

The Werowocomoco (44GL32) Research Project: Background and 2003 Archaeological Field Season Results



College of William & Mary
Department of Anthropology
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Number 1



Commonwealth of Virginia
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Project web site

<http://powhatan.wm.edu/>

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The research at Werowocomoco has received vital assistance from numerous individuals and several institutions. The project would not have been possible without the continued support and encouragement of land owners, Bob and Lynn Ripley. Their active participation in the research has greatly strengthened our efforts, and we are most appreciative. By partnering with the Werowocomoco Research Group from the inception of the project, the Virginia Indian community has likewise played an essential role. We thank Reeve Tilley, former Chair of the Virginia Council on Indians, and the other members of the Council who met with us in November 2002 to initiate this partnership in an executive session of the Council. The members of the project's Virginia Indian Advisory Board, in particular, have given generously of their time to meet regularly with the research team, to serve as liaisons to the larger Virginia Indian community, and to offer thoughtful guidance to the Werowocomoco Research Group. Virginia Indian Advisory Board members include Jeff Brown (Pamunkey), Mark Custalow (Mattaponi), Kerry Canaday (Chickahominy), Lee Lockamy (Nansemond), Chief Anne Richardson (Rappahannock), Reggie Tupponce (Upper Mattaponi), and ex-officio advisors Chief Steve Adkins (Chickahominy), Chief Ken Adams (Upper Mattaponi), and Chief Emeritus Oliver Perry (Nansemond). We also thank Deanna Beacham, a member of the Werowocomoco Research Group in 2003 and 2004, for the considerable time and energy she contributed to the project.

Especially critical to the research was institutional support from the College of William & Mary, the Virginia Department of Historic Resources (VDHR), the Virginia Foundation for the Humanities (VFH), and the Virginia Council on Indians (VCI). The College's Vice President for Public Affairs, William Walker, was instrumental in organizing our May 2003 press conference which drew so much attention to the project. Provost Geoffrey Feiss, Interim Dean of the Faculty of Arts and Sciences Barbara Watkinson, and Anthropology Department Chair Tomoko Hamada provided financial support critical to the success of the William & Mary 2003 Archaeological Field School. Provost Feiss, Dean Watkinson, and Professor Hamada also played important roles in our efforts to develop partnerships with the Virginia Indian Community. Virginia Department of Historic Resources Director Kathleen Kilpatrick ensured from the beginning that the project receive all available departmental support possible. VDHR has provided essential funding for the fieldwork, analysis, and publication of the Werowocomoco research. We are also appreciative that the VDHR and the College supported the project through their web sites and publications which assisted us in presenting to the public the importance of Werowocomoco as a symbol of Virginia Indians and Virginia history. Funding for our public outreach during the early phases of the project was provided by the Virginia Foundation for the Humanities. David Beringer of the VFH has been particularly supportive of our efforts, taking the time to meet with the project team and to visit the site. VFH funding allowed us to engage in a series of public outreach efforts, including the creation of a web site (<http://powhatan.wm.edu/>).

The field research reported in this volume represents the efforts of the Werowocomoco Research Group (Martin D. Gallivan, E. Randolph Turner III, Danielle Moretti-Langholtz, David A. Brown, and Thane Harpole) working in conjunction with the William & Mary 2003 Archaeological Field School. The excavation crew included Werowocomoco Research Group members David Brown and Thane Harpole, who served as teaching assistants alongside Daniel Sayers of the William and Mary graduate anthropology program. Jennifer Osborne, also of the William and Mary graduate anthropology program, directed the field laboratory. Through their professionalism and dedication, Dan and Jen have made considerable contributions to our understanding of Werowocomoco's archaeological record. With Jen's continued role as database manager and artifact analyst she has contributed more to the archaeological research at the site than anyone outside the Werowocomoco Research Group. The Werowocomoco field crew included students enrolled in the Archaeological Field Methods class: Justin Arocho, Brendan Burke, Edward Dunlap, James Goodwin, Nicola Harrison, Aaron Henry, Virginia Horner, Rachel Istvan, Jacqueline Langholtz, Mindy Lechman, Erin Patterson, Jennifer Props, Michael Rodgers, Sarah Tolbert, Cynthia Volbrecht, and Matthew Whalen. We are greatly appreciative of the field school student's efforts during the 2003 summer at the Werowocomoco site. Through sometimes difficult field conditions, the students and staff succeeded in producing first-rate archaeological research. We appreciate the efforts of Brian Heinsman and Erin Patterson who produced the graphics for this report. Finally, we also thank Two Rivers Multimedia who provided video documentation of the project's inaugural season.

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CHAPTER 1

INTRODUCTION

Arriving at Werawocomoco, their emperour proudly lying upon a Bedstead a foote high upon tenne or twelve Mattes, richly hung with manie Chaynes of great Pearles about his necke, and covered with a great Covering of rahaughcums [racoons]: At his heade sat a woman, at his feete another, on each side sitting upon a Matte upon the ground were raunged his chiefe men on each side the fire, tenne in a ranke, and behinde them as many yong women, each a great Chaine of white Beades over their shoulders, their heades painted in redde, and [he] with such a grave and Majesticall countenance, as drave me into admiration to see such state in a naked Salvage, [. . .] hee kindly welcomed me with good wordes, and great Platters of sundrie Victuals, assuring mee his friendship, and my libertie within foure dayes . . . I requited his discourse, seeing what pride hee had in his great and spacious Dominions, seeing that all hee knewe were under his Territories. In describing to him the territories of Europe, which was subject to our great King whose subject I was, [and] the innumerable multitude of his ships. . . hee desired me to forsake Paspahgh, and to live with him upon his River, a Countrie called Capahowasicke: hee promised to give me Corne, Venison, or what I wanted to feede us, Hatchets and Copper wee should make him, and none should disturbe us. This request I promised to performe (Smith 1986a:53-57).

Even with its archaic spelling and unfamiliar phrasing, Jamestown colonist John Smith's *True Relation* offers a compelling sketch of his initial arrival at the Powhatan village of Werowocomoco and his introduction to Powhatan, the paramount leader or *Mamantowick* of the Powhatan chiefdom. Late in 1607, while exploring the Chickahominy River, Smith was captured by a hunting party of Pamunkeys, Mattaponis, Paspahghs, Chickahominies, Kiskiacks, and Youghtanunds led by Powhatan's brother Opechancanough. Opechancanough brought Smith before Powhatan at the chief's principal residence in Werowocomoco (Smith 1986a:91).

Werowocomoco, located on the north shore of the York River (then the Pamunkey River), served as the capital of the Powhatan polity that dominated much of coastal Virginia by the early seventeenth century and included a population of perhaps 15,000 Algonquian-speaking Natives. In the woods outside Werowocomoco, Smith underwent a conjuration ritual orchestrated by Powhatan priests and intended to divine colo-

nists' intentions. Upon entering Werowocomoco, Smith faced Powhatan, apparently the first Englishman to do so. Amidst a protracted series of events in December 1607 that included feasting, oration, and ritual, Powhatan's daughter Pocahontas reportedly rescued Smith from imminent execution by her father. Following this event Powhatan, also known as Wahunsenacawh, declared that he and Smith were now friends and Smith a subordinate chief. After Powhatan freed Smith, the English visited Werowocomoco on several occasions in 1608 and 1609. In 1609, Powhatan decided to distance himself from the English at Jamestown, moving west onto the upper Chickahominy River to Orapaks.

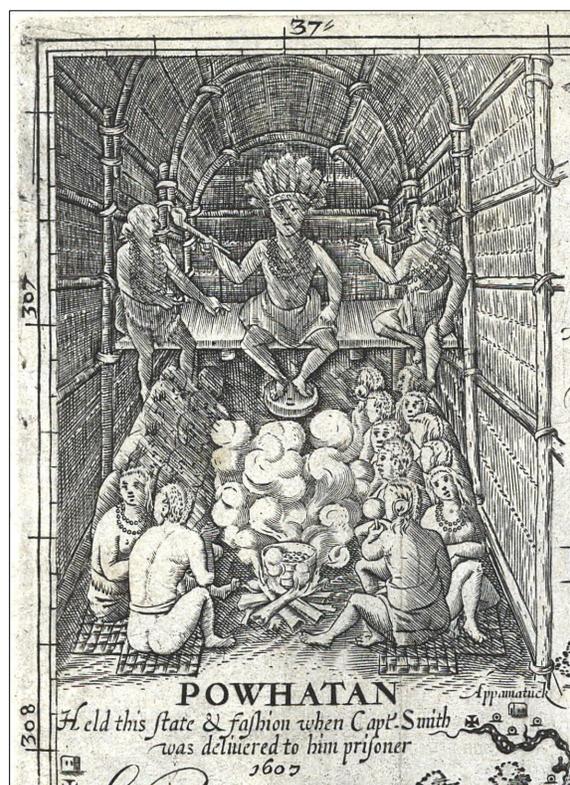


Figure 1-1. Inset from John Smith's (1986b) *Map of Virginia* depicting the interior of Powhatan's house at Werowocomoco.

Amidst these events of colonial contact, Natives and newcomers sought to influence one another through a

negotiated discourse of speech, ceremony, and exchange. Despite considerable scholarship aimed at explaining these events (e.g., Axtell 2001; Barbour 1964; Feest 1978; Rountree 1989, 1990; Williamson 2003), much remains to be learned regarding the cultural perspectives of Powhatan participants. Written accounts, such as those by colonists John Smith (1986a, 1986b, 1986c, 1986d), William Strachey (1953), and Henry Spelman (1998), offer invaluable evidence from this period, though these narratives are often tinged with a strong colonialist bias. Understanding the Chesapeake Contact period more fully requires detailed archaeological study of Powhatan settlements in an effort to consider Native culture history on its own terms.

Today, Werowocomoco represents a place with considerable significance for several communities. To archaeologists interested in chiefdom dynamics and the North American colonial encounter, the site represents a Native political center infused with social history leading up to and including colonial contact. From the historian's perspective, the village served witness to Contact period events at the roots of the colonial American experience.

To the general public, the site offers an entrée into the Native world of the Chesapeake, a world known mostly from the towering personalities of Powhatan (Wahunsenacawh) and Pocahontas and from pop culture references to their initial meeting with Smith at Werowocomoco. In fact, Smith's ostensible rescue by Pocahontas has now entered the realm of American folklore, in recent years providing the basis of popular histories (e.g., Price 2003), academic scholarship (e.g., Townsend 2004; Gunn-Allen 2003; Mossiker 1996), historical fiction (e.g., Vollmann 2001), and children's literature (e.g., Fritz 1987). Much of this recent interest in events at Werowocomoco was likely triggered by the international popularity of the 1995 Disney film *Pocahontas* and the legions of children, now young adults, raised on this story. The 2005 film *The New World*, directed by Terrence Malick and starring Colin Farrell, may broaden popular interest in this history as well.

The site also encompasses a historical setting that, for contemporary Virginia Indian communities, is charged with political authority and sacred power. Despite the growing recognition among archaeologists and historians that our research has a profound effect on descendant communities, sustained efforts by scholars to collaborate with Native Americans in eastern North America have been unusual or episodic. Virginia's Native communities' growing insistence that

their voices be included in historical accounts of the Chesapeake region has provided an unusual opportunity for collaboration tied to the Werowocomoco research. Recognizing this opportunity, the Werowocomoco Research Group has worked to develop a long-term research project accountable to and in close partnership with Virginia's tribes.

History of the Project

To establish the location of Werowocomoco, ethnohistorians (e.g., Tyler 1901; Rountree 1990:41) and archaeologists (e.g., Turner and Opperman 1993; McCary 1981) have compared early seventeenth-century maps of Virginia such as those associated with Tindall (1608), Zuñiga (1608), and Smith (1986b) with modern cartography. Though precise map projections of historic sites are fraught with difficulties, the overwhelming consensus among these scholars is that the Purtan Bay vicinity represents the most likely location of Werowocomoco. Similarly, early historical accounts are consistent with this location, including one by Smith (1986b:147) placing Pamunkey territory 25 miles upriver and the village of Kiskiack 10 to 12 miles down river. The core of Pamunkey territory was located some 25 miles west of modern-day Purtan Bay, beginning at West Point and extending further west up the Pamunkey River. Recent archaeological research conducted by the William and Mary Center for Archaeological Research (Underwood et al. 2003) places the village of Kiskiack just over 11 miles east of Purtan Bay at what is now the U.S. Naval Weapons Station in York County, again a close match with Smith's distances. Drawing on his repeated visits to the village, Smith (1986a:63) described Werowocomoco as 12 miles from Jamestown and beside a broad, shallow bay fed by three creeks -- a landscape that fits the Purtan Bay vicinity more closely than any other portion of the York River drainage.

Werowocomoco first appeared in the Commonwealth's archaeological inventory files as site 44GL32. In 1977, Virginia Commonwealth University archaeologist L. Daniel Mouer described the site as the "possible location of Werowocomoco" after finding Native American artifacts there. A brief survey by the Gloucester County Archaeological Project followed in 1978-79. Just over two decades later, in 2001, Fairfield Foundation archaeologists David Brown, Thane Harpole, and Anthony Smith visited the site and met with owners Bob and Lynn Ripley to discuss the 1978-79 survey. At that time, Lynn Ripley showed them a remarkable collection of artifacts she had amassed over the years as she walked her property. Recognizing the potential significance of this collection, Brown and Harpole contacted the Virginia Department of Historic

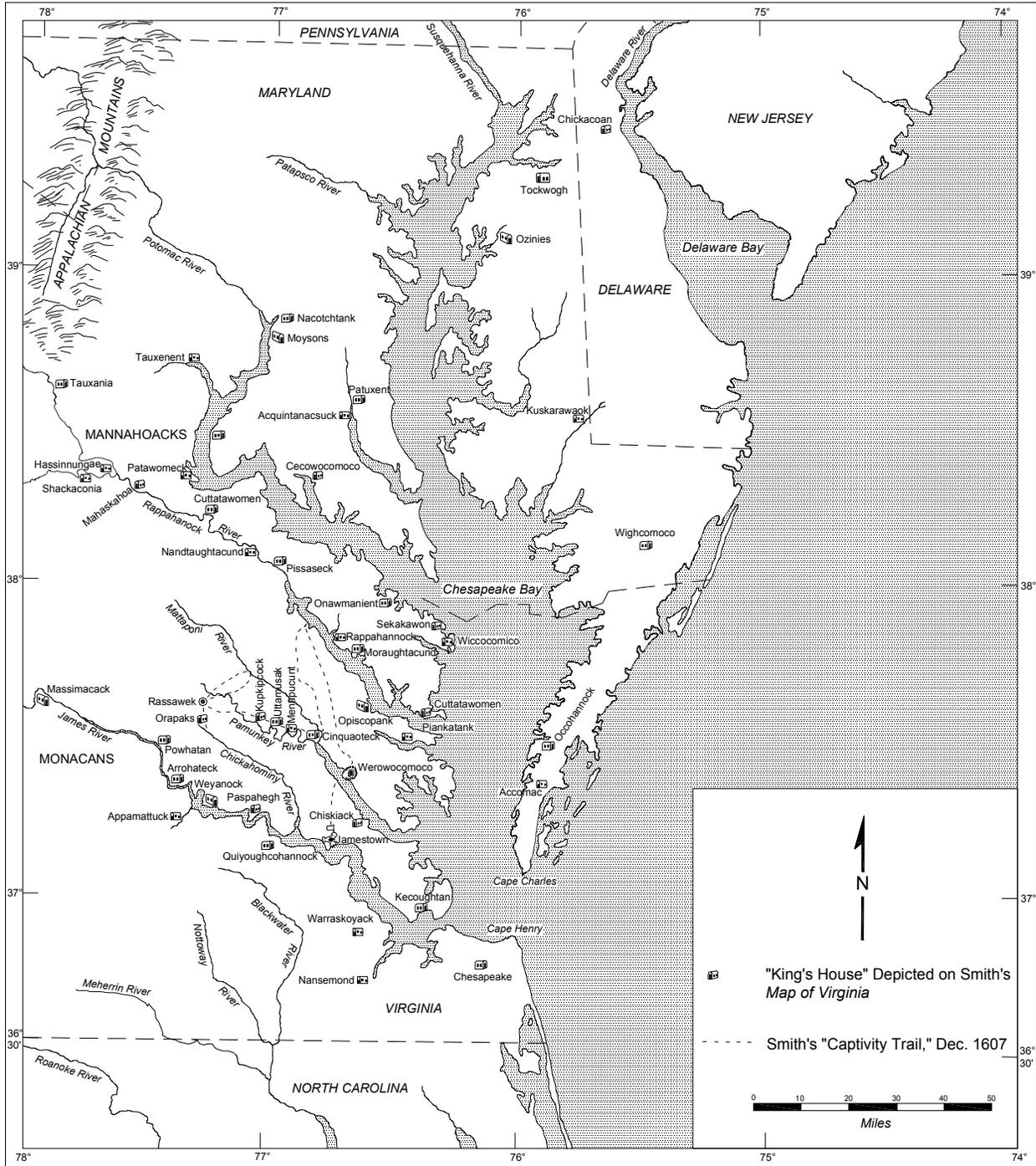


Figure 1-2. Map of Eastern Virginia, circa 1607, depicting principal native villages ("Kings' Houses on Smith's (1612) Map of Virginia) and Smith's 1607-1608 Captivity Route (taken from the Zuñiga (1608) Map).

Resources (DHR) in 2001. Shortly thereafter, Randolph Turner, Director of DHR's Tidewater Regional Office visited the site and confirmed that many of the artifacts dated to the Late Woodland/Contact periods (ca. A.D. 900 to the early seventeenth century). The sheer volume of Native American artifacts in the collection indicated a major village site.

With the support of the owners and assistance from DHR, Brown and Harpole conducted a comprehensive archaeological survey of the site, summarized in chapter 3. In 2002, the DHR, Brown and Harpole, the College of William and Mary, and the Virginia Indian community entered into a partnership and formed the Werowocomoco Research Group (WRG). In addition to Turner, Brown, and Harpole, members of the Werowocomoco Research Group include Martin Gallivan, an assistant professor at the College of William and Mary, and Danielle Moretti-Langholtz, Director of the American Indian Resource Center at the College of William and Mary. An archaeologist with research interests in the Late Woodland and Contact period Chesapeake, Gallivan serves as field director of the Werowocomoco project. Moretti-Langholtz has developed close ties to Virginia Indian communities in the context of oral history and ethnohistory projects spanning more than a decade. By adding a cultural anthropologist with long-standing relationships with the Virginia Indian community to the project team, the Werowocomoco Research Group has made a commitment to build partnerships with descendant Native communities.

Partnerships with the Virginia Indian Community

From its inception, the Werowocomoco Research Group has worked toward a new model of archaeological research on Native sites in the Chesapeake that includes close Native collaboration at every stage. With some notable exceptions, archaeological research in Virginia is generally conducted by academics, cultural resource managers, and avocationalists without the awareness or involvement of tribal communities. This is due partly to long-standing archaeological practice of working without tribal consultation and to the lack of Federal recognition for the Virginia tribes, eight of which have received formal recognition from the Commonwealth of Virginia. The WRG is hopeful that the Werowocomoco research may serve as a positive example of a nascent trend in Virginia archaeology toward the greater inclusion of Native voices.

With this goal in mind, in November of 2002, the WRG met with the Virginia Council on Indians (VCI), a state advisory board on Indian affairs in the Com-

monwealth, to inform the Council that we had identified a site we believed to be Werowocomoco. The WRG requested that our presentation be received in a VCI executive session to ensure that information pertaining to the project be presented to tribal leaders for each of the eight state recognized tribes prior to any public announcement about the location of the site and future investigations. During the WRG presentation we discussed our survey results and assessment of the site's significance. We also sought the advice of the VCI in arranging a meeting with tribal leaders so that they would learn of the site directly from the research team and before any media coverage appeared. Additionally, we introduced the Council to the members of the research group as well as Lynn Ripley, and outlined a long-term plan to study Werowocomoco with the close involvement of the Native community. The Council, under the leadership of Reeva Tilley (Rappahannock Tribe) expressed their support for the project and offered important guidance on future Native involvement. These discussions included plans for a subsequent visit to the site and for the formation of an all-Native advisory board to the research team.

In February 2003, the Werowocomoco Research Group presented a detailed project proposal to tribal chiefs, members of the Virginia Council on Indians, and other representatives of Virginia's state-recognized tribes in meetings held at the College of William and Mary. College officials, including then Dean of the Faculty Geoffrey Feiss and Anthropology Department Chair Tomoko Hamada, offered their support for the project. Presentations to the community outlined current understanding of the site and its significance from the point of view of academic researchers. The research team discussed a multi-year research design for the site centered on William and Mary field schools. Together with the property owners, the WRG then hosted an event at the site, giving community representatives the chance to see the location first-hand. Representatives from the Pamunkey, Upper Mattaponi, Chickahominy, Eastern Chickahominy, Nansemond, Rappahannock, and Monacan tribes attended the meetings. During these meetings Lynn Ripley asked that the Virginia Indians consider Werowocomoco as a place where members of their communities were always welcome. The research team listened carefully to the tribal representatives as they discussed their own perspectives on Werowocomoco. These perspectives varied, though many included a powerful connection to Werowocomoco as the historic center of the Powhatan chiefdom and as a modern place for renewing Virginia Indians' influence on representations of the Native past. Others encouraged us to pursue research that

focuses on the power and social complexity of the Powhatan chiefdom.

Representatives from six of the Powhatan descendent communities subsequently formed an all-Native Virginia Indian Advisory Board to guide WRG's efforts. Virginia Indian Advisory Board members include Jeff Brown (Pamunkey), Mark Custalow (Mattaponi), Kerry Canaday (Chickahominy), Lee Lockamy (Nansemond), Chief Anne Richardson (Rappahannock), Reggie Tupponce (Upper Mattaponi), and ex-officio advisors Chief Steve Adkins (Chickahominy), Chief Ken Adams (Upper Mattaponi), and Chief Emeritus Oliver Perry (Nansemond). The Virginia Indian Advisory Board (VIAB) has since met regularly with the WRG, receiving updates and reports on the research and advising the research team as we have formulated our research goals and policies. In keeping with the goals of our partnership the research team shares all information we have on the project with the advisory board, including minutes of all meetings and financial reports of all activities. The advisory board has served as the critical linkage between the research team and the tribal communities. Among other decisions, the VIAB has been central to the creation of a policy for the accidental discovery of human remains on site, a policy that involves close consultation with the Native community. In response to the Ripleys' invitation, the advisory board has also facilitated regular Native visitation to the site. These visits have included a week-long open house for members of the Virginia Indian community to visit the site during the archaeological field season.



Figure 1-3. William and Mary Dean of the Faculty Geoffrey Feiss welcomes representatives from the Virginia Indian Community to the College.

Archaeological Investigations at Werowocomoco

The following volume describes the results of our first season of archaeological excavations at the

Werowocomoco site (44GL32) in a project that seeks to develop a new model of archaeological research in Virginia predicated on close collaboration with Native communities. To date (through 2006), we have completed a comprehensive shovel-test survey and four field seasons confirming the site's research potential. Our research has been oriented toward two broad themes: 1) a community-oriented perspective on the development of the Powhatan chiefdom from A.D. 1200 - 1609 and, 2) a study of the material consequences of the Chesapeake colonial encounter from the vantage of a Native center. Thus far, our field research indicates that the site was a remarkably large village circa 1607 containing evidence of substantial landscape modification dating to the Late Woodland (AD 900 - 1607) and Contact (AD 1607 - 1646) periods.

Our study focuses on questions of the social dynamics of chiefdom polities. Anthropological archaeologists' "political" models of chiefdoms generally emphasize the means through which chiefly elites came to dominate power relations through control of the political economy, military power, and ideology (Earle 1997; Drennan and Uribe 1987). Recent chiefdom literature focuses on the elite strategies and social processes creating permanent, centralized decision-making authority. With the shift in archaeology away from positivist approaches and toward humanistic perspectives, researchers have begun to emphasize chiefdom polities' historical trajectories and the hegemony, domination, and subordination inherent in these histories (Emerson 1997:18). Interpretations of North American chiefly centers such as Cahokia (e.g., Pauketat 1994) demonstrate that elites often recognized the ideological power of place, transforming settlements into politicized locations by segmenting sacred space and by constructing monumental architecture requiring massed labor. Such studies often begin with the notion of a "cultural landscape" as both an ideologically-motivated representation of the world (Cosgrove 1984) and a physical expression of meanings negotiated in the past (Ucko and Layton 1999).

In addition to being politicized spaces, chiefly centers often represented key nodes in a regional political economy dominated by elites. Prestige-good exchange models (e.g., Friedman and Rowlands 1977; Earle 1991) highlight an association between exotic, ritually-charged materials and elites within chiefdom societies. Prestige goods may serve as status markers symbolizing rank or wealth items distributed to meet social obligations (Emerson 1997:33). These items are thus central to the reproduction of hierarchical social orders in many North American chiefdoms. Such strategies of "wealth finance" are often complemented by strate-

gies of “staple finance” whereby elites induce increased production of subsistence goods that are in turn expropriated (D’Altroy and Earle 1985).

With these themes in mind, our investigations have focused on evidence of the settlement’s spatial organization, exchange relations, and subsistence patterns during the periods immediately before and after Jamestown’s settlement. Our intent is to contribute to an understanding of how social power came to be concentrated within and exercised from Werowocomoco. We are particularly interested in addressing a related set of

the questions: Did Powhatan and the residents of Werowocomoco remake the village’s cultural landscape when he moved there prior to 1607? What does Werowocomoco’s archaeological record indicate regarding exchange of powerful prestige goods before and after Jamestown’s settlement? Is there evidence that the residents at Werowocomoco intensified production of maize and other staples during the Late Woodland / Contact period transition? Does Werowocomoco’s archaeological record include evidence of status differences or hierarchical social orders?

CHAPTER 2

WEROWOCOMOCO IN THE CONTACT PERIOD: COLONIAL NARRATIVES, ETHNOHISTORY, AND ARCHAEOLOGY

The following discussion places the recent excavations at Werowocomoco in the larger context of ethnohistorical and archaeological research on the Contact period Chesapeake. The chapter begins with a narrative of events that occurred at Werowocomoco as reported by English colonists before turning to ethnohistorical and archaeological research concerning this history. This summary draws on sources that largely exclude a Virginia Indian perspective. Our hope is that as the Werowocomoco research develops, we will be able to incorporate archaeological information and contemporary discourse that offers more of the Native view on the Chesapeake colonial encounter. Though the English colonists' experiences at Werowocomoco were limited largely to six events that occurred from December 1607 through sometime in 1609, a close reading of the documentary records indicates that the village represented a central place in the Powhatan political and spiritual world.

Our reading of these texts emphasizes references to Werowocomoco's location, the colonial entanglements that began there, and the materiality of this interaction. By "materiality" we refer to the ways in which early colonial connections were expressed materially (e.g., through exchanged items) and influenced by the meanings associated with some categories of material culture (e.g., copper ornaments and maize kernels). As an exercise in historical anthropology, our research begins with the events of colonial contact witnessed by English colonists. We are, of course, mindful of the personal and rhetorical elements that shaped the Jamestown accounts as well as the English colonialist lens that influenced their creation. Our understanding of Werowocomoco's history emphasizes the village as an origin point of colonial entanglements that were marked by myriad Native responses and the newly-hybridized cultural practices of Natives and newcomers alike. Such a reading differs in subtle but important ways from a perspective that emphasizes the village as a site of fleeting encounters between independent, bounded cultural wholes (Silliman 2005).

During the early seventeenth century the Native political dynamics of the Powhatan world of *Tsenacommacah* (i.e., the Virginia Tidewater) were centered on the overwhelming authority of the individual named Wahunsenacawh or Powhatan. Wahunsenacawh was

known as the *Mamanatowick* or "great king" of Tidewater Indians referred to by the English (and by Wahunsenacawh himself) as "Powhatans." The Powhatans included those Algonquin speakers of Tidewater Virginia that came under the political influence of the *Mamanatowick* during the late sixteenth century, the years immediately preceding the settlement of Jamestown. Residing in dozens of settlements and grouped into about thirty-two political districts, approximately 15,000 Powhatans lived in settlements that lined the banks of the principal rivers of the Virginia Coastal Plain circa 1607 (Rountree and Turner 2002). Their mixed horticultural-foraging subsistence economy centered on riverine villages occupied for most of the year. Households dispersed during the winter months for hunting camps located in the interior.

Powhatan social organization was defined by sharp inequities of status, authority, and wealth that included *weroances* whom the English described variously as kings, commanders, or chiefs. As the *Mamanatowick*, Wahunsenacawh's authority permeated a polity stretching from the James River to the Potomac's southern shores and from the Fall Line to the Eastern Shore (Turner 1993). By the height of his power, Wahunsenacawh had moved from his natal village at the falls of the James River to Werowocomoco on the York. This relocation may have been due in part to Werowocomoco's central location vis-à-vis the river systems of the Chesapeake (Gallivan 1997). Other factors tied to the unusual cultural landscape of Werowocomoco that apparently drew Wahunsenacawh to Werowocomoco are beginning to emerge from our archaeological study of the site as well. From Werowocomoco Wahunsenacawh dominated a social network through which gifts, tribute, and power flowed.

Given the ethnohistorical indications of a three-tiered hierarchy incorporating the *Mamanatowick*, *weroances* with regional authority, and those with localized power, the Powhatans appear to have been an almost archetypal complex, or paramount, chiefdom (Rountree and Turner 1998; Earle 1978; Wright 1984). As envisaged in Smith's (1986b) *Map of Virginia*, the Powhatan polity consisted of "kings' houses" (depicted with icons of *yihakans* – Native houses) where

weroances resided, and “ordinary houses” (depicted as points surrounded by circles) along Coastal Plain rivers (Figure 2-1). Tribute in the form of surplus staples flowed from commoners to *weroances* and from *weroances* to the *Mamanatowick*. *Weroances* dominated exchange of wealth items (i.e., prestige good exchange) through which copper, shell, puccoon, pearls, and other items circulated (Rountree 1993). These materials expressed elite social status due to their color symbolism, rarity, production process, and sources at the edges of *Tsenacommacah* (Gallivan and Klein 2004). In mortuary rituals reserved for *weroances*, the Powhatans interred remains with such prestige goods in temples constructed for this purpose.

Thus, the documentary records suggest that the Powhatans of the early seventeenth century Virginia Tidewater comprised a complex chiefdom structured by social stratification, political hierarchy, and a political economy dominated by elites (Rountree and Turner 2002, 1994; Rountree 1989; Turner 1976; Potter 1993; Binford 1964). Recent ethnohistorical and archaeological research (e.g., Williamson 2003; Gallivan 2003; Mallios 1998; Gleach 1997) building on earlier studies and summarized below indicates that the Werowocomoco project arrives at a time in Powhatan scholarship when new interpretive possibilities

abound. A close reading and analysis of the ethnohistorical accounts represents a critical departure point for this effort. The following traces the Jamestown narratives as they touched Werowocomoco before turning to recent ethnohistorical and archaeological research focused on the Virginia Tidewater. Ultimately, the archaeological record offers the greatest potential to yield new information about Powhatan cultural practices and representations during the early colonial Contact period.

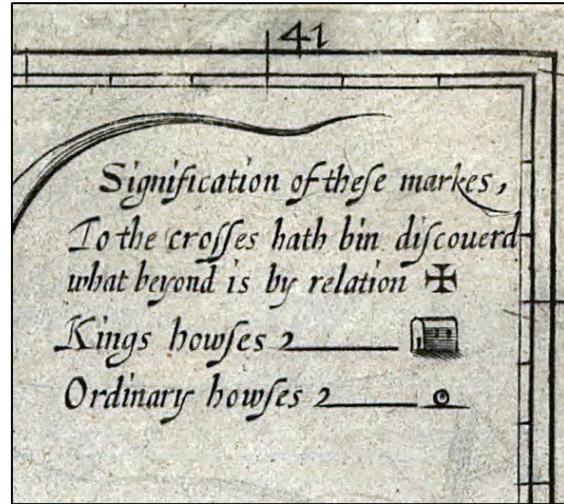


Figure 2-1. Key from Smith's Map of Virginia.

Arriving at Werowocomoco

Under the command of Christopher Newport, the Virginia Company's fleet of three ships arrived at the mouth of the Chesapeake Bay in late April 1607. Shortly thereafter a group of Indians briefly attacked the English from shore (Percy 1998:90; Smith 1986a:27). Four days later a party of colonists visited the village of the Kecoughtans on the James River and was received cordially. The events of spring 1607 included a series of encounters, some violent, others peaceful, that ushered in the early seventeenth-century Contact period. Intermittent contacts between Indians and Europeans during the shadowy sixteenth century had already shaped Powhatans' perceptions of the English colonists and, likewise, English colonists' expectations of the Powhatans. In addition to poorly-documented visits by European vessels during this century, close, and ultimately violent encounters surrounded the failed Spanish Jesuit mission to Virginia of 1570 - 1571 and the unsuccessful Roanoke colony of the 1580s in the nearby Outer Banks. On May 14, 1607 the Jamestown colonists started constructing

James Fort in the territory of the Paspaheghs. Over the next half century the Jamestown colony would struggle with starvation, infighting, unstable leadership, and relations with diverse groups of Virginia Algonquians that alternated between violence and alliance, tolerance and manipulation, cohabitation and apartheid. Eventually the colonists discovered a means of economic viability in tobacco production, becoming a successful royal colony that expanded outward from Jamestown, consuming Native lands in the process. The Powhatans' efforts to resist this gradual invasion, including coordinated attacks in 1622 and again in 1644, ultimately failed.

During the colony's initial years, though, this outcome seemed far from likely. Colonists' accounts imply that on many occasions Wahunsenacawh and other Native leaders held the upper hand. Heavily reliant on Native generosity and on unreliable supplies from England, the colonists struggled. Smith's (1986a, 1986b, 1986c, 1986d) four published accounts of his

experiences in Virginia from 1607 – 1609 describe events that swing from the horrific to the comedic to the heroic. It is largely from Smith's accounts that scholars draw an understanding of events that occurred at Werowocomoco, beginning with his captivity narrative of December 1607 and ending with the 1609 departure of Wahunsenacawh from the village. Smith described these events several times, producing accounts that are both detailed and inconsistent. Smith took pains to portray himself as a man of action capable of producing results. Despite indications that he inflated his own importance and misconstrued elements of the Powhatan society, he emerges as a savvy culture broker capable of adapting to novel circumstances.

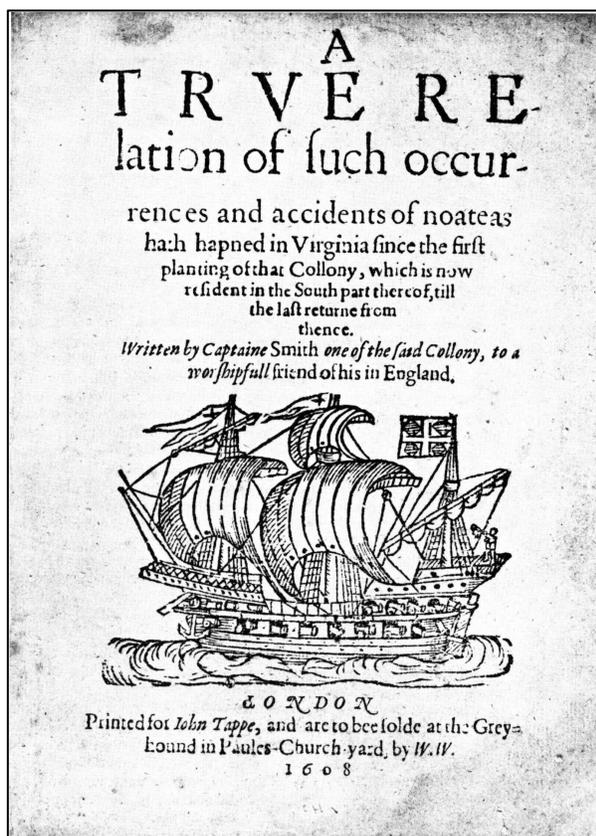


Figure 2-2. Cover page from Smith's *True Relation*, his earliest account of events in Virginia.

Smith was well prepared to do so. He originally left England in 1596 at age 16 to volunteer in France with forces battling for Dutch independence from Spain. Four years later he joined Austrian forces to fight the Ottoman Turks. Promoted to "Captain" while fighting in Hungary, Smith was subsequently wounded in battle, captured, and sold as a slave to the Turks. Smith's (1986e) narrative of this experience recounts his escape by beating his owner to death before mak-

ing his way back to England in 1604. As a proud and boastful man, Smith wrote of events that reflect his exploits in a heroic light. The notion that Smith embellished his accounts for dramatic effect is implied by the four separate instances in which young women appeared and saved him at moments of peril, with the most famous of these occurring at Werowocomoco (Townsend 2004:53). Read with an eye focused on Native cultural practices, though, the accounts offer a good starting point for considering events at Werowocomoco.

The Captivity Narrative

The earliest, and best known, events at the village of Werowocomoco began during December of 1607 when Smith was captured, brought to the village, and released after a period of captivity lasting roughly four weeks (Smith 1986a:43-59, 1986c:212-213, 1986d:146-151). Nearly half of the original colonists were dead by this time as a result of starvation, disease, and hostilities with the Powhatans. Wahunsenacawh was apparently following the colony's struggles to acquire food carefully, sending gifts of maize and other provisions at strategic moments that kept at least some of the colonists from starvation. He received copper objects, glass beads, and iron hatchets in return. In a contentious move with Smith at the center, Edward Wingfield had recently been replaced as president of the colony's ruling council. The new president, John Ratcliffe, placed Smith in charge of relations with the Natives.

On December 10th Smith took nine men and the colony's shallow westward five miles up the James to the mouth of the Chickahominy River. His principal intention was to explore the Chickahominy River for a possible route to the Pacific, though it is also clear Smith sought to reconnoiter as much of the surrounding territory as possible. After Smith's party passed a series of villages, the densely populated Moysenec peninsula, and the village of Apocant 50 miles from the Chickahominy's mouth, the river became too narrow for the shallow. Smith arranged for two men from Apocant to guide him and two other colonists, Thomas Emry and John Robinson, further upriver.

The next day the five men set forth in a canoe. After traveling another 12 miles upriver, the group came to shore to eat. In the meantime and unbeknownst to Smith, the men he had left behind at Apocant were attacked by a group of Chickahominies when they went ashore. One of the colonists, George Casson, was captured, tortured, and killed. Upriver, Smith was on foot with one of his guides and separated from Emry and Robinson when he heard a loud cry

from their direction. Thinking that his guide had betrayed him, Smith trained his gun on the man, who immediately urged him to run. At this point Smith was struck with an arrow in the leg. After returning fire with his pistol several times, new attackers appeared, sending volleys of arrows in his direction. Seizing his guide as a shield, Smith was immediately surrounded by a force of 200 Natives led by Opechancanough, the Pamunkey *weroance* and brother of Wahunsenacawh. The guide shouted that Smith was a leader of the English and therefore should not be killed. A standoff ensued as Smith demanded that he be allowed to return to the canoe while Opechancanough insisted that Smith lay down his arms or be killed just as his two compatriots had already been slain. This ended when Smith, still holding his guide, fell into the mud and became stuck. Smith promptly threw down his weapon and surrendered.

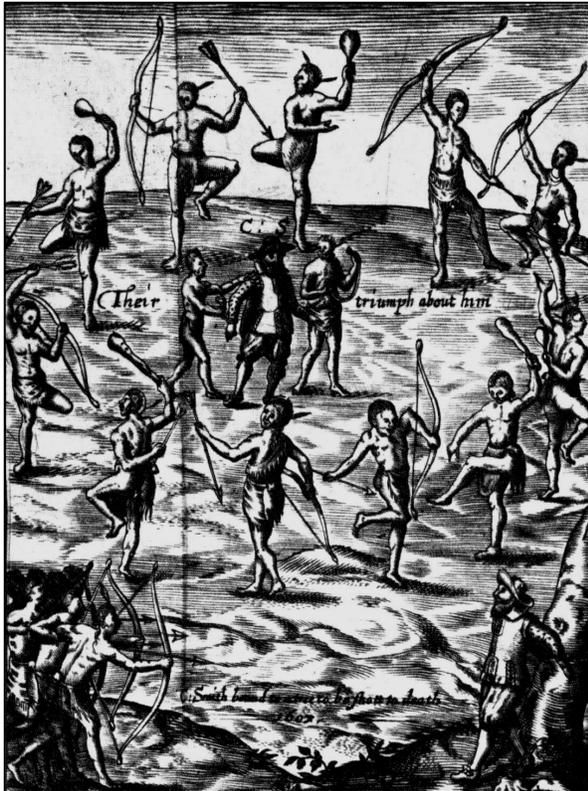


Figure 2-3. Inset from engraving by Robert Vaughan accompanying Smith's (1624) *Generall Historie of Virginia, New-England, and the Summer Isles*.

Brought before Opechancanough, Smith pulled out his compass and began to explain its use and the motion of planets in the solar system. This effort to impress and mystify Opechancanough apparently drew from the experiences of the Roanoke colonists years earlier (Barbour 1986:102). Smith was then conducted to a hunting camp named Rassawek six miles from

where he was seized. At the camp the Powhatan men formed a ring and performed a dance. Smith noted that the men were painted red on their heads and shoulders with animal skins on their arms and birds' wings tied to their hair. After being fed well, Smith conversed with Opechancanough about English ships, James Fort's defenses, and a place called Ocanahonan where men wore English clothes—possibly a reference to refugees from the Roanoke colony. Opechancanough agreed to Smith's request that he be allowed to write a letter to Jamestown about his status. In the letter, which was brought to Jamestown by some of Opechancanough's men, Smith mentioned his fear of an imminent attack on the fort. Subsequently Smith was conducted along a circuitous route that included a series of locations along the Pamunkey and Mattaponi rivers where he was brought before several *weroances*. At one settlement he was asked to demonstrate the effectiveness of his pistol from a distance beyond its range. In order to hide its limitations, Smith covertly broke the weapon. At the village of Toppahannock on the Rappahannock River Smith was presented to the *weroance* in order to determine whether Smith was in fact the European who had previously killed a Toppahannock leader. On finding that he was not the man, the Powhatans turned toward Werowocomoco.

Before entering Werowocomoco Smith faced a ceremony apparently intended to determine the colonists' intentions (1986d:149). This ceremony occurred either sometime prior to his tour of Powhatan villages or during his stay at Pamunkey, Smith's various accounts are inconsistent on the timing. Smith was placed before a fire in a longhouse, his guards leaving his side. A "great grim fellow" entered painted black, his head adorned with stuffed snake and weasels surrounded by feathers. The man, evidently a Powhatan priest, began his invocation and surrounded the fire with a circle of corn meal. Six more priests entered the structure in groups of three, painted half black and half red with white paint around their eyes. Next the priests sat down with Smith. After singing a song, the man Smith identified as the chief priest began to encircle the corn meal with two rings of corn kernels, all the while alternating between short speeches and songs (see Figure 2-4). The priests then added short sticks between the rings of corn kernels. They continued the ceremony for three days, resting and eating only during the evenings.

In a welcome bit of exegesis, Smith (1986d:150) offers his understanding of these events: the ceremony was a means of determining whether Smith intended the Powhatans any harm. As a cosmological map of the Powhatan world, the circle of meal stood for

Tsenacommacah, the Powhatans' domain. The circles of corn represented the edge of the ocean and the sticks represented the colonists' country. Smith notes that the Powhatans' imagined the world to be flat and round, like a platter, with Tidewater Virginia in the center. Smith was then brought before Opitchapam, Wahunsenacawh's brother. After a feast, Smith's captors then took him to Werowocomoco where he confronted the *Mamanatowick* for the first time.

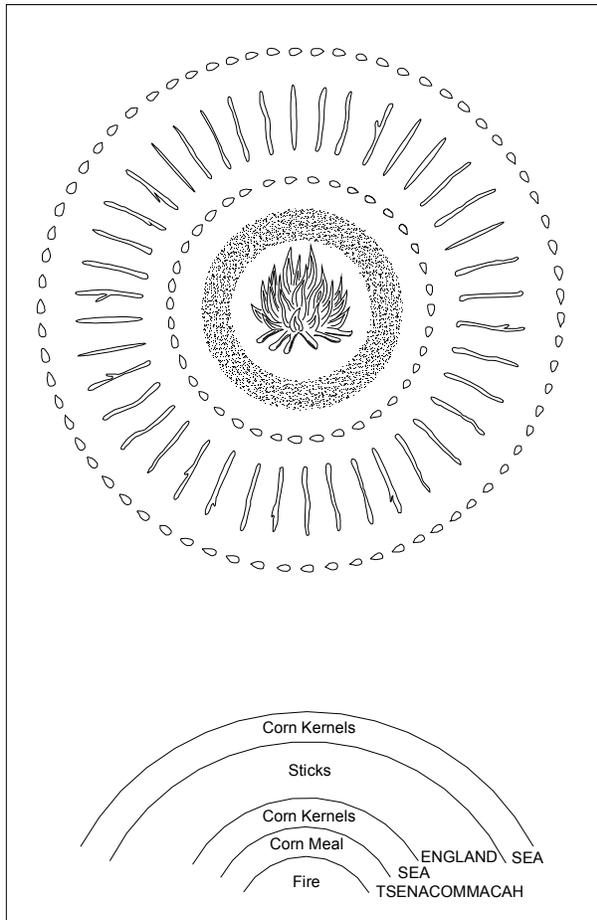


Figure 2-4. Powhatan "Divination" Circle and Exegesis, modified from Fausz 1985:240.

Arriving at Werowocomoco, Smith reported that he was met by 200 "courtiers" who studied him closely as Wahunsenacawh prepared to receive him (1986d:150). Elsewhere Smith numbered the "able" male population of Werowocomoco at 40, a relatively small number compared to other districts Smith visited (Smith 1986c:147, 1986d:104). Smith was eventually taken to Wahunsenacawh's house where he met the *Mamanatowick* and his impressive retinue of men and women. The length of the *Mamanatowick's* residence impressed Smith (1986d:126), stretching as it did some

30 to 40 yards on the long axis. Other colonists confirmed that the houses of chiefs were broader and longer than those of ordinary Powhatans (e.g., Spelman 1998:487).

In his original account (1986a) Smith describes events at Werowocomoco as including feasting and a series of conversations between the *Mamanatowick* and his captive. When Wahunsenacawh inquired as to why the colonists had come, Smith replied that they had been driven by Spanish enemies, bad weather, and damaged vessels to the area. His recent exploration, Smith explained, was aimed at discovering a passage to the west and at avenging the death of one of the colonists at the hands of the Monacans, enemies of the Powhatans. Wahunsenacawh responded by describing the coastal region, *Tsenacommacah*, under his command and the people within and around these domains. Smith answered with an account of the territories of Europe and the ferocity of Captain Newport, Smith's "father." Wahunsenacawh then insisted that Smith and the English leave Jamestown and move their settlement to Capahosic, downstream of Werowocomoco. Wahunsenacawh would see to it that the colonists were fed and protected if they followed these instructions and provided Wahunsenacawh with hatchets and copper. Smith was then released and escorted back to Jamestown.

In a later version of these events published in 1624 as part of the *Generall Historie* Smith added an account of his "rescue" by Pocahontas from execution by Wahunsenacawh. Considering the amount of attention that has been paid this event, it is remarkable how little Smith wrote about it. Smith refers to himself in the third person:

[H]aving feasted him after their best barbarous manner they could, a long consultation was held, but the conclusion was, two great stones were brought before Powhatan: then as many as could layd hands on him, dragged him to them, and thereon laid his head, and being ready with their clubs, to beate out his braines, Pocahontas the Kings dearest daughter, when no intreaty could prevaile, got his head in her armes, and laid her owne upon his to save him from death: whereat the Emperour was contented he should live to make him hatchets, and her bells, beads, and copper; for they thought him as well of all occupations as themselves (Smith 1986d:151).

Two days later Smith experienced a final ceremony involving the *Mamanatowick* before being released. Wahunsenacawh brought Smith to a large

structure in the woods and sat him before a fire. Soon thereafter Wahunsenacawh appeared from behind a mat in the structure with two hundred others, all painted black. Wahunsenacawh approached Smith, promising friendship and instructing him to obtain two cannons and a grindstone at Jamestown as recompense for the territory of Capahosic. Wahunsenacawh declared that he would “for ever esteeme him [i.e., Smith] as his sonne Nantaquod” (Smith 1986d:151). Smith departed for Jamestown soon thereafter.

Wahunsenacawh Meets Nantaquod’s Father

In February 1608 the Jamestown colonists received word from Wahunsenacawh that he wanted to meet Smith’s “father” Newport (Smith 1986a:63-79, 1986c:215-217). Newport and Smith soon left by boat for Werowocomoco with 30 to 40 men. Arriving at Werowocomoco, Smith led 20 armed men ashore to revisit the *Mamanatowick* while Newport remained behind. Smith (1986a:63) offers a brief description of Werowocomoco’s setting at this point in the narrative. Werowocomoco was situated on a bay fed by three creeks. The bay itself was “all ooze” for a mile and a half. As Smith and his men attempted to enter the village, they found themselves mistakenly on one of the three creeks located within a mile of the village itself. Smith was then guided into the village by one of Wahunsenacawh’s sons.

Upon arriving at Wahunsenacawh’s house, Smith gave the *Mamanatowick* a suit of red cloth, a white greyhound, and a hat. Three of his “nobles” accepted the gifts with speeches of alliance and friendship. Wahunsenacawh inquired as to Newport’s location, and Smith replied that he would arrive the following day. When invited inside to eat, Smith warily allowed his men to enter the structure in pairs only. Wahunsenacawh then asked Smith and his men to lay down their arms, noting that as his subjects, this was expected. Smith countered that only enemies would demand such an action. In an apparent effort to assure Wahunsenacawh, Smith explained that the colonists’ planned to hand over a boy to live among the Powhatans. Smith also offered to subjugate the Monacans and Susquehannocks for Wahunsenacawh. This evidently pleased the *Mamanatowick*, and he declared Smith to be a Powhatan *weroance*. The colonists were no longer to be considered *Tassantasses* (strangers) or *Paspaheghs* (the territory in which Jamestown was located) but Powhatans. As Powhatan’s people, the colonists would be allowed to have corn, women, and land.

Smith then spent the evening in one of Wahunsenacawh’s lodges, feasting and conversing with Wa-

hunsenacawh. The following day, Wahunsenacawh brought Smith to the river and, pointing to his canoes, described the system of tribute through which he received shell beads, copper, and deer skins. Seeing that Newport was coming ashore, Wahunsenacawh left Smith so that he could receive Newport at his house. Upon meeting Wahunsenacawh, Newport offered to have Thomas Savage live with Wahunsenacawh as his son. When Wahunsenacawh repeated his request that the colonists lay down their arms, Newport sent his men back to the water. This occurred despite Smith’s objection to their retreating the considerable space from Wahunsenacawh’s residence to the water, a distance that Smith (1986a:69) described as “thirty score.”

On their third day at Werowocomoco, Newport began to trade with Wahunsenacawh, seeking to obtain food for hatchets and copper pots. Objecting to the idea of haggling, Wahunsenacawh demanded that Newport lay out all of the items the English brought for trade. Wahunsenacawh, as the *Mamanatowick*, would choose what he wanted and reciprocate with corn as he saw fit. Newport went along with this arrangement and received an unimpressive four bushels of corn from Wahunsenacawh. Annoyed at Newport’s perceived ineptitude at negotiating with Wahunsenacawh, Smith pulled out some blue beads. Wahunsenacawh demanded that Smith offer the beads in trade, but Smith answered that they were far too valuable for this. Piquing Wahunsenacawh’s interest in the beads, Smith was eventually able to obtain 200 – 300 bushels of corn in return for the beads. On the fourth day at Werowocomoco, Smith had difficulty getting back to his ship. Becoming mired in the ooze once again, Smith waited until midnight for the tide to rise.

During the next days the colonists discussed with Wahunsenacawh plans for a joint attack on the Monacans. They also received several invitations from Opechancanough to visit him. Eventually Newport acquiesced and the colonists traveled up the York River to visit the *Mamanatowick*’s brother at Pamunkey. After several days of feasting and trading with Opechancanough (trade centered on Smith’s blue beads), the colonists traveled back down the river, briefly stopped at Werowocomoco, then returned to Jamestown.

The “Maskarado” and an Invitation Refused

By the fall of 1608 Smith had been made president of the Jamestown colony and Newport had returned to Virginia with a second relief supply. Newport brought more colonists, including Germans and Poles who would come to play a role at Werowocomoco. New-

port also carried instructions from the Virginia Company to find something of value in the colony and to crown Wahunsenacawh as a vassal to King James. Smith (1986c:235-236, 1986d:182-183) objected vehemently to the coronation as a time-consuming distraction, objections that were overruled by Newport. Smith was able to convince Newport that Smith should travel to Werowocomoco to invite Wahunsenacawh to come to Jamestown for the coronation, thus minimizing the colonists' efforts somewhat.

Smith took an overland route from Jamestown to Werowocomoco. Upon arriving, Smith and his four men learned that Powhatan was not present but would be sent for. While waiting, Smith experienced a remarkable ceremony he labeled a "Virginia maskarado." Smith was brought to a field and placed before a fire. Soon he heard a "hideous noise" as thirty Powhatans ran shrieking from the woods and into the field. Assuming that he was under attack, Smith prepared to defend himself. In one (though not all) of Smith's (1986d:182-183) versions of the events, Pocahontas then appeared and explained to Smith that no harm was intended. Noting the men, women, and children in attendance, Smith let down his guard. Presently the thirty young women formed a ring around the fire and began to dance and sing. The women were clothed only with a few leaves and adorned with white, red, and black paint. The group's leader wore deer antlers on her head while others carried bows and arrows, clubs, and swords. After an hour of impassioned and solemn performance, the women left the same way they arrived. Smith reported that the women then offered themselves to him with the entreaty, "Love you not me"?

The next day, Wahunsenacawh arrived. Smith offered him presents and assistance in attacking the Monacans, Wahunsenacawh's enemy. He also invited him to come to Jamestown for the coronation. Wahunsenacawh angrily refused the invitation and the military assistance, insisting that he could avenge the injuries caused by the Monacans on his own. Wahunsenacawh demanded that Newport travel to Werowocomoco in eight days for the ceremony. Smith returned to Jamestown with the message.

Newport's "Coronation" of Wahunsenacawh

The fourth event at Werowocomoco recorded in the Jamestown chronicles entailed Wahunsenacawh's coronation, a ceremony Smith describes in a single paragraph (1986c:237, 1986d:184). During a ceremony that must have been somewhat strange for all involved, Christopher Newport presented gifts to Powhatan, including a pitcher, a basin, a bed, and a red

cloak. Powhatan did not completely comply with the English efforts to crown him:

but a foule trouble there was to make him kneele to receive his Crowne, he neither knowing the majesty nor meaning of a Crowne, nor bending of the knee, endured so many perswasions, examples, and instructions, as tyred them all; at last by leaning hard on his shoulders, he a little stooped, and three having the crowne in their hands put it on his head, when by the warning of a Pistoll the Boats were prepared with such a volley of shot, that the King start up in a horrible feare, till he saw all was well (Smith 1986d:184).

Powhatan then gave his shoes and his mantle to Newport in return. He also provided seven or eight bushels of corn and admonished the colonists not to pursue their plans to travel west to the Monacans' territory. Smith's tone here is clearly one of contempt for Newport and bemusement with the turn of events.

Smith's Aborted Raid on Werowocomoco

The next event involving the colonists at Werowocomoco occurred late in December 1608 through January 1609, following a period when Wahunsenacawh had commanded his people to cease trading with the colonists and allow them to starve (Smith 1986c:245-250, 1986d:205-206). In a situation of growing desperation, Smith led a party to Nansemond village and obtained a large quantity of corn by firing muskets, burning a house, and threatening to burn the entire village. Seeking to repeat this successful tactic, Smith argued that the colonists should return to Werowocomoco in order to capture Wahunsenacawh and all of his provisions. Other members of the colonial leadership opposed the plan as overly provocative. Wahunsenacawh nonetheless provided an opening for another visit to Werowocomoco when he sent word to Jamestown that he would provision the settlement if the colonists built an English-style house for him at Werowocomoco and send a grindstone, fifty swords, guns, a rooster, a hen, copper, and beads. The colonists decided to send the requested assistance and materials minus the swords and guns. Smith sent three "Dutchman" (i.e., recently-arrived German glassmakers) and two Englishmen to build the house, thinking that the project would provide an opening to surprise Wahunsenacawh. Before setting out for Werowocomoco Smith sent an additional fourteen or fifteen colonists to assist in the house construction effort.

On December 29, 1608, a year away from his original visit to and captivity in Werowocomoco, Smith traveled by river back to Wahunsenacawh's

residence, arriving on January 12, 1609. Once again, the tide was out, forcing Smith and his men to slog through the mud (covered with ice this time) to enter the village. Smith and his men quartered in the first house they found. The next day Wahunsenacawh met the colonists and asked when they planned to leave, feigning ignorance of his offer of provisions. When Smith reminded him of this, Wahunsenacawh repeated his demand for guns and swords, pointing out that corn was more valuable than these items since corn could be eaten. Smith responded that he had no swords or guns to spare but had sacrificed to have his men build Wahunsenacawh a house and expected friendship in return. Wahunsenacawh promised to provision the colonists and raised his own doubts about the purpose of their settlement:

Some doubt I have of your comming hither, that makes me not so kindly seeke to relieve you as I would: for many doe informe me, your comming hither is not for trade, but to invade my people, and possesse my Country, who dare not come to bring you corne, seeing you thus armed with your men. To free us of this feare, leave aboard your weapons, for here they are needlesse, we being all friends, and for ever Powhatans (Smith 1986d:195).

Smith soon learned that the German craftsmen had informed Wahunsenacawh of the colonists' plans and how to counter them.

Wahunsenacawh then gave the colonists corn in return for a copper kettle and discussed war and peace with the colonists, urging that they choose the latter:

Captaine Smith, you may understand that I having seene the death of all my people thrice, and not anyone living of those three generations but my selfe; I know the difference of Peace and Warre better then any in my Country. But now I am old and ere long must die, my brethren, namely Opitchapam, Opechancanough, and Kekataugh, my two sisters, and their two daughters, are distinctly each others successors. I wish their experience no lesse then mine, and your love to them no lesse then mine to you. But this bruit from Nandsamund, that you are come to destroy my Country, so much affrighteth all my people as they dare not visit you. What will it avale you to take that by force you may quickly have by love, or to destroy them that provide you food. What can you get by warre, when we can hide our provisions and fly to the woods? whereby you must famish by wronging us your friends. And why are you thus jealous of our loves seeing us unarmed,

and both doe, and are willing still to feede you, with that you cannot get but by our labours? Thinke you I am so simple, not to know it is better to eate good meate, lye well, and sleepe quietly with my women and children, laugh and be merry with you, have copper, hatchets, or what I want being your friend: then be forced to flie from all, to lie cold in the woods, feede upon Acomes, rootes, and such trash, and be so hunted by you, that I can neither rest, eate, nor sleepe; but my tyred men must watch, and if a twig but breake, every one cryeth there commeth Captaine Smith: then must I fly I know not whether: and thus with miserable feare, end my miserable life, leaving my pleasures to such youths as you, which through your rash unadvisednesse may quickly as miserably end, for want of that, you never know where to finde. Let this therefore assure you of our loves, and every yeare our friendly trade shall furnish you with Come; and now also, if you would come in friendly manner to see us, and not thus with your guns and swords as to invade your foes (Smith 1986d:196).

Whether Wahunsenacawh was referring to waves of death from epidemics, starvation, or warfare or whether he was reflecting on his own seniority is unclear. His description of successors implies a matrilineal descent pattern in which his sisters' children represented the next generation. The violence at Nansmond apparently left a strong impression on Wahunsenacawh, or so Smith (chief proponent of these tactics) would have us believe.

Wahunsenacawh implored Smith to disarm. Sensing a pending ambush and concerned that he was vulnerable in Wahunsenacawh's house with only one other colonist (John Russell) at his side, Smith refused and quietly sent word for more of the colonists to come to shore in order to ambush Wahunsenacawh before he had the opportunity. Immediately after the *Mamantowick* slipped away, Smith began to hear Wahunsenacawh's men surround the structure. Smith and Russell rushed out, fired a warning shot, and ran to meet the other colonists assembled nearby. Wahunsenacawh quickly sent an "ancient orator" to Smith with a gift of pearls to explain that Smith had misunderstood the Powhatans' intentions, which were simply to guard the corn Wahunsenacawh had given to the English. Cocking their weapons, the colonists convinced the Powhatans to transport the corn to barges waiting on the shore. As the tide was out and the

barges were stuck in the mud, the colonists waited until evening in the village.

At this point in the narrative, we find another discrepancy in Smith's writings about the role played by Pocahontas in events at Werowocomoco. Where she is not mentioned in Smith's initial recounting of this visit to Werowocomoco, Pocahontas intervenes once again in a later account (Smith 1986d), written in 1624 after she had died. In this account Smith reported that as the evening meal approached, Pocahontas secretly approached him and reported that her father planned to have him killed at dinner. Urging him to flee, Pocahontas became upset when Smith tried to reward her with a small gift, possibly of copper or beads (Smith did not specify). Pocahontas responded that she would be killed if she were seen with the objects. When food was brought to him, Smith had the Powhatans taste it first. Smith sent word (with a double meaning, perhaps) that he was ready for Wahunsenacawh, yet no attack came.

Wahunsenacawh Abandons Werowocomoco

After Smith left Werowocomoco in January 1609, interaction between the colonists and the Powhatans on the York River became particularly violent. Upon Smith's departure from Werowocomoco, Wahunsenacawh sent two of the Germans to Jamestown to collect weapons (Smith 1986c:250-256, 1986d:199-206). The Germans claimed, falsely, that Smith had requested the weapons, and Councilor Winne at Jamestown agreed to the request. At the same time, several other colonists decided to abandon the "misery" of Jamestown for Werowocomoco. The day after the Germans departed for Werowocomoco, six or seven men stole swords, pike heads, firearms, shot, and powder as gifts for Wahunsenacawh.

In the meantime, Smith and his party sailed upstream from Werowocomoco in an effort to obtain corn from Opechancanough at Pamunkey. The colonists met Wahunsenacawh's brother and obtained the corn through trade. In the midst of a subsequent speech delivered by Opechancanough, Smith realized that several hundred warriors were quietly assembling nearby. Fearing an attack, Smith seized Opechancanough and threatened to shoot him. The Pamunkeys immediately backed down. While Smith later slept at Pamunkey, some warriors attempted unsuccessfully to surprise and kill him. An additional attempt to kill Smith and his men, this time through poisoning, succeeded only in making the men sick. The colonists then traveled along the Pamunkey and Mattaponi rivers and forcibly obtained corn at several villages, re-

fraining from doing so only when moved by the tears of women and children.

Smith then headed back downstream for Werowocomoco. After sending two men ashore to reconnoiter the town, Smith learned that Wahunsenacawh had abandoned his new house and the village entirely. Apparently, the Germans had convinced Wahunsenacawh that he should leave the settlement with all of his provisions. The colonists returned to Jamestown with the enormous store of food they had obtained on the trip. Subsequently Wahunsenacawh moved westward to Orapax located on the upper reaches of the Chickahominy River. Smith (1986d:126) described Wahunsenacawh's departure from Werowocomoco in the following way:

At Werowocomoco on the Northside of the river Pamaunkee, was his residence, when I was delivered him prisoner, some 14 myles from James Towne, where for the most part, he was resident, but at last he tooke so little pleasure in our neare neighbourhood, that he retired himselfe to Orapakes, in the desert betwixt Chickahamania and Youghtanund.



Figure 2-5. DeBry engraving of Pocahontas' capture.

From 1609 until his death in 1618, Wahunsenacawh's centrality to Powhatan politics and interaction with the English declined with his move west. By 1614, Wahunsenacawh apparently shifted his residence once again, this time to Matchcot on the Pamunkey River (Smith 1986d:245). Reference to Matchcot, "the chiefest residency Powhatan had" (Hamor 1998: 807), came amidst another well-known episode in the Jamestown chronicles that featured Pocahontas, but not John

Smith. After (apparently) saving Smith at Werowocomoco on the two occasions described above, Pocahontas was kidnapped by colonist Samuel Argall in 1613 and brought to Jamestown in an effort to force Wahunsenacawh to return English prisoners and stolen arms and to send additional supplies of corn. Wahunsenacawh paid part of the ransom and requested that Pocahontas be treated well. The following year, Thomas Dale brought Pocahontas and 150 men by ship up the York River seeking Wahunsenacawh, the remainder of the ransom, and compliance from the Powhatans.

Their destination, Wahunsenacawh's "chief habitation" in Smith's (19086d:244-245) retelling of the event, was likely not Werowocomoco since he had left the village several years earlier. Dale's party came under attack from bowmen on shore as they headed up the York. Responding in kind, Dale's men went ashore and burned forty houses in an unnamed town on

the York. Though they never reached Wahunsenacawh, the colonists were able to meet with two of Pocahontas' brothers who were allowed to see their sister. Pocahontas assured her brothers that she had been treated well and told them of her desire to marry Englishman John Rolfe. After the colonists met with Opechancanough at Matchcot on the Pamunkey River and received promises of peaceful relations, the colonists returned to Jamestown with Pocahontas. Wahunsenacawh subsequently sent word that he approved of the proposed marriage. Rolfe and Pocahontas married on April 5, 1614 after Pocahontas was baptized, ushering in a period of relatively harmony between the colonists and the Powhatans. Pocahontas, her husband, and their young son traveled to England in 1616 in an effort to raise funds for the Virginia Company. She died in England of pneumonia or tuberculosis in 1617 as the family was embarking on the voyage back to Virginia.

Ethnohistorical Perspectives on Werowocomoco

As part of the accounts of Jamestown's early days, these events at Werowocomoco represent important elements in the inter-societal relations of the Chesapeake Contact period. The narratives are generally read by scholars in four distinct ways. Archaeologists (e.g., Turner 1976; Potter 1993; Binford 1964) and cultural anthropologists (e.g., Rountree and Turner 2002; Rountree 1989; Feest 1990) draw from the accounts an image of a Powhatan 'ethnographic present' on the eve of contact that encapsulates the social structures of an eastern Algonquian chiefdom. Related archaeological studies apply a cultural ecological perspective that provides a foundation for archaeologists' use of a direct historic approach that works backward into prehistory. Ethnohistorians (e.g., Rountree 1993; Axtell 2001; Fausz 1985; Kupperman 2000) have emphasized the narrative flow of events surrounding Jamestown's settlement in an effort to understand the history of Native communities overshadowed by the English colonial perspective. One theme emerging from these studies is the contingent (i.e., unpredictable) nature of early colonial history in the Chesapeake. The ultimate English devastation of Native societies and usurpation of their lands was by no means assured during Jamestown's early days.

A third set of readings draws on the modern fascination with Pocahontas and, to a lesser extent John

Smith, prompting not only the well-known popular treatments but a series of scholarly studies (e.g., Barbour 1970; LeMay 1992; Mossiker 1996; Faery 1999; Strong 1999; Tilton 1994; Vaughan 1975) that includes two recent publications (Townsend 2004; Gunn-Allen 2003). Much of this scholarship focuses on Pocahontas' purported rescue of John Smith at Werowocomoco, placing this event in the context of Pocahontas' remarkable biography.

A fourth set of studies draws from approaches in historical anthropology that assume culture is a historical product and that history is culturally-ordered (Sahlins 1985). This research alternates between historical narrative and social theories concerning cosmology, political economy, and cultural practice in an effort to unpack meaning in the Jamestown narratives that might otherwise be missed. Historical anthropological studies emphasize Powhatan symbolic systems and Native agency that shaped early colonial-era history, starting with the assumption that the Powhatans' actions in the novel circumstances of the period accorded with deeply-rooted cultural structures (Williamson 1992:368-369).

For example, Williamson's (2003) recent study of Powhatan power and authority forces a reconsideration of the basis of Powhatan leadership, the relationship

between political leaders and religious specialists, and the importance of ritual and cosmology. Her close reading of Powhatan ethnohistory suggests that religious figures in the Powhatan world represented the authority behind the power exercised by *weroances* and the *Mamanatowick*.

On a complementary track, Gleach's "ethnoethnohistory" identifies culturally-informed strategies on the part of both the Powhatans and the English that indicate both sought to "civilize" the other. This effort to correct and refine cultural transgressions combined ritual, speech, material exchange, and violence. Gleach's analysis of Powhatan categories of power suggests that the authority of Wahunsenacawh and the *weroances* of the Chesapeake region ultimately flowed from their connections to the sacred, a connection that manifested itself in culturally appropriate behavior. By the early seventeenth century, Wahunsenacawh possessed an overwhelming authority due to its basis in the sacred. Wahunsenacawh apparently drew his spiritual authority from a sacred status, while his inherited political status as a *weroance* gave him power over districts in the core region of his chiefdom (Gleach 1997:32). Likewise, Mallios' (1998) micro-social analysis of exchange events involving the Jamestown colonists and the earlier Spanish Jesuit Mission and Roanoke colony indicates that European colonists repeatedly violated indigenous gift-exchange rules, unintentionally provoking Native attacks. Drawing on ideas from Mauss (1954), Mallios noted that gift-giving for the Powhatans created and sustained social ties through practices organized around chiefly prerogatives and the social obligation to reciprocate.

The following summarizes scholarship drawn from each of these perspectives on the Powhatans. Ultimately, our intention with the Werowocomoco investigation is to contribute to the historical anthropology of the Powhatans in ways that builds on the fourth set of studies mentioned above. A close reading of the early Jamestown narratives with a central focus on Werowocomoco allows us to probe three issues critical to our archaeological study: the village's location, colonial entanglements between Natives and newcomers that began at Werowocomoco, and the materiality of these early colonial-era intersections.

Werowocomoco's Location

Efforts to identify Werowocomoco's location draw on the Jamestown narratives and early maps of the region. Primary cartographic sources for Werowocomoco's location include Tindall's 1608 Draft of Virginia, the 1608 Zuñiga Map, and Smith's 1612 *Map of Virginia*. Tindall's Draft (Figure 2-6) represents the

oldest surviving map prepared by a Jamestown colonist (Mook 1943). The enigmatic Zuñiga Map (Figure 2-7) was originally identified in a Spanish archive with an accompanying 1608 letter to Philip III of Spain from Don Pedro de Zuñiga, Spain's ambassador to England, informing him of developments at Jamestown. The map appears to be a copy of a sketch John Smith sent to England along with his *True Relation* (Barbour 1969:238). Smith's formal *Map of Virginia* (Figure 2-8) was subsequently published in 1612 accompanied by text describing the Powhatans. This map went through at least eleven revisions and multiple printings (Stephenson and McKee 2000:28). The Zuñiga, Smith, and Tindall maps are oriented such that west is at the top, reflecting a reference point from the Chesapeake Bay or the Atlantic Ocean.

Robert Tindall, one of the original colonists, accompanied Christopher Newport to the villages of Powhatan and Werowocomoco (Barbour 1969:104-107). Tindall describes himself in a letter as "gunner to Prince Henry" and later references indicate he became a master mariner (Mook 1943:373). Tindall's map includes a remarkable amount of accurate detail given its early date, depicting the James from its mouth to the village of "Poetan" (i.e., Powhatan) symbolized with an icon of a *yihakan*. "Prince Henry's River" (i.e., the York) extends from its mouth to a location west of the Pamunkey – Mattaponi confluence. The village of "Pamonke" (i.e., Pamunkey) appears in a location west of this confluence in the vicinity of the contemporary Pamunkey Reservation. Downstream from the Pamunkey – Mattaponi confluence on the north side of the York Tindall depicted a second village labeled Poetan, this one signified by four Native houses. The shoreline at Poetan suggests a bay fed by three streams that enter in the vicinity of the village. Scholars (e.g., Brown 1890:151,188; Tyler 1901; Mook 1943:379) have long agreed that "Poetan" represents another name for Werowocomoco given that the village was known primarily as Powhatan's residence and Tindall was known to have visited the location. The only other York River settlement depicted on the map is "Chescoyak" (i.e., Kiskiack), a village that functioned almost as a gateway to Werowocomoco for the English who generally traveled by boat (Underwood et al. 2003). Consistent with other early maps, Kiskiack is placed on the southwest side of the York just upstream of its mouth. Recent research conducted by the William and Mary Center for Archaeological Research (Underwood et al. 2003) has identified the archaeological site of Kiskiack on the grounds of the Naval Weapons Station, a location that corresponds closely with Tindall's Draft.



Figure 2-6. Robert Tyndall's (1608) Draught.

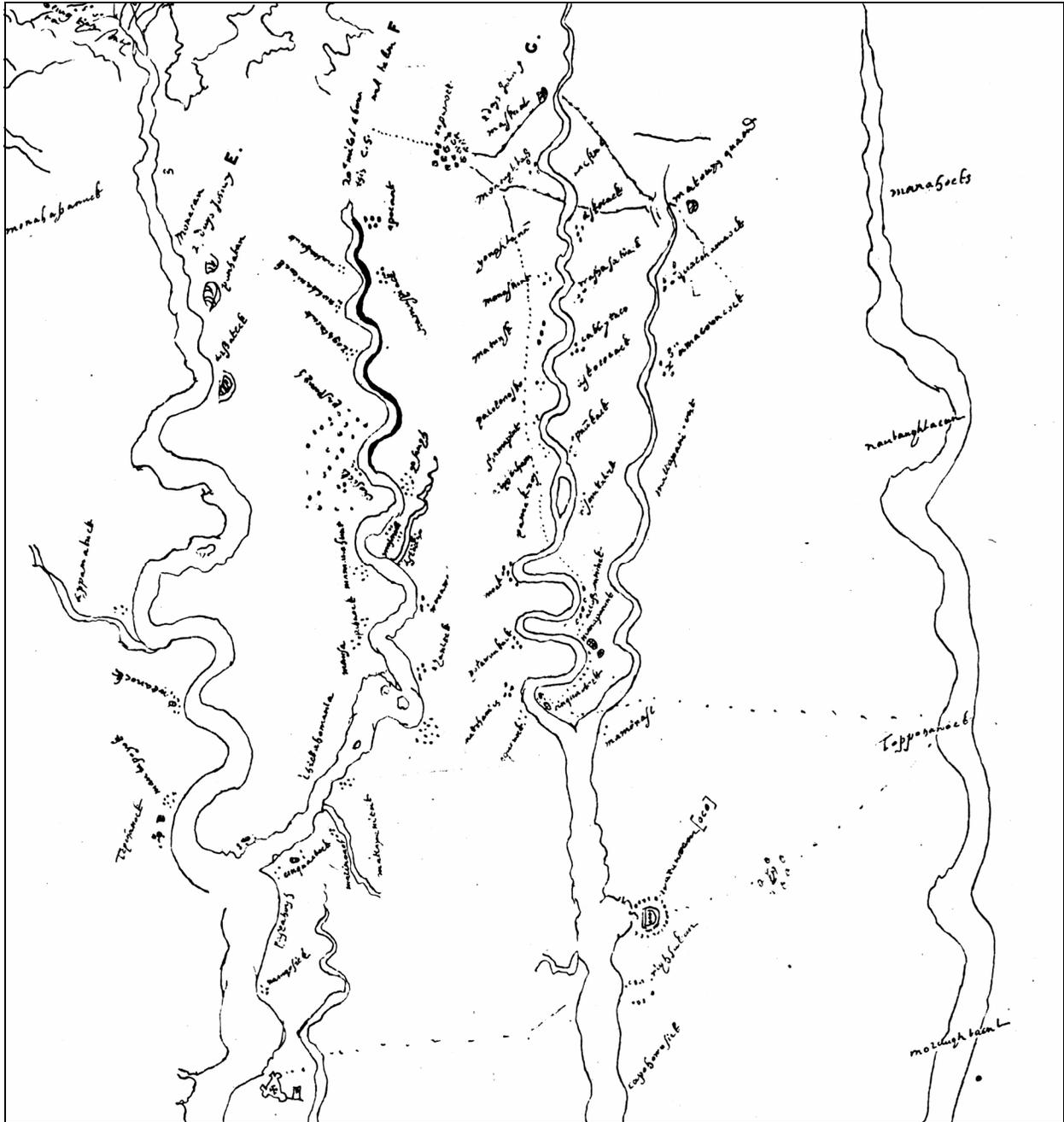


Figure 2-7. Zuñiga's (1608) Map of Virginia.

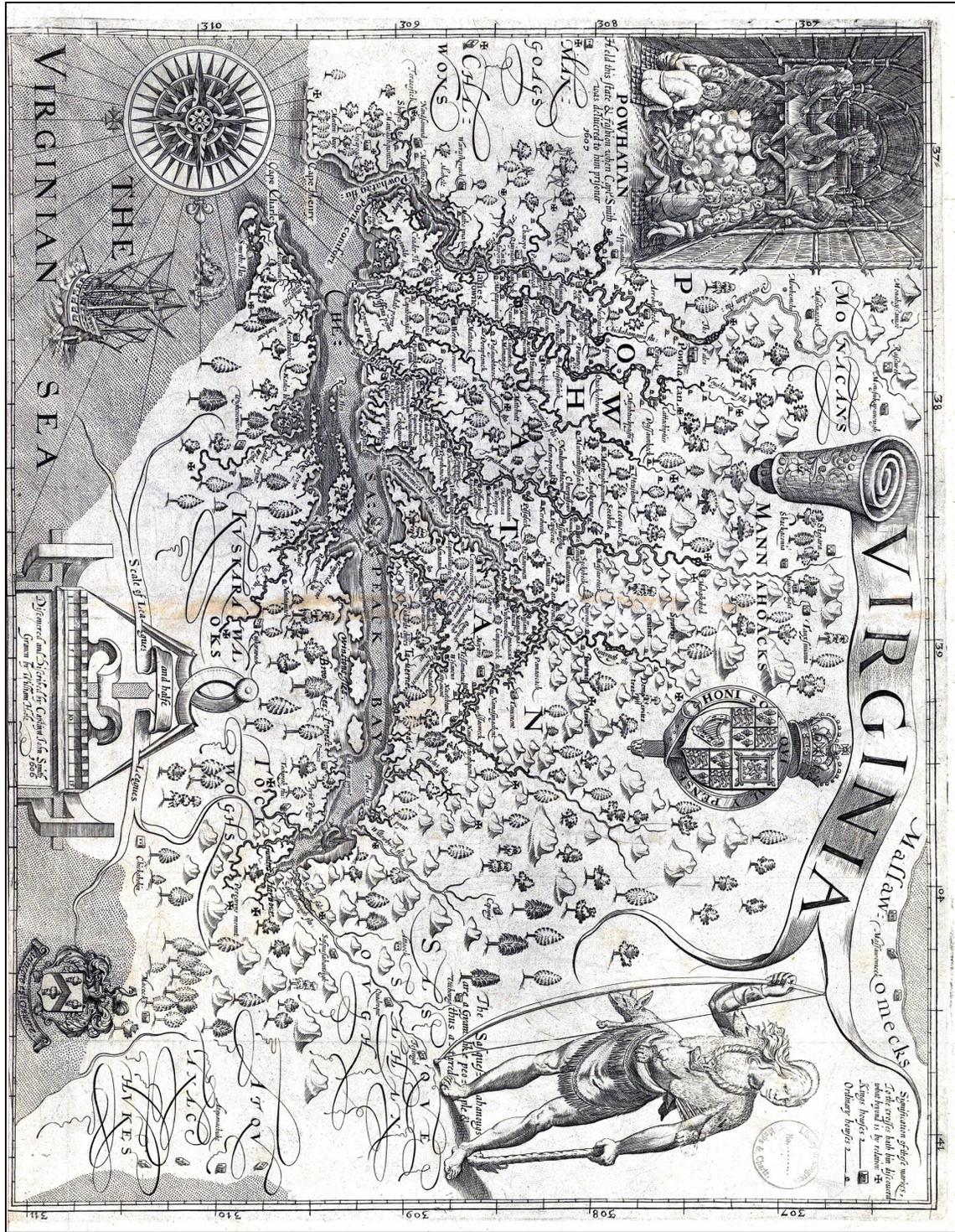


Figure 2-8. Smith's (1612) Map of Virginia.

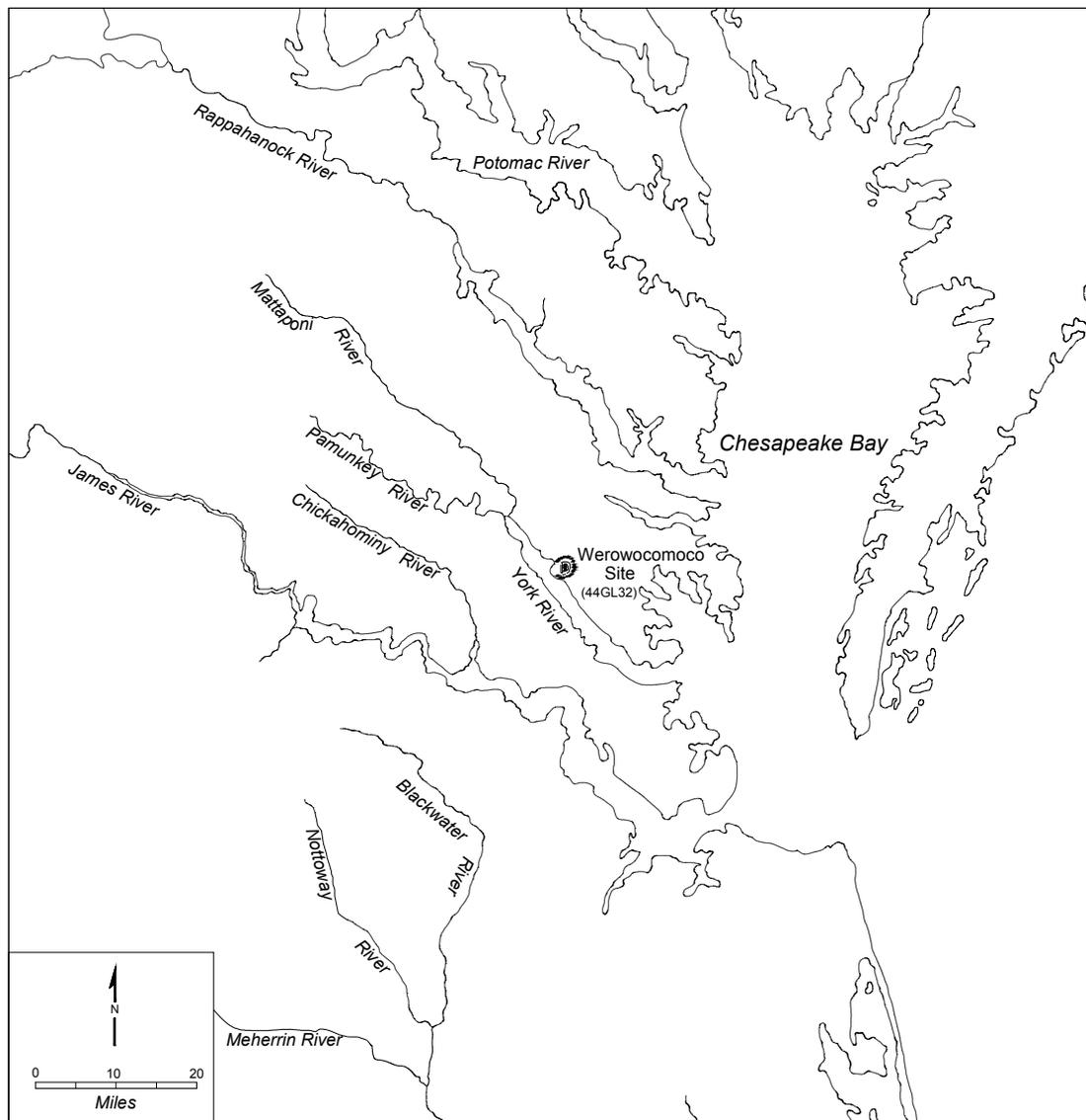


Figure 2-9. Modern Map of Virginia Tidewater with Werowocomoco Site Location.

Tindall's Draft lacks a scale, making distances on the map unclear. However, by using the approximately 25 mile distance from the Mattaponi-Pamunkey confluence (today's West Point) to "Tindall's Point" (today's Gloucester Point) as a gauge, distances from Poetan / Werowocomoco to other reference points on the York may be estimated accurately. The distance from Pamunkey village to the Pamunkey – Mattaponi confluence is approximately 5 linear miles or 10 – 15 miles by river. The distance from the Pamunkey – Mattaponi confluence to Poetan / Werowocomoco is 11 miles, while the distance from Poetan / Werowocomoco to Chescoyak / Kiskiack is approximately 10 miles, and the distance from Tindall's /

Gloucester Point is approximately 14.5 miles. These closely match distances from Purtan Bay as measured on a modern map of the York: Purtan is 11 miles below West Point, 11 miles above the Naval Weapons Station at Indian Field Creek, and 14 miles upriver from Gloucester Point. Tindall's Map also accords well with the York River shoreline at Purtan Bay, which is fed by Purtan, Leigh, and Bland Creeks. Given this rather remarkable congruence, it is not surprising that scholars have long agreed that Purtan Bay represents the location of Werowocomoco (Brown 1890; Tyler 1901; Mook 1943; Lewis and Loomie 1953; Montague 1972; McCary 1981; Noël Hume 1994; Rountree 1990).

The Zuñiga Map adds additional detail to the York River landscape and expands the region covered to include areas to the south of the James described by Roanoke colonists as well as the Rappahannock and Potomac drainages. The map is consistent with Tindall's in the relative placement of Jamestown, Werowocomoco, Kiskiack, and the Mattaponi-Pamunkey confluence. The Zuñiga Map includes the names of 68 villages Smith visited prior to June 1608 and additional names beyond the core James / York area apparently drawn from Native informants and from reports of the Roanoke Colony (Barbour 1969:238). Notations on the map include the expression "20 miles about this C. S. [word crossed out] was taken" and dotted lines that trace the route on which Captain Smith was taken during his captivity. Several villages, including Kiskiack on the York, are identified as a scatter of dots (apparently depicting houses) lining the riverfront or embayed areas along the river. Additional notation on the map includes the path Smith took during his December 1607 - January 1608 captivity and scattered dots that appear to represent dispersed house locations in some Powhatan villages. At Werowocomoco the cartographer added an unusual set of symbols that appear as dots surrounding a double "D" shaped pattern. Within the two "D"s are three additional dots. The significance of this notation is unclear, but its large size clearly conveys its strategic importance alongside Jamestown.

Clearly a rough sketch drawn by someone with much greater familiarity with the James and York than areas beyond these rivers, the document is particularly valuable as an informal map drawn by hand "in the field" rather than as a formal, engraved map. The map apparently reflects Smith's recordation of a Chesapeake landscape that he experienced first-hand more broadly than any other colonist while Powhatan resided at Werowocomoco. As Turner and Opperman (1993:72) have noted, the chaotic mix of dots, blobs, and odd marks on the Zuñiga map likely reflects Smith's efforts to characterize an unfamiliar landscape of dispersed Native villages and community forms with which he was unfamiliar.

Smith's later *Map of Virginia* clearly evolved out of some version of the Zuñiga Map, though the later document had changed considerably as it was standardized according to the formal mapmaking style of early seventeenth-century England. Where Smith had

experienced the Chesapeake landscape while passing through it (as indicated by the captivity trail on the Zuñiga Map) the formalized *Map of Virginia* effectively obscured the events leading to its creation. This concealment parallels a broader colonial process: beginning in the fifteenth century European colonists' narrative accounts of new places were replaced by maps, documents that "colonized" space in the process (de Certeau 1984:118-122). Named places associated with varied topologies, histories, and memories were conflated through their inclusion on the same Cartesian plane. Smith's *Map of Virginia* achieves this by excluding much of the detail found on the Zuñiga Map, detail that may prove valuable in understanding the Chesapeake cultural landscape circa 1607.

Even so, Smith's 1612 *Map of Virginia* is invaluable for its comprehensive coverage of the Chesapeake region and its accurate rendering of Virginia Tidewater geography. Distances on the map from Werowocomoco closely match those on the Tindall Map. Werowocomoco is depicted as 14 miles upstream from Tyndall's Point and 9 miles above Kiskiack. It is also 11 miles below the confluence of the Pamunkey River (labeled here as the "Youghtanund") and the Mattaponi. The shoreline includes a bay and indentations suggesting three creeks. The map has, however, excluded most of the notations found on the Zuñiga Map. Settlements are depicted as either points (ordinary houses) or *yihakans* (kings' houses). The map implies a uniformity and spatial boundedness to Native settlements that fail to match the archaeology of Contact period settlements. Such settlements generally consist of dispersed villages with variable communal organization (e.g., Lucketti et al. 1994; Mouer et al. 1992; Underwood et al. 2003), a topic we turn to below.

The cartographic sources may be combined with other written references to Werowocomoco's landscape in order to determine whether Purtan Bay matches these descriptions. From Smith's second visit to Werowocomoco we learn that that the village was situated on a shallow bay some 12 miles from Jamestown that was choked with "ooze" and fed by three creeks. In the text of his *Map of Virginia* (1986b:173) Smith modifies this distance slightly to 14 miles while Strachey (1953:57) places the distances at "some 15 or 16 myles." Smith described the confluence of the Pamunkey and Mattaponi rivers and Native settlements in this region, noting,

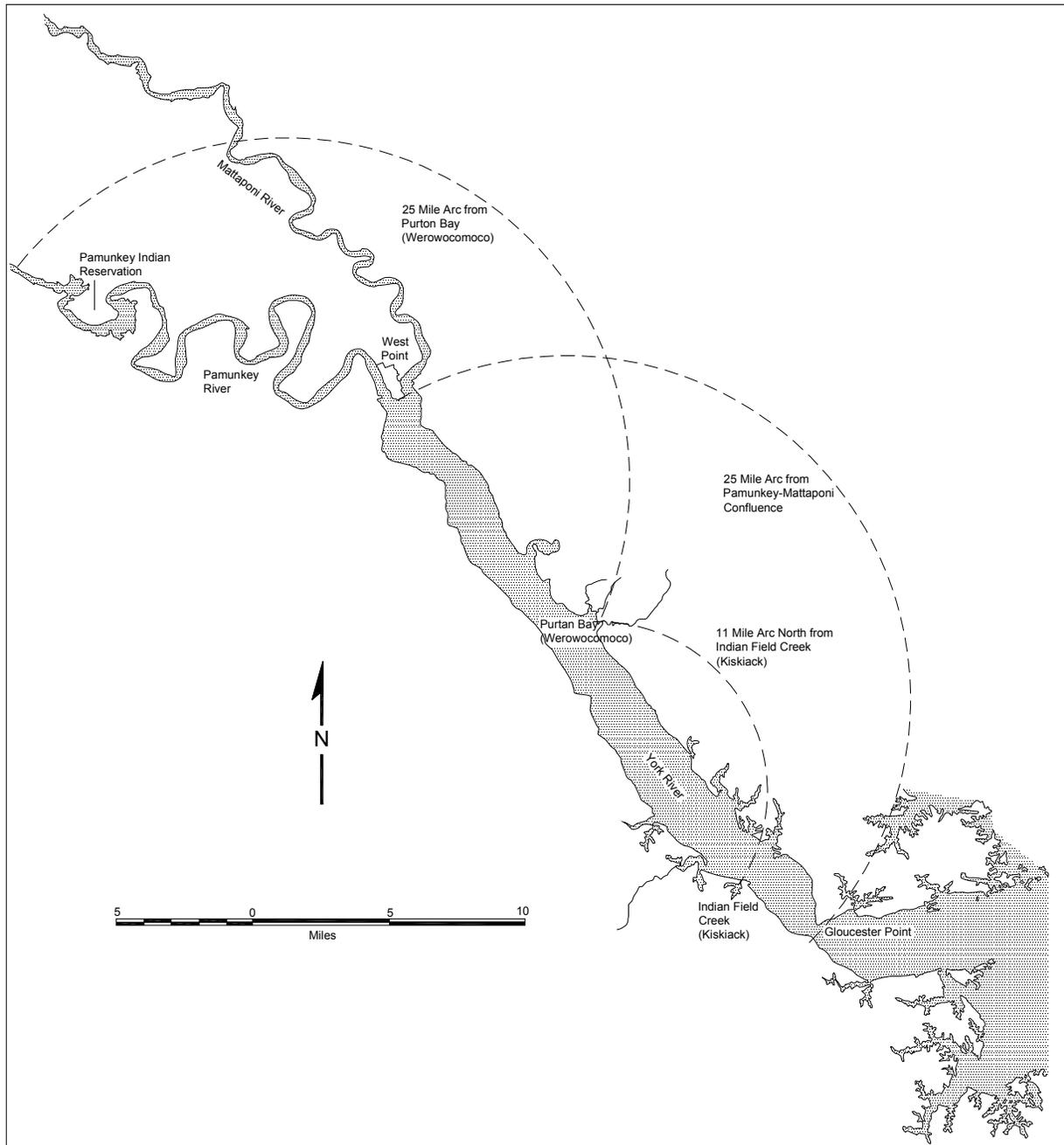


Figure 2-10. Distances Along the York River. The Purtan Bay area accords well with cartographic and ethnohistorical references to Werowocomoco's location.

Where this river is divided the Country is called Pamaunke, and nourished 300 able men. About 25 miles lower on the North side of this river is Werowocomoco, where their great king inhabited when Captain Smith was delivered him prisoner; yet there are not past 40 able men. But now he hath abandoned that, and liveth at Orapakes by Youghtanund in the wilderness; 10 or 12 myles lower on the South side of the river is Chiskiack, which hath some 40 or 50 men (1986b:147).

Smith also offers some indications of Werowocomoco's layout by describing the *Mamanatowick's* house as situated thirty score from the water. Whether this refers to a distance of 600 feet or 600 paces (or roughly 1500 to 1800 feet) is left unclear in the text, yet the implication is that Powhatan met Smith and Newport in a structure spatially removed from the riverfront.

Smith's references to the shallow bay fed by three creeks fits the Purtan Bay area well. Purtan Bay is located 13 miles northeast of Jamestown, again, according with the *Map of Virginia*. On first glance, Smith's reference to Werowocomoco as 25 miles below "where the river is divided" is puzzling. Traveling 25 miles below the Pamunkey – Mattaponi confluence on the York takes one to Gloucester Point. The three early seventeenth-century maps of the area described above consistently place Powhatan villages (including Werowocomoco) well upstream of this location. In fact, if the village of Kiskiack was indeed roughly 10 to 12 miles downstream of Gloucester Point that would place it at the York River mouth. Returning to the text, though, it is clear from the first sentence in the passage that Smith is referring to the "Country called Pamunkey" rather than the confluence of the Mattaponi and Pamunkey rivers (Montague 1972). The core of Pamunkey territory was located some distance west of the Pamunkey River's mouth. In fact, the village labeled "Pamonke" on the Tindall's map of the York was located approximately 21 – 26 miles upstream from what is today Purtan Bay.

Taken together, the documentary and cartographic sources leave no doubt that the Purtan Bay vicinity represents the most likely location of Werowocomoco (cf. Turner et al. 2005 for a more detailed discussion).

Werowocomoco as a Point of Colonial Intersection

The early colonial history at Werowocomoco indicates that the village served as a central stage for contact-era political theater directed by the *Mamanatowick* and, at times, by the colonists. Chief Powhatan orchestrated the colonists' exposure to Powhatan ritual,

exchange, and the built environment such that Werowocomoco emerges from the documents as a place of considerable power. The colonists were duly impressed by the *Mamanatowick's* retinue, his residence, and the volume of maize obtained through exchange with the Powhatans at the village. Across verbal discourse, exchange, and ritual, the two communities negotiated with one another in a classic example of inter-cultural contact. Read carefully, this history runs counter to the notion that the early colonial Chesapeake entailed simply a dichotomous confrontation of English colonizer and Powhatan Native, each conceived as bounded, homogenous entities existing largely independent of one another and of the seventeenth-century Chesapeake. An alternative conception of Werowocomoco emphasizes the village as a space of struggle and negotiation that essentially created and sustained new colonial identities and political strategies amidst the changing relations of colonialism.

The most prominent events involving such an intertwined colonial relationship occurred when Powhatan effectively transformed Smith into a Powhatan *weroance* and when the colonists struggled to crown Powhatan as a vassal of King James. Powhatan's efforts to transform Smith may or may not have involved his daughter Pocahontas. For over a century, scholars have debated whether or not Pocahontas truly did "rescue" Smith during the 1607 winter while more recently researchers have focused on the significance of the overall captivity narrative to Powhatan culture and history. From the mid-nineteenth century historians have suggested that Smith invented or exaggerated Pocahontas' role in the captivity narrative to enhance his importance and to enliven the story (Barbour 1986:lxiii-lxiv). Others have pointed out that notions of romantic involvement between Pocahontas and Smith are likely overblown given Pocahontas' young age. Recently Rountree (1990:38-39) and Townsend (2004:52-56) have dismissed Pocahontas' purported role in the event based partly on Smith's silence on the matter in his initial report. Rountree adds that the overall narrative, during which Powhatan first feasted and then reportedly planned to bludgeon Smith, appears inconsistent and is therefore doubtful. Townsend notes that on four different occasions during his travels in Europe and North America Smith reported that a young woman intervened on his behalf during a moment of peril, raising questions as to the veracity of all of these events.

Whether or not Pocahontas truly played the specific role described in Smith's *Generall Historie* may not be particularly important. More significant, perhaps, is the idea that during his period of captivity

Smith was adopted as a Powhatan, an interpretation that has received some consensus among scholars (e.g., Barbour 1970:23-26; Rountree 1990). Williamson (1992) and Gleach (1997:120) have both developed this theme. Williamson suggests that the Powhatans adopted Smith in order to establish a political alliance with the English cemented through the creation of a father-son relationship between Powhatan and Smith. In this reading, Powhatan's offer of Capahosic and of abundant corn placed him in the superior position as creditor to the English. Rather than a potential love interest, Pocahontas thus became Smith's sister, an interpretation which accords well with aspects of their subsequent interaction. Gleach similarly suggests that Powhatan sought to adopt Smith and the English colony through these events in and around Werowocomoco. He reads the captivity narrative as a protracted rite of passage in which Smith was separated from his old status through capture, held in a liminal state as he was paraded through various villages, and finally reintegrated into his new status as a Powhatan *weronance* at Werowocomoco (cf. Turner 1967). As part of this process, the "divination" at the initial stage of this process was in fact designed to incorporate a dangerously liminal Smith safely into the Powhatan world through the mimetic process of map making.

Read in this light, Smith's first experience at Werowocomoco represents Powhatan's efforts to, in effect, colonize the English by creating lasting social and political dependencies through the metaphor of kinship and the material of food and prestige goods. In a similar vein, the English sought to confer a politically-subservient status on Powhatan through the power of ritual in his "coronation" ceremony. In both instances, many of the symbolic and material cues of the intended relationships were no doubt misunderstood. Nonetheless, the struggles and negotiations between the English and Powhatans from 1607 to 1609, reflected in long speeches, material exchanges, tactical maneuvers, and in sacred ritual, meant that Werowocomoco served as the locus of new social connections and novel cultural meanings central to early colonial history in the Chesapeake. Powhatan sought copper, iron tools, and swords from the English while the colonists desperately needed food. By obtaining symbolically powerful prestige goods, Powhatan enhanced his ability to exercise regional authority and, briefly, to expand this authority. Judging from his rhetoric at Werowocomoco, the arrival of the English, "strangers" defined by their profound difference, partly shaped Powhatan's efforts to create a "Powhatan" social identity that included all residents in the Virginia Tidewater.

Today we follow the English colonial accounts and use the convenient shorthand label "Powhatan" to refer to the residents of the Virginia Tidewater, yet a close reading of the Jamestown accounts indicates that the Virginia Algonquians by no means comprised a bounded, uniform society sharing uniform, agreed upon political strategies vis-à-vis the colonists. In fact, Native references to a "Powhatan" social identity come almost exclusively from Wahunsenacawh himself. By enhancing Powhatan's power and by giving the Virginia Algonquians a reason to unite as "Powhatans", the presence of the English altered the Native culture history in ways that are masked by the use of the Powhatan label.

The Materiality of Colonial Entanglements at Werowocomoco

The early colonial history at Werowocomoco had a material component that reveals much about Powhatan cultural practices and symbolic systems. As outlined in the narrative accounts, Powhatan established the structure of exchange relations during Smith's captivity at Werowocomoco. Powhatan feasted Smith while he was held captive then promised to feed the remainder of the Jamestown colonists if they reciprocated with large guns. This relationship was structured around the Powhatans providing food for items with symbolic resonance (including copper and glass beads) and those with practical uses (including swords and iron tools). As the recipient of such valuable prestige items, the *Mamanatowick* held a position of power over the colonists. The colonists' repeatedly failed to appreciate the social consequences of these exchanges (Mallios 1998). During the second encounter at Werowocomoco, Newport initially sought to bargain with Powhatan in order to obtain as much corn as possible while surrendering as little of the copper and glass beads the Powhatans sought. In chastising the English during this event, Powhatan sought to educate the colonists about gift exchange and his inherently superior position as the *Mamanatowick* in the resulting relationships. In fact, Smith and Newport's efforts to obtain corn from Werowocomoco in exchange for copper kettles, iron hatchets, and glass beads reveal just how differently the Powhatans and the English conceptualized such trade. The Powhatans' approach to exchange with the English emphasized an etiquette of gift giving that reflected and created social relationships between giver and receiver (Mauss 1954). As noted in Mallios' (1998) study of exchange relations during the Contact period, by seeking to maximize their returns the English (and particularly Smith) appear to be largely unaware of the social webs that suspended exchange within the Powhatan world.

Also apparent in these exchanges is a Powhatan color symbolism defining value and meaning in terms quite different than those of the colonists. During the Contact-era Chesapeake, copper objects represented a symbol and source of power (Gallivan and Klein 2004; Hantman 1990; Potter 1989:153-4). Copper body adornment, in particular, represented the province of *weroances* and priests – i.e., those capable of controlling its power (Gleach 1997:56). Copper's power derived from its origins in spiritual beings at the edge of the world that controlled forces of nature (Miller and Hamel 1986). The red metal mediated between white and black, a pattern of color symbolism observed in Powhatan ritual and numerous events at Werowocomoco (Hamel 1983; Miller and Hamel 1986; Pietak 1999). In Native societies, red could represent both a soul's liminal state and the substance that resolved that liminality (Claassen 1998:206). By contrast, white beads – shell or glass – linked the underwater world, the sky, fertility, and individual and social well being (Claassen 1998:205-6; Miller and Hamel 1986:324-5; Pietek 1999:12). In Hamell's historical reconstruction

of bead symbolism among Northeastern Indians, white shell represented long life and success in hunting and fishing, warfare, and courtship (Hamel 1983:25). The blue glass beads Smith traded so effectively at Werowocomoco likely figured into Powhatan color symbolism as a color akin to black (Gleach 1997:56). The *Mamanatowick*, Powhatan warriors, and ritual participants were often adorned in black and red. In the *Huskanaw*, the Powhatans' male right of passage, boys were painted black during the phase of the ritual in which they were said to be dead. As with red and white, black's symbolic connotations likely varied according to context, but it appears for the Powhatans to be associated with death and with sacred power.

Powhatan's efforts to acquire copper objects represented a critical strategy as he consolidated his central role in the regional political economy. Prior to the arrival of Jamestown colonists who brought large amounts of copper for trading, the Monacans probably served as a source of this symbolically-potent material for the Indians of the Coastal Plain (Hantman 1990). Powhatan initially sought to monopolize the flow of

Archaeological Research and Werowocomoco

The following summary of Werowocomoco's archaeological context discusses late precontact developments in the Virginia Tidewater before turning to studies of archaeological sites, material culture, and regional-scale patterns associated with the Contact period. We conclude by summarizing a recent effort to reinterpret Chesapeake archaeology and ethnohistory. This discussion draws heavily from previous summaries published elsewhere (Gallivan 2003:11-43; Turner 1992; Hodges 1993).

Late Precontact Developments in Tidewater

Archaeologists' interpretations of the Powhatan chiefdom generally invoke a long-term process whereby acceleration of population growth and the intensification of subsistence production spurred the formation of complex polities. Much of this research draws upon a combination of regional settlement pattern studies and ethnohistorical analysis, quite different sources of historical knowledge whose linkage poses epistemological challenges.

Regional archaeological survey in several areas suggests to archaeologists that the chiefdom societies of the Chesapeake—most prominently the Powhatans—emerged out of a social transition

whereby Middle Woodland (500 B.C. - A.D. 900) “harvesters of the Chesapeake” became Late Woodland (A.D. 900 - 1500) village agriculturalists (Potter 1993:139; Binford 1964; Turner 1976; Dent 1995). Prior to this transformation, a focus on estuarine resources and settlement along major waterways in the Coastal Plain began during the Late Archaic (3000 B.C. - 1000 B.C.) and Early Woodland (1000 B.C. - 500 B.C.) periods throughout the Middle Atlantic Coast region, likely driven by a subsistence emphasis on shellfish and anadromous fish. Paralleling this trend, an Early Woodland shift to lowland, estuarine areas is apparent in regional settlement patterns (e.g., Steponaitis 1987). Detailed analysis of shell midden formation has produced similar evidence of increasing exploitation of oysters during the Late Archaic and Early Woodland periods in the Potomac River basin (Waselkov 1982:207). Archaeological evidence of intensive shellfish exploitation is contemporaneous with a stabilization of the Chesapeake region's shorelines, making it difficult to separate the possible cultural transition from natural processes that heighten the visibility of post-Middle Archaic shoreline sites and submerged or destroyed earlier ones (Klein and Klatka 1991:165). Regardless of the timing of its commencement, extensive use of estuarine environments was in

place in the Virginia Coastal Plain by the later centuries of the Middle Woodland period.

Survey data along the south shore of the Potomac River record late precontact settlement patterns that oscillated between population concentration and dispersal (Potter 1993). During the early Late Woodland centuries, large sites disappeared as newly agricultural populations dispersed in intermediate-sized settlements along the floodplains and neck lands of the Coan River. For the period between A.D. 1300 - 1500 a settlement pattern matching that described in colonial accounts emerged, with a large and internally dispersed village along the Coan River. The villages of the terminal Late Woodland contained a diversity and abundance of artifacts in the context of midden deposits, suggesting settlements occupied for a substantial portion of the year and favored locations which drew populations for multiple reoccupations. The survey data also suggest that population growth accelerated with the establishment of relatively sedentary communities during the final precontact centuries.

Interpretations of such regional settlement patterns generally envision the development of complex polities from the interplay between high population densities, social circumscription, hostilities across the fall line, and control of important resources and communication arteries by inner Coastal Plain groups (Potter 1993:168; Binford 1964; Turner 1976). This control likely conveyed a selective advantage on groups like the Powhatan on the James and the Patowomekes on the Potomac in the sixteenth century's competitive social climate. Some researchers have suggested that chiefdom polities ultimately arose as a solution to social and ecological problems posed by the sixteenth century cultural landscape in the Chesapeake (e.g., Potter 1993:149). In the Potomac River Valley the palisaded Potomac Creek (44ST2) and Accokeek Creek (18PR8) sites appear as fortified settlements of Piedmont emigrants in a hostile inner Coastal Plain (Potter 1993:120-121; Blanton 1999). The lack of subsurface storage at these locations raises the possibility that chiefs were present who controlled surplus maize production in above ground cribs (Potter 1993:120-121). In some Eastern Woodlands settings, a political economy in which chiefs dominated household production resulted in the absence of subsurface storage pits (DeBoer 1988; Ward 1985).

The inner Coastal Plain represented the primary ecological setting for chiefdom emergence in the Chesapeake with its dense population concentrations during the Late Woodland period (Turner 1976:68, 205). Due to the high agricultural productivity of

floodplain soils and the increased numbers of settlements adjacent to rivers, competition for fertile land may have induced warfare, as indicated by the presence of fortified floodplain sites in the final Late Woodland centuries. The demographically large inner Coastal Plain groups who controlled Piedmont / Coastal Plain exchange appear to have prevailed in this hostile context, which spurred the formation of complex societies (1976:267).

The increasingly-limited spatial distribution of Late Woodland (A.D. 900 - 1500) ceramic wares compared with Middle Woodland (500 B.C. - A.D. 900) patterns appears to have paralleled increased territoriality critical to the late precontact emergence of regionally-distinct Native polities (Turner 1993). By the end of the Middle Woodland period, shell-tempered Mockley ceramics, generally with cord-marked surfaces, appeared throughout the Virginia Coastal Plain. The Townsend tradition developed after (and possibly out of) Mockley at the beginning of the Late Woodland period, with most of these shell-tempered ceramics exhibiting a fabric-impressed surface. During the opening centuries of the Late Woodland period, Rappahannock fabric-impressed pottery, a sub-category of the shell-tempered Townsend series, occurred across much of the coastal Middle Atlantic. By the end of the Late Woodland period this widespread uniformity was replaced by ceramic types with more restricted distributions. In Tidewater Virginia these included Roanoke ceramics—shell-tempered and simple-stamped—that dominated the lower James River valley. Sand and crushed quartz-tempered Gaston ceramics with simple-stamped surfaces appeared in the inner Coastal Plain of the James and York River drainages. Rappahannock fabric-impressed pottery continued in use throughout the lower York, Rappahannock, and Potomac. Sand and crushed quartz-tempered Potomac Creek pottery, a ware with distinctive rim decorations, occurred in the Potomac's inner Coastal Plain.

Several excavations have produced information regarding Coastal Plain burial practices. Where ethno-historical accounts clearly distinguish between ritual practices associated with the burials of Powhatan commoners and chiefs, Coastal Plain mortuary archaeology generally does not record the clear expression of social differentiation until the Contact period. Ossuary burial, which comprises the final step of a two-stage ritual process, represents the most common mortuary practice of the Late Woodland Coastal Plain (Boyd and Boyd 1992:261-263; Curry 1999; Jirikowic 1990; Turner 1992). While colonial accounts mention both primary interments and secondary burial ritual, it is not entirely clear whether either practice conferred a

higher status. The accounts are consistent in noting that chiefly interments occurred *above ground* in temples reserved for this use and attended by priests. Disarticulated bone bundles, articulated burials, and cremated remains have all been identified in Coastal Plain ossuaries, which usually date to the final Late Woodland centuries and the early colonial era. Individuals from all age groups and both sexes appear within ossuaries, providing no evidence of the exclusion of social categories from this institution.

Funerary objects rarely accompany precontact ossuary burial, though the contact era "Paspahgh" site (44JC308) located near Jamestown (most likely the Paspahgh village of Cinquoteck) did include ossuary burials associated with European-produced copper artifacts (Lucketti et al. 1994:164). Amateur archaeologists uncovered a clearly high status burial containing copper and shell funerary objects in the Potomac drainage, again dating to the early colonial era. The increased occurrence of copper in ossuary burial on the Potomac Neck after A.D. 1630 may signal widespread access to this material and the end of chiefs' monopolization of the prestige goods trade in copper (Potter 1989). Early colonial accounts emphasize the placement of shell beads and copper objects with the high status burials in the Coastal Plain. The paucity of precontact evidence of high status burials may be a product of the Powhatans' practice of placing chiefs in above ground temples which have escaped archaeological detection or the limited sample of excavated precontact burials. In support of the latter possibility, a Late Woodland component at the Great Neck site (44VB7) exhibits a notable exception to the pattern in which precontact burials lack clear evidence of status differences. Excavators identified three forms of Great Neck burial associated with a fifteenth-century palisaded village, one of which incorporated copper funerary objects (Hodges 1993).

Generally, then, late precontact archaeological studies record a social transformation in the Coastal Plain from a foraging and hunting economy drawing upon the rich and diverse Chesapeake estuary to a subsistence economy which complemented these resources with maize-bean-squash horticulture concentrated in floodplain locations. By the final precontact centuries, relatively large communities dotted the river banks of the Coastal Plain, with palisaded settlements near the fall line. Colonial accounts likewise note the presence of fortified settlements on the James, including Powhatan village where the man who would become paramount chief was born. An overall pattern of late precontact increase in population density is evident, with an acceleration of population growth in the

final precontact centuries. Political complexity most likely arose near the fall line amidst rich and diverse resources, high population densities, and a proximity to the trading and raiding Piedmont Indians.

Excavated Protohistoric and Contact Period Sites

Archaeologists have investigated relatively few sites in the Virginia Tidewater dating to the early seventeenth-century Contact period or the Protohistoric sixteenth century, an era marked by intermittent or indirect encounters between Natives and European colonists. As summarized by Hodges (1993) and Turner and Opperman (1993), several small-scale excavations conducted prior to 1990 identified evidence of European trade items in Native contexts that date to the Protohistoric and Contact periods. Recent studies that offer a more comprehensive glimpse at Tidewater settlement organization and material culture during this period include excavations along the James River at Jordan's Point and near the Chickahominy River mouth and along the York River on the Naval Weapons Station.

Investigations in the vicinity of Jordan's Point, a small prominence reaching into a bay formed by the confluence of the James and Appomattox rivers, have identified Native American and European colonial settlements from the sixteenth and seventeenth centuries (e.g., Mouer et al. 1992; McLearn and Mouer 1994; Morgan et al. 1995). Virginia Commonwealth University's large-scale excavations at the Jordan's Journey sites documented an early seventeenth-century English settlement superimposed on a dispersed, Protohistoric Native American settlement. Jordan's Journey graphically records the early seventeenth-century English strategy of establishing plantations in the same prime agricultural land that previously had been cleared and farmed by Native Americans (Turner 1993:87). The Indian settlement at Jordan's Point, likely a Weyanoke village, consisted of houses, pit features, and burials spread around Jordan's Point beyond the boundaries of several numbered archaeological sites. The sites yielded evidence of approximately 30 well-defined domestic structures. The structures vary widely, though most are elliptical in plan and lack evidence of associated storage pits, burials, or other sub-surface features. No radiocarbon dates are available from the sites, yet the predominance of Gaston simple-stamped ceramics, the lack of European trade goods, and the spatial correlation of the Indian settlement with the early seventeenth-century English one suggests that the village has a sixteenth-century date immediately prior to Jamestown's settlement (Mouer et al. 1992:161).

Large-scale excavations at a site located along the Chickahominy River near its confluence with the James uncovered extensive evidence of a village dating to the early years of the Jamestown Colony. Based on map projections, the settlement is most likely the Paspahugh village of Cinquoteck (Lucketti et al. 1994). Located five miles from Jamestown, the settlement offers some of the best archaeological evidence of a group under Powhatan's influence living in close proximity to Jamestown. The Native community residing at the site interacted intensively with English colonists, as reflected in the written accounts and in the presence of European copper artifacts in burial contexts. Radiocarbon dates, the predominance of Roanoke simple-stamped ceramics, and the absence of artifacts diagnostic of earlier periods indicate that Cinquoteck's archaeological deposits date almost exclusively to the early colonial period (Lucketti et al. 1994:183).

The village, only a portion of which was excavated, was organized according to a dispersed settlement pattern of houses interspersed with burial grounds. The excavations identified 48 structures across the site. With the exception of 25 burials, the site lacked pit features dating to the Contact period. Two of the largest structures at the site contained internal partitions conforming to ethnohistoric descriptions of chiefs' houses (Lucketti et al. 1994:307). In addition, the varied mortuary patterning at the site suggests the expression of social differentiation. Copper funerary objects were included with three of the 21 excavated burial features, prompting the excavators to suggest that the site's mortuary rituals expressed at least two distinct levels of social ranking. An analysis of the copper ornaments associated with human burials indicates that most of the objects came from European sources.

Recent investigations by the William and Mary Center for Archaeological Research (WMCAR) at the Naval Weapons Station Yorktown on the York River have resulted in the most intensive and comprehensive archaeological survey in the Virginia Tidewater (Underwood et al. 2003). Of the 366 sites identified on the property, at least 20 have yielded evidence diagnostic of the protohistoric sixteenth century or the early seventeenth-century Contact period. The Naval Weapons Station's York River shoreline includes areas that correspond with the location of the Powhatan village of Kiskiack as depicted on the Tindall, Zuñiga, and Smith maps. Drawing from such cartographic sources, various researchers (Mook 1943; McCary 1981) have long agreed that Kiskiack lies on this portion of the York. WMCAR's recent testing of sites on an embayment of tidal creeks along the York added a

carefully-documented set of archaeological evidence that confirms Kiskiack's location. Recovered artifacts included items believed to have originated at Jamestown, including pieces of sheet copper, lead shot, and English flint fragments. These materials came from unplowed, midden contexts associated with small, intensively occupied areas that were likely part of a dispersed settlement organization. Compositional analysis of the copper, presented to the public in the summer of 2004, indicated that the material matched the signature of copper sheets from Jamestown. These results establish a temporal and material link between Jamestown and Kiskiack, paralleling documentary accounts that place Jamestown colonists in Kiskiack on numerous occasions (often on the way to Werowocomoco). The discovery of Jamestown copper in non-burial contexts offers unprecedented evidence of the materials' widespread distribution in the Chesapeake following a breakdown in Powhatan's control of trade with the English, supporting arguments made by Potter (1989) some years ago.

No discussion of Contact period settlements in the Virginia Tidewater would be complete without mention of the excavations conducted by the Association for the Preservation of Virginia Antiquities at James Fort itself (Kelso and Straube 2004). The recent rediscovery and decade-long study of the fort has yielded an incredibly rich body of evidence from the first years of the Jamestown colony, the years coinciding with colonial interactions at Werowocomoco. The Jamestown Rediscovery team has uncovered a number of features associated with the triangular James Fort, including several hundred feet of palisade walls, the east cannon bulwark, and several house cellars. The initial field seasons at Jamestown focused on locating the Fort and confirming that a substantial portion remained on dry land and had not been inundated by the rising James River (Kelso and Straube 2004:11).

Subsequent expansion of the excavations has exposed materials from an early Fort period (1607 – 1623) that contrasts considerably with contexts dating to the Post-Fort period (1624 – 1660+) (Mallios and Straube 2000:27). The archaeological record of the Fort period is characterized by substantial amounts of copper scraps, glass beads, arms and armor, and wild fauna. Fully half of the pottery dating to this period is Native. The Fort period assemblage speaks to regular, bilateral exchanges involving the movement of copper and glass beads to the Powhatans and Native ceramic vessels (containing food) and wild fauna that flowed to the colonists (Mallios and Straube 2000:29). Material from contexts dating to a transitional era at the end of the Fort period included an even greater percentage

(70% of the assemblage) of Native ceramics while wild fauna continued to dominate the assemblage. Fewer copper and glass beads occurred in these contexts than in the preceding period. The Post-Fort period included relatively few Native ceramics (20%), little copper, and few glass beads. Domesticated fauna dominates the Post-Fort assemblage. These trends point toward a pattern in which material culture associated with Native communities was at first pervasive in the Fort. Subsequently, exchange relations that had been bilateral became unidirectional. Food apparently moved from Native communities into the Fort while fewer trade goods moved in the opposite direction. Finally, evidence of even these connections dwindles in contexts post-dating 1623. For the first 16 years of Jamestown, though, the archaeology of the Fort records a thoroughly hybridized context. In fact, the prevalence of Native pottery at the Fort during the early seventeenth century parallels references in the documentary records to Powhatans residing at the Fort, possibly including Indian women who lived with colonists (Mallios and Straube 2000:38-39).

Artifact Studies

Studies of Contact period material culture have focused on Native ceramic traditions (e.g., Mouer et al. 1999) and trade items of the early colonial era (e.g., Potter 1989; Hantman 1990). A recent series of innovative analyses spawned by the excavations at Jamestown (Hudgins 2004; Mallios and Emmet 2004; Blanton et al. 2001; Lapham 2001) and at the Native village of Kiskiack on the York River (Blanton and Hudgins n.d.) have added nuanced understandings of the material culture from this period. Together these studies offer promising directions for understanding the ways that pottery, stone tools, copper objects, and glass beads expressed and channeled the hybridized social entanglements of the early colonial era.

Not surprisingly, the ceramic traditions of Native communities in early colonial Tidewater Virginia reflect both continuities and changes from precontact styles. A trend in Townsend and Potomac Creek ceramics toward plain and smoothed-over surfaces is apparent in a number of sites dating to the sixteenth and early seventeenth centuries (Hodges 1993:19-20). This trend may in fact have led to the development of the “colonoware” tradition of low-fired, hand-built earthenware with plain or burnished surfaces. Though these ceramics, which include a wide range of attributes (Henry 1980), are commonly dated to the latter half of the seventeenth century when Werowocomoco had long-since ceased to be a Native settlement, the early seventeenth century represents a critical period of transformation in Native ceramic that probably set the

stage for the subsequent appearance of colonoware. Initially defined as “Colono-Indian ware”, these ceramics typically combine elements of European vessel form with the production methods, pastes, and tempers of Native American wares (Noel Hume 1962). Drawing on the well-documented history of pottery production on the Pamunkey Reservation in King William County, Noel Hume concluded that colonoware chamber pots, plates, cups, porringers, and pipkins were likely produced by Native potters and marketed to English colonists and (eventually) Euro-Americans.

In subsequent archaeological research, several historical archaeologists (Ferguson 1992; Deetz 1988) have called this interpretation into question. Ferguson’s research on South Carolina plantation sites identified a clear association between colonoware and the quarters of enslaved Africans. Building on Ferguson’s research, Deetz suggested that the amount of colonoware in Virginia exceeded the production capacity of Virginia Indians. Since colonoware ceramics appear in the archaeological record in large numbers beginning in the late seventeenth century, a period that saw a sharp increase in the numbers of enslaved Africans brought to the colony, Deetz argued that it was likely slaves who produced and used the ware.

A number of archaeologists (e.g., Hodges 1993; Mouer et al. 1999) have, in turn, challenged this interpretation with evidence linking locally-made earthenwares of the historic period with long-standing Native ceramic traditions. In northern Virginia, Camden ware appears in seventeenth and eighteenth century Native settlements and shares attributes with precontact Potomac Creek ware and colonoware (MacCord 1969). The coastal region of the James and York rivers contains “Colono-Indian ware” matching Noel Hume’s classic descriptions—shell-tempered, plain or burnished—that is similar to the Townsend and Roanoke wares found in the region prehistorically. A survey of the Pamunkey Indian Reservation identified several sites with colonoware pottery, including a pit containing abundant colonoware, unfired clay tempered with shell, and pearlware, linking this tradition to historic-era Virginia Indians (McCarthy and Hodges 1980). To the south, Courtland pottery with fine sand temper, plain and burnished surfaces, and European vessel forms appears on seventeenth- and eighteenth-century Nottoway and Meherrin Indian settlements (Binford 1964). Early Courtland vessels resemble the protohistoric Branchville type and exhibit a trend from plain surface treatments during the seventeenth century to burnished surfaces during the eighteenth century (Mouer et al. 1999:84-85). Noting that historical archaeologists in the Chesapeake have a “blind spot” that

masks the contributions of Native Americans during the historic era, the eight authors of Mouer et al. 1999 argue convincingly that Native contributions to the colonoware traditions of the Chesapeake cannot be so easily dismissed.

As noted above, copper played a critical role in early colonial entanglements centered on Werowocomoco and Jamestown. The recent identification of scrap copper at Jamestown, and of Jamestown copper in Native village sites on the James (Cinquoteck) and the York (Kiskiack) indicates that this material may allow archaeologists to trace Contact period exchange alluded to in the documentary accounts. Potter's (1989) identification of the copper trade's historical dynamics and Hantman's (1990) recognition of its political importance have pointed out ways that Contact period interaction has a fundamentally material dimension. Mallios (1998) has added a study of early exchange relations involving Europeans and Virginia Algonquians, interaction that often included copper objects. His interpretations of these historical data suggest that Native actions that included gift giving, hospitality, admonishment, theft, and violence responded to coherent and consistent cultural logics that the English often missed. Subsequent archaeological research (Mallios and Emmett 2004; Hudgins 2004) building on these arguments has added important details. The inundation of copper in the Chesapeake following Wahunsenacawh's 1609 departure from Werowocomoco undermined Powhatan authority structures and contributed to the social havoc of the Contact period (Mallios and Emmett 2004). Hudgins' (2004) archival research and recent spectrographic studies of copper at Jamestown and Kiskiack has added several new elements to the story of copper during the Contact period. In addition to being a critical item of trade with Native communities, scrap copper at Jamestown served as an ingredient needed in colonists' efforts to identify zinc among the minerals present in Virginia. As an essential component in brass, zinc was critical for early English industrial production involving cast items such as cannons, cauldrons, and bells. In short, the archaeological recovery of copper opens a range of research avenues in the study of the early colonial Chesapeake.

Regional Studies of Contact Period Landscapes

Several efforts to characterize the Contact period landscape have contributed insights critical to understanding social interaction at the communal and regional scales. Turner and Opperman (1993) laid the foundations for characterizing communal organization in the Contact period Chesapeake with their compilation of Native and English settlement data from the

Virginia Company period (1607 -1624). Turner and Opperman note that Native settlements of the Late Woodland and Contact period across the Chesapeake were often internally dispersed affairs that are difficult to recognize archaeologically. In fact, the Cinquoteck site mentioned above was not recognized as the sprawling Contact period site that it is until large areas were stripped of plow zone soils, exposing an array of features. Nucleated communities are present in the Contact period, yet Turner and Opperman's efforts to account for the settlements on Smith's *Map of Virginia* with identified archaeological sites indicates that they are atypical. In addition, the frequent reoccupation of favored locations plus the considerable diversity of Native settlement forms complicates efforts to identify and characterize Native villages.

A cultural ecological study that addresses regional-scale dynamics of the Contact period has demonstrated that the worst droughts of the past 800 years coincided with the failures of the late sixteenth-century Roanoke Island's "Lost Colony" and the early seventeenth-century "starving time" at Jamestown (Blanton 2000). Researchers analyzed bald cypress tree rings recovered from southeast Virginia to construct a temperature and precipitation history during the period from A.D. 1185 - 1984 (Stahle et al. 1998). This innovative analysis concluded that extreme drought must be considered as one of the factors in the failure of the Roanoke colony and the starvation of early Jamestown colony. Documentary accounts point to the sensitivity of Tidewater Indians' subsistence system to prolonged periods of low rainfall. Droughts forced Roanoke and Jamestown colonists to depend upon a badly strained Native subsistence economy for provisions, as alluded to in colonial histories. The recent tree-ring research adds a detailed climatological context for the Roanoke Colony's failure and the high mortality rates at Jamestown.

The study also indicates that year-to-year fluctuations in temperatures and rainfall have long characterized the Chesapeake region, fluctuations that required Native Americans to develop social means of alleviating resource shortfalls. The bald cypress tree ring record that Blanton and colleagues evaluated indicates that substantial annual fluctuation in rainfall has characterized the most recent 800 years in the region. Short term climatic events, such as the droughts identified in the study, become critical in the fine-grained analysis of historical sequences captured by the documentary record of the late sixteenth and early seventeenth centuries. Spanish Jesuit missionaries' descriptions of Virginia in 1570 as a land "chastened" with famine and death (Lewis and Loomie 1953:89) hint at

the impact of periodic droughts in the region. While such events may be implicated in long term culture change, they must be viewed in tandem with evidence from the social environment. As in other regions (e.g., Braun and Plog 1982), technological and social practices related to storage, inter-group alliance, and regional exchange played a role in limiting the impact of unusual climatological conditions, since a considerable degree of temperature and precipitation variance was normal in the region.

As mentioned above, Blanton and his WMCAR colleagues (Underwood et al. 2003) contributed another important body of data illuminating key aspects of the Contact period regional landscape with their survey at the Naval Weapons Station Yorktown. Combining their results with previous survey at the installation, the study identified 366 sites across 10,000+ acres of riverine and upland areas. As the surveyed area is a mere 10 miles from Purtan Bay this study provides a rich, long-term context for settlement patterns associated with the Werowocomoco site. The survey identified an increasing number of sites through time with dramatic increases at the outset of the Middle Woodland period (500 B.C. – A.D. 900) and during the Protohistoric period (A.D. 1500 – 1607). Late Woodland (A.D. 900 – 1500) sites are distinguished by middens and features pointing toward greater sedentism. Until the Protohistoric period, site locations frequently keyed off of estuarine resource locations that shifted over time with rising sea levels (Blanton 1996). The survey identified a remarkable number of Protohistoric sites, including settlements that were generally located closer to the York River than those of earlier periods. WMCAR's confirmation of Kiskiack's location, hinted at previously (McCary 1981), represents a major contribution of the study. In addition, the excavations of household clusters associated with Kiskiack produced evidence conforming to Turner and Opperman's (1993) model of internally-dispersed Powhatan communities.

A Recent Reinterpretation

Recent research drawing on the archaeological record of the James River valley by one of the authors of this volume (Gallivan 2003) has offered several new ideas regarding the origins and dynamics of the Powhatan chiefdom and the Monacan Indian polity of the Virginia Piedmont. The departure point for this study was the contrast between the written accounts of the Powhatans and Monacans and the archaeological record of the region. As noted by Turner (1986), the early colonial accounts of these societies emphasize social relationships involving political hierarchy while the region's archaeological record lacks some attrib-

utes typically associated with hierarchical chiefdom polities. Other regions of Native North America with such polities, notably the Mississippian Southeast, include evidence of monumental architecture, ranked site sizes, sharply differing burial practices, and high volumes of symbolic prestige good exchange. The James River study indicates that the complex polities of the Chesapeake region developed with a culture history distinct from that of other regions. As a result, understanding the Powhatan chiefdom requires an appreciation of political dynamics drawn from this unique history rather than a generic, neo-evolutionary sequence. The study identified a set of social changes that coincided with the establishment of relatively large and permanent village communities in the James River Valley during the Late Woodland II centuries between A.D. 1200 and A.D. 1500. Changes in domestic production, community organization, and regional exchange that accompanied the establishment of village communities each contributed to social inequality political hierarchy. During the subsequent Protohistoric and Contact periods, villages containing particularly large residential structures and centrally-controlled stores are apparent archaeologically.

Documentary references from the Contact period complement this evidence by demonstrating how *weroances* and the *Mamanatowick* manipulated funds of power originating in the domestic sphere. These sources record tribute payments that Powhatan extracted from *weroances* and that *weroances* drew from domestic groups. Such tribute included domestic staples – corn, meat, and deer skins – along with prestige items such as copper and pearls. Central storage of these items occurred in above-ground storehouses constructed by the *Mamanatowick* and, on a smaller scale, by *weroances*. In fact, *weroances*' considerable tribute demands may have induced some domestic groups to conceal corn and other valuables in storage pits in order to avoid tribute payment. Strachey noted of the Powhatans that,

Their corn and (indeed) their copper, hatchetts, howes, beades, perle and most things with them of value according to their own estymation, they hide one from the knowledge of another in the grownd within the woods, and so keepe them all yeare, or untill they have fit use for them . . . and when they take them forth they scarce make their women privie to the storehowse (1953:115).

Where storage pits located within house interiors offered adequate protection for surpluses of the Late Woodland II period, Powhatans elected to hide corn and other valuables away from the village during the

early colonial era. Similar tactics aimed at avoiding the loss of surpluses appeared amidst the colonists' efforts to extract corn from Powhatan village at the James River falls, "Trade they would not, and finde their corn we could not; for they had hid it in the woods" (Smith 1986d:185).

Viewed in tandem, the archaeological and ethno-historical evidence indicates that colonial-era *weroances* successfully intervened in the domestic economy in order to extract surpluses. Through gift-giving, feast sponsorship, and other forms of patronage, surpluses that remained within the domestic realm during the Late Woodland period became funds of power wielded in the political arena after A.D. 1500. Ethnohistoric references hinting that some Powhatan households and communities took steps to counter this process through concealment indicate that, even in the Coastal Plain, *weroances* had not established complete control over the domestic economy. Nonetheless, the Powhatans altered their use of storage pits rather dramatically during the colonial era, concealing them in the woods rather than placing them within their houses in response to elites' intervention in the domestic sphere.

Complementary evidence from communal and regional spheres records the development of a new social landscape during the Protohistoric period. Within village settlements the archaeological record points to the advent of palisade construction, possible communal feasting, and elite mortuary ritual during the Late Woodland II phase, though each took on a greater prominence during the Protohistoric period. Palisades distinguished a space dominated by chiefly elites and served as defensive features. Mortuary practices conveyed greater social differences during the Contact period. Prestige goods with a sparse distribution in the precontact era assumed a more prominent role during

the early colonial era. The communal feasts that drew upon the surpluses of a horticultural economy became a critical part in the events of contact involving *weroances* and the colonists. In short, through their association with palisade construction, elite mortuary ritual, and communal feasting, select villages of the early colonial era became physical landscapes that embodied expressions of sacred and political authority.

Documentary accounts suggest that Wahunsenacawh effectively built an individual-centered authority upon the foundation of communal will expressed by the priests and other *quioccosuks*—men granted a sacred status by the *huskanaw* rite of passage. Powhatan pursued strategies designed to enhance his own centrality within social networks that encompassed the English by building alliances and demanding objects of power. In effect, the English briefly became Powhatan's subjects as the *Mamantowick* played the *weroance's* traditional role of a culture broker capable of assimilating the unrefined strangers into the Powhatan world. Powhatan had pursued similar strategies to build networks of power during the protohistoric era prior to the settlement of the Jamestown colony, precluding the notion that the colonists' arrival somehow produced the *Mamantowick* and his paramountcy. Nonetheless, through his role in the Protohistoric and Contact period events that comprise his reign, Powhatan revealed himself as a canny manipulator of both the communal symbols that were central to Powhatan culture and the individual-centered power that came to dominate the early colonial encounter. The intermittent violence and profound otherness that attended European visits during the Protohistoric and Contact periods likely contributed to the consolidation of chiefly authority in the Chesapeake, perhaps by encouraging some Virginia Algonquians to invest in the *Mamantowick* and their *weroances* an unprecedented measure of authority.

CHAPTER 3

ARCHAEOLOGICAL SURVEY RESULTS

The recent investigations of the Werowocomoco site began in March 2002 with a systematic archaeological survey of property along Puritan Bay owned by Robert and Lynn Ripley (Harpole et al. 2003). Though scholars have long-agreed that the area surrounding Puritan Bay likely includes the location of Werowocomoco, intensive and sustained archaeological study of the locale only began with this shovel-test survey of 45 acres. The survey recovered shell-tempered Native

ceramics across most of the survey area. Artifacts associated with Native settlement—including pottery and lithics—were concentrated along Puritan Bay and continued in lighter densities as far as 1500 feet from the bay. Several small concentrations of Middle Woodland (Mockley) and Late Woodland / Contact (Townsend / Roanoke) ceramics offer preliminary indications of settlement organization within the site.



Figure 3-1. Werowocomoco Site Location, Gresitt Quadrangle, USGS 7.5 Minute Series .

The artifact distribution parallels a dispersed village focused around a core area along the river, a layout consistent with Turner and Opperman's (1993) and Underwood et al.'s (2003) models of Contact period communities. The distribution of Late Woodland / Contact period diagnostic artifacts, including a concentration of materials approximately 1000 feet east of Purtan Bay, point toward a varied and complex settle-

ment landscape. The survey and earlier surface collections on the site also record a history of Native settlement from the Archaic period through Contact and historic occupations beginning in the late seventeenth century. The following summarizes the environmental setting, property history, surface collections, and survey results.

Environmental Setting of the Property

The Ripley property is located along Purtan Bay on the northeast shore of the York River in Gloucester County, Virginia. Purtan Bay is bounded by the extensive saltwater marshes of Purtan Island upstream and by Barren Point downstream. The Bay ranges from 2 to 6 feet in depth and has an average tidal range of approximately 3 feet. Three primary creeks empty into the Bay: Purtan, Leigh, and Bland. Tidal influence is significant along both the bay and the creeks. The surveyed landform varies in elevation from 10 to 30 feet above mean sea level (AMSL) and is bounded by Leigh Creek, Purtan Bay, and Bland Creek, and by the 30 foot contour line on the northeast. This area consists mainly of plowed fields, landscaped yard, and

wooded areas along the river and creeks. Route 704 (Ginny Hill Road) is a straight gravel driveway bisecting the project area from northeast to southwest. One modern home, a garage, a doghouse, and an equipment shed are located in the central portion of the survey area north of the driveway. Most of the landscaped yard lies between the house and Purtan Bay, and on the north side of Route 704 whereas plowed fields lie to the south of Route 704. The main portion of the survey area consists of a flat terrace, approximately 20 feet AMSL. Fifteen hundred feet east of the bay, the land rises to another terrace at approximately 30 feet AMSL. Soils within the project area are generally Suffolk fine sandy loam with 2-6% slope.



Figure 3-2. Aerial View of Purtan Bay and the Werowocomoco site, looking north.

History of the Property after Wahunsenacawh

Little was recorded regarding the site during the seventeenth century following Wahunsenacawh's 1609 departure from Werowocomoco. English colonists' earliest settlement in Gloucester County began during the late 1630s, a process that intensified a decade later. By 1650 colonists patented thousands of acres every year, and numerous settlers began to construct houses and plant tobacco fields. The first mention of the property in historic documents dates to November 1652 when William Roberts secured a modest patent for 200 acres located "On the N side of York R. at the mouth of Jones [now Bland] Crk. & NW side, adjoining Edw. West and E upon a White Marsh" (Gloucester County Plat Book [GCPB] 160; Mason 1965:I:64). This land was later included in John Stubbs' 1714 patent for 300 acres described as:

Escheat land formerly in possession of Wm. Roberts dece'd, and for which Justophineca Bennitt, Wm. Sawyer, John Absalom & Mary his wife obtained Certificate Oct. 1707. Since sold to Stubbs by Certificate 21st of October, 1708. (GCPB 10:214; Mason 1965:I:71).

It is unclear whether Roberts lived on the property, but based on these land transactions some individuals probably did occupy part of the land. The documents offer no other information about these early settlers, though surface collection by the landowners and artifacts found during shovel testing do offer some evidence for a late seventeenth / early eighteenth-century occupation on the property.

Documentation of the site resumes in the 1760s when Richard Taliaferro was listed as a resident of Petsworth Parish, the Gloucester County parish that included the survey area (Chamberlayne 1933:319). In 1770 records indicate that Taliaferro owned 415 acres of land encompassing the neck of land between Bland and Leigh creeks (Mason 1965:I:102). Taliaferro died in 1789, but his wife Elizabeth continued to own the property until 1804 (Gloucester County Land Tax Records [GCLTR] 1793-1804). Their son, John, owned the property from 1805 to 1814, and then sold the farm to William Caffee (GCLTR 1805-15). The exact location of the Taliaferro farmstead is unknown, though the archaeological record indicates that the primary occupation area on the property shifted westward during this period to an area fronting the York River.

William Caffee owned the property, with minor changes, until his death in 1839 (GCLTR 1840). The

property was subsequently listed under the estate of William Caffee until sold to Archer Bland in 1860 (GCLTR 1860). Although the records clearly indicate the Taliaferro and Caffee families lived on the property, building values were not recorded until the 1820s, when Caffee's lands contained \$1000 in buildings (GCLTR 1825). An 1855 plat depicts a detailed representation of the Taliaferro/Caffee dwelling house that also appears in slightly different form on an 1848 plat of a neighboring property (GC PB 2:115, 1:260-1). This house survived with extensive alterations until the late 1960s.

The 1865 will of Archer Bland divided the property between his wife and children, though the final dissolution of the property took several years (Gloucester County Will Book A:4). The primary tracts containing the survey area devolved to Archer Bland's children, Schuyler and Julia Leigh Stubblefield (GCLTR 1874). The majority of the property remained in the Bland and Stubblefield families until the middle of the twentieth century. Bounded as it is by creeks and the York River on three sides, the current property encompasses much of the former Taliaferro/Caffee/Bland estate, and preserves a rural landscape that has seen few changes since the middle of the eighteenth century.

Soon after Robert and Lynn Ripley purchased the property in 1996, Lynn began to collect artifacts from the fields, forests, and beaches on the property. Initially recovering mostly mid-eighteenth through twentieth-century ceramics and bottle glass, Lynn also began to recover Native projectile points and fragments of Native ceramics. Lynn assembled a sizable collection of Native materials over several years, including shell-tempered pottery dating to the Middle Woodland, Late Woodland, and Contact periods. Most of the Native ceramics, projectile points, and lithic debitage were recovered on the shore of Purtan Bay, indicating that some erosion of Native features and living surfaces has occurred along the York River bluff. The surface collection suggests that primary occupations occurred along the edge of this bluff above Purtan Bay during the Middle Woodland through Contact periods, and from the late eighteenth to twentieth centuries.

The Native materials, particularly the shell-tempered/fabric-impressed, plain, and simple stamped sherds, indicate that the site includes a sizable settlement dating to the Late Woodland and Contact peri-

ods. A minority of the ceramics are decorated with incised lines and motifs common to the Late Woodland Chesapeake. A preliminary study (Tolbert nd) of this shell-tempered pottery indicates that roughly half of the material may be classified as Rappahannock fabric-impressed pottery, with plain, cord-marked (i.e., Mockley), and simple stamped (i.e., Roanoke) surfaces present in lower frequencies. A shift from bag-shaped to globular vessel forms is apparent in the morphology of Middle Woodland Mockley cord-marked ceramics and Late Woodland Rappahannock fabric-impressed pottery. Comparison of the Mockley, Rappahannock, and Roanoke sherds indicates that vessel diameter increased from the Middle Woodland through Late Woodland periods. Projectile points recovered in the collection include a variety of forms, some dating to the Early Archaic period. The majority of the points, though, are quartzite triangles diagnostic of the Middle and Late Woodland periods. Items in the collection likely dating to the Contact period include a blue glass bead and fragments of sheet copper. Analysis of the copper to determine whether the material originated

from the early seventeenth-century trade between colonists and Native communities is currently underway.



Figure 3-3. Scrap copper collected from surface and plow zone excavations.

Burial and Artifact Cache

Prior to the survey of the Werowocomoco site and the creation of the Werowocomoco Research Group, fragmentary human remains and an associated cache of artifacts were recovered by collectors at the site. The burial included poorly-preserved bones and teeth of a 2 – 4 year old child of probable Native American ancestry. Materials associated with the burial, described in detail below, include European-produced metal objects and glass beads dating to the early seventeenth century. The cache and human remains were recovered from a feature located 1400 feet from the York on an elevated terrace overlooking the site. All of the soil was screened through 1/16-inch window screen. No photographs were taken or drawings made documenting the removal of the materials.

The human remains and associated objects are critical elements of the site's history and powerful symbols for contemporary Native communities in Virginia. Though the Native American Graves Protection and Repatriation Act (NAGPRA) does not apply to Virginia's tribes (which have not yet obtained Federal recognition), the research team's policy on human remains operates as if the law does apply. The Werowocomoco Research Group informed the Virginia Coun-

cil on Indians of the burial and artifact cache at the site prior to commencing any excavation or studies. We have subsequently met with the project's Virginia Indian Advisory Board and discussed the ultimate disposition of the human remains and associated materials. Our goal has been to develop a plan for the human remains and associated materials that is respectful of the Virginia Indian community's wishes while also meeting our ethical obligations as stewards of archaeological information from the site. Our Virginia Indian advisors have expressed a strong sense that the objects represent items sacred to Powhatan descendants. Under NAGPRA, the materials would likely be accorded the status of associated funerary objects. Given the strong convictions of the contemporary community, it is also possible that the materials would today be considered objects of cultural patrimony. Objects of cultural patrimony have ongoing historical, traditional, or cultural importance central to a tribe itself, rather than the property of an individual tribal member. Upon completion of an inventory, the Werowocomoco Research Group and landowners delegated decisions pertaining to the reinterment of the remains and associated objects to the Virginia Indian Advisory Board.

Element	n	Size (mm)	Comments
Right rib fragment	1	0.7 x 3.3	Juvenile individual based on size and features.
Femoral head metaphysis	1	1.4 x 1.2	Probable right femur. Fovea Capitis present.
Possible endocranial or ilium fragment	1	2.3 x 2.1	Flat bone fragment. Too fragmentary to determine age.
Possible innominate	1	-	Probable pubis or ischium.
Endocranial layer fragment	1	3.9 x 1.3	Possible occipital.
Probable cranial fragment	1	-	Possible ilium fragment.
Right tibia or femur	1	-	Long bone shaft with observable nutrient foramen. Flattened appearance. Green stain on proximal end possibly due to contact with a copper alloy object.
Basilar portion of crania	1	2.5 x 0.7	Probable mastoid.
Small bone fragments	2	-	Unidentifiable.
First deciduous molars	2	-	Roots broken off, crowns complete. Minimum age: one year.
Second deciduous molars	2	-	Dentin layer established. Minimum age: one year.
Deciduous molar	1	-	Shell only.
First permanent molars	4	-	Crowns partially developed. Age: one to three years.
Deciduous canine crowns	2	-	Dentin and pulp chamber established. Broken roots. Minimum age: nine months.
Deciduous canine	1	-	Complete root (curved). Enamel exfoliating. Age: one – three years.
Deciduous central incisor	1	-	Crown broken in half. Labial and lingual sides present. Shovel-shaped lingual side indicates possible Native American ancestry.

Table 3-1. Summary of Human Remains Recovered from the Burial and Artifact Cache.

The human remains include ten bone fragments and nine teeth. Biological anthropologist Lesley Rankin-Hill's (2004) assessment of these remains is summarized in table 3-1. Though the remains were fragmentary, the dentition indicates that they are from a child aged 2 – 4 years. Native ancestry is indicated by a shovel-shaped incisor. Copper staining on one of the bones implies that it was in contact with some of the copper-alloy objects described below.

Objects associated with this burial included an iron lathing hammer, a copper-alloy skillet, a copper-alloy spoon, copper-alloy beads, two copper-alloy "King's Touch" tokens, and several thousand white and blue glass beads. Though uncommon in the Chesapeake region, such a combination of materials has been found in other Middle Atlantic and Northeast burial contexts dating to the Contact period (e.g., Pietak 1999, Rubertone 2001). These objects include materials critical to early exchange relations in the Chesapeake—copper, glass, and iron—as well as materials that embody the red, white, and black color symbolism that recurs throughout Powhatan cosmology.

The wrought iron lathing hammer has a hatchet end used to cut strips of lath for plaster and a hammer end to drive nails. Impressions of wood in the corro-

sion on one side of the hammer suggest that it may have been placed in a box or laid on a board, which later decayed in the ground. Lathing hammers are not unusual on seventeenth-century sites, and they saw use as all-purpose hatchets and hammers, and as trade items (Gaynor 1993:348).

The near-complete copper-alloy skillet measures 3 1/4" (82mm) tall and 6 3/16" (156mm) in diameter. The pot, missing its handle, is heavily worn and slightly misshapen, and bears a blackish residue on the exterior that may have resulted from use in a fire. The bowl was hammered out of single sheet of copper alloy with an everted rim that was rolled over a copper wire for strength (Straube 2004). Based on similar objects recovered from early seventeenth century sites, the rivets likely attached three iron strap-like legs (now missing) to the sides. A leg repair is suggested by the extra rivet located at one leg attachment.

The two fragments of a copper-alloy 'seal-top' spoon have a fig-shaped bowl and flat-topped baluster finial. This style was common during the sixteenth and early seventeenth centuries (Cotter 1994:189; Noel Hume 1991:181). The spoon is stamped in the bowl with a maker's mark, an "R B" within a square-topped shield. The bowl shows evidence of use, while the handle is broken and partially missing. Similar spoons

with an identical maker's mark have been recovered from the early seventeenth-century occupation at the Jordan's Journey site (Straube 2004).

The two copper-alloy tokens were stamped on one side with a crown above an entwined rose and thistle, identical to the motif used on the halfpenny acknowledging the union of England and Scotland during the reign of James I (Straube 2004). Similar objects recovered from James Fort and from the Piscataway Creek site in Maryland have been identified as "King's Touch" tokens (Kelso and Straube 1997:25). The tokens relate to an English royal ceremony originating in the fourteenth century that imbued the monarch with healing powers. The King's touch was said to cure scrofula, or tuberculosis of the neck. After the ceremony diseased attendees were handed a token of the ceremony. Recent excavations at James Fort have recovered twenty-three of these tokens in contexts dating circa to 1610 (Straube 2004). A similar set of eighteen tokens, pierced and comprising a necklace, were located in a seventeenth-century Indian ossuary on the banks of Piscataway Creek in Maryland (Ferguson 1940). The tokens were presumably brought to Virginia for trade with Native communities. The examples found at the Werowocomoco site are both pierced in the middle with two holes, suggesting they were modified and used in a necklace or other form of body adornment.

Copper-alloy beads in the form of short tubes were also part of the cache, including nine complete beads and three fragments. The beads are between 14 and 16 millimeters long and are made of thin pieces of rolled copper. Several of the beads have a fibrous thread inside them, which suggests that they were held together in a necklace. An analysis of the thread from several of the beads indicates the fibers are linen flax of probable European origin (Williams 2005). An ongoing analysis of the copper from these objects will help determine whether the objects are European or Native in origin. Given the proximity of the copper beads, tokens, and glass beads, it is likely that the objects were strung together on a complex decorative necklace.

The largest number of artifacts in the cache, a total of 3,951, consist of small blue and white glass beads and one large chevron bead. The following summarizes Lapham's (2004) detailed assessment beads from the cache. This assessment indicates that four bead varieties were present, including 3,631 small white glass beads in two variants and 320 blue glass beads. Labeled according to the Kidd and Kidd (1970) classification system, these beads fall under the Ila56,

IVa11, IVa11*, and IVk_* varieties (table 3-2). This classification system distinguishes bead varieties based on manufacturing processes, shape, size, and color. All of the beads in the cache were produced using the drawing process.

Lapham classified all but two of the 3,631 white glass beads in the assemblage under the IVa11 variety. These are small, circular beads comprised of three layers of glass. Two other white beads, labeled IVa11* were virtually identical but exhibited a transposed sequence of glass layers (a colorless glass between two opaque white glass layers). These white bead varieties are common on early to middle seventeenth-century sites in the Middle Atlantic and Northeast, though few have been recovered from the James Fort site. The IVa11 variety comprises only 1% of the Early Fort period (1607 – 1623) assemblage and 4% of the Post-Fort period (1624 – 1660) assemblage (Lapham 2001).

The small blue glass beads present in the assemblage were all of the Ila56 variety. This bead type typically occurs in small numbers on early to late seventeenth-century sites in the Middle Atlantic and Northeast. A considerable amount of Ila56 blue glass beads have been excavated from Early Fort contexts at Jamestown—a full 26% of the assemblage (Lapham 2004:3). These beads, though, are entirely absent from the Post-Fort period.

The final bead variety, a large, spherical chevron bead, designated IVk_*, does not conform to the Kidd classification system. These beads are referred to as chevrons due to the star-like pattern apparent when viewed from their ends (Lapham 2004:5). The bead includes an opaque white glass layer contained between two translucent dark blue layers (Munsell hue 5 PB 2/8). It differs from other identified chevron varieties in that it lacks the typical color sequence of 4 – 5 layers commonly seen in a dark blue chevron. The bead is the only documented example in the region of a 16-point star-shaped mold containing two colors and three layers of glass (Lapham 2004:5). Similar dark blue chevrons (Kidd varieties IVk3 and IVk4) have been recovered from early-to-mid seventeenth-century Native American sites in the Northeast. These beads typically derive from Dutch-supplied Polychrome Horizon assemblages dating to A.D. 1609-1624 and from Iroquois sites in New York dating circa A.D. 1620-1650 (Fitzgerald et al. 1995; Kenyon and Kenyon 1983). Chevrons are also present on early seventeenth-century Monongahela and Susquehannock sites in Pennsylvania and the upper Potomac River Valley in Maryland (Kent 1983; Lapham and Johnson 2002; Sempowski 1994; Wall and Lapham 2003). Excava-

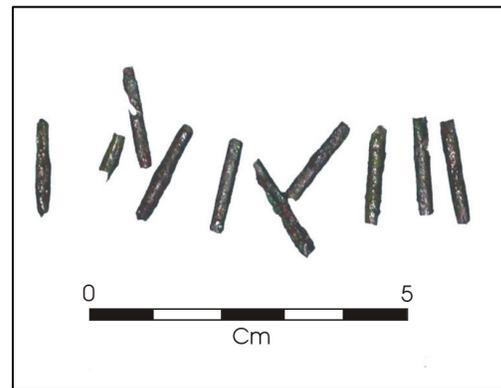
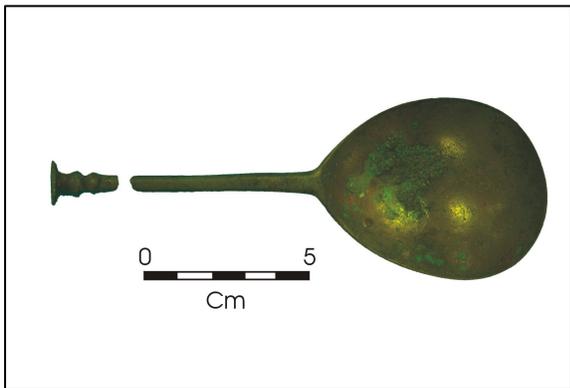


Figure 3-4. Metal objects from artifact cache: lathing hammer, skillet, spoon, beads, and Touch Tokens.

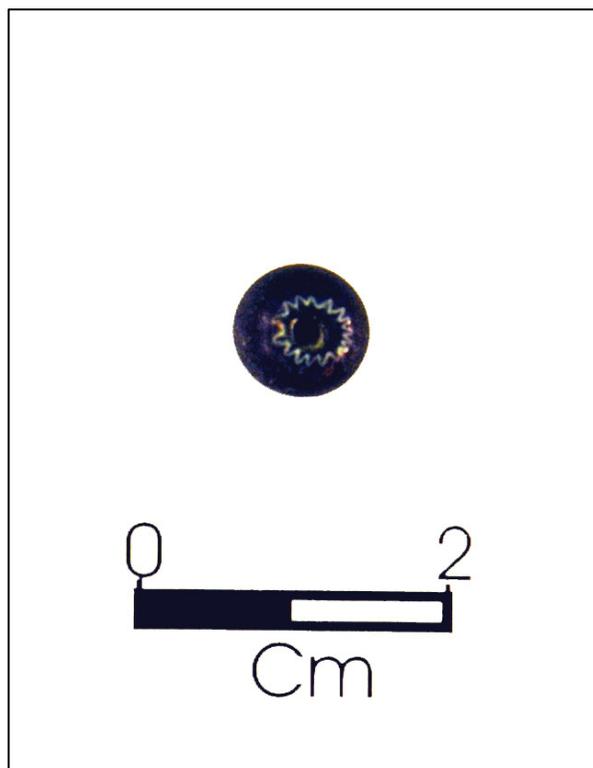
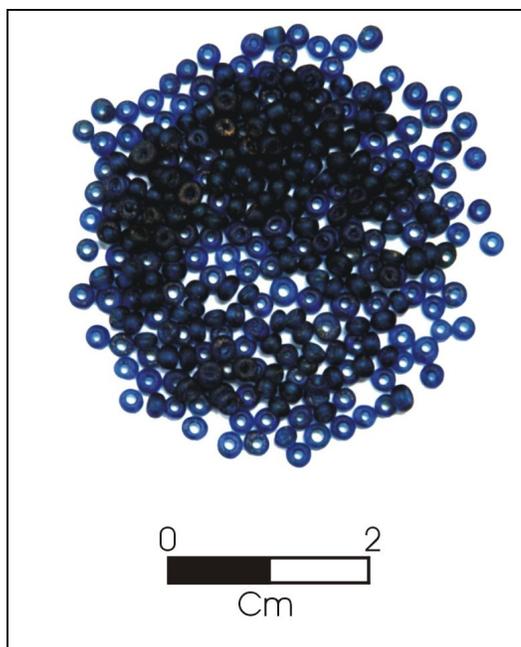
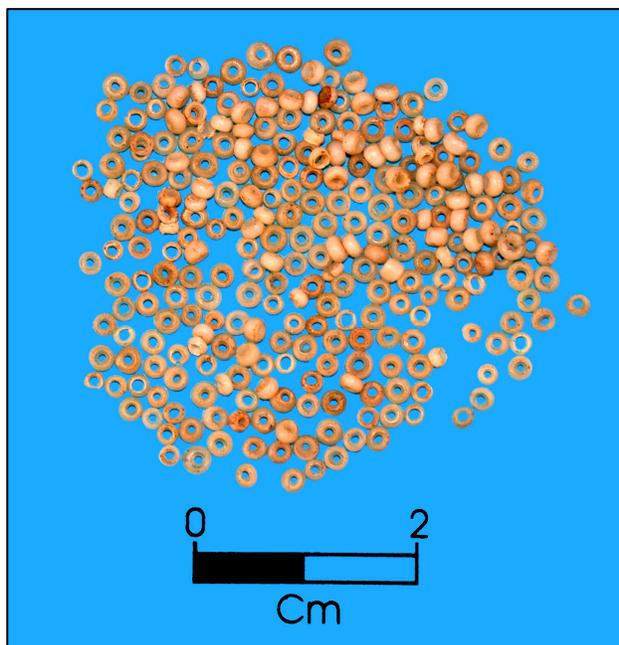


Figure 3-5. Glass beads from artifact cache.

Kidd Variety	Description	Est. Count n=3,951	Examined n=846	Mean Diam. (mm)	Mean Length (mm)
IVa11	Very small-small, circular, 3-layer white beads (C/W/C)	3629	823	2.41	1.49
IVa11*	Very small-small, circular, 3-layer white beads (W/C/W)	2	2	2.41	1.45
Ila56	Very small-small, circular, translucent dark blue beads	319	20	2.63	1.50
IVk_*	Lg., spherical, 3-layer translucent dark blue beads (B/W/B)	1	1	8.76	7.89

Figure 3-2. Beads Recovered from Artifact cache. Data Drawn from Lapham (2004).

tions by the William and Mary Center for Archaeological Research at the Thomas Wharf site on the Eastern Shore near Nassawadox, Virginia, recovered one chevron bead (Blanton 1999; Lapham 1998). The sporadic occurrence of spherical-shaped chevron beads in the Middle Atlantic may be tied to the predominance of English (as opposed to Dutch) trade in the region. Excavations at James Fort, from the Early Fort and later periods, have not recovered similar chevrons.

The glass bead varieties recovered from Werowocomoco have occurred in other contexts across the Atlantic seaboard dating from the early and middle seventeenth century. The numbers of small, dark blue beads in Early Fort period contexts (A.D. 1607-1623) at Jamestown identical to those recovered at Werowocomoco point toward links between the two assemblages. However, the small white bead variety (IVa11) recovered from Werowocomoco was present within Early Fort period contexts at Jamestown only in low numbers. This variety is more common during the Post-Fort period (A.D. 1624-1660), though even during this interval the variety is relatively uncommon. Spherical chevrons have not yet appeared in the exca-

vations at Jamestown. Given its unique role in early exchange relations in the Chesapeake, Werowocomoco's assemblage may very well differ from other Middle Atlantic sites of the early seventeenth century.

The burial and associated funerary items are evidence of Werowocomoco's unique status in the archaeological record of the Chesapeake region. Likely an early seventeenth-century context, it is not clear whether the burial dates to the years before or after 1609 when Wahunsenacawh ended his residency at the village. The materials included with the burial came from sources beyond the known Powhatan world and possibly beyond the world of English colonists given the enigmatic origins of the chevron bead. As discussed in chapter 2, the color symbolism in the artifact cache suggests a complex suite of ideas associated with life, death, and liminality. The burial at Werowocomoco marked the death of a person with considerable importance in the Powhatan world during the seventeenth century. Given the status of Werowocomoco as Powhatan's residence, the buried child may, in fact, have been related to Wahunsenacawh's lineage.

Survey Goals, Methods, and Results

As discussed above, written records and cartographic sources indicate that the Ripley property likely contained Powhatan's village of Werowocomoco. Surface collection by the landowners revealed the presence of cultural materials diagnostic of the Late Woodland / Contact period throughout the property, specifically within the plowed fields south of Route 704 (Ginny Hill Road) and along the shoreline of Purtan Bay. The archaeological survey of the Werowocomoco site, conducted by DATA Investigations and described in detail in Harpole et al. 2003, sought to define these archaeological resources more precisely in order to assess their research potential. Bearing in mind the length of known use and occupation, the survey strategy sought the maximum information from

the site with the least amount of intrusive disturbance through excavation. Specifically, the shovel test survey was designed to determine the site's boundaries and to identify artifact concentrations that might correspond with elements of a Late Woodland / Contact period community.

Early colonial sources document Powhatan settlements comprised of residential cores surrounded by a dispersed arrangement of households and associated horticultural plots. Given the social and political importance of Werowocomoco during the early seventeenth century, this community model may not apply to the settlement. In fact, Werowocomoco may have included a more consciously-ordered landscape than

other contemporary villages. Artifact concentrations identified during the survey provide a departure point for evaluating the settlement's spatial configuration.

There is no documentary evidence that the property was inhabited by English settlers during the first half of the seventeenth century. By the middle seventeenth through early eighteenth centuries, most Tidewater settlements were small farmsteads situated on large parcels held by middling planters and worked by indentured servants and slaves. Typically, these farmsteads consisted of a house, several outbuildings, and a few acres of fields (Brown et al. 1986:131). The devotion to tobacco monoculture during this period required the clearance of large tracts of land. Archaeologically, such sites are often difficult to locate due to the use of earthfast construction, which left only ephemeral subsurface indications of their existence, and a lack of extensive material possessions among the majority of settlers.

By the 1760s it appears that Richard Taliaferro had settled on the property (Chamberlayne 1933:319; Mason 1965:I:102), though the location of his dwelling within the 400-acre property is unknown. The sizable landholdings of Richard Taliaferro suggest a farmstead of some means that would have included numerous outbuildings and the use of slave labor. The dispersal of these buildings throughout the landscape should be reflected in varying concentrations of artifacts found in the plowzone and yard areas. By the early nineteenth century, it is clear that the primary occupation within the survey area is in the modern landscaped yard, close to the York River. At the center of this farmstead was the Caffee house, a timber-framed structure on a brick foundation or piers that was sketched in 1855 and survived until the 1960s.

Field Methods

The archaeological survey was undertaken to assess the boundaries of the Werowocomoco site (44GL32) as well as the archaeological research potential of the property. The study included shovel testing, mechanical stripping of a discreet, previously disturbed area, and sampling of previously removed soils. The survey grid was oriented along Route 704, which bisects the property and the natural landform. Grid north is perpendicular to Route 704 and is approximately 18 degrees west of magnetic north, and 24 degrees west of true north. Every 50 feet along this grid shovel tests (approximately one foot in diameter) were excavated to sterile subsoil or cultural feature. All excavated soils were screened through ¼ inch mesh screen to ensure uniform recovery of cultural materi-

als. Soil profiles for each shovel test were recorded along with an interim artifact inventory.

An approximately 120' x 45' area in the southwest portion of the survey area was previously disturbed by construction activities related to a shoreline stabilization project. Significant portions of this area had been stripped to sterile subsoil prior to the survey. The plowed soils that had been removed were placed in a berm surrounding the edges of the impacted area. A sample of the removed plowed soils (approximately 5%) was screened through ¼ inch mesh screen. The area was then cleared of remaining rip-rap and soil with a backhoe and cleaned by hand. Features identified during this process were mapped and photographed prior to sampling.

Survey Results

A total of 603 shovel test pits were excavated, of which 504 yielded artifacts and 42 identified features. Fragments of brick and sherds of Native pottery were common throughout much of the surveyed area, with lithic debitage, bottle glass, and European ceramics also retrieved in significant numbers. In the Damage Assessment area, four cultural features were identified. One feature was sampled and appears to be a small pit dating to the late eighteenth or early nineteenth century. The shovel testing indicates that plowing was widespread across the survey area.

The shovel tests were excavated in three different types of land coverage: open field and pasture, landscaped yard, and young (<40 years) forest. Shovel tests excavated in the open field and pasture environments are primarily composed of two strata: plowzone (Ap horizon) and subsoil (C horizon). The plowzone is typically composed of dark brown to yellowish brown sandy loam, and varies between 0.4' and 1.4' in thickness. The underlying subsoil generally consists of a yellowish brown to brownish yellow sandy clay starting between 0.6' and 1.2' below ground surface.

Shovel tests excavated in the landscaped yard included a thin root mat within a matrix of dark grayish brown or dark brown sandy loam. This layer typically overlay an historic plowzone extending to a depth of 0.8' to 2.1' and composed mainly of brown to dark brown sandy loam. The plowzone attained significant depth in portions of the yard area, particularly north of the main house. The landform exhibits a slight dip in this area, such that plowing and erosion filled in portions of the natural drainage system. Below the remnant plowzone is yellowish brown or brownish yellow clayey sand subsoil.

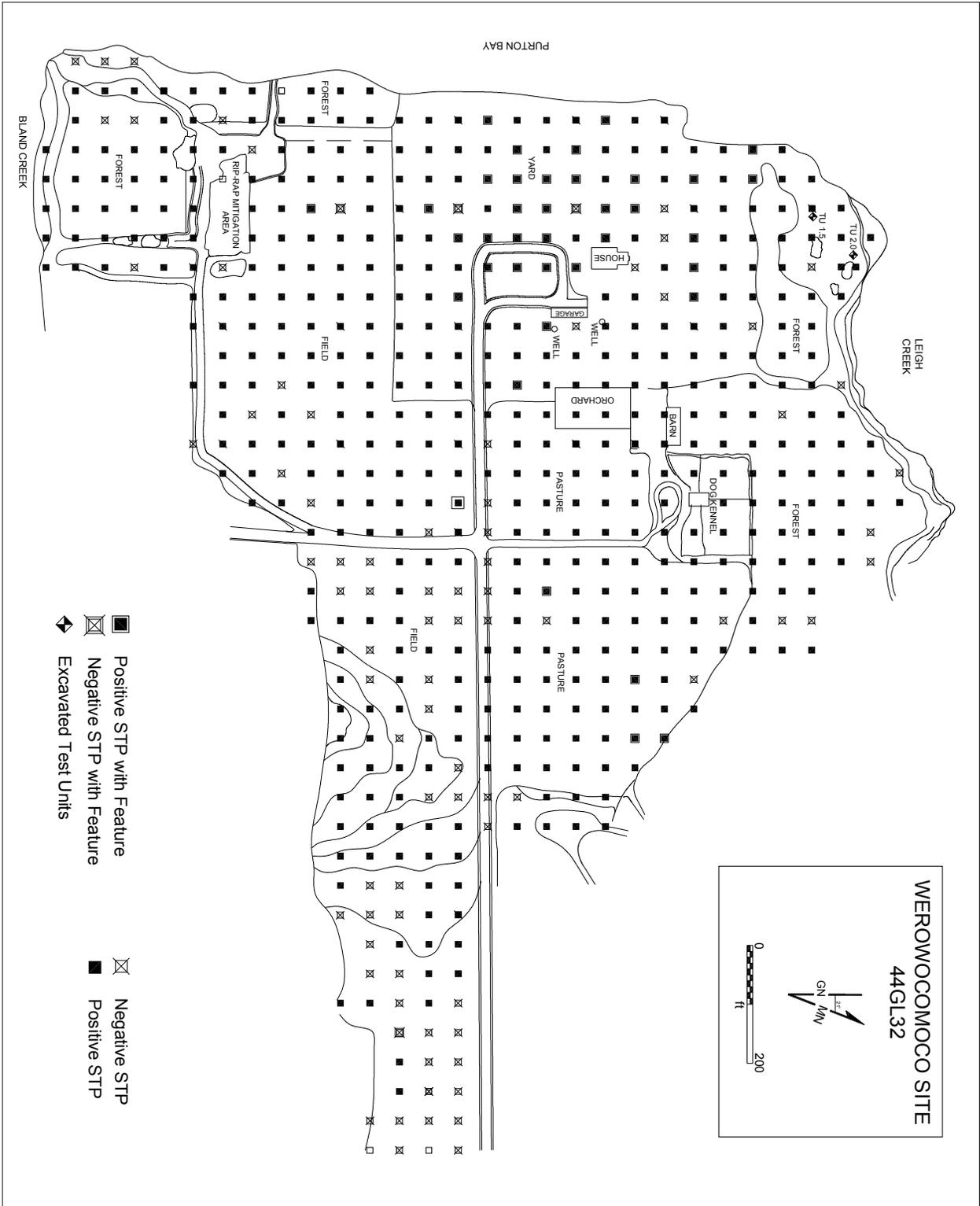


Figure 3-6. Map of Survey Area.

Shovel tests excavated in the wooded areas typically included a thin upper layer of root mat/humus mixed within a matrix of dark brown or very dark gray sandy loam. Below the topsoil is a layer that varied between brown and pale brown loamy sands, and extending to a depth of 0.9' to 1.2' below ground surface. This layer represents an older plowzone, although portions of the forested areas were probably unplowed and exhibit natural soil horizons. Subsoil, a layer of yellowish brown sandy clay, was encountered below the old plowzone.

Artifact Concentration Analysis

The archaeological survey provided information about the location of both Native and Euro-American occupation and activity areas. Though artifacts were recovered across the entire 45-acre survey area, distinct concentrations associated with varying temporal / cultural periods were identified.

The concentrations of Native artifacts were defined primarily by the recovery of prehistoric ceramic sherds with identifiable surface treatment and temper relating to one of two specific periods. Six distinct

concentrations were identified, two with Middle Woodland diagnostics and four containing ceramics dating to the Late Woodland and Contact periods.

Native materials occurred in light densities across much of the site with higher densities along Purtan Bay. The two Middle Woodland concentrations, located in the northern part of the survey area and along the edge of the York River bluff, were identified based on the presence of shell-tempered ceramics with net-impressed and cord-marked surfaces from the Mockley series. Both areas are relatively small, suggesting a less intensive occupation during the Middle Woodland period. Late Woodland diagnostic ceramics are also present in both areas.

Four disparate concentrations dating to the combined Late Woodland and Contact periods were identified across the survey area. Diagnostic ceramics from these centuries, including Townsend and Roanoke wares, occur before and after 1607 in the Virginia Tidewater. The two largest areas (II and III) were adjacent to the bluffs above the York River and represent a more intensive occupation, possibly the residential

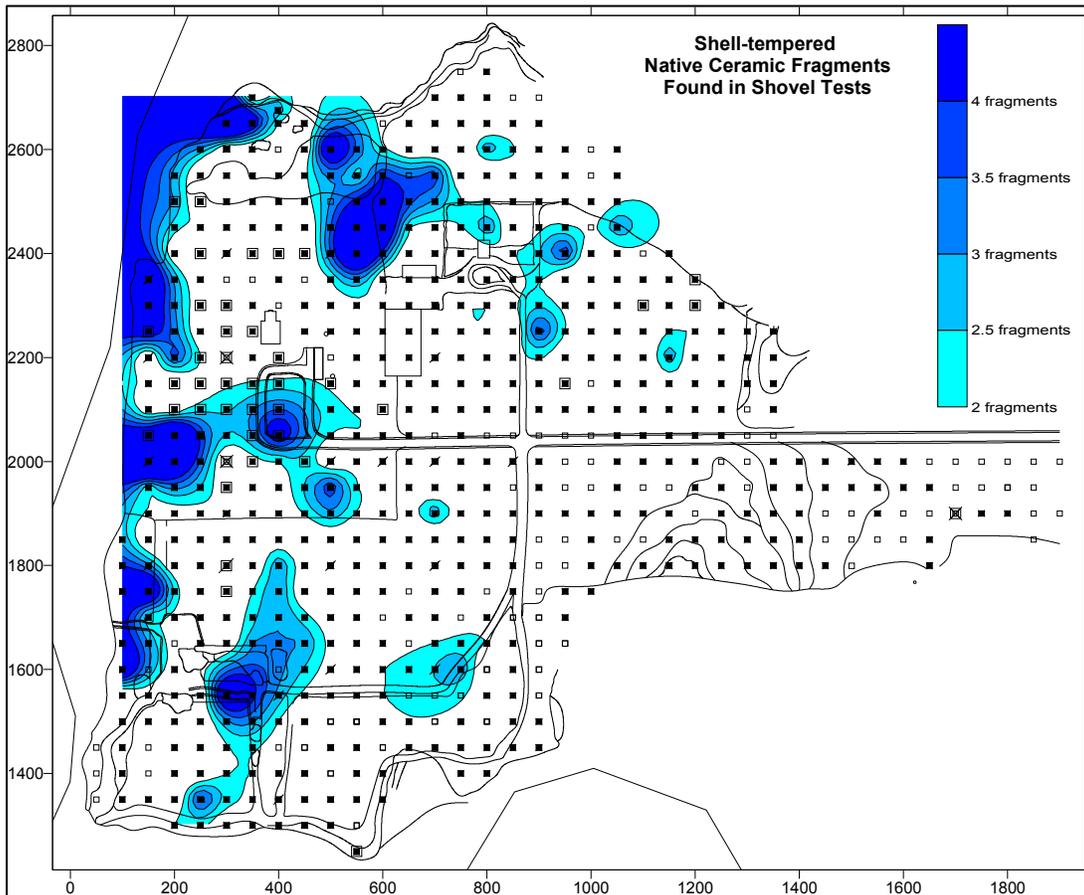


Figure 3-7. Distribution of Shell-tempered Pottery at the Werowocomoco Site.

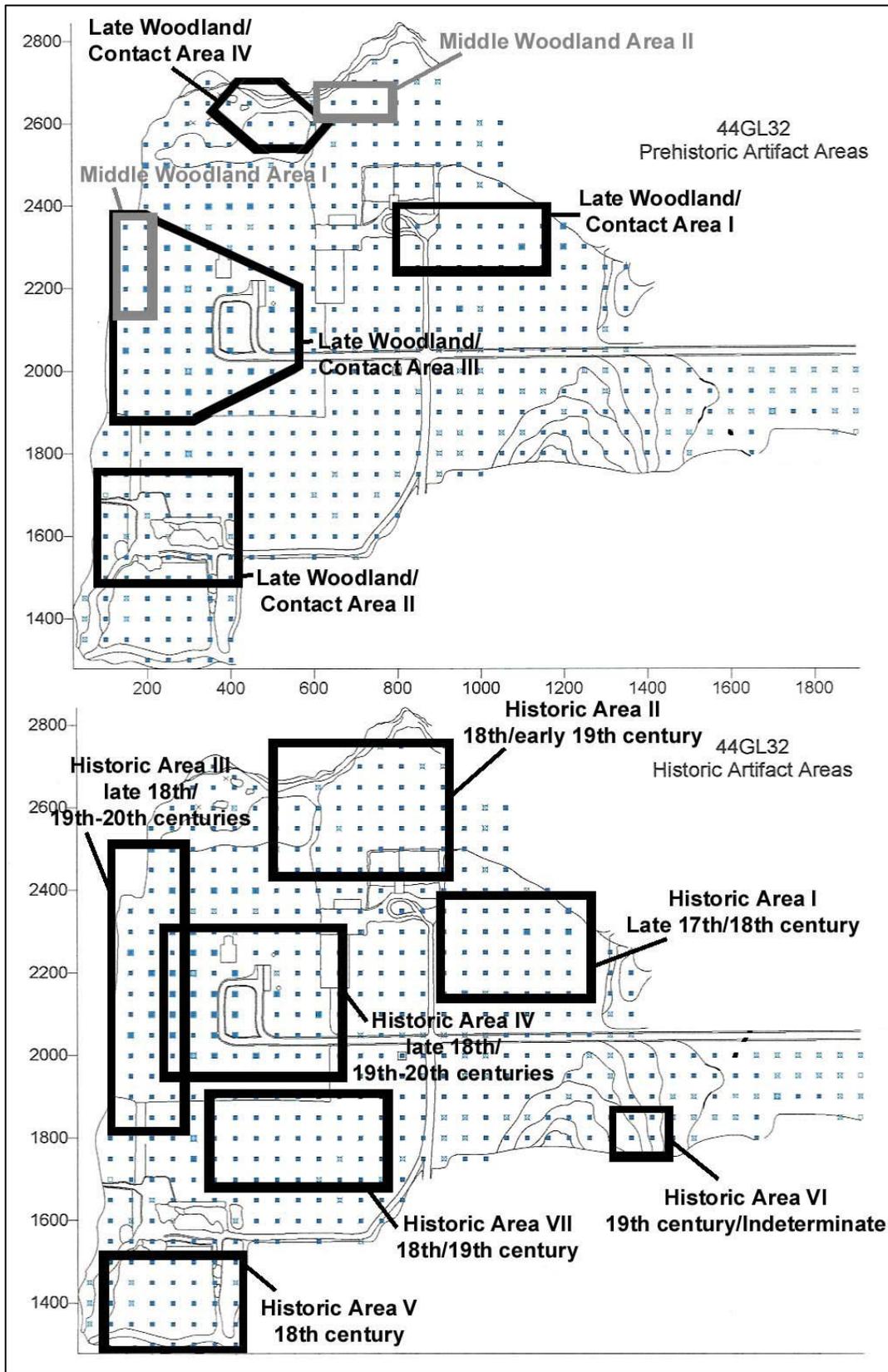


Figure 3-8. Artifact Concentrations Identified by the Werowocomoco Survey.

core of the village. A small concentration (IV) was identified in the northern portion of the property, near one of the Middle Woodland concentrations, while the final Late Woodland/Contact area (I) was located several hundred feet east of the York River in a present-day pasture. These concentrations were identified based on varying quantities of simple-stamped, fabric-impressed, plain, and incised shell-tempered prehistoric ceramic found in shovel tests.

Historic artifacts were found in abundance across the 45-acre survey area, in particular brick, coal, glass, and ceramic. The survey identified eight distinct concentrations of historical artifacts which were temporally or functionally related. These included one late seventeenth-century component, six eighteenth-century components, five nineteenth-century components, and two twentieth-century components.

The only area suggesting a seventeenth-century occupation was located in the pasture area several hundred feet east of the York River (I). While eighteenth-century artifacts predominate, the ceramics from this area of the property also suggest that colonists may have established a small farmstead here during the late seventeenth century, an occupation that continued through the middle of the eighteenth century. Several

fragments of cut nails were recovered, but little else suggests a longer occupation. Area I appears to represent the earliest Euro-American occupation of the site.

During the eighteenth century, the primary settlement focus on the property appears to have shifted westward towards the York River. Areas III, IV, and VII represent the primary occupation areas of the site beginning in the late eighteenth century and extending to the present. The size and varying nature of these concentrations suggest the presence of a large farmstead with outbuildings and activity areas.

Areas II and V, located on the northern and southern edges of the survey area, respectively, probably represent outlying activity areas, outbuildings, or tenant structures associated with the farmstead of the eighteenth and early nineteenth centuries. Area VI, represented by oyster and clam shell and a few nineteenth-century artifacts, may represent a zone of historic trash deposition. This indistinct scatter is located several hundred feet southwest of a late nineteenth-century farmhouse. Finally, Area VIII surrounds the location of a late nineteenth- to early twentieth-century store and wharf site. Extensive early twentieth-century refuse was noted on the surface.

Conclusions

The archaeological survey indicates that the site includes an extensive array of prehistoric occupations spanning the Middle Woodland through Contact periods and covering the majority of the 45-acre project area. Historical occupations are also present, ranging from the late seventeenth through twentieth centuries. Within the Werowocomoco site are the remains of a dispersed Contact period village in addition to smaller prehistoric occupations dating throughout the Middle and Late Woodland periods. Historic farmsteads, associated buildings, and activity areas dating to the late seventeenth through twentieth centuries are also present. Features identified during the survey suggest

good preservation of cultural remains from both the Native and historic occupations.

Complementing the evidence discussed here, several informal surveys conducted around Purtan Bay have also identified Native American occupations, though none have recovered Late Woodland / Contact period diagnostics in concentrations that approach those found at 44GL32. The assemblage of surface-collected artifacts combined with the material recovered during the shovel-test survey record spatially extensive occupation of the site during the era of Wahunsenacawh's presence at Werowocomoco.

CHAPTER 4

RESEARCH DESIGN AND EXCAVATION RESULTS

Introduction

The documentary accounts of seventeenth-century events at Werowocomoco describe the Powhatans' efforts to probe the colonists' intentions and to absorb them into the social world of *Tsenacomacoh*. Though much is known about the Powhatan chiefdom and its central role in the early colonial history of North America from English documentary sources, this history is most often framed by seventeenth-century colonialist narratives and a series of events involving English colonists. Ethnohistorians have long studied accounts of culture contact at Werowocomoco (e.g., Axtell 2001; Gleach 1997; Rountree 1989, 1990; Rountree and Turner 2002; Williamson 2003:34-35), yet the village's archaeological record has remained, until recently, unknown. Assuming, as we do, that the material world structured daily practices and experiences at Werowocomoco and that culture and history have a materiality oft-neglected by historical researchers, the village's archaeological record becomes central to understanding Chesapeake colonial encounters.

Building on the earlier efforts of Virginia Commonwealth University archaeologist Daniel Mouer, the archaeological survey of 44GL32 indicates that the site comprised a large, dispersed village dating to the Late Woodland through Contact periods. Subsequent colonial, nineteenth, and twentieth-century deposits are also, not surprisingly, present in discrete portions of the site. Combining these survey results with documentary and cartographic evidence discussed above, it becomes clear that the site likely represents the location of Werowocomoco, Powhatan's seat of power during the early seventeenth century. Archaeological excavations at the Werowocomoco site hold the promise of adding significantly to our understanding of Native perspectives on colonial encounters in the Chesapeake by expanding our frame of reference beyond an

event-based perspective centered on the colonizers.

Excavations at the Werowocomoco site took place throughout the month of June 2003 under the auspices of the William and Mary Department of Anthropology's archaeological field school directed by Assistant Professor Martin Gallivan. The excavation crew included Werowocomoco Research Group members David Brown and Thane Harpole, who served as field directors alongside Daniel Sayers of the William and Mary graduate anthropology program. Jennifer Osborne, also of the William and Mary graduate anthropology program, directed the field laboratory. Field crew included students enrolled in the Archaeological Field Methods class: Justin Arocho, Brendan Burke, Edward Dunlap, James Goodwin, Nicola Harrison, Aaron Henry, Virginia Horner, Rachel Istvan, Jacqueline Langholtz, Mindy Lechman, Erin Patterson, Jennifer Props, Michael Rodgers, Sarah Tolbert, Cynthia Volbrecht, and Matthew Whalen. Robert and Lynn Ripley, owners of the property, graciously opened their home to us and contributed greatly to the excavation effort. Lynn Ripley joined the field crew for the length of the excavation. Robert Ripley provided regular and much-needed logistical support and guidance. Randolph Turner and Danielle Moretti-Langholtz assisted with public relations and public outreach related to the project.

The following describes the results of the Werowocomoco Research Group's first field season at the site, including research themes relevant to the investigation, the field research design, the results of block excavations in four distinct areas of the site, and a preliminary interpretation of these results that will guide our future excavation strategies.

Research Topics

Topics related to Werowocomoco's culture history, colonial encounters in the Chesapeake, Powhatan chiefdom dynamics, and the cultural landscapes of political centers guide our long-term research goals at the Werowocomoco site. An initial priority of our investigations centered on confirming the identity of the site as Werowocomoco and on tracing the settlement's occupation history during the Late Woodland and Contact periods. The cartographic, ethnohistorical, and archaeological evidence reviewed in chapter 2 strongly suggests that the location represents the Contact period village of Werowocomoco. As noted in chapter 2's review of the region's culture history, recent research into the Powhatan past indicates that archaeological study of Werowocomoco should shed light on the issues of chiefdom formation and Contact period interaction. Our shovel test survey also supports the inference that the 44GL32 site represents Werowocomoco. Collections from the site have yielded copper, iron, and glass items (albeit in limited numbers) that are likely trade goods received by Wahunsenacawh and the Contact-period community. The cache of artifacts associated with the remains of a juvenile individual aged 2 – 4 identified along the eastern edges of this landform discussed in chapter 3 lends additional support to the notion that the site represents a prominent early seventeenth-century Powhatan community.

It should be noted that several aspects of Werowocomoco's history indicate that archaeological study of this settlement may prove challenging. Jamestown colonists documented Wahunsenacawh's (i.e., chief Powhatan's) residence at Werowocomoco only from 1607 - 1609. Wahunsenacawh probably resided at Werowocomoco some years prior to this brief interval, and a community of some size likely persisted at Purtan Bay after his departure. Colonists' population estimates of Werowocomoco suggest a modest community with "40 able men" (Smith 1986a:147) or about 150 - 200 total residents depending upon the ratio of young men to the district's overall population and variation in community size tied to the seasonal settlement round. The most common diagnostic artifacts from this era, Rappahannock plain and fabric-impressed pottery (a variety of Townsend ware), Roanoke simple-stamped pottery, and small triangular projectile points, all span the Late Woodland / Contact period centuries, making precise chronology construction challenging. Like-

wise, radiocarbon dates from the Contact period often include sizable error factors due to the vagaries of the radiocarbon calibration curve circa A.D. 1600. Finally, excavation of other Contact period settlements in the Chesapeake, including Paspahugh (Lucchetti et al. 1994) and Jordan's Point (Mouer et al. 1992), recovered relatively low densities of Native American materials. These excavations identified few feature contexts beyond postmolds and burials, requiring exposure of large blocks to produce an understanding of material culture use and settlement organization. As important as Werowocomoco's brief historical association with Wahunsenacawh and events of culture contact involving Jamestown colonists is the late precontact history of the settlement. By tracing the culture history of Werowocomoco during the centuries immediately preceding the Contact period we hope to better understand the reasons why chief Powhatan chose to reside there.

In addition to our focus on the settlement's culture history, we are particularly intrigued by the ways in which Powhatan-Anglo interaction at Werowocomoco shaped Contact period dynamics in the Chesapeake region. Colonial documentary sources record a regular series of encounters at Werowocomoco that introduced copper, iron, and glass trade goods into the village, exchange events that undoubtedly impacted the archaeological record. Ethnohistorical studies (e.g., Rountree 1990; Gleach 1997; Mallios 1998; Williamson 2003) suggest that the Powhatan Indians and the English sought to "civilize" one another through such exchanges at Werowocomoco as well as through the ceremony and public discourse accompanying it. As part of this process Wahunsenacawh attempted to enhance his own status by monopolizing the flow of English trade goods flowing into the region, a cultural strategy that succeeded for a brief period, then ultimately failed (Potter 1989; Hantman 1990). Important events tied to these dynamics occurred along the shores of the York River at Werowocomoco.

Since Werowocomoco represented the Powhatan chiefdom's political center in the early days of the colonial era, the site also offers an ideal place to study the chiefdom from a community-based perspective. Archaeologists' "political" models of chiefdoms emphasize the means by which chiefly elites came to dominate power relations through control of political economy, military power, and ideology (e.g., Earle

1997; Drennan and Uribe 1987). Chiefdom studies have recently focused on elite strategies and social processes that constructed and legitimized a permanent, centralized decision-making authority in the form of chiefs and a supporting elite. Some of these studies draw on a notion of “ideology” that represents the contradictory as coherent and the historically-contingent as permanent and natural (Althusser and Balibar 1971; Shanks and Tilley 1982). Others seek to study the materiality of hegemony and agency, domination and resistance expressed in the archaeological record (Emerson 1997:18). Understanding the ways in which authority and ideology were exercised from Werowocomoco necessarily entails a long-term goal requiring several seasons beyond the one reported here.

A final long-term research focus of our investigations at the site involves Werowocomoco’s changing “cultural landscape” (i.e., the physical layout of the village) during the years immediately before and after Jamestown’s settlement. Cultural landscapes strongly influence social histories, in some settings conveying and reinforcing structures of authority. Though they exist in the empirical realm and have measurable properties, such spaces become meaningful through personal experiences as they structure social actions and

representations and are, in turn, structured by them. Space is thus a social product, generated through practices that mediate subjects (i.e., historical actors) and objects (i.e., spatial arrangements). In this way, cultural landscapes may be studied in terms of three dimensions: as perceived, conceived, and lived (Lefebvre 1991:38-46).

This notion of landscape provides a point of departure for archaeologists seeking to understand the consolidation of social power in a place like Werowocomoco. Drawing ideas from diverse academic disciplines (e.g., Bradley 2000; Cosgrove 1984; Casey 1997) archaeologists have recently begun to think critically about the social and symbolic implications of spatial arrangements, landscape features, and cultural perceptions of space. Such spatial arrangements may inculcate, embody, and habituate cultural notions, seamlessly linking the material and ideal in the process. As discussed in chapter 2, one early map of Werowocomoco, Zuñiga’s, raises the possibility that unusual landscape features marked the community. As a center of considerable Native authority in the Chesapeake, Werowocomoco’s cultural landscape may indeed have reflected the village’s status as a place of power.

Research Design

Though these over-arching research topics remain central to our excavation strategies, we oriented our initial field season toward three, more modest goals: evaluating the integrity of archaeological features and activity areas at 44GL32, developing a baseline understanding of the site’s occupation history, and probing the spatial and functional organization of the Contact period settlement. Our approach to these topics at Werowocomoco centered on block excavations in four different areas of the site (Figure 4-1). This strategy was designed to produce information regarding the integrity of features and activity areas by exposing large areas of sub-plow zone deposits while spreading these exposures across several different parts of the site in an effort to understand something of the site’s overall layout. We began by establishing five permanent data (consisting of a piece of rebar set in poured concrete) at the site. Since the initial archaeological survey of the property was conducted using English rule, we continued to use feet rather than the typical standard of metric measurement. The four excavation

blocks opened up 1400 square feet, uncovering features and intact cultural horizons from Late Woodland / Contact period occupations of the site as well as preceding and subsequent occupations.

Excavation blocks were selected 1) to maximize our understanding of spatial variation across the land form, 2) to cover areas containing Late Woodland / Contact period diagnostics, and 3) to investigate portions of the settlement referenced in early colonial documents.

The first two excavation areas included two blocks located approximately 1000 feet from Puritan Bay within an area currently in pasture, areas labeled the Pasture West and Pasture East blocks. These blocks were closely spaced to allow an (initially) inexperienced field crew to benefit from the close supervision of the field school staff. Our survey indicated that these areas contained concentrations of Native pottery dating to the Late Woodland / Contact period centuries. John Smith’s (1986a:69) description of Werowo-

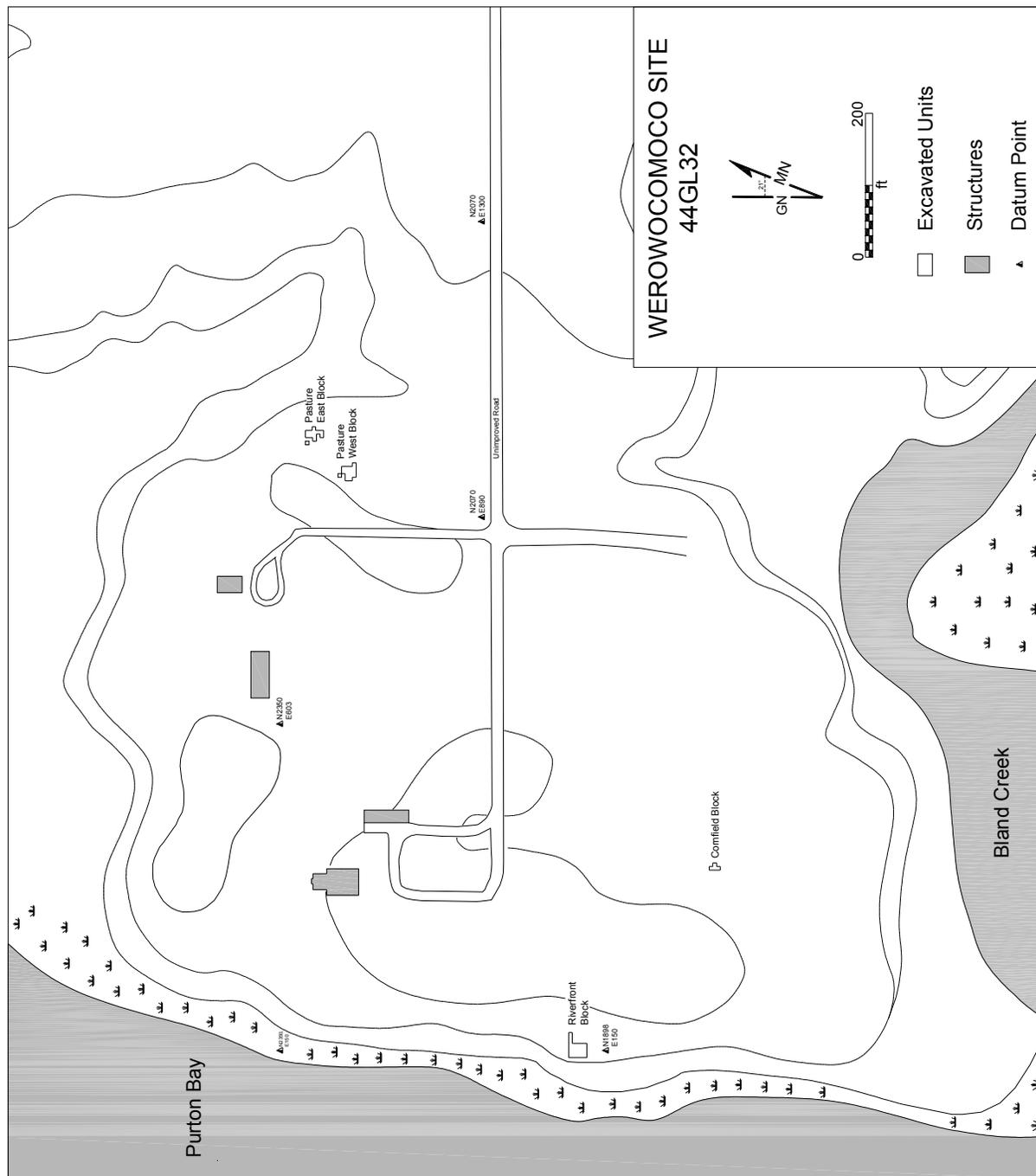


Figure 4-1. The Werowocomoco site and its environs with the four excavation blocks of the 2003 Field Season.

comoco mentions that Wahunsenacawh's massive house was situated "thirty score" from the water. Depending upon whether Smith was referring to feet or to paces and upon the location of Smith's starting point on the various bodies of water adjacent to the settlement, the house probably stood between 600 to 1800 feet from the 1607 shoreline of Purtan Bay. Some of the earliest European artifacts recovered during the survey appeared in this area as well, predominantly eighteenth-century materials suggesting the presence of an earthfast residence and other structures. Across the Chesapeake region it is not uncommon to find the earliest colonial settlements in areas cleared and inhabited by Native communities during the late precontact and Contact periods (e.g., Potter and Waselkov 1994).

Shovel-tests in the vicinity of the third excavation block, located on the Purtan Bay waterfront, recovered a high density and diversity of Native American materials. Archaeological studies and colonial accounts of other Contact period villages in the region note that residential areas typically lined riverbanks in a dispersed fashion.

Finally, we tested an area 400 feet from the York River within a field planted in corn. Surface collections in this area by the property owner recovered a glass bead, possibly a Contact period trade item. The shovel-test survey indicated that this area contained a light scatter of Native artifacts, raising the possibility that this marked the edges of residential settlement in the village.

Excavation Methods

Excavation methods followed practices standard in the region. Fifty-six 5-x-5 foot test units were excavated within the four excavation blocks. All plow zone soil from these units was screened through quarter-inch mesh for uniform artifact recovery. A 250 milliliter soil sample was drawn from each plow zone context for chemical analysis. At the plow zone base, excavation units were trowel-scraped to identify features and intact sub-plow zone deposits. Excavation units were then photographed and all soil anomalies drawn in plan. Representative profiles of excavation units were recorded with scale drawings and photographs. Soil descriptions relied on standard Munsell color charts and USDA textural terminology.

Within each excavation block a sample of the identified features was excavated, with priority placed on those that appeared to date to the precontact or Contact periods rather than those from later historic periods. Features chosen for excavation were drawn and photographed in plan prior to excavation. One half of each

feature was excavated to reveal a cross-section profile, which was also drawn and photographed. Feature fill was excavated according to natural strata if present. All feature soils were processed through a flotation tank for ethnobotanical and small artifact recovery. In those locations where cultural deposits continued beneath the plow zone, excavation proceeded according to artificial levels and then by natural strata. Flotation samples were also drawn from these deposits.

Laboratory Methods

Artifact classification followed an attribute-based approach recorded in a Microsoft Access database, a copy of which is available upon request. The Native ceramic analysis included characterization of vessel portion (i.e., rim, shoulder, body, base), rim form, sherd size, mean sherd thickness, surface treatment (i.e., fabric-impressed, simple-stamped, cord-marked, check-stamped, plain), temper (i.e., shell, crushed lithic, sand), and decoration. When present, decoration (e.g., incising, punctation, cord-wrapped dowel impression) was characterized according to location, implement, and motif.

Our ceramic classification includes both traditional typological assignments using regionally-accepted type definitions (Egloff and Potter 1978) and adherence to Klein's (1994) "absolute" seriation approach. Drawing on Braun's (1983) ceramic engineering model, Klein eschewed typological classification of ceramics for an approach that allows more precise dating of archaeological contexts. Klein's seriation formulas are based on regression equations calculated from changes in quantifiable ceramic attributes. Klein determined that from A.D. 200 - 1600 in the Virginia Coastal Plain, including the York River drainage, sherd thickness decreased and the percentage of plain, fabric, simple-stamped, and decorated pottery increased. Klein's seriation allows ceramic assemblages to be assigned an absolute, calendar date with an error factor of approximately 250 years, making it an ideal tool for probing the Werowocomoco site's occupation chronology. Klein's (1994:321) formula for dating Coastal Plain assemblages is as follows: $\text{Date bp} = 1108.7742 + (0.7443 \times \text{mean sherd thickness}) - (792.2040 \times \text{percentage of stamped} + \text{plain} + \text{fabric} + \text{other decorated sherds}) \pm 249$.

Lithic artifact classification included characterization of raw material and artifact form. Similar to other sites dating to the Late Woodland / Contact period transition, the site produced relatively low numbers of lithic artifacts. The vast majority of these fell under the category of debitage. Categories of debitage used in the classification included decortation flakes, inte-

rior flakes, biface thinning flakes, shatter, and tested cobbles. Decortation flakes, the product of the initial step in the stone tool production process, exhibit a striking platform, bulb of percussion, and cortex. Secondary flakes are flat flakes lacking cortex that exhibit scars on the dorsal surface. Tertiary flakes are small flakes, less than one centimeter in maximal length, that generally result from pressure flaking tool edges. The category of “shatter” includes angular pieces that are part of stone tool production, but lack the formal attributes of flakes due to uneven fracture patterns. Tested cobbles exhibit a few flake scars.

Stone tools identified at the site include bifaces, utilized flakes, abraders, fire-cracked rock, and projectile points. Bifaces are defined here as generalized stone tools or more formal tools abandoned during the reduction process with flake scars on opposite surfaces. Utilized flakes exhibit retouched edges and use

marks. Abraders in the Chesapeake region are typically sandstone and were used to smooth or sharpen antler, bone, wood, and stone, a use reflected in grooves or abrasions on the artifact’s surface. Projectile points are formal, hafted bifaces and are temporally diagnostic.

Historic artifact classification followed methods that are standard in the Chesapeake region. Ceramics, glass, bone, nails, and other metals were categorized using descriptive typologies, recording characteristics such as ware type, vessel portion and form, decoration, and function. All fragments of brick, mortar, oyster and clam shell, coal, and other items were collected and then weighed in order to plot distributions within the various excavation areas. The resulting data were used to delineate patterns of historical occupation on the property from the late seventeenth through to the twentieth centuries.

Pasture West Block

The Pasture West block consisted of 15 excavation units centered on the grid coordinate N2250 E950 (Figure 4-2). Shovel-tests in this area of the site identified evidence of an early eighteenth-century domestic area, possibly the earliest European occupation within the survey area, as well as a light scatter of shell-tempered Native sherds. Our recent excavations uncovered evidence of two ditch features running roughly north-south across the excavation block. Artifacts recovered from the feature fill and two radiocarbon dates indicate that the ditches likely represent the remains of large Native features dating to the end of the Late Woodland period. The following discusses plow zone deposits before turning to features identified in the excavation block.

Stratigraphy and Plow Zone Deposits

Excavation units in this area uncovered a 10YR4/4 dark yellowish brown sandy loam plow zone (stratum I) underlain by a 10YR5/6 yellowish brown sandy clay (stratum II). Plow zone depths ranged from 0.8 to 1.2 feet below surface. Temporally diagnostic materials recovered from the plow zone included predominantly imported ceramics dating to the late seventeenth through late eighteenth century and shell-tempered pottery from the Late Woodland through Contact periods (Figure 4-3). Tin-glazed earthenware formed the largest category of historic pottery in this portion of the site (Figure 4-4) with other historic ceramics sug-

gesting a prominent eighteenth-century presence. Imported pipe bore diameters (Figure 4-5) exhibited a modal peak in the 5/64^{ths} range (1710 - 1750), with lower frequencies in the 6/64^{ths} (1680 - 1710) and 4/64^{ths} (1750 - 1800) ranges, while the presence of domestic pipe stem fragments and case bottle glass point toward a seventeenth-century component. Taken together, these historical materials reflect an eighteenth-century domestic area. Nineteenth- and twentieth-century diagnostics appear in low numbers, suggesting more ephemeral occupations in recent centuries.

Other historic-era artifacts from the plow zone indicate a significant domestic occupation, likely beginning sometime late in the seventeenth century, and lasting throughout much of the next century. While some later material is present, including whiteware, cut nails, coal and machine-made glass, the pasture area appears to have declined in use after the late eighteenth century. Most of the ceramics and glass are domestic in function, used for preparing and serving foods, and the quantity of tablewares combined with the presence of table glass and other items suggest a farmstead of at least middling status. Animal bone and oyster and clam shell also attest to these activities, revealing a dispersed refuse midden surrounding the colonial settlement. Architecturally, the brick, mortar, window glass and nails imply the presence of post-in-ground

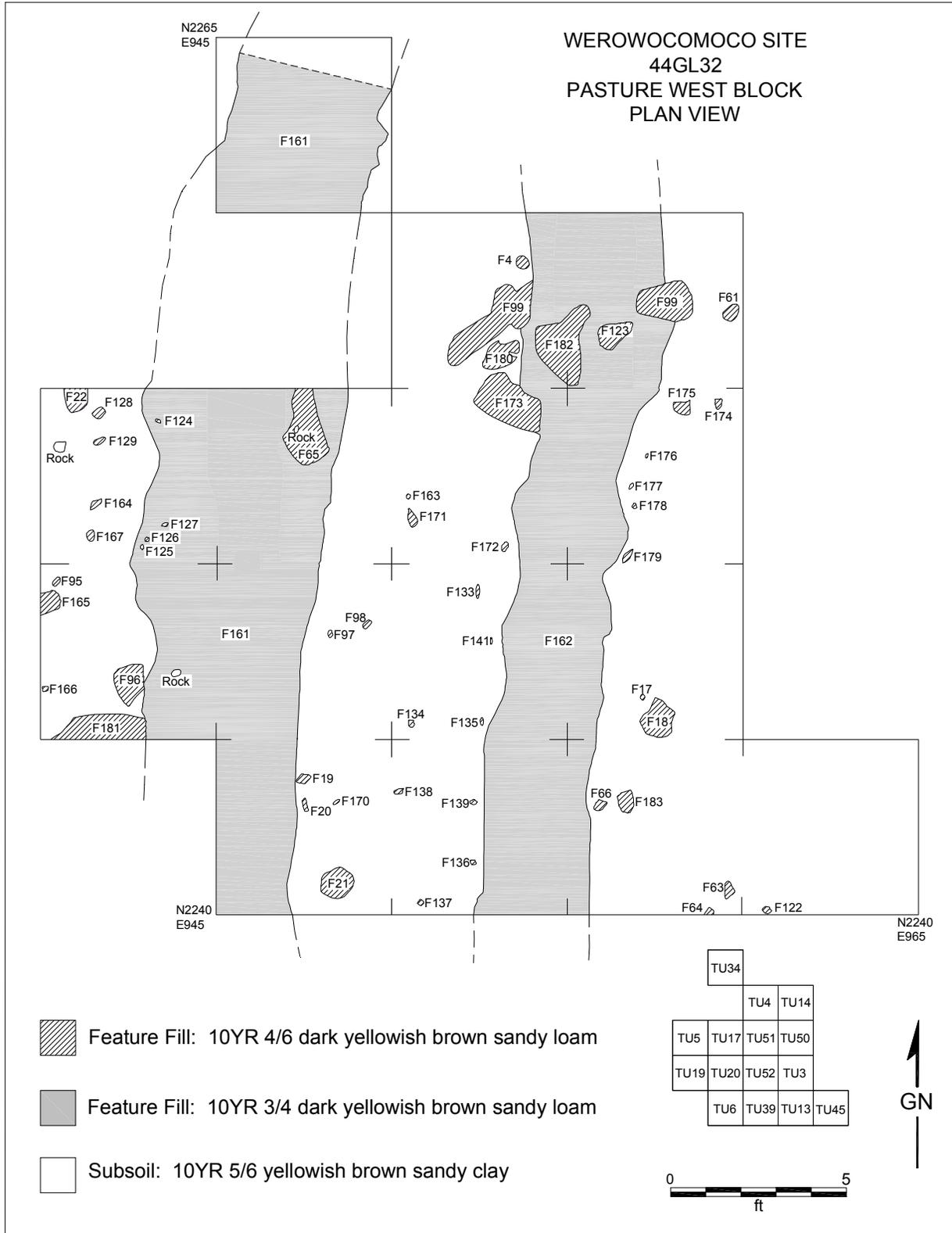


Figure 4-2. Plan of Pasture West Block.



Figure 4-3. Historic ceramics, Pasture West Block

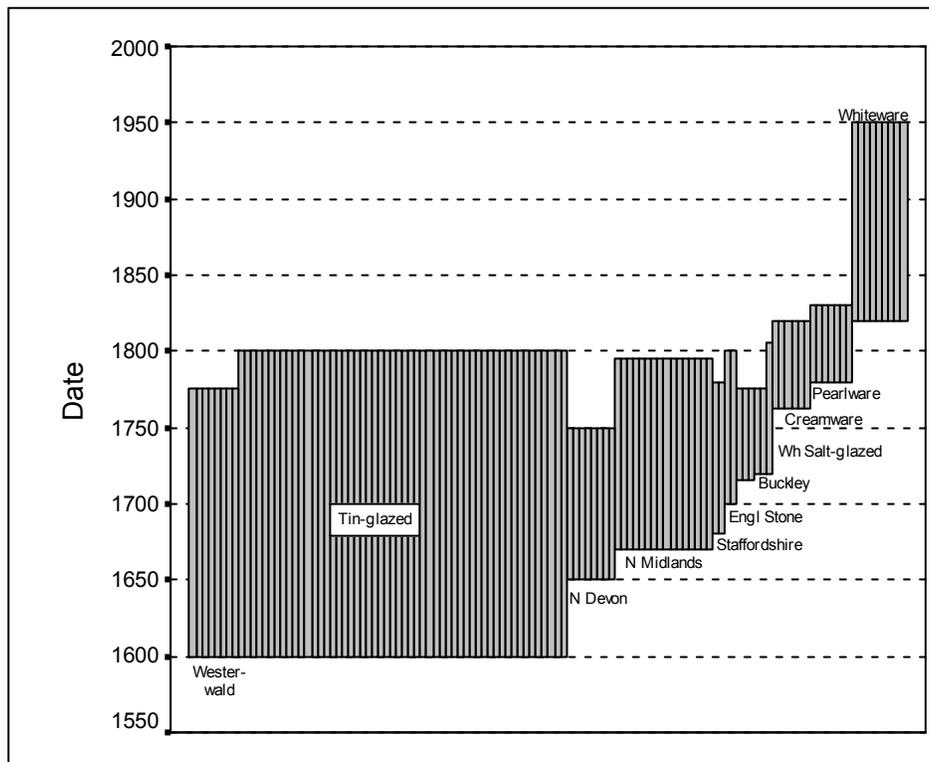


Figure 4-4. Historic Ceramics from Pasture West Block. Each bar represents one sherd.

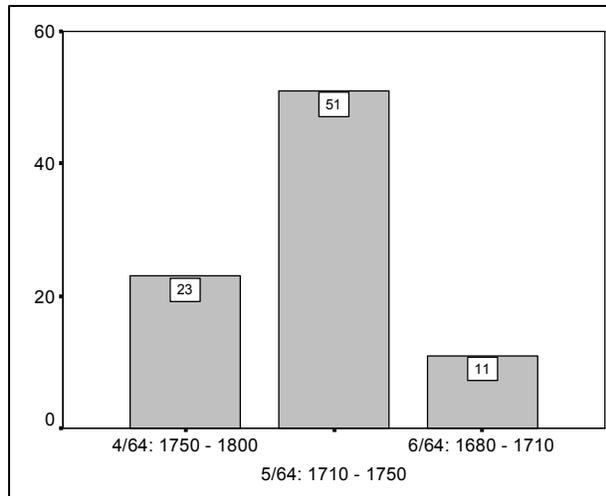


Figure 4-5. Imported Pipe Stem Bore Diameters from Pasture Block West, Measured in 64ths of an Inch.

structures with brick chimneys, or perhaps even more substantial structures. The concentrations indicate that the densest colonial occupation occurred slightly to the north and east of the Pasture West block.

Native ceramics recovered from the Pasture West plow zone (n=1172) included shell, sand, and crushed lithic tempered varieties with cord-marked, fabric-impressed, simple-stamped, and plain surface treatments (Table 4-1). Of the sherds with identifiable temper (n=331) approximately 88% were tempered with crushed shell. Of the sherds with identifiable surface treatments (n=123), 42% were plain, 28% were simple-stamped, 20% were fabric-impressed, and 10% were cord-marked. As noted in Table 4-1, pottery from Pasture West matches descriptions of Mockley cord-marked, Rappahannock fabric-impressed and incised (both Townsend varieties), and Roanoke simple-stamped (Figure 4-6). Many of the shell-tempered, plain ceramics fit descriptions of Yeocomico, characterized by finely-crushed shell temper, plain and scraped exterior surfaces, and thin vessel walls (Egloff and Potter 1978:112). Since this type is similar to

other shell-tempered wares with plain surface treatment, no type designation is applied to these sherds.

This typological classification of ceramics from the Pasture West block implies a series of Middle Woodland II (A.D. 200 – 900), and Late Woodland (A.D. 900 – 1600) through Contact (A.D. 1600 – 1622) period occupations, with indications that settlement intensified during the Late Woodland and Contact centuries. The numbers of Roanoke simple-stamped sherds are particularly intriguing as this ceramic type is uncommon north of the York River where Townsend pottery predominates from the Late Woodland through Contact (Turner 1993). The numbers of Roanoke simple-stamped sherds at the site imply close exchange ties and shared pottery traditions linking residents at the site to communities on the Virginia Peninsula, in the James River valley, and points south. Colonial documentary accounts note that Wahunsenacawh was born at the falls of the James River and that political dynamics within the Powhatan chiefdom hinged on social interaction between groups in the James and York River drainages, so this pattern is not entirely unexpected.



Figure 4-6. Rappahannock Fabric-impressed pottery, Pasture West Block

Surface Treatment	Temper	Decoration	Ware	N
Cord	Shell	Incised	Mockley	1
Cord	Shell	-	Mockley	10
Cord	Unknown	Incised		1
Fabric	Sand	-		1
Fabric	Shell/Crushed Lithic	-	Townsend	1
Fabric	Shell	-	Townsend	20
Fabric	Shell/Sand	Incised	Townsend	1
Fabric	Unknown	-		2
Simple stamped	Sand	-		1
Simple stamped	Shell	Incised	Roanoke	1
Simple stamped	Shell	-	Roanoke	27
Simple stamped	Shell/Sand	-	Roanoke	3
Simple stamped	Unknown	-		2
Plain	Sand	-		3
Plain	Shell	Incised		2
Plain	Shell	-		38
Plain	Shell/Sand	-		1
Plain	Unknown	-		8
Unknown	Crushed Lithic	Incised		1
Unknown	Crushed Lithic	-		8
Unknown	Shell/Crushed Lithic	-		1
Unknown	-	-		5
Unknown	Sand	Incised		3
Unknown	Sand	-		16
Unknown	Shell	Cord-wrapped Dowel		1
Unknown	Shell	Incised		13
Unknown	Shell	-		136
Unknown	Shell/Sand	Incised		1
Unknown	Shell/Sand	-		18
Unknown	Unknown	Incised		3
Unknown	Unknown	-		843
TOTAL				1172

Table 4-1. Native Ceramics, Pasture West Plow Zone.

Absolute seriation of pottery from the Pasture West block using the dating method developed by Klein (1994) discussed above suggests that this area of the site saw the most intensive occupation during the terminal Late Woodland through Contact periods (Figure 4-7). The chart depicts absolute seriation dates calculated using Klein's equation as applied to pottery recovered from each test unit excavated in this portion of the site. The chart points toward an ephemeral Native presence during the thirteenth century and increasingly intensive occupations during the terminal Late Woodland and Contact periods. It is important to remember that this dating method includes an error factor of +/- 249 years, meaning that the actual dates of the most intensive occupations likely fall between the fourteenth and seventeenth centuries.

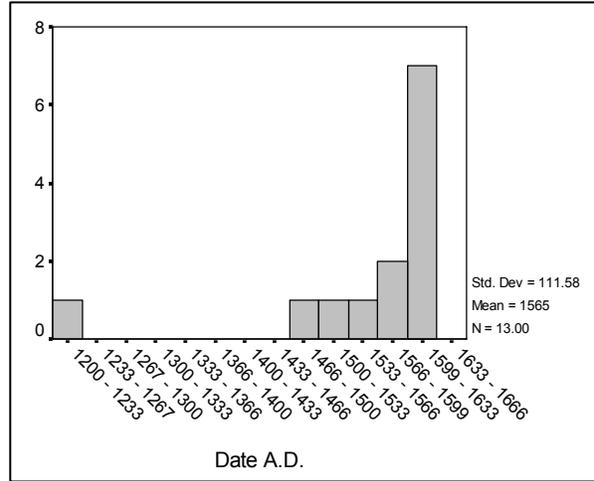


Figure 4-7. Absolute Seriation Histogram for Native Ceramics, Pasture West Block Plow Zone

Material	Form	N	Grams
Chert	Expended core	1	
Chert	Secondary flake	3	
Chert	Shatter	1	
Chert	Tertiary flake	3	
Jasper	Cobble	1	
Jasper	Primary decortation flake	1	
Jasper	Secondary flake	2	
Jasper	Tertiary flake	5	
Quartz	Expended core	1	
Quartz	Primary decortation flake	4	
Quartz	Retouched flake	1	
Quartz	Secondary flake	8	
Quartz	Shatter	23	
Quartz	Tertiary flake	10	
Quartz	Tested cobble	3	
Quartzite	Biface	1	
Quartzite	Fire-Cracked rock	5	239.8
Quartzite	Primary decortation flake	2	
Quartzite	Secondary flake	8	
Quartzite	Shatter	5	
Quartzite	Tertiary flake	7	
Rhyolite	Secondary flake	1	
Rhyolite	Shatter	4	
Sandstone	Abrader	1	

Table 4-2. Native Lithics, Pasture West Block Plow Zone

Native lithic artifacts recovered from the Pasture West block include a light scatter of quartz, quartzite, chert, jasper, and sandstone debitage and tools, but no temporally diagnostic items (Table 4-2). Though clearly some stone tool production occurred in this portion of the site, no definable concentrations of tools or debitage are apparent that could be tied to stone tool production or usage areas.

Features

Excavations uncovered 56 features in the Pasture West block, 36 of which were excavated or sampled (Table 4-3). The block contained two linear features running parallel, roughly north-south across the excavation block (features 161 and 162). Also present were several burned tap roots in the northeast portion of the block and 35 small circular stains adjacent to features 161 and 162 with the shapes and dimensions of Native postmolds. With the exception of those identified within features 161 and 162, features noted within the excavation block occurred at the plow zone base framed by a 10YR5/6 yellowish brown sandy clay subsoil. As listed in Table 4-3, artifacts occurred in low numbers or were absent from most features. Given the relatively high numbers of eighteenth-century artifacts in the plow zone, the absence of any clearly colonial-era features from early English settlement is striking.

Ditch Features

Features 161 and 162 clearly dominate the excavation block (Figure 4-8). The features appear to repre-

sent parallel ditches extending both north and south beyond the excavation block. The excavated portions of the features in test units 5 and 17 (feature 161) and test units 4 and 14 (feature 162) revealed a roughly basin-shaped profile with slightly shallower ‘step’ on the east side (Figures 4-9 - 4-12). Their consistent orientations, sizes, and shapes suggest that they were likely constructed in tandem or close in time.

With a maximum east-west width in plan of 5.80 feet and a maximum depth of 1.50 feet from the plow zone base, feature 161 is somewhat larger than feature 162. The northern portion of feature 161 arcs slightly to the east. A series of soil horizons were apparent in the feature profiles that included a combination of sands and silts of varying grain sizes and colors, suggesting that the ditches filled gradually over time with colluvial wash. Feature 65, a charcoal-rich lens containing Native pottery and fire-cracked rock, occurred at the base of feature 161’s stratum I at a depth of 0.40 feet below the top of feature 161 (Figures 4-13 and 4-14). A small portion of feature 65 is visible in the north profile of feature 161.



Figure 4-8. Pasture West Block (facing south) with partially excavated features 162 (left) and 161 (right).

Feat.	Identified within	Excavated	Max. N-S	Max. E-W	Max. Depth	Artifacts	Interpretation
4	Unit 4	X	0.27	0.20	0.30	-	Native post mold
17	Unit 3	X	0.44	0.21	0.14	-	Native post mold
18	Unit 3	X	0.52	0.42	0.30	Plain shell-tempered sherd	Native pit
19	Unit 6	X	0.25	0.30	0.21	-	Native post mold
20	Unit 6	X	0.45	0.23	-	-	Undetermined (no appreciable depth)
21	Unit 6	X	0.80	0.90	1.70	Native sherd	Rodent disturbance
22	Unit 5	X	0.75	.85	-	-	Undetermined
31	Unit 12	X	0.34	0.29	0.34	-	Native post mold
61	Unit 14	X	0.39	0.33	0.30	-	Native post mold
62	Unit 14	X	0.22	0.18	0.22	-	Native post mold
63	Unit 13	X	0.37	0.32	0.29	-	Native post mold
64	Unit 13		-	0.30	-	-	Undetermined
65	Feat 161	X	2.20	1.20	0.40	Plain shell-tempered sherds (14), Roanoke sherd, crushed lithic-tempered Native sherd, Fire-cracked rock	Native hearth
66	Unit 13	X	0.28	0.23	0.21	-	Native post mold
95	Unit 19	X	0.22	0.20	-	-	Possible Native post mold
96	Unit 19	X	0.58	0.40	0.65	iron nail frag	Rodent disturbance
97	Unit 20	X	0.28	0.20	-	-	Possible Native post mold
98	Unit 20	X	0.30	0.23	-	-	Possible Native post mold
99	Units 4 and 14	X	1.10	5.60	0.45	Roanoke sherds (5), Plain shell-tempered sherds (2), other shell-tempered Native sherds (16), tin-glazed earthenware, imported tobacco pipe bowl frag., brick frags. (2), window glass frags. (11), wrought iron nail, scrap iron frag.	Animal burrow
122	Unit 45	X	0.18	0.23	0.17	-	Native post mold
123	Feat 162	X	0.81	0.72	2.35	Fabric-impressed, shell-tempered sherd	Burned taproot or large post mold
124	Feat 161	X	0.25	0.30	0.25	-	Native post mold
125	Feat 161	X	0.18	0.20	0.34	-	Native post mold
126	Feat 161	X	0.15	0.20	0.22	-	Native post mold
127	Feat 161	X	0.20	0.20	0.14	-	Native post mold
128	Unit 5	X	0.40	0.20	-	-	Possible Native post mold
129	Unit 5	X	0.30	0.30	-	-	Possible Native post mold
133	Unit 52	X	0.18	0.18	0.22	-	Native post mold
134	Unit 52	X	0.19	0.22	0.13	-	Native post mold
135	Unit 52	X	0.28	0.20	0.13	-	Native post mold
136	Unit 39	X	0.20	0.25	0.20	-	Native post mold
137	Unit 39	X	0.20	0.24	0.15+	-	Non-cultural
138	Unit 39	X	0.18	0.23	0.25+	-	Non-cultural
139	Unit 39	X	0.20	0.20	0.18	-	Native post mold
141	Unit 52	X	0.18	0.19	0.15	-	Native post mold
161	various	Sampled	25+	5.80	1.50	Roanoke (4), other Native sherds (2), qtz flake, tobacco pipe frag.	Ditch
162	various	Sampled	20+	4.20	1.10	Roanoke pottery (4), Plain shell-tempered (1), Imported tobacco pipe frag.,	Ditch
163	Unit 51		0.20	0.20	-	-	Possible Native post mold
164	Unit 5		0.30	0.30	-	-	Possible Native post mold
165	Unit 19		0.55	-	-	-	-
166	Unit 19		0.25	0.20	-	-	Possible Native post mold
167	Unit 5		0.20	0.20	-	-	Possible Native post mold
168	Feat 161		0.70	0.85	-	-	-
170	Unit 6		0.50	0.45	-	-	Possible Native post mold
171	Unit 51		0.35	0.25	-	-	Possible Native post mold
172	Unit 51		0.20	0.20	-	-	Possible Native post mold
173	Unit 51		1.40	1.85	-	-	-
174	Unit 50		0.35	0.30	-	-	Possible Native post mold
175	Unit 50		0.70	0.55	-	-	-
176	Unit 50		0.30	0.20	-	-	Possible Native post mold
177	Unit 50		0.25	0.25	-	-	Possible Native post mold
178	Unit 50		0.25	0.28	-	-	Possible Native post mold
179	Unit 50		0.30	0.20	-	-	Possible Native post mold
180	Unit 4		0.95	0.90	-	-	-
181	Unit 19		-	2.75	-	-	-
182	Feat 162	X	1.55	1.20	4.90	Plain shell-tempered (2)	Burned tap root or post
183	Unit 13		0.60	0.50	-	-	-

Table 4-3. Pasture West Block Features.



Figure 4-9. Feature 161 north profile.

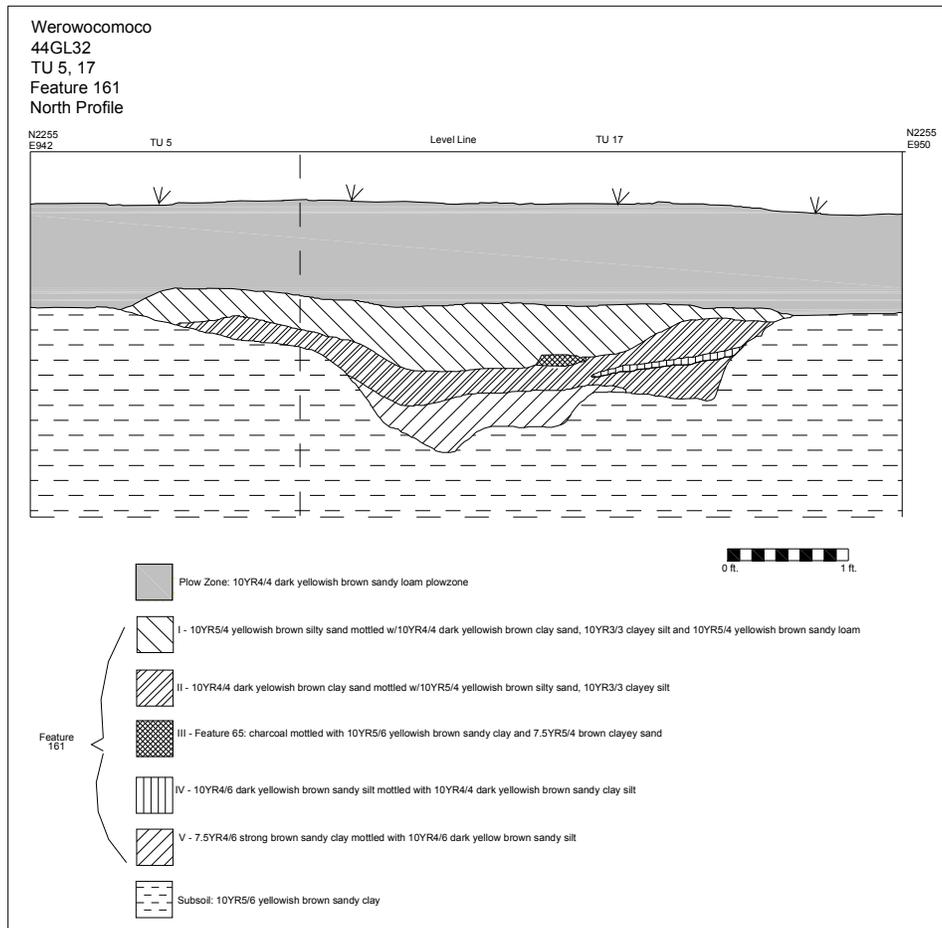


Figure 4-10. Feature 161 North Profile.

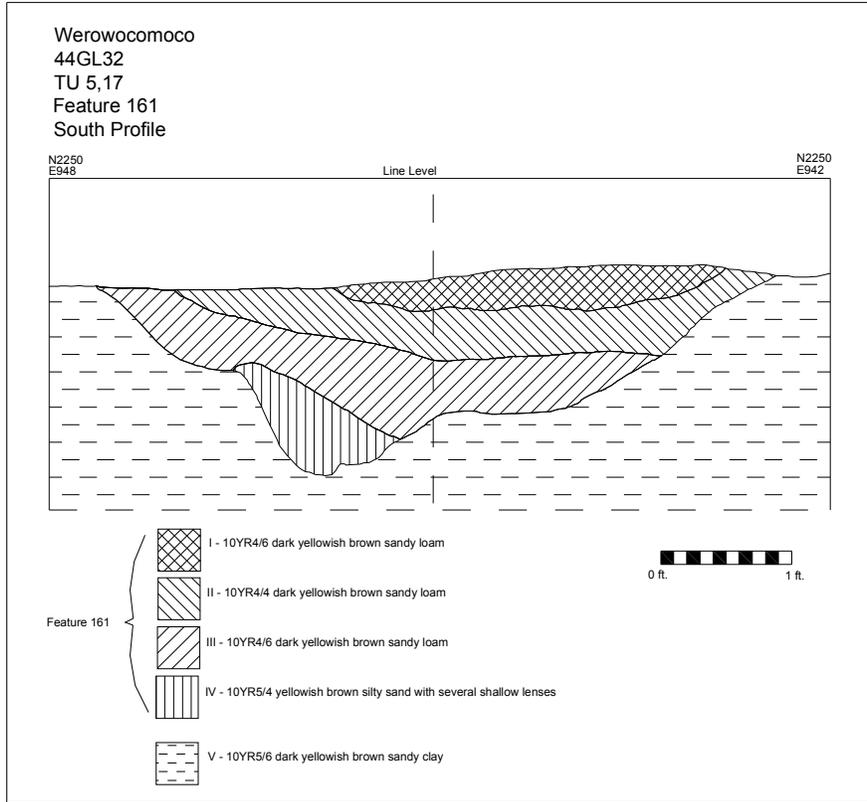


Figure 4-11. Feature 161 South Profile.

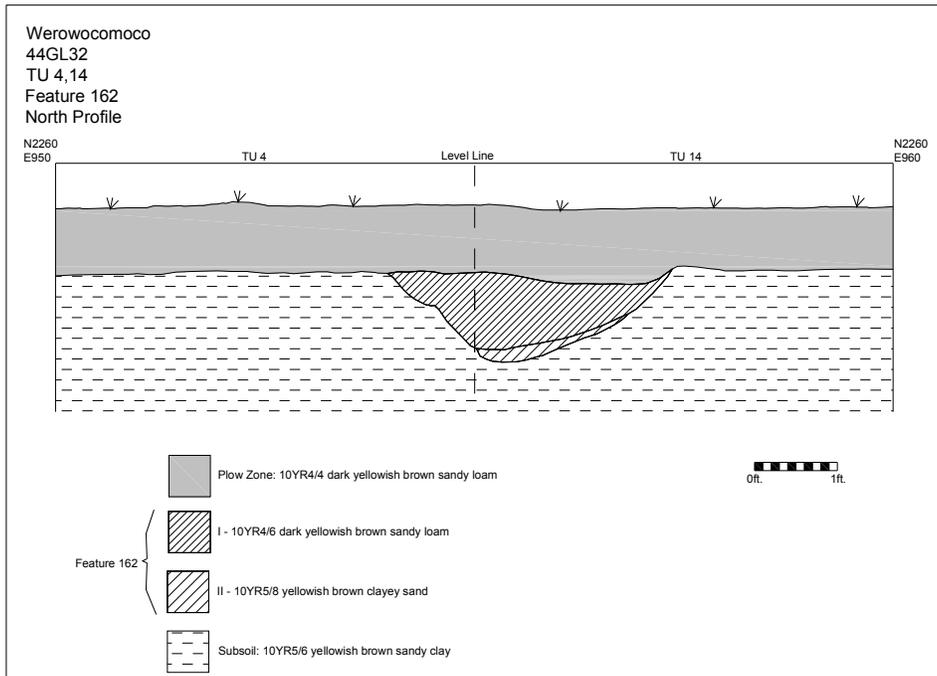


Figure 4-12. Feature 162 North Profile.



Figure 4-13. Feature 65, East profile.

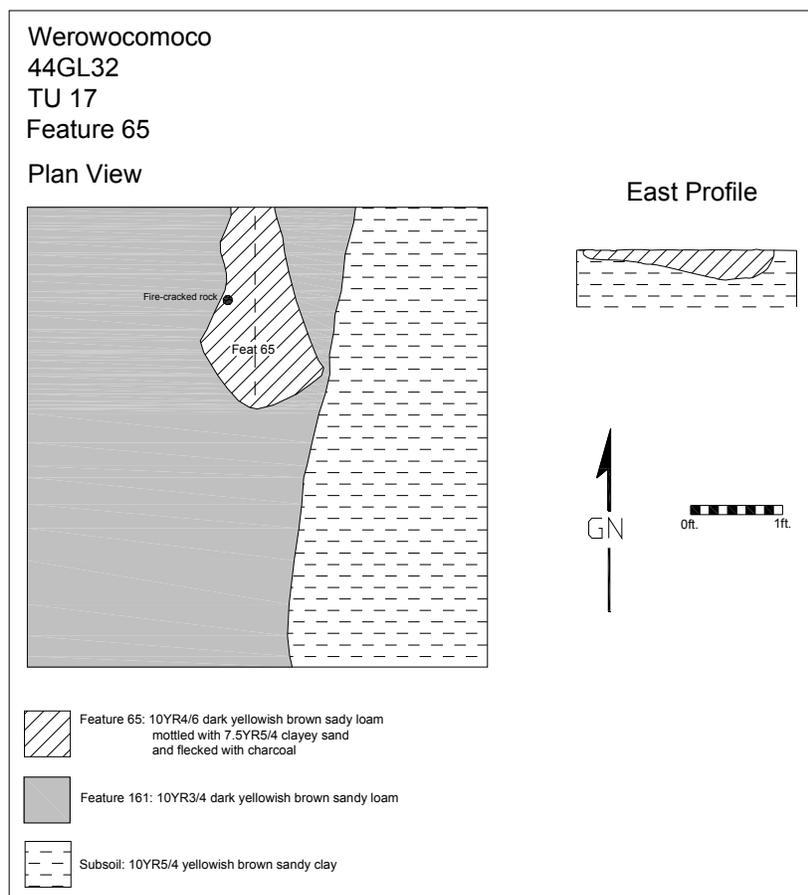


Figure 4-14. Feature 65 Plan and Profile.

With the exception of one imported kaolin pipe fragment identified in the transitional deposits located in the top 0.2 feet of the feature, artifacts identified within feature 161 were exclusively Native American. Artifacts included 4 shell-tempered, simple-stamped ceramics (i.e., Roanoke ware) several small Native sherds with unidentifiable surface treatments and tempers, and a quartz flake. Feature 65 contained an additional Roanoke simple-stamped sherd, 14 shell-tempered plain ceramics, and a fire-cracked rock. Charcoal from feature 65 returned a radiocarbon date of 490 +/- 40 BP (Beta 186839), which calibrates at

the two sigma range to A.D. 1400 – 1460 (Table 4-4) (Stuiver and van der Plicht 1998).

Though somewhat smaller at 4.20 feet across and 1.10 foot in depth, feature 162 was similar to feature 161 in form, contents, and north – south extent. Evidence of colluvial deposition was less apparent in feature 162, possibly due to disturbance from an animal burrow, labeled feature 99, which cut into the top of feature 161. Artifacts recovered from feature 162 included 4 Roanoke simple-stamped sherds (Table 4-5).

Beta Analytic Sample No.	Feature No. / Description	Measured C14 Age (BP)	Conventional C14 Age (BP)	Intercept w/ Calibration Curve	Calibrated Age (2 sigma)
186840	F. 182 (Burned tap root)	540 +/- 40	500 +/- 40	Cal AD 1420	Cal AD 1400 - 1450
186839	F. 65 (Charcoal lens)	510 +/- 40	490 +/- 40	Cal AD 1430	Cal AD 1400 - 1460

Table 4-4. Pasture Block West Radiocarbon Dates.

Feature	Context identified within	Stratum	Level	Artifacts	Count
161	Unit 17	I	a	Roanoke sherds	3
161	Unit 17	I	b	Roanoke sherd	1
161	Unit 5	I		Imported tobacco pipe fragment	1
161	Unit 5	II		Quartz secondary flake	1
161	Unit 17	III	a	Unidentified Native sherds	2
65	Feat 161	I		Plain shell-tempered sherds	14
65	Feat 161	I		Roanoke sherd	1
65	Feat 161	I		Crushed lithic tempered Native sherd	1
65	Feat 161	I		Fire-cracked rock (quartzite)	1
162	Unit 14	I	b	Roanoke sherds	2
162	Unit 4	I	c	Roanoke sherd	1
162	Unit 14	I	c	Roanoke sherd	1
123	Feat 162	I		Sand-tempered, fabric-impressed sherd	1
182	Feat 162	I	a	Unidentified Native sherd	1
182	Feat 162	I	a	Fired Clay fragments	2

Table 4-5. Artifacts in Ditch features and Associated Contexts, Pasture Block West.

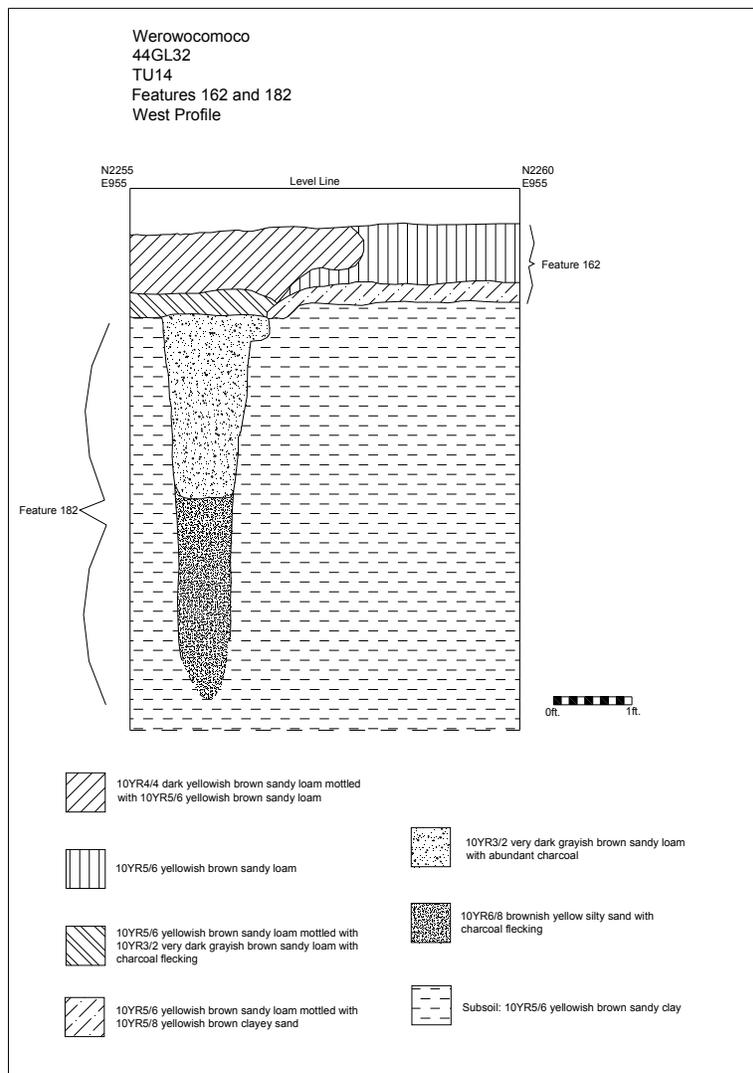


Figure 4-15. Feature 162 and 182 West Profile.

Our excavations exposed two charcoal-rich anomalies, designated features 123 and 182, at the base of feature 162. The larger of the two features, feature 182, consisted primarily of large pieces of burned wood mixed with sandy loam (stratum I) and a second layer of charcoal-flecked silty sand (stratum II) extending almost 5 feet in depth (Figure 4-15). Charcoal from feature 182 returned a radiocarbon date of 500 +/- 40 BP (Beta 186840), which calibrates at the two-sigma range to A.D. 1400 – 1450 (Stuiver and van der Plicht 1998). Artifacts identified within the feature fill included an eroded Native sherd and two fired clay fragments. Feature 123 appeared along the shallow, eastern portion of feature 162 and contained a charcoal-rich sandy loam matrix extending 2.40 feet below the base of feature 162. A single, sand-tempered, fabric-impressed sherd appeared at the top of the feature.

Postmold features

Most of the features in the excavation block had diameters in plan of 0.2 – 0.4 feet, depths of 0.2 – 0.3 feet, and basin-shaped profiles. Several of these likely Native postmolds identified in plan were difficult or impossible to detect in profile, as noted in the table with a missing value for feature depth. Postmolds were present along the western edges of features 161 and 162, possibly forming linear patterns, though the size of the stains and the spacing between them does not match other sites that contain clear evidence of palisade lines. Postmold stains were also present within the excavated portion of feature 161, though, once again, the numbers, spacing, and sizes of the stains do not point toward the presence of a palisade line. Additional excavation in this portion of the site should allow us to better understand the spatial organization and function of these postmold patterns.

Feature Chronology, Function, and Structure

Interpretation of the chronology, structure, and function of features 161 and 162 must necessarily be preliminary. Based on the associated artifacts and radiocarbon dates, it appears that the features are not boundary ditches associated with the early eighteenth-century colonial occupation of the site. Boundary ditches are fairly common on colonial sites dating to the seventeenth- and eighteenth-centuries in Tidewater Virginia. Such boundary ditches were typically created to mark property boundaries and subsequently filled with soils containing artifacts from the later colonial era (Horning 1998). Features 161 and 162 contained almost exclusively Native artifacts despite the abundance of eighteenth-century refuse in the plow zone. The materials from early historic occupation of the site present in the features – the two imported tobacco pipe fragments – appear to be intrusive.

Moreover, the radiocarbon dates place the ditch construction and use squarely in the precontact era. The slightly earlier date (500 BP +/- 40) came from feature 182 identified at the base of the ditch feature 162. Given its unusual shape, contents, and depth, feature 182 appears to represent the burned taproot of a sizable tree. Nearby feature 123 may also represent a burned taproot. Our rationale in selecting this sample for dating was that the burned root may date a forest-clearing event that occurred immediately prior to the ditch construction. English colonist Henry Spelman's (1998) account of Powhatan agricultural practices includes a reference to Powhatans who burned and chipped tree stumps in order to clear areas for gardens. If similar practices were behind the burning of the feature 182 taproot, then the radiocarbon date for the feature may correspond with the ditch construction date.

An alternate explanation is that the feature represents a large post set in the ditch that eventually burned. This possibility is suggested by illustrations that accompanied Thomas Hariot's (1972) *A Briefe and True Report of the New Found Land of Virginia* (Lorant 1946). Hariot's publication describes the Algonquian communities of the North Carolina coast encountered by the Roanoke colonists during their repeated (and ultimately failed) attempts to colonize the area from 1584 - 1590. The volume was illustrated with detailed engravings depicting Carolina Algonquians, their villages, and their daily practices. The engravings are Theodor de Bry's copies of watercolors painted by John White, the recording artist on the 1585-6 colonization attempt. White's painting of the village of Secota (Figure 4-16) includes a circular depression with inset posts within which several Secotans dance. White's accompanying annotation de-

scribes, "A ceremony in their prayers with strange gestures and songs dancing about posts carved at the topps lyke mins faces" (Lorant 1946:191). A more detailed watercolor labeled "A Religious Dance" (Figure 4-17) depicts seven posts with carved faces set in a shallow circular ditch. The posts appear to be about a foot in diameter, roughly paralleling feature 182's width in plan.

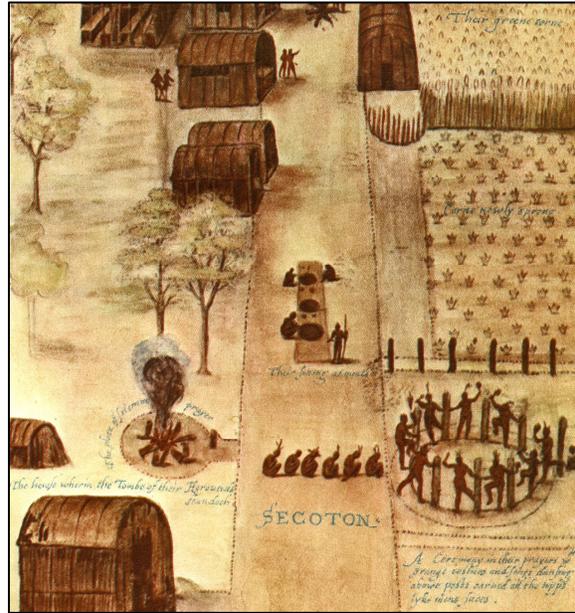


Figure 4-16. Inset from John White's watercolor of Secota (Lorant 1946:191).

The slightly later radiocarbon assay (490 BP +/- 40) came from feature 65, a concentration of charcoal and artifacts identified near the base of the feature 161 ditch. The feature was apparently created when the ditch was open and subsequently sealed by feature 161's fill. Our rationale in selecting a sample from feature 65 for dating was that the context appeared to mark a feature, possibly a hearth, in use while the ditch was open. The proximity of the two dates from different contexts within separate ditch features supports the inference that the ditches are indeed precontact features.

The overall size and layout of the ditches is, of course, unknown at this point, though there are some indications from their shapes in plan that the ditches may be curvilinear. Again, such a pattern points toward Native, as opposed to English colonial, construction. Circular ditches surrounding Native settlements that are in some ways similar to features 161 and 162 have been identified in the Potomac River drainage at the Potomac Creek site (44ST2) (Blanton et al. 1999; Stewart 1992), the Moyaone site (18PR8) (Stephenson

et al. 1963), Cumberland site (18CV171) (Williams 1983), and the Winslow (18MO9), and Fisher (18LD4) sites (Slattery and Woodward 1992). The ditches at these sites are associated with a palisade and surround nucleated settlements – elements that are not apparent at the Werowocomoco site. Recent excavations at the Potomac Creek site, a settlement with occupations contemporaneous with the fifteenth-century dates from Werowocomoco, exposed a series of circular palisade trenches, post lines, and pit features, including a main ditch measuring approximately 3.0 feet (0.93 m) across and 0.8 feet (0.24 m) in depth. Blanton and his colleagues (1999:95) argue convincingly that the ditch and similar features on other sites initially served as a borrow pits for soil banked against the interior palisade. Such ditches subsequently served as convenient locations for refuse disposal. Two concentric ditches encircle the Buck site (44CC29) along the Chickahominy River, a site excavated in the late 1960s whose materials are currently under study at William and Mary. The ditches enclose a relatively small area measuring roughly 200 by 60 feet containing a light scatter of postmolds and pit features.

Although small postmolds were present adjacent to and within the ditch features in the Pasture West block, the limited exposure does not provide any clear evidence of palisade lines associated with the ditches. Such palisade lines may, of course, become apparent in future excavations. Artifact density within the ditches was also extremely light, considerably lighter than the refuse pits at the Potomac Creek site and similar settlements with nucleated residential areas. The ditches at Werowocomoco appear to represent features somewhat different than ditches at some contemporaneous settlements in the Chesapeake.

Early documentary accounts of Werowocomoco village may aid in interpreting the features. John Smith made no mention of ditch features or palisade lines in his accounts of Werowocomoco. If a defensive palisade was present at Werowocomoco and he was allowed to see it, it is likely that Smith, a soldier by training and temperament, would have mentioned it. The early seventeenth-century Zuñiga map, a map likely drawn by Smith, (Stephensen and McKee 2000:33) may offer important clues about the ditches (Figure 4-18). Researchers studying Jamestown have recently drawn from the detailed sketch of James Fort found on the Zuñiga map to assess their excavation results, finding the sketch an accurate rendering of the

fort's footprint (1996:17). Additional notation on the map includes the path Smith took during his December 1607 - January 1608 captivity and scattered dots that appear to represent dispersed house locations in some Powhatan villages. As noted earlier in chapter 2, the cartographer added an unusual set of notations at Werowocomoco—dots surrounding a double “D” shaped pattern and three additional dots within the Ds. The significance of this notation is unclear, but its large size clearly conveys its strategic importance alongside Jamestown. Taken together, the map and the ditches identified in the Pasture West block raise the intriguing possibility that Powhatan Indians constructed large landscape features at the village during the fifteenth century that continued to exist through 1607, finding their way onto a draft of Smith's *Map of Virginia*.

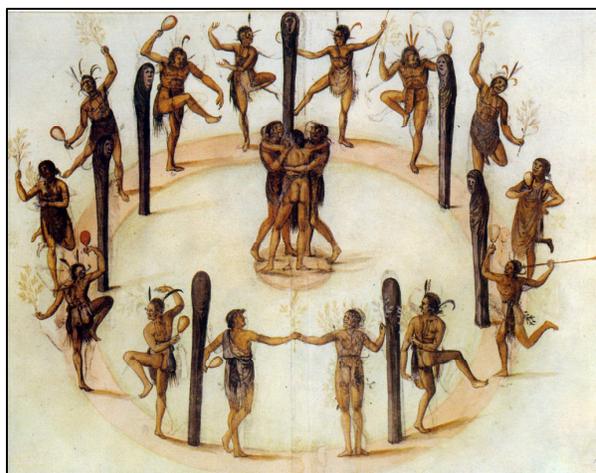


Figure 4-17. John White's watercolor entitled "A Religious Dance" (Lorant 1946:196-7).

If this interpretation is correct, then the ditch features were over a century old when Wahunsenacawh rose to power. The ditches may represent prominent landscape features that defined Werowocomoco as a powerful place, perhaps even drawing Wahunsenacawh to establish his residence there. The Zuñiga Map may in fact record substantial landscape modification at Werowocomoco that was subsequently forgotten. The evidence at hand suggests these inferences, though other interpretive possibilities exist. Additional excavation is necessary before any confident conclusions may be reached about the ditch features. Such investigations will focus on identifying the size, shape, contents, and chronology of the features.

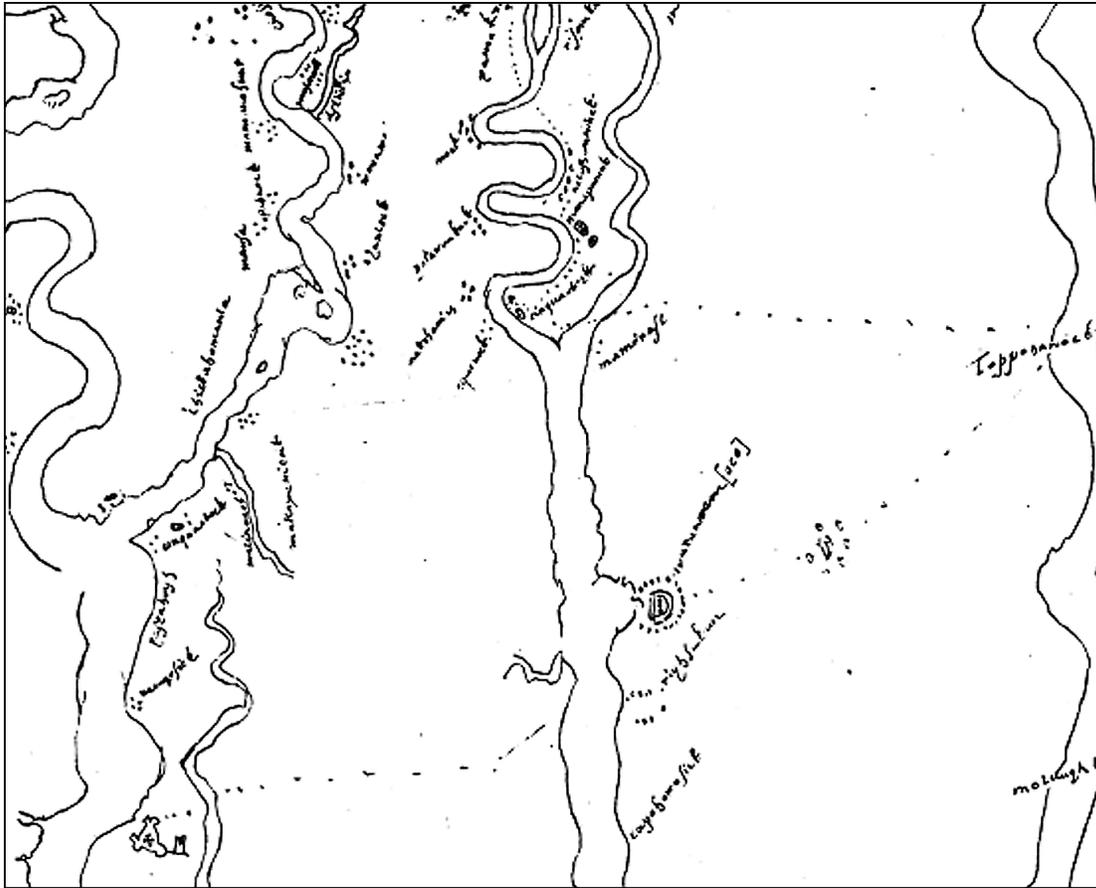


Figure 4-18. Inset from the Zuñiga Map of Virginia.

Pasture East Block

The Pasture East block consisted of 12 excavation units centered on the grid coordinate N2300 E1000 (Figure 4-19). These excavations identified one large feature and abundant artifacts associated with an eighteenth-century domestic area. Also present in lower frequencies were Native ceramics, lithics, and post-molds from an earlier occupation likely associated with the materials in the adjacent Pasture West block. The following discusses plow zone deposits before turning to the features identified in the block.

Stratigraphy and Plow Zone Deposits

Excavation units in this area uncovered the same 10YR4/4 dark yellowish brown sandy loam plow zone (stratum I) underlain by a 10YR5/6 yellowish brown sandy silt (stratum II) identified in the nearby Pasture West block. Plow zone depths were fairly uniform,

ranging from 0.8 to 0.9 feet below surface. Most historic ceramics recovered from the plow zone were manufactured during the seventeenth and eighteenth centuries. Native ceramics were predominantly shell-tempered wares from the Late Woodland through Contact periods. Tin-glazed earthenware formed the largest category of historic pottery in this portion of the site (Figure 4-20), with other historic ceramics suggesting a prominent eighteenth-century presence matched in the Pasture West block. Imported pipe bore diameters were concentrated in the middle to late eighteenth century (Figure 4-21). Taken together these historical materials point toward a late seventeenth-through middle eighteenth-century occupation, perhaps immediately preceding Richard Taliaferro's documented late eighteenth-century residence on the property.

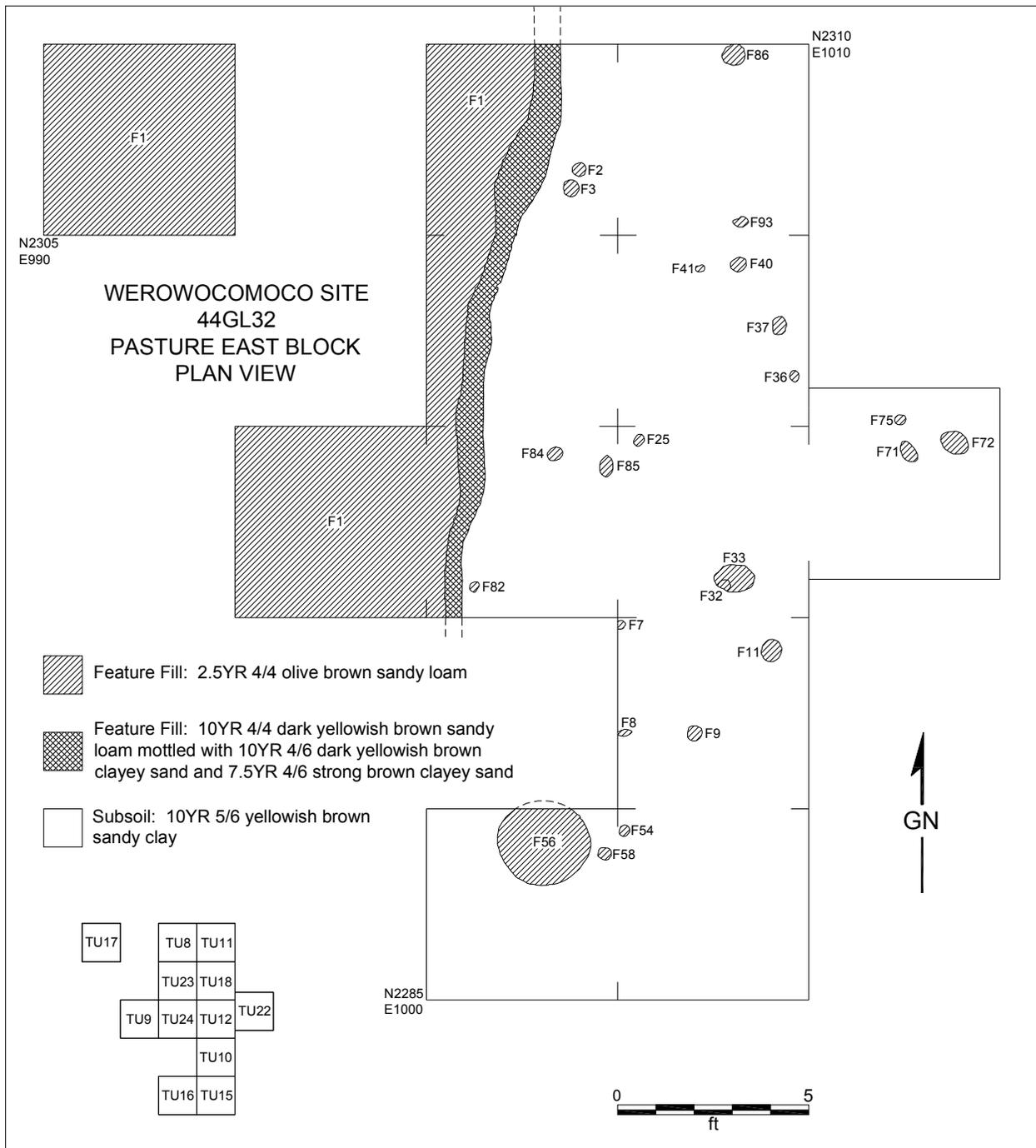


Figure 4-19. Plan of Pasture East Block.

Colonial era artifacts were found in high densities within the Pasture East block, and are consistent with a dispersed trash midden surrounding a residence and/or kitchen. A large feature identified in the western portion of the block may in fact represent one of these buildings. The artifact signature was very similar to that seen in the Pasture West block, though higher densities were generally found in the east block. Colonoware identified in both pasture excavation blocks may indicate the presence of early colonial pottery produced within a Native American community or by enslaved Africans during the eighteenth century. Together with the results of the shovel test survey, the artifacts from the pasture blocks suggest a proximity to the center of a sizable Euro-American farmstead, dating from the late seventeenth through the early nineteenth centuries. This component may mask important portions of the Native settlement at Werowocomoco, and it is unclear how the colonists may have incorporated elements of the Contact era landscape into their farmstead.

Fewer Native ceramics were recovered from the plow zone of the Pasture East block (n=198) compared with the adjacent Pasture West block (n=1172). With the exception of one sherd with crushed lithic temper, all of the Native pottery was tempered with crushed shell (Table 4-6). Of the sherds with identifiable surface treatments (n=41), most (78%) had plain surfaces, while the remainder were fabric-impressed (10%), simple-stamped (7%), or cord-marked (5%). Paralleling patterns in the Pasture West block, typological classification of these ceramics indicates a light scatter of Middle Woodland through Contact period ceramics, with greater numbers of Late Woodland through Contact period diagnostics. Absolute seriation of the Native pottery from the Pasture East Block suggests dates ranging from the fifteenth through early seventeenth centuries with a strong peak circa AD 1600 (Figure 4-22). Lithic artifacts recovered from the block were fashioned predominantly from quartz and quartzite and included no temporally diagnostic items (Table 4-7).

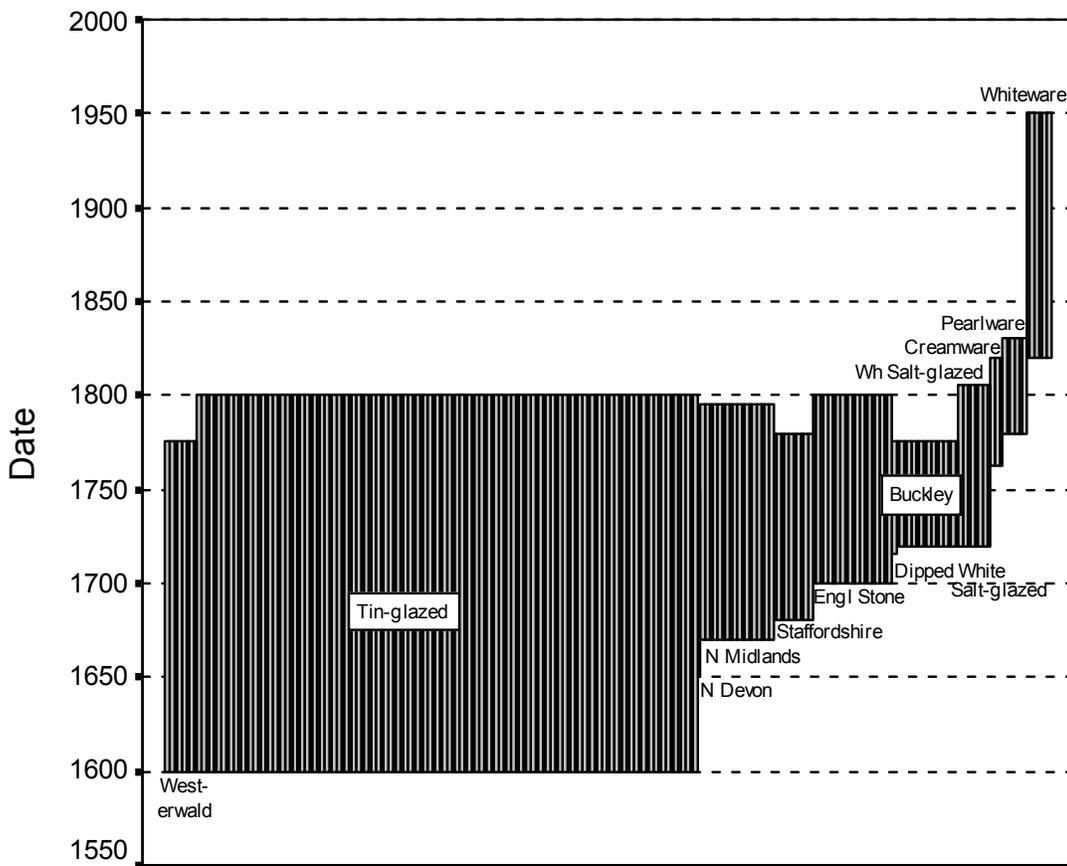


Figure 4-20. Temporal Distribution of Historic Ceramics from Pasture East Block Plow Zone. Each bar represents one sherd.

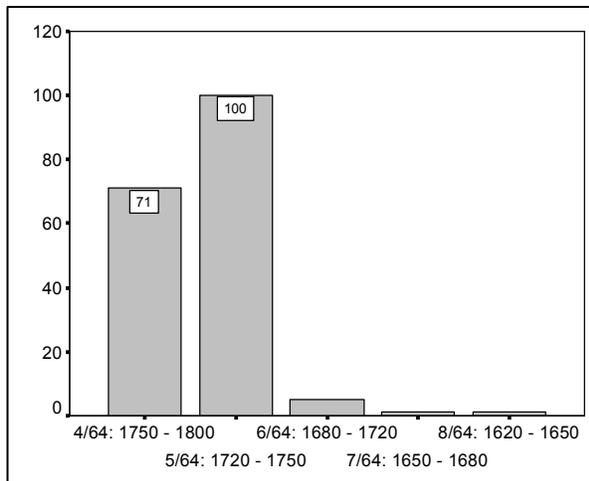


Figure 4-21. Imported Pipe Stem Bore Diameters from Pasture East Block, Measured in 64ths of an Inch.

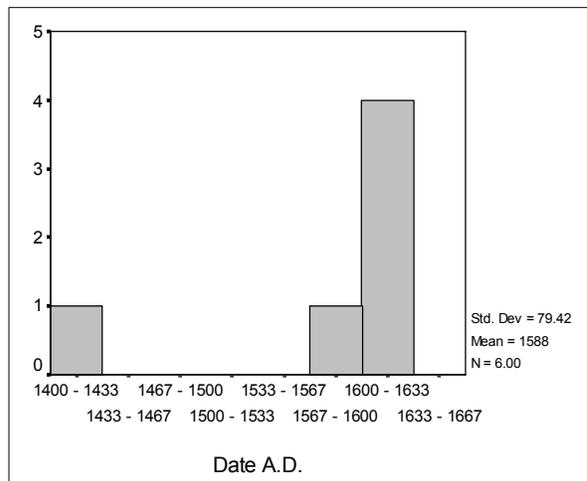


Figure 4-22. Histogram of Absolute Seriation Results for Native Ceramics from the Plow Zone, Pasture East Block.

Surface Treatment	Temper	Decorative Technique	Ware	N
Cord	Shell	-	Mockley	2
Fabric	Shell	-	Townsend	4
Simple stamped	Shell	Incised	Roanoke	1
Simple stamped	Shell	-	Roanoke	2
Plain	Shell	-	-	24
Plain	Sand	-	-	1
Plain	Unknown	-	-	7
Unknown	Crushed Lithic	-	-	1
Unknown	Sand	Incised	-	1
Unknown	Sand	-	-	3
Unknown	Shell	Incised	-	1
Unknown	Shell	-	-	27
Unknown	Shell/Sand	-	-	1
Unknown	Unknown	-	-	123
Total				198

Table 4-6. Plow Zone Pasture Block East, Native Sherds.

Material	Form	N	Grams
Chert	Primary decortation flake	5	
Chert	Secondary flake	4	
Chert	Tertiary flake	6	
Chert	Tested cobble	1	
Jasper	Primary decortation flake	1	
Jasper	Tertiary flake	3	
Quartz	Fire-Cracked rock	2	117.5
Quartz	Primary decortation flake	4	
Quartz	Secondary flake	2	
Quartz	Shatter	25	
Quartz	Tertiary flake	10	
Quartz	Tested cobble	4	
Quartzite	Fire-Cracked rock	2	10.0
Quartzite	Primary decortation flake	1	
Quartzite	Retouched flake	2	
Quartzite	Secondary flake	10	
Quartzite	Shatter	3	
Quartzite	Tertiary flake	4	
Rhyolite	Primary decortation flake	1	
Rhyolite	Secondary flake	3	
Rhyolite	Shatter	3	
Slate	Secondary flake	1	
Slate	Tertiary flake	4	

Table 4-7. Plow Zone Pasture Block East, Lithic Artifacts.

Fea.	Identified in unit(s)	Excavated	Fill	Max N-S (ft)	Max E-W (ft)	Max Depth (ft)	Artifacts	Interpretation
1	7-9, 23,24		10YR4/3 sandy loam w/ charcoal flecks	15+	13+	-	Imported pipe stems, tin-glazed earthenware, coarse red earthenware, hand-wrought nails, iron, charcoal, brick, shell	Large eighteenth century feature
2	8	X	10YR3/4 sandy loam	0.33	0.36	0.15	-	Native post mold
3	8	X	10YR3/4 sandy loam	0.38	0.40	0.29	-	Native post mold
7	10	X	10YR3/4 sandy loam	0.25	0.26	0.12	-	Native post mold
8	10	X	10YR3/4 sandy loam	0.30	0.25	0.10	-	Native post mold
9	10	X	10YR3/4 sandy loam	0.37	0.30	0.22	-	Native post mold
11	10	X	10YR3/4 sandy loam	0.34	0.48	0.12	-	Native post mold
25	12	X	10YR3/4 sandy loam	0.21	0.28	0.10	-	Native post mold
32	12	X	10YR4/4 sandy loam	0.32	0.30	0.30	-	Historic post mold
33	12	X	10YR3/4 sandy loam	0.72	1.02	0.40	-	Historic post hole
36	18	X	10YR3/4 sandy loam underlain by 10YR5/6 sandy loam	0.30	0.20	0.15	-	Native post mold
37	18	X	10YR3/4 sandy loam underlain by 10YR5/6 sandy loam	0.38	0.35	0.21	-	Native post mold
40	18	X	10YR3/4 sandy loam underlain by 10YR5/6 sandy loam	0.38	0.42	0.20	-	Native post mold
41	18	X	10YR3/4 sandy loam	0.19	0.26	0.10	-	Native post mold
54	15	X	10YR3/4 sandy loam	0.20	0.22	0.12	-	Native post mold
56	16	X	10YR3/3 sandy loam mottled w/ 10YR5/4 clay w/ heavy charcoal	1.95	2.20	3.90	Wrought nail, unidentified nail, Native sherd, quartzite flake (in top 0.3 ft)	Burned tap root
58	16	X	10YR3/4 sandy loam	0.22	0.32	0.14	-	Native post mold
71	22	X	10YR3/4 sandy loam	0.45	0.45	0.30	-	Native post mold
72	22	X	10YR3/4 sandy loam	0.64	0.70	0.35	Wrought nail	Historic post hole
75	22	X	10YR3/4 sandy loam underlain by 10YR5/6 sandy loam	0.35	0.35	0.30	-	Native post mold
82	24	X	10YR3/4 sandy loam	0.20	0.24	0.25	-	Native post mold
84	24	X	10YR3/4 sandy loam	0.25	0.34	0.26	-	Native post mold
85	24	X	10YR3/4 sandy loam	0.60	0.54	0.25	-	Native post mold
86	11	X	10YR3/4 sandy loam	0.56	0.61	0.52	-	Native post mold
93	11	X	10YR3/4 sandy loam	0.29	0.40	0.15	-	Native post mold

Table 4-8. Pasture East Block Features.

Features

Excavations uncovered a total of 24 features in the Pasture East block, all but one of which were tested (Table 4-8). Features noted within the excavation block all occurred at the plow zone base framed by 10YR5/6 yellowish brown sandy silt subsoil.

Feature 1 appeared in five test units as a 2.5Y4/4 olive brown sandy loam mottled with charcoal and shell fragments. At its surface the feature contained a dense concentration of tin-glazed earthenware, coarse red earthenware, imported pipe stems, hand-wrought nails, and brick fragments. The excavation exposed portions of the feature's relatively straight eastern edge, indicating that it extends over fifteen feet north-south and over 13 feet east-west. A transitional zone occurred along the eastern edge of the feature consisting of lighter 10YR4/4 dark yellowish brown sandy loam mottled with 10YR4/6 dark yellowish brown clayey sand and 7.5YR4/6 strong brown clayey sand. Given its likely chronological placement in the late seventeenth or eighteenth centuries, the feature was not excavated. Feature 1 represents a large pit, possibly a cellar hole, associated with the early historic occupation previously identified by shovel testing in this por-

tion of the site.

Feature 56 was roughly circular in plan with a maximal diameter of 2.2 feet, a cylindrical shape in profile, and a depth of almost 4 feet (Figure 4-23).



Figure 4-23. Feature 56 plan.

Artifacts, including a hand-wrought nail, an unidentified nail fragment, an eroded Native sherd, and a quartzite flake, were recovered from the top 0.3 feet of the fill. The paucity of historic materials from the fill suggests that the feature dates to the early stages of the English colonial occupation of the site or late in the Native phase of settlement.

In general, the Pasture East block included a large feature and deposits associated with a late seventeenth through eighteenth-century residential complex amidst a lighter scatter of Native features and deposits dating to the Late Woodland through Contact periods. As listed in Table 4-8, artifacts occurred in low numbers or were absent from most excavated features. The only Native artifacts recovered from feature context were found in the burned taproot along with two nail fragments. A comparison of the density of historic artifacts per test unit (Figure 4-24) indicates that the Pasture East Block has higher numbers of materials associated with residential space (particularly imported tobacco pipe fragments) and architecture (particularly hand-wrought nails) during the late seventeenth through eighteenth centuries. Combined with the large feature 1, it is clear that this area of the site is close to the core of the early historic-era residence.

The presence of early historic-era features and artifacts of a residential complex, likely the earliest on the site, raises the possibility that the ditch features identified in the nearby Pasture West Block were associated with this complex. Based on the available evidence, though, this association does not appear likely. No historic artifacts were recovered from the ditches with the exception of the upper-most, transitional layer, and the silty fill within the ditches suggests that they were open for some time. Additionally, the available radiocarbon dates provide a consistent, precontact age for the ditch features. As noted above, research on the

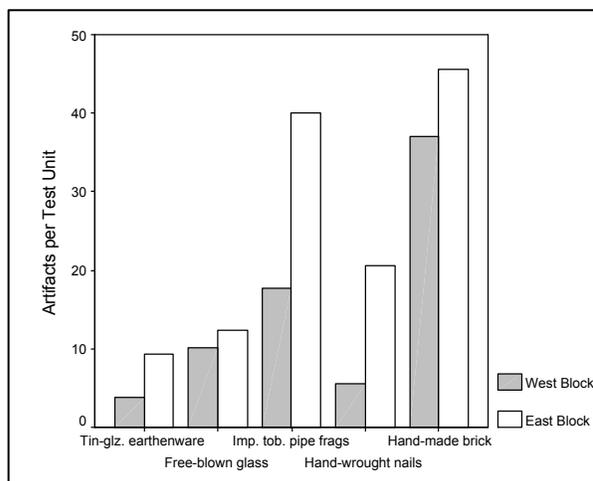


Figure 4-24. Comparison of Historic Artifacts in the Pasture Excavation Blocks.

earliest colonial settlements in the Chesapeake (e.g., Potter and Waselkov 1994) highlights a trend toward settlement locations that correspond with Native villages.

One puzzling aspect of the site has been why the earliest historic-era occupation is located so far (roughly 1000 feet) from Puritan Bay. A possible explanation is that the earliest settlers chose to locate their residence in an area of the site previously-cleared of trees and settled by Powhatans and close to natural springs. This settlement strategy may have benefited from the labor of previous Native residents and from their identification of some of the most productive agricultural soils (Potter and Waselkov 1994). Another possibility, one that cannot yet be evaluated fully with the evidence at hand, is that the earliest colonial settlers intentionally chose to occupy and to reconfigure a landscape of symbolic importance to Wahun-senacawh and the Powhatan Indians.

Riverfront Excavation Block

The Riverfront block consisted of twenty-three excavation units centered roughly on the grid coordinate N1930 E150 (Figures 4-25 and 4-26). The block yielded the highest density of Native American ceramics on the site, particularly Townsend ware, and a diversity of Native material culture suggesting that the area corresponded with the residential core of the Late Woodland / Contact period village. Historic artifacts recovered from the block include predominantly nineteenth- through twentieth-century materials associated

with a landscaped yard and farmhouse that may date to the arrival of the Caffee family during the early nineteenth century.

Stratigraphy and Plow Zone Deposits

Excavation units in this area uncovered a 10YR3/4 dark yellowish brown sandy loam plow zone (stratum I) underlain by a 10YR5/6 yellowish brown sandy silt (stratum II). While the topography in this area was generally flat with only a slight slope declining to the

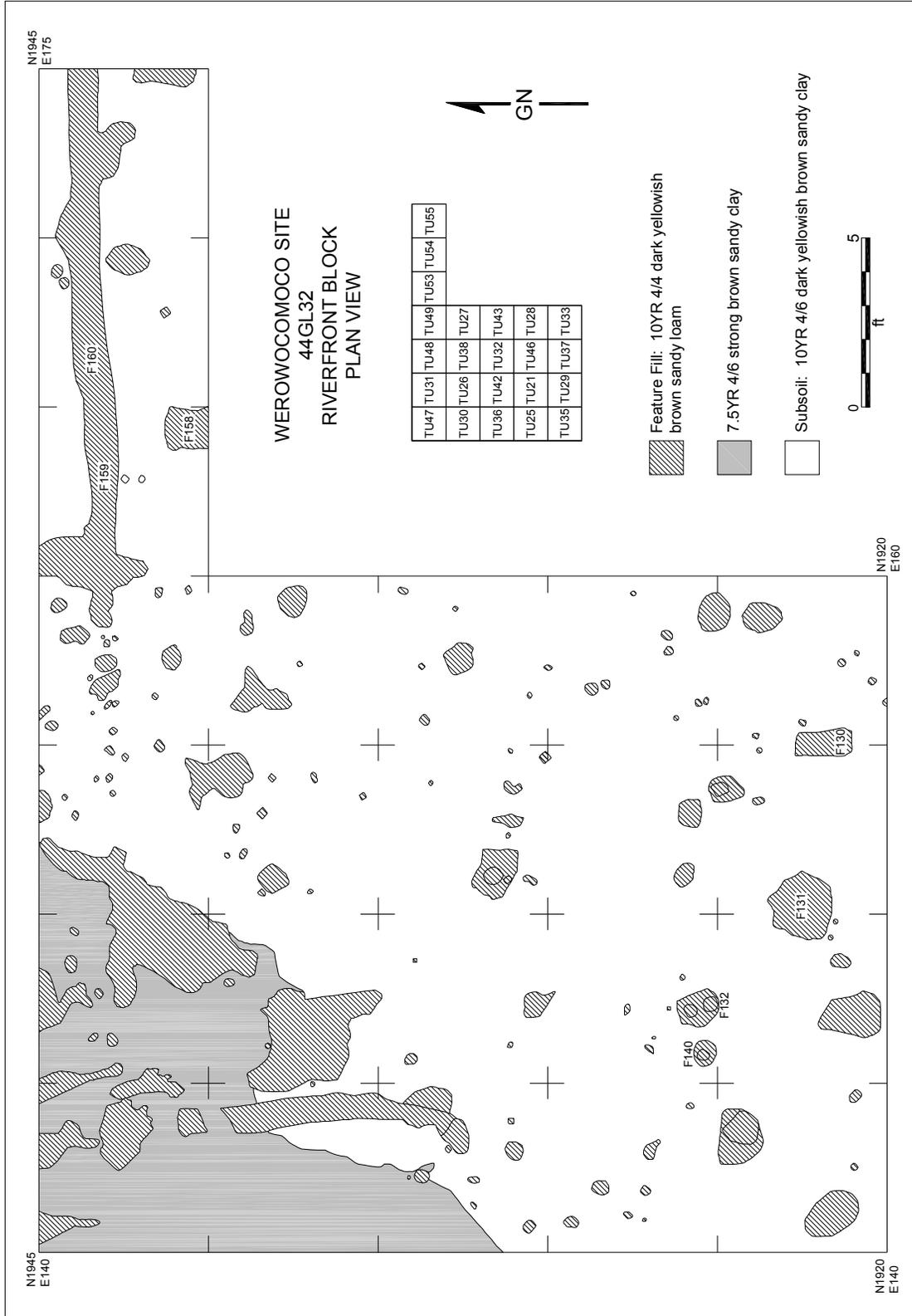


Figure 4-26. Plan of Riverfront Block



Figure 4-25. Riverfront Excavation Block

west, the plow zone varied in thickness from 0.30 feet in test unit 55 to 0.80 feet in test unit 47. This variation in depth is likely due to a combination of vertical erosion and nineteenth- through twentieth-century landscaping.

Temporally diagnostic materials from the historic era in the plow zone included imported ceramics, iron nails, and hand-made brick. Together with machine-made bottle glass and cut nails, the historic ceramics recovered from the Riverfront block reflect a prominent nineteenth- and twentieth-century presence (Figure 4-27). The majority of nineteenth- and twentieth-century domestic artifacts such as table glass fragments, iron can fragments, and whiteware pottery sherds were located west of grid line E155. Eighteenth-century ceramics, including white salt-glazed and other English stonewares, creamware, and tin-glazed earthenware, were found evenly distributed in lower frequencies throughout the excavation block. The later materials coincide with evidence of a fence line, defined by a series of postholes running grid north-south through the excavation block. Since the fence line corresponds with trash disposal during the more recent period and does not conform to the distribution of the eighteenth-century material, the fence line was probably not built until the nineteenth century. Construction materials, including shell mortar, window glass, and hand-made brick, follow a similar

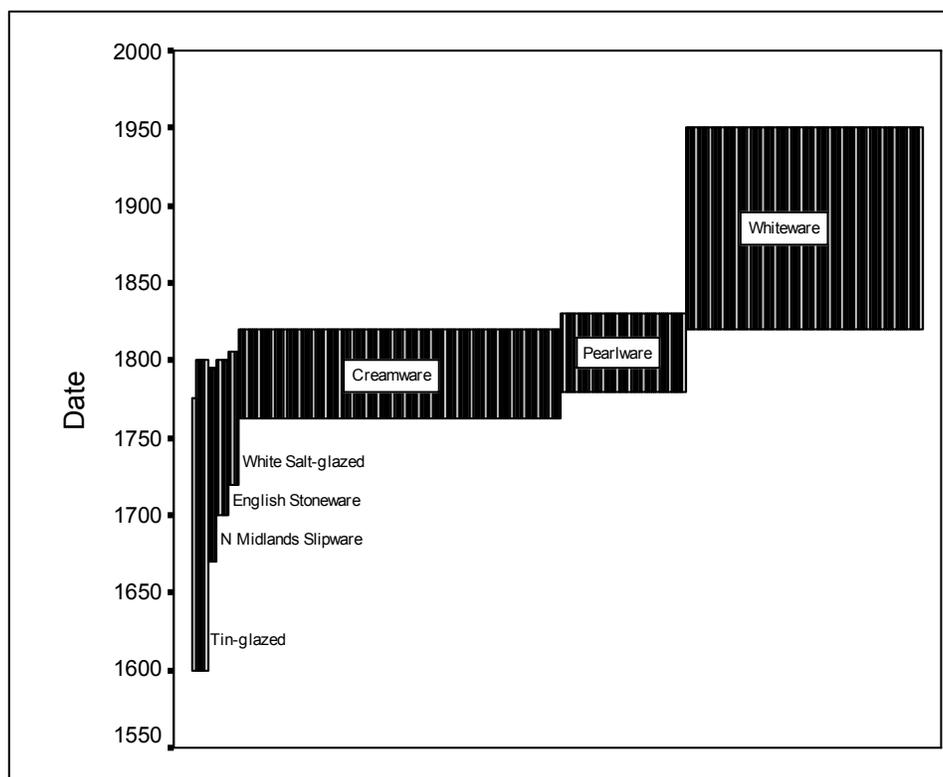


Figure 4-27. Temporal Distribution of Plow Zone Ceramics from Riverfront Block.

pattern, generally increasing to the north. This material probably relates to the Caffee home, an early nineteenth-century structure demolished in the 1960s, that stood a short distance northeast of the Riverfront Block.

Two artifact classes, shell and domestic red clay tobacco pipe fragments, were deposited in the area of the excavation during both the historic and Native periods of occupation. Shell fragments were found in their highest concentrations in the northwest corner of the block, probably reflecting the thickness of the plow zone deposit. This pattern also corresponds to a slight discoloration of the soil at the plow zone base containing oyster and clam shell, suggesting a shallow midden or trash disposal area. The domestic red clay tobacco pipe fragments recovered throughout the block are likely of Native manufacture. Similar tobacco pipe fragments are often found in seventeenth-century contexts, yet there were no other contemporary European-manufactured artifacts found within the excavation block.

The Riverfront Block contained the highest density and diversity of Native artifacts on the site. Ceramics from the block included a variety of surface treat-



Figure 4-28. Sample of triangular projectile points from the Werowocomoco site.

ments, tempers, and decorative attributes (Table 4-9), though Rappahannock fabric-impressed and plain, shell tempered ceramics comprised over 75% of identifiable Native ceramics in the block. Lithic artifacts (Table 4-10) were similarly diverse, including two medium-sized triangular points and one side-notched

Surface Treatment	Temper	Ware	Decorative Technique	N	%
Fabric	Shell	Townsend		214	50.2
Fabric	Shell	Townsend	Incised	12	2.8
Plain	Shell			78	18.3
Plain	Shell		Incised	5	1.2
Cord	Shell	Mockley		39	9.2
Cord	Shell	Mockley	Incised	3	0.7
Plain	Sand			24	5.6
Fabric	Sand			16	3.8
Fabric	Sand		Incised	1	0.2
Simple stamped	Shell	Roanoke		15	3.5
Cord	Sand			10	2.3
Simple stamped	Sand			3	0.7
Plain	Crushed Lithic/Sand			2	0.5
Fabric	Crushed Lithic			1	0.2
Simple stamped	Crushed Lithic			1	0.2
Plain	Shell		Cord-wrapped dowel	1	0.2
Plain	Rounded lithic/Sand			1	0.2
SUBTOTAL				426	100.0
Fabric	Unknown			12	46.2
Plain	Unknown			10	38.5
Cord	Unknown			4	15.4
SUBTOTAL				26	100.0
Unknown	Shell			875	68.3
Unknown	Shell		Incised	178	13.9
Unknown	Shell		Cord-wrapped dowel	13	1.0
Unknown	Shell		Punctuation	6	0.5
Unknown	Sand			143	11.2
Unknown	Sand		Incised	26	2.0
Unknown	Sand		Cord-wrapped dowel	2	0.2
Unknown	Sand		Punctuation	1	0.1
Unknown	Crushed Lithic			13	1.0
Unknown	Crushed Lithic		Incised	2	0.2
Unknown	Rounded Lithic			2	0.2
Unknown	Crushed Lithic		Cord-wrapped dowel	1	0.1
Unknown	Unknown		Incised	18	1.4
Unknown	Unknown		Cord-wrapped dowel	1	0.1
SUBTOTAL				1281	100.0
Unknown	Unknown			3501	

Table 4-9. Native Ceramics, Riverfront Plow Zone.

point. The presence of substantial numbers of fire-cracked rock and the overall diversity of lithic forms and materials support the notion that the Riverfront block is within a longstanding residential zone of the site. Contour maps of ceramic and lithic artifact density across the block indicate that artifact densities

increase markedly on the northern edge of the block across most categories (Figures 4-29 and 4-30). Combining this evidence with the shovel test data, it appears likely that the block is adjacent to an area of the site intensively occupied by Native residents.

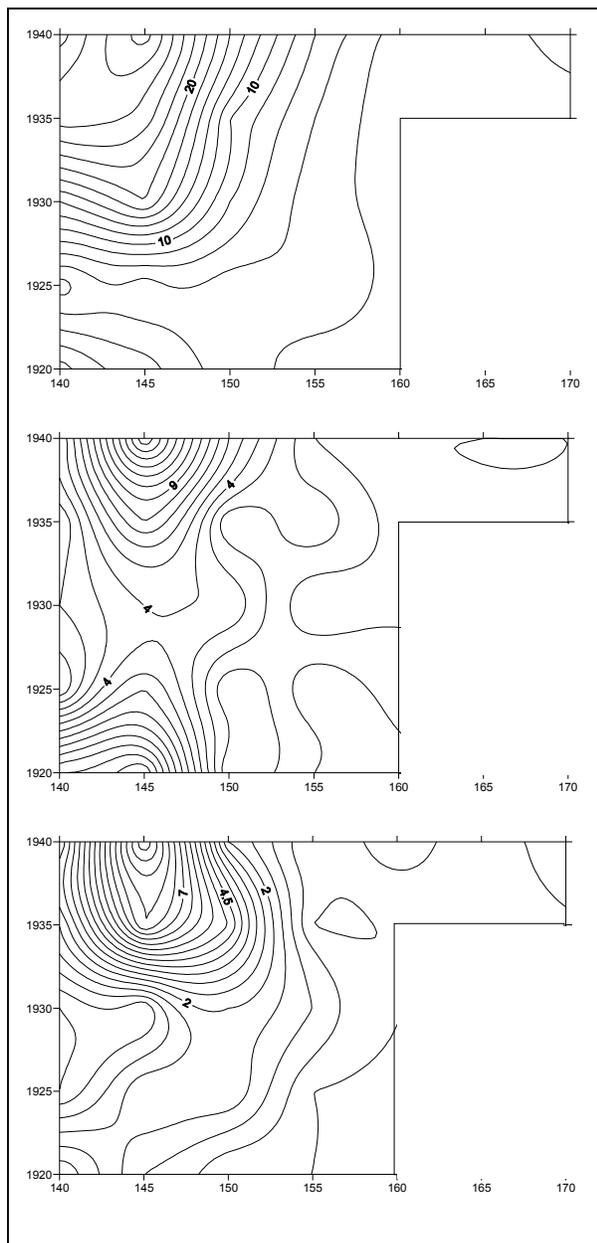


Figure 4-29 Contour Map of Native Ceramics from the Riverfront Block. From top: Townsend Fabric-impressed, Plain Shell-tempered, Mockley Cord-marked.

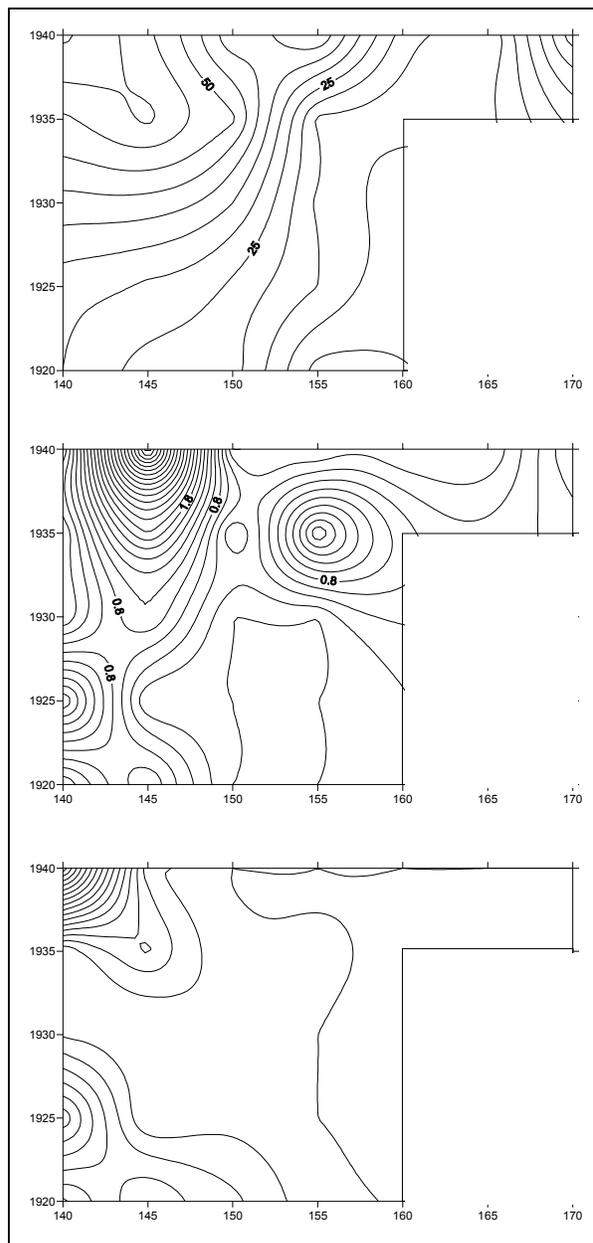


Figure 4-30. Contour Map of Lithic Artifacts from the Riverfront Block. From top: Debitage, bifaces, fire-cracked rock.

Material	Form	N	Weight (g)
Argillite	Primary decortation flake	1	
Basalt	Retouched flake	1	
Chalcedony	Tertiary flake	1	
Chert	Primary decortation flake	5	
Chert	Secondary flake	6	
Chert	Tertiary flake	17	
Chert	Shatter	6	
Jasper	Projectile point: Triangle	1	
Jasper	Tertiary flake	1	
Quartz	Tested cobble	2	
Quartz	Core	1	
Quartz	Primary decortation flake	41	
Quartz	Secondary flake	72	
Quartz	Tertiary flake	88	
Quartz	Shatter	112	
Quartz	Retouched flake	2	
Quartz	Fire-Cracked rock	7	170.3
Quartzite	Primary decortation flake	24	
Quartzite	Secondary flake	171	
Quartzite	Tertiary flake	181	
Quartzite	Shatter	47	
Quartzite	Retouched flake	2	
Quartzite	Biface	2	
Quartzite	Projectile point	3	
Quartzite	Projectile point: Side Notched	1	
Quartzite	Projectile point: Triangle	2	
Quartzite	Abrader	1	
Quartzite	Fire-Cracked rock	28	1761.9
Slate	Secondary flake	1	

Table 4-10. Native Lithics, Riverfront Plow Zone.

Absolute seriation of the Native ceramics in the block produced dates ranging from the fourteenth through early seventeenth centuries A.D., a result consistent with the numbers of Townsend ceramics recovered from the block (Figures 4-31 and 4-32). The presence of Mockley ceramics as a minority ware (10% of the assemblage) indicates that the Riverfront block also saw earlier, less intensive, Middle Woodland settlement.



Figure 4-31. Rappahannock Incised ceramics from the Riverfront Block.

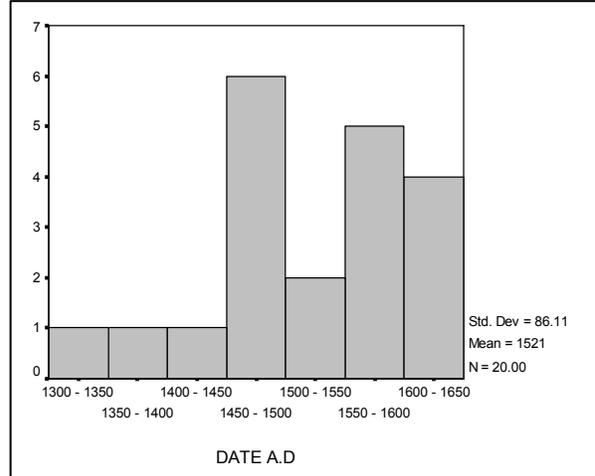


Figure 4-32. Histogram of Absolute Seriation Results for Native Ceramics from the Plow Zone, Riverfront Block.

One copper object recovered from the Riverfront plow zone may tie the site to the English colonial presence in the region. The artifact is rectangular and measures roughly one inch square. It appears to be cut from a larger piece of copper and was later folded. Fragments of this size have been found in considerable numbers from early seventeenth-century contexts at Jamestown, and were specifically created for trade with the Powhatans (Kelso et al. 2001). The fragments of copper may be one of a number of objects traded during the early encounters between the English and Virginia Indians at Werowocomoco. Other copper objects collected by the landowners from the plow zone were found in both the pasture and the fields closer to the water. Several of these may be of early seventeenth-century origin, including several small scraps of sheet copper and an apparent rolled copper bead. (Figure 4-33). Analysis of these materials for their mineral composition and their place of manufacture is currently underway.



Figure 4-33. Rolled copper bead recovered from plow zone deposits.

Fea.	Test unit(s)	Excavated	Fill	Max N-S (ft)	Max E-W (ft)	Max Depth (ft)	Artifacts	Interpretation
130	33, 37	X	10YR4/4 sandy clay loam	1.40	0.80	1.00	Creamware sherd, shell fragment	Post-1765 postmold
131	29, 37	X	10YR4/4 sandy clay loam	1.75	2.00	0.65	Pearlware sherd, handmade brick, Native ceramics (3), quartzite secondary flake, shell fragments (2)	Post-1770 postmold
132	21	X	10YR4/6 sandy loam mottled w/ 10YR3/6 sandy loam	1.20	0.80	0.60	Handmade brick, Native ceramics (2), bone, shell	Historic post-hole and postmold
140	21		10YR4/3 sandy loam	0.70	0.70	-	Pigs tooth fragments (5)	Historic post-mold
158	53	X	10YR4/3 silty loam	1.20	0.90	0.45	Native ceramics (2), quartzite flakes (2), shell (2), bone	Postmold
159	31	X	10YR5/6 silty loam	2.00	-	0.10	Native ceramic, handmade brick, shell (4), bone	Slot trench
160	54	X	10YR5/6 silty loam	1.80	-	0.28	Townsend fabric impressed sherd, Other Native sherds (2), quartzite flakes (2), quartz shatter, shell (2), bone	Slot trench
160A	54	X	10YR3/4 sandy loam	0.60	0.40	0.23	-	Postmold
160B	54	X	10YR3/4 sandy loam	0.35	0.45	0.15	-	Postmold

Table 4-11. Riverfront Block Features

Features

Our excavations identified over 100 soil anomalies in the Riverfront block. Since the excavation strategy in this portion of the site prioritized exposure of a broad area of what appears to be the residential core of the Late Woodland / Contact period settlement, only eight features were sampled during the field season (Table 4-11).

The excavated features include four that appear to be historic postholes based on their shapes and contents. Feature 130, which contained creamware, was rectangular in plan with a flat-based, U-shaped profile. Feature 131 was amorphous in plan with a flat-based profile and tapering sidewalls. Artifacts recovered from the feature include hand-made brick and a pearlware sherd, indicating the feature was likely filled after the late 1770s. Feature 132 was a rectangular posthole with two square molds that contained hand-made brick. Feature 158 was rectangular in plan with a U-shaped profile. Artifacts included oyster shell fragments and faunal remains. Native artifacts, including two quartzite flakes and a shell-tempered sherd, were also present in the feature.

Feature 158, a possible postmold located in test unit 53, was rectangular in plan and measured 1.2 feet by 0.9 feet. Excavation of the north half of the feature exposed a round-based, U-shaped profile extending to a depth of 0.45 feet beneath the base of stratum I. Artifacts recovered from the feature include oyster shell fragments and faunal remains. Native artifacts, including a quartzite secondary thinning flake and tertiary flake, a shell-tempered ceramic sherd, and an eroded ceramic sherd were also recovered from the feature.

Features 159 and 160 are sections of a linear slot trench extending more than 35 feet east-west through several test units (Figure 4-34 and 4-35). Each exca-

vated section represents a 2.5-foot long sample of the trench. The width of the trench varied from 0.55 to 0.70 feet. Excavation revealed a flat-bottomed, U-shaped profile 0.25 feet deep. Artifacts recovered from the features included Rappahannock fabric-impressed pottery, Native lithics, oyster shell, and animal bone fragments. One fragment of hand-made brick was also recovered from the top of feature 159. This was the only historic artifact found in the feature and may be intrusive.

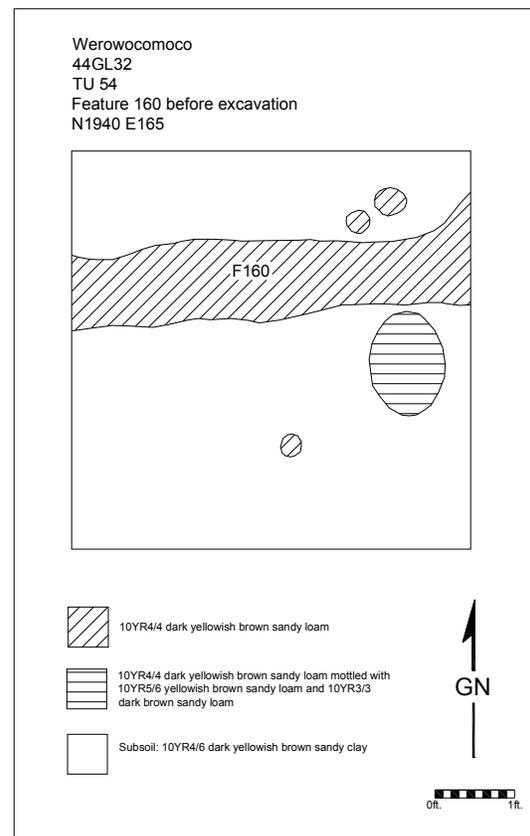


Figure 4-34. Feature 160 Prior to Excavation.

A series of circular to elliptical soil anomalies appeared in an uneven distribution at the base of features 159 and 160. Six possible postmolds were identified at the base of feature 159. The postmolds ranged in size from 0.2 to 0.5 feet in diameter, none of which were sampled. Eight possible postmolds were also located at the base of feature 160. Two sampled postmolds were semicircular in plan with a V- (160A) or U- (160B) shaped profile. Neither contained any artifacts.

In addition to these numbered features, two shallow soil anomalies appeared at the plow zone base running north-south and curving to the east near the south wall. These features may represent the remains of a cart path. The deposit contained dark brown (10YR4/3) silty loam mottled with dark yellowish brown (10YR3/4) silty loam and extended 0.3 feet beneath the plow zone base. Shallow cart “ruts” that extended slightly deeper appeared within some portions of this feature.

Two additional soil anomalies were noted but not sampled. A 7.5YR4/6 strong brown sandy clay was found at the base of stratum I in most of test unit 30. No artifacts were observed on the surface of this soil concentration. Probing of the soil indicated the deposit extends at least two feet below the base of stratum I, suggesting that it represents a natural soil stratum. A second, more diffuse anomaly consisted of dark yellowish brown (10YR4/4 and 5/4) sandy loam mottled with oyster and clam shell inclusions located in portions of test units 26, 31, 38, and 48. The highest concentrations of oyster and clam shell in the excavation

block were found in the vicinity of this soil anomaly, as well as a substantial number of Native ceramics and lithics. This area appears to represent the remains of shell disposal in the vicinity of a former living surface.

The evidence from the Riverfront Block will help guide future excavation strategies at the site aimed at identifying Native features dating to the Contact period. The paucity of Native pit features in an area of the site with such high densities of Native artifacts in the plow zone seems, at first glance, somewhat puzzling. The Riverfront block contained roughly ten times the density of Townsend sherds compared with other portions of the site and four times the density of lithic artifacts, as discussed below. The presence of Native postmolds indicates that the area contained structures whose outlines are now difficult to detect. As noted above, residential areas of Contact period settlements in the Chesapeake often contain few features beyond postmolds.

The linear trench that extends almost the full length of the northern wall of the excavation block represents a landscape feature intended to separate two areas. While we did recover a small amount of hand-made brick near the top of one of the trench sections, no other historic artifacts were found within the feature fill or the sampled postmolds. If the trench was constructed by eighteenth- or nineteenth-century occupants of the site, it likely performed the same functions as the fence lines described above. Its orientation coincides with more recent landscape features and may have delineated field from yard or a small garden. If

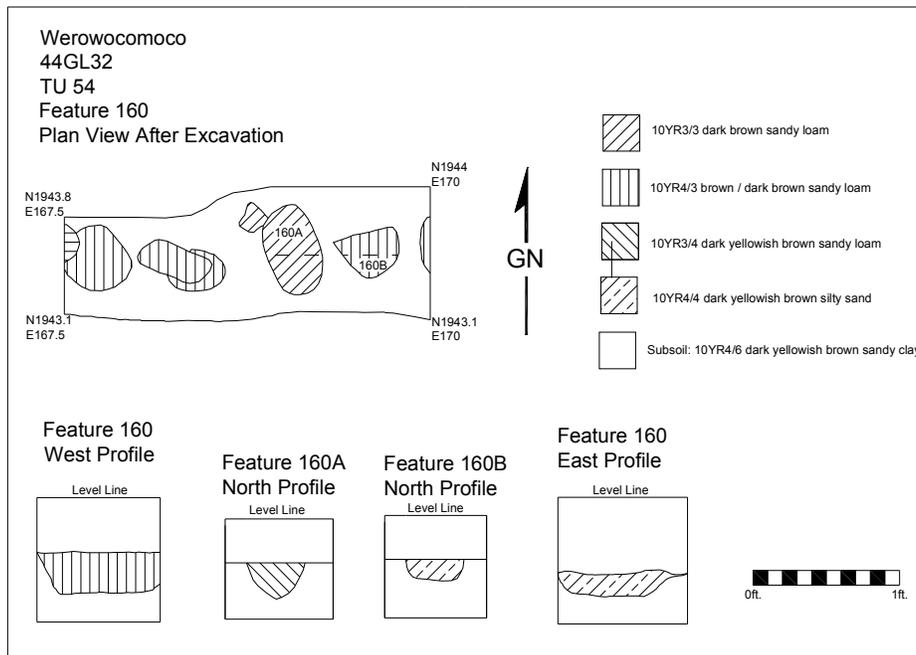


Figure 4-35. Feature 160 After Excavation.

the hand-made brick is intrusive, and the trench instead dates to the Native occupation of the site, the feature may have separated domestic living spaces or served a defensive function as a palisade. A significant increase in the amount of Native material was recorded during shovel testing immediately north of the trench, suggesting that this may indeed mark a division between two heavily occupied areas of the village. John White's painting of Secota (Figure 4-16) includes just such a fence line.

The historic domestic artifacts recovered from the Riverfront block reflect a typical domestic assemblage from an extended occupation lasting from the late eighteenth through the twenty-first centuries. Differences in the concentrations of these artifacts over the excavation area likely reflect shifting attitudes toward

trash disposal that correspond with changes in the use of space. In the years shortly before the Caffee family built their home near the excavation area, and possibly their first years of residence, they disposed of very little trash in this portion of the site. By mid-century the occupants of the house built a fence demarcating yard space from agricultural fields and began disposing their refuse beyond the fence in an attempt to maintain cleaner areas within the more formalized landscape. This coincides with changes in Victorian sensibilities reflected in a modified form by the rural middle class families of the Middle Atlantic region (e.g., Bushman 1993). The maintenance of these fence lines reflects a long-term commitment to these ideals, and an attempt to sustain borders between the agricultural world and the home space.

Cornfield Excavation Block

The smallest excavation block opened during the 2003 season was located approximately 350 feet from the Purtan Bay waterfront within a field planted in corn (Figure 4-36). Excavation of four test units in this area recovered the lowest densities of historic materials on the site but comparable densities of Native materials. The paucity of historic materials in the Cornfield block reflects its distance from residential spaces and other activity areas intensively used during the historic era. No post-contact features were found in this portion of the site, raising the likelihood that Native deposits in the Cornfield block experienced less of an impact from historic occupations than other portions of the site.

Stratigraphy

The Cornfield block uncovered stratified deposits that included two stacked plow zones and what appears to be a buried "A" horizon (Figures 4-37 and 4-38). The more recent plow zone of 10YR3/4 sandy loam extended to depths ranging from 0.8 – 1.1 feet below surface, while an older plow zone consisting of 10YR3/4 sandy loam mottled with 10YR5/8 sandy silt with plow scars at its base extended to depths ranging from 1.0 – 1.3 feet below surface. These deposits were combined as stratum I. A third layer of soil (excavated as stratum II) contained a light scatter of Native artifacts beneath this second plow zone. The interface between stratum I and II undulated to a greater degree than the current surface, suggesting a historic landform with greater topographic variation than at present.

Due to the possibility that the Cornfield block con-

tained stratified deposits, test unit 56 was excavated in arbitrary 0.1-foot levels starting at one foot below surface. Our goal in using this strategy was to detect deposits containing solely Native materials associated with a buried cultural horizon. As listed in Table 4-12, stratum I soils (i.e., the Ap horizon or plow zone) contained a mix of historic and Native materials. Beneath the stratum I plow scars, stratum II was defined by a change in soil color and texture. Stratum II contained a light scatter of Native pottery and one piece of iron. At the base of stratum IIb the darker soils of stratum II covered all of test unit 41 and the eastern portions of test units 44 and 56 in an arcing pattern that parallels a line of posts in these units.

Stratum II may indeed represent a buried A horizon, i.e., organic- and artifact-rich soils of a former living surface that include, in this case, diagnostic artifacts from the Middle Woodland through Contact periods. Another possibility is that these soils represent a subsurface zone of soil composed of materials and organic matter leached from an A horizon (i.e., a B horizon). Given that the stratum II soils roughly parallel an arcing line of postmolds immediately to the east (described below), the deposits may be associated with the western end of a Native domestic structure. The stratum II deposits differ only subtly in color from the overlying plow zone soils and artifact density was low, lending some support to the notion that they represent a B horizon. Future excavation in this portion of the site and additional radiocarbon dates should clarify these issues.

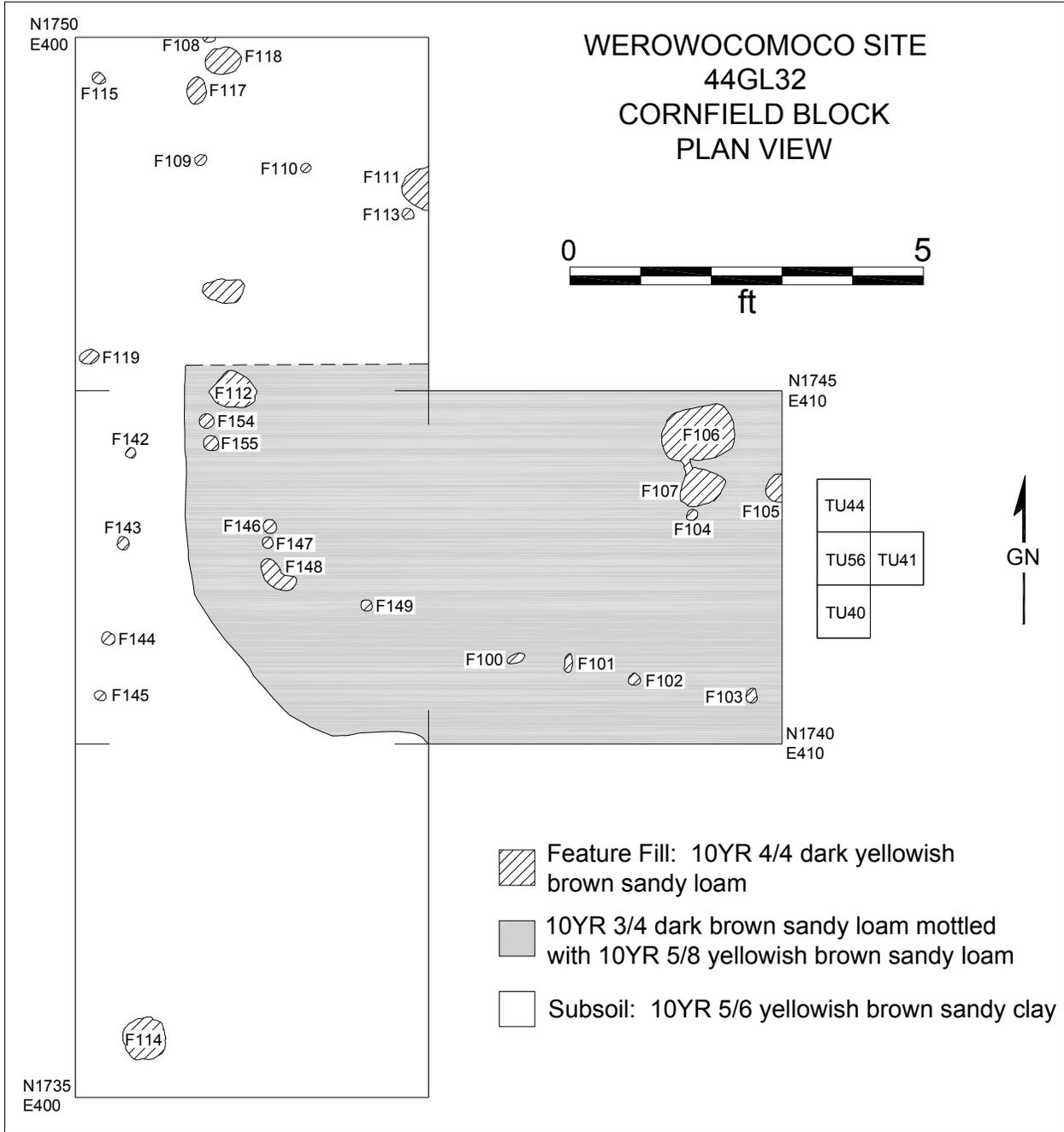


Figure 4-36. Plan of Cornfield Block

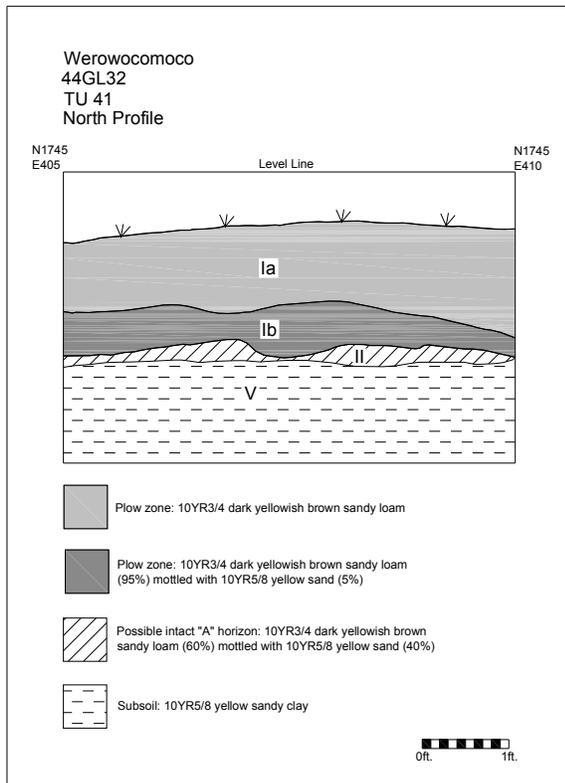


Figure 4-37. Test Unit 41 North Profile.

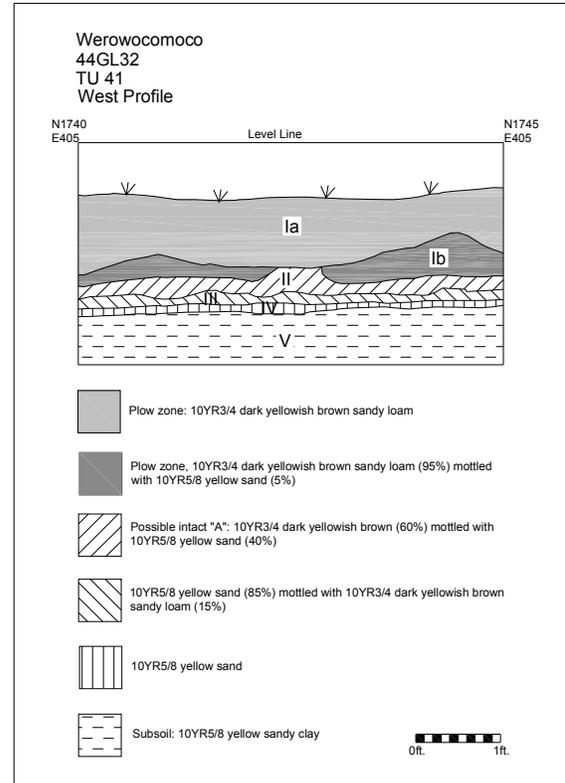


Figure 4-38. Test Unit 41 West Profile.

Strat / Lvl	Starting depth (ft)	Ending depth (ft)	Soil	Feats / anomalies at base	Artifacts	Comments
I a	0.0	0.8	10YR3/4 sandy loam	-	Brick, coal, glass, nails, domestic and imported pipe stems, Historic ceramics (North Devon, Tin-glazed, English stoneware, Pearlware, Creamware), Fire-cracked rock, lithics, Roanoke simple-stamped pottery	Plow zone
I b	0.8	1.0	10YR3/4 sandy loam	Plow scars	Brick, coal, nails, lithics, English stoneware, shell-tempered Native pottery	Plow zone
I c	1.0	1.1	10YR3/4 sandy loam	Plow scars	Roanoke simple-stamped pottery	Base of plow zone
II a	1.1	1.2	10YR3/4 sandy loam mottled w/ 10YR 5/8 sandy silt	No plow scars, amorphous stains w/ charcoal flecks	Shell-tempered Native pottery	Possible buried "A" horizon Late Woodland / Contact?
II b	1.2	1.3	10YR3/4 sandy loam w/ 10YR 5/8 sandy silt	Post molds	Shell-tempered Native pottery, iron fragment	Possible buried "A" horizon dating to Late Woodland / Contact
II c	1.3	1.4 - 1.5	10YR3/4 sandy loam mottled w/ 10YR 5/8 sandy silt	-	Mockley cord-marked pottery	Possible "A" horizon base dating to Middle Woodland

Table 4-12. Deposits from Test Unit 56.

Plow Zone Artifacts

Plow zone materials recovered from the Cornfield block point toward a series of late precontact through twentieth-century activities. Historic ceramics present in the Cornfield block include low numbers of wares produced during the seventeenth through twentieth centuries, with some indications that the area was used more intensively during the eighteenth and early nineteenth centuries (Figure 4-39). The two measurable pipe stem fragments fell into the 1710 – 1750 range (5/64ths).

Native ceramics from the Cornfield plow zone generated absolute seriation dates falling in the fourteenth, sixteenth, and seventeenth centuries A.D. (Figure 4-40). Ceramic wares included Mockley, Townsend, and Roanoke (Table 4-13), extending this occupation range from the Middle Woodland period through Contact. Native lithic artifacts recovered from the block were predominantly quartz and quartzite and included no temporally diagnostic items (Table 4-14).

Features

Twenty-nine soil stains appeared within the Cornfield excavation units, most of which had the dimensions and shapes of Native postmolds, i.e., circular plans and shallow, basin- or v-shaped profiles (Table 4-15). The majority of features in the block contained

no artifacts and none included historic materials. Postmolds in test units 41, 56, and 44 formed what may be the arcing line of a Native house pattern, and a second line of posts in test unit 56 was also apparent. Two larger pit features with basin-shaped profiles also occurred in the block. Features 106 and 114 both contained shell-tempered Native pottery. As noted in Table 4-15, our excavations exposed other features with dimensions similar to features 106 and 114, though none were associated with any artifacts.

In general, excavations in the Cornfield block indicate the considerable spatial extent of archaeological deposits associated with Native occupations at the site. The block is located several hundred feet from the Puritan Bay riverfront yet it contains domestic architectural features and (possibly) the intact deposits of a living surface predating English colonial settlement. The presence of a line of Native postmolds in an area of the site otherwise containing modest numbers of Native materials suggests that similar domestic features may be present across much of the site. In fact, the pattern is consistent with other sites, such as Paspheg (44JC308) along the James River (Lucketti et al. 1994), where dispersed village communities of the Late Woodland / Contact era are associated with a light scatter of artifacts.

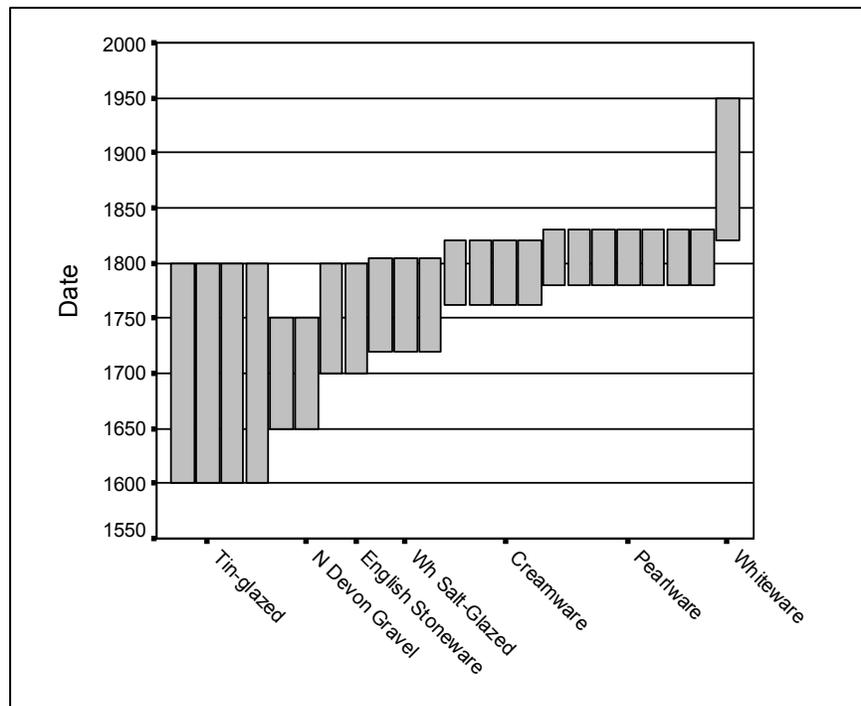


Figure 4-39. Temporal Distribution of Historic Ceramics from Corn Field Block Plow Zone. Each bar represents one sherd.

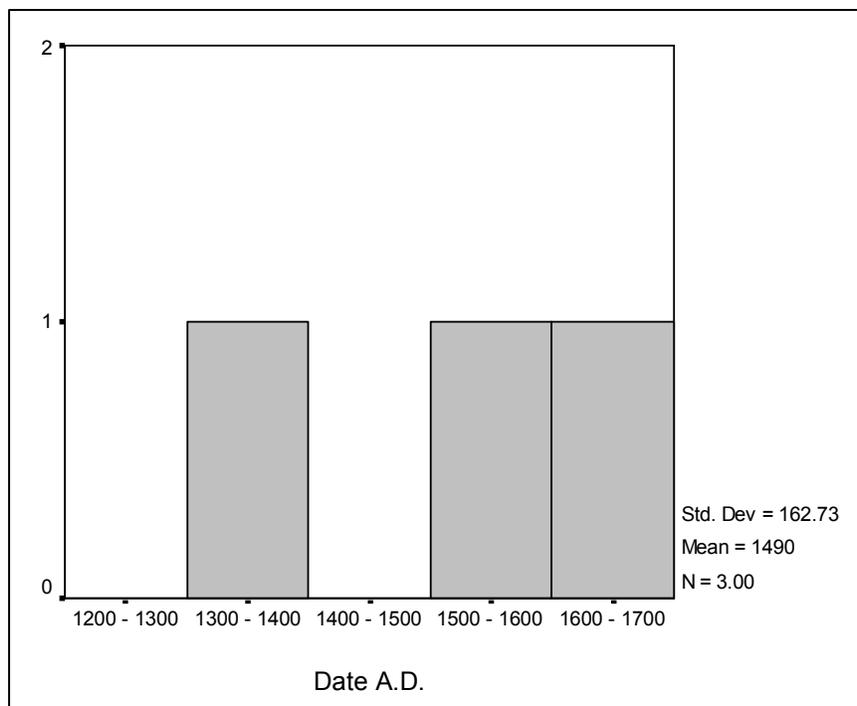


Figure 4-40. Absolute Seriation of Native Ceramics from the Plow Zone, Cornfield Block.

Surface Treatment	Temper	Decorative Technique	Ware	N
Cord	Shell	-	Mockley	5
Cord	Shell	Incised	Mockley	1
Fabric	Sand	-	-	1
Fabric	Shell	-	Townsend	2
Simple stamped	Shell	-	Roanoke	3
Plain	Shell	-	-	4
Plain	Sand	-	-	2
Unknown	Unknown	-	-	164
Unknown	Shell	-	-	41
Unknown	Shell	Incised	-	14
Unknown	Sand	-	-	14
Unknown	Sand	Incised	-	1
Unknown	Crushed lithic	-	-	1

Table 4-13. Native Ceramics, Cornfield Plow Zone.

Material	Form	N	Grams
Chert	Primary decortation flake	1	
Chert	Secondary flake	1	
Chert	Shatter	1	
Quartz	Primary decortation	4	
Quartz	Secondary flakes	4	
Quartz	Tertiary flakes	1	
Quartz	Shatter	4	
Quartzite	Biface	1	
Quartzite	Fire-cracked rock	2	294
Quartzite	Secondary flakes	8	
Quartzite	Tertiary flakes	5	
Quartzite	Shatter	2	
Slate	Tertiary flake	1	

Table 4-14. Native Lithics, Cornfield Plow Zone.

Feat.	Identified within unit (s)	Exca - vated	Fill	Max N-S	Max E-W	Max Depth	Artifacts	Interpretation
100	41	X	10YR3/4 sandy loam	0.18	0.26	0.15	-	Native post mold
101	41	X	10YR3/4 sandy loam	0.26	0.17	0.12	Native pottery sherd	Native post mold
102	41	X	10YR3/4 sandy loam	0.18	0.16	0.15	-	Native post mold
103	41	X	10YR3/4 sandy loam	0.16	0.17	0.13	-	Native post mold
104	41	X	10YR3/4 sandy loam	0.16	0.14	0.20	-	Native post mold
105	41	X	10YR3/4 sandy loam	-	0.42	0.20	-	-
106	41	X	10YR3/4 sandy loam w/ 10YR5/8 sandy silt	0.74	1.02	0.46	Native pottery sherd	Native pit
107	41	X	10YR3/4 sandy loam	0.58	0.53	0.80	-	-
108	44	X	10YR3/4 sandy loam	0.18	0.20	0.17	-	Native post mold
109	44	X	10YR3/4 sandy loam	0.17	0.16	0.20	-	Native post mold
110	44	X	10YR3/4 sandy loam	0.17	0.17	0.18	-	Native post mold
111	44	X	10YR3/4 sandy loam	0.58	-	0.14	-	-
112	44	X	10YR3/4 sandy loam	0.41	0.42	0.21	-	-
113	44	X	10YR3/4 sandy loam	0.15	0.15	0.14	-	Native post mold
114	40	X	10YR3/4 sandy loam	0.57	0.60	0.25	Shell-tempered (3), sand-tempered (1), and unidentified Native pottery (1)	Shallow Native pit
115	44	X	10YR3/4 sandy loam	0.20	0.22	0.20	-	Native post mold
117	44	X	10YR3/4 sandy loam	0.38	0.30	0.30	-	-
118	44	X	10YR3/4 sandy loam	0.40	0.50	0.20	-	-
119	44	X	10YR3/4 sandy loam	0.28	0.20	0.18	-	Native post mold
142	56	X	10YR3/4 sandy loam	0.18	0.18	0.20	-	Native post mold
143	56	X	10YR3/4 sandy loam	0.20	0.18	0.18	-	Native post mold
144	56	X	10YR3/4 sandy loam	0.20	0.19	0.18	-	Native post mold
145	56	X	10YR3/4 sandy loam	0.20	0.18	0.18	-	Native post mold
146	56		10YR3/4 sandy loam	0.22	0.20		-	Native post mold
147	56		10YR3/4 sandy loam	0.20	0.18		-	Native post mold
148	56		10YR3/4 sandy loam	0.30	0.62		-	Native post mold
149	56		10YR3/4 sandy loam	0.20	0.19		-	Native post mold
154	56		10YR3/4 sandy loam	0.21	0.20		-	Native post mold
155	56		10YR3/4 sandy loam	0.40	0.22		-	Native post mold

Table 4-15. Corn Field Block Features.

Summary

To summarize the results of the 2003 season at Werowocomoco, we excavated four blocks, each of which produced information useful to understanding the Late Woodland / Contact period village. Excavations in the pasture blocks identified two large, parallel ditch features containing Native artifacts that produced radiocarbon dates in the fifteenth century AD. The scatter of postmolds identified in this portion of the site did not form any discernible patterns. The large, apparently rectilinear feature in the pasture points to-

ward the earliest historical (i.e., post-contact) presence at the site, an occupation that likely began in the late seventeenth or early eighteenth century. Excavations in the Riverfront block produced the highest density of Native materials and an array of Native postmolds. The Cornfield block identified a possible buried cultural horizon containing Middle and Late Woodland diagnostics, several small Native features, and an arcing pattern of Native postmolds.

CHAPTER 5

CONCLUSION

Though the Werowocomoco research is still at an early stage, the results of the first field season demonstrate that the site will shed light on a settlement that played an important role in the Contact period. Our research addresses two broad themes: 1) a community-oriented perspective on the development of a Native chiefdom polity from A.D. 1300 - 1609 and, 2) a study of the Chesapeake colonial encounter's material consequences from the vantage of a Native center. Thus far, our field research indicates that the site was a remarkably large village circa 1607 containing evidence of substantial landscape modification dating to Contact and the centuries immediately preceding 1607.

Our review of the ethnohistorical and archaeological context of the site indicates that studies of the Powhatans are now at a critical juncture. A comparable body of data from archaeological sites on the James (the Paspahugh site, Jordan's Point) and the York (Werowocomoco and Kiskiack) is starting to emerge. Studies of Contact-period material culture have allowed researchers to examine the social entanglements that defined the Contact period. Interpretive frames applied to the culture history of Native societies in the Chesapeake now include perspectives that combine a close reading of the archaeological and documentary evidence with social theories on cultural practice, political economy, and cosmology. The descendant communities of Virginia Indians have also insisted that they be part of the process to recover and represent their history. Opportunities for a new historical anthropology of the Chesapeake region abound.

Research goals during the first season of excavations at the Werowocomoco site focused on the related issues of site integrity, chronology, and spatial organization. Our archaeological survey identified a large, complex, and multi-component site. Elements of the survey record parallel models of a dispersed Native settlement dating to the Contact period. The subsequent excavations indicate that the site contains intact features from the Late Woodland through Contact periods and an array of later deposits from the historic era. Two of the excavation blocks, the Pasture West block and the Cornfield block, yielded features and possibly a buried horizon dating to the Late Woodland through Contact periods. The other two excavation blocks contained postmold stains that could date to any number

of periods prior to the English colonial occupation of the site. In terms of integrity and feature preservation, these results compare favorably with other Native sites dating to the terminal Late Woodland through Contact periods in the Coastal Plain, most of which include few features beyond postmolds and burials.

The site's radiocarbon dates, Native ceramics, and European trade goods point toward ephemeral Middle Woodland occupations and increasingly intensive settlement toward the end of the Late Woodland period. Mockley ceramics, generally dating from A.D. 200 to A.D. 900, comprise a minority component in all of the excavation blocks except the Cornfield. Townsend ceramics, which persist on the Middle Peninsula from A.D. 900 – 1600, occur in particularly high densities along the Purtan Bay riverfront (Figure 5-1). Roanoke simple-stamped ceramics dating to the terminal Late Woodland centuries and the Contact period occur in higher densities in the Pasture West block – the area containing the two ditches. Absolute seriation of plow zone contexts in each of the blocks points toward Late Woodland settlement that increased after A.D. 1400. Copper trade goods recovered from the plow zone combined with the materials from the burial and cache of artifacts described in chapter 3 parallel a Contact period component at the site. An important goal in future field seasons will be to identify intact features that may be dated definitively to the Contact period.

Changes in the nature of historic-era occupations are also apparent in artifact patterns at the site (Figure 5-2). The two pasture blocks, which contained predominantly eighteenth-century materials, included the highest densities of ceramics and pipe fragments. The density of nails and brick increased in the Pasture East block over the Pasture West block, likely corresponding to the presence of structures in that area. The densities of glass containers and brick peaked in the Riverfront block corresponding with shifts in material culture during the nineteenth century. These variations seem to indicate a spatial reorganization at the site during the late eighteenth or early nineteenth centuries, when the focus of the farmstead shifted closer to the river. Finally, densities of all categories of historic materials were lowest in the Cornfield block, raising the likelihood of undisturbed Native deposits in this portion of the site.

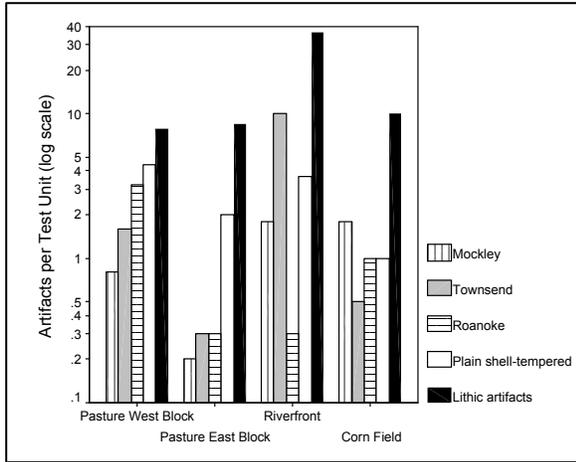


Figure 5-1. Comparison of Native Artifacts by Block.

Taken together, the temporal and spatial patterning identified during the 2003 season suggests a narrative outline of the site’s historical landscapes. The Middle Woodland through Contact period use of space at the site apparently expanded inward from the first floodplain terrace overlooking Purтан Bay, Leigh Creek, and Bland Creek. As suggested by the shovel test survey, Middle Woodland II (A.D. 200 – A.D. 900) settlement at the site focused on this lowest terrace. The Townsend ceramics concentrated in the Riverfront block point toward a greater concentration of residential activities and living spaces on Purтан Bay throughout the Late Woodland period. Based on the absolute seriation results, this use of the riverfront as the residential core of the village peaked during the fifteenth through early seventeenth centuries. The two available radiocarbon dates and the density of Roanoke ceramics recovered from the Pasture West block indicate that a roughly contemporaneous expansion of the site occurred 1000 feet to the east in the pasture. Though we have much to learn about the role of the ditch features and this area more generally, the use of space in the pasture differed markedly from the residential core of the village on Purтан Bay. This portion of the site may correspond with an elite or sacred area of the village, one created late in the precontact era and eventually tied to Wahunsenacawh’s residence, as mentioned in John Smith’s account.

As outlined in chapter 3, the burial and artifact cache located on the second floodplain terrace contribute to the next chapter in the Werowocomoco narrative. The cache contained the three categories of material sought most by Wahunsenacawh and the Powhatans generally: copper ornaments, glass beads, and iron tools. The presence of two ‘King’s Touch’

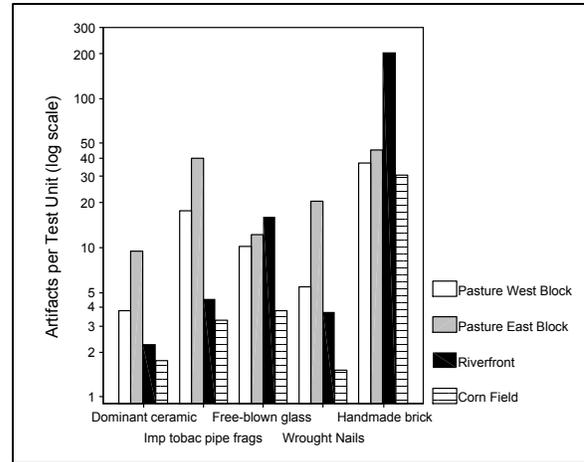


Figure 5-2. Comparison of Historic Artifacts by Block.

tokens and almost 4,000 glass beads suggest a high status burial, possibly one with ties to, or a relative of, Wahunsenacawh. The materials accompanying the remains of the 2 – 4 year old child can only be understood within the context of Powhatan mortuary ritual, Native symbolic systems, and early seventeenth-century relations that created new social identities and meanings in the negotiated events of culture contact. The presence of these early seventeenth-century prestige goods at Werowocomoco prompts questions about who the remains represent and what role he or she played within Powhatan kinship relations and early colonial interaction in the Chesapeake, questions that cannot be answered at this time. The remains were interred in an area of the site overlooking both the ditch features identified in the pasture and the residential village.

This Native cultural landscape clearly evolved through time with new elements that took cues from existing uses of space. We will need to test a good deal more of the site before we understand this landscape history in any detail. Aspects of the Contact period settlement that have already emerged, though, may parallel the use of space illustrated in the John White watercolor of the North Carolina Algonquian settlement of Secota, reproduced below from the DeBry engraving that accompanied Hariot’s (Lorant 1946) *Brief and True Report*. The images from White (and DeBry) have been used to illustrate so many discussions of Native community organizations during the early colonial era that they have become iconic. Despite this overuse, the illustrations nonetheless provide a useful departure point for thinking about the use of space within Contact period Werowocomoco.

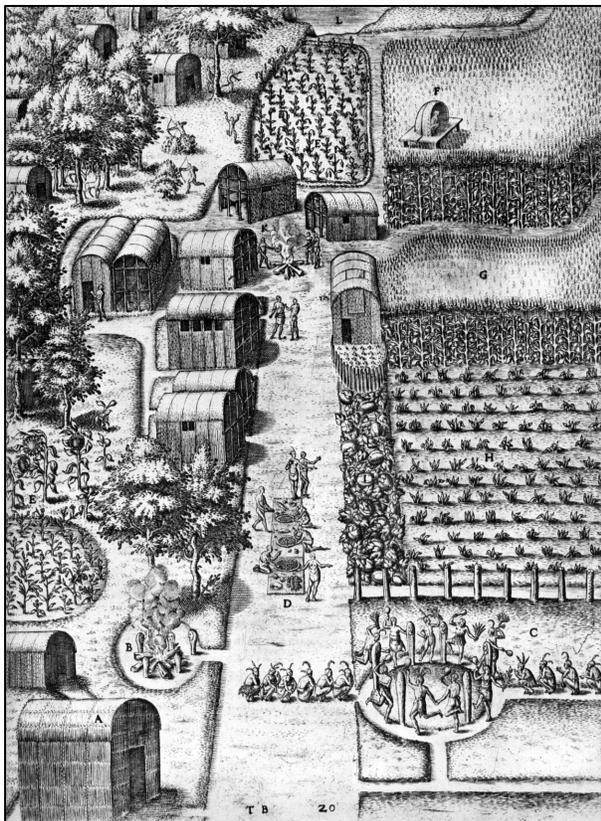


Figure 5-3. John White painting of “The Town of Secota” from Lorant (1946:191).

The caption that accompanied the image is reproduced below:

THOSE of their towns which are not fenced in are usually more beautiful, as can be seen in this picture of the town of Secota. The houses are farther apart and have gardens (marked E), in which they grow tobacco, called by the natives uppówoc. They also have groves of trees where they hunt deer, and fields where they sow their corn. In the cornfields they set up a little hut on a scaffold, where a watchman is stationed (F). He makes a continual noise to keep off birds and beasts which would otherwise soon devour all the corn. They sow their corn a certain distance apart (H), so that one stalk should not choke the next. For the leaves are large like great reed leaves (I).

They also have a large plot (C) where they meet with neighbors to celebrate solemn feasts, and a place (D) where they make merry when the feast is ended. In the round plot (B) they assemble to pray. The large

building (A) holds the tombs of their kings and princes. In the garden on the right (I) they sow pumpkins. There is also a place (K) where they build a fire at feast time, and just outside the town is the river (L) from which they get their water.

These people live happily together without envy or greed. They hold their feasts at night, when they make large pres to light them and to show their joy.

White’s paintings and DeBry’s engravings have been characterized as Europeanized imagining of the Native world in coastal North Carolina. No doubt this characterization has some validity, as may be seen in the wide, straight avenue running through Secotan. Yet White was also a careful observer whose detailed imagery capture details that would otherwise be lost. Like Secotan, the Werowocomoco site includes a concentrated residential core located in close proximity to the riverfront. Moving away from the river in the Secotan image, an area of agricultural fields is followed by round plots for prayer, feasting, and ritual. Opposite the dance circle a structure houses the remains of “kings and princes.” Similarly, the interior zone of the Werowocomoco site includes ditch features opposite an area containing at least one high status burial. Though these possible parallels between an Algonquian community in North Carolina and one in Virginia are suggestive, at this stage in our research they simply provide hypotheses for testing in future investigations at the site.

The earliest English colonial settlement at Werowocomoco apparent in our excavations, dating to the late seventeenth or early eighteenth century, was superimposed directly on the area of the Native settlement defined by the ditches. In fact, the colonial settlement in the pasture represents a seemingly odd location for an English settlement of this period given its distance from the York River. The location may reflect a conscious effort to incorporate elements of the Powhatan landscape by colonists who were aware of the property’s history. Alternatively, this portion of the site may have appealed to the settlers since it offered an open space cleared of trees and closer to fresh water springs. Finally, a reorganization of space within the farmstead moved the focus of settlement closer to the river late during the eighteenth century or early nineteenth century.

This narrative will no doubt be amended and revised as we accumulate additional information from the site. Future research directions critical to this ef-

fort include excavations to determine the size, shape, contents, and chronology of the ditch features in the pasture. Testing in the area surrounding the ditches is also critical to understanding the overall spatial context of these landscape features. Further investigation of the riverfront area is needed to evaluate the primary living space of the village during the Late Woodland and Contact periods. Excavation of the Cornfield block should allow us to determine whether the area contains intact deposits and residential architecture, both of which are suggested by the limited testing in this portion of the site.

Perhaps even more essential than these efforts, a richer understanding of the long-term precontact history of the site is also needed. An excavation strategy designed to identify such evidence, including buried deposits that may be present along Purtan Bay, Leigh, and Bland Creeks, is planned for the current field season. By combining such evidence with the results of copper characterization studies, radiocarbon dating, and ethnobotanical analysis (all currently underway), a better understanding of Werowocomoco's history will emerge.

REFERENCES

- Althusser, Louis and Etienne Balibar
1971 *Reading Capital*. New York: Pantheon Books.
- Axtell, James
2001 *Natives and Newcomers: The Cultural Origins of North America*. New York: Oxford University Press.
- Barbour, Philip L.
1964 *The Three Worlds of Captain John Smith*. Boston: Houghton Mifflin.
1969 *The Jamestown Voyages under the First Charter, 1606-1609: Documents Relating to the Foundation of Jamestown and the History of the Jamestown Colony up to the Departure of Captain John Smith, last President of the Council in Virginia under the First Charter, Early in October 1609*. London: published for the Hakluyt Society by Cambridge U.P.
1970 *Pocahontas and Her World; a Chronicle of America's First Settlement in Which Is Related the Story of the Indians and the Englishmen, Particularly Captain John Smith, Captain Samuel Argall, and Master John Rolfe*. Boston: Houghton Mifflin.
1986 *The Complete Works of Captain John Smith (1580-1631)*. Chapel Hill: University of North Carolina Press.
- Binford, Lewis R.
1964 *Archaeological and Ethnohistorical Investigations of Cultural Diversity and Progressive Development among the Aboriginal Cultures of Coastal Virginia and North Carolina*. Ph.D. dissertation, University of Michigan.
- Blanton, Dennis B.
1999 *The Potomac Creek Site (44ST2) Revisited*. Richmond: Virginia Department of Historic Resources.
1999 *A Study of the First People of the Eastern Shore: Archaeological Evaluation of the Thomas Wharf Site (44NH1), Northampton County, Virginia*. Williamsburg, Va.: Center for Archaeological Research, Department of Anthropology, The College of William & Mary.
2000 Drought as a Factor in the Jamestown Colony, 1607 - 1612. *Historical Archaeology* 34:74-81.
- Blanton, Dennis B. and Carter C. Hudgins
nd *Archaeological Evidence for Native Prestige Commodity Devaluation: An Example from the Chesapeake Associated with the Jamestown Colony*. Unpublished manuscript.
- Blanton, Dennis B., Veronica Deitrick, and Kara Bartels
2001 Brief and True Report of Projectile Points from Jamestown Rediscovery as of December 1998. *Journal of the Jamestown Rediscovery Center* 1.
- Boyd, Donna C. and C. Clifford
1992 Late Woodland Mortuary Variability in Virginia. In *Middle and Late Woodland Research in Virginia: A Synthesis*. T. Reinhart and M.E. Hodges, eds. Pp. 249-276. Richmond: The Dietz Press.
- Bradley, Richard
2000 *An Archaeology of Natural Places*. New York: Routledge.
- Braun, David P.
1983 Pots as Tools. In *Archaeological Hammers and Theories*. J. Moore and A. Keene, eds. Pp. 107-134. New York: Academic Press.
- Braun, David P. and Stephen Plog
1982 Evolution of "Tribal" Social Networks: Theory and Prehistoric North American Evidence. *American Antiquity* 47:504-525.
- Brown, Alexander
1890 *The Genesis of the United States ; a Narrative of the Movement in England, 1605-1616, Which Resulted in the Plantation of North America by Englishmen, Disclosing the Contest between England and Spain for the Possession of the Soil Now Occupied by the United States of America ; Set Forth through a Series of Historical Manuscripts Now First Printed, Together with a Reissue of Rare Contemporaneous Tracts, Accompanied by Bibliographical Memoranda, Notes,*

- and *Brief Biographies*. London: W. Heineman.
- 1969 *The First Republic in America; an Account of the Origin of This Nation, Written from the Records Then (1624) Concealed by the Council, Rather Than from the Histories Then Licensed by the Crown*. New York: Russell & Russell.
- Brown, Marley R. and Kathleen J. Bragdon
1986 *Toward a Resource Protection Process: James City County, York County, City of Poquoson, and City of Williamsburg*. Williamsburg, Va.: Office of Archaeological Excavation, Department of Archaeology, Colonial Williamsburg Foundation.
- Bushman, Richard
1993 *The Refinement of America: Persons, Houses, and Cities*. New York: Vintage Books.
- Casey, Edward S.
1997 *The Fate of Place: A Philosophical History*. Berkeley: University of California Press.
- Certeau, Michel de
1984 *The Practice of Everyday Life*. Berkeley: University of California Press.
- Chamberlayne, C. G.
1933 *The Vestry Book of Petsworth Parish Gloucester County, Virginia, 1677-1793*. Richmond: Virginia State Library.
- Claassen, Cheryl
1998 *Shells*. Cambridge: Cambridge University Press.
- Cosgrove, Denis E.
1984 *Social Formation and Symbolic Landscape*. London: Croom Helm.
- Cotter, John L.
1994 *Archaeological Excavations at Jamestown, Virginia*. Special Publication 32. Courtland, Va.: Archaeological Society of Virginia.
- Curry, Dennis C.
1999 *Feast of the Dead: Aboriginal Ossuaries in Maryland*. Crownsville: Maryland Historical Trust Press.
- D'Altroy, Terence N. and Timothy Earle
1985 Staple Finance, Wealth Finance, and Storage in the Inka Political Economy. *Current Anthropology* 26:187-206.
- DeBoer, Warren R.
1988 Subterranean Storage and the Organization of Surplus: The View from Eastern North America. *Southeastern Archaeology* 7:1-20.
- Deetz, James
1988 American Historical Archaeology: Methods and Results. *Science* 239:362-367.
- Dent, Richard J.
1995 *Chesapeake Prehistory: Old Traditions, New Directions*. New York: Plenum Press.
- Drennan, Robert D. and Carlos A. Uribe
1987 *Chiefdoms in the Americas*. Lanham, Md.: University Press of America.
- Earle, Timothy K.
1978 Chiefdoms in Archaeological and Ethnohistorical Perspectives. *Annual Review of Anthropology* 16:279-308.
1991 *Chiefdoms: Power, Economy, and Ideology*. Cambridge: Cambridge University Press.
1997 *How Chiefs Come to Power: The Political Economy in Prehistory*. Stanford, Calif.: Stanford University Press.
- Emerson, Thomas E.
1997 *Cahokia and the Archaeology of Power*. Tuscaloosa: University of Alabama Press.
- Egloff, Keith T. and Stephen R. Potter
1982 Indian Ceramics from Coastal Plain Virginia. *Archaeology of Eastern North America* 10:95-117.
- Faery, Rebecca Blevins
1999 *Cartographies of Desire: Captivity, Race, and Sex in the Shaping of an American Nation*. Norman: University of Oklahoma Press.
- Fausz, Frederick J.
1985 Patterns of Anglo-Indian Aggression and Accommodation Along the Mid-Atlantic Coast, 1584 - 1634. In *Cultures in Contact: The European Impact on Native Cultural Institutions in Eastern*

- North America, A.D. 1000-1800*. W.W. Fitzhugh, ed. Washington, DC: Smithsonian Institution Press.
- Feest, Christian F.
 1978 Virginia Algonquians. In *Handbook of North American Indians*. W.C. Sturtevant, ed. Pp. 235-270. Washington, D.C.: Smithsonian Institution Press.
 1990 *The Powhatan Tribes*. New York: Chelsea House Publishers.
- Ferguson, Alice L. and T. Dale Stewart
 1940 An Ossuary near Piscataway Creek with a Report on the Skeletal Remains. *American Antiquity* 6:4-18.
- Ferguson, Leland G.
 1992 *Uncommon Ground: Archaeology and Early African America, 1650-1800*. Washington, D.C.: Smithsonian Institution Press.
- Fitzgerald, William R., Dean H. Knight, and Allison Bain
 1995 Untanglers of Matters Temporal and Cultural: Glass Beads and the Early Contact Period Huron Ball Site. *Canadian Journal of Archaeology* 19:117-138.
- Friedmann, J. and M. J. Rowlands
 1977 *The Evolution of Social Systems: Proceedings of a Meeting of the Research Seminar in Archaeology and Related Subjects Held at the Institute of Archaeology, London University*. London: Duckworth.
- Fritz, Jean
 1987 *The Double Life of Pocahontas*. New York: Puffin Books.
- Gallivan, Martin D.
 1997 Spatial Analysis of John Smith's 1612 Map of Virginia. *Journal of Middle Atlantic Archaeology* 13:145-160.
 2003 *James River Chiefdoms: The Rise of Social Inequality in the Chesapeake*. Lincoln: University of Nebraska Press.
- Gallivan, Martin and Michael Klein
 2004 Economy, Architecture, and Exchange: Conjunction and Event in the Chesapeake, AD 1200 - 1607. *Journal of Middle Atlantic Archaeology* 20:13-20.
- Gaynor, Jay
 1993 'Tools of All Sorts to Worke': A Brief Look at Trade Tools in 17th-Century Virginia. In *The Archaeology of 17th-Century Virginia*. T.R. Reinhart and D.J. Pogue, eds. Pp. 311-356. Richmond, Va.: Dietz Press.
- Gleach, Frederic W.
 1997 *Powhatan's World and Colonial Virginia: A Conflict of Cultures*. Lincoln: University of Nebraska Press.
- Gunn-Allen, Paula
 2003 *Pocahontas: Medicine Woman, Spy, Entrepreneur, Diplomat*. San Francisco: Harper.
- Hammell, George R.
 1983 Trading in Metaphors: The Magic of Beads. In *Proceedings of the Glass Bead Conference*. C.F.I. Hayes, ed. Rochester, N.Y.: Rochester Museum of Science.
- Hamor, Ralph
 1998 A True Discourse. In *Jamestown Narratives: Eyewitness Accounts of the Virginia Colony*. E.W. Haile, ed. Pp. 792-840. Champlain, Va.: RoundHouse.
- Hantman, Jeffrey L.
 1990 Between Powhatan and Quirank: Reconstructing Monacan Culture and History in the Context of Jamestown. *American Anthropologist* 92(3):676-690.
- Hariot, Thomas, and John White
 1972 *A Briefe and True Report of the New Found Land of Virginia*. New York: Dover Publications.
- Harpole, Thane, David A. Brown, and Anthony Smith
 2003 *The Search for Powhatan's Seat of Power: A Survey and Salvage Excavation of a Portion of Site 44GL32, Gloucester County, Virginia*. Gloucester, Va.: DATA Investigations.
- Henry, Susan
 1980 *Physical, Spatial, and Temporal Dimensions of Colonial Ware in the Chesapeake 1600 - 1800*. Volume 23. Columbia: South Carolina Institute of Archaeology and Anthropology, University of

- South Carolina.
- Hodges, Mary Ellen.
1993 The Archaeology of Native American Life in Virginia in the Context of European Contact: Review of Past Research. In *The Archaeology of 17th-Century Virginia*. T. Reinhart and D.J. Pogue, eds. Pp. 1-66. Richmond, Va.: The Dietz Press.
- Horning, Audrey J.
1998 *Ditches of New Town*. Williamsburg, Va.: Colonial Williamsburg Foundation.
- Hudgins, Carter C.
2004 Old World Industries and New World Hope: The Industrial Role of Copper at Jamestown. *Journal of the Jamestown Rediscovery Center* 2.
- Jirikowic, Christine A.
1990 The Political Implications of a Cultural Practice: A New Perspective on Ossuary Burial in the Potomac Valley. *North American Archaeologist* 11:353-74.
- Kelso, William M., J. Eric Deetz, Seth W. Mallios, and Beverly A. Straube
2001 *Jamestown Rediscovery VII*. Richmond: The Association for the Preservation of Virginia Antiquities.
- Kelso, William M. and Beverly A. Straube
1997 *1996 Interim Report on the APVA Excavations at Jamestown, Virginia*. Richmond: Association for the Preservation of Virginia Antiquities.
2004 *Jamestown Rediscovery 1994-2004*. Richmond: Association for the Preservation of Virginia Antiquities.
- Kent, Barry C.
1983 The Susquehanna Bead Sequence. In *Proceedings of the 1982 Glass Bead Conference*. C.F. Hayes, ed. Pp. 75-81. Rochester, N.Y.: Rochester Museum and Science Division.
- Kenyon, Ian T. and Thomas Kenyon
1983 Comments on Seventeenth Century Glass Trade Beads. In *Proceedings of the 1982 Glass Bead Conference*. C.F. Hayes, ed. Pp. 59-74. Rochester, N.Y.: Rochester Museum and Science Division.
- Kidd, Kenneth E. and Martha A. Kidd
1970 *A Classification System for Glass Beads for the Use of Field Archaeologists*. Volume 1. Ottawa: Parks Canada.
- Klein, Michael
1994 *An Absolute Seriation Approach to Ceramic Chronology in the Roanoke, Potomac and James River Valleys, Virginia and Maryland*. Ph.D. dissertation, University of Virginia.
- Klein, Michael and Thomas Klatka
1991 Late Archaic and Early Woodland Demography and Settlement Patterns. In *Late Archaic and Early Woodland Research in Virginia: A Synthesis*. T. Reinhart and M.E. Hodges, eds. Richmond, Va.: The Dietz Press.
- Kupperman, Karen Ordahl
2000 *Indians and English: Facing Off in Early America*. Ithaca, N.Y.: Cornell University Press.
- Lapham, Heather A.
2001 More Than "a Few Blew Beads": The Glass and Stone Beads from Jamestown Rediscovery's 1994-1997 Excavations. *Journal of the Jamestown Rediscovery Center* 1.
2004 *Glass Beads from the Ripley Collection*. Manuscript on file at the Department of Anthropology, College of William and Mary, Williamsburg, Va.
- Lapham, Heather A. and William C. Johnson
2002 Protohistoric Monongahela Trade Relations: Evidence from the Foley Farm Phase Glass Beads. *Archaeology of Eastern North America* 30:97-120.
- Lefebvre, Henri
1991 *The Production of Space*. Cambridge: Blackwell.
- Lemay, J. A. Leo
1992 *Did Pocahontas Save Captain John Smith?* Athens: University of Georgia Press.
- Lewis, Clifford M. and Albert J. Loomie
1953 *The Spanish Jesuit Mission in Virginia, 1570-1572*. Chapel Hill: Published for the Virginia Historical Society by the University of North Carolina Press.

- Lorant, Stefan, ed.
1946 *The New World: The First Pictures of America*. New York: Duell Sloan & Pearce.
- Lucketti, Nicholas M., Mary Ellen N. Hodges, and Charles T. Hodges, eds.
1994 *Paspahegh Archaeology: Data Recovery Investigations of Site 44jc308 at the Governor's Land at Two Rivers James City County, Virginia*. Williamsburg, Va.: James River Institute for Archaeology, Inc.
- McCartney, Martha W. and Mary Ellen N. Hodges
1980 National Register of Historic Places Registration Form, Pamunkey Indian Reservation Archaeological District. United States Department of the Interior, National Park Service.
- MacCord, Howard A.
1969 Camden: A Postcontact Indian Site in Caroline County. *Quarterly Bulletin of the Archeological Society of Virginia* 24:1-55.
- Mallios, Seth W.
1998 *In the Hands of "Indian Givers": Exchange and Violence at Ajacan, Roanoke, and Jamestown*. Ph.D. dissertation, University of Virginia.
- Mallios, Seth W. and Shane Emmet
2004 Demand, Supply, and Elasticity in the Copper Trade at Early Jamestown. *Journal of the Jamestown Rediscovery Center* 2.
- Mallios, Seth W. and Beverley A. Straube
2000 *1999 Interim Report on the APVA Excavations at Jamestown, Virginia*. Richmond: Association for the Preservation of Virginia Antiquities.
- Mason, Polly (compiler)
1965 *Records of Colonial Gloucester County*. 2 vols. Berryville, Va.: Chesapeake Book Company.
- Mauss, Marcel
1954 *The Gift; Forms and Functions of Exchange in Archaic Societies*. Glencoe, Ill.: Free press.
- McCary, Ben
1981 The Location of Werowocomoco. *Quarterly Bulletin of the Archeological Society of Virginia* 36:77-93.
- McLearan, Douglas C. and L. Daniel Mouer
1994 *Jordan's Journey III: A Preliminary Report on the 1992-1993 Excavations at Archaeological Site 44PG307*. Richmond: Virginia Commonwealth University Archaeological Research Center.
- Miller, Christopher L. and George R. Hammell
1986 A New Perspective on Indian-White Culture Contact: Cultural Symbols and Material Trade. *Journal of American History* 73:311-328.
- Montague, Col. Ludwell Lee
1972 Powhatan's Chimney, Gloucester County. *Discovery* 4(3):6-10.
- Mook, Maurice A.
1943 The Ethnological Significance of Tindall's Map of Virginia, 1608. *William and Mary College Quarterly Historical Magazine* 23(4):371-408.
- Morgan, Tim, et al.
1995 *Archaeological Excavations at Jordan's Point: Sites 44PG151, 44PG300, 44PG302, 44PG303, 44PG315, 44PG333*. Williamsburg, Va.: The Virginia Company Foundation.
- Mossiker, Frances
1996 *Pocahontas: The Life and the Legend*. New York: Da Capo Press.
- Mouer, L. Daniel, Mary Ellen N. Hodges, Stephen R. Potter, Susan L. Henry Renaud, Ivor Noël Hume, Dennis J. Pogue, Martha W. McCartney, and Thomas E. Davidson
1999 Colonoware Pottery, Chesapeake Pipes and 'Uncritical Assumptions'. In *I Too Am America: Archaeological Studies of African-American Life*. T.A. Singleton, ed. Pp. 83-115. Charlottesville: University Press of Virginia.
- Mouer, L. Daniel, et al.
1992 *Jordan's Journey: A Preliminary Report on Archaeology at Site 44PG302*. Richmond: Virginia Commonwealth University Archaeological Research Center.
- Noël Hume, Ivor
1962 An Indian Ware of the Colonial Period. *Quarterly Bulletin of the Archeological Society of Vir-*

- ginia 17:2-14.
- 1991 *A Guide to Artifacts of Colonial America*. New York: Vintage Books.
- 1994 *The Virginia Adventure, Roanoke to James Towne: An Archaeological and Historical Odyssey*. New York: Alfred A. Knopf.
- Pauketat, Timothy R.
- 1994 *The Ascent of Chiefs: Cahokia and Mississippian Politics in Native North America*. Tuscaloosa: University of Alabama Press.
- Percy, George
- 1998 Observations Gathered out of Discourse. In *Jamestown Narratives: Eyewitness Accounts of the Virginia Colony*. E.W. Haile, ed. Pp. 85-100. Champlain, Va.: Roundhouse.
- Pietak, Lynn
- 1999 Bead Color Symbolism among Post-Contact Delaware and Munsee Groups. *Journal of Middle Atlantic Archaeology* 15:3-20.
- Potter, Stephen R.
- 1989 Early English Effects on Virginia Exchange and Tribute Systems in the Seventeenth Century: An Example from the Tidewater Potomac. In *Powhatan's Mantle: Indians in the Colonial Southeast*. P.H. Wood, G.A. Waselkov, and M.T. Hatley, eds. Pp. 151-172. Lincoln: University of Nebraska Press.
- 1993 *Commoners, Tribute, and Chiefs: The Development of Algonquian Culture in the Potomac Valley*. Charlottesville: University Press of Virginia.
- Potter, Stephen R. and Gregory A. Waselkov
- 1994 "Whereby We Shall Enjoy Their Cultivated Places". In *Historical Archaeology of the Chesapeake*. P. Shackel and B.J. Little, eds. Pp. 23-33. Washington, D.C.: Smithsonian Institution Press.
- Plog, Stephen and Braun David P.
- 1982 Evolution of "Tribal" Social Networks: Theory and Prehistoric North American Evidence. *American Antiquity* 47:504-525.
- Price, David
- 2003 *Love and Hate in Jamestown: John Smith, Pocahontas, and the Heart of a New Nation*. New York: Knopf.
- Rankin-Hill, Lesley
- 2004 *Inventory of Human Remains Recovered from the Werowocomoco Site (44GL32), Gloucester County, Virginia*. Manuscript on file at the Department of Anthropology, College of William and Mary, Williamsburg, Va.
- Rountree, Helen C.
- 1989 *The Powhatan Indians of Virginia: Their Traditional Culture*. Norman: University of Oklahoma Press.
- 1990 *Pocahontas's People: The Powhatan Indians of Virginia through Four Centuries*. Norman: University of Oklahoma Press.
- 1993 *Powhatan Foreign Relations, 1500-1722*. Charlottesville: University Press of Virginia.
- Rountree, Helen C. and E. Randolph Turner III
- 1994 On the Fringe of the Southeast: The Powhatan Paramount Chiefdom in Virginia. In *The Forgotten Centuries: The Southeastern United States in the Sixteenth and Seventeenth Centuries*. C. Hudson and C. Tesser, eds. Pp. 355-72. Athens: University of Georgia Press.
- 1998 The Evolution of the Powhatan Paramount Chiefdom in Virginia. In *Chiefdoms and Chieftaincy in the Americas*. E.M. Redmond, ed. Gainesville: University Press of Florida.
- 2002 *Before and after Jamestown: Virginia's Powhatans and Their Predecessors*. Gainesville: University Press of Florida.
- Rubertone, Patricia E.
- 2001 *Grave Undertakings: An Archaeology of Roger Williams and the Narragansett Indians*. Washington, D.C.: Smithsonian Institution Press.
- Sahlins, Marshall David
- 1985 *Islands of History*. Chicago: University of Chicago Press.
- Sempkowski, Martha L.
- 1994 Early Historic Exchange between the Seneca and the Susquehannock. In *Proceedings of the 1992*

- People to People Conference*. C.F. Hayes, ed. Pp. 51-64. Rochester, New York: Rochester Museum and Science Center.
- Shanks, Michael, and Christopher Tilley
1982 Ideology, Symbolic Power, and Ritual Communication: A Reinterpretation of Neolithic Mortuary Practices. In *Symbolic and Structural Archaeology*. I. Hodder, ed. Pp. 129-154. Cambridge: Cambridge University Press.
- Silliman, Stephen W.
2005 Culture Contact or Colonialism? Challenges in the Archaeology of Native North America. *American Antiquity* 70:55-74.
- Slattery, Richard G., and Douglas R. Woodward
1992 *The Montgomery Focus: A Late Woodland Potomac River Culture*. Havre de Grace: Archaeological Society of Maryland.
- Spelman, Henry
1998 Relation of Virginia. In *Jamestown Narratives: Eyewitness Accounts of the Virginia Colony*. E.W. Haile, ed. Pp. 497-519. Champlain, Virginia: RoundHouse.
- Smith, John
1986a A True Relation. In *The Complete Works of Captain John Smith (1580-1631)*. P.L. Barbour, ed. Pp. 5-117, Vol. 1. Chapel Hill: University of North Carolina Press.
1986b A Map of Virginia. In *The Complete Works of Captain John Smith (1580-1631)*. P.L. Barbour, ed. p. 119-189, Vol. I. Chapel Hill: University of North Carolina Press.
1986c The Proceedings. In *The Complete Works of Captain John Smith (1580-1631)*. P.L. Barbour, ed. Pp. 191-279, Vol. II. Chapel Hill: University of North Carolina Press.
1986d Generall Historie of Virginia. In *The Complete Works of Captain John Smith (1580-1631)*. P.L. Barbour, ed. Pp. 5-475, Vol. II. Chapel Hill: University of North Carolina Press.
1986e The True Travels, Adventures, and Observations of Captaine John Smith. In *The Complete Works of Captain John Smith (1580-1631)*. P.L. Barbour, ed. Pp. 123-252, Vol. III. Chapel Hill: University of North Carolina Press.
- Stahle, David W., Cleaveland, Malcolm K., Blanton, Dennis B., Therrell, Matthew D., and Gay, David A.
1998 The Lost Colony and Jamestown Droughts. *Science* 280:564-567.
- Stephenson, Robert L., Alice L. Ferguson, and Henry G. Ferguson
1963 *The Accokeek Creek Site: A Middle Atlantic Seaboard Culture Sequence*. Volume 20. Ann Arbor: Museum of Anthropology, University of Michigan.
- Stephenson, Richard W. and Marianne M. McKee
2000 *Virginia in Maps: Four Centuries of Settlement, Growth, and Development*. Richmond, Va.: Library of Virginia.
- Steponaitis, Laurie C.
1987 *Prehistoric Settlement Patterns in the Lower Patuxent Drainage, Maryland*. Ph.D. dissertation, State University of New York at Binghamton.
- Stewart, T. Dale
1992 *Archaeological Exploration of Patowomeke: The Indian Town (44ST2) Ancestral to the One (44ST1) Visited in 1608 by Captain John Smith*. Contributions to Anthropology 56. Washington, D.C.: Smithsonian Institution Press.
- Strachey, William
1953 *The Historie of Travell into Virginia Britania*. London: Hakluyt Society.
- Straube, Beverley A.
2004 *Inventory of Metal Objects Recovered from the Werowocomoco Site (44g132), Gloucester County, Virginia*. Manuscript on file at the Department of Anthropology, College of William and Mary, Williamsburg, Va.
- Strong, Pauline Turner
1999 *Captive Selves, Captivating Others: The Politics and Poetics of Colonial American Captivity Narratives*. Boulder, Colo.: Westview Press.
- Stuiver, Minze and Johannes van der Plicht
1998 Intcal 98 Radiocarbon Age Calibration. *Radiocarbon* 40(3):1041-83.
- Tilton, Robert S.
1994 *Pocahontas: The Evolution of an American Narrative*. New York: Cambridge University Press.

- Tolbert, Sarah E.
 nd *A Preliminary Study of Ceramic Style at the Werowocomoco Site*. Unpublished Manuscript.
- Townsend, Camilla
 2004 *Pocahontas and the Powhatan Dilemma*. New York: Hill and Wang.
- Turner, E. Randolph III
 1976 *An Archaeological and Ethnohistorical Study of the Evolution of Rank Societies in the Virginia Coastal Plain*. Ph.D. dissertation, Pennsylvania State University.
 1986 Difficulties in the Archaeological Identification of Chiefdoms as Seen in the Virginia Coastal Plain During the Late Woodland and Early Historic Periods. In *Late Woodland Cultures of the Middle Atlantic Region*. J.F. Custer, ed. Newark: University of Delaware Press.
 1992 The Virginia Coastal Plain During the Late Woodland Period. In *Middle and Late Woodland Research in Virginia: a Synthesis*. T. Reinhart and M.E. Hodges, eds. Pp. 97-136. Richmond, Va.: The Dietz Press.
 1993 Native American Protohistoric Interactions in the Powhatan Core Area. In *Powhatan Foreign Relations: 1500-1722*. H.C. Rountree, ed. Pp. 76-93. Charlottesville: University of Virginia Press.
- Turner, E. Randolph III, Martin D. Gallivan, Thane Harpole, David Brown, and Danielle Moretti-Langholtz
 2005 National Register of Historic Places Registration Form, Werowocomoco Archaeological Site. United States Department of the Interior, National Park Service.
- Turner, E. Randolph, III and Anthony F. Opperman
 1993 Archaeological Manifestations of the Virginia Company Period: A Summary of Surviving Powhatan and English Settlements in Tidewater Virginia, Circa 1607-1624. In *The Archaeology of 17th-Century Virginia*. T. R. Reinhart and D. J. Pogue, eds. Richmond, Va.: The Dietz Press.
- Turner, Victor W.
 1967 *The Forest of Symbols; Aspects of Ndembu Ritual*. Ithaca, N.Y.: Cornell University Press.
- Tindall, Robert
 1608 *The Draught of Virginia*. London: The British Library.
- Tyler, Lyon G.
 1901 Werowocomoco. *William and Mary College Quarterly* 10(1):1-4.
- Ucko, Peter J. and Robert Layton.
 1999 *The Archaeology and Anthropology of Landscape: Shaping Your Landscape*. New York: Routledge.
- Underwood, John R., Dennis B. Blanton, W. Jason Cline, David W. Lewes, William H. Moore
 2003 *Systematic Archaeological Survey of 6,000 Acres, Naval Weapons Station Yorktown, Virginia*. Williamsburg, Va.: William and Mary Center for Archaeological Research.
- Vaughan, Alden T.
 1975 *American Genesis: Captain John Smith and the Founding of Virginia*. Boston: Little Brown.
- Vollmann, William T.
 2001 *Argall: A Book of North American Landscapes*. New York: Viking.
- Wall, Robert D. and Heather A. Lapham
 2003 Material Culture of the Contact Period in the Upper Potomac Valley: Chronological and Cultural Implications. *Archaeology of Eastern North America* 31:151-177.
- Waselkov, Gregory A.
 1982 *Shellfish Gathering and Shell Midden Archaeology*. Ph.D. dissertation, University of North Carolina, Chapel Hill.
- Ward, H. Trawick
 1985 Social Implications of Storage and Disposal Patterns. In *Structure and Process in Southeastern Archaeology*. R.S. Dickens and H.T. Ward, eds. Pp. 83-101. Tuscaloosa: University of Alabama Press.
- Williams, Emily
 2005 Analysis of Fibers from the Werowocomoco Site (44GL32). Report on file at the William and Mary Department of Anthropology, Williamsburg, Va.
- Williams, M. Christopher
 1983 A Preliminary Site Report for the Cumberland Palisaded Village Site, Calvert County, Maryland. Report submitted to the Maryland Historical Trust, Southern Maryland Regional Preservation Center, and American University.

Williamson, Margaret Holmes

1992 Pocahontas and Captain John Smith. *History and Anthropology* 5:365-402.

2003 *Powhatan Lords of Life and Death: Command and Consent in Seventeenth-century Virginia*.
Lincoln: University of Nebraska Press.

Wright, Henry T.

1984 Prestate Political Formations. In *On the Evolution of Complex Societies: Essays in Honor of Harry Hoijer*. T.K. Earle, ed. Malibu: Undena Publications.

Zuñiga, Don Pedro de

1608 *Map of Virginia*. Valladolid, Spain: Archivo General de Simancas.