified iron fragment; 3 unidentified mammal tooth fragments (1.0 grams)
18CH0808	94	328425	1349275	1 possible chert secondary flake; 2 unidentified mammal tooth fragments (0.3 grams)
18CH0808	95	328425	1349300	1 unidentified white clay tobacco pipe bowl or stem fragment
18CH0808	96	328425	1349325	1 red clay tobacco pipe stem fragment, 7/64" bore diameter, possibly of European manufacture; 1 North Devon gravel-tempered coarse earthenware body sherd
18CH0808	N/A	328425	1349350	No Artifacts
18CH0808	N/A	328425	1349375	No Artifacts
18CH0808	N/A	328425	1349400	No Artifacts
18CH0808	N/A	328425	1349425	No Artifacts
18CH0808	N/A	328425	1349450	No Artifacts
18CH0808	N/A	328425	1349475	No Artifacts
18CH0808	N/A	328425	1349500	No Artifacts
18CH0808	N/A	328425	1349525	No Artifacts
18CH0808	N/A	328425	1349550	No Artifacts
18CH0808	N/A	328425	1349575	No Artifacts
18CH0808	N/A	328425	1349600	No Artifacts
18CH0808	N/A	328425	1349625	No Artifacts
18CH0808	N/A	328425	1349650	No Artifacts
18CH0808	N/A	328425	1349675	No Artifacts
18CH0808	N/A	328425	1349700	No Artifacts
18CH0808	N/A	328400	1348950	No Artifacts
18CH0808	N/A	328400	1348975	No Artifacts
18CH0808	N/A	328400	1349000	No Artifacts
18CH0808	N/A	328400	1349025	No Artifacts
18CH0808	N/A	328400	1349050	No Artifacts
18CH0808	N/A	328400	1349075	No Artifacts

18CH0808	N/A	328400	1349100	No Artifacts
18CH0808	N/A	328400	1349125	No Artifacts
18CH0808	N/A	328400	1349150	No Artifacts
18CH0808	97	328400	1349175	1 white clay tobacco pipe stem fragment, 7/64" bore diameter; 1 white clay tobacco pipe bowl fragment, undecorated
18CH0808	N/A	328400	1349200	No Artifacts
18CH0808	98	328400	1349225	1 quartz tertiary flake; 1 Potomac Creek plain body sherd; 1 red clay tobacco pipe stem fragment, unmeasurable bore; 3 white clay tobacco pipe bowl fragments, undecorated
18CH0808	N/A	328400	1349250	No Artifacts
18CH0808	N/A	328400	1349275	No Artifacts
18CH0808	99	328400	1349300	1 colorless glass fragment
18CH0808	100	328400	1349325	1 red clay tobacco pipe stem fragment, unmeasurable bore
18CH0808	N/A	328400	1349350	No Artifacts
18CH0808	N/A	328400	1349375	No Artifacts
18CH0808	N/A	328400	1349400	No Artifacts
18CH0808	N/A	328400	1349450	No Artifacts
18CH0808	N/A	328400	1349500	No Artifacts
18CH0808	N/A	328400	1349550	2 chert rocks, non-cultural (discarded)
18CH0808	N/A	328400	1349600	No Artifacts
18CH0808	N/A	328400	1349650	No Artifacts
18CH0808	N/A	328400	1349700	No Artifacts
18CH0808	N/A	328375	1348950	No Artifacts
18CH0808	N/A	328375	1348975	No Artifacts
18CH0808	231	328375	1349000	2 unidentified iron nail fragments, possibly wire nail
18CH0808	N/A	328375	1349025	No Artifacts
18CH0808	N/A	328375	1349050	No Artifacts
18CH0808	N/A	328375	1349075	No Artifacts
18CH0808	N/A	328375	1349100	No Artifacts
18CH0808	N/A	328375	1349125	No Artifacts
18CH0808	101	328375	1349150	1 round black glass bead (0.3"x 0.25")
18CH0808	102	328375	1349175	1 small mica fragment
18CH0808	N/A	328375	1349200	No Artifacts
18CH0808	N/A	328375	1349225	No Artifacts
18CH0808	103	328375	1349250	1 English flint fragment; 1 wrought iron nail fragment; 2 unidentified mammal bone fragments (0.1 grams); 1 plastic marker cap
18CH0808	104	328375	1349275	1 Potomac Creek plain body sherd; 1 wrought iron nail fragment
18CH0808	N/A	328375	1349300	No Artifacts
18CH0808	105	328375	1349325	1 quartz secondary flake
18CH0808	N/A	328375	1349350	No Artifacts
18CH0808	106	328375	1349375	1 sandstone fragment, flat (23.9 grams)
18CH0808	N/A	328375	1349400	No Artifacts
18CH0808	N/A	328350	1348950	No Artifacts

18CH0808	N/A	328350	1348975	No Artifacts
18CH0808	107	328350	1349000	1 unidentified flat, circular lead fragment, hollow
18CH0808	N/A	328350	1349025	No Artifacts
18CH0808	108	328350	1349050	1 unidentified flat, circular lead fragment, hollow
18CH0808	N/A	328350	1349075	No Artifacts
18CH0808	N/A	328350	1349100	No Artifacts
18CH0808	109	328350	1349125	1 white clay tobacco pipe bowl fragment, undecorated
18CH0808	N/A	328350	1349150	No Artifacts
18CH0808	N/A	328350	1349175	No Artifacts
18CH0808	N/A	328350	1349200	No Artifacts
18CH0808	N/A	328350	1349225	No Artifacts
18CH0808	N/A	328350	1349250	No Artifacts
18CH0808	N/A	328350	1349275	No Artifacts
18CH0808	N/A	328350	1349300	No Artifacts
18CH0808	N/A	328350	1349325	No Artifacts
18CH0808	N/A	328350	1349350	1 chert rock, non-cultural (discarded)
18CH0808	110	328350	1349375	1 possible chert secondary flake
18CH0808	N/A	328350	1349400	No Artifacts
18CH0808	N/A	328350	1349450	No Artifacts
18CH0808	N/A	328350	1349500	No Artifacts
18CH0808	N/A	328350	1349550	2 chert rocks, non-cultural (discarded)
18CH0808	N/A	328350	1349600	No Artifacts
18CH0808	N/A	328350	1349650	No Artifacts
18CH0808	N/A	328350	1349700	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328325	1348950	No Artifacts
18CH0808	N/A	328325	1348975	No Artifacts
18CH0808	N/A	328325	1349000	No Artifacts
18CH0808	N/A	328325	1349025	No Artifacts
18CH0808	111	328325	1349050	2 unidentified iron fragments, probably nails, heavily corroded
18CH0808	112	328325	1349075	1 unidentified iron nail fragment
18CH0808	N/A	328325	1349100	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328325	1349125	No Artifacts
18CH0808	N/A	328325	1349150	No Artifacts
18CH0808	N/A	328325	1349175	No Artifacts
18CH0808	113	328325	1349200	1 Potomac Creek plain body sherd (broken into 2 pieces in field)
18CH0808	N/A	328325	1349225	No Artifacts
18CH0808	N/A	328325	1349250	No Artifacts
18CH0808	114	328325	1349275	1 unidentified clay tobacco pipe stem fragment, unmeasurable bore; 1 unidentified square nail fragment
18CH0808	N/A	328325	1349300	No Artifacts
18CH0808	N/A	328325	1349325	No Artifacts
18CH0808	115	328325	1349350	1 red brick fragment (2.3 grams)
18CH0808	N/A	328325	1349375	No Artifacts

18CH0808	N/A	328325	1349400	No Artifacts
18CH0808	N/A	328300	1348950	No Artifacts
18CH0808	N/A	328300	1348975	No Artifacts
18CH0808	N/A	328300	1349000	No Artifacts
18CH0808	N/A	328300	1349025	No Artifacts
18CH0808	N/A	328300	1349050	No Artifacts
18CH0808	116	328300	1349075	1 unidentified square nail fragment
18CH0808	N/A	328300	1349100	No Artifacts
18CH0808	N/A	328300	1349125	No Artifacts
18CH0808	N/A	328300	1349150	No Artifacts
18CH0808	N/A	328300	1349175	No Artifacts
18CH0808	N/A	328300	1349200	No Artifacts
18CH0808	N/A	328300	1349225	No Artifacts
18CH0808	N/A	328300	1349250	No Artifacts
18CH0808	N/A	328300	1349275	No Artifacts
18CH0808	N/A	328300	1349300	No Artifacts
18CH0808	N/A	328300	1349325	No Artifacts
18CH0808	N/A	328300	1349350	No Artifacts
18CH0808	N/A	328300	1349375	No Artifacts
18CH0808	N/A	328300	1349400	No Artifacts
18CH0808	N/A	328300	1349450	No Artifacts
18CH0808	N/A	328300	1349500	No Artifacts
18CH0808	117	328300	1349550	1 unidentified white refined earthenware body spall
18CH0808	N/A	328300	1349600	No Artifacts
18CH0808	N/A	328300	1349650	1 chert rock, non-cultural (discarded)
18CH0808	N/A	328300	1349700	1 chert rock, non-cultural (discarded)
18CH0808	232	328275	1348950	1 quartzite secondary flake
18CH0808	N/A	328275	1348975	No Artifacts
18CH0808	233	328275	1349000	1 Potomac Creek plain body sherd
18CH0808	N/A	328275	1349025	No Artifacts
18CH0808	N/A	328275	1349050	No Artifacts
18CH0808	N/A	328275	1349075	No Artifacts
18CH0808	N/A	328275	1349100	No Artifacts
18CH0808	118	328275	1349125	1 colorless bottle glass body fragment; 1 unidentified square nail fragment
18CH0808	N/A	328275	1349150	No Artifacts
18CH0808	N/A	328275	1349175	No Artifacts
18CH0808	119	328275	1349200	1 Potomac Creek plain body sherd
18CH0808	N/A	328275	1349225	No Artifacts
18CH0808	N/A	328275	1349250	No Artifacts
18CH0808	N/A	328275	1349275	No Artifacts
18CH0808	N/A	328275	1349300	No Artifacts
18CH0808	120	328275	1349325	1 quartz secondary flake

18CH0808	N/A	328275	1349350	No Artifacts
18CH0808	121	328275	1349375	1 colorless bottle glass body fragment, modern
18CH0808	122	328275	1349400	1 brown bottle glass base fragment, modern; 5 brown bottle glass body fragments, modern
18CH0808	N/A	328250	1348950	No Artifacts
18CH0808	N/A	328250	1348975	No Artifacts
18CH0808	N/A	328250	1349000	No Artifacts
18CH0808	N/A	328250	1349025	No Artifacts
18CH0808	123	328250	1349050	1 Potomac Creek plain body sherd
18CH0808	N/A	328250	1349075	No Artifacts
18CH0808	124	328250	1349100	1 white clay tobacco pipe bowl fragment, undecorated
18CH0808	125	328250	1349125	1 quartzite tertiary flake
18CH0808	N/A	328250	1349150	No Artifacts
18CH0808	N/A	328250	1349175	No Artifacts
18CH0808	N/A	328250	1349200	No Artifacts
18CH0808	N/A	328250	1349225	No Artifacts
18CH0808	N/A	328250	1349250	No Artifacts
18CH0808	N/A	328250	1349275	No Artifacts
18CH0808	N/A	328250	1349300	No Artifacts
18CH0808	126	328250	1349325	3 unidentified stoneware body sherds, modern; 2 colorless bottle glass fragments, modern
18CH0808	N/A	328250	1349350	No Artifacts
18CH0808	N/A	328250	1349375	No Artifacts
18CH0808	N/A	328250	1349500	No Artifacts
18CH0808	N/A	328250	1349550	No Artifacts
18CH0808	127	328250	1349600	1 unidentified plastic fragment
18CH0808	128	328250	1349650	1 brown bottle glass base fragment, modern; 1 brown bottle glass body fragment, modern
18CH0808	N/A	328225	1348950	No Artifacts
18CH0808	129	328225	1348975	1 white clay tobacco pipe stem fragment, 5/64" bore diameter
18CH0808	N/A	328225	1349000	No Artifacts
18CH0808	N/A	328225	1349025	No Artifacts
18CH0808	130	328225	1349050	2 unidentified red brick fragments (22.3 grams)
18CH0808	N/A	328225	1349075	No Artifacts
18CH0808	N/A	328225	1349100	No Artifacts
18CH0808	N/A	328225	1349125	No Artifacts
18CH0808	N/A	328225	1349150	No Artifacts
18CH0808	N/A	328225	1349175	No Artifacts
18CH0808	N/A	328225	1349200	No Artifacts
18CH0808	N/A	328225	1349225	No Artifacts
18CH0808	N/A	328225	1349250	No Artifacts
18CH0808	N/A	328225	1349275	No Artifacts
18CH0808	N/A	328225	1349300	No Artifacts
18CH0808	N/A	328200	1348950	No Artifacts

18CH0808	131	328200	1348975	1 handmade red brick fragment (0.5 grams)
18CH0808	N/A	328200	1349000	No Artifacts
18CH0808	N/A	328200	1349025	No Artifacts
18CH0808	N/A	328200	1349050	No Artifacts
18CH0808	N/A	328200	1349075	No Artifacts
18CH0808	N/A	328200	1349100	No Artifacts
18CH0808	N/A	328200	1349125	No Artifacts
18CH0808	N/A	328200	1349150	No Artifacts
18CH0808	N/A	328200	1349175	No Artifacts
18CH0808	N/A	328200	1349200	No Artifacts
18CH0808	N/A	328200	1349225	No Artifacts
18CH0808	N/A	328200	1349250	No Artifacts
18CH0808	N/A	328200	1349275	No Artifacts
18CH0808	N/A	328200	1349300	No Artifacts
18CH0808	N/A	328200	1349500	No Artifacts
18CH0808	N/A	328200	1349550	No Artifacts
18CH0808	N/A	328200	1349600	No Artifacts
18CH0808	N/A	328200	1349650	No Artifacts

Site	Lot	North	East	Artifacts
18CH0809	N/A	328650	1348100	No Artifacts
18CH0809	N/A	328650	1348150	No Artifacts
18CH0809	N/A	328650	1348200	No Artifacts
18CH0809	N/A	328650	1348250	No Artifacts
18CH0809	1	328650	1348450	24 colorless bottle glass body fragments, modern; 2 brown bottle glass base fragments, modern; 3 brown bottle glass body fragments, modern; 1 light blue-green tinted bottle glass body fragment, modern; 8 flat, blue-green tinted glass fragments, modern; 5 unidentified iron fragments; 7 shingle fragments, modern; 1 unidentified round plastic fragment; 2 white plastic fragments; 31 blue plastic fragments
18CH0809	2	328650	1348500	2 colorless bottle glass rim fragments, modern; 4 colorless bottle glass base fragments, modern; 44 colorless unidentified container glass body fragments, modern; 1 blue-green tinted bottle glass base fragment, modern; 1 blue-green tinted bottle glass body fragment, modern; 1 brown bottle glass base fragment, modern case bottle; 10 brown bottle glass body fragments, modern case bottle; 8 unidentified iron fragments
18CH0809	3	328650	1348550	1 modern mirror fragment; 1 colorless bottle glass body fragment, modern
18CH0809	N/A	328650	1348600	No Artifacts
18CH0809	N/A	328650	1348650	No Artifacts
18CH0809	N/A	328650	1348700	No Artifacts
18CH0809	N/A	328650	1348750	No Artifacts

18CH0809	N/A	328600	1348100	No Artifacts
18CH0809	N/A	328600	1348150	No Artifacts
18CH0809	N/A	328600	1348200	No Artifacts
18CH0809	N/A	328600	1348250	No Artifacts
18CH0809	N/A	328600	1348300	No Artifacts
18CH0809	4	328600	1348350	2 colorless bottle glass body fragments, modern; 1 green bottle glass body fragment, modern
18CH0809	N/A	328600	1348400	No Artifacts
18CH0809	N/A	328600	1348450	No Artifacts
18CH0809	5	328600	1348500	1 rhyolite tertiary flake
18CH0809	6	328600	1348550	1 oyster shell fragment (9.5 grams)
18CH0809	7	328600	1348600	1 chert secondary flake
18CH0809	N/A	328600	1348650	No Artifacts
18CH0809	N/A	328600	1348700	No Artifacts
18CH0809	N/A	328600	1348750	No Artifacts
18CH0809	N/A	328550	1348100	No Artifacts
18CH0809	N/A	328550	1348150	No Artifacts
18CH0809	N/A	328550	1348200	No Artifacts
18CH0809	N/A	328550	1348250	No Artifacts
18CH0809	N/A	328550	1348300	No Artifacts
18CH0809	N/A	328550	1348350	No Artifacts
18CH0809	N/A	328550	1348400	No Artifacts
18CH0809	N/A	328550	1348450	No Artifacts
18CH0809	8	328550	1348500	1 coal fragment, 3.1 grams
18CH0809	N/A	328550	1348550	No Artifacts
18CH0809	N/A	328550	1348600	No Artifacts
18CH0809	9	328550	1348650	1 red brick fragment (0.3 grams)
18CH0809	10	328550	1348700	1 red brick fragment (1.4 grams)
18CH0809	N/A	328550	1348750	No Artifacts
18CH0809	N/A	328500	1348100	No Artifacts
18CH0809	N/A	328500	1348150	No Artifacts
18CH0809	11	328500	1348200	1 unidentified square nail fragment, possibly wrought
18CH0809	N/A	328500	1348250	No Artifacts
18CH0809	N/A	328500	1348300	No Artifacts
18CH0809	12	328500	1348350	1 quartz shatter
18CH0809	N/A	328500	1348400	No Artifacts
18CH0809	N/A	328500	1348450	No Artifacts
18CH0809	13	328500	1348500	2 coal fragments (0.5 grams)
18CH0809	N/A	328500	1348550	No Artifacts
18CH0809	N/A	328500	1348600	No Artifacts
18CH0809	N/A	328500	1348650	No Artifacts
18CH0809	N/A	328500	1348700	No Artifacts
18CH0809	N/A	328500	1348750	No Artifacts

18CH0809	N/A	328450	1348100	1 chert rock, non-cultural (discarded)
18CH0809	N/A	328450	1348150	No Artifacts
18CH0809	N/A	328450	1348200	No Artifacts
18CH0809	N/A	328450	1348250	No Artifacts
18CH0809	N/A	328450	1348300	No Artifacts
18CH0809	N/A	328450	1348350	No Artifacts
18CH0809	N/A	328450	1348400	No Artifacts
18CH0809	14	328450	1348450	1 colorless glass body fragment, slight blue tint
18CH0809	N/A	328450	1348500	No Artifacts
18CH0809	15	328450	1348550	1 chert secondary flake; 1 ironstone or white salt-glazed stoneware base/body sherd 1 red brick fragment (5.3 grams)
18CH0809	16	328450	1348600	1 chert tertiary flake; 1 orange-pasted, green/brown lead-glazed coarse earthenware rim sherd, unknown rim diameter; 1 orange-pasted, unglazed coarse earthenware body sherd; 3 white refined earthenware body sherds, creamware; 3 white refined earthenware body sherds, possibly pearlware; 1 blue-painted white refined earthenware body sherd, pearlware; 1 Rhenish brown stoneware body sherd; 1 English brown stoneware body sherd; 1 round black glass bead (0.3"x 0.15"); 1 dark olive green colonial bottle glass fragment; 3 unidentified square nail fragments, probably wrought; 2 unidentified iron fragments; 45 red brick fragments (161.1 grams)
18CH0809	17	328450	1348650	1 unidentified square nail fragment, probably wrought; 2 red brick fragments (3.9 grams)
18CH0809	18	328450	1348700	1 red-pasted, brown lead-glazed coarse earthenware body sherd; 1 red brick fragment (6.0 grams)
18CH0809	N/A	328450	1348750	No Artifacts
18CH0809	N/A	328400	1348100	No Artifacts
18CH0809	19	328400	1348150	1 colorless bottle glass body fragment, modern
18CH0809	N/A	328400	1348200	No Artifacts
18CH0809	N/A	328400	1348250	No Artifacts
18CH0809	N/A	328400	1348300	No Artifacts
18CH0809	N/A	328400	1348350	No Artifacts
18CH0809	N/A	328400	1348400	No Artifacts
18CH0809	20	328400	1348450	2 red brick fragments (0.7 grams)
18CH0809	N/A	328400	1348500	No Artifacts
18CH0809	21	328400	1348550	1 dark green bottle glass body fragment, possibly modern; 2 red brick fragments (74.2 grams)
18CH0809	22	328400	1348600	1 white refined earthenware body sherd, creamware; 1 white refined earthenware body sherd, pearlware; 1 unidentified iron fragment; 2 red brick fragments (2.4 grams)
18CH0809	N/A	328400	1348650	No Artifacts
18CH0809	N/A	328400	1348700	No Artifacts
18CH0809	N/A	328400	1348750	No Artifacts
18CH0809	N/A	328350	1348100	No Artifacts
18CH0809	N/A	328350	1348150	No Artifacts
18CH0809	23	328350	1348200	1 chert rock, non-cultural; 2 white refined earthenware body

				sherds, pearlware; 1 colorless bottle glass body fragment
18CH0809	N/A	328350	1348250	No Artifacts
18CH0809	N/A	328350	1348300	No Artifacts
18CH0809	N/A	328350	1348350	No Artifacts
18CH0809	N/A	328350	1348400	No Artifacts
18CH0809	N/A	328350	1348450	No Artifacts
18CH0809	N/A	328350	1348500	No Artifacts
18CH0809	24	328350	1348550	1 aqua-colored bottle glass body fragment; 1 wrought iron nail fragment; 4 red brick fragments (0.7 grams)
18CH0809	25	328350	1348600	1 chert rock, non-cultural; 1 chert secondary flake
18CH0809	N/A	328350	1348650	No Artifacts
18CH0809	N/A	328350	1348700	No Artifacts
18CH0809	N/A	328350	1348750	No Artifacts
18CH0809	N/A	328300	1348100	No Artifacts
18CH0809	N/A	328300	1348150	No Artifacts
18CH0809	N/A	328300	1348200	No Artifacts
18CH0809	N/A	328300	1348250	No Artifacts
18CH0809	N/A	328300	1348300	No Artifacts
18CH0809	N/A	328300	1348350	No Artifacts
18CH0809	N/A	328300	1348400	No Artifacts
18CH0809	N/A	328300	1348450	No Artifacts
18CH0809	N/A	328300	1348500	No Artifacts
18CH0809	N/A	328300	1348550	No Artifacts
18CH0809	N/A	328300	1348600	No Artifacts
18CH0809	N/A	328300	1348650	No Artifacts
18CH0809	N/A	328300	1348700	No Artifacts
18CH0809	N/A	328300	1348750	No Artifacts
18CH0809	N/A	328250	1348100	No Artifacts
18CH0809	N/A	328250	1348150	No Artifacts
18CH0809	N/A	328250	1348200	No Artifacts
18CH0809	N/A	328250	1348250	No Artifacts
18CH0809	N/A	328250	1348300	No Artifacts
18CH0809	N/A	328250	1348350	No Artifacts
18CH0809	N/A	328250	1348400	No Artifacts
18CH0809	N/A	328250	1348450	No Artifacts
18CH0809	N/A	328250	1348500	No Artifacts
18CH0809	N/A	328250	1348550	No Artifacts
18CH0809	26	328250	1348600	1 dark green flat bottle glass fragment, possibly late 18th-/early 19th-century
18CH0809	N/A	328250	1348650	No Artifacts
18CH0809	N/A	328250	1348700	No Artifacts
18CH0809	N/A	328250	1348750	No Artifacts
18CH0809	27	328200	1348100	1 black glass seed bead (0.1"x 0.15")

18CH0809	N/A	328200	1348150	No Artifacts
18CH0809	N/A	328200	1348200	No Artifacts
18CH0809	28	328200	1348250	1 unidentified clear glass fragment, possibly part of a table glass base; 2 coal fragments (0.8 grams)
18CH0809	N/A	328200	1348300	No Artifacts
18CH0809	N/A	328200	1348350	No Artifacts
18CH0809	N/A	328200	1348400	No Artifacts
18CH0809	N/A	328200	1348450	No Artifacts
18CH0809	N/A	328200	1348500	No Artifacts
18CH0809	29	328200	1348550	1 unidentified square nail fragment, possibly wrought
18CH0809	N/A	328200	1348600	No Artifacts
18CH0809	N/A	328200	1348650	No Artifacts
18CH0809	N/A	328200	1348700	No Artifacts
18CH0809	N/A	328200	1348750	No Artifacts
18CH0809	N/A	328150	1348100	No Artifacts
18CH0809	N/A	328150	1348150	No Artifacts
18CH0809	30	328150	1348200	1 unidentified square nail fragment (broken in field)
18CH0809	N/A	328150	1348250	No Artifacts
18CH0809	N/A	328150	1348300	No Artifacts
18CH0809	N/A	328150	1348350	No Artifacts
18CH0809	N/A	328150	1348400	No Artifacts
18CH0809	N/A	328150	1348450	No Artifacts
18CH0809	N/A	328150	1348500	No Artifacts
18CH0809	N/A	328150	1348550	No Artifacts
18CH0809	N/A	328150	1348600	No Artifacts
18CH0809	N/A	328150	1348650	No Artifacts
18CH0809	N/A	328150	1348700	No Artifacts
18CH0809	N/A	328150	1348750	No Artifacts
18CH0809	N/A	328100	1348100	No Artifacts
18CH0809	N/A	328100	1348150	No Artifacts
18CH0809	N/A	328100	1348200	No Artifacts
18CH0809	N/A	328100	1348250	No Artifacts
18CH0809	N/A	328100	1348300	No Artifacts
18CH0809	N/A	328100	1348350	No Artifacts
18CH0809	N/A	328100	1348400	No Artifacts
18CH0809	N/A	328100	1348450	No Artifacts
18CH0809	N/A	328100	1348500	No Artifacts
18CH0809	N/A	328100	1348550	No Artifacts
18CH0809	N/A	328100	1348600	No Artifacts
18CH0809	31	328100	1348650	1 colorless flat glass fragment, window glass
18CH0809	N/A	328100	1348700	No Artifacts
18CH0809	N/A	328100	1348750	No Artifacts

Site	Lot	North	East	Artifacts
-	N/A	329250	1348950	No Artifacts
-	N/A	329250	1349000	No Artifacts
-	N/A	329250	1349050	No Artifacts
-	N/A	329250	1349100	No Artifacts
-	N/A	329250	1349150	No Artifacts
-	N/A	329250	1349200	No Artifacts
-	N/A	329250	1349250	No Artifacts
18CHX067	1	329250	1349300	1 unidentified iron concretion
18CHX067	2	329250	1349350	1 unidentified iron concretion
18CHX067	3	329250	1349400	1 unidentified iron concretion
18CHX067	4	329250	1349450	1 black plastic fragment
-	N/A	329250	1349500	No Artifacts
-	N/A	329250	1349550	No Artifacts
18CHX067	5	329250	1349600	1 unidentified iron concretion
-	N/A	329250	1349650	No Artifacts
-	N/A	329250	1349700	No Artifacts
-	N/A	329250	1349750	No Artifacts
18CHX067	6	329250	1349800	2 unidentified iron concretions
-	N/A	329250	1349850	No Artifacts
-	N/A	329250	1349900	No Artifacts
18CHX067	N/A	329250	1349950	1 chert rock, non-cultural (discarded)
-	N/A	329250	1350000	No Artifacts
-	N/A	329250	1350050	No Artifacts
-	N/A	329250	1350100	No Artifacts
-	N/A	329250	1350150	No Artifacts
-	N/A	329200	1348950	No Artifacts
-	N/A	329200	1349000	No Artifacts
-	N/A	329200	1349050	No Artifacts
-	N/A	329200	1349100	No Artifacts
-	N/A	329200	1349150	No Artifacts
-	N/A	329200	1349200	No Artifacts
-	N/A	329200	1349250	No Artifacts
-	N/A	329200	1349300	No Artifacts
-	N/A	329200	1349350	No Artifacts
-	N/A	329200	1349400	No Artifacts
-	N/A	329200	1349450	No Artifacts
-	N/A	329200	1349500	No Artifacts
-	N/A	329200	1349550	No Artifacts
-	N/A	329200	1349600	No Artifacts
-	N/A	329200	1349650	No Artifacts

-	N/A	329200	1349700	No Artifacts
-	N/A	329200	1349750	No Artifacts
-	N/A	329150	1348950	No Artifacts
-	N/A	329150	1349000	No Artifacts
-	N/A	329150	1349050	No Artifacts
-	N/A	329150	1349100	No Artifacts
-	N/A	329150	1349150	No Artifacts
-	N/A	329150	1349200	No Artifacts
-	N/A	329150	1349250	No Artifacts
-	N/A	329150	1349300	No Artifacts
-	N/A	329150	1349350	No Artifacts
-	N/A	329150	1349400	No Artifacts
18CHX067	7	329150	1349450	1 fossil rock; 1 iron fragment, possible knife handle with fake abalone plastic handle
-	N/A	329150	1349500	No Artifacts
-	N/A	329150	1349550	No Artifacts
18CHX067	8	329150	1349600	1 colorless bottle glass fragment
18CHX067	9	329150	1349650	1 iron crescent wrench fragment with 3 perforations on handle, corroded
18CHX067	10	329150	1349700	1 handmade red brick fragment (8.3 grams)
-	N/A	329150	1349750	No Artifacts
-	N/A	329100	1348950	No Artifacts
-	N/A	329100	1349000	No Artifacts
-	N/A	329100	1349050	No Artifacts
-	N/A	329100	1349100	No Artifacts
-	N/A	329100	1349150	No Artifacts
-	N/A	329100	1349200	No Artifacts
-	N/A	329100	1349250	No Artifacts
-	N/A	329100	1349300	No Artifacts
-	N/A	329100	1349350	No Artifacts
-	N/A	329100	1349400	No Artifacts
-	N/A	329100	1349450	No Artifacts
-	N/A	329100	1349500	No Artifacts
-	N/A	329100	1349550	No Artifacts
-	N/A	329100	1349600	No Artifacts
-	N/A	329100	1349650	No Artifacts
-	N/A	329100	1349700	No Artifacts
-	N/A	329100	1349750	No Artifacts
-	N/A	329050	1348950	No Artifacts
-	N/A	329050	1349000	No Artifacts
-	N/A	329050	1349050	No Artifacts
-	N/A	329050	1349100	No Artifacts
-	N/A	329050	1349150	No Artifacts

-	N/A	329050	1349200	No Artifacts
-	N/A	329050	1349250	No Artifacts
-	N/A	329050	1349300	No Artifacts
-	N/A	329050	1349350	No Artifacts
-	N/A	329050	1349400	No Artifacts
-	N/A	329050	1349450	No Artifacts
-	N/A	329050	1349500	No Artifacts
-	N/A	329050	1349550	No Artifacts
-	N/A	329050	1349600	No Artifacts
-	N/A	329050	1349650	No Artifacts
-	N/A	329050	1349700	No Artifacts
-	N/A	329050	1349750	No Artifacts
-	N/A	328700	1348100	No Artifacts
-	N/A	328700	1348150	No Artifacts
-	N/A	328700	1348200	No Artifacts
-	N/A	328700	1348250	No Artifacts
-	N/A	328700	1348300	No Artifacts
-	N/A	328700	1348350	No Artifacts
-	N/A	328700	1348400	No Artifacts
-	N/A	328700	1348450	No Artifacts
-	N/A	328700	1348500	No Artifacts
18CHX067	11	328700	1348550	1 chert rock, non-cultural (discarded); 1 brown bottle glass fragment, modern; 2 colorless bottle glass fragments; 1 thin glass fragment, probably light bulb glass
-	N/A	328700	1348600	No Artifacts
-	N/A	328700	1348650	No Artifacts
-	N/A	328700	1348700	No Artifacts
-	N/A	328700	1348750	No Artifacts
18CHX067	N/A	328700	1348800	1 chert rock, non-cultural (discarded)
-	N/A	328700	1348850	No Artifacts
18CHX067	12	328700	1348900	9 roofing shingle fragments
-	N/A	328650	1348800	No Artifacts
-	N/A	328650	1348850	No Artifacts
-	N/A	328650	1348900	No Artifacts
18CHX067	13	328600	1348800	1 quartz shatter
-	N/A	328600	1348850	No Artifacts
-	N/A	328600	1348900	No Artifacts
-	N/A	328550	1348800	No Artifacts
-	N/A	328550	1348850	No Artifacts
-	N/A	328550	1348900	No Artifacts
-	N/A	328500	1348800	No Artifacts
-	N/A	328500	1348850	No Artifacts
-	N/A	328500	1348900	No Artifacts

-	N/A	328450	1348800	No Artifacts
-	N/A	328450	1348850	No Artifacts
-	N/A	328450	1348900	No Artifacts
-	N/A	328400	1348800	No Artifacts
-	N/A	328400	1348850	No Artifacts
-	N/A	328400	1348900	No Artifacts
-	N/A	328350	1348800	No Artifacts
18CHX067	14	328350	1348850	1 chert secondary flake; 1 chert rock, non-cultural (discarded)
-	N/A	328350	1348900	No Artifacts
-	N/A	328300	1348800	No Artifacts
18CHX067	15	328300	1348850	10 barbed wire fragments
-	N/A	328300	1348900	No Artifacts
-	N/A	328250	1348800	No Artifacts
-	N/A	328250	1348850	No Artifacts
-	N/A	328250	1348900	No Artifacts
-	N/A	328200	1348800	No Artifacts
-	N/A	328200	1348850	No Artifacts
-	N/A	328200	1348900	No Artifacts
-	N/A	328150	1348800	No Artifacts
18CHX067	16	328150	1348850	1 unidentified square nail fragment, possibly cut
-	N/A	328150	1348900	No Artifacts
-	N/A	328150	1348950	No Artifacts
-	N/A	328150	1349000	No Artifacts
-	N/A	328150	1349050	No Artifacts
-	N/A	328150	1349100	No Artifacts
-	N/A	328150	1349150	No Artifacts
-	N/A	328150	1349200	No Artifacts
-	N/A	328150	1349250	No Artifacts
-	N/A	328150	1349500	No Artifacts
18CHX067	17	328150	1349550	1 quartz rock, non-cultural (discarded); 1 colorless window glass fragment, modern; 5 roofing shingle fragments
-	N/A	328100	1348800	No Artifacts
-	N/A	328100	1348850	No Artifacts
-	N/A	328100	1348900	No Artifacts
-	N/A	328100	1348950	No Artifacts
-	N/A	328100	1349000	No Artifacts
-	N/A	328100	1349050	No Artifacts
-	N/A	328100	1349100	No Artifacts
-	N/A	328100	1349150	No Artifacts
-	N/A	328100	1349200	No Artifacts
18CHX067	18	328100	1349250	1 quartz shatter; 1 chert rock, non-cultural (discarded); 1 quartzite fire-cracked rock (93.7 grams)
-	N/A	328100	1349300	No Artifacts

18CHX067	19	328100	1349350	1 red brick fragment with gravel temper (7.1 grams)
-	N/A	328100	1349400	No Artifacts
-	N/A	328100	1349450	No Artifacts
-	N/A	328100	1349500	No Artifacts
-	N/A	328100	1349550	No Artifacts
-	N/A	328050	1348100	No Artifacts
-	N/A	328050	1348150	No Artifacts
-	N/A	328050	1348200	No Artifacts
-	N/A	328050	1348250	No Artifacts
-	N/A	328050	1348300	No Artifacts
-	N/A	328050	1348350	No Artifacts
-	N/A	328050	1348400	No Artifacts
-	N/A	328050	1348450	No Artifacts
-	N/A	328050	1348500	No Artifacts
-	N/A	328050	1348550	No Artifacts
-	N/A	328050	1348600	No Artifacts
-	N/A	328050	1348650	No Artifacts
-	N/A	328050	1348700	No Artifacts
-	N/A	328050	1348750	No Artifacts
-	N/A	328050	1348800	No Artifacts
-	N/A	328050	1348850	No Artifacts
-	N/A	328050	1348900	No Artifacts
-	N/A	328050	1348950	No Artifacts
-	N/A	328050	1349000	No Artifacts
-	N/A	328050	1349050	No Artifacts
-	N/A	328050	1349100	No Artifacts
-	N/A	328050	1349150	No Artifacts
-	N/A	328050	1349200	No Artifacts
-	N/A	328050	1349250	No Artifacts
-	N/A	328050	1349300	No Artifacts
18CHX067	20	328050	1349350	1 colorless bottle glass fragment, modern
-	N/A	328050	1349400	No Artifacts
-	N/A	328050	1349450	No Artifacts
-	N/A	328050	1349500	No Artifacts
-	N/A	328000	1348100	No Artifacts
-	N/A	328000	1348150	No Artifacts
-	N/A	328000	1348200	No Artifacts
-	N/A	328000	1348250	No Artifacts
-	N/A	328000	1348300	No Artifacts
-	N/A	328000	1348350	No Artifacts
-	N/A	328000	1348400	No Artifacts
-	N/A	328000	1348450	No Artifacts

-	N/A	328000	1348500	No Artifacts
-	N/A	328000	1348550	No Artifacts
-	N/A	328000	1348600	No Artifacts
-	N/A	328000	1348650	No Artifacts
-	N/A	328000	1348700	No Artifacts
-	N/A	328000	1348750	No Artifacts
-	N/A	328000	1348800	No Artifacts
-	N/A	328000	1348850	No Artifacts
-	N/A	328000	1348900	No Artifacts
-	N/A	328000	1348950	No Artifacts
-	N/A	328000	1349000	No Artifacts
-	N/A	328000	1349050	No Artifacts
-	N/A	328000	1349100	No Artifacts
-	N/A	328000	1349150	No Artifacts
-	N/A	328000	1349200	No Artifacts
-	N/A	328000	1349250	No Artifacts
-	N/A	328000	1349300	No Artifacts
-	N/A	328000	1349350	No Artifacts
-	N/A	328000	1349400	No Artifacts
-	N/A	328000	1349450	No Artifacts
-	N/A	328000	1349500	No Artifacts
-	N/A	327650	1348100	No Artifacts
-	N/A	327650	1348150	No Artifacts
-	N/A	327650	1348200	No Artifacts
-	N/A	327650	1348250	No Artifacts
-	N/A	327650	1348300	No Artifacts
-	N/A	327650	1348350	No Artifacts
-	N/A	327650	1348400	No Artifacts
-	N/A	327650	1348450	No Artifacts
-	N/A	327650	1348500	No Artifacts
-	N/A	327650	1348550	No Artifacts
-	N/A	327650	1348600	No Artifacts
-	N/A	327650	1348650	No Artifacts
-	N/A	327650	1348700	No Artifacts
-	N/A	327650	1348750	No Artifacts
-	N/A	327650	1348800	No Artifacts
-	N/A	327650	1348850	No Artifacts
-	N/A	327650	1348900	No Artifacts
-	N/A	327650	1348950	No Artifacts
-	N/A	327650	1349000	No Artifacts
-	N/A	327650	1349050	No Artifacts
-	N/A	327650	1349100	No Artifacts

-	N/A	327650	1349150	No Artifacts
-	N/A	327650	1349200	No Artifacts
-	N/A	327650	1349250	No Artifacts
-	N/A	327650	1349300	No Artifacts
-	N/A	327650	1349350	No Artifacts
-	N/A	327650	1349400	No Artifacts
-	N/A	327650	1349450	No Artifacts
-	N/A	327650	1349500	No Artifacts

**APPENDIX II.**  
**ARTIFACTS RECOVERED FROM DRY-SCREENED TEST UNITS**  
**WINDY KNOLLS I (18CH0808)**

	□325230A Lot 234	□330235A Lot 235	□335230A Lot 236	□340235A Lot 237	□345230A Lot 238	□350235A Lot 239
Primary flake	-	-	-	-	-	-
Secondary flake	1	-	-	-	-	-
Tertiary flake	2	-	1	-	1	1
Shatter	3	1	1	5	1	1
Projectile point	-	-	-	-	-	-
Tool/biface	-	-	-	-	-	-
Other stone/lithic fragment	-	-	-	-	-	-
<b>Total Lithics (Non-flint)</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>2</b>
Potomac Creek plain	-	6	7	3	3	6
Poss. Potomac Creek plain	3	1	-	-	-	-
Potomac Creek cord-marked	-	-	1	-	1	-
Poss. Potomac Creek cord-marked	1	-	-	-	-	-
Moyaone plain	-	-	-	-	2	-
Poss. Moyaone plain	-	3	-	2	1	2
Poss. Moyaone cord-marked	-	-	-	-	-	-
Poss. Camden plain	-	-	-	-	-	-
Poss. Yoacomico plain	-	-	-	-	-	-
Poss. Townsend plain	-	-	-	-	-	-
Poss. colonoware	-	-	-	-	-	-
UID crushed-quartz tempered plain	-	-	-	-	-	1
UID shell-tempered plain	-	-	1	1	-	-
UID sand-tempered plain	-	-	-	-	-	-
UID sand- and shell-tempered plain	-	-	-	-	-	-
UID untempered plain	-	-	-	-	-	1
UID shell-tempered cord-marked	-	-	-	-	-	-
<b>Total Indian Ceramics</b>	<b>4</b>	<b>10</b>	<b>9</b>	<b>6</b>	<b>7</b>	<b>10</b>
Orange micaceous ware	-	-	-	-	-	-
Unglazed coarse earthenware	-	-	-	-	-	-
Tin-glazed earthenware	-	-	-	-	-	-
UID lead-glazed earthenware	-	-	-	-	-	-
Poss. North Devon gravel-tempered	-	-	-	-	-	-
Poss. Borderware	-	-	-	-	-	-
English brown stoneware	-	-	-	-	-	-
Rhenish brown stoneware	-	1	-	-	-	-
19th-century refined earthenware	-	-	-	1	-	-
Other post-colonial ceramic	-	-	-	-	-	-
<b>Total European Ceramics</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>
European flint debitage	-	2	6	1	4	6
European flint core	-	-	1	-	-	-
Gunflint	-	-	-	-	-	-

Ochre fragment	-	-	-	-	1	-
	□325230A Lot 234	□330235A Lot 235	□335230A Lot 236	□340235A Lot 237	□345230A Lot 238	□350235A Lot 239
Fire-cracked rock	1	-	-	1	3	4
<b>Total other stone</b>	<b>1</b>	<b>2</b>	<b>7</b>	<b>2</b>	<b>8</b>	<b>10</b>
Copper alloy scrap	-	-	-	-	-	4
Copper alloy triangle	1	-	-	-	-	-
Copper alloy cone	-	-	-	1	-	-
Copper alloy button	-	-	-	-	-	-
Copper alloy tack	-	-	-	-	-	-
Other copper alloy object	-	-	-	-	-	-
<b>Total copper alloy</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>4</b>
Lead shot	-	-	-	-	-	-
Other lead object	-	-	-	-	-	-
Pewter fragment	-	-	-	-	-	-
UID lead fragment	-	-	-	-	-	1
Silver sword hanger/scabbard hook	-	-	-	-	-	-
<b>Total Lead/Silver</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
Terra cotta pipe stem, unmeasurable	1	-	-	1	-	1
Terra cotta pipe stem, 7/64"	-	-	-	-	-	-
Terra cotta pipe stem, 8/64"	-	-	-	-	-	-
Terra cotta pipe stem, 9/64"	-	-	-	-	-	-
Terra cotta pipe heel	-	-	-	-	-	-
Terra cotta pipe bowl/rim fragment	-	1	2	-	1	2
<b>Total TCTP</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>3</b>
White clay pipe stem, unmeasurable	-	-	-	1	1	1
White clay pipe stem, 5/64"	1	-	-	-	-	-
White clay pipe stem, 6/64"	-	-	2	1	1	1
White clay pipe stem, 7/64"	-	1	-	-	1	2
White clay pipe stem, 8/64"	-	-	-	-	-	-
White clay pipe stem, 9/64"	-	-	-	-	-	-
White clay pipe bowl/rim fragment	3	1	-	4	-	6
<b>Total WCTP</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>3</b>	<b>10</b>
Glass bead, black	-	1	1	2	1	4
Glass bead, black (fused)	-	-	-	-	-	-
Glass bead, Cornaline D'Aleppo	-	1	-	1	1	2
Glass bead, Cornaline D'Aleppo (fused)	-	-	-	-	-	-
Glass bead, white/colored stripes	-	-	1	-	-	-
Glass bead, white	-	-	-	-	-	-
Glass bead, blue	-	-	-	1	-	-
Glass button	-	-	-	-	-	-
Green glass, colonial	2	-	-	1	1	-
19th/20th century glass	-	-	-	-	-	-
<b>Total Glass</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>6</b>

	-	1	1	1	1	2
	□325230A Lot 234	□330235A Lot 235	□335230A Lot 236	□340235A Lot 237	□345230A Lot 238	□350235A Lot 239
Iron nail, wrought	-	1	1	1	1	2
Iron tack, wrought	-	-	-	-	-	-
UID iron nail, square-bodied	-	2	-	1	3	2
UID iron nail	3	-	3	-	-	-
Iron triangle, perforated	-	-	-	-	-	-
Iron knife fragment	-	-	-	-	-	-
Iron gun trigger	-	-	-	-	-	-
UID iron fragment	-	5	5	-	3	7
<b>Total Iron</b>	<b>3</b>	<b>8</b>	<b>9</b>	<b>2</b>	<b>7</b>	<b>11</b>
Brick/daub	-	1 (1.6 g)	2 (0.4 g)	2 (0.8 g)	1 (0.5 g)	3 (0.8 g)
Shark tooth	-	-	-	-	-	-
Faunal	2 (0.44 g)	1 (0.31 g)	16 (2.05 g)	8 (2.24 g)	14 (3.0 g)	45 (9.66 g)
Oyster shell	-	7 (7.4 g)	-	2 (0.61 g)	4 (2.1 g)	2 (1.79 g)
Bog iron	-	-	-	-	1	-
Mica	-	-	-	-	-	-
Other modern material	-	-	-	-	1	1
<b>Total Miscellaneous</b>	<b>2</b>	<b>9</b>	<b>18</b>	<b>12</b>	<b>21</b>	<b>51</b>
<b>TOTAL</b>	<b>24</b>	<b>36</b>	<b>51</b>	<b>41</b>	<b>52</b>	<b>108</b>

	□355230A Lot 240	□360235A Lot 241	□365230A Lot 242	□370235A Lot 243	□375230A Lot 244	□375235A Lot 245
Primary flake	-	-	-	-	-	-
Secondary flake	1	1	-	-	-	2
Tertiary flake	1	2	3	4	-	-
Shatter	1	1	5	6	7	-
Projectile point	-	-	-	-	-	-
Tool/biface	-	-	-	-	-	1
Other stone/lithic fragment	-	-	-	1	-	-
<b>Total Lithics (Non-flint)</b>	<b>3</b>	<b>4</b>	<b>8</b>	<b>11</b>	<b>7</b>	<b>3</b>
Potomac Creek plain	4	7	-	1	5	4
Poss. Potomac Creek plain	-	1	2	-	-	-
Potomac Creek cord-marked	-	1	-	-	-	-
Poss. Potomac Creek cord-marked	-	-	-	-	-	-
Moyaone plain	-	3	-	-	1	-
Poss. Moyaone plain	-	-	3	5	4	-
Poss. Moyaone cord-marked	-	-	-	-	1	-
Poss. Camden plain	-	-	-	-	-	-
Poss. Yoacomico plain	-	-	-	2	-	-
Poss. Townsend plain	-	-	-	-	-	-
Poss. Colonowares	-	-	1	-	1	-
UID quartz tempered plain	-	-	-	-	-	-
UID shell-tempered plain	1	8	-	-	2	4
UID sand-tempered plain	2	4	2	-	-	-
UID sand- and shell-tempered plain	-	-	-	-	-	-

UID untempered plain	-	-	-	-	-	-
	□355230A Lot 240	□360235A Lot 241	□365230A Lot 242	□370235A Lot 243	□375230A Lot 244	□375235A Lot 245
UID shell-tempered cord-marked	-	-	-	-	-	-
<b>Total Indian Ceramics</b>	<b>7</b>	<b>24</b>	<b>8</b>	<b>8</b>	<b>14</b>	<b>8</b>
Orange micaceous ware	1	1	-	2	5	1
Unglazed coarse earthenware	-	-	-	-	-	-
Tin-glazed earthenware	1	1	-	-	-	-
UID lead-glazed earthenware	-	-	-	-	-	-
Poss. North Devon gravel-tempered	-	-	-	-	1	-
Poss. Borderware	-	-	-	-	-	-
English brown stoneware	-	-	-	1	-	-
Rhenish brown stoneware	-	-	-	-	-	-
19th-century refined earthenware	-	-	1	-	-	-
Other post-colonial ceramic	-	-	-	-	-	-
<b>Total European Ceramics</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>1</b>
European flint debitage	6	7	6	9	17	8
European flint core	-	-	-	-	1	-
Gunflint	1	-	-	-	2	1
Ochre fragment	-	-	-	-	-	-
Fire-cracked rock	2	4	5	2	4	3
<b>Total other stone</b>	<b>9</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>24</b>	<b>12</b>
Copper alloy scrap	1	2	-	2	1	2
Copper alloy triangle	-	-	-	-	1	-
Copper alloy cone	-	-	-	-	-	-
Copper alloy button	-	-	-	-	-	1
Copper alloy tack	-	1	-	-	-	-
Other copper alloy object	-	-	-	1	-	-
<b>Total copper alloy</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>3</b>
Lead shot	-	1	-	1	-	-
Other lead object	-	-	-	-	-	1
Pewter fragment	1	-	-	-	-	-
UID lead fragment	-	3	1	1	-	1
Silver sword hanger/scabbard hook	-	-	1	-	-	-
<b>Total Lead/Silver</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>
Terra cotta pipe stem, unnm.	-	2	1	2	4	-
Terra cotta pipe stem, 7/64"	1	-	-	-	-	-
Terra cotta pipe stem, 8/64"	1	-	2	1	-	1
Terra cotta pipe stem, 9/64"	-	-	-	-	1	-
Terra cotta pipe heel	-	1	-	-	-	-
Terra cotta pipe bowl/rim fragment	1	-	4	3	2	1
<b>Total TCTP</b>	<b>3</b>	<b>3</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>2</b>
White clay pipe stem, unnm. le	-	7	3	1	4	5
White clay pipe stem, 5/64"	-	-	-	-	-	-
White clay pipe stem, 6/64"	-	2	1	1	2	1
White clay pipe stem, 7/64"	3	1	5	1	1	3
White clay pipe stem, 8/64"	-	1	-	3	1	1

White clay pipe stem, 9/64"	-	-	-	-	-	-
	□355230A Lot 240	□360235A Lot 241	□365230A Lot 242	□370235A Lot 243	□375230A Lot 244	□375235A Lot 245
White clay pipe bowl/rim fragment	2	3	2	4	7	12
<b>Total WCTP</b>	<b>5</b>	<b>14</b>	<b>11</b>	<b>10</b>	<b>15</b>	<b>22</b>
Glass bead, black	2	4	8	5	2	6
Glass bead, black (fused)	-	-	-	1	-	-
Glass bead, Cornaline D'Aleppo	2	2	6	5	2	1
Glass bead, Cornaline D'Aleppo (fused)	-	-	-	-	-	-
Glass bead, white/colored stripes	-	-	-	-	-	-
Glass bead, white	-	-	-	-	-	-
Glass bead, blue	-	-	-	-	-	-
Glass bead, Gooseberry	-	-	-	-	-	-
Glass button	-	-	-	1	-	-
Green glass, colonial	2	2	2	3	1	1
19th/20th century glass	1	-	-	-	-	1
<b>Total Glass</b>	<b>7</b>	<b>8</b>	<b>16</b>	<b>15</b>	<b>5</b>	<b>9</b>
Iron nail, wrought	4	9	6	8	4	11
Iron tack, wrought	-	-	-	-	-	-
UID iron nail, square-bodied	-	3	4	3	7	3
UID iron nail	3	-	-	-	-	-
Iron triangle, perforated	-	-	-	-	-	1
Iron knife fragment	-	-	-	-	-	-
Iron gun trigger	-	-	-	-	-	-
UID iron fragment	2	14	4	6	1	8
<b>Total Iron</b>	<b>9</b>	<b>26</b>	<b>14</b>	<b>17</b>	<b>12</b>	<b>23</b>
Brick/daub	1 (1.2 g)	4 (1.3 g)	4 (1.0 g)	2 (0.9 g)	3 (2.4 g)	-
Shark tooth	-	-	-	-	-	-
Faunal	70 (14.89 g)	189 (40.0 g)	163 (39.45 g)	174 (37.66)	202 (40.74 g)	139 (34.03 g)
Oyster shell	10 (4.01 g)	8 (31.31 g)	12 (28.8 g)	27 (37.7 g)	7 (7.91 g)	12 (5.3 g)
Bog iron	-	-	-	10	7	-
Mica	-	-	-	3	-	-
Other modern material	-	-	-	1	1	1
<b>Total Miscellaneous</b>	<b>81</b>	<b>201</b>	<b>179</b>	<b>217</b>	<b>220</b>	<b>152</b>
<b>TOTAL</b>	<b>128</b>	<b>300</b>	<b>257</b>	<b>303</b>	<b>312</b>	<b>237</b>

	□380235A Lot 246	□385230A Lot 247	□390235A Lot 248	□395230A Lot 249	□400235A Lot 250	□405230A Lot 251
Primary flake	-	-	-	-	-	-
Secondary flake	1	-	-	-	-	-
Tertiary flake	-	1	-	-	1	-
Shatter	1	4	3	1	1	-
Tool/biface	-	-	-	-	-	-
<b>Total Lithics (Non-flint)</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>0</b>
Potomac Creek plain	4	9	7	8	11	6

	□380235A Lot 246	□385230A Lot 247	□390235A Lot 248	□395230A Lot 249	□400235A Lot 250	□405230A Lot 251
Poss. Potomac Creek plain	-	-	-	-	1	-
Potomac Creek cord-marked	-	-	1	-	-	-
Poss. Potomac Creek cord-marked	-	-	-	-	-	-
Moyaone plain	-	-	3	-	1	1
Poss. Moyaone plain	-	-	-	4	4	1
Poss. Moyaone cord-marked	-	1	-	-	-	1
Poss. Camden plain	-	-	-	-	-	-
Poss. Yoacomico plain	-	-	-	-	-	-
Poss. Townsend plain	-	-	-	3	-	-
Poss. colonoware	-	-	-	-	-	-
UID crushed-quartz tempered plain	-	-	-	-	-	-
UID shell-tempered plain	1	-	1	-	5	2
UID sand-tempered plain	-	-	-	-	-	-
UID sand- and shell-tempered plain	1	-	-	-	-	-
UID untempered plain	-	-	-	-	-	-
UID shell-tempered cord-marked	-	1	-	-	-	-
<b>Total Indian Ceramics</b>	<b>6</b>	<b>11</b>	<b>12</b>	<b>15</b>	<b>22</b>	<b>11</b>
Orange micaceous ware	3	2	2	6	1	1
Unglazed coarse earthenware	-	-	2	-	-	2
Tin-glazed earthenware	-	-	-	-	-	-
UID lead-glazed earthenware	-	-	-	-	-	1
Poss. North Devon gravel-tempered	-	-	-	-	-	-
Poss. Borderware	-	-	-	-	-	-
English brown stoneware	1	-	3	-	1	-
Rhenish brown stoneware	-	-	-	-	-	-
19th-century refined earthenware	-	-	-	-	-	-
Other post-colonial ceramic	-	-	-	-	-	-
<b>Total European Ceramics</b>	<b>4</b>	<b>2</b>	<b>7</b>	<b>6</b>	<b>2</b>	<b>4</b>
European flint debitage	20	12	10	10	13	15
European flint core	-	-	-	-	-	-
Gunflint	1	2	-	2	-	-
Ochre fragment	-	1	-	-	-	-
Fire-cracked rock	4	6	4	5	1	5
<b>Total other stone</b>	<b>25</b>	<b>21</b>	<b>14</b>	<b>17</b>	<b>14</b>	<b>20</b>
Copper alloy scrap	4	2	3	2	-	2
Copper alloy triangle	-	-	-	-	-	-
Copper alloy cone	-	-	-	-	-	-
Copper alloy button	-	-	-	-	-	-
Copper alloy tack	-	-	-	-	-	-
Other copper alloy object	-	-	-	-	-	-
<b>Total copper alloy</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>2</b>

	□380235A Lot 246	□385230A Lot 247	□390235A Lot 248	□395230A Lot 249	□400235A Lot 250	□405230A Lot 251
Lead shot	-	-	-	-	-	-
Other lead object	-	1	-	-	-	-
Pewter fragment	-	-	-	-	-	-
UID lead fragment	5	2	1	1	-	1
Silver scabbard hook	-	-	-	-	-	-
<b>Total Lead/Silver</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>
Terra cotta pipe stem, unnm.	-	2	-	-	1	2
Terra cotta pipe stem, 7/64"	-	-	-	-	-	-
Terra cotta pipe stem, 8/64"	-	1	-	-	-	-
Terra cotta pipe stem, 9/64"	-	-	-	1	-	-
Terra cotta pipe heel	-	-	-	-	-	-
Terra cotta pipe bowl/rim fragment	2	3	2	2	1	2
<b>Total TCTP</b>	<b>2</b>	<b>6</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>4</b>
White clay pipe stem, unnm.	2	5	-	2	3	-
White clay pipe stem, 5/64"	-	-	-	-	-	-
White clay pipe stem, 6/64"	2	2	1	2	3	-
White clay pipe stem, 7/64"	3	2	1	3	1	2
White clay pipe stem, 8/64"	-	1	-	-	2	1
White clay pipe stem, 9/64"	-	-	-	-	-	-
White clay pipe bowl/rim frag	11	8	9	16	10	12
<b>Total WCTP</b>	<b>18</b>	<b>18</b>	<b>11</b>	<b>23</b>	<b>19</b>	<b>15</b>
Glass bead, black	6	4	2	7	3	6
Glass bead, black (fused)	-	-	-	-	-	-
Glass bead, Cornaline D'Aleppo	2	5	-	2	2	1
Glass bead, Cornaline D'Aleppo (fused)	-	-	-	-	-	-
Glass bead, white/colored stripes	-	-	-	-	-	-
Glass bead, white	-	-	-	-	-	-
Glass bead, blue	-	-	-	-	1	-
Glass bead, Gooseberry	-	1	-	1	-	-
Glass button	-	-	-	-	-	-
Green glass, colonial	2	3	4	4	4	-
19th/20th century glass	-	1	-	-	-	-
<b>Total Glass</b>	<b>10</b>	<b>14</b>	<b>6</b>	<b>14</b>	<b>10</b>	<b>7</b>
Iron nail, wrought	20	4	5	3	12	7
Iron tack, wrought	-	-	-	-	-	-
UID iron nail, square-bodied	-	3	-	5	-	1
UID iron nail	-	-	-	-	-	-
Iron triangle, perforated	-	-	-	-	-	-
Iron knife fragment	-	1	-	-	-	-
Iron gun trigger	-	-	-	-	-	-
UID iron fragment	9	5	3	1	4	15
<b>Total Iron</b>	<b>29</b>	<b>13</b>	<b>8</b>	<b>9</b>	<b>16</b>	<b>23</b>
Brick/daub	3 (0.8 g)	2 (0.9 g)	-	2 (0.5 g)	4 (2.3 g)	-
Shark tooth	-	1	-	-	-	-
Faunal	387 (80.97 g)	315 (72.84 g)	165 (47.84 g)	211 (52.28 g)	257 (98.37 g)	285 (71.2 g)

	□380235A Lot 246	□385230A Lot 247	□390235A Lot 248	□395230A Lot 249	□400235A Lot 250	□405230A Lot 251
Oyster shell	18 (19.81 g)	15 (28.0 g)	28 (39.76 g)	10 (5.0 g)	11 (15.6 g)	18 (48.71 g)
Bog iron	4	1	4	3	11	9
Mica	-	-	-	-	-	-
Other modern material	2	1	-	-	-	-
<b>Total Miscellaneous</b>	<b>414</b>	<b>335</b>	<b>197</b>	<b>226</b>	<b>283</b>	<b>312</b>
<b>TOTAL</b>	<b>519</b>	<b>430</b>	<b>264</b>	<b>317</b>	<b>370</b>	<b>399</b>

	□405325A Lot 252	□410235A Lot 253	□415230A Lot 254	□420235A Lot 255	□425230A Lot 256	□430235A Lot 257
Primary flake	-	-	-	-	-	-
Secondary flake	1	-	1	-	-	1
Tertiary flake	-	3	-	-	1	2
Shatter	1	-	3	3	3	-
Projectile point	-	-	-	-	-	-
Tool/biface	-	1	-	-	1	-
Other stone/lithic fragment	-	-	-	-	-	-
<b>Total Lithics (Non-flint)</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>5</b>	<b>3</b>
Potomac Creek plain	2	-	12	5	-	-
Poss. Potomac Creek plain	-	8	-	-	6	7
Potomac Creek cord-mk.	1	-	-	-	-	-
Poss. Potomac Creek cord-marked	-	-	-	-	-	-
Moyaone plain	-	1	-	-	-	-
Poss. Moyaone plain	1	-	-	-	-	-
Poss. Moyaone cord-mk.	-	-	-	-	-	-
Poss. Camden plain	-	-	-	-	-	-
Poss. Yoacomico plain	-	-	-	-	-	-
Poss. Townsend plain	-	-	-	-	-	-
Poss. Colonoware	-	-	-	-	-	-
UID quartz-tempered plain	-	-	-	-	-	-
UID shell-tempered plain	1	4	6	3	-	2
UID sand-tempered plain	-	-	-	-	-	-
UID sand- and shell-tempered plain	-	-	-	-	-	-
UID untempered plain	-	-	-	-	-	-
UID shell-temp. cord mkd	-	-	-	-	-	-
<b>Total Indian Ceramics</b>	<b>5</b>	<b>13</b>	<b>18</b>	<b>8</b>	<b>6</b>	<b>9</b>
Orange micaceous ware	1	3	1	2	1	2
Unglazed coarse e-ware	1	1	-	-	-	-
Tin-glazed earthenware	-	-	-	-	-	1
UID lead-glazed e-ware	-	-	-	-	-	-
Poss. N. Devon gravel-temp	-	-	-	-	-	-
Poss. Borderware	-	-	-	-	-	-
English brown stoneware	1	-	-	-	1	-
Rhenish brown stoneware	-	-	-	-	-	-
19th-century refined e-ware	-	-	-	-	-	-
Other post-colonial ceramic	-	-	1	-	-	-

	□405325A Lot 252	□410235A Lot 253	□415230A Lot 254	□420235A Lot 255	□425230A Lot 256	□430235A Lot 257
<b>Total European Ceramics</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>
European flint debitage	2	11	8	11	8	8
European flint core	-	-	-	-	-	-
Gunflint	-	1	-	2	3	-
Ochre fragment	-	-	-	-	-	-
Fire-cracked rock	-	6	6	10	5	7
<b>Total other stone</b>	<b>2</b>	<b>18</b>	<b>14</b>	<b>23</b>	<b>16</b>	<b>15</b>
Copper alloy scrap	-	2	3	-	5	2
Copper alloy triangle	-	-	1	-	-	-
Copper alloy cone	-	-	-	-	-	-
Copper alloy button	-	-	-	-	-	-
Copper alloy tack	-	-	-	1	1	1
Other copper alloy object	-	-	-	-	-	-
<b>Total copper alloy</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>6</b>	<b>3</b>
Lead shot	-	-	1	-	-	-
Other lead object	-	-	-	-	-	-
Pewter fragment	-	-	-	-	-	1
UID lead fragment	1	-	1	1	-	-
Silver sword hanger/scabbard hook	-	-	-	-	-	-
<b>Total Lead/Silver</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>
Terra cotta pipe stem, unmeasurable	-	-	2	1	5	2
Terra cotta pipe stem, 7/64"	-	-	-	-	-	-
Terra cotta pipe stem, 8/64"	-	-	-	-	1	-
Terra cotta pipe stem, 9/64"	-	-	-	-	1	-
Terra cotta pipe heel	-	-	-	-	-	-
Terra cotta pipe bowl/rim fragment	-	3	3	3	6	3
<b>Total TCTP</b>	<b>0</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>13</b>	<b>5</b>
White clay pipe stem, unnm.	-	3	3	1	-	-
White clay pipe stem, 5/64"	-	-	-	-	-	-
White clay pipe stem, 6/64"	-	-	-	4	1	2
White clay pipe stem, 7/64"	1	1	3	-	2	2
White clay pipe stem, 8/64"	-	2	1	1	-	1
White clay pipe stem, 9/64"	-	-	-	-	-	-
White clay pipe bowl/rim fragment	2	10	6	7	4	3
<b>Total WCTP</b>	<b>3</b>	<b>16</b>	<b>13</b>	<b>13</b>	<b>7</b>	<b>8</b>
Glass bead, black	-	4	5	8	4	3
Glass bead, black (fused)	-	-	-	-	-	-
Glass bead, Cornaline D'Aleppo	2	-	2	-	1	1
Glass bead, Cornaline D'Aleppo (fused)	-	-	-	-	-	-
Glass bead, white/colored stripes	-	-	-	-	-	-
Glass bead, white	-	-	-	-	-	-
Glass bead, blue	-	-	-	-	-	-
Glass bead, Gooseberry	-	-	-	-	-	-

	□405325A Lot 252	□410235A Lot 253	□415230A Lot 254	□420235A Lot 255	□425230A Lot 256	□430235A Lot 257
Glass button	-	-	-	-	-	-
Green glass, colonial 19th/20th century glass	4	2	4	-	-	5
<b>Total Glass</b>	<b>6</b>	<b>7</b>	<b>11</b>	<b>8</b>	<b>6</b>	<b>9</b>
Iron nail, wrought	5	9	2	10	2	9
Iron tack, wrought	-	-	-	-	-	-
UID iron nail, square- bodied	-	-	1	4	2	2
UID iron nail	-	-	-	-	-	-
Iron triangle, perforated	-	-	-	-	-	-
Iron knife fragment	-	-	-	-	-	-
Iron gun trigger	-	-	-	-	-	-
UID iron fragment	-	3	2	8	4	6
<b>Total Iron</b>	<b>5</b>	<b>12</b>	<b>5</b>	<b>22</b>	<b>8</b>	<b>17</b>
Brick/daub	6 (11.2 g)	4 (1.6 g)	2 (1.4 g)	2 (0.5 g)	3 (1.0 g)	2 (0.3 g)
Shark tooth	-	-	-	-	-	-
Faunal	1 (0.2 g)	138 (41.47 g)	62 (15.21 g)	52 (12.18 g)	100 (20.02 g)	30 (6.18 g)
Oyster shell	-	48 (15.1 g)	1 (6.1 g)	-	2 (3.5 g)	-
Bog iron	-	3	4	5	5	10
Mica	-	-	1	-	-	-
Other modern material	-	2	-	-	-	-
<b>Total Miscellaneous</b>	<b>7</b>	<b>195</b>	<b>70</b>	<b>59</b>	<b>110</b>	<b>42</b>
<b>TOTAL</b>	<b>34</b>	<b>274</b>	<b>148</b>	<b>144</b>	<b>179</b>	<b>115</b>

	□435230A Lot 258	□440235A Lot 259	□445230A Lot 260	□450235A Lot 261	□455230A Lot 262	□460235A Lot 263
Primary flake	-	-	-	-	-	-
Secondary flake	-	-	1	-	-	-
Tertiary flake	-	-	-	-	-	-
Shatter	-	-	1	-	4	-
Projectile point	-	1	-	-	-	-
Tool/biface	-	1	-	-	-	-
Other stone/lithic fragment	-	-	-	1	-	-
<b>Total Lithics (Non-flint)</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>0</b>
Potomac Creek plain	6	3	5	9	3	5
Poss. Potomac Creek plain	-	-	-	-	-	-
Potomac Creek cord-mrk.	-	-	-	1	-	1
Poss. Potomac Ck cord-mrk	-	-	-	-	-	-
Moyaone plain	-	-	2	1	-	3
Poss. Moyaone plain	-	3	-	-	-	-
Poss. Moyaone cord-mrk.	-	-	-	-	-	-
Poss. Camden plain	-	-	-	-	-	1
Poss. Yoacomico plain	-	-	-	-	-	-
Poss. Townsend plain	-	-	-	-	-	-

	□435230A Lot 258	□440235A Lot 259	□445230A Lot 260	□450235A Lot 261	□455230A Lot 262	□460235A Lot 263
Poss. Colonowares	-	-	-	-	-	-
UID quartz tempered plain	-	-	-	-	-	-
UID shell-tempered plain	1	-	3	-	2	2
UID sand-tempered plain	-	-	2	1	-	-
UID sand- and shell-tempered plain	-	-	-	-	-	-
UID untempered plain	-	-	-	-	-	-
UID shell-tempered cord-marked	-	-	-	-	-	-
<b>Total Indian Ceramics</b>	<b>7</b>	<b>6</b>	<b>12</b>	<b>12</b>	<b>5</b>	<b>12</b>
Orange micaceous ware	2	2	1	3	1	2
Unglazed coarse e-ware	-	1	-	-	-	-
Tin-glazed earthenware	1	-	-	-	1	-
UID lead-glazed e-ware	-	1	1	-	-	-
Poss. North Devon gravel-tempered	-	-	-	-	-	-
Poss. Borderware	-	-	1	-	-	-
English brown stoneware	-	1	-	-	1	-
Rhenish brown stoneware	-	-	-	-	-	-
19th-century refined e-ware	-	-	-	-	-	-
Other post-colonial ceramic	-	-	-	-	-	-
<b>Total European Ceramics</b>	<b>3</b>	<b>5</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>
European flint debitage	11	5	8	8	7	6
European flint core	-	-	-	-	-	-
Gunflint	-	-	-	-	-	1
Ochre fragment	-	-	-	-	-	-
Fire-cracked rock	1	3	4	1	4	2
<b>Total other stone</b>	<b>12</b>	<b>8</b>	<b>12</b>	<b>9</b>	<b>11</b>	<b>9</b>
Copper alloy scrap	1	1	1	1	1	-
Copper alloy triangle	1	-	-	-	-	-
Copper alloy cone	-	-	-	-	-	-
Copper alloy button	-	-	-	-	-	-
Copper alloy tack	-	1	-	-	-	-
Other copper alloy object	-	-	-	-	-	1
<b>Total copper alloy</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
Lead shot	1	-	2	1	2	1
Other lead object	-	-	-	-	-	-
Pewter fragment	-	-	-	-	-	-
UID lead fragment	1	-	-	-	1	1
Silver scabbard hook	-	-	-	-	-	-
<b>Total Lead/Silver</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>2</b>
Terra cotta pipe stem, unnm.	-	-	2	-	1	1
Terra cotta pipe stem, 7/64"	-	-	-	-	-	-
Terra cotta pipe stem, 8/64"	1	1	-	-	-	-
Terra cotta pipe stem, 9/64"	1	-	-	-	-	-
Terra cotta pipe bowl/rim fragment	4	1	1	-	3	1
<b>Total TCTP</b>	<b>6</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>2</b>
White clay pipe stem, unnm.	-	-	-	-	1	-

	□435230A Lot 258	□440235A Lot 259	□445230A Lot 260	□450235A Lot 261	□455230A Lot 262	□460235A Lot 263
White clay pipe stem, 5/64"	-	-	-	-	-	-
White clay pipe stem, 6/64"	2	-	1	-	-	2
White clay pipe stem, 7/64"	-	1	1	1	2	1
White clay pipe stem, 8/64"	-	1	-	1	1	-
White clay pipe stem, 9/64"	-	-	-	-	-	-
White clay pipe bowl/rim fragment	1	5	5	4	6	4
<b>Total WCTP</b>	<b>3</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>10</b>	<b>7</b>
Glass bead, black	3	1	1	1	6	3
Glass bead, black (fused)	-	-	-	1	-	-
Glass bead, Cornaline D'Aleppo	6	1	1	2	1	3
Glass bead, Cornaline D'Aleppo (fused)	-	-	-	-	-	-
Glass bead, white/colored stripes	-	-	-	-	-	-
Glass bead, white	-	-	-	-	-	-
Glass bead, blue	-	-	-	-	-	-
Glass bead, Gooseberry	-	-	-	-	-	-
Glass button	-	-	-	-	-	-
Green glass, colonial	1	4	3	4	5	-
19th/20th century glass	2	-	-	-	-	-
<b>Total Glass</b>	<b>12</b>	<b>6</b>	<b>5</b>	<b>8</b>	<b>12</b>	<b>6</b>
Iron nail, wrought	2	6	2	3	3	6
Iron tack, wrought	-	-	-	-	-	-
UID iron nail, square-bodied	-	-	1	3	-	2
UID iron nail	4	-	-	-	2	-
Iron triangle, perforated	-	-	-	-	-	-
Iron knife fragment	-	-	-	-	-	-
Iron gun trigger	-	-	-	-	-	-
UID iron fragment	1	2	7	7	6	7
<b>Total Iron</b>	<b>7</b>	<b>8</b>	<b>10</b>	<b>13</b>	<b>11</b>	<b>15</b>
Brick/daub	7 (12.2 g)	12 (98.8 g)	1 (20.1 g)	-	4 (1.2 g)	4 (0.8 g)
Shark tooth	-	-	-	-	-	-
Faunal	19 (6.26 g)	7 (1.01 g)	7 (0.87 g)	3 (0.21 g)	3 (0.3 g)	5 (0.71 g)
Oyster shell	7 (19.7 g)	-	-	-	-	-
Bog iron	4	-	3	5	6	7
Mica	-	-	-	-	-	-
Other modern material	-	-	2	-	-	-
<b>Total Miscellaneous</b>	<b>37</b>	<b>19</b>	<b>13</b>	<b>8</b>	<b>13</b>	<b>16</b>
<b>TOTAL</b>	<b>91</b>	<b>65</b>	<b>70</b>	<b>62</b>	<b>77</b>	<b>72</b>

	□465230A Lot 264	□470235A Lot 265	□475230A Lot 266	□480235A Lot 267	□485230A Lot 268	□490235A Lot 269
Primary flake	-	-	-	-	-	-
Secondary flake	-	-	-	-	-	-
Tertiary flake	-	2	-	-	-	-
Shatter	2	-	1	-	-	-
Projectile point	-	-	-	-	-	-
Tool/biface	-	-	-	-	-	-
Other stone/lithic fragment	-	-	-	-	-	1
<b>Total Lithics (Non-flint)</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
Potomac Creek plain	11	8	6	4	2	3
Poss. Potomac Creek plain	-	-	-	-	-	-
Potomac Creek cord-marked	2	-	-	1	-	-
Poss. Potomac Creek cord-marked	-	-	-	-	-	-
Moyaone plain	-	2	-	-	2	2
Poss. Moyaone plain	-	-	-	-	-	-
Poss. Moyaone cord-marked	1	-	-	-	-	-
Poss. Camden plain	-	-	-	-	-	-
Poss. Yoacomico plain	-	-	-	-	-	-
Poss. Townsend plain	-	-	-	-	-	-
Poss. Colonowares	-	-	-	-	-	-
UID quartz tempered plain	-	-	-	-	-	-
UID shell-tempered plain	2	4	1	1	1	1
UID sand-tempered plain	-	-	-	-	-	-
UID sand- and shell-tempered plain	-	-	-	-	-	-
UID untempered plain	-	-	-	-	-	-
UID shell-tempered cord-marked	-	-	-	-	-	-
<b>Total Indian Ceramics</b>	<b>16</b>	<b>14</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>6</b>
Orange micaceous ware	3	3	1	-	1	2
Unglazed coarse e-ware	-	-	-	1	-	-
Tin-glazed earthenware	1	-	-	-	-	-
UID lead-glazed e-ware	-	-	-	-	-	3
Poss. North Devon gravel-tempered	-	-	-	-	-	-
Poss. Borderware	-	-	-	-	-	-
English brown stoneware	-	-	-	-	-	-
Rhenish brown stoneware	-	-	-	-	-	-
19th-cent. refined e-ware	-	-	2	-	-	-
Other post-colonial ceramic	-	-	-	1	-	-
<b>Total European Ceramics</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>5</b>
European flint debitage	11	5	5	8	1	8
European flint core	-	-	-	-	-	1
Gunflint	1	1	-	-	-	-
Ochre fragment	-	-	-	-	-	-
Fire-cracked rock	3	1	-	1	-	-
<b>Total other stone</b>	<b>15</b>	<b>7</b>	<b>5</b>	<b>9</b>	<b>1</b>	<b>9</b>
Copper alloy scrap	-	1	1	1	-	1
Copper alloy triangle	-	-	-	-	-	-
Copper alloy cone	-	-	-	-	-	-
Copper alloy button	-	-	-	-	-	-
Copper alloy tack	-	-	-	-	-	-

	□465230A Lot 264	□470235A Lot 265	□475230A Lot 266	□480235A Lot 267	□485230A Lot 268	□490235A Lot 269
<b>Total copper alloy</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>
Lead shot	2	1	1	-	1	1
Other lead object	-	-	-	-	-	-
Pewter fragment	-	-	-	-	-	-
UID lead fragment	-	1	-	-	-	-
Silver scabbard hook	-	-	-	-	-	-
<b>Total Lead/Silver</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>
Terra cotta pipe stem, unnm.	1	-	2	-	-	3
Terra cotta pipe stem, 7/64"	-	-	-	-	-	-
Terra cotta pipe stem, 8/64"	1	2	1	1	-	-
Terra cotta pipe stem, 9/64"	-	-	-	-	-	-
Terra cotta pipe heel	-	-	-	-	-	-
Terra cotta pipe bowl/rim fragment	-	2	1	1	-	-
<b>Total TCTP</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>3</b>
White clay pipe stem, unmeasurable	-	1	1	-	-	1
White clay pipe stem, 5/64"	-	-	-	-	-	-
White clay pipe stem, 6/64"	-	-	2	-	-	-
White clay pipe stem, 7/64"	-	1	-	1	1	-
White clay pipe stem, 8/64"	-	-	1	-	-	1
White clay pipe stem, 9/64"	-	-	-	-	-	-
White clay pipe bowl/rim fragment	6	4	3	2	4	3
<b>Total WCTP</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>3</b>	<b>5</b>	<b>5</b>
Glass bead, black	-	8	6	4	3	9
Glass bead, black (fused)	-	-	-	-	-	-
Glass bead, Cornaline D'Aleppo	1	1	1	2	1	2
Glass bead, Cornaline D'Aleppo (fused)	-	-	-	-	-	-
Glass bead, white/colored stripes	-	-	-	-	-	-
Glass bead, white	-	-	-	-	-	-
Glass bead, blue	-	1	-	-	-	-
Glass bead, Gooseberry	-	-	-	-	-	-
Glass button	-	-	-	-	-	-
Green glass, colonial	5	4	4	6	3	6
19th/20th century glass	1	1	-	-	-	-
<b>Total Glass</b>	<b>7</b>	<b>15</b>	<b>11</b>	<b>12</b>	<b>7</b>	<b>17</b>
Iron nail, wrought	-	3	2	-	2	-
Iron tack, wrought	-	-	-	-	-	1
UID iron nail, square-bodied	3	-	1	-	-	4
UID iron nail	-	-	-	-	-	-
Iron triangle, perforated	-	-	-	-	-	-
Iron knife fragment	-	-	-	-	-	-
UID iron fragment	2	5	5	18	5	9
<b>Total Iron</b>	<b>5</b>	<b>8</b>	<b>8</b>	<b>18</b>	<b>7</b>	<b>14</b>
Brick/daub	-	1 (4.5 g)	4 (1.0 g)	3 (1.8 g)	5 (22.9 g)	7 (4.0 g)
Shark tooth	-	-	-	-	-	-
Faunal	1 (1.72 g)	3 (0.46 g)	1 (0.1 g)	-	-	-
Oyster shell	-	2 (1.4 g)	-	-	-	-
Bog iron	-	2	-	2	1	-

	□465230A Lot 264	□470235A Lot 265	□475230A Lot 266	□480235A Lot 267	□485230A Lot 268	□490235A Lot 269
Mica	-	-	-	-	-	-
Other modern material	-	-	-	-	-	-
<b>Total Miscellaneous</b>	<b>1</b>	<b>8</b>	<b>5</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>TOTAL</b>	<b>60</b>	<b>70</b>	<b>53</b>	<b>58</b>	<b>33</b>	<b>69</b>

	□495230A Lot 270	□500235A Lot 271	□505230A Lot 272	□510235A Lot 273	□515230A Lot 274	□540235A Lot 275
Primary flake	-	-	-	-	-	1
Secondary flake	-	1	1	-	-	-
Tertiary flake	1	-	-	-	1	-
Shatter	1	-	-	-	2	-
Projectile point	-	-	-	-	-	-
Tool/biface	1	-	-	1	-	-
Other stone/lithic fragment	-	-	-	-	-	-
<b>Total Lithics (Non-flint)</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>
Potomac Creek plain	2	2	-	2	4	-
Poss. Potomac Creek plain	-	-	1	-	-	-
Potomac Creek cord-marked	-	-	-	-	-	-
Poss. Potomac Creek cord-marked	-	-	-	-	-	-
Moyaone plain	1	-	-	-	-	-
Poss. Moyaone plain	-	-	-	-	-	-
Poss. Moyaone cord-marked	-	-	-	-	-	-
Poss. Camden plain	-	-	-	-	-	-
Poss. Yoacomico plain	-	-	-	-	-	-
Poss. Townsend plain	-	-	-	-	-	-
Poss. colonoware	-	-	-	-	-	-
UID crushed-quartz tempered plain	-	-	-	-	-	-
UID shell-tempered plain	-	2	-	-	3	1
UID sand-tempered plain	-	-	-	-	-	-
UID sand- and shell-tempered plain	-	-	-	-	-	-
UID untempered plain	-	-	-	-	-	-
UID shell-tempered cord-marked	-	-	-	-	-	-
<b>Total Indian Ceramics</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>7</b>	<b>1</b>
Orange micaceous ware	1	-	-	-	1	-
Unglazed coarse earthenware	1	-	-	-	-	-
Tin-glazed earthenware	-	-	1	-	-	-
UID lead-glazed earthenware	-	-	-	-	-	1
Poss. North Devon gravel-tempered	-	-	-	-	-	-
English brown stoneware	-	-	-	-	1	-
Rhenish brown stoneware	-	-	-	-	-	-
19th-century refined earthenware	2	-	1	1	1	1
Other post-colonial ceramic	-	1	-	-	-	-
<b>Total European Ceramics</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>2</b>
European flint debitage	1	2	1	3	4	-
European flint core	-	-	-	-	-	-
Gunflint	-	-	1	-	-	-

	□495230A Lot 270	□500235A Lot 271	□505230A Lot 272	□510235A Lot 273	□515230A Lot 274	□540235A Lot 275
Ochre fragment	-	-	-	-	-	-
Fire-cracked rock	-	-	-	1	-	-
<b>Total other stone</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>0</b>
Copper alloy scrap	1	-	-	-	-	-
Copper alloy triangle	-	-	-	-	-	-
Copper alloy cone	-	-	-	-	-	-
Copper alloy button	-	-	-	-	-	-
Copper alloy tack	-	-	-	-	-	-
Other copper alloy object	1	-	-	-	-	-
<b>Total copper alloy</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Lead shot	1	1	-	-	1	-
Other lead object	-	-	-	-	-	-
Pewter fragment	-	-	-	-	-	-
UID lead fragment	-	-	-	-	-	-
Silver sword hanger/scabbard hook	-	-	-	-	-	-
<b>Total Lead/Silver</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
Terra cotta pipe stem, unmeasurable	-	-	-	-	3	-
Terra cotta pipe stem, 7/64"	-	-	-	-	-	-
Terra cotta pipe stem, 8/64"	-	-	-	-	-	-
Terra cotta pipe stem, 9/64"	-	-	-	-	-	-
Terra cotta pipe heel	-	-	-	-	-	-
Terra cotta pipe bowl/rim fragment	-	-	-	-	-	2
<b>Total TCTP</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>
White clay pipe stem, unmeasurable	1	-	-	-	-	-
White clay pipe stem, 5/64"	-	-	-	-	-	-
White clay pipe stem, 6/64"	-	1	-	-	-	1
White clay pipe stem, 7/64"	-	-	-	-	-	-
White clay pipe stem, 8/64"	-	-	-	-	-	-
White clay pipe stem, 9/64"	-	-	-	-	-	-
White clay pipe bowl/rim fragment	-	1	-	-	2	1
<b>Total WCTP</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>
Glass bead, black	-	2	-	-	-	1
Glass bead, black (fused)	-	-	-	-	-	-
Glass bead, Cornaline D'Aleppo	3	-	-	-	-	-
Glass bead, Cornaline D'Aleppo (fused)	-	-	-	-	-	-
Glass bead, white/colored stripes	-	-	-	-	-	-
Glass bead, white	-	-	-	-	-	-
Glass bead, blue	-	-	1	-	1	-
Glass bead, Gooseberry	-	-	-	-	-	-
Glass button	-	-	-	-	-	1
Green glass, colonial	4	2	3	2	4	1
19th/20th century glass	-	-	1	1	1	1
<b>Total Glass</b>	<b>7</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>6</b>	<b>4</b>
Iron nail, wrought	1	1	-	-	3	-
Iron tack, wrought	-	-	-	-	-	-
UID iron nail, square-bodied	-	1	2	5	4	-
UID iron nail	-	-	-	-	-	-
Iron triangle, perforated	-	-	-	-	-	-
Iron knife fragment	-	-	-	-	1	-

	□495230A Lot 270	□500235A Lot 271	□505230A Lot 272	□510235A Lot 273	□515230A Lot 274	□540235A Lot 275
UID iron fragment	-	1	5	-	7	2
<b>Total Iron</b>	<b>1</b>	<b>3</b>	<b>7</b>	<b>5</b>	<b>15</b>	<b>2</b>
Brick/daub	3 (7.6 g)	6 (22.3 g)	2 (0.4 g)	4 (2.4 g)	8 (3.5 g)	7 (4.3 g)
Shark tooth	-	-	-	-	-	-
Faunal	-	-	-	-	2 (0.99 g)	2 (0.79 g)
Oyster shell	-	-	-	-	-	-
Bog iron	-	-	-	-	-	-
Mica	-	-	-	-	-	-
Other modern material	1	-	-	-	-	-
<b>Total Miscellaneous</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>4</b>	<b>10</b>	<b>9</b>
<b>TOTAL</b>	<b>27</b>	<b>24</b>	<b>20</b>	<b>20</b>	<b>54</b>	<b>23</b>

	□575110A Lot 276	□575120A Lot 277	□620625A Lot 278	□620625B Lot 279	□645600A Lot 280	□645600B Lot 281
Primary flake	-	-	-	-	-	-
Secondary flake	2	-	-	1	1	-
Tertiary flake	2	3	-	-	1	1
Shatter	7	4	-	-	1	-
Projectile point	1	-	-	-	-	-
Tool/biface	-	-	-	-	1	-
Other stone/lithic fragment	-	-	-	-	-	-
<b>Total Lithics (Non-flint)</b>	<b>12</b>	<b>7</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>1</b>
Potomac Creek plain	7	7	-	-	5	3
Poss. Potomac Creek plain	-	-	-	2	-	-
Potomac Creek cord-marked	4	4	-	3	-	-
Poss. Potomac Creek cord-marked	-	-	-	1	-	-
Moyaone plain	6	-	-	5	-	-
Poss. Moyaone plain	-	-	-	-	-	-
Poss. Moyaone cord-marked	1	-	-	-	-	-
Poss. Camden plain	2	-	-	-	-	-
Poss. Yoacomico plain	8	-	-	-	-	-
Poss. Townsend plain	-	-	-	-	-	-
Poss. colonoware	-	-	-	-	-	-
UID crushed-quartz tempered plain	-	-	1	-	-	-
UID shell-tempered plain	17	3	-	1	-	1
UID sand-tempered plain	-	-	-	-	-	-
UID sand- and shell-tempered plain	-	-	-	-	-	-
UID untempered plain	-	-	-	-	-	-
UID shell-tempered cord-marked	-	-	-	-	-	-
<b>Total Indian Ceramics</b>	<b>45</b>	<b>14</b>	<b>1</b>	<b>12</b>	<b>5</b>	<b>4</b>
Orange micaceous ware	2	-	-	-	-	-
Unglazed coarse earthenware	2	-	-	-	-	-
Tin-glazed earthenware	3	-	-	-	-	-
Poss. North Devon gravel-tempered	-	-	-	1	-	-

	□575110A Lot 276	□575120A Lot 277	□620625A Lot 278	□620625B Lot 279	□645600A Lot 280	□645600B Lot 281
Poss. Borderware	-	-	-	-	-	-
English brown stoneware	-	5	-	-	-	-
Rhenish brown stoneware	-	-	-	-	-	-
19th-century refined earthenware	-	-	-	-	2	-
Other post-colonial ceramic	-	-	-	-	-	-
<b>Total European Ceramics</b>	<b>7</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>
European flint debitage	26	4	-	10	3	2
European flint core	1	1	-	-	1	-
Gunflint	-	-	-	-	-	-
Ochre fragment	-	-	-	-	-	-
Fire-cracked rock	5	1	-	-	3	-
<b>Total other stone</b>	<b>32</b>	<b>6</b>	<b>0</b>	<b>10</b>	<b>7</b>	<b>2</b>
Copper alloy scrap	2	1	-	-	-	-
Copper alloy triangle	-	-	-	-	-	-
Copper alloy cone	-	-	-	-	-	-
Copper alloy button	-	-	-	-	-	-
Copper alloy tack	-	-	-	-	-	-
Other copper alloy object	-	1	-	-	-	-
<b>Total copper alloy</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Lead shot	-	-	-	-	-	-
Other lead object	-	-	-	-	-	-
Pewter fragment	-	-	-	-	-	-
UID lead fragment	1	-	-	-	-	-
Silver scabbard hook	-	-	-	-	-	-
<b>Total Lead/Silver</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Terra cotta pipe stem, unmeasurable	1	2	-	-	-	-
Terra cotta pipe stem, 7/64"	-	-	-	-	-	-
Terra cotta pipe stem, 8/64"	1	-	-	1	-	-
Terra cotta pipe stem, 9/64"	2	-	-	-	-	-
Terra cotta pipe heel	-	-	-	-	-	-
Terra cotta pipe bowl/rim fragment	4	1	-	-	-	-
<b>Total TCTP</b>	<b>8</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>
White clay pipe stem, unmeasurable	7	1	2	1	-	-
White clay pipe stem, 5/64"	-	-	-	-	-	-
White clay pipe stem, 6/64"	4	2	-	-	-	1
White clay pipe stem, 7/64"	6	1	1	-	-	1
White clay pipe stem, 8/64"	2	2	-	-	-	1
White clay pipe stem, 9/64"	1	-	-	-	-	-
White clay pipe bowl/rim fragment	18	5	-	5	1	-
<b>Total WCTP</b>	<b>38</b>	<b>11</b>	<b>3</b>	<b>6</b>	<b>1</b>	<b>3</b>
Glass bead, black	9	3	-	4	-	-
Glass bead, black (fused)	-	-	-	-	-	-
Glass bead, Cornaline D'Aleppo	4	2	1	2	-	-
Glass bead, Cornaline D'Aleppo (fused)	1	-	-	1	-	-
Glass bead, white/colored stripes	-	-	-	-	-	-
Glass bead, white	-	-	-	1	-	-
Glass bead, blue	1	-	-	-	-	-
Glass bead, Gooseberry	-	-	-	-	-	-
Green glass, colonial	20	6	-	4	1	-

	□575110A Lot 276	□575120A Lot 277	□620625A Lot 278	□620625B Lot 279	□645600A Lot 280	□645600B Lot 281
19th/20th century glass	-	3	1	-	1	-
<b>Total Glass</b>	<b>35</b>	<b>14</b>	<b>2</b>	<b>12</b>	<b>2</b>	<b>0</b>
Iron nail, wrought	17	8	-	-	-	1
Iron tack, wrought	-	-	-	-	-	-
UID iron nail, square-bodied	-	-	-	-	-	-
UID iron nail	-	-	-	-	1	-
Iron triangle, perforated	-	-	-	-	-	-
Iron knife fragment	-	-	-	-	-	-
Iron gun trigger	1	-	-	-	-	-
UID iron fragment	10	10	-	11	2	1
<b>Total Iron</b>	<b>28</b>	<b>18</b>	<b>0</b>	<b>11</b>	<b>3</b>	<b>2</b>
Brick/daub	1 (27.4 g)	3 (4.6 g)	-	2 (0.4 g)	-	-
Shark tooth	-	-	-	-	-	-
Faunal	81 (14.8 g)	9 (4.8 g)	1 (0.02 g)	5 (0.91 g)	-	-
Oyster shell	4 (23.2 g)	-	1 (4.5 g)	-	-	-
Bog iron	-	-	-	3	4	-
Mica	-	-	-	-	-	-
Other modern material	-	3	-	-	1	-
<b>Total Miscellaneous</b>	<b>86</b>	<b>15</b>	<b>2</b>	<b>10</b>	<b>5</b>	<b>0</b>
<b>TOTAL</b>	<b>294</b>	<b>95</b>	<b>8</b>	<b>64</b>	<b>29</b>	<b>12</b>

**APPENDIX III.**  
**ARTIFACTS RECOVERED FROM WATER-SCREENED COLUMN SAMPLES**  
**WINDY KNOLLS I (18CH0808)**

	□325230A Lot 282	□330235A Lot 283	□335230A Lot 284	□340235A Lot 285	□345230A Lot 286	□350235A Lot 287
Secondary flake	-	-	-	-	-	-
Tertiary flake	1	-	-	5	-	3
Shatter	-	1	-	-	-	-
<b>Total Lithic (non-flint)</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>3</b>
Potomac Creek plain	-	-	1	-	-	-
Possible Potomac Creek plain	-	1	-	1	-	-
Potomac Creek cord-marked	-	-	-	-	-	-
Yeocomico plain	-	-	-	-	-	-
Possible colonoware	-	-	-	-	-	-
UID temper, plain	-	-	-	-	-	-
<b>Total Indian ceramic</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
Orange micaceous earthenware	-	-	-	-	-	-
Unglazed coarse earthenware	-	-	-	-	-	-
Lead-glazed coarse earthenware	-	-	-	-	-	-
Tin-glazed earthenware	-	-	-	-	-	-
Post-colonial ceramic	-	-	-	-	-	-
<b>Total European ceramic</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
European flint debitage	-	-	-	2	-	3
Fire-cracked rock	-	-	-	1	1	-
Sandstone fragment	-	-	-	-	-	1
<b>Total other stone</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>4</b>
Lead shot	-	-	-	1	1	1
UID lead fragment	-	-	-	-	-	-
Copper alloy scrap	-	-	-	-	-	-
<b>Total copper alloy/lead</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>
Terra cotta UID fragment	-	-	-	-	1	-
Terra cotta pipe stem fragment	-	-	-	-	-	-
Terra cotta pipe bowl fragment	-	-	-	-	-	-
<b>Total TCTP</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
White clay UID fragment	1	-	-	-	-	-
White clay pipe stem fragment	-	-	-	-	-	-
White clay pipe stem fragment, 7/64"	-	1	-	-	-	-
White clay pipe bowl fragment	-	-	-	2	-	-
<b>Total WCTP</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>
Glass bead, black	-	-	-	1	-	-
Glass bead, Cornaline D'Aleppo	-	-	-	1	1	-
Glass bead, blue	-	-	-	-	-	-
Glass bead, white	-	-	-	-	-	-
Green bottle glass, colonial	-	-	-	-	-	-
Modern bottle glass	-	-	1	-	-	1
<b>Total Glass</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>
Oyster shell	-	-	-	-	1	-
Faunal	15 (0.28 g)	23 (0.5 g)	36 (0.73 g)	131 (1.67 g)	88 (1.21 g)	151 (4.67 g)
<b>Total Fauna</b>	<b>15</b>	<b>23</b>	<b>36</b>	<b>131</b>	<b>89</b>	<b>151</b>
Wrought iron nail fragment	-	-	-	-	-	-

	□325230A Lot 282	□330235A Lot 283	□335230A Lot 284	□340235A Lot 285	□345230A Lot 286	□350235A Lot 287
UID iron fragment	-	1	2	15	9	10
<b>Total Iron</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>15</b>	<b>9</b>	<b>10</b>
Bog iron	-	4	-	-	-	-
Other modern material	-	-	1	-	-	-
Red brick/daub	-	-	-	-	-	-
Fossil rock	-	-	-	-	-	-
<b>Total miscellaneous</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL</b>	<b>17</b>	<b>31</b>	<b>41</b>	<b>160</b>	<b>102</b>	<b>170</b>

	□355230A Lot 288	□360235A Lot 289	□365230A Lot 290	□370235A Lot 291	□375230A Lot 292	□375235A Lot 293
Secondary flake	-	-	-	-	-	2
Tertiary flake	1	-	1	2	-	-
Shatter	-	-	-	-	-	-
<b>Total Lithic (non-flint)</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>2</b>
Potomac Creek plain	-	-	-	-	-	1
Possible Potomac Creek plain	-	-	-	-	1	-
Potomac Creek cord-marked	-	-	-	-	-	-
Yeocomico plain	-	-	-	-	-	-
Possible colonowares	-	-	-	-	-	-
UID temper, plain	-	-	-	-	-	-
<b>Total Indian ceramic</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>
Orange micaceous earthenware	-	-	-	-	-	-
Unglazed coarse earthenware	1	-	-	-	-	-
Lead-glazed coarse earthenware	-	-	-	-	-	-
Tin-glazed earthenware	-	-	-	-	-	-
Post-colonial ceramic	-	-	-	-	-	-
<b>Total European ceramic</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
European flint debitage	2	-	2	2	3	-
Fire-cracked rock	-	-	-	-	-	-
Sandstone fragment	-	-	-	-	-	-
<b>Total other stone</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>0</b>
Lead shot	-	1	-	-	-	-
UID lead fragment	-	-	-	-	1	-
Copper alloy scrap	-	-	-	-	-	-
<b>Total copper alloy/lead</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
Terra cotta UID fragment	1	-	-	-	3	-
Terra cotta pipe bowl fragment	-	-	-	1	-	1
<b>Total TCTP</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>1</b>
White clay UID fragment	1	-	-	-	1	-
White clay pipe stem fragment	-	-	-	-	-	-
White clay pipe stem fragment, 7/64"	-	-	-	-	-	-
White clay pipe bowl fragment	-	-	-	1	-	-
<b>Total WCTP</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>
Glass bead, black	-	-	1	-	-	-
Glass bead, Cornaline D'Aleppo	2	1	-	-	1	-
Glass bead, blue	-	-	-	-	-	-

	□355230A Lot 288	□360235A Lot 289	□365230A Lot 290	□370235A Lot 291	□375230A Lot 292	□375235A Lot 293
Glass bead, white	-	-	-	-	-	-
Green bottle glass, colonial	-	-	-	-	-	-
Modern bottle glass	1	-	-	-	-	-
<b>Total Glass</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>
Oyster shell	-	-	-	-	2	-
Faunal	151 (7.51 g)	177 (7.73 g)	130 (7.36 g)	198 (9.51 g)	479 (19.21 g)	407 (14.94 g)
<b>Total Fauna</b>	<b>151</b>	<b>177</b>	<b>130</b>	<b>198</b>	<b>481</b>	<b>407</b>
Wrought iron nail fragment	-	-	-	-	-	-
UID iron fragment	1	5	-	-	1	6
<b>Total Iron</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>6</b>
Bog iron	-	6	-	2	20	18
Other modern material	-	-	-	-	-	-
Red brick/daub	1	1	-	2	2	-
Fossil rock	-	-	-	-	-	-
<b>Total miscellaneous</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>4</b>	<b>22</b>	<b>18</b>
<b>TOTAL</b>	<b>162</b>	<b>191</b>	<b>134</b>	<b>208</b>	<b>514</b>	<b>435</b>

	□380235A Lot 294	□385230A Lot 295	□390235A Lot 296	□395230A Lot 297	□400235A Lot 298	□405230A Lot 299
Secondary flake	-	-	-	-	-	-
Tertiary flake	-	5	-	3	-	-
Shatter	-	-	-	-	-	-
<b>Total Lithic (non-flint)</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>
Potomac Creek plain	1	-	1	1	-	-
Possible Potomac Creek plain	-	-	-	-	-	-
Potomac Creek cord-marked	-	-	-	-	-	-
Yeocomico plain	-	-	-	-	-	-
Possible colonoware	-	-	-	-	-	-
UID temper, plain	-	-	-	-	-	-
<b>Total Indian ceramic</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
Orange micaceous earthenware	-	-	-	-	-	-
Unglazed coarse earthenware	-	-	1	-	-	-
Lead-glazed coarse earthenware	-	-	-	-	-	-
Tin-glazed earthenware	-	-	-	-	-	-
Post-colonial ceramic	-	-	-	-	-	-
<b>Total European ceramic</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
European flint debitage	2	1	-	1	1	-
Fire-cracked rock	-	-	-	-	-	1
Sandstone fragment	-	-	-	-	-	-
<b>Total other stone</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>
Lead shot	1	1	-	-	-	-
UID lead fragment	-	-	1	1	-	-
Copper alloy scrap	-	-	-	1	-	-
<b>Total copper alloy/lead</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>
Terra cotta UID fragment	-	2	-	-	-	-
Terra cotta pipe stem fragment	-	-	1	1	-	-
Terra cotta pipe bowl fragment	-	-	-	-	-	-
<b>Total TCTP</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>

	□380235A Lot 294	□385230A Lot 295	□390235A Lot 296	□395230A Lot 297	□400235A Lot 298	□405230A Lot 299
White clay UID fragment	-	-	-	-	-	-
White clay pipe stem fragment	-	1	-	-	-	-
White clay pipe stem fragment, 7/64"	-	-	-	-	-	-
White clay pipe bowl fragment	-	-	2	-	-	-
<b>Total WCTP</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>
Glass bead, black	-	1	-	-	-	3
Glass bead, Cornaline D'Aleppo	2	-	-	2	-	-
Glass bead, blue	-	-	-	-	-	-
Glass bead, white	1	1	-	-	-	1
Green bottle glass, colonial	-	-	5	-	-	-
Modern bottle glass	-	-	-	-	-	-
<b>Total Glass</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>4</b>
Oyster shell	-	1	1	3	-	-
Faunal	386 (15.64 g)	575 (22.95 g)	346 (15.4 g)	417 (15.14 g)	79 (3.7 g)	186 (7.96 g)
<b>Total Fauna</b>	<b>386</b>	<b>576</b>	<b>347</b>	<b>420</b>	<b>79</b>	<b>186</b>
Wrought iron nail fragment	-	-	-	-	-	1
UID iron fragment	1	1	2	1	-	-
<b>Total Iron</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>
Bog iron	-	26	19	30	1	9
Other modern material	-	-	1	-	-	-
Red brick/daub	-	9	1	-	-	-
Fossil rock	-	-	-	-	-	-
<b>Total miscellaneous</b>	<b>0</b>	<b>35</b>	<b>21</b>	<b>30</b>	<b>1</b>	<b>9</b>
<b>TOTAL</b>	<b>394</b>	<b>624</b>	<b>381</b>	<b>461</b>	<b>81</b>	<b>201</b>

	□405325A Lot 300	□410235A Lot 301	□415230A Lot 302	□420235A Lot 303	□425230A Lot 304	□430235A Lot 305
Secondary flake	-	-	-	-	-	-
Tertiary flake	-	-	-	-	-	1
Shatter	-	-	-	-	-	-
<b>Total Lithic (non-flint)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
Potomac Creek plain	-	1	-	3	-	-
Possible Potomac Creek plain	-	-	-	-	-	-
Potomac Creek cord-marked	-	-	-	1	-	-
Yeocomico plain	-	-	-	-	-	-
Possible colonoware	-	-	-	-	1	-
UID temper, plain	-	-	-	2	-	-
<b>Total Indian ceramic</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>0</b>
Orange micaceous earthenware	-	-	-	-	-	-
Unglazed coarse earthenware	-	-	1	-	-	-
Lead-glazed coarse earthenware	-	-	-	-	-	-
Tin-glazed earthenware	-	-	-	-	-	-
Post-colonial ceramic	-	-	-	-	-	-
<b>Total European ceramic</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
European flint debitage	1	2	1	-	1	1
Fire-cracked rock	1	-	-	-	-	-

	□405325A Lot 300	□410235A Lot 301	□415230A Lot 302	□420235A Lot 303	□425230A Lot 304	□430235A Lot 305
Sandstone fragment	-	-	-	-	-	-
<b>Total other stone</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>
Lead shot	-	-	-	1	1	-
UID lead fragment	-	-	-	-	-	-
Copper alloy scrap	-	-	-	-	-	-
<b>Total copper alloy/lead</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>
Terra cotta UID fragment	-	-	-	-	-	-
Terra cotta pipe stem fragment	-	-	-	4	-	-
Terra cotta pipe bowl fragment	1	1	-	-	-	-
<b>Total TCTP</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>
White clay UID fragment	-	-	-	-	-	-
White clay pipe stem fragment	1	-	-	-	-	-
White clay pipe stem fragment, 7/64"	-	-	-	-	-	-
White clay pipe bowl fragment	-	-	2	-	-	-
<b>Total WCTP</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>
Glass bead, black	-	1	1	-	-	-
Glass bead, Cornaline D'Aleppo	1	-	1	-	1	1
Glass bead, blue	-	-	-	-	-	-
Glass bead, white	-	-	-	1	-	-
Green bottle glass, colonial	-	-	-	-	-	-
Modern bottle glass	-	-	-	-	-	-
<b>Total Glass</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>
Oyster shell	1	1	2	-	-	-
Faunal	7 (0.19 g)	121 (8.04 g)	136 (4.41 g)	91 (4.54 g)	56 (1.27 g)	65 (1.84 g)
<b>Total Fauna</b>	<b>8</b>	<b>122</b>	<b>138</b>	<b>91</b>	<b>56</b>	<b>65</b>
Wrought iron nail fragment	-	-	-	-	-	-
UID iron fragment	-	2	2	-	2	2
<b>Total Iron</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>
Bog iron	1	2	31	3	-	4
Other modern material	-	-	-	-	-	3
Red brick/daub	-	1	-	-	2	2
Fossil rock	-	-	-	-	-	-
<b>Total miscellaneous</b>	<b>1</b>	<b>3</b>	<b>31</b>	<b>3</b>	<b>2</b>	<b>9</b>
<b>TOTAL</b>	<b>14</b>	<b>132</b>	<b>177</b>	<b>106</b>	<b>64</b>	<b>79</b>

	□435230A Lot 306	□440235A Lot 307	□445230A Lot 308	□450235A Lot 309	□455230A Lot 310	□460235A Lot 311
Secondary flake	-	-	-	-	-	-
Tertiary flake	-	-	1	-	-	2
Shatter	-	-	-	-	1	-
<b>Total Lithic (non-flint)</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>
Potomac Creek plain	-	-	-	-	-	-
Possible Potomac Creek plain	-	1	-	-	-	-
Potomac Creek cord-marked	-	-	-	-	-	-
Yeocomico plain	-	-	-	-	-	-
Possible colonoware	-	-	-	-	-	-

	□435230A Lot 306	□440235A Lot 307	□445230A Lot 308	□450235A Lot 309	□455230A Lot 310	□460235A Lot 311
<b>Total Indian ceramic</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Orange micaceous earthenware	-	-	-	-	-	-
Unglazed coarse earthenware	-	-	-	-	-	-
Lead-glazed coarse earthenware	-	-	-	-	-	-
Tin-glazed earthenware	-	-	-	-	-	-
Post-colonial ceramic	-	-	-	-	-	-
<b>Total European ceramic</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
European flint debitage	2	-	3	-	2	-
Fire-cracked rock	-	-	-	1	2	1
Sandstone fragment	-	-	-	-	-	-
<b>Total other stone</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>
Lead shot	-	-	-	-	2	-
UID lead fragment	-	-	-	-	-	-
Copper alloy scrap	-	-	-	-	-	-
<b>Total copper alloy/lead</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>
Terra cotta UID fragment	-	-	-	-	-	-
Terra cotta pipe stem fragment	-	-	-	-	-	-
Terra cotta pipe bowl fragment	-	-	-	-	-	-
<b>Total TCTP</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
White clay UID fragment	-	-	-	-	-	-
White clay pipe stem fragment	-	-	-	-	-	-
White clay pipe stem fragment, 7/64"	-	-	-	-	-	-
White clay pipe bowl fragment	-	-	-	-	-	-
<b>Total WCTP</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Glass bead, black	-	-	-	2	2	-
Glass bead, Cornaline D'Aleppo	-	-	1	-	-	-
Glass bead, blue	-	-	-	-	-	-
Glass bead, white	-	-	-	-	-	-
Green bottle glass, colonial	1	-	-	-	-	1
Modern bottle glass	-	1	-	-	-	-
<b>Total Glass</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>
Oyster shell	-	1	-	-	-	-
Faunal	44 (1.17 g)	18 (1.0 g)	3 (0.02 g)	27 (0.56 g)	13 (1.15 g)	2 (0.1 g)
<b>Total Fauna</b>	<b>44</b>	<b>19</b>	<b>3</b>	<b>27</b>	<b>13</b>	<b>2</b>
Wrought iron nail fragment	-	-	-	-	-	-
UID iron fragment	3	1	-	2	2	1
<b>Total Iron</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>
Bog iron	-	-	-	17	2	-
Other modern material	-	-	-	-	-	-
Red brick/daub	5	-	-	-	1	1
Fossil rock	-	-	-	-	-	-
<b>Total miscellaneous</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>3</b>	<b>1</b>
<b>TOTAL</b>	<b>55</b>	<b>22</b>	<b>8</b>	<b>49</b>	<b>27</b>	<b>8</b>

	□465230A Lot 312	□470235A Lot 313	□475230A Lot 314	□480235A Lot 315	□485230A Lot 316	□490235A Lot 317
Secondary flake	-	1	-	-	-	-
Tertiary flake	-	-	1	-	-	1
Shatter	-	-	-	-	-	-
<b>Total Lithic (non-flint)</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>
Potomac Creek plain	-	-	-	-	-	-
Possible Potomac Creek plain	-	-	-	-	-	-
Potomac Creek cord-marked	-	-	-	-	-	-
Yeocomico plain	-	-	-	-	-	-
Possible colonoware	-	-	-	-	-	-
UID temper, plain	-	-	-	-	-	-
<b>Total Indian ceramic</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Orange micaceous earthenware	-	-	-	-	-	-
Unglazed coarse earthenware	-	-	-	-	-	-
Lead-glazed coarse earthenware	-	-	-	-	-	-
Tin-glazed earthenware	-	-	-	-	1	-
Post-colonial ceramic	-	-	-	2	-	-
<b>Total European ceramic</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>
European flint debitage	-	-	-	-	1	3
Fire-cracked rock	-	-	-	-	-	-
Sandstone fragment	-	-	-	-	-	-
<b>Total other stone</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>
Lead shot	-	-	-	-	-	-
UID lead fragment	-	-	-	-	-	-
Copper alloy scrap	-	-	-	-	-	-
<b>Total copper alloy/lead</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Terra cotta UID fragment	-	-	-	-	-	-
Terra cotta pipe stem fragment	-	-	-	-	1	-
Terra cotta pipe bowl fragment	-	-	-	-	-	1
<b>Total TCTP</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>
White clay pipe stem fragment	-	-	-	-	-	1
White clay pipe bowl fragment	-	-	-	1	-	-
<b>Total WCTP</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>
Glass bead, black	1	-	1	1	-	-
Glass bead, Cornaline D'Aleppo	-	-	1	2	1	1
Glass bead, blue	-	-	-	-	-	1
Green bottle glass, colonial	-	1	-	-	-	-
Modern bottle glass	-	-	-	-	-	-
<b>Total Glass</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>2</b>
Oyster shell	1	-	-	-	-	-
Faunal	9 (0.14 g)	13 (0.15 g)	5 (0.09 g)	7 (0.14 g)	2 (0.01 g)	4 (0.06 g)
<b>Total Fauna</b>	<b>10</b>	<b>13</b>	<b>5</b>	<b>7</b>	<b>2</b>	<b>4</b>
Wrought iron nail fragment	-	1	-	-	-	-
UID iron fragment	2	1	1	4	-	-
<b>Total Iron</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>0</b>
Bog iron	2	3	2	-	2	-
Other modern material	1	-	-	-	-	-
Red brick/daub	1	-	1	-	-	1
<b>Total miscellaneous</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>1</b>
<b>TOTAL</b>	<b>17</b>	<b>20</b>	<b>12</b>	<b>17</b>	<b>8</b>	<b>13</b>

	□495230A Lot 318	□500235A Lot 319	□505230A Lot 320	□510235A Lot 321	□515230A Lot 322	□540235A Lot 323
Secondary flake	-	-	-	-	-	4
Tertiary flake	-	2	-	-	-	-
Shatter	-	-	-	-	-	-
<b>Total Lithic (non-flint)</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>
Potomac Creek plain	-	-	-	-	-	1
Possible Potomac Creek plain	-	-	-	-	-	-
Potomac Creek cord-marked	-	-	-	-	-	-
Yeocomico plain	-	-	-	-	-	-
Possible colonoware	-	-	-	-	-	-
UID temper, plain	-	-	-	-	-	-
<b>Total Indian ceramic</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
Orange micaceous earthenware	-	-	-	-	-	-
Unglazed coarse earthenware	-	1	-	-	-	-
Lead-glazed coarse earthenware	-	-	1	-	-	-
Tin-glazed earthenware	-	-	-	-	-	-
Post-colonial ceramic	-	-	-	-	-	-
<b>Total European ceramic</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
European flint debitage	-	-	-	-	-	1
Fire-cracked rock	-	-	-	-	-	-
Sandstone fragment	-	-	-	-	-	-
<b>Total other stone</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
Lead shot	-	-	-	-	-	-
UID lead fragment	-	-	-	-	-	-
Copper alloy scrap	-	-	-	-	-	-
<b>Total copper alloy/lead</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Terra cotta UID fragment	-	-	1	1	-	-
Terra cotta pipe stem fragment	-	-	-	-	-	-
Terra cotta pipe bowl fragment	-	-	-	-	-	-
<b>Total TCTP</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
White clay UID fragment	-	-	-	-	-	-
White clay pipe stem fragment	-	-	-	-	-	-
White clay pipe stem fragment, 7/64"	-	-	-	-	-	-
White clay pipe bowl fragment	-	-	-	-	-	-
<b>Total WCTP</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Glass bead, black	-	-	-	-	-	-
Glass bead, Cornaline D'Aleppo	-	-	-	-	-	-
Glass bead, blue	-	-	-	-	-	-
Glass bead, white	-	-	-	-	1	-
Green bottle glass, colonial	-	-	-	-	-	-
<b>Total Glass</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
Oyster shell	-	-	-	-	1	7
Faunal	-	2 (0.02 g)	6 (0.03 g)	10 (0.12 g)	-	5 (0.02 g)
<b>Total Fauna</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>10</b>	<b>1</b>	<b>12</b>
UID iron fragment	-	3	4	-	2	4
<b>Total Iron</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>4</b>
Bog iron	4	3	-	2	-	1
Red brick/daub	5	2	5	2	4	12
<b>Total miscellaneous</b>	<b>9</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>13</b>
<b>TOTAL</b>	<b>9</b>	<b>13</b>	<b>17</b>	<b>15</b>	<b>8</b>	<b>35</b>

	□575110A Lot 324	□575120A Lot 325	□620625A Lot 326	□620625B Lot 327	□645600A Lot 328	□645600B Lot 329
Secondary flake	4	-	-	-	-	-
Tertiary flake	4	-	-	1	-	-
Shatter	-	-	-	-	-	-
<b>Total Lithic (non-flint)</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>
Potomac Creek plain	-	-	-	-	-	-
Possible Potomac Creek plain	-	-	-	-	-	-
Potomac Creek cord-marked	-	-	-	-	-	-
Yeocomico plain	1	-	-	-	-	-
Possible colonoware	-	-	-	-	-	-
UID temper, plain	-	-	-	-	-	-
<b>Total Indian ceramic</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Orange micaceous earthenware	1	-	-	-	-	-
Unglazed coarse earthenware	-	-	-	-	-	-
Lead-glazed coarse earthenware	-	-	1	-	-	-
Tin-glazed earthenware	-	-	-	-	-	-
Post-colonial ceramic	-	-	-	-	-	-
<b>Total European ceramic</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
European flint debitage	3	-	-	1	-	-
Fire-cracked rock	-	-	1	1	-	-
Sandstone fragment	-	-	-	-	-	-
<b>Total other stone</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>
Lead shot	-	-	2	-	-	-
UID lead fragment	-	-	-	-	-	-
Copper alloy scrap	-	-	-	-	-	-
<b>Total copper alloy/lead</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>
Terra cotta UID fragment	1	-	-	-	-	-
Terra cotta pipe stem fragment	-	-	-	-	-	-
Terra cotta pipe bowl fragment	1	1	-	-	-	1
<b>Total TCTP</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
White clay UID fragment	-	-	-	-	-	-
White clay pipe stem fragment	1	-	-	-	-	-
White clay pipe bowl fragment	3	-	-	-	-	-
<b>Total WCTP</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Glass bead, black	-	1	-	-	-	-
Glass bead, Cornaline D'Aleppo	2	-	2	-	-	2
Green bottle glass, colonial	-	-	-	-	-	1
Modern bottle glass	-	-	4	-	-	-
<b>Total Glass</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>3</b>
Oyster shell	-	-	-	-	-	-
Faunal	120 (3.63 g)	11 (0.42 g)	14 (0.25 g)	18 (0.96 g)	3 (0.07 g)	9 (0.22 g)
<b>Total Fauna</b>	<b>120</b>	<b>11</b>	<b>14</b>	<b>18</b>	<b>3</b>	<b>9</b>
Wrought iron nail fragment	-	-	-	-	-	-
UID iron fragment	1	3	-	-	1	2
<b>Total Iron</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>
Bog iron	-	3	-	-	-	-
Red brick/daub	6	-	-	-	-	1
Fossil rock	-	-	2	-	-	-
<b>Total miscellaneous</b>	<b>6</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>TOTAL</b>	<b>148</b>	<b>19</b>	<b>26</b>	<b>21</b>	<b>4</b>	<b>16</b>

**APPENDIX IV.  
ARTIFACTS RECOVERED FROM SHOVEL TESTS, STEFFENS PROPERTY (18CH0093)**

<b>Lot</b>	<b>North</b>	<b>East</b>	<b>Artifacts</b>
1	321100	1346450	1 quartz shatter
2	321150	1346350	1 quartz secondary flake
3	321150	1346400	2 quartz shatter
4	321200	1346300	1 quartz shatter; 1 quartz secondary flake
5	321200	1346350	1 quartz shatter; 1 quartz secondary flake; 1 quartzite possible core; 1 rhyolite tertiary flake
6	321200	1346400	1 quartz tertiary flake
7	321200	1346450	1 quartzite fire-cracked rock; 1 rhyolite tertiary flake, possibly utilized
8	321200	1346500	1 quartz shatter; 1 quartz primary flake; 1 quartz fire-cracked rock; 1 complete copper alloy button with shank
9	321200	1346550	1 quartz shatter; 1 rhyolite tertiary flake
10	321200	1346650	1 quartz shatter
11	321250	1346250	2 unid. Iron fragments
12	321250	1346300	1 quartz tertiary flake
13	321250	1346350	2 quartz shatter; 1 quartz tertiary flake
14	321250	1346400	1 quartz shatter; 1 quartz stemmed projectile point base
15	321250	1346450	1 quartz secondary flake; 1 quartz tertiary flake
16	321250	1346500	1 rock, non-cultural
17	321250	1346600	1 quartz secondary flake; 1 rhyolite tertiary flake
18	321250	1346650	1 quartz tertiary flake; 1 quartzite chunk, possibly bifacially retouched
19	321250	1346700	1 quartz secondary flake, possibly utilized; 2 quartz tertiary flakes; 1 quartzite secondary flake
20	321250	1346750	1 quartz shatter, possibly utilized
21	321300	1346250	1 chert secondary flake
22	321300	1346300	1 quartz shatter
23	321300	1346450	1 rhyolite tertiary flake
24	321300	1346750	1 quartz shatter
25	321300	1346800	1 chert tertiary flake
26	321350	1346250	1 quartz tertiary flake
27	321350	1346300	1 quartz secondary flake
28	321350	1346350	1 quartz tertiary flake
29	321350	1346450	1 quartz possible fire-cracked rock
30	321350	1346500	1 quartz tertiary flake
31	321350	1346550	1 quartzite tertiary flake
32	321350	1346600	1 quartz core; 1 quartz secondary flake; 3 quartzite shatter; 1 quartzite secondary flake; 1 quartzite possible fire-cracked rock; 1 rhyolite secondary flake; 1 rhyolite tertiary flake
33	321400	1346350	1 quartz tertiary flake; 1 quartzite tertiary flake
34	321400	1346500	1 quartz shatter

35	321400	1346550	3 quartz shatter
36	321400	1346600	1 quartz secondary flake
37	321450	1346200	4 quartz shatter; 1 quartz secondary flake
38	321450	1346250	1 rhyolite secondary flake
39	321450	1346300	4 quartz shatter; 2 quartz tertiary flake
40	321450	1346350	3 quartz shatter; 1 quartz secondary flake; 1 quartz tertiary flake; 2 quartzite fire-cracked rock
41	321450	1346400	2 quartz shatter; 1 quartz tertiary flake
42	321450	1346400	2 quartz tertiary flakes
43	321450	1346500	4 quartz shatter; 1 quartz tertiary flake
44	321450	1346550	1 quartz shatter; 1 quartz secondary flake
45	321450	1346700	1 quartz secondary flake
46	321500	1346150	1 quartz tertiary flake
47	321500	1346200	1 quartz shatter
48	321500	1346250	3 quartz shatter; 1 quartz secondary flake, retouched
49	321500	1346300	1 quartz shatter; 1 quartz primary flake; 1 quartz secondary flake; 2 quartz tertiary flakes
50	321500	1346350	1 rhyolite secondary flake
51	321500	1346400	1 quartz shatter; 1 quartz tertiary flake
52	321500	1346450	1 quartz shatter; 2 quartz tertiary flakes
53	321500	1346500	1 quartz shatter; 1 quartz secondary flake; 1 quartz shatter
54	321500	1346550	1 quartz shatter; 1 quartz tertiary flake
55			NOT USED
56	321550	1346050	2 quartz shatter
57	321550	1346100	1 quartzite tertiary flake
58	321550	1346150	1 quartzite possible fire-cracked rock
59	321550	1346250	1 quartz shatter; 1 quartz tertiary flake; 1 sandstone fire-cracked rock
60	321550	1346300	1 quartz shatter
61	321550	1346400	1 quartz shatter
62	321550	1346450	1 quartz secondary flake, possibly retouched; 2 quartz tertiary flakes
63	321600	1346050	1 quartzite projectile point tip
64	321600	1346900	1 chert tertiary flake
65	321600	1347350	1 quartz primary flake, possibly retouched
66	321600	1347400	1 quartz shatter
67	321650	1346100	1 rhyolite tertiary flake
68	321650	1346250	1 quartz shatter
69	321650	1346300	1 quartz tertiary flake
70	321650	1347400	1 quartz shatter
71	321700	1347250	1 rhyolite secondary flake; 1 chert possible shatter
72	321750	1346100	1 quartz shatter; 1 quartz tertiary flake
73	321750	1347100	1 quartz shatter
74	321750	1347250	1 chert fire-cracked rock

75	321750	1347400	1 daub fragment, 0.2g
76	321800	1346850	1 quartz shatter
77	321850	1345900	1 quartz shatter; 1 chert possible shatter
78	321850	1346000	1 quartz tertiary flake
79	321850	1346750	1 quartz shatter
80	321850	1346800	1 quartz tertiary flake
81	321850	1347000	40 iron, gravel, and cement concretion, 84.0g
82	321850	1347050	7 iron, gravel, and cement concretion, 10.7g
83	321850	1347150	2 quartz shatter
84	321850	1347300	1 chert rock, non-cultural
85	321900	1346750	3 quartz shatter; 1 quartz tertiary flake
86	321900	1346900	1 quartz secondary flake
87	321900	1347000	1 quartzite secondary flake
88	321900	1347050	1 chert secondary flake
89	321900	1347150	1 quartz shatter
90	321900	1347250	1 quartzite tertiary flake
91	321950	1346650	1 quartz shatter; 2 brick/daub, 0.9g
92	321950	1346800	1 quartzite tertiary flake, possibly utilized
93	321950	1346950	1 quartzite tertiary flake
94	321950	1347100	1 quartz shatter; 1 quartz tertiary flake; 1 chert flake
95	321950	1347150	1 quartz tertiary flake; 1 quartzite primary flake
96	321950	1347200	1 quartz tertiary flake
97	321950	1347300	1 unid. Iron or rust fragment
98	322000	1346650	1 clear flat glass, modern
99	322000	1346700	1 quartzite tertiary flake
100	322000	1346800	1 quartz secondary flake
101	322000	1346900	1 red brick fragment, 0.5 g
102	322000	1346950	1 quartz primary flake
103	322000	1347100	1 shotgun shell fragment
104	322050	1345800	1 quartzite fire-cracked rock
105	322050	1345900	1 coal fragment, 0.4 g
106	322050	1346650	1 quartz shatter
107	322050	1346900	1 quartz tertiary flake
108	322050	1347000	1 quartz tertiary flake
109	322050	1347100	1 quartz secondary flake
110	322100	1346550	1 brick fragment, 0.4g
111	322100	1346600	1 brick fragment, 0.4g
112	322100	1346700	1 colorless bottle glass fragment, modern; 1 brick fragment, 0.1g
113	322100	1347000	1 quartz shatter; 2 quartz tertiary flakes
114	322100	1347050	2 quartz tertiary flakes

115	322150	1346650	1 brick fragment, 0.1g	
116	322150	1346850	1 quartz shatter	
117	322150	1347000	1 quartzite tertiary flake	
118	322150	1347100	1 quartz biface; 1 quartz tertiary flake; 1 chert tertiary flake (?)	
119	322200	1346550	2 brick fragments, 0.8g	
120	322200	1347000	1 quartz secondary flake; 1 quartz tertiary flake; 1 quartzite tertiary flake	
121	322200	1347100	1 chert secondary flake	
122	322200	1347150	1 rhyolite tertiary flake; 1 green bottle glass, modern	
123	322250	1346700	1 red brick fragment, 0.3g	
124	322250	1346750	1 undecorated porcelain body fragment	
125	322250	1346850	1 rhyolite tertiary flake	
126	322250	1347000	1 quartz tertiary flake	R
127	322250	1347050	1 clear bottle glass, modern	
128	322250	1347100	1 quartz shatter	
129	322300	1346600	1 rhyolite tertiary flake	
130	322300	1346850	1 quartz tertiary flake	
131	322300	1346900	1 quartz primary flake; 1 quartzite secondary flake; 1 chert possible fire-cracked rock	
132	322300	1347000	1 quartz shatter	
133	322300	1347050	1 quartzite tertiary flake	
134	322300	1347100	2 quartz shatter; 1 chert shatter; 1 chert primary flake; 1 chert secondary flake	
135	322350	1346200	4 brick fragments, 80.6	
136	322350	1346650	1 brick fragment, some glazing, 86.2g	
137	322350	1346700	2 brick fragments, 0.1g	
138	322350	1346850	1 quartz shatter	
139	322350	1347000	1 quartz primary flake	
140	322400	1346600	1 rhyolite tertiary flake	
141	322400	1346650	1 unid. Iron nail fragment	
142	322400	1346750	1 quartzite fire-cracked rock	
143	322400	1346800	1 red brick fragment, < 0.1g	
144	322400	1346900	1 quartz secondary flake	
145	322400	1346950	1 quartz primary flake, 1 quartz tertiary flake	
146	322450	1346450	1 colorless bottle glass, modern	
147	322450	1346550	1 red brick fragment, 45.2g	
148	322500	1346500	1 red brick fragment, 73.4g	
149	322500	1346900	1 quartz tertiary flake	
150	322550	1346800	1 quartz biface	
151	322600	1346400	2 quartz shatter	
152	322600	1346650	1 brick fragment, 0.5g; 6 burned brick fragments, 11.2g	
153	322600	1346800	1 quartz shatter; 2 black lead-glazed red-pasted earthenware fragments	
154	322600	1346900	1 chert secondary flake; 1 burned brick, < 0,1g	

155	322650	1346400	1 colorless flat glass; 1 unid. Iron nail fragment
156	322650	1346500	2 quartz shatter; 1 red brick fragment, < 0.1g
157	322650	1346650	1 quartz shatter
158	322650	1346750	3 quartz shatter
159	322650	1346800	1 chert tertiary flake
160	322650	1346850	1 oyster shell fragment
161	322700	1346350	1 quartz primary flake; 3 red brick fragments, 9.6g; 1 .22 bullet casing
162	322700	1346400	1 quartzite fire-cracked rock; 1 brown bottle glass, modern
163	322700	1346450	1 unid. Iron nail or wire fragment
164	322750	1346350	2 quartz shatter; 1 quartz primary flake; 1 colorless bottle glass fragment, modern
165	322750	1346400	2 red brick fragments, 4.6g
166	322750	1346450	1 quartzite tertiary flake; 1 unid. Refined earthenware body fragment
167	322800	1346350	1 black lead-glazed coarse earthenware fragment; 1 North American salt-glazed stoneware body fragment; 2 red brick fragments, 0.7g; 1 unid. Iron rust
168	322800	1346400	1 quartzite fire-cracked rock; 1 unid. Plain refined earthenware (possibly creamware); 4 red brick fragments, 1.1g
169	322800	1346500	1 unidentified blue refined earthenware; 2 red brick fragments, 0.3g
170	322800	1346550	1 red brick fragment, 2.2g
171	322850	1346350	1 quartzite primary flake; 1 quartzite tertiary flake; 1 unid. Refined earthenware body fragment; 1 unidentified refined earthenware base fragment; 2 clear bottle glass fragments, modern; 2 oyster shell fragments; 1 red brick fragment, 10.1g
172	322850	1346400	1 quartz secondary flake
173	322900	1346350	1 quartz shatter; 1 quartz secondary flake; 3 red brick fragments, 4.0g; 1 oyster shell fragment
174	322900	1346400	1 red brick fragment, 0.2g; 1 oyster shell fragment
175	322900	1346450	1 quartz tertiary flake; 1 unid. Refined earthenware body fragment, polychrome decoration; 1 clear bottle glass fragment; 3 brick fragments, 0.5g
176	322900	1346500	1 quartz secondary flake
177	323000	1346400	1 clear bottle glass fragment, modern; 1 brown bottle glass fragment, modern; 8 red brick fragments, 4.5g; 1 oyster shell fragment
178	323050	1346400	1 unid. Iron artifact; 4 red brick fragments, 93.5g
179	323100	1346400	2 red brick fragments, 5.9g
180	322450	1346911	1 chert shatter (?)
181	322618	1346400	1 quartzite secondary flake, possibly utilized

**APPENDIX V.**  
**ARTIFACTS RECOVERED FROM SHOVEL TESTS, HOGUE PROPERTY (18CH103)**

<b>Lot</b>	<b>North</b>	<b>East</b>	<b>Artifacts</b>
N/A	322150	1348800	No Artifacts
10	322150	1348850	1 quartzite fire cracked rock
11	322150	1348900	3 quartz shatter; 1 quartz secondary flake, possibly utilized; 1 quartzite primary flake; 2 quartzite secondary flake; 1 quartzite tertiary flake; 1 rhyolite tertiary flake; 1 chert tertiary flake
12	322150	1348950	1 quartz shatter; 1 quartz primary flake; 1 quartz secondary flake
13	322150	1349000	1 quartz shatter; 1 colorless bottle glass, modern
N/A	322200	1348750	No Artifacts
N/A	322200	1348800	No Artifacts
14	322200	1348850	1 quartz shatter; 1 quartz secondary flake; 1 quartzite tertiary flake; 1 rhyolite tertiary flake
15	322200	1348900	1 quartz shatter; 1 quartzite tertiary flake; 2 rhyolite tertiary flakes; 1 unidentified black plastic tube, modern
N/A	322200	1348950	No Artifacts
16	322200	1349000	2 quartz secondary flakes; 1 quartzite fire cracked rock
N/A	322250	1347300	No Artifacts
17	322250	1347400	1 quartz biface tip
18	322250	1347500	1 quartz shatter; 2 quartz tertiary flakes; 1 rhyolite tertiary flake
19	322250	1347600	1 quartzite shatter; 1 rock (discarded)
20	322250	1348650	1 brick/daub fragment (1.0 g)
21	322250	1348700	1 quartz tertiary flake
22	322250	1348750	1 quartzite secondary flake; 1 possible jasper shatter
23	322250	1348800	1 quartz secondary flake; 2 quartz tertiary flakes; 1 rhyolite tertiary flake
24	322250	1348850	1 quartz shatter; 1 quartz tertiary flake
25	322250	1348900	2 quartz shatter; 2 quartz tertiary flakes; 1 quartzite shatter; 1 quartzite tertiary flake; 1 rhyolite projectile point, tip and base missing; 1 brick fragment (0.3 g)
N/A	322250	1348950	No Artifacts
N/A	322250	1349000	No Artifacts
26	322300	1347300	1 quartz chip
N/A	322300	1347400	No Artifacts
27	322300	1347500	1 quartz tertiary flake
N/A	322300	1347600	No Artifacts
28	322300	1348600	1 quartz tertiary flake
N/A	322300	1348650	No Artifacts
N/A	322300	1348700	No Artifacts
29	322300	1348750	1 quartz tertiary flake
30	322300	1348800	1 quartz shatter; 1 quartzite secondary flake

N/A	322300	1348850	No Artifacts
31	322300	1348900	2 quartz shatter; 1 quartzite secondary flake; 1 quartzite tertiary flake; 1 rhyolite tertiary flake; 1 quartz unifacial scraper; 1 iron concretion
32	322300	1348950	1 quartz shatter; 1 quartz primary flake; 1 quartz tertiary flake
33	322300	1349000	1 quartz secondary flake; 1 quartz tertiary flake
N/A	322350	1347300	No Artifacts
N/A	322350	1347400	No Artifacts
34	322350	1347500	1 quartz shatter; 2 rocks, non-cultural (discarded)
N/A	322350	1347600	No Artifacts
35	322350	1347700	3 quartz shatter; 1 quartzite tertiary flake; 1 chert shatter
N/A	322350	1347800	No Artifacts
N/A	322350	1347900	No Artifacts
N/A	322350	1348000	No Artifacts
N/A	322350	1348400	No Artifacts
N/A	322350	1348450	No Artifacts
N/A	322350	1348500	No Artifacts
36	322350	1348550	1 quartzite shatter
N/A	322350	1348600	No Artifacts
N/A	322350	1348650	No Artifacts
37	322350	1348700	2 quartz tertiary flakes; 1 rock (discarded)
38	322350	1348750	1 quartzite secondary flake; 1 quartzite tertiary flake
39	322350	1348800	2 quartz tertiary flakes
40	322350	1348850	1 quartz shatter; 1 quartz secondary flake; 2 quartz tertiary flakes; 1 rhyolite tertiary flake
N/A	322350	1348900	No Artifacts
41	322350	1348950	1 quartz core fragment; 2 rhyolite tertiary flakes
42	322350	1349000	2 quartz shatter; 1 quartz tertiary flake; 1 quartzite secondary flake
N/A	322400	1347200	2 rocks (discarded)
43	322400	1347250	2 quartz tertiary flakes
44	322400	1347300	2 quartz tertiary flakes
N/A	322400	1347350	No Artifacts
N/A	322400	1347400	No Artifacts
45	322400	1347450	1 quartz shatter
N/A	322400	1347500	No Artifacts
N/A	322400	1347550	No Artifacts
N/A	322400	1347600	No Artifacts
N/A	322400	1347650	No Artifacts
N/A	322400	1347700	No Artifacts
46	322400	1347750	1 quartz shatter; 13 colorless bottle glass fragments, modern; 12 amber bottle glass fragments, modern
47	322400	1347800	1 white semi-porcelain body sherd; 2 colorless bottle glass fragments, modern; 8 unidentified iron fragments

48	322400	1347850	1 quartz shatter
N/A	322400	1347900	No Artifacts
N/A	322400	1347950	No Artifacts
N/A	322400	1348000	No Artifacts
N/A	322400	1348050	No Artifacts
N/A	322400	1348100	No Artifacts
49	322400	1348350	1 rhyolite tertiary flake
50	322400	1348400	1 quartz tertiary flake
N/A	322400	1348450	No Artifacts
N/A	322400	1348500	No Artifacts
N/A	322400	1348550	No Artifacts
N/A	322400	1348600	No Artifacts
N/A	322400	1348650	No Artifacts
N/A	322400	1348700	No Artifacts
N/A	322400	1348750	No Artifacts
51	322400	1348800	1 quartzite tertiary flake
52	322400	1348850	3 quartz shatter; 1 quartzite tertiary flake; 1 chert secondary flake
53	322400	1348900	2 quartz secondary flakes; 1 quartz tertiary flake; 3 quartzite tertiary flakes; 1 rock (discarded)
N/A	322400	1348950	No Artifacts
54	322400	1349000	11 barbed wire fragments; 1 rock, non-cultural
N/A	322425	1348775	No Artifacts
56	322425	1348800	1 quartz secondary flake
57	322425	1348825	2 quartz secondary flakes
58	322425	1348850	2 quartz tertiary flakes; 1 quartzite tertiary flake
59	322425	1348875	2 quartz secondary flakes; 2 rhyolite tertiary flakes
60	322425	1348900	3 quartz shatter; 1 quartz tertiary flake; 1 quartz core
61	322425	1348925	2 quartz shatter
N/A	322450	1347200	No Artifacts
N/A	322450	1347250	No Artifacts
62	322450	1347300	1 quartz shatter; 1 quartzite secondary flake
N/A	322450	1347350	No Artifacts
63	322450	1347400	1 quartz secondary flake
N/A	322450	1347450	No Artifacts
N/A	322450	1347500	No Artifacts
64	322450	1347550	1 quartz secondary flake; 1 quartz tertiary flake
65	322450	1347600	1 chert secondary flake
66	322450	1347650	3 green bottle glass fragments, modern
67	322450	1347700	1 chert rock, non-cultural (discarded); 1 colorless bottle glass fragment; 1 colorless bottle glass fragment (possibly melted); 1 unidentified iron fragment; 2 red plastic fragments (discarded)
68	322450	1347750	1 quartz secondary flake; 1 quartz tertiary flake; 1 quartzite shatter

69	322450	1347800	1 quartz tertiary flake
70	322450	1347850	3 red brick fragments, 1 daub (1.9 g)
71	322450	1347900	5 red brick fragments, 1 daub (3.9 g)
N/A	322450	1347950	No Artifacts
72	322450	1348000	1 quartzite fire cracked rock
N/A	322450	1348050	No Artifacts
N/A	322450	1348100	No Artifacts
73	322450	1348300	1 quartzite fire cracked rock; 1 rock (discarded)
74	322450	1348350	1 quartzite tertiary flake
75	322450	1348400	1 quartzite tertiary flake; 1 quartzite core; 1 rock (discarded)
N/A	322450	1348450	No Artifacts
N/A	322450	1348500	No Artifacts
N/A	322450	1348550	No Artifacts
76	322450	1348600	1 quartz shatter
77	322450	1348650	1 quartz secondary flake
N/A	322450	1348700	No Artifacts
78	322450	1348750	1 quartz shatter; 1 sand tempered brown pasted plain Potomac Creek body sherd
79	322450	1348775	1 quartzite secondary flake
80	322450	1348800	1 quartzite secondary flake
81	322450	1348825	1 quartz tertiary flake; 1 rhyolite tertiary flake; 1 chert tertiary flake
82	322450	1348850	2 quartz shatter; 2 sand tempered brown pasted plain Potomac Creek body sherds
83	322450	1348875	1 quartz shatter; 1 sand tempered brown pasted plain Potomac Creek body sherd
84	322450	1348900	5 quartz shatter; 3 quartz tertiary flakes; 1 quartzite tertiary flake; 1 quartz fire cracked rock; 1 chert fire cracked rock; 1 chert rock, non-cultural (discarded); 1 sand tempered brown pasted plain Potomac creek body sherd
N/A	322450	1348925	No Artifacts
85	322450	1348950	1 quartz secondary flake; 1 quartz tertiary flake; 1 chert tertiary flake; 1 rock (discarded); 1 iron tube/pipe fragment, modern
86	322450	1349000	2 quartz tertiary flakes
87	322475	1348775	1 quartzite shatter
88	322475	1348800	2 quartzite secondary flakes
89	322475	1348825	1 quartz tertiary flake; 1 rhyolite tertiary flake; 1 chert tertiary flake; 1 rock (discarded); 1 possibly shell tempered brown pasted plain Indian ceramic body sherd
90	322475	1348850	1 quartz tertiary flake; 1 quartzite primary flake; 1 quartzite secondary flake
91	322475	1348875	1 quartz tertiary flake
92	322475	1348900	3 quartz shatter; 1 chert secondary flake; 1 unidentified rock tertiary flake
N/A	322475	1348925	No Artifacts
N/A	322500	1347150	No Artifacts
N/A	322500	1347200	No Artifacts
93	322500	1347250	1 quartz secondary flake; 1 quartz tertiary flake
N/A	322500	1347300	No Artifacts
94	322500	1347350	1 quartz secondary flake

N/A	322500	1347400	No Artifacts
N/A	322500	1347450	No Artifacts
95	322500	1347500	1 chert shatter, non-cultural
N/A	322500	1347550	4 rocks (discarded)
96	322500	1347600	2 quartz shatter; 2 quartz secondary flakes; 1 chert rock (discarded); 5 rocks (discarded)
97	322500	1347650	1 chert rock, non-cultural (kept); 5 rocks (discarded)
98	322500	1347700	1 chert shatter; 3 rocks (discarded); 1 unidentified iron nail fragment, 1 unidentified rust fragment
99	322500	1347750	1 quartz secondary flake; 1 quartzite fire cracked rock; 10 rocks (discarded); 1 probably wrought iron nail fragment
100	322500	1347800	1 quartz tertiary flake
101	322500	1347850	1 quartz shatter; 2 quartz tertiary flakes; 3 rocks (discarded)
N/A	322500	1347900	1 rock (discarded)
102	322500	1347950	1 unidentified iron nail fragment
N/A	322500	1348000	No Artifacts
103	322500	1348050	1 quartz shatter; 1 quartz tertiary flake
N/A	322500	1348100	1 rock (discarded)
N/A	322500	1348200	No Artifacts
N/A	322500	1348300	No Artifacts
N/A	322500	1348350	No Artifacts
N/A	322500	1348400	No Artifacts
N/A	322500	1348450	No Artifacts
N/A	322500	1348500	No Artifacts
104	322500	1348550	1 quartzite fire cracked rock
105	322500	1348600	1 quartzite fire cracked rock
N/A	322500	1348650	No Artifacts
N/A	322500	1348700	No Artifacts
N/A	322500	1348750	No Artifacts
106	322500	1348800	2 quartz shatter; 1 quartzite secondary flake
107	322500	1348850	1 quartz shatter; 1 rock (discarded)
108	322500	1348900	2 quartz shatter
109	322500	1348950	2 quartz shatter; 1 quartzite tertiary flake
N/A	322550	1347150	1 rock (discarded)
110	322550	1347200	1 quartz tertiary flake, unifacially retouched
N/A	322550	1347250	No Artifacts
N/A	322550	1347300	No Artifacts
111	322550	1347350	1 quartz secondary flake; 1 quartzite tertiary flake
N/A	322550	1347400	No Artifacts
112	322550	1347450	1 quartz shatter; 1 chert secondary flake
113	322550	1347500	1 unidentified iron nail fragment; 1 unidentified iron rust fragment
114	322550	1347550	1 red brick fragment (0.7 g); 3 green bottle glass fragments, modern; 10 unidentified iron fragments, possibly natural; 2 iron-stone rocks (discarded)

115	322550	1347600	1 quartz shatter; 1 quartz tertiary flake; 3 rocks (discarded); 1 brown bottle glass fragment, modern; 1 plastic fragment (discarded)
116	322550	1347650	1 iron wire nail, 4 1/4" long
117	322550	1347700	1 quartz shatter; 1 quartzite tertiary flake; 2 rocks (discarded); 1 iron fence staple
118	322550	1347750	1 quartz shatter; 5 rocks (discarded)
119	322550	1347800	1 chert fire cracked rock; 3 rocks (discarded)
N/A	322550	1347850	No Artifacts
N/A	322550	1347900	2 rocks (discarded)
120	322550	1347950	1 quartz shatter
N/A	322550	1348000	No Artifacts
N/A	322550	1348050	No Artifacts
N/A	322550	1348100	No Artifacts
121	322550	1348200	1 red brick fragment (0.3 g); 1 red brick fragment, burnt (1.4 g); 2 charcoal fragments (discarded)
122	322550	1348250	3 red brick fragments (1.5 g)
N/A	322550	1348300	No Artifacts
N/A	322550	1348350	No Artifacts
N/A	322550	1348400	No Artifacts
N/A	322550	1348450	No Artifacts
123	322550	1348500	1 quartz tertiary flake
N/A	322550	1348550	No Artifacts
N/A	322550	1348600	No Artifacts
N/A	322550	1348650	No Artifacts
124	322550	1348700	1 rhyolite tertiary flake
125	322550	1348750	1 quartz secondary flake; 1 quartzite tertiary flake
126	322550	1348800	3 quartz shatter; 1 quartz tertiary flake; 1 quartzite tertiary flake; 1 sandstone fire cracked rock
127	322550	1348850	2 quartzite tertiary flakes
128	322550	1348900	1 quartz shatter; 1 quartz secondary flake
N/A	322600	1347100	No Artifacts
N/A	322600	1347150	No Artifacts
129	322600	1347200	2 red brick fragments (3.4 g)
130	322600	1347250	1 quartz shatter; 1 quartz tertiary flake
N/A	322600	1347300	No Artifacts
N/A	322600	1347350	No Artifacts
N/A	322600	1347400	No Artifacts
131	322600	1347450	1 quartzite rock, non-cultural
N/A	322600	1347500	No Artifacts
132	322600	1347550	1 colorless bottle glass fragment, modern
133	322600	1347600	2 iron wire nails, 4 1/4"
134	322600	1347650	1 red brick fragment (0.4 g)
N/A	322600	1347700	No Artifacts

135	322600	1347750	1 quartz biface
N/A	322600	1347800	No Artifacts
N/A	322600	1347850	No Artifacts
N/A	322600	1347900	1 rock (discarded)
N/A	322600	1347950	No Artifacts
N/A	322600	1348000	4 rocks (discarded)
136	322600	1348050	1 chert rock (discarded); 4 red brick fragments (0.8 g)
N/A	322600	1348100	No Artifacts
137	322600	1348200	1 colorless bottle glass fragment with letters "O" and "R" on exterior
N/A	322600	1348250	No Artifacts
138	322600	1348300	4 red brick fragments (7.8 g); 2 charcoal fragments (discarded)
N/A	322600	1348350	No Artifacts
N/A	322600	1348400	No Artifacts
N/A	322600	1348450	No Artifacts
139	322600	1348500	1 quartzite tertiary flake
N/A	322600	1348550	No Artifacts
N/A	322600	1348600	No Artifacts
N/A	322600	1348650	No Artifacts
N/A	322600	1348700	No Artifacts
140	322600	1348750	1 quartzite tertiary flake
141	322600	1348800	4 quartz shatter; 2 quartz tertiary flakes; 3 quartzite tertiary flakes; 1 rhyolite tertiary flake; 1 chert rock, non-cultural (discarded)
142	322600	1348850	1 quartz shatter
N/A	322600	1348900	No Artifacts
143	322625	1348725	2 quartz tertiary flakes; 1 rock (discarded)
144	322625	1348750	2 quartz tertiary flakes
145	322625	1348775	1 quartz secondary flake; 1 quartzite tertiary flake; 1 unidentified stone secondary flake; 1 quartz projectile point tip
N/A	322650	1347050	1 rock (discarded)
N/A	322650	1347100	No Artifacts
N/A	322650	1347150	No Artifacts
N/A	322650	1347200	No Artifacts
N/A	322650	1347250	No Artifacts
146	322650	1347300	1 red brick fragment (0.2 g)
N/A	322650	1347350	No Artifacts
147	322650	1347400	1 quartzite tertiary flake; 1 quartzite Bare Island or small Savannah River projectile point
148	322650	1347450	1 quartz shatter
N/A	322650	1347500	No Artifacts
149	322650	1347550	1 chert rock, non-cultural (kept)
N/A	322650	1347600	No Artifacts
N/A	322650	1347650	No Artifacts

150	322650	1347700	1 quartzite tertiary flake
N/A	322650	1347750	No Artifacts
N/A	322650	1347800	No Artifacts
N/A	322650	1347850	1 rock (discarded)
N/A	322650	1347900	No Artifacts
N/A	322650	1347950	No Artifacts
N/A	322650	1348000	No Artifacts
N/A	322650	1348050	1 rock (discarded)
N/A	322650	1348100	No Artifacts
151	322650	1348150	1 quartz tertiary flake; 1 colorless bottle glass fragment, modern; 3 asphalt fragments
152	322650	1348200	1 teal bottle glass fragment, modern
153	322650	1348250	1 quartz shatter; 1 quartz tertiary flake; 1 quartzite primary flake
N/A	322650	1348300	No Artifacts
N/A	322650	1348350	No Artifacts
N/A	322650	1348400	No Artifacts
154	322650	1348450	1 quartzite primary flake; 1 rock (discarded)
N/A	322650	1348500	No Artifacts
N/A	322650	1348550	No Artifacts
N/A	322650	1348600	No Artifacts
155	322650	1348650	1 quartz shatter
N/A	322650	1348700	No Artifacts
156	322650	1348725	1 quartz shatter; 1 quartzite possibly Broad-spear type projectile point, reworked; 3 quartzite fire cracked rocks
157	322650	1348750	2 quartzite tertiary flakes; 1 sand tempered brown pasted plain Potomac Creek body sherd
N/A	322650	1348775	No Artifacts
158	322650	1348800	1 quartz shatter; 1 quartz secondary flake; 1 quartz tertiary flake; 1 quartzite secondary flake; 1 quartzite tertiary flake; 1 unidentified stone fire cracked rock
159	322650	1348850	1 quartz shatter; 1 quartz secondary flake; 1 rhyolite shatter
N/A	322650	1348900	No Artifacts
160	322675	1348725	1 quartz secondary flake; 1 quartzite secondary flake; 1 chert fire cracked rock
161	322675	1348750	1 quartz tertiary flake; 1 quartzite secondary flake
162	322675	1348775	1 quartzite secondary flake; 1 quartzite tertiary flake; 1 quartz core; 2 rocks (discarded); 1 sand tempered brown pasted plain Potomac Creek body sherd
N/A	322700	1347050	No Artifacts
163	322700	1347100	1 quartz shatter; 1 chert secondary flake; 1 chert tertiary flake
N/A	322700	1347150	No Artifacts
164	322700	1347200	1 quartz shatter
165	322700	1347250	1 quartz shatter
166	322700	1347300	1 blown green bottle glass fragment; 2 red brick fragments (0.5 g)
167	322700	1347350	1 quartz secondary flake
N/A	322700	1347400	No Artifacts

168	322700	1347450	1 quartz shatter
N/A	322700	1347500	No Artifacts
N/A	322700	1347550	No Artifacts
N/A	322700	1347600	No Artifacts
N/A	322700	1347650	No Artifacts
169	322700	1347700	1 rock (discarded); 2 red brick fragments (0.3 g)
N/A	322700	1347750	1 rock (discarded)
N/A	322700	1347800	No Artifacts
170	322700	1347850	1 whiteware body sherd
171	322700	1347900	1 quartz primary flake
172	322700	1347950	3 rocks (discarded); 1 brown bottle glass fragment, modern
N/A	322700	1348000	No Artifacts
N/A	322700	1348050	12 charcoal fragments (discarded)
N/A	322700	1348100	No Artifacts
173	322700	1348150	1 quartz tertiary flake; 1 possible pearlware, white refined earthenware body sherd
174	322700	1348200	1 red brick fragment (0.9 g); 2 charcoal fragments (discarded)
175	322700	1348250	1 quartzite tertiary flake; 1 quartzite fire cracked rock; 1 sand tempered brown pasted cord marked Potomac Creek body sherd; 1 iron wire fragment, modern; 1 metal strip with serrated edges
176	322700	1348300	1 quartz shatter; 3 red brick fragments (0.9 g)
N/A	322700	1348350	No Artifacts
N/A	322700	1348400	No Artifacts
177	322700	1348450	2 quartz tertiary flakes; 11 red brick fragments (5.1 g)
178	322700	1348500	3 brown bottle glass fragments, modern
N/A	322700	1348550	No Artifacts
N/A	322700	1348600	No Artifacts
N/A	322700	1348650	No Artifacts
N/A	322700	1348700	No Artifacts
179	322700	1348750	1 quartz shatter; 1 quartz tertiary flake; 1 quartz core
180	322700	1348800	1 quartz secondary flake
181	322700	1348850	2 quartz shatter; 1 quartz tertiary flake; 2 quartzite possible fire cracked rocks; 1 rock, non-cultural
N/A	322750	1347000	No Artifacts
N/A	322750	1347050	No Artifacts
N/A	322750	1347100	No Artifacts
N/A	322750	1347150	No Artifacts
N/A	322750	1347200	No Artifacts
N/A	322750	1347250	No Artifacts
182	322750	1347300	1 unidentified buff pasted stoneware body sherd, 19th or 20th-century
N/A	322750	1347350	No Artifacts
N/A	322750	1347400	No Artifacts
N/A	322750	1347450	No Artifacts

N/A	322750	1347500	No Artifacts
183	322750	1347550	1 iron wire fragment
N/A	322750	1347600	No Artifacts
N/A	322750	1347650	No Artifacts
N/A	322750	1347700	No Artifacts
N/A	322750	1347750	No Artifacts
184	322750	1347800	1 possible jasper core
N/A	322750	1347850	1 rock (discarded)
N/A	322750	1347900	No Artifacts
N/A	322750	1347950	brick dust (discarded)
N/A	322750	1348000	No Artifacts
N/A	322750	1348100	No Artifacts
185	322750	1348150	1 quartz tertiary flake; 1 rhyolite tertiary flake; 1 rock, non-cultural (discarded)
186	322750	1348200	1 quartz tertiary flake
187	322750	1348250	1 quartz secondary flake; 1 quartzite secondary flake; 1 charcoal fragment (discarded)
188	322750	1348300	1 quartz shatter; 1 rhyolite tertiary flake; 1 quartzite fire cracked rock; 1 unidentified iron rust fragment
N/A	322750	1348350	No Artifacts
189	322750	1348400	1 quartz shatter; 1 quartzite shatter; 1 rhyolite tertiary flake; 1 chert tertiary flake
N/A	322750	1348450	No Artifacts
190	322750	1348500	1 red brick fragment, burnt (57.4 g)
N/A	322750	1348550	No Artifacts
N/A	322750	1348600	No Artifacts
191	322750	1348650	1 quartz secondary flake
N/A	322750	1348700	No Artifacts
N/A	322750	1348750	No Artifacts
N/A	322750	1348800	No Artifacts
192	322750	1348850	1 rhyolite secondary flake
193	322775	1348775	1 quartz tertiary flake; 1 quartz unifacial scraper
194	322775	1348800	1 quartz secondary flake; 1 quartz tertiary flake; 1 quartzite primary flake; 2 iron-stone fragments, kept
195	322775	1348825	1 quartz primary flake; 1 quartz tertiary flake; 1 quartzite secondary flake; 1 quartzite tertiary flake; 1 chert tertiary flake
N/A	322800	1348500	No Artifacts
N/A	322800	1348550	No Artifacts
N/A	322800	1348600	No Artifacts
196	322800	1348650	1 quartz tertiary flake
197	322800	1348700	1 quartz shatter; 2 quartz tertiary flakes
198	322800	1348750	4 quartz shatter; 1 quartzite shatter; 1 quartz fire cracked rock
199	322800	1348800	2 quartz tertiary flakes; 1 grit tempered brown pasted cord marked Popes Creek body sherd
200	322800	1348850	1 quartz tertiary flake; 3 plastic fragments (discarded)

N/A	322800	1347000	No Artifacts
201	322800	1347050	1 quartz tertiary flake; 1 colorless flat glass fragment, modern
N/A	322800	1347100	No Artifacts
N/A	322800	1347150	No Artifacts
N/A	322800	1347200	1 rock (discarded)
N/A	322800	1347250	No Artifacts
202	322800	1347300	1 quartz shatter
N/A	322800	1347350	No Artifacts
N/A	322800	1347400	No Artifacts
203	322800	1347450	2 quartz shatter
204	322800	1347500	1 quartzite tertiary flake
N/A	322800	1347550	No Artifacts
205	322800	1347600	1 quartzite secondary flake
206	322800	1347650	1 rhyolite tertiary flake
207	322800	1347700	1 chert shatter
N/A	322800	1347750	No Artifacts
N/A	322800	1347800	No Artifacts
N/A	322800	1347850	No Artifacts
208	322800	1347900	1 colorless bottle glass fragment, modern
N/A	322800	1347950	No Artifacts
N/A	322800	1348000	No Artifacts
209	322800	1348050	1 quartzite tertiary flake
210	322800	1348100	No Artifacts
211	322800	1348150	1 rhyolite shatter; 1 chert rock (discarded)
212	322800	1348200	1 quartz secondary flake; 1 quartz tertiary flake; 1 quartzite secondary flake
213	322800	1348300	1 quartzite shatter; 1 quartzite tertiary flake; 2 rhyolite tertiary flakes
214	322800	1348350	2 quartz shatter; 1 quartzite secondary flake; 1 chert tertiary flake; 1 flint fragment
215	322800	1348400	2 quartz shatter; 1 quartzite tertiary flake; 1 rhyolite tertiary flake
N/A	322800	1348450	No Artifacts
216	322800	1348775	1 quartz shatter; 1 quartz shatter with biface retouching; 2 quartz tertiary flakes; 1 rhyolite tertiary flakes
217	322800	1348825	1 quartz secondary flake
N/A	322825	1348675	No Artifacts
218	322825	1348700	1 quartz secondary flake
219	322825	1348725	2 quartz tertiary flakes
220	322825	1348775	1 quartz primary flake; 1 quartz secondary flake; 3 rhyolite tertiary flakes
221	322825	1348800	3 quartz tertiary flakes; 1 English flint fragment with cortex
222	322825	1348825	1 quartzite secondary flake; 1 quartzite tertiary flake; 1 rhyolite tertiary flake
N/A	322850	1347100	No Artifacts
223	322850	1347150	1 rhyolite tertiary flake
N/A	322850	1347200	No Artifacts

224	322850	1347250	1 quartzite drill tip
225	322850	1347300	1 quartz shatter; 1 quartz secondary flake; 1 brick fragment (0.2 g)
226	322850	1347350	1 quartzite secondary flake
227	322850	1347400	1 quartzite secondary flake, possibly retouched
N/A	322850	1347450	No Artifacts
228	322850	1347500	1 quartzite tertiary flake
229	322850	1347650	1 chert flake, non-cultural (kept)
N/A	322850	1347700	No Artifacts
N/A	322850	1347750	No Artifacts
N/A	322850	1347800	No Artifacts
N/A	322850	1347850	No Artifacts
N/A	322850	1347900	No Artifacts
230	322850	1347950	1 turtle shell fragment
231	322850	1348000	1 quartz shatter; 1 quartz tertiary flake; 1 chalcedony tertiary flake
232	322850	1348050	1 quartz secondary flake; 1 quartzite tertiary flake; 1 rhyolite tertiary flake; 4 brick fragments (2.3 g)
233	322850	1348100	1 quartz shatter; 2 quartz tertiary flakes; 1 chert rock, non-cultural (discarded)
234	322850	1348150	1 quartz shatter; 1 quartz secondary flake; 1 quartzite secondary flake; 1 quartzite tertiary flake
235	322850	1348300	1 quartz shatter; 1 quartzite tertiary flake
N/A	322850	1348350	Lots of charcoal, discarded in field
N/A	322850	1348400	No Artifacts
236	322850	1348450	1 quartzite tertiary flake
237	322850	1348500	1 quartz shatter; 1 quartz secondary flake; 1 rhyolite tertiary flake
N/A	322850	1348600	No Artifacts
238	322850	1348650	1 quartz shatter; 1 quartz secondary flake
239	322850	1348675	1 quartz shatter; 1 quartz secondary flake; 1 quartzite tertiary flake; 1 quartz projectile point tip; 1 quartzite possible fire cracked rock
240	322850	1348700	2 quartz tertiary flakes; 1 unidentified grit tempered red pasted cord marked Indian ceramic body sherd, possibly Accokeek or Potomac Creek
241	322850	1348725	1 quartz secondary flake; 2 rhyolite tertiary flakes
242	322850	1348750	1 quartz shatter; 1 quartz secondary flake; 3 quartz tertiary flakes; 3 rhyolite tertiary flakes; 1 colorless bottle glass fragment, melted
243	322850	1348800	1 quartz secondary flake; 3 quartz tertiary flakes; 1 quartzite fire cracked rock
244	322850	1348850	1 quartz tertiary flake; 1 rhyolite tertiary flake; 1 quartzite fire cracked rock; 1 quartzite possible fire cracked rock
N/A	322850	1348900	No Artifacts
N/A	322850	1348950	No Artifacts
N/A	322850	1349000	No Artifacts
N/A	322875	1348675	No Artifacts
245	322875	1348700	1 quartz tertiary flake
246	322875	1348725	1 quartz tertiary flake; 1 quartzite shatter; 2 quartzite secondary flakes; 1 unidentified stone possible fire cracked rock; 1 colorless glass fragment, modern; 1 iron rust fragment

N/A	322900	1347400	No Artifacts
N/A	322900	1347600	No Artifacts
N/A	322900	1347650	No Artifacts
N/A	322900	1347700	No Artifacts
N/A	322900	1347750	No Artifacts
N/A	322900	1347800	No Artifacts
N/A	322900	1347850	No Artifacts
N/A	322900	1347900	No Artifacts
N/A	322900	1347950	No Artifacts
247	322900	1348000	1 quartz tertiary flake; 1 rhyolite tertiary flake
248	322900	1348050	1 quartz secondary flake; 1 rhyolite tertiary flake
249	322900	1348100	1 quartz shatter; 3 quartz tertiary flakes; 4 rhyolite tertiary flakes; 2 quartzite fire cracked rocks; 2 rocks (discarded); 1 brick fragment (0.9 g)
250	322900	1348150	1 quartzite secondary flake; 1 chert tertiary flake; 2 concrete/cement fragments, modern (discarded)
251	322900	1348200	1 quartz tertiary flake; 2 quartzite tertiary flakes
252	322900	1348300	1 chert secondary flake; 1 chert fire cracked rock; 1 colorless bottle glass fragment
253	322900	1348350	1 quartz tertiary flake; 1 plain Potomac Creek body sherd
254	322900	1348400	1 quartz shatter; 1 quartz tertiary flake
N/A	322900	1348450	No Artifacts
255	322900	1348500	1 quartz shatter; 1 quartzite core
256	322900	1348550	1 rhyolite secondary flake
N/A	322900	1348600	No Artifacts
N/A	322900	1348650	No Artifacts
257	322900	1348700	3 quartz tertiary flakes; 1 quartzite tertiary flake; 1 chert tertiary flake, possibly heat altered; 1 quartzite fire cracked rock
258	322900	1348750	1 quartz secondary flake; 2 quartz tertiary flakes; 1 sandstone possible fire cracked rock
259	322900	1348800	3 quartz shatter
N/A	322900	1348850	No Artifacts
N/A	322900	1348900	No Artifacts
N/A	322900	1348950	No Artifacts
N/A	322900	1349000	No Artifacts
N/A	322900	1349050	No Artifacts
N/A	322950	1347600	No Artifacts
N/A	322950	1347650	No Artifacts
N/A	322950	1347700	No Artifacts
N/A	322950	1347750	No Artifacts
N/A	322950	1347800	1 iron-stone rock (discarded)
N/A	322950	1347850	No Artifacts
N/A	322950	1347900	No Artifacts
260	322950	1347950	1 chalcedony tertiary flake
261	322950	1348000	1 quartz shatter; 1 quartz secondary flake; 1 quartzite secondary flake

262	322950	1348050	4 quartz shatter; 1 quartz secondary flake; 2 quartz tertiary flakes; 1 quartzite secondary flake; 1 chert tertiary flake; 1 silicified sandstone tertiary flake; 1 quartzite rock (discarded)
263	322950	1348100	1 quartz secondary flake; 3 quartz tertiary flakes; 1 rhyolite secondary flake
264	322950	1348200	1 quartz secondary flake; 4 iron-stone fragments (discarded)
265	322950	1348250	1 quartz tertiary flake
266	322950	1348300	2 quartz shatter
267	322950	1348350	2 rocks, non-cultural (kept_
N/A	322950	1348400	No Artifacts
N/A	322950	1348450	No Artifacts
268	322950	1348500	1 plain Potomac Creek body sherd
N/A	322950	1348550	No Artifacts
269	322950	1348600	2 quartz tertiary flakes
N/A	322950	1348650	No Artifacts
270	322950	1348700	1 quartz shatter; 1 quartz tertiary flake; 1 rhyolite tertiary flake; 1 quartzite fire cracked rock
271	322950	1348750	1 quartz shatter; 1 quartz tertiary flake; 1 quartzite secondary flake; 1 quartzite tertiary flake; 2 colorless bottle glass fragments, modern
N/A	322950	1348795	No Artifacts
N/A	322950	1348850	No Artifacts
N/A	322950	1348900	No Artifacts
N/A	322950	1348950	No Artifacts
N/A	322950	1349000	No Artifacts
N/A	322950	1349050	No Artifacts
272	323000	1347650	1 unidentified iron fragment
N/A	323000	1347700	No Artifacts
N/A	323000	1347750	No Artifacts
N/A	323000	1347800	No Artifacts
273	323000	1347900	1 quartz shatter; 1 colorless bottle glass, modern
274	323000	1347950	2 brick fragments (0.8 g)
275	323000	1348000	1 quartz rock (discarded); 1 chert rock (discarded); 4 brick fragments (2.4 g)
276	323000	1348050	1 quartz tertiary flake; 1 plain pearlware spall fragment
N/A	323000	1348100	Bag misplace
277	323000	1348200	5 quartz shatter; 1 quartz tertiary flake; 1 quartzite secondary flake; 1 rhyolite tertiary flake; 1 possible basalt fire cracked rock
278	323000	1348250	2 quartz secondary flakes; 1 quartzite biface/projectile point
N/A	323000	1348300	1 rock (discarded)
N/A	323000	1348350	No Artifacts
279	323000	1348400	1 quartz shatter; 1 quartzite tertiary flake; 1 chert rock (discarded)
280	323000	1348450	1 quartz secondary flake; 1 quartzite secondary flake; 1 quartzite tertiary flake
N/A	323000	1348500	No Artifacts
N/A	323000	1348550	No Artifacts
281	323000	1348600	1 quartz tertiary flake

282	323000	1348750	1 quartz secondary flake
283	323050	1347800	1 brick fragment (0.3 g)
284	323050	1347850	1 brick fragment (5.2 g)
N/A	323050	1347900	No Artifacts
285	323050	1347950	1 brick fragment (8.7 g)
N/A	323050	1348000	No Artifacts
286	323050	1348050	5 brick fragments (4.3 g)
287	323050	1348150	1 quartz shatter; 2 quartz tertiary flakes; 2 quartzite tertiary flakes; 1 rhyolite tertiary flake; 1 quartzite fire cracked rock
288	323050	1348200	1 quartz shatter; 1 quartzite tertiary flake
289	323050	1348250	1 quartz shatter; 1 quartzite secondary flake; 1 quartzite tertiary flake; 1 rhyolite tertiary flake; 1 unidentified stone fire cracked rock
290	323050	1348300	1 quartz tertiary flake; 1 rhyolite tertiary flake; 1 quartzite fire cracked rock
291	323050	1348350	1 quartz tertiary flake
292	323050	1348400	1 quartz secondary flake; 1 chert tertiary flake
293	323050	1348450	1 chert rock , non-cultural (kept)
N/A	323050	1348500	No Artifacts
294	323050	1348550	1 quartz shatter; 1 quartz tertiary flake; 1 quartzite tertiary flake; 1 rhyolite tertiary flake
295	323050	1348600	1 quartz tertiary flake
296	323050	1348650	3 quartz shatter; 1 quartz secondary flake; 3 quartz tertiary flakes; 1 quartzite secondary flake; 1 quartzite tertiary flake; 1 rhyolite tertiary flake
297	323050	1348700	1 quartz shatter; 1 quartz secondary flake; 1 rhyolite secondary flake; 3 unidentified iron nail fragments
298	323050	1348750	1 quartz primary flake; 1 rhyolite tertiary flake
N/A	323100	1347900	No Artifacts
N/A	323100	1347950	No Artifacts
299	323100	1348000	1 rhyolite tertiary flake; 4 brick fragments (0.2 g)
300	323100	1348050	1 quartzite tertiary flake
301	323100	1348100	5 brick fragments (3.0 g)
302	323100	1348150	2 brick fragments (11.8 g)
303	323100	1348200	1 quartz shatter; 2 quartz secondary flakes; 1 quartz tertiary flake; 1 quartzite tertiary flake
304	323100	1348250	1 possible rhyolite tertiary flake
305	323100	1348300	2 quartzite secondary flakes; 1 quartzite tertiary flake; 1 rhyolite projectile point, very heavily re-worked
306	323100	1348350	1 quartzite primary flake; 1 quartzite secondary flake
307	323100	1348400	1 quartz tertiary flake
N/A	323100	1348450	No Artifacts
N/A	323100	1348500	No Artifacts
N/A	323100	1348550	No Artifacts
N/A	323100	1348600	No Artifacts
308	323150	1348000	1 quartz shatter; 1 blue glass slag fragment
309	323150	1348050	1 quartz tertiary flake; 1 chert possible fire cracked rock; 1 rock (discarded)

N/A	323150	1348100	No Artifacts
N/A	323150	1348150	No Artifacts
310	323150	1348200	1 quartz shatter; 1 quartz tertiary flake; 1 rhyolite tertiary flake; 1 quartzite fire cracked rock; 1 unidentified greenstone fragment
311	323150	1348250	5 quartz shatter; 1 quartz secondary flake; 3 quartz tertiary flake; 1 quartzite tertiary flake
312	323150	1348300	4 quartz shatter; 2 quartz tertiary flakes; 2 quartzite shatter; 1 quartzite tertiary flake; 5 rocks (discarded)
313	323150	1348350	1 quartz tertiary flake; 1 quartzite secondary flake; 2 quartzite tertiary flake; 1 chalcedony tertiary flake
314	323150	1348400	2 quartz shatter; 1 quartz secondary flake; 1 rhyolite tertiary flake; 1 sandstone fire cracked rock
315	323150	1348500	2 quartz shatter; 2 quartz secondary flakes; 1 quartz tertiary flake; 1 quartzite tertiary flake
316	323150	1348550	2 quartz secondary flakes; 1 quartz tertiary flake
317	323150	1348600	3 quartz shatter; 1 quartz tertiary flake; 1 chert shatter, possibly fire cracked rock; 1 chalcedony secondary flake
N/A	323200	1348150	No Artifacts
N/A	323200	1348200	No Artifacts
318	323200	1348250	1 quartz shatter; 1 iron rust fragment
319	323200	1348300	2 quartz shatter; 1 quartz tertiary flake; 1 quartzite tertiary flake; 1 possible quartzite fire cracked rock; 1 quartzite rock, non-cultural (discarded)
320	323200	1348350	1 quartz secondary flake; 2 quartz tertiary flakes
321	323200	1348400	2 quartz shatter; 1 fragment of over fired brick
322	323200	1348450	1 quartz shatter, possibly re-touched; 1 chert rock, non-cultural (discarded)
323	323200	1348500	1 quartz secondary flake; 1 quartz tertiary flake; 1 rhyolite tertiary flake
324	323200	1348550	2 quartz secondary flakes
N/A	323250	1348150	3 rocks (discarded)
N/A	323250	1348200	No Artifacts
N/A	323250	1348250	No Artifacts
325	323250	1348300	1 quartz core
326	323250	1348350	2 quartz shatter; 1 quartz secondary flake; 1 quartz tertiary flake; 1 chert rock, non-cultural (discarded)
327	323250	1348400	1 quartz tertiary flake; 2 quartzite tertiary flakes; 1 English flint flake; 2 red brick fragments (1.9 g)
328	323250	1348450	4 quartz shatter; 1 quartz tertiary flake; 1 chert shatter; 1 sandstone fire cracked rock; 6 rocks (discarded)
329	323250	1348500	1 quartz secondary flake; 1 quartz tertiary flake; 2 rhyolite tertiary flakes
N/A	323250	1348550	1 rock (discarded)
330	323300	1348400	2 quartz shatter; 2 quartzite secondary flakes; 1 quartzite tertiary flake; 1 rhyolite secondary flake; 3 rhyolite tertiary flakes
331	323300	1348450	1 quartz secondary flake; 1 rock (discarded)
332	323350	1348400	1 quartz tertiary flake; 1 rhyolite tertiary flake; 1 chert tertiary flake; 1 chalcedony tertiary flake; 1 unidentified sand, grog, and possibly shell tempered, possibly cord marked Indian ceramic body sherd

**APPENDIX VI.  
ARTIFACTS RECOVERED FROM SHOVEL TESTS  
JORDAN SWAMP I (18CH0694)**

<b>Lot</b>	<b>North</b>	<b>East</b>	<b>Artifacts</b>
17	344000	1351250	1 quartzite secondary flake (large), possibly utilized; 1 quartz secondary flake; 1 quartz tertiary flake
N/A	344000	1351275	No Artifacts
18	344000	1351300	1 quartz secondary flake; 1 quartz tertiary flake
N/A	344000	1351325	No Artifacts
N/A	344000	1351350	No Artifacts
N/A	344000	1351375	No Artifacts
N/A	344025	1351225	No Artifacts
19	344025	1351250	2 quartz primary flakes
20	344025	1351275	1 quartz shatter; 1 quartz secondary flake; 3 quartz tertiary flakes
21	344025	1351300	1 quartz secondary flake; 2 quartz tertiary flakes
N/A	344025	1351325	No Artifacts
N/A	344025	1351350	IN STREAM
N/A	344025	1351375	No Artifacts
N/A	344025	1351400	No Artifacts
N/A	344025	1351425	No Artifacts
N/A	344025	1351450	No Artifacts
22	344050	1351200	1 quartzite secondary flake, possibly utilized
23	344050	1351225	1 quartz core; 3 quartz tertiary flakes
N/A	344050	1351250	No Artifacts
N/A	344050	1351275	No Artifacts
24	344050	1351300	1 quartz tertiary flake
N/A	344050	1351325	No Artifacts
N/A	344050	1351350	No Artifacts
N/A	344050	1351375	No Artifacts
N/A	344050	1351400	No Artifacts
N/A	344050	1351425	No Artifacts
N/A	344075	1351200	No Artifacts
N/A	344075	1351225	No Artifacts
N/A	344075	1351250	No Artifacts
25	344075	1351275	1 quartz projectile point fragment, base missing; 2 quartz secondary flakes; 2 quartz tertiary flakes; 1 quartzite secondary flake; 1 rock, non-cultural (discarded)
N/A	344075	1351300	No Artifacts
N/A	344075	1351325	No Artifacts
N/A	344075	1351350	IN STREAM
N/A	344075	1351375	No Artifacts
N/A	344075	1351400	No Artifacts
N/A	344075	1351425	No Artifacts
N/A	344075	1351450	No Artifacts

26	344100	1351175	1 quartz tool, possible unifacial scraper
N/A	344100	1351200	No Artifacts
N/A	344100	1351225	No Artifacts
27	344100	1351250	1 quartz secondary flake; 1 quartz tertiary flake; 1 rhyolite tertiary flake
N/A	344100	1351275	No Artifacts
28	344100	1351300	1 quartz shatter; 1 quartz secondary flake; 1 quartz tertiary flake; 1 quartzite secondary flake; 1 chert rock, non-cultural (discarded)
N/A	344100	1351325	No Artifacts
N/A	344100	1351350	No Artifacts
N/A	344100	1351375	No Artifacts
N/A	344100	1351400	IN STREAM
N/A	344100	1351425	No Artifacts
N/A	344100	1351450	No Artifacts
N/A	344125	1351175	No Artifacts
N/A	344125	1351200	No Artifacts
29	344125	1351225	1 quartz tertiary flake
30	344125	1351250	1 quartz shatter; 1 quartz primary flake; 1 quartz secondary flake, unifacially retouched on two sides; 1 quartzite secondary flake; 1 clear bottle glass (modern); 1 rock, non-cultural (discarded)
31	344125	1351275	1 quartz primary flake; 1 quartz secondary flake; 2 quartz tertiary flakes; 1 quartz shatter
32	344125	1351300	1 sand-tempered Potomac Creek plain body sherd; 3 quartz shatter; 1 quartz secondary flake; 1 quartz tertiary flake; 1 quartzite tertiary flake, possibly retouched
33	344125	1351325	1 quartz biface, broken; 1 quartz secondary flake
N/A	344125	1351350	No Artifacts
N/A	344125	1351375	No Artifacts
N/A	344125	1351400	No Artifacts
N/A	344125	1351425	No Artifacts
N/A	344125	1351450	No Artifacts
N/A	344150	1351150	No Artifacts
34	344150	1351175	2 quartz shatter; 1 rock, non-cultural (discarded)
N/A	344150	1351200	SKIPPED
35	344150	1351225	1 chert rock, non-cultural (discarded)
N/A	344150	1351250	No Artifacts
36	344150	1351275	1 rhyolite shatter; 1 quartz primary flake
N/A	344150	1351300	No Artifacts
37	344150	1351325	1 quartz tertiary flake
38	344150	1351350	1 quartz primary flake
N/A	344150	1351375	No Artifacts
N/A	344150	1351400	No Artifacts
N/A	344150	1351425	SKIPPED
N/A	344150	1351450	No Artifacts
N/A	344175	1351150	No Artifacts
N/A	344175	1351175	No Artifacts

39	344175	1351200	1 banded chert secondary flake
40	344175	1351225	1 possible quartzite fire-cracked rock
41	344175	1351250	1 quartzite tertiary flake, possibly retouched or possible triangular point
N/A	344175	1351275	No Artifacts
42	344175	1351300	1 quartz tertiary flake
N/A	344175	1351325	No Artifacts
43	344175	1351350	1 net-impressed Mockley body sherd; 1 rhyolite biface fragment; 1 quartz shatter; 1 quartz rock, non-cultural (discarded)
N/A	344175	1351375	No Artifacts
N/A	344175	1351400	No Artifacts
N/A	344175	1351425	SKIPPED
N/A	344175	1351450	No Artifacts
N/A	344200	1351150	No Artifacts
44	344200	1351175	1 quartz shatter; 1 quartz secondary flake
N/A	344200	1351200	No Artifacts
N/A	344200	1351225	No Artifacts
45	344200	1351250	2 chert rocks, non-cultural
46	344200	1351275	1 quartz tertiary flake, possibly retouched; 1 quartz shatter; 1 quartzite tertiary flake; 1 rock, non-cultural (discarded)
47	344200	1351300	1 quartz secondary flake, possibly utilized
N/A	344200	1351325	No Artifacts
48	344200	1351350	2 quartz shatter; 1 snail shell
N/A	344200	1351375	No Artifacts
N/A	344200	1351400	No Artifacts
N/A	344200	1351425	No Artifacts
N/A	344200	1351450	No Artifacts
N/A	344225	1351150	No Artifacts
49	344225	1351175	1 quartz secondary flake; 1 unidentified rock, possibly fire-cracked
N/A	344225	1351200	No Artifacts
N/A	344225	1351225	No Artifacts
50	344225	1351250	1 quartz biface base fragment
51	344225	1351275	1 quartzite secondary flake
52	344225	1351300	1 quartz tertiary flake; 1 quartzite fire-cracked rock
53	344225	1351325	1 unidentified fire-cracked rock, possibly chert
54	344225	1351350	1 quartzite primary flake, large
N/A	344225	1351375	No Artifacts
N/A	344225	1351400	No Artifacts
N/A	344225	1351425	SKIPPED
N/A	344225	1351450	No Artifacts
55	344250	1351150	1 quartz shatter; 2 chert cobble, cracked, probably non-cultural; 1 rock, non-cultural
56	344250	1351175	1 quartz secondary flake
57	344250	1351200	1 quartz tertiary flake
N/A	344250	1351225	No Artifacts

58	344250	1351250	3 quartz tertiary flakes
59	344250	1351275	1 quartz tertiary flake
60	344250	1351300	1 quartzite secondary flake; 2 rocks, non-cultural (discarded)
N/A	344250	1351325	No Artifacts
61	344250	1351350	1 quartz shatter; 2 quartz primary flakes (mend); 3 quartz tertiary flakes; 1 chert tertiary flake; 1 chert fire-cracked rock
N/A	344250	1351375	No Artifacts
N/A	344250	1351400	No Artifacts
N/A	344250	1351425	No Artifacts
N/A	344250	1351450	IN STREAM
N/A	344275	1351150	No Artifacts
N/A	344275	1351175	No Artifacts
62	344275	1351200	1 iron nut and bolt (modern)
N/A	344275	1351225	No Artifacts
N/A	344275	1351250	No Artifacts
63	344275	1351275	1 quartz secondary flake; 1 chert tertiary flake
N/A	344275	1351300	No Artifacts
64	344275	1351325	2 quartz shatter; 1 quartz tertiary flake; 1 chert tertiary flake; 1 quartzite stemmed projectile point, possible Halifax type
65	344275	1351350	1 quartz tertiary flake
N/A	344275	1351375	No Artifacts
66	344275	1351400	1 quartzite fire-cracked rock
	344275	1351425	No Artifacts
67	344275	1351450	1 quartz secondary flake
68	344300	1351150	1 quartz shatter; 3 quartz tertiary flakes (2 mend)
69	344300	1351175	1 rock
70	344300	1351200	1 quartz secondary flake; 1 quartz tertiary flake; 1 chert fire-cracked rock; 8 daub fragments (5.6 grams); 1 rock, non-cultural (discarded)
N/A	344300	1351225	No Artifacts
71	344300	1351250	1 sandstone fire-cracked rock; 1 quartz tertiary flake; 1 rhyolite tertiary flake; 1 quartzite rock, non-cultural (discarded)
N/A	344300	1351275	No Artifacts
72	344300	1351300	1 quartz shatter; 1 quartzite primary flake; 1 rhyolite tertiary flake; 2 rocks, non-cultural
N/A	344300	1351325	No Artifacts
73	344300	1351350	1 possible quartzite fire-cracked rock; 1 English flint flake; 1 sand-tempered Potomac Creek cord-marked body sherd; 7 rocks, non-cultural (discarded)
N/A	344300	1351375	No Artifacts
N/A	344300	1351400	No Artifacts
N/A	344300	1351425	No Artifacts
N/A	344300	1351450	No Artifacts
74	344325	1351325	3 quartz shatter; 1 quartzite shatter; 3 rocks, non-cultural (discarded)
N/A	344325	1351350	No Artifacts
N/A	344325	1351375	No Artifacts
75	344062	1351278	1 rhyolite projectile point, possible Kanawha type
76	344088	1351203	1 sand-tempered Indian ceramic body sherd, probably Potomac Creek

**APPENDIX VII.  
PROFESSIONAL QUALIFICATIONS**

**ALEX J. FLICK**

**Education**

M.A. student, 2012-present  
Historical Archaeology, University of Massachusetts-Boston, Boston, Massachusetts.

B.A., 2010  
Political Science, St. Mary's College of Maryland, St. Mary's City, Maryland.

**Relevant Work Experience**

*AK Environmental*, Field Technician  
Phase I Survey—Williamsport, PA, July-August 2012

Phase I Survey—Susquehanna County, PA, April 2012

*TRC Environmental*, Field Technician  
Cattle Pass Phase II Survey—Martinsburg, WV, May 2012

Martin's Creek Phase I Survey—Allentown, PA, March 2012

*Zekiah Archaeological Project/St. Mary's College of Maryland*  
Windy Knolls/Zekiah Fort Project—Waldorf, MD, February-December 2011

Wicomico River Drainage Survey—*Various locations*, MD, May-July 2010

“His Lordship's Favor” Project—Waldorf, MD, May-July 2009

**Archaeological Field School**

St. Mary's College of Maryland West Africa Field Study Program  
Berefet, The Gambia, May-July 2012

**Papers Presented**

Council Travel and the Politics of Landscape in Proprietary Maryland.  
Presented at the 2012 Society for Historical Archaeology Annual Conference, Baltimore, MD.

“Att a Councell Held Att...”: Landscape, Politics, and Maryland's Council, 1637-1695.  
Presented at the 2010 annual meeting of the Middle Atlantic Archaeological Conference, Ocean City, MD.

**Memberships**

Middle Atlantic Archaeological Conference  
Society for Historical Archaeology

## SKYLAR A. BAUER

### EDUCATION

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Masters in Anthropology Projected Graduation 2014  
*Western Michigan University, Kalamazoo, MI*

Bachelor of Arts in Anthropology Graduated Spring 2011  
*St. Mary's College of Maryland, St. Mary's City, MD* Summa Cum Laude

Member of the Council for Maryland Archaeology, Member of Psi Beta Kappa and Lambda Alpha,  
Martin E. Sullivan Museum Scholar 2010-2011, Garry Wheeler Stone Award 2011

### FIELD AND LAB EXPERIENCE (seasonal)

---

2012 Field Intern, **Fort St. Joseph Archaeological Project (Niles, MI)**  
2012 Field Technician, **TRC Environmental (Martinsburg, WV)**  
2012 Field Technician, **AK Environmental (New Milford, PA)**  
2012 Field and Lab Technician, **Applied Archaeology and History Associates  
(Anne Arundel County, MD)**  
2012 Field Technician, **Greenhorne & O'Mara (Dubois and Emporium, PA)**  
2011 Field and Lab Supervisor, **Notley Hall (St. Mary's County, MD)**  
2010-2011 Field Technician, **Zekiah Archaeological Project (Charles County, MD)**  
2008-2011 Lab Assistant and Fellowship, **Historic St. Mary's City Archaeology Lab  
(St. Mary's City, MD)**  
2010 Field Technician, **Clohamon Castle (Clohamon, Co. Wexford, Ireland)**  
2010 Field Technician, **Anne Arundel Hall Archaeological Project (St. Mary's City, MD)**  
2009 Field School Student, **Historic St. Mary's City Archaeological Field School  
(St. Mary's City, MD)**

### WRITING EXPERIENCE

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Present Co-authoring Two Site Reports: Notley Hall (18ST074) and Hawkins Gate (18CH004).  
2010 Co-authored "The Clay Tobacco Pipes Recovered from Westwood Manor" found in the  
Archaeological Preliminary Site Report titled: *The Westwood Manor Archaeological  
Collection: Preliminary Interpretations* 2010, Alexander et al.

### CONFERENCE PRESENTATIONS

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2012 "Archaeology of 17<sup>th</sup>-century Politics Along Maryland's Wicomico River," Annual  
Society for Historical Archaeology Conference, Baltimore, Maryland.  
2011 "From Old Hall to Great Hall: Thomas Notley and His Life as Governor," Annual Middle  
Atlantic Archaeological Conference, Ocean City, Maryland.

## SCOTT MORGAN STRICKLAND

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<b>Summary</b>	<p>Experienced in Computer Aided Drafting (CAD), mapping, surveying, and data analysis.</p> <ul style="list-style-type: none"> <li>• Strong surveying background with more than 5 years of experience.</li> <li>• Extensive CAD experience, word processing, database entry &amp; analysis, and graphic design.</li> </ul> <p>Archaeological field &amp; lab experience with strong interest in colonial history.</p>
<hr/>	
<b>Education</b>	<p><b>M.Sc. Archaeological Computing/Spatial Technologies</b> <span style="float: right;">2012</span></p> <p><b>B.A. Sociology/Anthropology</b> <span style="float: right;">2008</span>  <i>St. Mary's College of Maryland, St. Mary's City, MD</i>            Concentration in Anthropology, member of Lambda Alpha, 3.4 G.P.A.</p> <p><b>Associates Degree in Social Sciences</b> <span style="float: right;">2006</span>  <i>College of Southern Maryland, La Plata, MD</i></p>
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<b>Career History &amp; Accomplishments</b>	
	<p><b>Historical Research and Patent Reconstruction, Wetherburn Associates LLC.</b> <span style="float: right;">2008-2009</span></p> <ul style="list-style-type: none"> <li>• Extensive research at the Maryland State Archives; including research in land records &amp; patents, wills, and colonial council &amp; court records.</li> <li>• Using Computer Aided Drafting software to reconstruct colonial patents.</li> <li>• Producing maps for the purpose of planning archaeological field work in Charles County Maryland.</li> </ul> <p>Researching the history of the Piscataway Indians in Charles County Maryland in order to locate important archaeological sites.</p> <p><b>Field Archaeologist, St. Mary's College of Maryland</b> <span style="float: right;">2008</span></p> <ul style="list-style-type: none"> <li>• Directed and Supervised Field Crew.</li> <li>• Lab work, including completing site survey forms as well as washing, labeling, and cataloging artifacts.</li> <li>• Co-Authoring Archaeological Site Report, titled: <i>The Search for the Court House at Moore's Lodge – Charles County's First County Seat</i>; primarily producing maps, graphics, and data analysis.</li> <li>• Co-Authoring Article in Maryland Archaeology (biannual publication by the Archaeological Society of Maryland), titled: <i>The Search for Charles County's First Courthouse</i>, vol. 43 no. 2.</li> <li>• Designed a display of artifacts for the general public in a county government building.</li> </ul> <p><b>Draftsmen and Field Technician, Offenbacher Land Surveying</b> <span style="float: right;">2003-2008</span></p> <ul style="list-style-type: none"> <li>• Drafted boundary surveys, site plans, ALTA-ACSM surveys, FEMA Flood Insurance Certification, and subdivision plans.</li> <li>• Worked with State and County government agencies for development approval.</li> </ul> <p>Extensive use of Computer Aided Drafting, GIS, and Electronic Transit instruments (Leica &amp; Topcon).</p>
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<b>Memberships &amp; Affiliations</b>	
	<ul style="list-style-type: none"> <li>• Member, Lambda Alpha (Anthropology Honors), Delta of Maryland</li> <li>• Member, Middle Atlantic Archaeological Conference</li> </ul>

## DANNY BRAD HATCH

### EDUCATION:

- Currently Enrolled Ph.D. Anthropology, University of Tennessee, Knoxville, Tennessee.  
Advisor: Barbara Heath
- 2009 M.A. Anthropology/Historical Archaeology, College of William and  
Mary, Williamsburg, Virginia. Advisor: Fred Smith. Thesis Title:  
“Bottomless Pits: The Decline of Subfloor Pits and Rise of African  
American Consumerism in Virginia”
- 2007 B.A. Magna Cum Laude, Historic Preservation, University of  
Mary Washington, Fredericksburg, Virginia. Advisor: Doug  
Sanford.

### TEACHING EXPERIENCE

- Fall 2011-Present Graduate Teaching Assistant, University of Tennessee, Knoxville.  
Knoxville, TN.

### PROFESSIONAL EXPERIENCE:

- 2003-Present Several field crew and supervisor positions, including Ferry Farm,  
Stratford Hall, Zekiah Fort, and Indian Camp.
- October 2008-July 2009 Staff Archaeologist/Lab Manager, Dovetail Cultural Resource Group.  
Fredericksburg, VA.

### PUBLICATIONS AND REPORTS (SELECTED):

- 2011 Bones, Pans, and Probates: A Faunal Analysis of the Newman’s  
Neck Site (44NB180). *Journal of Middle Atlantic Archaeology*  
27:75-91.
- 2011 A Report on the Faunal Remains from Wingo’s Quarter. Appendix  
to A Summary of Archaeology at Wingo’s Quarter. By Barbara  
Heath, Eleanor Breen, and Crystal Ptacek.
- 2009 Phase I Archaeological Survey of a 5-Acre Parcel (GPIN: 8188-  
67-7083) in the Town of Dumfries, Prince William County,  
Virginia. By Brad Hatch and Marco A. Gonzalez. Served as  
Principal Investigator.
- 2009 Archaeological Investigations on the Enchanted Castle  
(44OR0003) at Germanna, Orange County, Virginia: A Summary,  
1984-1995” By Kerri Barile, Sean Maroney, and Brad Hatch.
- 2009 Phase I Archeological Survey of the Proposed Buried Waterline  
Corridor Within the Spotsylvania Court House Battlefield,  
Spotsylvania County, Virginia. By Brad Hatch and Marco  
Gonzalez. Served as Principal Investigator.

### PROFESSIONAL ORGANIZATIONS

- December 2009-Present Member, Middle Atlantic Archaeological Conference
- April 2009-Present Member, Society for Historical Archaeology.
- July 2009-Present Member, Register of Professional Archaeologists

## JULIA ANN KING

### EDUCATION:

- Ph.D., 1990, Historical Archaeology, University of Pennsylvania, Philadelphia.  
M.A., 1981, Anthropology, Florida State University, Tallahassee.  
B.A., 1978, College of William and Mary, Williamsburg, Virginia.

### TEACHING EXPERIENCE:

- 2006-present, Associate Professor of Anthropology, St. Mary's College of Maryland  
St. Mary's City, Maryland, 20686.  
2008-present, Coordinator, Museum Studies Program, SMCM.

### PROFESSIONAL EXPERIENCE:

- 1996 to 2006: Director, Maryland Archaeological Conservation Laboratory, Maryland  
Historical Trust, St. Leonard, Maryland, 20685.  
1987 to 1996: Director of Research, Jefferson Patterson Park and Museum, St. Leonard,  
Maryland.  
1978-1986: Numerous field crew and field supervisor positions, including Flowerdew  
Hundred, Governor's Land, St. Augustine, St. Mary's City.

### OTHER POSITIONS:

- 2003 President, Society for Historical Archaeology ([www.sha.org](http://www.sha.org)).  
2003-2011 Member, President's Advisory Council on Historic Preservation  
([www.achp.gov](http://www.achp.gov)).

### GRANTS, AWARDS, and FELLOWSHIPS:

- 2005-2007 National Endowment for the Humanities, Division of Preservation and Access. :  
*Developing a Records Database for the State of Maryland's Archaeological Collections.*  
2002-2005 National Endowment for the Humanities, Division of Collaborative Research. *A  
Comparative Archaeological Study of Colonial Chesapeake Culture.*  
2002 Research Fellow, Henry Francis duPont Winterthur Museum, Winterthur, Delaware.  
2001-2003 National Endowment for the Humanities, Division of Preservation and Access.  
*Developing a Digital Catalog for the State of Maryland's Archaeological Collections.*  
2000 Andrew Mellon Fellow, Virginia Historical Society, Richmond.  
1999 Research Associate, The Colonial Williamsburg Foundation, Williamsburg, Va.  
1994 Fellow in Landscape Architecture Studies, Dumbarton Oaks, Washington, D.C.

### PROFESSIONAL MEMBERSHIPS and SERVICE:

- Society for Historical Archaeology, Member, Director (1997-2000), President (2003)  
Society for American Archaeology, Member  
Council for Northeast Historical Archaeology, Member, Director (1991-94, 1995-98)  
Southeastern Archaeological Conference, Life Member  
Register of Professional Archaeologists, Member  
American Anthropological Association, Member  
Associate Editor, *Historical Archaeology*

### PEER-REVIEWED PUBLICATIONS:

- 2012 *Archaeology, Landscape, and the Politics of the Past: The View from Southern  
Maryland.* University of Tennessee Press, Knoxville.

- 2009 Archaeological Collections, Government Warehouses, and Anxious Moderns: The Maryland Archaeological Conservation Laboratory. *Archaeologies, Journal of the World Archaeological Congress* 4(2):264-285.
- 2007 Still Life with Tobacco: The Archaeological Uses of Dutch Art. In Diana DiPaolo Loren and Uzi Baram, editors, *Between Art and Artifact: Approaches to Visual Representations in Historical Archaeology*. *Historical Archaeology* 41(1):6-22.
- 2006 Household Archaeologies, Identities, and Biographies. In Mary C. Beaudry and Dan Hicks, editors, *Cambridge Companion in Historical Archaeology*, pp. 293-313. Cambridge University Press, New York.
- 1997 Tobacco, Innovation, and Economic Persistence in Nineteenth Century Southern Maryland. *Agricultural History* 71(2):207-236.
- 1996 'The Transient Nature of All Things Sublunary': Romanticism, History and Ruins in Nineteenth Century Southern Maryland. In Rebecca Yamin and Karen Bescherer Metheny, eds., *Landscape Archaeology: Reading and Interpreting the American Historical Landscape*, pp. 249-272. Knoxville, University of Tennessee Press.
- 1994 Rural Landscape in the Mid-Nineteenth Century Chesapeake. In Barbara J. Little and Paul A. Shackel, eds., *Historical Archaeology of the Chesapeake Region*, pp. 283-299. Washington, D.C., Smithsonian Institution Press.
- 1984 Ceramic Variability in Seventeenth Century St. Augustine, Florida. *Historical Archaeology* 18(2):75-82.
- with Dennis B. Blanton, co-editors*
- 2004 *Indian and European Contact in Context: The Mid-Atlantic Region*. Gainesville, University Press of Florida.
- with Edward E. Chaney*
- 2004 Did the Chesapeake English Have a Contact Period? In Dennis B. Blanton and Julia A. King, eds., *Indian and European Contact in Context: The Mid-Atlantic Region*, pp. 193-221. Gainesville, University Press of Florida.
- 1999 Lord Baltimore and the Meaning of Brick Architecture in Seventeenth Century Maryland. In Geoff Egan and Ronald L. Michael, eds., *Old and New Worlds*, pp. 51-60. Oxford, CT, Oxbow Books.
- with Henry M. Miller*
- 1987 The View from the Midden: An Analysis of Midden Distribution and Composition at the van Sweringen Site, St. Mary's City, Maryland. *Historical Archaeology* 21(2):37-59.
- with Thao T. Phung and Douglas H. Ubelaker*
- 2009 Alcohol, Tobacco, and Excessive Animal Protein: The Question of an Adequate Diet in the 17th-Century Chesapeake. *Historical Archaeology* 43(2):62-83.