Abstract

Archaeologists from the Association for the Preservation of Virginia Antiquities (APVA), excavated archaeological site 44JC568 during the summers of 1996 and 1997. The work in 1996 was conducted from June 17th to July 26th by 13 field school students earning credits from the University of Virginia. In 1997, 18 field school students, again earning credits from the University of Virginia, worked at the site from June 30th to July 25th. Archaeologists named the site after the area’s first documented land owner, the Reverend Richard Buck, who served as the minister at Jamestown from 1610 to 1624. The Buck site, located in James City County, Virginia, on a parcel known as Neck-of-Land in the Peleg’s Point residential subdivision, is approximately one mile north of Jamestown Island. This report summarizes findings from 44JC568.

The artifacts recovered from the site indicated it was occupied from ca. 1630-50. Historical records included details of Richard Buck’s 1619 patent on 750 acres of land at Neck-of-Land, bounded by Mill Creek on the east, Back River on the south, and Powhatan Creek on the west. It is unlikely that the Reverend himself lived at Neck-of-Land, residing instead at Jamestown. Upon Buck’s death in 1624, the property passed into the hands of a caretaker and guardian of his children, Richard Kingsmill. In 1635, Thomas Crump, husband of Richard Buck’s eldest daughter Elizabeth, acquired the 500 acres directly to the north of the original 750-acre Buck land patent. Buck’s eldest son Gercian attained his majority in the early 1630s, and in 1636 purchased the 500 acres from his brother-in-law, Thomas. Through this acquisition and the inheritance of his father’s Neck-of-Land property, Gercian amassed a contiguous 1,250-acre tract of land. Two years later, the youngest Buck sibling, Peleg, inherited the entire property upon Gercian’s death. Peleg held the land until his own demise in 1642, whereupon Elizabeth Crump assumed ownership until 1654. Due to the changing ownership of the property between 1619 and 1654, site 44JC568 likely related to a series of resident and non-resident owners, as well as groups of indentured servants and tenants.

During the two summer field seasons, archaeological crews located and excavated a total of 53 features at 44JC568. These included three barrel lined wells, nine human burials, four small outbuildings, two pits, a series of ditches and fence lines, and additional miscellaneous soil discolorations and anomalies. The site yielded more than 12,000 artifacts, consisting primarily of pottery, case-bottle glass, clay tobacco pipe stems and bowls, nails and other iron objects, and faunal remains. Analysis of the findings suggested that the site served as a farmstead for a series of occupants. The artifact collection and archaeological context offered insights into the outfitting and operation of one of Virginia’s earliest attempts at settling Jamestown’s hinterland.
List of Figures

Figure 1. 1997 field school students trowel the burial ground.
Figure 2. Site location.
Figure 3. Advertisement for Peleg's Point.
Figure 4. Theodore de Bry's depiction of the 1622 Algonquian Uprising.
Figure 5. An idealized version of Pocahontas' baptism.
Figure 6. The Buck family tree.
Figure 7. Owners, overseers, and guardians of Buck land, 1619-54.
Figure 8. Acreage calculations, including marshlands.
Figure 9. Acreage calculations, not including marshlands.
Figure 10. The well casing sits in partially excavated Well 1.
Figure 11. 44JC568 overall site plan.
Figure 12. Well 1 before excavation.
Figure 13. Well 1's sectioned top layers.
Figure 14. Plan of the main occupation area
Figure 15. The in situ wooden lining in Well 1.
Figure 16. Stratigraphy of Well 1.
Figure 17. Well 1's brass pulley wheel.
Figure 18. A copper ladle from Well 1.
Figure 19. A sample of Well 1's Chesapeake tobacco pipes.
Figure 20. Stratigraphy of Well 2.
Figure 21. A broad ax blade from the base of Well 2.
Figure 22. Well 2 before excavation.
Figure 23. Well 2's sectioned top layers.
Figure 24. One of many stones and brick fragments uncovered along the perimeter of Well 2.
Figure 25. Well Boom 1 profile.
Figure 26. Engraving of a garden with a well and boom.
Figure 27. Well 3 before excavation.
Figure 28. Well 3's sectioned top layers.
Figure 29. Stratigraphy of Well 3.
Figure 30. North Devon sgraffito dish from Well 3 and a similar vessel from Site B at Martin's Hundred.
Figure 31. A snaphaunce gunlock from Well 3.
Figure 32. A complete case bottle recovered from Well 3.
Figure 33. Well 3's silver braided wire.
Figure 34. Remains of a smaller wooden barrel resting atop a larger one at the base of Well 3.
Figure 35. Skeletal remains of Burial 1.
Figure 36. Plan of Burial 1.
Figure 37. Skeletal remains of Burial 2.
Figure 38. Plan of Burial 2.
Figure 39. Two English sixpence halves from Burial 2.
Figure 40. English sixpence, 1582-84.
Figure 41. Skeletal remains of Burial 5.
Figure 42. Plan of Burial 5.
Figure 43. Location of nails in Burial 6.
Figure 44. Plan of Burials 6 and 7.
Figure 45. Sectioned posts of Shed 1.
Figure 46. Fully excavated Shed 2.
Figure 47. Shed 3 before excavation.
Figure 48. Wide Ditch 1 profile.
Figure 49. Crossmended Montelupo dish fragments.
Figure 50. In situ Montelupo sherds from the fill of Wide Ditch 1.
Figure 51. Claude Gillet's "The Two Carriages."
Figure 52. Additional examples of Montelupo dishes.
Figure 53. Fully excavated section of Wide Ditch 2.
Figure 54. Western and central sections of Narrow Ditch 1.
Figure 55. Maker's mark on an English tobacco-pipe heel found in Narrow Ditch 1.
Figure 56. Chinese porcelain wine cup from Narrow Ditch 3.
Figure 57. Jamestown Potter pipkin and pot from Narrow Ditch 3.
Figure 58. Narrow Ditch 3's nearly complete Colono Ware bowl.
Figure 59. Site 44JC568 fauna.
Figure 60. Ceramic type intersection date range for entire site.
Figure 61. English pipe-stem histogram for entire site.
Figure 62. English pipe-stem occurrence seriation for Wells 1, 2, and 3.
Figure 63. English pipe-stem histogram for Well 3.
Figure 64. English pipe-stem histogram for Well 1.
Figure 65. English pipe-stem histogram for Well 2.
Figure 66. Map of burial ground showcasing two different orientations.
Figure 67. English pipe-stem histogram for all ditches.
Figure 68. Overall feature chronology.
Figure 69. Dr. Doug Owsley analyzes the human remains in Burial 2.
Figure 70. Burial inventory.
Figure 71. Speculative house placement.
Figure 72. Brass spur with gold gilt from Narrow Ditch 1.
Figure 73. Non-meat bearing versus meat bearing elements for horse, cow, pig, and deer.
Figure 74. Historical and archaeological correspondence.
Acknowledgments

Many individuals contributed to the excavations at 44JC568. Nicholas Luccketti, Director of Field Projects for the APVA’s Jamestown Rediscovery project, and William Kelso, Director of the APVA’s Jamestown Rediscovery project were instrumental in procuring funding for the excavation and directing the subsequent work. Without their guidance, little would have been learned from the Buck site.

Mill Creek Landing Associates, the owners and developers of Peleg’s Point sub-division, provided site archaeologists with two essential elements—money and time. They generously funded portions of the archaeological testing and excavation, and conscientiously avoided impacting the site during initial stages of development. In particular, Lewis Waltrip and his associates Richard Abbitt and Larry Cooke, went out of their way to assist the archaeologists. Mr. Waltrip provided heavy equipment and skilled operators free of charge whenever asked. Without the machinery, only a fraction of the work at the Buck site would have been completed. Under no legal obligation to conduct archaeological research, Mill Creek Landing Associates set an example of custodial conduct and preservation.

David Hazzard, Supervisor of the Virginia Department of Historic Resources Threatened Sites Program, allocated timely funds for the project in 1996 that also made excavation possible. In addition, he offered many valuable archaeological insights during the writing of this report.

Archaeologist Perry McSherry, with the James River Institute for Archaeology, Inc. (JRIA), first discovered site 44JC568 while conducting a survey of the property in 1990. Mr. McSherry was assisted by JRIA colleagues Jamie May, Kevin Goodrich, and William Leigh III.

Seth Mallios and Garrett Fesler directed the 1996 and 1997 field schools. Jennifer Arthur, Kristen Braddock, Jason Buroughs, Beth Cackowski, Ned Lawless, Crista Livecechi, Anna Neuzil, Ciara O’Connell, Darcy O’Donnell, Susan Otis, Danny Schmidt, Nat Skolochenka, and Amanda Taplett comprised the 1996 field school crew. Dr. Mallios and Mr. Fesler were assisted in 1997 by Jason Buroughs and 18 field school students: Edith Backman, Courtney Birkett, Virginia Bowen, Elizabeth Burling, Stacey Chambliss, D’erdré Dwyer, Margo Edwards, Geoff Evans, Greg Gammonley, Don Gaylord, Lys Green, Dennis Gunn, Courtney Jamison, Jean Kesner, Christina Moon, Margaret Rhett, Sarah Stroud, and Jaime Suskewicz.

Others aided in the excavations at the Buck site as well. They are listed in the order they worked at 44JC568. Kelley Deetz put in numerous hours at the site, aiding in its initial trowel-cleaning following mechanical plowzone stripping to feature excavation to backfilling. Monticello’s archaeological field school, including supervisor Derek Wheeler, dug one weekend at the site. The University of Virginia Louisa County field school, directed by Alison Bell, worked for a weekend as well. Students from the College of William and Mary, enrolled in a class taught by Professor Jim Whittenberg, volunteered at the dig. Christy Slappy from the National Park Service, and Anna Agbe-Davies with the Colonial Williamsburg Foundation Department of Archaeological Research both worked for a day at the Buck site. Joanne Robbins assisted with excavation of two of the burials. Bill Barker, affiliated with the Colonial Williamsburg Foundation, volunteered for several afternoons. APVA Jamestown Rediscovery staff members J. Eric Deetz, Elliott Jordan, Jamie May, and Michael Lavin gave up several of their weekends and aided in the site’s excavation. Ms. May put in many hours carefully mapping the skeletons in Burials I and II. JRIA’s Diane Masters helped dig one of the burials. Brandon Brucker, Tad Perdue, David Givens, Chip Cunningham, Cindy Deetz, Lenora King, Coy Barefoot, Beth Anderson, and Jamie Ferguson also volunteered their efforts on various weekends. Eighth-grade student Eric Jones worked for two weeks at the site. The students and staff profited from inspiring visits by Ivor Noel-Hume in 1996 and James Deetz in 1996 and 1997, both of whom offered their greatly appreciated insights. In January of 1998, James Cameron Monroe III worked for a day at the site along with JRIA crew members Edith Backman, Virginia Bowen, Bert Dunkerly, Jennifer Gates, Don Gaylord, and Margaret Rhett.

In addition to providing a wealth of information regarding artifact identification, APVA Jamestown Rediscovery Curator Beverly Straube supervised laboratory work on the Buck assemblage. Michael Lavin, Bill Connell, Terri Keffert, and the 1996 and 1997 field school students processed the
artifacts from 44JC568. Fiona Bessey catalogued the collection.

Dr. Douglas Owsley of the Smithsonian Institution analyzed the human burials. He visited the site on multiple occasions and continues to study this material at his laboratory. Heather Lapham conducted analysis on the faunal material from the Buck site and produced a summary of her findings that is included in this report. Jamie May and Elliott Jordan created the graphics for the work presented here. Mr. Jordan also edited the text and designed and produced the final report.

Mr. Luccketti and Ms. Straube commented on preliminary drafts of this report. They, in addition to Dr. Kelso, frequently provided comparative examples from other sites on which they have worked. The excavation, analysis, and interpretation of 44JC568 presented here drew heavily on their collective expertise of Chesapeake archaeology.

The Neck-of-Land community, especially those who reside in the Peleg's Point subdivision, frequently visited the Buck site and were supportive of the archaeology conducted in their neighborhood. The enthusiasm of these and other visitors to 44JC568, including Williamsburg and James City County locals, Buck descendants, and tourists, added to the overall enjoyment and success of the project, for which the archaeologists are grateful.
Introduction

Archaeologists, students, and volunteers excavated site 44JC568 during June and July of 1996 and 1997. Archaeologists from the Association for the Preservation of Virginia Antiquities (APVA) led the two University of Virginia summer field schools. Archaeologists named 44JC568 after the area's first documented land owner, the Reverend Richard Buck, who served as Jamestown's Minister until 1624. In 1619, Buck acquired 750 acres in the Neck-of-Land area, one-half mile north of Jamestown Island. Upon the deaths of the Reverend and his wife, the land passed to their children, who occupied Neck-of-Land along with their overseers, guardians, tenants, and indentured servants. Archaeological excavations revealed that a series of individuals occupied the Buck site from 1630 to 1650.

44JC568 is located at the entrance of the Peleg's Point residential subdivision, adjacent to Neck-o-Land Road (State Route 682), in James City County, Virginia. Neck-o-Land Road forms the site's western boundary. The adjacent area, known historically as "Neck-of-Land," was home to scores of English settlers during the 17th century. The Back River— which drains into the Thoroughfare and subsequently, the James River—is approximately one-half mile to the southwest of the site. The north side of Jamestown Island is on the opposite bank of the Back River. The main channel of Mill Creek is approximately one mile to the east of the site, and a tributary of Powhatan Creek is within one-quarter of a mile to the west. The head of an intermittent stream that empties into Mill Creek is roughly 100' to the southwest of the site. 44JC568 is between 10 and 15' above mean sea level and comprised of soil types that, in general, are suitable for farming, although poorly drained. Without drainage, the soil is not recommended for farming of any kind (Hodges et al. 1985).

Figure 1. 1997 field school students trowel the burial ground.
Figure 2. Site location.

Figure 3. Advertisement for housing in the Peleg’s Point residential subdivision.
Neck-of-Land was a leading Jamestown suburb that “enjoyed a continuous and prosperous existence” during the second quarter of the 17th century (Fausz 1971:56). During the first decade and a half of English colonization along the James River (1607-1622), the Virginia Company had mandated that plantations not be settled within 10 miles of each other (Kingsbury 1935, III:104). However, the 1622 Powhatan Uprising forced the colonists to alter dramatically their settlement pattern. The coordinated Algonquian attacks devastated the colony and forced the English, in the words of Governor Francis Wyatt, “to quitt many of our Plantacons and to vnite more neerely together in fewer places the better for to Strengthen and Defende ourselve” (Kingsbury 1935, III:612-613). As a result, the English began to establish clustered settlements with communities that were well-supplied with people (including entire nuclear families), dwellings, food and livestock, and nearby defenses (Fausz 1971, 55). During the post-Uprising expansion era, ca. 1623-1650, Neck-of-Land developed into a “most self-sufficient suburb” of Jamestown with 145 people, 31 dwellings, 6 stores, 4,000 pounds of fish, more bushels of corn than Jamestown, 32 cattle, 55 swine, and 15 goats (VMHB 1899-1900, 366-367).

Descriptions of Richard Buck’s children and their ordeals in and around Neck-of-Land abound in the historical records concerning Jamestown’s hinterland. Each of the different guardians of the younger Buck generation, in addition to the Buck children themselves, likely resided at one time or another at or near 44JC568. They played important roles in the maintenance of Buck lands and were familiar with each other as neighbors and business associates, often interacting socially. Historical records include 10 groups of individuals who likely lived in the vicinity of the Buck site. The following section lists these people and the years they resided at or near 44JC568 and presents a summary of their interaction in the area.

Richard Buck (1619-24)

The Reverend Richard Buck is the earliest documented patentee of the land that encompassed or was adjacent to site 44JC568. He patented the area on January 20, 1619 (Nugent 1979, 299). Richard Buck was born in 1582 at Wymondham, in the County of Norfolk, England, and educated at Cambridge’s Caius College (Meyer and Dorman 1987, 140; WMQ 1930, 200). At the age of 27, Buck, accompanied by his wife and their two daughters, sailed in 1609 to Virginia from England on the Sea Venture. Sir Thomas Gates, who had been recently appointed Governor of Virginia, led the ill-fated expedition, which wrecked and was stranded on Bermuda for nine months. During the winter of 1609-10, Buck officiated two baptisms and one
marriage on the West Atlantic island (W MQ 1930, 199). Gates and his followers built two small pinnacles while at Bermuda, and the 150 survivors—including the Bucks—set sail for Virginia again, this time (reaching Jamestown in May of 1610 (Strachey 1610 in Wright 1964, 59). Gates immediately noted the poor prospects for those at James Fort, remarking that “the Indian as fast killing without as the pestilence within” (Brown 1890, 405). Buck responded to the dreary conditions by leading “a zealous and sorrowful prayer, finding all things so contrary to our expectation, so full of misery and misgovernment” (Brown 1890, 405). Gates, after seeing Jamestown wracked with famine, disease, and casualties from hostilities with Powhatan natives, agreed with other local English leaders in their colony-wide decision to abandon the settlement. Just as the settlers left Jamestown, newly appointed First Governor and Captain-General of Virginia, Lord De La Warr arrived in the Chesapeake Bay, met the colonists, and ordered their immediate return.

Richard Buck served as minister at Jamestown from 1610 until his death in 1624. He likely was the third individual to fulfill the colony's top secular position, following the Reverend Robert Hunt who died in 1608, and a second minister who was not mentioned by name in the historical records. However, written descriptions of his demeanor exist. Hunt's immediate successor “was somewhat a puritane,” which caused most colonists to “refuse to go to his service & to heare his sermons” (J. Beaulieu/William Trumbell Correspondence 1609, 2).

Buck was a close friend of English planter John Rolfe, and he officiated at the April 1, 1614 wedding of Rolfe and Pocahontas, the daughter of the Powhatan Mamanatowick or supreme chief. This event helped solidify a truce between the colonists and the indigenous population, temporarily ending English/Algonquian hostilities during the second decade of the 17th century (Brown 1890, 835). In 1616 Rolfe wrote a letter to England characterizing his friend Buck as “a veerie good preacher” (Brown 1890, 835). At other times, associates commented that the Reverend was “good and worthie” and “an able and painfull preacher” (W MQ 1930, 200). Buck opened the first representative legislative assembly in the New World in 1619 with a prayer in the church at Jamestown (Meyer and Dorman 1987, 140-141; Brown 1890, 835). On March 10, 1621, Buck witnessed the will of his friend Rolfe (Brown 1890, 835). Both Buck and his wife were dead by early 1624 (Hotten 1980, 175, 178-179, 225).

Clergymen were one of the more economically successful groups in Virginia and had accumulated much land during the first half of the 17th century. Patent records indicated that nine ministers each owned 300 or more acres in Jamestown's hinterland during this time (Fausz 1971, 12). As James City's minister, Buck was entitled to the use of 100 acres of the corporation's glebe land. Glebe lands were church lands often forming part or all of a benefice, an endowed church office that provided a living for the clergy elite. Land patents indicated that the glebe lands for James City were located on the east side of Mill Creek, between Archer's Hope and Neck-of-Land (Hatch 1957, 109). It is possible that Buck resided on the glebe land, although his duties at Jamestown make it more likely that he remained at the capitol.

Figure 5. This painting, an idealized version of Pocahontas' baptism by Reverend Buck at the Jamestown church hangs in the US Capitol in Washington D.C., and is credited to the “Architect of the Capitol.”
In 1618 the London Council reorganized the sputtering Virginia Company and put a new charter into effect that contained a different disbursement policy of privatized land ownership. Since Buck and his wife arrived in the Colony prior to 1616, they were categorized as “Ancient Planters.” As a result, they were each eligible for 100 acres of land, in addition to 50-acre parcels for any other persons they paid passage to Virginia under a “headrights” system (Hatch 1957, 21-23). Following these rules of land acquisition, the Bucks obtained 750 acres in the Neck-of-Land area near Jamestown and the James City glebe lands in January of 1619 (Kingsbury 1935, IV:555-556). Patent records indicated that the 750-acre parcel was bounded by Mill Creek on the east, Back River on the south, and Powhatan Creek on the west. Buck likely placed indentured servants on his property rather than resided there himself. He purchased at least one servant in 1622, and a year later noted that an unspecified number of servants had been in his employ (Kingsbury 1935, III:460-461).

A year after acquiring 750 acres at Neck-of-Land, Buck obtained 12 acres of land at Jamestown from William Fairfax. The lot included Fairfax’s dwelling house and a second building as well (Meyer and Dorman 1987, 141; Nugent 1969, 109-110). In 1627 several years after Buck’s death, court records referred to a parcel “in the garden nere to James City adjoyning unto Mr Bucks house” (McIlwaine 1979, 152). This evidence further suggested that Buck himself did not live at 44JC568, given his responsibilities at the Jamestown church, and the testimony that he purchased and took up residence in Fairfax’s house and lot in town.

The contingencies of parenthood likely had a substantial effect on Buck’s decisions concerning land acquisition. Buck and his wife produced six children who lived into adulthood. Elizabeth and Bridget were both born prior to Buck’s arrival in Virginia in 1610. An infant daughter, Bermuda, was born to the Bucks and died while the colonists were marooned on the island of the same name in 1609-10. Another daughter, Mara, was born in 1611. In 1614 the Buck’s produced their first son, Gercian (Gersham), then two more sons, Benoni in 1616, and Peleg in 1620 (Meyer and Dorman 1987, 141-142).

Several of the Buck children were born with disorders. Known as “the first idiot” born in Virginia, Benoni Buck might have suffered from Down’s Syndrome (VMHB 1901(1), 178-179; VMHB 1904-1905(1), 390-393). Court testimony characterized daughter Mara as “very dull in taking her learninge” as well (VMHB 1911, 236). The meanings of the Biblical names given to their Virginia-born offspring suggested that the Reverend and his wife felt some anguish in producing and raising children in America. The name “Mara” means “bitter,” “Gercian” refers to a “stranger in a strange land” and to purgatory, and “Benoni” translates to “son of my sorrow.” To the contrary, the Bucks did not burden their youngest child, “Peleg”—or “flowing water,” with a name that conveyed images of strife or sadness (Meyer and Dorman 1987:141; W MQ 1910(3), 200-201). Richard Buck expressed the burden of raising his children in 1621 when he wrote to officials of the Virginia Company with an entreaty for funds owed to him, stressing he had “a charg of children to provide for & but one boy to be an helper to me in my business, how precious therefor a few servants would be to me” (Kingsbury 1935, III:443-444). He wrote again in June of the same year, asking for servants, “for ye time of my old servants is now expired.” Buck believed that additional servants and money “would be a good estate for me & the releife of my wife & Children”.

Figure 6. The Buck family tree.
Within a year and a half of writing these letters, both the Reverend and his wife had died. They left behind two married daughters—Elizabeth and Bridget—and four children under the age of 13.

Following the death of their parents, all of the minor Buck children moved into the Jamestown household of John Isgrane and Mary Ascombe, a widow (Kingsbury 1935, III:175). By 1625 the underage Buck children lived under the guardianship of several foster families likely located at or near Neck-of-Land. Bridget Buck and her husband John Burrows cared for 13-year old Mara Buck. Ten-year old Gercian lived with John Jackson and his nine-year old namesake. Benoni, age eight, and Peleg, age four, both lived with Thomas Alnutt and his wife and servants (Kingsbury 1935, III:32-33).

After Richard Buck's death, each of his underaged children were appointed individual custodians to oversee their interests in the Buck estate, consisting of the 750 acres at Neck-of-Land, the property at Jamestown, and personal property such as livestock, tobacco, and other goods valued in 1626 at 320 pounds of tobacco (McIlwaine 1979, 100). Separate from the guardians of the Buck children who took immediate responsibility for their well-being, the custodian of each share of the estate was supposed to protect the child's economic interests. Richard Buck's former neighbor and friend Richard Kingsmill of Neck-of-Land was appointed the principal overseer of Buck's will and estate, and presumably made the decisions concerning guardianship. Due to "divers varyances between the Overseers and the Gardians of ye said Mr. Buck," much squabbling ensued between the many custodians who attempted to acquire sizable portions of the Buck estate legally and otherwise. Compounding matters, two of the children, Benoni and Mara, were incapable of handling their own affairs, even upon reaching adulthood.

Disputes regarding Buck possessions continued into the decades following the Reverend's demise. In the late 1630s, Ambrose Harmer petitioned the King for access to Benoni Buck's portion of the estate, declaring he had been caring for the child since the Richard Buck's death. Governor John Harvey investigated the matter and found that over the years several people, including Richard Kemp and Harmer's wife's former husband "had much enriched [themselves] from the stocks" belonging to Benoni (VMHB 1904-1905, 390-393).

Richard and Jane Kingsmill (ca. 1623-38)

Richard Kingsmill and his wife Jane, their children, and their servants were the first people most directly associated with the Buck family's Neck-of-Land property after the death of the Reverend Buck. Richard Kingsmill immigrated to Virginia prior to 1616. As a result, Virginia Company officials considered him, like Buck, an "Ancient Planter" (Meyer and Dorman 1987, 385). A muster taken a few years after Richard Buck's death listed Richard Kingsmill living at Neck-of-Land (Hotten 1980, 178). This 1625 muster added that Richard, Jane, their five-year old son Nathaniel, and a one-year old daughter named Susan resided at Neck-of-Land, along with 10 servants, including "a Negro" named Edward. Their Neck-of-Land property consisted of five buildings, fortified by more than a half-dozen cannon; a boat; almost 30 livestock; and substantial stores of corn, meat, and fish (Meyer and Dorman 1987, 36-37). Kingsmill also owned land and a house on Jamestown Island, adjoining the lot purchased by Richard Buck from William Fairfax in 1620, as well as 500 acres nearby at Archer's Hope (Goodwin 1958, iii-v).

Kingsmill gained political prominence in the Colony and served as a representative for James City at the General Assemblies of 1624, 1625 and 1629 (Meyer and Dorman 1987, 385). He appeared in court periodically, serving on juries and administering wills. Richard and Jane Kingsmill were dead by 1638, leaving only one heir, a daughter Elizabeth born at Neck-of-Land in 1625 (Goodwin 1958, iii-vi).

Kingsmill's official association with the Buck family consisted primarily of overseeing the Reverend's will. This entailed placing the children with guardians and protecting the estate until they reached their majority. Kingsmill's presence at Neck-of-Land might suggest that he acquired the use of Buck's 750 acres until one of Buck's sons inherited it. Prior to 1625, land records indicated that the only property in Virginia that Kingsmill owned outright was an 80-acre parcel on Jamestown Island proper, likely too small to plant sufficiently (Meyer and Dorman 1987, 385). Only by 1625 did Kingsmill acquire a large tract of farmland of his own, 500 acres at Archer's Hope, located across Mill Creek to the east of Neck-of-Land (McIlwaine 1979, 102; Goodwin 1958, iv-v). The Kingsmills
and Bucks were familiar with each other as neighbors on Jamestown Island. Given the relatively large-scale settlement of Kingsmill at Neck-of-Land in 1624 and 1625, and no recorded evidence of land purchases there, Kingsmill likely acquired use of the land by overseeing Buck’s estate. In October of 1626, Kingsmill petitioned the Court and was granted guardianship of Peleg Buck and his estate upon the death of Thomas Alnutt, Peleg’s guardian at the time (McIlwaine 1979, 117).

In sworn testimony at Court in June, 1624, Jane Kingsmill mentioned a house attributed to Richard Buck at Neck-of-Land. She testified that two months earlier in April, when “Cominge through Mr. Bucks entrie at the Dore” she had overheard Robert Marshall propose marriage to Ellinor Sprage.1 Mrs. Kingsmill stated that she then accompanied the pair to “ye waterside” while they discussed what the couple would wear for the wedding ceremony. Another resident of Neck-of-Land, Richard Peerce, explained that Jane Kingsmill then told him what she witnessed “nere to Mr Bucks house” (VMHB 1911, 233-235). Kingsmill mentioned “Buck’s house,” suggesting that she lived in a separate dwelling. From this evidence, it appeared Richard Buck erected a dwelling on his 750-acre property at Neck-of-Land that was still in use months after his death, a house familiar to both Mrs. Kingsmill and Richard Peerce. Based on the testimony, apparently Kingsmill and Ralphe Griffith were leaving that house as Marshall proposed. They walked a short distance to a body of water, parted, and Kingsmill and Griffith then met and told Peerce what they had just witnessed. The closest substantial body of water to site 44JC568 is approximately one-half mile to the south on the Back River. Kingsmill’s testimony suggested that the distance they traveled from Mr. Buck’s house to “ye waterside” was relatively short.

In a court case the same year concerning Mara Buck, Thomas Allnut’s servant “Ellnor” testified (VMHB 1913, 49; see also Hotten 1980, 178). If this was the same Ellinor (Sprage) who agreed to marry Robert Marshall, perhaps Thomas Alnutt, his family and their servants (including Ellinor) lived in the house attributed to Richard Buck, a house probably located closer to a major body of water than 44JC568. No record existed of Alnutt owning any of his own land (see Nugent 1969).

John Jackson (ca. 1623-35)

The 1625 muster indicated that after the deaths of the Reverend Buck and his wife, John Jackson assumed guardianship of Gercian Buck (Meyer and Dorman 1987, 32).2 At that time, Jackson was a small freeholder living in the Corporation of James City, in the vicinity of Neck-of-Land, with his nine-year old son John. More than a year earlier, Jackson’s wife was alive and residing with him in the household of John Isgrane and Mary Ascombe, and the four young Buck children—Mara, Gercian, Benoni, and Peleg. The muster also listed Jackson’s provisions as a few bushels of corn, one firearm, three cattle, four hogs, and three lambs, in addition to his household goods (Hotten 1980, 175). Since John Jackson owned no servants in 1625 and had recently lost his wife, the addition of Gercian Buck, an able-bodied 11-year old boy, into his household might have had a positive impact on Jackson’s fortunes.

Jackson was sociable with some of his neighbors and fellow Buck guardians, including Thomas Alnutt and his wife, Peter and Mary Langman,3 and John and Bridget (Buck) Burrows, as well as a network of servants and small farmers living in the Neck-of-Land area (VMHB 1911, 235-237). Jackson was again mentioned as one of the guardians of Richard Buck’s children in May, 1626, when he witnessed John Dyus tampering with Buck cattle. In that same court case, Mary Landman (probably Mary Langman, Peter Langman’s wife) testified that she overheard Dyus complain that he was owed money from the Buck estate. Based on the testimony, the Court ordered Richard Kingsmill to pay the 40-shilling debt to Dyus from the Buck estate (McIlwaine 1979, 102-103).

In March, 1628, a John Jackson was appointed Commander of Neck-of-Land in the Corporation of James City (McIlwaine 1979:192). However, this probably was another John Jackson, associated with Richard Kingsmill, first as his servant, later as a business partner, and later still as the guardian of Kingsmill’s daughter Elizabeth (Goodwin 1958, iv-vi).

Thomas Alnutt (1623-26)

Not far from John Jackson’s household, Benoni and Peleg Buck were put under the guardianship of Thomas Alnutt and his wife in 1624. Court cases revealed that the Alnutt’s interacted with other Buck guardians. Alnutt served on juries and coroner’s inquests with neighbors John Jackson and John Burrows (VMHB 1911, 129; VMHB 1915, 10). The Alnutt’s appeared to have been better equipped to care for the handicapped eight-year old Benoni and
his four-year old brother Peleg than was the less successful Jackson. In 1625, the Alnutts had three adult servants, Peter and Mary Langman, and Roger Roeds (Redes). The Langmans had a direct role in the care of Benoni and Peleg, likely as part of their indenture to the Alnutts (Meyer and Dorman 1987, 32; VMHB 1917, 34). The servant Elinor Sprague had moved out of the household by this time, presumably having married Robert Marshall. The Alnutts and their servants had over a half-dozen barrels of corn, six firearms, a dozen livestock, and a boat, as well as one dwelling to house them all at the time of the muster (Meyer and Dorman 1987, 32).

The records indicated that Thomas Alnutt was not the most diligent guardian of the Buck children’s interests. In 1625, Alnutt was fined 100 pounds of tobacco for neglecting to care properly for the cattle belonging to young Peleg Buck. William Carter testified that Alnutt neglected to pay him for treatment of one animal, then refused to allow Carter to treat another cow that had a fistula on its eye from which it later died. Abraham Porter, one of Peter Langman’s servants, witnessed the death of another Buck cow and told the Court he had recently informed Richard Kingsmill that that the cows were being milked too much, not allowing the calves to thrive (VMHB 1917, 33-34). For their misdeeds, the Court ordered Alnutt and the other Buck guardians, including Peter Langman, to post a bond ensuring that they properly maintained the cattle (McIlwaine 1979, 86).

Alnutt was apt to act impulsively. In March, 1625, he bet one of his servants, Roger Reades (Redes) a year’s service and lost. The wager concerned the date of Easter that year. Reades was correct and won a year of freedom as ordered by the Court (VMHB 1917, 228).

By the fall of 1626, Thomas Alnutt was dead and his wife had remarried to Thomas Bagwell, a longtime resident of Neck-of-Land (VMHB 1919, 261). Richard Kingsmill assumed guardianship of Peleg Buck and direct control of his portion of the Buck estate, still consisting primarily of cattle (McIlwaine 1979, 117). Mentally handicapped Benoni Buck lived until the age of 23, dying in 1639, apparently under the care of the wife of Ambrose Harmer (likely the widow of one of the earlier guardians) (VMHB 1904-1905, 393). Further evidence also suggested that Benoni remained close to the family of his older sister Bridget Burrows and her husband John (VMHB 1911, 236).

John & Bridget Burrows(1623-28)

Upon the death of her mother and father, 13-year old Mara Buck resided with her older sister Bridget and Bridget’s husband John Burrows. John Burrows entered the colony in 1608, and by late 1623 he lived with his wife and eight servants near Jamestown, in close proximity to the Buck children dwelling with John Isgrane and Mary Ascombe (Hotten 1980, 175). By February, 1624, John Burrows had established a 150-acre plantation known as Burrow’s Mount on the south side of the James River, upriver from Jamestown (Meyer and Dorman 1987:142-143; Hatch 1957:78). Although named for himself, Burrows appears not to have lived there long. Instead, he and Bridget, Mara Buck, and seven indentured servants (mostly teenagers) lived in the vicinity of Neck-of-Land (although the exact timing of this is unknown). According to the muster of 1625, their plantation was stocked with a dozen barrels of corn, substantial stores of fish, four firearms, some shot, and several pieces of armor, as well as ten head of livestock and a boat, all packed into two houses. In addition, the 30 head of cattle and 23 goats belonging to the Buck children were on hand (Meyer and Dorman 1987, 33).

A 1624 court case concerning Mara Buck’s welfare included testimony from John and Bridget Burrows, Thomas Alnutt and his wife, the Allnut’s servant Elinor, and John Jackson. All of these individuals were involved with the care of Buck children (McIlwaine 1979, 15-16; VMHB 1913, 49-51). The Alnutts asserted that minister David Sandys planned to marry and “steele Mara Buck away” to his plantation. Several witnesses testified as to hearing about this potential kidnapping as well. They also declared that upon receiving news of the rumors, John Burrows said he planned to marry young Mara to a man named Richards, rather than to Sandys who was a stranger to them. Bridget Burrows, Mara’s caretaker and older sister, vehemently opposed Mara marrying either man and vowed that she alone would take the blame if Mara were stolen into marriage. As the case unfolded, various individuals testified that the 13-year old Mara “was very dull in taking her lerninge,” and that although Bridget Burrows had tried to teach her sister to read the Bible, Mara was unable (McIlwaine 1979, 15-16). Ultimately, the Court ordered John Burrows to pay a 100-pound security that neither he nor his wife would permit any motions of marriage to be
made to Mara without informing the custodians of the Buck estate.

Although Burrows owned the 150-acre Burrow's Mount parcel on the south side of the James River, historical evidence indicated that the Burrows family, including Mara, lived on the north side throughout much of 1624 and 1625. The court testimony concerning Mara Buck implied that Sandys planned to take her from her home on the north side of the river to his on the south side. Moreover, most of the witnesses questioned in the case lived on the north side in and around Neck-of-Land, suggesting that they had daily interaction with John and Bridget Burrows and Mara Buck. Several months after the legal case, in the muster of 1625, the Burrows contingency lived near “James Citty” (Hatch 1957, 78). In August 1626, the Court granted Burrows formal permission to “remove and seate himself upon the Neck of Land neere James Cyttie chieflie for the keepinge and preservinge of the catt due to Mara Buck” provided that he “doth leave the plantatione of Bourrows mounte sufficyently manned and strengthened” (VMHB 1918, 6-7). In January of 1625, a man named John Smith paid rent on Burrow's Mount and later purchased it outright, probably at the time Burrows requested to relocate permanently to Neck-of-Land (McIlwaine 1979,89; Nugent 1969, 10).

According to court testimony in October 1624, John Burrows' plantation at Neck-of-Land was seated along the Back River. Burrows testified in the case of Elizabeth Abbott, an indentured servant who was brutally beaten by another servant on the instruction of her owner John Proctor. Abbott was so severely injured by the 500 lashes she received from a whip with fishhooks tied to it that she stumbled away from Proctor's plantation onto Burrows' property at Neck-of-Land. Another woman found her “by the watersid by Mr. Bourows Planta- tion lyinge behind the boate wrapped in A rugge” (McIlwaine 1979,23). These details indicated that John Burrows lived near a navigable body of water.

John Burrows lived for only a brief period at Neck-of-Land. On January 1, 1628, he was stabbed to death by 14-year old William Reade at Benjamin Jackson's home at Blunt Point in Warwick. According to one witness, Reade accused Burrows of stealing a piece of lead from one of Jackson's servants, to which Burrows responded by punching Reade in the chest. Reade retaliated by stabbing Burrows in the stomach with a knife. Reade himself testified that he stabbed Burrows because Burrows tried to steal his knife. The defendant declared that Burrows wrestled his knife away, then in an act of bravado dropped it on the ground and proceeded to punch Reade. Reade countered by picking up the knife and stabbing Burrows. A jury that included Richard Kingsmill, John Jackson, and Thomas Crump, found Reade guilty of manslaughter (VMHB 1922, 350-352).

The widowed Bridget Burrows later married William Davis, and later still John Bromfield. Evidence indicated that she continued to live near Neck-of-Land, perhaps to the east at Archer's Hope and eventually died by the 1650s (Meyer and Dorman 1987, 143). Mara Buck likely stayed under Bridget Burrows' care until she married Richard Adkins (Tyler 1936, 136).

Thomas Crump (1624-36)

Elizabeth Crump was the eldest Buck sibling, yet she and her husband Thomas Crump had no known role in the care and upkeep of the other Buck children. It is unlikely that she was living in Virginia at the time of her parents' death. She first appeared in the Virginia records in 1625, the same year she married Thomas Crump (Meyer and Dorman 1987, 142).

Sergeant Thomas Crump arrived in Virginia in 1624 and was documented in the 1625 muster as living at Jamestown Island (Jester and Hiden 1964, 147). By the early 1630s, Crump had acquired political prominence, serving as a Burgess from Neck-of-Land in 1632 and 1633 (Meyer and Dorman 1987, 224). In 1635, Crump acquired 500 acres at Neck-of-Land north of Richard Buck's original 750-acre patent (Nugent 1969, 31-32, 83'). Like Buck's patent, Crump's acreage was bounded on the east by Mill Creek, on the west by Powhatan Creek, and to the south was “land belonging to the Orphans & heirs of Mr. Richard Buck” (Nugent 1969, 32; VMHB 1896-1897, 75). Accordingly, this indicated that Buck's land fronted the Back River overlooking Jamestown Island to the south, whereas Crump's parcel was located inland, some distance north of the Back River. Crump acquired the 500 acres by paying the passage of himself and nine men indepen-
tured to serve him (VMHB 1896-1897, 75). In the decade prior to the acquisition, the Crumps possibly lived somewhere on the 750-acre Buck patent. Crump then may have outfitted the nine servants on the 500-acre parcel to work there while in his employ. No record remains of Thomas Crump's death. His widow Elizabeth Crump lived until at least the mid-1650s, long enough for the Court twice to grant her official rights to the original land patent of her father by virtue of her status as the last surviving Buck sibling (Meyer and Dorman 1987, 224; Hening 1823, I:405).

Gercian Buck (1625-38)

Almost exactly a year after Thomas Crump acquired his 500 acres at Neck-of-Land in 1636, he sold it to his brother-in-law Gercian Buck, who just had attained his majority. In addition to the acreage, Gercian Buck also secured "all howses & c., gardens, orchards, tenements & c." on the parcel (Nugent 1979, 83). The reference to multiple houses and tenements might indicate that several residences were standing on the property, likely inhabited by tenants or indentured servants. However the reference could also be standard legal jargon of the time. At the same time, Gercian gained control of the 750 acres patented by his father in 1619, thereby amassing a contiguous 1,250-acre tract of land. Gercian had little time to work the land because he died two years later at the age of 24. By the summer of 1638, the property had passed to his younger brother Peleg Buck.

Peleg Buck (1625-42)

Little is known about Peleg Buck's tenure on the 1,250 acres of land that Gercian gave to him. The youngest of the Buck children, 18-year old Peleg inherited the land on May 29, 1638, from his recently deceased older brother (Nugent 1979, 83, 299). A 1642 dispute brought to Court over the Buck Neck-of-Land holdings demonstrated that Peleg, like his brother, had only a few years to work the land before he died at the age of 22 (Hening 1823, I:405).

Elizabeth Crump (1625-54)

Peleg Buck's 1642 death resulted in disputes over the ownership of the Buck/Crump land. The Reverend's male heirs were no longer alive, and thus, the property devolved to the daughters, Elizabeth and Bridget. Elizabeth Crump legally defended her right to occupy the 1,250-acre Buck/Crump parcel in 1642. Bridget was dead by 1654, and her third husband John Bromfield attempted to acquire the land by virtue of his wife's Buck-heritage. In a 1654 ruling, the Court "ordered that the said Elizabeth Crumpe continue her possession without any further molestation in the premises" (Hening 1823, I:405).

John Crump (1654-?)

In November of 1654, Elizabeth Crump's son, John Crump, inherited the 1,250-acre combined Buck/Crump property at Neck-of-Land. According to the patent, the land was "By Mr. Batts landing... On main branch of the Gleab land Cr., etc. 750 acs. Granted to Rich. Buck, 20. Jan 1619; 500 acs. Granted to Peleg Buck 29 May 1638" (Nugent 1979, 299). The land later descended into the Page family in the 1660s with the death of John Crump and the marriage of his widow to Matthew Page (Barham and Barham 1986, Meyer and Dorman 1987, 410).

Summary

The historical records illustrated the intricately intertwined lives of those residing at Neck-of-Land in the 1620s, '30s, and '40s. A network of neighbors, kin, and business associates quickly developed, and these links were maintained through the years. People cared for each other's children, shared supplies, helped defend one another, traded goods, sold land to each other, exchanged labor, voted each other into office, sat on juries together, socialized, competed, and remanded each other's wills. Disputes often erupted, and were settled both in and out of court. Sometimes, as in the case of John Burrows, disputes escalated into murder. Of the people that can be potentially associated with 44JC568, dated archaeologically to ca. 1630-50, several observations can be made.

1. The Reverend Richard Buck (1582-1624) most likely did not live at 44JC568 because of his early demise, which pre-dated the site, and his duties as Jamestown's minister.
2. Richard Kingsmill (?-1638) lived at Neck-of-Land in the mid-1620s in a fairly sizable plantation and as overseer of the Reverend's will organized the guardianships of the Buck orphans. Furthermore the Kingsmills had acquired substantial land at Archer's Hope and likely moved there by the time English colonists initially occupied 44JC568 in the 1630s.
3. John Jackson cared for Gercian Buck in the mid-1620s. Exactly where Jackson lived at Neck-of-Land is unknown, but again, activity at 44JC568 had begun after Jackson is lost in the records by the late 1620s.

4. Thomas Alnutt (?-1626), his wife, and his servants Peter and Mary Langman cared for Benoni and Peleg Buck from 1624 to 1626. Based on circumstantial evidence, it is likely that they occupied a portion of Richard Buck's 750 acres, perhaps in the house alluded to by Jane Kingsmill in 1624 as belonging to the recently deceased Reverend. Kingsmill's testimony suggested that the dwelling was located close to the Back River, likely well south of 44JC568.

5. Abraham Porter (?-1628), originally indentured to Richard Buck in 1622, lived at Neck-of-Land until his death in 1628. He worked for the Alnutts, was associated with Thomas Crump and other neighbors, and at times lived in the same household as some of the Buck children. In 1625, he resided with fellow servant Thomas Sawyer at a small farm house, minimally stocked with nine barrels of corn, gun powder, four firearms, three cattle, and 14 pigs (Meyer and Dorman 1987, 32).

6. John (?-1628) and Bridget Burrows (pre-1610-1654) lived at a Neck-of-Land plantation in the 1620s that consisted of at least two houses. They cared for Mara Buck (1611-?) and at times were responsible for cattle belonging to the Buck estate as well. It is likely that while at Neck-of-Land, the Burrowses lived somewhere on the original 750-acre Buck patent. In a 1624 court case, however, testimony clearly indicated that the Burrows' plantation was located next to a navigable body of water, probably the Back River. Moreover, John Burrows was dead by 1628. Bridget Burrows remarried and probably moved herself and Mara elsewhere soon after her first husband's demise, suggesting that John, Bridget, and Mara did not live at Neck-of-Land when occupation began at 44JC568.

7. Thomas Crump purchased 500 acres north of the 750-acre Buck patent in 1635. He might have been servants indentured to Thomas Crump. Indeed, these individuals—John Gowing, Roger Arnwood, Robert Ackerman, Frederick Peale, John Abott, Lewis Depoma, Peter Brill, William Mallett, and Thomas Trunchfield—could have been the first to clear fields, dig wells and ditches, and erect structures at 44JC568. It is also possible, but not likely, that Thomas Crump himself, and his wife Elizabeth (Buck) Crump (pre-1610-1654) resided at 44JC568 in 1635. The official patent mentioned an unspecified number of houses, gardens, orchards, and tenements already standing somewhere on the 500 acres when Crump purchased it outright. Yet, this description might have been standard and default terminology used in contemporaneous legal documents.

8. Only a year after Thomas Crump acquired the 500 acres at Neck-of-Land he sold it to his brother-in-law Gercian Buck (1614-1638). Gercian also inherited the original 750-acre Buck tract, giving him a total of 1,250 acres at Neck-of-Land. Perhaps he maintained a contingent of indentured servants at 44JC568 as Thomas Crump might have done before him. Gercian might have begun living at the Buck site at this time as well. Nevertheless, there is no mention of his activity between 1636 and 1638.

9. In 1638 Peleg Buck (1620-1642) inherited the 1,250 Buck/Crump acres from Gercian Buck. No historical records described Peleg's activities from 1638 to his death in 1642, although it is possible that he lived at 44JC568 during this time. Clearly the artifacts recovered from the site correspond to the period of time when Peleg owned the property, but whether he was actually residing at the site is unknown.

10. In 1642 Elizabeth (Buck) Crump, the eldest Buck daughter inherited the family property, all 1,250 acres. Prior to 1642 she probably lived somewhere at Neck-of-Land, although most likely not at 44JC568. From 1642 to 1654 she maintained control of the property. If anyone was actively inhabiting 44JC568 during her tenure, they were likely tenants or indentured servants belonging to Elizabeth Crump, perhaps some of the same people that her husband Thomas Crump had placed there in 1635.

11. By 1654 Elizabeth's son John Crump inherited the Buck/Crump holdings at Neck-of-Land. According to the archaeological findings, activ-
ity had ceased at 44JC568 by this time. In fact, with Elizabeth Crump's death in 1654, the site might have been abandoned permanently.

The following chart of land ownership at and near 44JC568 is based on these observations and archaeological findings.

Additional Considerations

During the 1990 survey of 200 acres of the surrounding property, archaeologists located three other sites dating to the 17th century. The three sites were clustered together some 1,200' to the north and east of 44JC568, located near the head of a small stream, and in close proximity to Neck-o-Land Road (McSherry 1990, 52-54). No further archaeological work was conducted on this nearby suite of sites as immediate construction did not threaten them. These sites may be contemporaneous with 44JC568, perhaps also relating directly to the Buck legacy.

A 750-acre unit of land bounded on the south by the Back River, on the east by Mill Creek, and on the west by Powhatan Creek, calculated by use of an acreage counter and plotted on a United States Geological Survey plat of the Neck-of-Land property, indicates that 44JC568 was 500' to the north of and not part of Richard Buck's original 1619 patent. The additional 500 acres to the north that Thomas Crump first acquired in 1635 and then passed to Gercian Buck, Peleg Buck, and Elizabeth (Buck) Crump, again on the basis of acreage calculations, included the excavated area of the Buck site. In fact, the northern border of the 1,250-acre Buck/Crump land is 200' to the north of 44JC568. By these measurements, as much as one-third of Buck's 1619 750-acre tract included marsh and swamp-lands along the Back River, Sandy Bay, and Powhatan Creek, presumably unusable terrain. If the Reverend's patent did not include the marshy area, then it encompassed 44JC568 by extending inland from the Back River approximately three-quarters of a mile. A 1,250-acre marsh-free plot with these natural boundaries to the south, east, and west is a mile and third north of the Back River. It must be remembered that Tidewater survey plots were "more generous than accurate" and frequently imprecise (Phillips 1929, 32; Fausz 1971, 19). In addition, this analysis does not take into account Chesapeake sea level variations during the last four centuries. Overall, based on assumptions of relatively accurate land patents that included marshy areas in their calculations, the historical records indicated that 44JC568 was north of the 1619 750-acre Buck plot and in the heart of the 1635 500-acre Buck/Crump patent.

Figure 7. Owners, overseers, and guardians of Buck land, 1619-54.

<table>
<thead>
<tr>
<th>Name/Role</th>
<th>Original 750-acre Buck land patent</th>
<th>500 acres to the north of the original 750-acre grant 44JC568</th>
</tr>
</thead>
<tbody>
<tr>
<td>Richard Buck</td>
<td>1619-24 owner</td>
<td>--</td>
</tr>
<tr>
<td>Richard Kingsmill, overseer of Masa, Gercian, Benoni, and Peleg Buck</td>
<td>ca. 1625-38</td>
<td>--</td>
</tr>
<tr>
<td>John Jackson, guardian of Gercian Buck</td>
<td>ca. 1623-35</td>
<td>--</td>
</tr>
<tr>
<td>Thomas Alnutt, guardian of Benoni and Peleg Buck</td>
<td>1623-26</td>
<td>--</td>
</tr>
<tr>
<td>John Burrows, husband of Bridget Buck Burrows, guardian of Masa Buck</td>
<td>1623-28</td>
<td>--</td>
</tr>
<tr>
<td>Thomas Crump, husband of Elizabeth Buck Crump</td>
<td>1624-36</td>
<td>1635-36 owner</td>
</tr>
<tr>
<td>Gercian Buck</td>
<td>ca. 1625-35 under Jackson</td>
<td>1636-38 owner</td>
</tr>
<tr>
<td>Peleg Buck</td>
<td>1625-26, 1626-38 under Alnutt, Kingsmill</td>
<td>1638-42 owner</td>
</tr>
<tr>
<td>Elizabeth Crump</td>
<td>1624-36 with Thomas Crump</td>
<td>1642-54 owner</td>
</tr>
<tr>
<td>John Crump</td>
<td>--</td>
<td>1654-? owner</td>
</tr>
</tbody>
</table>
Figure 8. Acreage calculations projected onto Neck-o-Land map, including marshlands. This map is the best approximations of the actual land patents.

Figure 9. Acreage calculations projected onto Neck-o-Land map, not including marshlands. These projected boundaries are most likely less accurate than those on Figure 8.
Archaeological Methods

In March and April of 1990, members of the James River Institute for Archaeology, Inc., inspected a fallow field off of Neck-o-Land Road. In preparation for the survey, workers plowed and mechanically disked the field. Following substantial rain, the archaeologists systematically searched the area. In a 150' by 175' area numerous material remains from the first half of the 17th century were recovered. The crew found sherds of Jamestown coarseware, North Devon sgraffito slipware, North Devon gravel tempered ware, delftware, Rhenish stoneware, and Spanish coarseware vessels, and consequently identified the presence of a 17th-century historic domestic site. They later registered it as site 44JC568 and recommended additional archaeological evaluation.

With construction of road and house lots scheduled to impact 44JC568, the land owners supported excavation of endangered site areas in 1996 and 1997. In the early summer of 1996, an archaeological grid was established at the site with grid north 45° southwest or counterclockwise of true north. The top 1.2' of soil across the site area had been disturbed by centuries of field plowing. Archaeologists excavated a nine-percent sample of this plowzone strata by digging and screening through quarter-inch hardware cloth a 3' square (3' long, 3' wide, and ultimately 1.2' deep) in the northwest corner of each 10' square that fell within the road right-of-way slated to cut through the site (BK91-209). In this manner, nine square feet of every 100 square feet (and approximately nine cubic feet of every 100 cubic feet) from a 80' by 100' area of the site were hand dug and screened. Two features were identified during the plowzone testing; one of them contained fill from the second quarter of the 17th century. In addition, archaeologists took a soil chemical sample from each 3' plowzone corner square.

Following the plowzone sampling, archaeologists extended the grid beyond the area that was to be impacted by construction to the adjacent fields by placing pin flags every 10.0' along grid lines. Similar to the initial surface survey done by JRIA employees six years earlier, the archaeologists then collected all visible artifacts and sorted them according to the 10' by 10' grid square in which they were found (BK54-90).

After the plowzone testing and secondary surface survey, Waltrip workers removed the remaining plowzone within the road right-of-way with a mechanical excavator that had a 6' wide smooth-edged bucket. Three circular features (two wells and a pit), each 5'-7' in diameter, as well as four burials, a 30' section of a 2.5' wide ditch and two small earthfast structures, each consisting of four postholes, were uncovered during this process. Artifacts recovered from the surface of the features indicated that they were filled during the second quarter of the 17th century. The archaeological crew mapped the features on a master site plan at a scale of 1/4"=1'.

The features were trowel-cleaned, photographed, and mapped in plan at a 1"=1' scale. Archaeologists first excavated the east half of each feature in order to maximize potential sunlight for profile photography. Excavators used trowels to dig each feature stratigraphically, sifting all of the sub-plowzone fill through quarter-inch hardware cloth. All artifacts, including brick, rock, and shell were retained, and a soil chemical sample was taken from each layer of each feature as well. Once a feature was completely sectioned and cleaned, the profile was photographed and mapped at a 1"=1' scale, and the remaining half was excavated. The archaeological crew measured profile depths from the plowzone/subsoil interface. The report presented here refers to this measure as “depth below modern grade.” Modern grade resulted from the mechanical stripping of the 1-1.2' plowzone from the site.

Because of their size and depth, archaeologists excavated the wells (BK2, BK11, and BK24-27) in a slightly different manner. Initially, each well was sectioned in the aforementioned manner to a depth of 3.5' below modern grade, and its profile was then cleaned, photographed, and mapped. Instead of continuing to dig the eastern half stratigraphically, the western half was then excavated to a depth of 3.5' below modern grade. Next, the crew lowered a cylindrical metal casing, 5.2' in diameter and 5.0-5.5' tall, into the feature. The casing provided support for the surrounding dirt. Attempts at continuing to section the feature were abandoned as the casing allowed little room to maneuver. Thus, each layer was dug in its entirety. Archaeologists took elevations at the top of each new layer, and these measurements formed the basis for a running profile. As the excavation of each well proceeded, a sec-
ond casing was placed on top of and fastened to the first. Ultimately, the casings were essential in digging the wells because they supported the dirt around the edges of the feature and made for safe excavation, especially once the crew encountered the water table.

The archaeologists frequently water screened feature fill, also through ¼" hardware cloth. The James City County Fire Department allowed the excavators to tap into one of their fire hydrants, over 400' off site, at a minor cost.

In the early summer of 1997, heavy machinery was used to remove additional plowzone. The equipment and operators quadrupled the size of the excavation area and revealed five additional burials, another well, two more small four-post earthen structures, and an extensive series of ditches. During the 1997 summer excavations, the land owners repeatedly had their machinery and operators at the site, helping the archaeologists extend the site area and follow feature boundaries.

Five of the burials discovered during the 1996 and 1997 summer excavations contained partially preserved human remains. Archaeologists exposed the graves, studied the bones in-situ, and later removed them for more thorough study by Dr. Owsley at the Smithsonian Institution. Once study is completed on these specimens, the remains will be re-interred and their location will be marked.

17th-Century Barrel Lined Wells

With anaerobic water-sealed bottom layers that preserve both inorganic and organic material remarkably well and dozens of feet of fill that usually cover these artifact-rich contexts, historic wells have been the center of much archaeological inquiry. Past excavations have revealed many different types of well-lining. These include dirt or unlined shafts, barrel, wooden frame, cobble, standard brick, compass (or wedge-shaped) brick, and combination linings (wooden frame and barrel, compass brick and barrel, standard and compass brick). Due to poor preservation in upper strata or subsequent removal, the specific type of well-shaft lining is often unknown until excavators reach fill below the water level.

Site archaeologists spent much time and effort on the excavation, analysis, and interpretation of 44JC568's three wells as these features were the site's deepest, the most artifact rich, and were situated unusually close to one another. Two were within 11' of each other and a third was only 71' away.

Seventeenth-century barrel-lined wells have been excavated at many Tidewater sites, including Jamestown, Bennett Farm, Church Neck Wells, Dow Badishe, Drummond, and Kingsmill. Although the shape, size, depth, and fill of these features varied, each had at least one wooden barrel at the base of the well shaft.

John Cotter reported that seven of the 24 wells excavated by the National Park Service at Jamestown contained a wooden barrel at the base of the well shaft. Wells 8, 9, 10, 11, 14, and 21 each had a barrel lining, and Well 24 contained both a brick lining and a barrel at its bottom. The fill of each of these wells dated to the 17th century (Cotter 1994, 152-159; Straube 1993, 4).

Nicholas Luccketti directed excavations and recorded his findings and interpretations of a late 17th-century barrel well at Bennett Farm in York County, Virginia. At the base of Well 2, he found a smaller barrel (2.25' tall) sitting atop a larger barrel (3.25' tall) (Luccketti 1990, 25-52).

Timothy Morgan, Beverly Straube, and Mr. Luccketti reported on seven barrel lined wells at the Church Neck Wells Site in Northampton County, Virginia (Morgan, et. al. 1997). Five of these contained the bottom one or two barrels which formed the shaft lining, while two others had barrel lined shafts inside of wooden boxes. The artifacts uncovered in the well shafts suggested that these features were filled during the late 17th or early 18th century. Archaeological and documentary investigations of the site area revealed that these multiple contemporaneous wells were likely used in leather processing.

Archaeologists from the Virginia Research Center for Archaeology salvaged the bottom barrel of a well on the former Dow Badishe property in James City County, Virginia. An eroded cliff face had exposed the remains of a barrel-lined well shaft at least 12.0' deep. Due to the paucity of datable artifacts recovered from this well, the archaeologists were unable to specify its fill date (VRCA 1977).

Alain Outlaw directed the excavation of at least three barrel wells at the Drummond Site in James City County, Virginia. Two of the wells contained a single barrel at the shaft base, the third had a barrel inside of a wooden box. All three dated to the second half of the 17th century (Morgan, et. al. 1997, 7).

While almost all of the aforementioned barrel wells ranged in depth from eight to 13' below modern grade, William Kelso excavated a series of wells
at Kingsmill in James City County, Virginia, that were three and four times that depth. Although most of these were brick-lined and had no evidence of barrel lining, the well at the ordinary at Burwell’s Landing had both a brick lining and a barrel at the bottom of the well shaft. This 18th-century well contained evidence of how it was dug and constructed. Archaeologists discovered a wooden curb or well ring at the base of the compass brick lining (Kelso 1984, 162–63). John Vince explained in his booklet Wells and Water Supply that the well builder would stack a few rows of bricks in cylindrical form (called steening or steining) along the surface of the wood curb and then, “the wood curb was lowered into the ground by removing the dirt below it.” More brickwork was added to the top and then more dirt was dug and hauled out from the bottom. This process was repeated until the well digger reached groundwater and the steening rested at the base of the shaft (Vince 1978, 5).

Figure 10. The well casing sits in partially excavated Well 1. The circular stain that marks the edges of the shaft and fill at this point in the excavation is smaller than the diameter of the casing.
Figure 11. 44JC568 overall site plan.
Excavation Results

Archaeological excavations indicated historical occupation at 44JC568 from ca. 1630-50. The principle features consisted of three wells, two with nearby well boom postholes; nine human burials; four small earthfast non-domestic four-post structures (hereafter “sheds”); two pits; and a series of fence lines and ditches. For the most part, the fence lines and ditches ran along the cardinal directions. The ditches were of two widths; “wide” ditches measured 4’ across and “narrow” ditches were 2.5’ across. Ditches surrounded the two areas of the site. Wide ditches bounded 44JC568’s eastern half on the east and west, and narrow ditches marked its southern and northeastern limits. The eastern site area included three clusters of features: 1) the burial ground to the southeast, 2) a well, two sheds, and a fence line to the west, and 3) two wells, a shed, a fence line, and a large modern disturbance to the north. A separate meandering narrow ditch encircled the western site area, forming an irregular and nearly closed pentagon. This part of the site contained a few isolated postholes, but no other features of significance.

Wells and Well Booms

Well I (BK11)

Following plowzone removal, Well I appeared at the general subsoil surface as a dark brown circle, 7’ in diameter. Its fully excavated maximum depth measured 13.2’ below modern grade. Well I included 3’ of fill under the surface of the water table. During the removal of the first 8’ of multi-layer feature fill, the original 7’ circle narrowed to a circle 4’ in diameter, leaving a cone shaped hole. At 8.3’ below modern grade, remains of a wooden lining were uncovered. The lining formed a somewhat cubic open-ended box with slightly rounded edges, 3.5’ to a side and 2’ deep. It sat directly above a bulging cylindrical iron-strapped barrel. The barrel wood, having been completely submerged by the groundwater, was intact. The barrel, 2.0’ in diameter at its top and 3.0’ tall, rested on sterile subsoil.
Figure 14. 44JC568 site plan, with a close-up of the main eastern occupation area.
Well I contained 13 different fill layers. The first four layers (BK11A, B, C, and D) consisted of dark organic sandy loam with differing amounts of brick, charcoal, and mottled clay. These layers rose sharply on the south edge of the feature, suggesting that the fill was deposited from that direction. The recovery of Frechen stoneware, Dutch coarseware, and Martin’s Hundred potter sherds indicated that these strata dated to ca. 1630-50. Furthermore, over 70% of the two dozen English Ball-clay pipe stems from these layers had bores measuring 8/64". Layers 11A-11D were rich in artifacts and included such finds as gold threads, a knife blade, a pewter spoon, a cloth seal, multiple case bottles, Chesapeake pipes, compass bricks, and a brass pulley wheel. Although the pulley is less than 2" in diameter and made of brass instead of a more durable material like iron, it might have been part of the original well apparatus.

Well I’s fifth layer (BK11E) was 4’ deep and consisted of yellow sand with no inclusions. This sandy fill covered a hard yellow and brown mottled clay layer on the edges of the well-shaft walls (BK11F). Although the yellow sandy layer (BK11E) had few artifacts, a rich deposit rested in between the confines of it, the hard clay (BK11F), and the subsoil wall of the shaft. This pocket of charred purple/gray ashy loam (BK11G) contained case-bottle fragments, Chesapeake pipes, and a brass ladle—a another potential well tool. At 6.2' below modern...
grade, excavators uncovered an artifact-poor light brown clay layer (BK11H). Removal of the clay revealed dark brown and black clayey loam (BK11I), which contained sherds of a Jamestown potter vessel. Since this ceramic type was not manufactured before 1630, BK11I was deposited in Well I no earlier than then (Straube 1994, 7).

Upon fully excavating the dark loam layer (BK11I), archaeologists exposed a severely deteriorated wooden lining. The interior was sealed by dark brown soil with brick and charcoal inclusions (BK11J). Once the wood lining (BK11K) was removed, a barrel stain was uncovered. The barrel had two cylindrical iron straps at its top, both 2.5' in diameter, 1.5" tall, and .3" wide. Inside of the barrel was a pungent gray white clay (BK11L) that sealed subsoil.

Overall, excavation of Well I produced a dozen faceted Chesapeake pipe bowls with elaborate rouletted decorations and nine examples of Chesapeake pipes with an incised asterisk on a pad heel. There were no other nearby features or postholes that appeared to be directly associated with Well I.

Well II (BK2)

Well II was 11' south of Well I. At the base of plowzone, Well II was a near perfect circle, 7.5' in diameter. The first layer of this feature (BK2A) consisted of dark brown sandy loam, was 1' thick at its maximum depth below modern grade, and contained many artifacts, including Jamestown potter, Martin's Hundred potter, Frechen stoneware, case-bottle glass, flint, lead shot, English and Chesapeake tobacco pipes, and copper scraps. Excavators uncovered a series of sandy loam layers in the 7.1' of soil below BK2A. These four strata of brown, dark brown, yellow, and yellow/brown earth (BK2B, C, D, and E) contained Martincamp and delftware sherds, large iron tools (an ax and a hoe), and examples of each of the artifact types from BK2A. As archaeologists removed these layers, Well II narrowed from 6.5' in diameter (at the top of BK2B) to 4' across its center (at the bottom of BK2E).

Layer BK2E contained a large elliptical rock, 1.5' in diameter along one axis and .7' in diameter along the other. The stone rested against the north well-
shaft wall. Three of the next four layers also had rocks and broken bricks along the edge of the well shaft. As in Well I, Well II had a layer of hard clay (BK2F) that sealed subsoil along the edge of the shaft. This layer contained few artifacts and could only be distinguished from subsoil by the presence of brick inclusions. The next two layers below the brown/yellow clay of BK2E (BK2G and BK2H) contained few datable artifacts. Each of these strata had multiple broken bricks and rocks along the well-shaft perimeter. As archaeologists excavated the brown clay and bricks (BK2H), they encountered the water table at a depth of 11.1' below modern grade. A complete wooden barrel, fully preserved in the anaerobic aquatic environment rested just below the water table. Unlike Well I, this barrel had no iron straps. Similar to the adjacent well, the barrel was full of pungent gray clay (BK2I). This clay contained an ax head that was nearly perfectly preserved. In fact, the moment the ax came out of the well one could see on which side of the blade it was originally sharpened. This bottom layer (BK2I) also contained a peach pit. The barrel, 4.2' tall, and ranging in diameter from 2.5' at its narrow top and bottom to 3.7' at its bulging center, rested atop subsoil at a depth of 14.9' below modern grade.

Archaeologists uncovered no wooden lining above the barrel in this well. Yet, many broken bricks and rocks were found along the fill/shaft interface. In fact, once the well shaft narrowed to 4' (at the top of BK2E), every one of the more than two dozen bricks and stones excavated in Well II was found along the edges of the well.

Well Boom I (BK16)

Well II had a large posthole and mold (BK16) associated with it, which likely functioned as a well boom. The term “boom” derives from the Dutch word for “beam” and, in this case, describes a post
that hangs over a well and secures the bucket apparatus (OED 1995). One of the small postholes from Shed II cut Well Boom I, demonstrating that the small structure post-dated the boom. Enough of Well Boom I was left intact and undisturbed by Shed II to reveal the remains of an original boom posthole, a subsequent repair hole, and a repair mold. Well Boom I was located 8' west of Well II. The original boom posthole (BK16C) was a circular feature, 1.8' in diameter, 1' deep, and consisted of mottled brown and yellow clay. A circular repair hole (BK16B), 1' in diameter, 1.5' deep, with brown and yellow sandy loam fill cut this original posthole. The round repair mold (BK16A), .5' in diameter, 1.5' deep, and consisting of dark brown sandy loam, was in the center of this repair hole. No datable artifacts were recovered from these layers. The proximity of this feature to Well II and its overall shape, size, and depth suggested that it was used to support the well apparatus of Well II. No other posts of a similar size were found in association with Well Boom I or Well II.

**Well III (BK24, 25, 26, 27)**

When first trowel-cleaned at the base of plow zone, Well III was a large amorphous brown and black stain in the shape of a large light bulb with a circular top 12' across and a square bottom 6' to a side. Archaeologists divided this feature in half and then split each side into three 5' wide sections, separated by two 1.5' balks. Excavation began on the three sections in the east half of the soil stain. A large burnt tree stump was uncovered at the base of the first dark fill layer (BK 24-27A). Many root holes led from the burnt stump to the south end of the feature, suggesting that this tree stood and/or grew next to the well hole, burned, and then collapsed into the top fill layer. The tree hole likely expanded the original edges of the well's upper layers, increased the feature's overall diameter, and changed its shape from a medium-sized circle 7-9' in diameter (like Wells I and II) to a larger circle 12+ across with an additional square on the south end.

Below the top layer of fill on the north side of the well (away from the burnt stump and root holes), the strata alternated between layers of dark organic sandy loam, yellow clay, and yellow sand. Well III contained 17 different layers, most of which tipped up toward the north side of the feature. Thus, Well
Figure 27. Well 3 before excavation.

Figure 28. Well 3’s sectioned top layers.

Figure 29. Stratigraphy of Well 3.
III was likely filled from the north. Over half of the layers—including the top (BK24A) and bottom (BK27S)—contained fragments of a single cross-mended North Devon sgraffito slipware dish. This vessel had a distinctive decorative pattern, with broad blade incised “S” curves around its rim and an animal figure in the center. It is similar to a vessel found at Martin’s Hundred’s Site B by archaeologist Ivor Noel Hume (1979, 118).

At a depth of 2.9′ below modern grade, near the base of BK24-27D, Well III narrowed to a circular shaft 7′ across. This 7′-diameter mirrored the other two wells and was probably the extent of this well before the tree next to it burned and toppled into its fill. Once excavators removed BK24-27K’s mottled brown fill at 5.5′ below modern grade, the well shaft narrowed to a circle, 4.5′ in diameter. In one of the sandy strata (BK25G), archaeologists uncovered a complete and well-preserved snap-haunce, dated to ca. 1600-50. The artifacts from the top 10 fill layers indicated that Well III was filled between 1630 and 1645. Sherds of Jamestown and Martin’s Hundred potter vessels, as well as Frechen and Rhenish stoneware, delftware, and Merida costrel fragments temporally secured this feature in the second quarter of the 17th century. Seventy-three percent of the English ball clay pipe stems had bore diameters of 8/64″ further supporting this chronological designation. Many case-bottle glass pieces were recovered from the middle layers of the feature, including a complete vessel. Excavators found numerous silver threads tied into a knot in layer BK27J’s yellow clay. Well III contained many well or compass bricks, including 20 in its first 10 layers (BK24-27A-K).

At 7.7′ below modern grade, archaeologists uncovered a circular stain 2′ in diameter, marking the remains of the top of a small wooden barrel. The barrel stain contained two different fill layers, an upper tan sandy loam (BK27P) and a lower orange/yellow clay stratum (BK27R). Ground water began seeping into Well III at a depth of 9.7′ below subsoil. The small barrel was 2′ tall and led to another larger barrel. The second barrel, well-preserved since it was below the water table, was 3′ tall and ranged from 2-2.5′ in diameter. Inside the big barrel was the pungent gray clay that had also been found in the barrels at the base of Wells I and II.

The fill outside of the barrel at the bottom of Well III—an orange/yellow clay (BK27S)—contained a large iron object. Like the ax at the bottom of

Figure 30. North Devon sgraffito dish from Well 3, BK 24-27A-S, and a similar vessel from Site B at Martin’s Hundred.

Figure 31. A snap-haunce gunlock from Well 3, inside and outside views, BK25G.
Well II, the two dozen hoe blades at the base of Kingsmill’s Harrop well, the unbroken mortising ax and harrow tooth at Kingsmill’s Pettus well shaft, the many hoes and heavy iron tools found at the bottom of colonial wells at the Drummond site, and the two worn half horseshoes attached to the bucket chain in the Burwell kitchen well at Kingsmill, this iron object likely served as a “makeshift bucket weight until whatever was used to fasten them to the bucket wore out” (Kelso 1984, 154-55).

Well Boom II (BK42)

Like Well II, Well III had a large hole associated with it that likely served as a well boom. Well Boom II (BK42) was 7.7’ to the south of Well III. The posthole (BK42B) was 2’ in diameter, .8’ deep, and consisted of brown and yellow clay. The postmold (BK42A) was .9’ in diameter, .8’ deep, and filled with brown clay and charcoal inclusions.
Burials

Burial I (BK3)

Once trowel-cleaned after the removal of plow-zone, Burial I appeared as a 6’ by 2.5’ rectangular stain with mottled clay fill. It was aligned with the cardinal directions, the long side running east/west. Burial I contained two layers, grave fill above the skeleton (BK3A), and a lower strata with the bones surrounded by the body stain (BK3B). The grave fill contained three charcoal fragments and one sherd of Native American Roanoke Simple Stamped Pottery, but no brick inclusions. The ceramic sherd, one of only four fragments of native pottery found during excavations at 44JC568, was 1.8’ below modern grade, in the east half of the grave. No other artifacts were found. The skeleton was at a depth of 2.5’ below modern grade. The preservation was poor with between 25-50% of the skull complete, and less than 25% of the post-cranial bones intact. Only the skull and the long bones remained. The skeleton was extended on its back and undisturbed. The skull tilted toward and rested on the north side of the grave. The burial was oriented along traditional Christian norms with the skull at the west end and the feet at the east. This was in accordance with the religious belief that the interred individual could watch the sun rise over his feet. The arms were at each side and the legs were straight. There was no evidence of in situ nails or soil stains from decomposed wood for a coffin. The left and right ankles were close together, as were the left and right knees, suggesting that the individual had been wrapped in a shroud. However, archaeologists recovered no shroud pins. The skeleton was approximately 5.6’
in height and was determined by Dr. Owsley to be the remains of a 35 years old white male.

**Burial II (BK4)**

Burial II was a 6.5’ by 2.5’ rectangular stain with mottled clay fill. It was also aligned with the cardinal directions, the long side running east/west. This feature was slightly off line of Burial I, rotated 10° clockwise. Burial II was made up of two layers, grave fill above the skeleton (BK4A), and the bones surrounded by the body stain (BK4B). The grave fill had small brick and charcoal inclusions in it (less than .5” in diameter), as well as three iron flecks which were most likely deteriorated nail fragments. It had no datable artifacts. The skeleton was 1.6’ below subsoil. The preservation was poor with less than 25% of the skull complete, and less than 25% of the post-cranial bones intact. Only fragments of the skull and slivers of the long bones remained. The skeleton was extended on its back and undisturbed. The skull tilted toward and rested on the north side of the grave. The burial was not oriented along traditional Christian norms. The skull was at the east end and the legs were at the west, making this a reversed burial. The arms were crossed. There was no evidence of a coffin. The right and left knees were widely spaced, as were the left and right ankles, suggesting that the individual had not been wrapped in a shroud. The skeleton appeared to be loosely placed in the grave, also hinting at the lack of wrapping. The individual was approximately 4.9’ in height and Dr. Owsley determined the skeleton to be the remains of a white female, 18 to 24 years old at the time of her death. Half of a silver coin, folded into thirds was found directly above the left radius. The other half of the coin, also folded into thirds, was directly below the left radius. Once unfolded, the coin was identified as an English sixpence, dating to ca. 1582-84. These coin fragments were likely...
the remains of a bracelet worn by the individual in the grave.

**Burial III (BK5)**

Burial III, a 3.5' by 1.5' rectangular stain, contained mottled clay fill. It was aligned with the cardinal directions, the long side running east/west. This feature was off line of Burial I, rotated slightly clockwise 10°. Burial III consisted of two layers, grave fill above the coffin stain (BK5A), and the coffin stain and its contents (BK5B). The grave fill contained charcoal inclusions, but neither brick inclusions nor datable artifacts. The base of the coffin stain was 1.0' below subsoil. There were no skeletal remains. No coffin wood remained, but fragments of 13 coffin nails were uncovered. There was a circular rodent hole at the base of the coffin stain, .5' in diameter. The coffin was 2.5' long, 1' wide, and .5' deep. Its overall small size suggested that this feature was a child burial.

**Burial IV (BK6)**

Burial IV was a 4' by 2' rectangular stain with mottled clay fill, located less than 3' to the northwest of Burial III. This feature was off line of Burial I, rotated slightly clockwise 10°. It was aligned with the cardinal directions, the long side running east/west. Burial IV contained two layers, grave fill above the coffin (BK6A), and the coffin stain and its contents (BK6B). The grave fill contained charcoal inclusions, but neither brick inclusions nor datable artifacts. The coffin stain base was 2.4' below modern grade, over a foot deeper than Burial III. There were no skeletal remains in this burial, and only two nail fragments remained. The coffin stain was 3' long, 1' wide, and 1' deep. As was the case with Burial III, the small size of the grave and coffin stain suggested that this feature was a child burial.

**Burial V (BK18)**

Burial V was a 6.5' by 2' rectangular stain with mottled clay fill, less than 5' east southeast of Burial I. It was aligned with the cardinal directions, the long side running east/west. This feature was slightly off line of Burial I, rotated 10° clockwise. Burial V contained two layers, grave fill above the skeleton (BK18A), and the bones surrounded by the body stain (BK18B). The grave fill contained charcoal flecks, but neither brick inclusions nor datable artifacts. The grave shaft was remarkably deep and narrow as the skeleton was 3.4' below modern grade. The preservation was poor with between 25-50% of the skull complete, and less than 25% of the post-cranial bones in tact. Only the skull and the long bones remained. The skeleton was extended on its back and undisturbed. The skull tilted toward and rested on the north and east sides of the grave. The burial was oriented along traditional Christian norms with the skull at the west end and the feet at the east. The arms were at each side and the legs were straight. There was no evidence of a coffin. The legs were close together, suggesting that the individual was wrapped in a shroud. The deep and narrow dimensions of this grave could have made an unwrapped body appear as if it had been wrapped in a shroud. Nevertheless, a brass pin was found at the top of the cranium on the frontal lobe, indicating a shroud burial. The individual was approximately 5.6' in height and Dr. Owsley determined the skeleton to be the remains of a white male, between 15 to 25 years old at the time of his death.
Burial VI (BK19)

Burial VI was a 4’ by 1’ rectangular stain with mottled clay fill. It was aligned with the cardinal directions, long side running east/west. This feature contained two layers, grave fill above the coffin stain (BK19A), and the coffin stain and its contents (BK19B). The grave fill had charcoal inclusions in it, but neither brick inclusions nor datable artifacts. The base of the coffin stain was 1.1’ below subsoil. Archaeologists did not find skeletal remains or coffin wood in the burial. However, they uncovered 35 nails, presumably coffin nails. Nearly all of these were found along the long edges of the coffin, running east/west down the long central axis of the coffin. This nail pattern suggested that Burial VI originally contained a gabled coffin (Noël Hume 1979, 78-79). The coffin was 3’ long, 1’ wide, and .5’ deep. Its small size suggested that this feature was a child burial.
Burial VII (BK20)

Burial VII was a 3.5' by 2' rectangular stain with mottled clay fill less than 2' to the east of Burial VI. The feature was aligned with the cardinal directions, the long side running east/west. Burial VII contained only one layer (BK20A). There were no artifacts, no inclusions, and no evidence of a coffin in the 1.4' deep grave shaft. If there were any remains placed in this shaft at one time, they had long since vanished by the time of this excavation. The small size of the rectangular stain suggested that this hole was dug to serve as a grave for a child. However, there was no evidence that the hole was ultimately used for that purpose.

Burial VIII (BK21)

Burial VIII was a 7.5' by 2.5' rectangular stain with mottled clay fill 5' south of Burial II. It was aligned with the cardinal directions, the long side running east/west, and parallel to Burial II. This feature was off line of Burial I, rotated slightly clockwise 10°. Burial VIII contained two layers, grave fill above the skeleton (BK21A), and the bones surrounded by the body stain (BK21B). The grave fill had brick and charcoal inclusions in it (no more than .5" in diameter), as well as a complete English pipe bowl and adjoining stem fragment whose bore was 7/64" in diameter (ca. 1650-1680). Other archaeological contexts have dated the shape of this Bristol-type bowl and the "WC" maker's mark on its heel to ca. 1630-1650 (Nöldeke 1969, 303). The intersection of these chronologies hinted that the grave was filled some time around 1650. The skeleton was 2.4' below modern grade. The preser-
vation was poor with less than 25% of the skull complete, and less than 25% of the post-cranial bones in tact. Only fragments of the skull and slivers of the long bones remained. The skeleton was extended on its back and undisturbed. The skull tilted toward and rested on the north side of the grave. The burial was not oriented along traditional Christian norms. The skull was at the east end and the legs were at the west, making this a reversed burial due to its close proximity and parallel alignment with Burial II, the other backwards burial, this was not surprising. The arms were crossed. There was no evidence of a coffin. The legs were close together and fragments of one brass pin were found, suggesting that the individual was wrapped in a shroud. Dr. Owsley determined the skeleton to be the remains of a female, between 13 to 20 years old at the time of her death. No artifacts were found associated with the bones or body stain in Burial VIII.

Burial IX (BK22)

Burial IX was a 5.5' by 2' rectangular stain with mottled clay fill, 20.2' to the south of the other burials. The feature was aligned with the cardinal directions, the long side running east/west. It was off line of Burial I, rotated slightly clockwise 10°. Burial IX contained two layers, grave fill above the body stain (BK22A), and the body stain (BK22B). The grave fill had many large brick and charcoal chunks and inclusions (many larger than .5” in diameter), but no datable artifacts. The skeleton was 1.5’ below modern grade. The preservation was extremely poor with between 0-25% of the skull complete, and none of the post-cranial bones in tact. Only the teeth remained along with the body stain. The skeleton was extended on its back and undisturbed. The remains of the skull tilted toward and rested on the north and east sides of the grave. The burial was oriented along traditional Christian norms, with the skull fragments at the west. There was no evidence of a coffin and not enough preservation to determine whether or not the individual was wrapped in a shroud. The skeleton was approximately 5’ in height.

Sheds

Shed I (BK8)

Shed I was a set of four postholes with molds that formed a 5’ square, aligning with the cardinal directions. Each posthole (BK8B, D, F, and H) was circular, 1-1.3’ in diameter, filled with brown clay and no inclusions, and reached a maximum depth of .7’ below modern grade. The round postmolds (BK8A, C, E, and G) in each hole were each .5’ across, .7’ deep, and contained brick and charcoal flecks in a dark brown sandy loam. The only artifact recovered from the fill of these postholes was a nail fragment. The northeast corner of Shed I cut Burial I, indicating that it post-dated the filling of the grave. Shed I was half way between Pit I and Burial V, 5.3’ from each.

Shed II (BK14)

Shed II was a set of four postholes without molds that formed a 4’ square, aligning with the cardinal directions. Each posthole (BK14B, D, F, and H) was circular, 1-1.3’ in diameter, and ranged in depth from .4-.6’. The postholes contained brown clay fill with large brick and charcoal inclusions (.5” in diameter and larger). Shed II produced no artifacts and was located 8’ west of Well II and 2’ east of Pit II and Fence Line I. The northeast corner of Shed II cut Well Boom I.

Figure 45. Sectioned posts of Shed 1, with the east half of Burial 1 in the foreground. The northeast post cuts Burial 1.

Figure 46. Fully excavated Shed 2. Its northeast post (bottom right) cuts Well Boom 1.
Shed III (BK28)

Shed III was a set of four postholes that formed a 5' square, aligning with the cardinal directions. Each posthole (BK28 B, D, F, and H) was somewhat square-shaped, 1.5' to a side, and oriented north/south and east/west. The holes ranged in depth from 3.9' below modern grade and consisted of brown clay fill with no inclusions. The round postmolds (BK28 A, C, E, G) in each one were each .5' across and also ranged between 3.9' below modern grade in depth. The molds consisted of yellow/brown clay and had small brick and charcoal inclusions. Shed III was 4' north of Well III and 8.4' south of Shed IV.

Shed IV (BK40)

Shed IV was a set of four postholes that formed a 5' square, aligning with the cardinal directions. Each posthole (BK40 C, E, G, J) was square and 1.5' to a side. The northwest, southwest, and southeast postholes (BK40 C, G, J) were aligned with the cardinal directions, but the northeast posthole (BK40 E) was oriented 45° off of the cardinal directions. The holes ranged in depth from .4-.6' below modern grade and consisted of brown clay fill with no inclusions. The round postmolds (BK40 A, B, D, F, H) in each one were each .5' across and ranged between .4-.6' below modern grade in depth. The molds consisted of yellow/brown clay and had small brick and charcoal inclusions. Shed IV was 4.0' north of Fence Line II and 8.4' north of Shed IV, although not directly in line.

Pits

Pit I (BK7)

When first trowel-cleaned after the plowzone had been removed mechanically, Pit I was a circular stain, 5.3' in diameter, on the north edge of the burial ground. 3.5' east of Burial III, 6.2' west of Burial I, and 4.9' west of Shed I, Pit I contained one uniform brown sandy loam fill layer (BK7A). Excavators recovered Jamestown coarseware, an iron strap, and English ball clay tobacco pipes from this feature. Pit I had gradually sloping sides and reached its maximum depth .8' below modern grade.

Pit II (BK9)

Pit II was an amorphous dark brown stain, 8' along the north/south axis and 3.5' along the east/west axis, with many .2-.3' brick and charcoal fragments. It cut Fence Line I and was 1.1' west of Shed II and 7' west of Well II. Pit II had two layers, an upper dark brown sandy loam with brick and charcoal inclusions, and a lower mottled brown and yellow clay strata with no inclusions. The top layer (BK9A) reached a maximum depth of .5' below modern grade. The bottom layer (BK9B) was of a uniform depth of .8', except at the center where it sunk to 1.2'. Pit II's top layer included Martin's Hundred pottery, nails, and Chesapeake tobacco pipes. The bottom layer contained delftware, case-bottle glass, and nail fragments.
Ditches

A series of ditches divided site 44JC 568. Three different types of ditch, differentiated by width, were uncovered and excavated. A set of parallel 4' "Wide Ditches" bounded the east and west edges of the east half of the site. Two "Narrow Ditches," each 2.5' across, ran perpendicular to the two wide ditches. One marked the southern site boundary and the other split Wells I and II from the graveyard. A third narrow ditch, also 2.5' wide, formed a large irregular pentagon with sides averaging 120'. This nearly complete polygon intersected the western wide ditch and encompassed over 18,500 square feet. The third group of ditches, labeled "Fence Lines" were 5' wide and some contained faint traces of circular posts .3' in diameter. These ditches are discussed by type.

Wide Ditch I (BK15, 38)

Wide Ditch I was over 280' long, straight, and oriented north/south. It tapered to a point at its north terminus, 40' north of the intersection with Narrow Ditch I. Wide Ditch I ran perpendicular to Narrow Ditch I and Narrow Ditch II and connected them 125' apart. Wide Ditch I continued south from its junction with Narrow Ditch II for at least 115', well beyond the area that was to be impacted by the road right-of-way. No features were uncovered in the area mechanically stripped to the east of Wide Ditch I, suggesting that this ditch served in part as the eastern site boundary. Archaeologists divided Wide Ditch I into four segments, the northernmost 30' (which was left unexcavated), the next 20' to the south (BK15) which included its intersection with Narrow Ditch I, an additional 20' to the south (BK38), and the remaining 210+ (which was not excavated). The 40' of Wide Ditch I that was dug (BK15 and BK38) contained brown clay fill with brick and charcoal inclusions. Wide Ditch I had gradually sloping sides and its base was 1.1' below modern grade. When fully excavated it sloped downward toward the south, lowering in absolute depth .2' over 40' from the northern edge of BK 15 to the southern edge of BK 38. Excavators uncovered a variety of artifacts from this feature including an iron peat spade, Chesapeake pipes, case-bottle glass, and such ceramics as Border ware, Red Border ware slip decorated in Metropolitan style, delftware, Jamestown potter, North Devon fine gravel, Rhenish and Frechen stoneware, and Montelupo.

The Montelupo sherds were part of a shallow tin-glazed dish, manufactured and used in the second quarter of the 17th century. The fragments depicted a character named Brighella from the Italian commedia dell'arte-a play with a predictable plot performed by a traveling troupe that stopped in small European towns during the Renaissance (Wilson 1987). The tradition continues on in modern times. On this vessel and others of its kind, Brighella was
painted wearing a mask and a cape. A comedia dell’arte web site gave elaborate insight into Brighella’s character.

“[Brighella was] the most disturbing character of the comedy... Murder and theft were second nature to him, the dagger being a substitute for the slapstick. His audience accepted his evil and comic rascality because it was broad and aimed at his favorite enemy— the aristocracy. Brighella was a man of great charisma but no conscience.” (ozi.com/commedia web site)

Brighella was one of the first two characters used in comedia dell’arte plays. Archaeologists rarely find Montelupo pottery at historic Chesapeake sites, with isolated finds at Jamestown Island, Martin’s Hundred, Flowerdew Hundred, and Mathews Manor being exceptions to this general rule (Hurst 1986:18, Noel Hume 1979:319).

Wide Ditch II

(BK36, 37, 48, 49, 50, 51, 52, 53)

Wide Ditch II, also 4’ wide, straight, and oriented north/south, was parallel to and 160’ to the west of Wide Ditch I. It gradually tapered to a point at its south terminus yet came to an abrupt squared off northern end. Wide Ditch II was 295.5’ in total length and comprised of a 47.5’ section to the south of Narrow Ditch II, a 78’ segment between and including the intersections with Narrow Ditches II and III, and a 170’ segment to the north of Narrow Ditch III. Archaeologists dug eight of the 17 northernmost 10’ sections of Wide Ditch II (BK36-37, 48-53), but the ditch fill to the south of Narrow Ditch III was left unexcavated. Each of the 10’ segments that were dug had nearly identical profiles—a solitary and uniform dark brown clay strata with...
bricks and charcoal inclusions and no evidence of laminated or washed-in fill layers. When fully excavated Wide Ditch II sloped gradually downward toward the south, lowering in absolute depth .4' over 110' from the northern edge of BK 51 to the southern edge of BK 36. It contained sherds of Jamestown coarseware and delftware, as well as English and Chesapeake tobacco pipe stems. One of the ball clay pipes had an "RC" maker's mark on its heel, dating to ca. 1630-50, and thus supporting the date range established by the ceramics (Straube, personal communication).

Narrow Ditches

Narrow Ditch I (BK12)

Well II was bounded on the east side by a large modern amorphous anomaly, which contained many barbed wire fragments and the imprints of large tire treads. The overall exposed shape of this modern feature was somewhat triangular and 80.7-86.1' to a side. Narrow Ditch I ran east from the southeast edge of the modern tractor anomaly. This ditch was 2.5' wide, 1' deep, and continued east for 40' where it stopped and formed a "T" with Wide Ditch I (BK15). The westernmost 30' of Narrow Ditch I was designated BK 12A, while the easternmost 10' was labeled BK 12C. These designations described the same fill level. The ditch fill was a uniform brown clay with much brick and charcoal and no evidence of multiple layers that silted in and gradually filled the ditch. Narrow Ditch I sloped downward toward the east, running away from Well II and toward its junction with Wide Ditch I. Over its 40' length, from the west edge of BK 12A to the east edge of BK 12C (the union with BK 15), it lowered .3' in absolute depth.

Narrow Ditch I contained 25 nearly full Chesapeake pipe bowls, many of which were faceted, elaborately incised, and/or rouletted. Some of the pipes-those with quatrefoil heels or rims rouletted with diamonds within zigzags-were similar in decoration and form to those found at the Boldrop site in Newport News (44NN40). Boldrop dated to ca. 1625-45, and had the quatrefoil-heeled pipes in sealed contexts from the 1640s (Straube, personal communication). Pasbehay Tenement, ca. 1630-40, also contained Chesapeake pipes decorated in this manner (Outlaw, personal communication). Many
of the Chesapeake pipes with quatrefoil heels from Narrow Ditch I had an asterisk or “x” incised in the center of the pipe heel as well. Narrow Ditch I also contained sherds of Frechen stoneware, North Devon sgraffito slipware, English trailed slipware, Spanish coarseware, and Jamestown coarseware. Two of the English ball clay pipes found in this feature had maker’s marks on them. One was another “RC” designation. The second was a compound mark—a “GG” astride a vertical arrow with a diagonal line running from the center of the arrow down and to the right and then straight down. An identical maker’s mark was found on a pipe stem and heel from a plowzone context over the area of the original 1607 James Fort at Jamestown Island (J1 R129A).

Some of the plowzone above Narrow Ditch I and Wide Ditch I was excavated by hand, as opposed to heavy machinery, because a small grove of trees occupied this eastern area of the site. The area was not bladed, and archaeologists dug around the tree roots with shovels and trowels to expose and excavate the ditches, screening the fill through quarter-inch hardware cloth. This plowzone, ranging in depth from 0.9-1.2’, was dug in 5’ by 5’ square units along the grid lines (BK 250-257).

Narrow Ditch II

Narrow Ditch II ran perpendicular to Wide Ditches I and II and connected them. At its eastern edge Narrow Ditch II, like Narrow Ditch I, stopped and formed a “T” with Wide Ditch I. It continued west for over 160’ where it crossed Wide Ditch II. The western extent of this ditch was well beyond the endangered area of the site. No features were uncovered in the area bladed to the south of Narrow Ditch II, suggesting that it served in part as the southern site boundary. Narrow Ditch II was not excavated.

Narrow Ditch III

Out of the five ditches uncovered at 44JC568, only Narrow Ditch III strayed from a strict cardinal direction orientation. Also, whereas the other ditches maintained a uniform width of either 2.5’ or 4’ for their entirety, Narrow Ditch III varied in width from 1.7-2.5’. Overall, it formed a large pentagon with an open northeastern corner. The eastern segment was 87.1’ long, oriented north/south, came to a squared of edge at its north end, and parallel to and 8.1-11.6’ east of Wide Ditch II. At the southern edge of the eastern ditch section, it turned a corner, crossed Wide Ditch II after 11.6’, and headed west southwest for 142.8’. After a 2.1’ gap, the ditch turned and was oriented north northwest for 100’. Another 2.1’ gap separated this western ditch segment from an adjacent 45.2’ northwestern section. The northern pentagon side of Narrow Ditch III had three 22.3-35.5’ gaps between ditch segments. With the exception of a dozen anomalous soil disolorations, likely treeholes, the segment of Wide Ditch II; and one possible posthole (a 2’ square), there were no features in the area bounded by Narrow Ditch III. Archaeologists divided the east section of Narrow Ditch III into 10’ blocks and excavated them. Each of these ditch segments (BK 29-35, 39) were 2.5’ wide and 1’ deep, and full of brown clay with brick and charcoal inclusions. Over the 80’ from the northern extent of BK 39 to the southern limits of BK 29, the ditch sloped gradually down toward the south, lowering .3’ in absolute elevation.

Narrow Ditch III contained a wide array of artifacts including Frechen stoneware, North Devon sgraffito slipware, English trailed slipware, North Devon gravel temper, Spanish coarseware, delftware, Westerwald stoneware, and Chinese porcelain. The Chinese porcelain wine cup was neatly painted with a scroll and flame pattern and of a type that had been recovered from other Jamestown area sites. The example from the Buck site is more heavily potted and its scroll and flame frieze are higher up on the cup than on other Wan Li examples. These flame cups, on the basis of their being found on two shipwrecks, the Witte Leeuw and the Hatcher, dated to ca. 1613-44 (Straube, personal communication).
Three nearly complete ceramic vessels came out of this ditch as well. Two were Jamestown coarseware. The other was an unusual bowl, 11" in diameter and 3.5" tall, that had a tan body and burnishing on the surface. It had been hand-thrown, and had a small slightly off-center pedestal foot at its base. Its physical form resembled Colonoware pottery of African and/or Caribbean origin (see Ferguson 1992, 30). Although historical archaeologists in the Chesapeake usually find Colonoware in late 17th-century and 18th-century contexts, pre-1650 Tidewater examples have been uncovered (Mouer 1993).

Fifty-nine percent of the English pipe stems that came out of Narrow Ditch III had bores 8/64" in diameter. One of the complete ball clay pipes had a maker’s mark on its base, an “RG” dating to ca. 1630-50. Archaeologists recovered five complete Bristol-type pipe bowls, manufactured and used ca. 1630-50. Four of the pipes were marked although one mark was indecipherable. There was an “RC,” a “WC,” and an “EL.” Bristol pipemaker Edward Lewis made and marked pipes with this “EL” insignia from ca. 1631-41 (Straube, personal comm.).

A 5.2’ by 2.1’ Narrow Ditch III section on the north pentagon side, bounded on the east and west side by ditch gaps was excavated (BK 41). It was 1.1’ deep, contained a single strata of dark brown loam, but had no artifacts in its fill.

Fence Lines

Fence Line I (BK10)

Fence Line I was a ditch .3’ deep and 1’ wide, 13.1’ to the west of Wells I and II, consisting of three segments, and forming an “L.” The southernmost section was oriented north/south, 12.4’ long, and cut by Pit II. After a 2.5’ gap, Fence Line I continued north for 16.7’ and then turned west for 12.9’. A 1.9’ gap separated this section from an additional east/west 4.3’ segment. In the southernmost section, excavators uncovered three small postmold stains in the ditch (BK10B,C,D), each circular and ranging in diameter from .5-.7’. The fence line ditch contained two layers, a top brown loamy matrix (BK10A) and a bottom mottled orange and yellow clay (BK10E). The postmolds consisted of brown clay fill with brick and charcoal inclusions. Archaeologists uncovered only one artifact in Fence Line I, a sherd of English trailed slipware that crossmended with a sherd from Narrow Ditch I. It was Red Border ware that had...
been slip-decorated in imitation of Metropolitan slipware, produced ca. 1630-65.

Fence Line II

A second L-shaped fence line was uncovered to the north of Well III, in between Shed III and IV. Fence Line II had a 4.3’ north/south section that connected to an 11.2’ east/west section. Square postholes with circular molds were at each end of Fence Line II, which was not excavated.

Faunal Remains

Analysis on the faunal material from 44JC568 was undertaken well after initial drafts of this report were written. As a result, the following faunal summary, completed by Heather Lapham, strays from the previous report format that described and inventoried prominent site features. All faunal material was identified using modern comparative collections and published reference sources. The data recorded included taxon, skeletal element, element side, degree of epiphysis fusion, presence of burning, evidence of human modification and animal gnawing, and bone weight to the nearest tenth of a gram. In addition, the Number of Identified Specimens (NISP) and the Minimum Number of Individuals (MNI), both standard measures in zooarchaeological analysis, were calculated. All MNI’s for the 44JC568 assemblage were based on teeth. Teeth, particularly the enamel, tend to be a sturdy bone and generally preserve well, whereas much of the postcranial bone was in fairly poor condition.

The Buck site faunal collection yielded a total of 1,307 specimens weighing 4,541.8 grams. In total eight mammalian species were identified. Domestic mammals included: horse (Equus caballus), cow (Bos taurus), pig (Sus scrofa), and cat (Felis catus). The wild mammals in the assemblage were: white-tailed deer (Odocoileus virginianus), beaver (Castor canadensis), and opossum (Didelphus marsupialis). In addition to mammals, faunal remains from 44JC568 included birds, fish, and turtle. Over 80% of the animal bones recovered came from the wells, with Wells I and III each containing over 400 individual specimens.
Figure 59. Site 44JC568 Fauna

<table>
<thead>
<tr>
<th>Taxon</th>
<th>NISP</th>
<th>% NISP</th>
<th>Weight (grams)</th>
<th>% Weight</th>
<th>MNI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaver (Castor canadensis)</td>
<td>1</td>
<td>0.1</td>
<td>1.6</td>
<td>*</td>
<td>1</td>
</tr>
<tr>
<td>Domestic cat (Felis catus)</td>
<td>8</td>
<td>0.6</td>
<td>3</td>
<td>*</td>
<td>1</td>
</tr>
<tr>
<td>Cow (Bos taurus)</td>
<td>79</td>
<td>6</td>
<td>1,279.3</td>
<td>28.2</td>
<td>9</td>
</tr>
<tr>
<td>Deer (Odocoileus virginianus)</td>
<td>21</td>
<td>1.6</td>
<td>179.1</td>
<td>3.9</td>
<td>4</td>
</tr>
<tr>
<td>Horse (Equus caballus)</td>
<td>16</td>
<td>1.2</td>
<td>1,575.9</td>
<td>34.7</td>
<td>3</td>
</tr>
<tr>
<td>Opossum (Didelphis marsupialis)</td>
<td>3</td>
<td>0.2</td>
<td>4.1</td>
<td>0.1</td>
<td>2</td>
</tr>
<tr>
<td>Pig (Sus scrofa)</td>
<td>65</td>
<td>5</td>
<td>172.5</td>
<td>3.8</td>
<td>10</td>
</tr>
<tr>
<td>Unidentified very large mammal</td>
<td>643</td>
<td>49.2</td>
<td>1,038.2</td>
<td>22.9</td>
<td>---</td>
</tr>
<tr>
<td>Unidentified large mammal</td>
<td>292</td>
<td>22.3</td>
<td>261.7</td>
<td>5.8</td>
<td>---</td>
</tr>
<tr>
<td>Unidentified medium mammal</td>
<td>10</td>
<td>0.8</td>
<td>3.6</td>
<td>0.1</td>
<td>---</td>
</tr>
<tr>
<td>Anatidae family (ducks, geese)</td>
<td>15</td>
<td>1.1</td>
<td>3.4</td>
<td>0.1</td>
<td>---</td>
</tr>
<tr>
<td>Unidentified medium/large bird</td>
<td>19</td>
<td>1.5</td>
<td>4.8</td>
<td>0.1</td>
<td>---</td>
</tr>
<tr>
<td>Unidentified fish</td>
<td>6</td>
<td>0.5</td>
<td>0.7</td>
<td>*</td>
<td>---</td>
</tr>
<tr>
<td>Unidentified turtle</td>
<td>1</td>
<td>0.1</td>
<td>1</td>
<td>*</td>
<td>---</td>
</tr>
<tr>
<td>Unidentified to class</td>
<td>128</td>
<td>9.8</td>
<td>12.9</td>
<td>0.3</td>
<td>---</td>
</tr>
<tr>
<td>Totals</td>
<td>1,307</td>
<td>100%</td>
<td>4,541.8</td>
<td>100%</td>
<td>30</td>
</tr>
</tbody>
</table>
Figure 60. Ceramic type intersection date range for entire site.

CERAMIC TYPE
INTERSECTION DATE RANGE
ENTIRE SITE

1600 1610 1620 1630 1640 1650 1660 1670 1680 1690 1700

MARTINCAMP: 1550-1650
MERIDA COSTREL: 1550-1650
SPANISH OLIVE JAR: 1550-1650
FRECHEN STONEWARE (BELLARMINE): 1550-1700
BORDER WARE: 1550-1750
RHENISH STONEWARE (WESTERWALD): 1550-1775
CHINESE WAN-LI PORCELAIN: 1573-1644
MONTELUPO: 1575-1650
STARRED COSTREL: 1580-1670
DELFITWARE: 1600-1800
MARTIN'S HUNDRED: 1620-40
JAMESTOWN: 1630-45
NORTH DEVON SGRAFFITO SLIPWARE: 1630-1700
RED BORDER WARE: 1630-65
"WC" PIPE BOWL MARK: 1630-50
"RC" PIPE BOWL MARK: 1630-60
"GG" PIPE BOWL MARK: 1630-60
"RG" PIPE BOWL MARK: 1630-50
"EL" PIPE BOWL MARK: 1631-41
PIPE BOWL SHAPE-INTERSECTION: 1645-1660
PIPE BOWL SHAPE-INTERSECTION: 1620-1680
DATE RANGE
1630-1650
NO WINE BOTTLE GLASS
T.A.Q. 1650
Interpretations

Time

Entire Site

The 12,000+ artifacts recovered from 44JC568 indicated that this site was occupied from ca. 1630-50. The absence of wine bottle glass in any context provided the site with a terminus ante quem of 1650. The production dates of some of the ceramic types, especially Jamestown coarseware, suggested a terminus post quem of 1630. Although these ceramics could have been brought to a site that had already been inhabited for a decade, the intersection of ceramic production dates nonetheless reflected a 1630-50 occupation. The bore sizes of the 102 ball clay pipe stems supported this date range, with only 5% (5 total) measuring 9/64” in diameter (pre-1620) and the average bore diameter (7.647) indicating a Binford mean date occupation of 1639.2736 (April 10, 1639). A Harrington histogram on the English pipe collection demonstrated a major peak at 8/64” (59%; 1620-50). It also revealed a substantial number with bores 7/64” in diameter (32%; 1650-80), suggesting a more intense occupation at the Buck site during the latter half of the 1620-50 time period and perhaps lingering activity at the start of the second half of the 17th century. Overall, the artifact assemblage-specifically the Merida costrel, Montelupo, Starred costrel, delftware, trailed slipware, Spanish olive jar, Rhenish stoneware (Westerwald), Frechen Stoneware (Bartmanns), Chinese porcelain, English pipe bowl shapes, and pipemaker’s marks “EL,” “RC,” “WC,” and “GG”-supported a 1630-50 date range. Some of the different features at 44JC568 maintained slightly different date ranges within the larger temporal context, suggesting phases; others contained crossmends and indicated inter-feature congruence. The discussion that follows places each well, burial, shed, pit, and ditch into a general, yet circumstantial and tentative, chronology.

Well Chronology

Occurrence seriation of English pipe stems supported a distinct chronological sequence for the three wells. This analytical tool revealed a remarkably clear pattern. Well III was the only one of the three to have bores 9/64” in diameter, Well II provided the lone examples of pipe stems with bores 6/64” in diameter, and all three contained many 8/64” pipes. Since Harrington long ago established the overall trend of English pipe-stem bores reducing in diameter over time, there is little chance that this Well III-I-II (or 9/64”-8/64”-7/64”-6/64”) sequence is backwards (Harrington 1954, 10-14). The range of error for many of the dating methods used here, not including the pipe stem seriation, was precipitously close to the time spans being considered. An occurrence seriation for all ceramics from sealed contexts with more than 400 sherds failed to demonstrate a definite chronology, although it was somewhat supportive of the sequence proposed by the pipe-stem seriation (Appendix A). As a result, an

![Figure 61. English pipe-stem histogram for entire site.](image1)

![Figure 62. English pipe-stem occurrence seriation for Wells 1, 2, and 3. “x” denotes presence.](image2)
additional viable interpretation, that chronology was impossible to deduce, was considered. Ultimately, other lines of evidence—crossmends, mean dates, and analogous spatial configurations—supported the Well III-I-II sequence.

Well III, on the basis of the artifacts recovered from it, was likely the earliest of the three wells. Seventy-three percent (8 out of 11) of its English pipes had bores 8/64" in diameter, suggesting a 1620-50 date range. Both Well III’s pipe histogram shape and pipe mean date (1629) suggested that it was filled at the same time or slightly earlier than Well I. The production dates of the ceramics in Well III also indicated that this feature was either open at the same time or slightly earlier than Well I. Certain negative evidence suggested that Wells I and III were not filled contemporaneously. For a site that maintained a relatively small variety of ceramic types, few overlapped between the two features. They both had Frechen stoneware, delftware, and Jamestown and Martin's Hundred coarseware, but Well I had Dutch coarseware, while Well III had Native American Roanoke Simple Stamped pottery, North Devon finegravel, North Devon plain, Rhenish stoneware, Colono ware (Afro-Caribbean pottery?), and Merida costrel. Furthermore, none of the ceramics between Wells I and III crossmended. It is unlikely that both of these wells would have been used and filled at the same time with 1) no crossmendable artifacts entering their fill and 2) only 36% (4 of 11) ceramic types in common. This circumstantial evidence supported the chronology established by the pipe stem seriation, indicating that these features were likely filled at different times, with Well III pre-dating Well I.

Excavators found sherds of a single North Devon sgraffito slipware dish in nearly everyone of Well III's 17 layers. This vessel resembled a sgraffito plate uncovered at Martin's Hundred's Site B, which was occupied during the 1620s (Noll 1979, 118). In the museum of Exeter archaeologist John Allan dated this dish ca. 1625-45 (personal communication). Many sherds of a crossmended Jamestown Potter vessel (1630-45) also came from different layers in the feature. Multiple intra-feature multi-layer crossmended vessels supported the notion that those living at 44JC568 quickly filled Well III.

Well I, the wood-lined barrel well, contained many datable artifacts. Ceramic type production dates from local coarse wares, including those from Jamestown and Martin's Hundred potters; Frechen stoneware, and delftware placed the fill of this feature within a 1630-50 context. Temporal information discerned from the feature's ball clay pipe stems corresponded with the initial ceramic chronology. Seventy-six percent (19 of 25) of Well I's English pipe stems had bore diameters of 8/64", suggesting an intensive second quarter 17th-century occupation, centered about the year 1634. Few ceramics from Well I's different layers crossmended, suggesting that it was filled more slowly than Well III.

Well II, the barrel lined well with bricks and stones wedged in along the shaft, maintained similar ceramic types from top to bottom, with sherds of a single crossmended Frechen stoneware vessel in nearly every layer.

Figure 63. English pipe-stem histogram for Well 3.

Figure 64. English pipe-stem histogram for Well 1.
stoneware, Jamestown Potter, Martin's Hundred Potter, North Devon Fine Gravel, Martincamp, and delftware were nearly identical to those from Well I, and likewise, reflected a 1630-50 fill date. Unlike the previous well, Well II's English pipe stems suggested a later temporal range. A histogram indicated a post-1650 occupation with a 1654 midpoint, intimating that Well II post-dated Well I. However, since these calculations were based on a meager sample size of eight pipe stems the dates they provided were suspect. Like Well III, Well II, because of the intra-feature multi-layer crossmends, was likely filled quickly.

A set of crossmended stoneware fragments linked the fill of Wells I and II. A Frechen bottle (Bartmann) base sherd from the fourth layer of Well I (BK 11D) mended with two others from the middle strata of Well II (BK 2D & 2E). The crossmend suggested that these layers were deposited contemporaneously, seemingly contradicting the previous notion that Well II post-dated Well I. Yet, a layer by layer analysis of Well I's artifacts revealed a subtle temporal dividing line within this feature. The bores of the ball clay pipe stems demonstrated this apparent distinction. A quarter of the English pipes from the top four layers (BK 11A-D) had bores 7/64" in diameter, suggesting an occupation that possibly lingered later into the 1650s. Ball clay pipes from the bottom eight layers (BK 11E-L) were exclusively 8/64" in diameter, hinting at a 1620-50 date range. As before, these calculations were based on insufficiently small sample sizes (22 and 3). They were merely used to offer alternatives to the previous chronological contradiction concerning the depositional sequence of Wells I and II. Instead of 44C568's occupants filling these wells simultaneously (as inferred from the ceramic production dates) or first completely filling Well I and second Well II (as intimated by the holistic feature pipe stem histograms), this alternative suggested that those living at the Buck site initially used and then deposited their trash the bottom of Well I, and later dug, used, and filled Well II, in addition to filling the rest of Well I. The intra-feature crossmends supported this scenario, with Wells III and I apparently filled quickly (based on the multi-layer North Devon sgraffito, Jamestown Potter, and Frechen vessels), and Well II filled more slowly.

Analysis of the faunal remains from the wells indicated that each of these features had distinctive fill, supporting the theory that the refuse in Wells I, II, and III was likely deposited by different individuals or at different times. Well III contained the remains of domestic mammals (cow, horse, and pig) and an isolated deer specimen. In striking contrast, the bones from Well I were from a variety of wild animals (opossum, bird, fish, beaver, and deer) as well as cat and the aforementioned domestics. Well I's faunal assemblage was also unique in that it contained the only butchery marks. Knife cuts were observed on four deer specimens—a femur, a radius, and two scapula fragments. A hack mark, possibly from sort of cleaver-like tool was noted on a horse radius-ulna. The fauna from Well II was entirely domestic (cow, horse, and pig), and unlike the other two wells contained no deer bone. Overall, the fauna in Well I was significantly different from Wells II and III.

Few historical sites had multiple contemporaneous wells within 100' of each other. The exceptional cases were tied to specific non-domestic site activities, like leather tanning and brick making. For the most part, localized domestic groups of 17th-century Chesapeake inhabitants dug and used one well at a time. Because of this, Tidewater archaeologists have found that wells anchor sites (Hazzard, personal communication). Wells are usually solitary and found within 50' of domestic structures, and rarely more than 80' away from a dwelling (Kelso 1984, 153; Kelso, personal communication; Luccketti, personal comm.; Outlaw, personal comm.).

The Church Neck Wells site contained 10 wells within 90' of one another, seven of which were barrel lined, and all dating ca. 1690-1730. Many of

Figure 65. English pipe-stem histogram for Well 2.
these were likely active at the same time. The wells were associated with a specific historically documented industrial activity-leather manufacture and shoemaking. The archaeological record strongly supported the tannery hypothesis for the site. Excavators uncovered the remains of 10 different leather shoes, as well as leather offcut fragments. Morgan, Straube, and Luccketti explained in their report that the site's features corresponded with inherent tanning necessities. They wrote,

...a tannery... requires water for most of the lengthy leather-making processes. In fact, water is one of the basic raw materials required for tanning, along with hides, oak bark, and lime (Thomson 1981:174). The preliminary process for preparing a hide was washing “which took about 30 hours to clean the skins” (Welsh 1964:18-19). “It was normal practice for hides to go through a series of immersions, hence a tannery site required numerous pits” (Crossley 1990:219).

Thus, the many contemporaneous wells at the Church Neck Wells site were tied directly to the local industry (Morgan, et. al. 1997, 9-14, 23-38).

Carter’s Grove also had two wells in close proximity; they were located within 60’ of each other. These 18th-century features, Wells A (CG1315) and B (CG1111), were associated with at least five brick clamps. The wells were an integral part of the brick making process, as were drainage ditches to carry the water to the catch basins next to the clay. (Kelso 1972, 2) Kelso explained in his report,

...the plan... of an eighteenth-century brickyard... includes a day mixing area at one end of the site complete with a well without a wellhead and a ditch to carry water from the well to catch basins or pits from which water was thrown onto piles of clay for mixing with hoes. Well B, with its two ditches leading to Pit A (basin?) found by archaeology at Carter's Grove generally follows the same plan.

As in the previous example, contemporaneous historic wells in close proximity to one another resulted from specific industry as opposed to general domestic activities. Although 44JC568 contained multiple wells and ditches, similar to a brickyard, it lacked evidence of clay pits, catch basins, brick clamps or kilns, or brick wasters. Since excavations at the Buck site did not reveal evidence of most of the essential and auxiliary brick making components, it is highly unlikely that its wells were dug to serve that purpose.

Overall, closely located contemporaneous wells at historical sites reflected distinct industrial activities. For the most part, groups of occupants living in a confined site area used one well at a time. This general rule indirectly supported the aforementioned temporal observations concerning 44JC568’s three wells. Since no evidence of industrial activity was uncovered at the site, these wells were likely dug and used at separate times.

Another factor that might support the contention that these wells were not contemporaneous was that each had a different barrel combination at its base. Well I had a medium-sized barrel with iron straps underneath a wooden lining, Well II included a larger barrel without iron straps and numerous broken bricks and rocks wedged in around the well shaft, and Well III contained a small barrel on top of a medium-sized barrel, both without iron barrel bands. Although this difference might reflect a dearth of common materials (or a wealth of variable materials) available to those living at 44JC568, it also might indicate a link between a material difference and a chronological one as well. Simply put, if the wells were dug at the same time, why would they not be made in a similar style with similar materials?

In summary, ceramic production ranges, English pipe stem histograms and mean dates, inter- and intra-feature ceramic crossmends and type variety, faunal differences, the paucity of non-industrial contemporaneous multi-well sites in the Chesapeake and the absence of industrial features at the Buck site, and the three different barrel combinations suggested that 44JC568’s three wells were dug, used, and filled at different times. Although some of the evidence was circumstantial and many of the dating methods were based on insufficiently small samples, the relative well chronology at the Buck site was: 1) Well III, 2) Well I, and 3) Well II. Site inhabitants deposited their garbage into these features from ca. 1630-50. It is likely that Well III was filled quickly sometime in the 1630s, the bottom of Well I was filled in the late 1630s and early 40s, and the top of Well II and all of Well II were filled in the late 1640s and early ‘50s.

Burial Chronology

With only one datable artifact from the nine burials, establishing a definite and absolute chronology for these graves was impossible. However, three factors aided in placing these burials in speculative relative order. First, there were four different
general amounts of brick and charcoal in the fill of
the respective grave shafts: 1) none of either, 2)
small charcoal flecks up to .5" in diameter but no
brick inclusions, 3) charcoal and brick inclusions
up to .5" in diameter, and 4) large charcoal and
brick inclusions over .5" in diameter. Second, dif-
ferential grave alignments provided additional in-
sight into the burying scheme at 44JC 568. Third,
there were three pairs of burials on the basis of com-
mon size, internal orientation, and proximity: 1) II
and VIII, 2) III and IV, and 3) VI and VII.

Burials I, III, IV, V, VI, and VII had no brick in
their fill, Burials II and VIII had small flecks, and
Burial IX had large chunks. With Shed I cutting
Burial I, and Shed I having brick in its post molds
but not in its post holes, an expected pattern of "no
brick in fill" pre-dating "brick in fill" resulted. Thus,
a brick gradient likely corresponded with a tempo-
ral gradient. Consequently, Burials I, III, IV, V, VI,
and VII were probably dug and filled before Burials
II and VIII, which likely predated Burial IX.

Although all of the burials were placed along a
ture east/west axis, there were two slightly different
orientations. Burials I, VI, and VII were oriented
10° counterclockwise or southwest of Burials II, III,
IV, V, VIII, and IX. This differential grave orienta-
tion might indicate at least two separate burial
periods.

Burials II and VIII were most likely contempo-
aneous because of their multiple common and ex-
clusive characteristics. They both contained small
brick and charcoal inclusions and were both buried
opposite of traditional Christian norms with the
head placed at the eastern end. The English pipe
bowl (ca. 1630-50) and adjoining stem (ca. 1650-
80) found in the fill above Burial VIII was likely
produced in the 1640s or '50s. Each of the two sets
of child burials also appeared to be dug and filled
concurrently. Burials III and IV both had minor
charcoal inclusions, no brick in their fill, were per-
fectly parallel, and placed in the ground only a few
feet from each other. Burials VI and VII also were
very close to one another and were perfectly paral-
lel, suggesting their temporal concurrence.

Three rules of speculative relative chronology for
44JC 568's nine burials resulted from these criteria
of brick inclusion, orientation, and respect for grave
pairs. First, according to the brick gradient, Burials
I, III, IV, V, VI, and VII predated Burials II and
VIII, which were dug and filled before Burial IX.
Second, via the different orientations Burials I, VI,
and VII were separate and likely temporally distinct
from Burials II, III, IV, V, VIII, and IX. Third, fol-
lowing the sets of grave pairs, Burials VI and VII
were contemporaneous, as were Burials III and IV,
and Burials II and VII. A single relative chronology
resulted from these three standards. Following these
rules, only one sequence was possible. It contained
four stages and was:
1) Burials I, VI, and VII
2) Burials III, IV, and V
3) Burials II and VIII
4) Burial IX

Burial VIII's datable pipe bowl, maker's mark, and
stem provided the only absolute date for all of these
graves, suggesting that Burials VIII and II were filled
sometime after the 1640s or '50s. Burials I, VI, VII,
III, IV, and V likely pre-date the end of this time
span, and Burial IX post-dates the beginning of it.
Shed Chronology

Only one artifact, a nail fragment, came out of the fill of the four post holes and molds that constituted Shed I, making it difficult to assign it a substantiated date range. However, since its northeast corner post cut Burial I, it definitely was constructed after the grave was dug and filled (1630-45). Circumstantially, with the absence of brick and charcoal in the post holes and the presence of those items in the post molds, the construction of the shed could be tentatively identified with the first two pre-brick burial phases at this site that likely occurred before the mid-1640s and its destruction with the moderate brick inclusion phase of Burials I and II that dated ca. 1640-50. Since it was unlikely that 44JC568’s residents would knowingly build a shed partially on top of a grave, this stratigraphic sequence suggested a change in occupants between the digging and filling of Burial I and Shed I’s construction, sometime before 1645.

Shed II’s four post holes contained no artifacts. However, since it cut Well Boom I’s original and repair post molds, it was constructed after Well II was no longer in use, sometime after 1640. The presence of large (.5” in diameter) brick and charcoal fragments in the holes linked the construction of Shed II with the last post-1645 burial phase, and further supported the post-Well II date.

Sheds III and IV neither contained datable artifacts nor cut other features. Like Shed I, they contained no inclusions in their post holes and small (less than .5” in diameter) brick and charcoal inclusions in their post molds. According to the burial ground brick gradient, this placed the construction of Sheds III and IV before the mid-1640s and their destruction between 1640 and ’50.

Pit Chronology

The artifacts from Pits I and II did not narrow their fill dates from the site’s overall occupation date. Pit II cut and, consequently, post-dated Fence Line I, which contained a crossmend with Narrow Ditch I.

Ditch and Fence Line Chronology

All of the ditches and fence lines were likely filled contemporaneously during the 1630s and 40s. Stratigraphically, the intersections of Narrow Ditch I and Wide Ditch I, Wide Ditch II and Narrow Ditch II, Narrow Ditch II and Wide Ditch II, and Wide Ditch II and Narrow Ditch III, failed to demonstrate which features were dug, used, and filled first. Excavations revealed that instead of one ditch cutting or being cut by another ditch, the features were filled simultaneously. The collective English pipe stem bore diameter histogram and mean date from 44JC568’s ditches mirrored totals for the entire site. The histograms both reflected a peak during the 1620-50 time period and some lingering activity into the second half of the 17th century. Although the ditches contained less than half of the total English pipe stems, they provided identical mean dates (1639) as well. In addition, the set of wide ditches (Wide Ditch I and II) and the set of excavated narrow ditches (Narrow Ditch I and III) each had an example of every pottery type found throughout the site. In other words, for any ceramic sherd found in a well, burial, shed, or pit, a fragment of the same pottery type was recovered from both the wide ditches and the narrow ditches. Overall, the ceramic production dates, ball clay pipe stem bore diameters, bowl shape, and maker’s marks all suggested that the ditches were filled sometime from 1630-50. These measures failed to distinguish temporally the individual ditches from one another.

Overall Chronology

Artifacts, stratigraphy, and the historical records each suggested that 44JC568 went through as series of residents during the site’s 20-year occupation. Some of the features could be placed within phases, like the wells, burials, and sheds. Others, like the pits,
Figure 68. Overall feature chronology.
ditches, and fence lines, remained in an overall 1630-50 temporal context. Figure 68 illustrates the features, ordered by type and date, and their probable construction, use, destruction and/or fill dates.

**Form**

**Well Form**

Throughout the course of excavation, archaeologists found 28 well or compass bricks, half of which were nearly complete. All were placed in fill layers, and none seemed to be in their original context. The presence of well bricks at a site usually corresponds with a brick lined well, suggesting either that a fourth well with a brick lining existed in the near vicinity or that one or more of the wells at 44JC568 had a brick lining that was later robbed out entirely. Although it is possible that these curved bricks were used for some other purpose than well lining—like constructing a brick well head and placing it over a barrel well to give it the appearance of being brick lined—hypotheses like this are unsubstantiated archaeologically, without direct historic analogs, and are thus, highly improbable. The assumption of an additional well is also highly unlikely as workers mechanically removed the plowzone from the surrounding areas, excavating the top strata from over 150' in every direction from where the compass bricks were found, and uncovered no fourth well. No evidence of steening was found at the bottom of any of the three wells that could verify the construction process of a brick lining. However, not all brick wells were built using a wooden curb. Overall, the abundance of well bricks hinted that at least one of the barrel wells at 44JC568 was brick lined, likely similar in combination brick and barrel form to Jamestown’s Well 24 and the well at the Burwell’s Landing ordinary in Kingsmill.

Several factors suggested that Well III was the most likely of the three to have once had a brick lining. First, Well III contained a majority of the site’s well bricks scattered throughout its layers. It had 20 (71%) as opposed to the six in Well II (21%), and zero in Well I. Artifacts often cluster in the general area where they were once used. Second, Wells I and II had evidence of a separate non-well brick lining in addition to their barrels, whereas Well III did not. Well I contained a wooden lining in the form of a cubical open-ended box with slightly rounded edges above its fully preserved barrel. Well II had dozens of bricks (mostly standard) and stones placed exclusively on the edges of the well shaft, suggesting that these objects were secured in place along the perimeter by additional wooden barrels. In fact, the brick and rock fragments formed a nearly perfect silhouette of a barrel. They likely aided in the well’s water percolation, simultaneously supporting the well shaft and barrels, and allowing for water to drain into the bottom barrel. Third, only Wells I and III had room in the well shaft for brick lining. The barrel in Well II was 3.7' in diameter, leaving only .3'-not enough room for brick lining. Fourth, six of the broken bricks that lined the perimeter of Well II were compass bricks, likely destruction debris from the brick lining of a previous well. Since Wells I and III predated Well II, well bricks robbed from Well III could have been deliberately broken and wedged into the gaps between the barrels of Well II and the well wall. Overall, the quantity of well bricks, the lack of additional lining, the room in the well shaft, and the debris in a later well indicated that Well III was the most likely of the three wells to have had a brick lining.
Burial Form

Dr. Owsley made the following interpretations regarding the age, sex, and race of the individuals in the burials at 44JC568 (Owsley 1997). He identified the individual in Burial I as a male on the basis of the skeleton’s moderately developed brow ridges, sloping forehead, and large tooth roots. Owsley determined that the man engaged in extremely strenuous activities during his life span because his distal left humerus had a prominent lateral ridge. The individual was identified as “white” on the basis of prominent nasal bones, straight facial profile, and sharp nasal sill. Tooth wear indicated he was likely 35 years old at the time of his death.

On the basis of femur and tibia cross-section diameters and the relatively small sizes of both mandible and mastoid process, the individual in Burial II was an adult or adolescent female. The moderately pointed mental eminence and straight facial profile suggested that she was “white.” Tooth wear indicated that she was approximately 18 to 24 years old at the time of her death.

Owsley identified the individual in Burial V as a “white” male on the basis of a high, thin, vertical forehead. Furthermore, the evident tooth wear suggested that this individual was between 15 to 25 years old at the time of his death.

Burial VIII was determined to be a female on the basis of small femal mid-shaft diameters and the small cranium and delicate mandible. Furthermore, the tooth wear indicated that she was 13- to 20- years old at the time of her death.

Owsley identified the individual in Burial IX as a 10- to 15-year old male at the time of his death on the basis of several permanent teeth with no wear and good-sized crowns.

Ditch Form

Labeling the wide and narrow ditches at 44JC568 as “boundary” and/or “drainage” ditches would incorrectly imply that the archaeology had

<table>
<thead>
<tr>
<th>#</th>
<th>Age</th>
<th>Sex</th>
<th>Race</th>
<th>Coffin</th>
<th>Shroud</th>
<th>Head</th>
<th>Grave goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35</td>
<td>M</td>
<td>white</td>
<td>no</td>
<td>yes</td>
<td>west end</td>
<td>none</td>
</tr>
<tr>
<td>2</td>
<td>18-24</td>
<td>F</td>
<td>white</td>
<td>no</td>
<td>no</td>
<td>east end</td>
<td>2 folded 1/2 coins</td>
</tr>
<tr>
<td>5</td>
<td>15-25</td>
<td>M</td>
<td>white</td>
<td>no</td>
<td>yes</td>
<td>west end</td>
<td>none</td>
</tr>
<tr>
<td>7</td>
<td>child?</td>
<td>?</td>
<td>?</td>
<td>no</td>
<td>no</td>
<td>?</td>
<td>none</td>
</tr>
<tr>
<td>8</td>
<td>13-20</td>
<td>F</td>
<td>?</td>
<td>no</td>
<td>yes</td>
<td>east end</td>
<td>none</td>
</tr>
<tr>
<td>9</td>
<td>10-15</td>
<td>M</td>
<td>?</td>
<td>no</td>
<td>?</td>
<td>west end</td>
<td>none</td>
</tr>
</tbody>
</table>
revealed the explicit function of these features—which it did not. However, certain archaeological evidence suggested that the wide and narrow ditches did serve, at least in part, to divide (or bound) the site and to transport (or drain) water. For example, Wide Ditches I and II and Narrow Ditch III clearly separated the core site area from the periphery. All of the wells, burials, sheds, and pits were inside of the area bounded by these ditches, and the adjacent periphery contained no major features other than additional ditches. Furthermore, Narrow Ditch III formed a nearly closed pentagon, bounding the given area. Also, Narrow Ditch I divided the north side of the burial ground from the rest of the site. In this fashion, each of these ditches designated spatial boundaries.

The north/south ditches tilted downward to the south, and the only excavated east/west ditch sloped gradually down to the east. As a result of their placement and slope, each of the ditches would run water away from the nearest wells. This was especially evident in the case of Narrow Ditch I, which came within 17.0’ of Well II. Narrow Ditch I was a near perfect perpendicular bisector of Wide Ditch I at Well II, hinting that this ditch was dug for water related purposes. Although the ditches had no evidence of laminated wash layers and were apparently filled in a single quick episode, were water placed in them, it would drain away from the wells to the adjacent field areas. Since the ditch intersections suggested that these features were open simultaneously, water could have been channeled almost anywhere in the area. Neck-of-Land’s poor soil quality likely required artificial drainage to farm (Hodges et al. 1985). Thus, drainage ditches would have been essential in attempts at cultivating the land in and around 44JC568. The presence of farm tools, four hoe blades and a spade (BK2E, 11C, 15A, 258A (II)), in ditch fill and upper well strata (not including the well bucket weights at the well bases) supported this theory of nearby farming by the site’s residents.

Space

Where was the house?

Archaeologists did not find the remains of a house at the site, suggesting that either:
1) there never was a domestic structure at 44JC568,
2) living quarters were nearby yet still sealed by remaining topsoil and plowzone,
3) the house remains were wiped out by the modern tractor anomaly, or
4) years of field plowing gradually erased the shallow footprint of a domestic structure that once stood in the area.

These hypotheses are considered individually.

Since living quarters were usually found within 75’ of wells not associated with industrial activities and excavators uncovered no such industry-related features, a house likely once stood at the site. The substantial amounts of domestic debris—ceramics, case bottles, faunal remains, etc.—found in the wells and ditches strongly suggested that 44JC568 was a domestic site. With the limits of excavation extended over 150’ from the wells in every direction into predominantly featureless areas, it is highly unlikely that remains of living quarters were just off site. Houses of 17th-century Tidewater English were usually located closer to, rather than farther from, their domestic debris (Deetz 1996:125).

The fill layers in the wells pointed to two specific site areas where a house likely once was constructed and occupied. The well’s depositional debris indicated that Well III had been filled from the north, Well I from the south, and Well II from the east or west. Assuming that site inhabitants did not regularly take circuitous routes to dump their garbage and simply walked straight from their house(s) to abandoned wells, living quarters should have been located north of Well III, south of Well I, and either east or west of Well II. The modern tractor anomaly was directly to the east of Well II. It was expansive and deep enough to destroy the remains of a standard sized 17th-century earthfast dwelling. However, this location was nearly 70’ from Well III, near the maximum distance a house would likely stand from a well. Perhaps a domestic dwelling in this area was built and used contemporaneously with the later and closer wells (Wells I and II). The fill of the three wells also pointed to a second area, just west of Pit II and Fence Line I. Pit II contained a hearth brick, suggesting a nearby hearth. Fence Line I could have been built adjacent to a house. If the house contained a more ephemeral architectural footprint than customary post-in-ground construction, or if it had shallow posts, centuries of field plowing might have erased it from the landscape. These two areas, to the immediate east and west of Well II, were the likeliest locations of the domestic structure or structures that housed the site’s occupants.
Figure 71. Speculative house placement. The Xs mark likely house locations.
Overall site areas

The Buck site included three main areas. Surrounding fields, likely used for agricultural ventures and maintenance of Buck cattle, were located outside of the territory bounded by the wide and narrow ditches. The site's western pentagon (bounded by Narrow Ditch III) served an unknown purpose as it contained virtually no features. Perhaps 44JC568’s inhabitants used it for farming and livestock purposes as well. The eastern open rectangle of the site (surrounded on three sides by Wide Ditches I and II, and Narrow Ditch II) exhibited a wealth of activity, with a burial ground in the southeast quadrant, wells in the northeast and southeast quarters, and a set of fence lines separating these three areas from the northwestern quadrant. A house might have stood inside of these fence lines, although one also might have been built to the east of Wells I and II.

Status & Ethnicity

Modern interpretations of 17th-century Chesapeake status frequently hinge on issues of land and labor ownership. High-status individuals owned land and the labor of low-status indentured servants, drawing a line between Buck siblings, spouses, guardians and overseers; and their indentured servants. Archaeological manifestations of status differences were seen in historic burying practices. High-status individuals were commonly laid to rest in burials with coffins, and those of low-status were usually interred in coffin-less graves. In addition, Mr. Luccketti suggested a link between status and well type, equating “wells... lined with barrels or not at all” with “a complete lack of extravagance” (1990:83). Luxurious artifacts, those of precious metal or of exotic origin, also can reflect high status, while an abundance of coarse and common items tend to indicate a past hoi polloi occupation.

Archaeological investigations produced no incontrovertible evidence as to the status and ethnic identity of the Buck site’s inhabitants, although it suggested that indentured servants (most likely “white” individuals) occupied the site from 1630-50. Potential high status items recovered from the site included gold and silver threads, Chinese porcelain and Montelupo ceramics, a snaphaunce, and a brass spur with gold gilt (Narrow Ditch I). Other possible reflections of elite behavior were the three child burials with coffins, and the many compass bricks that might have been used in a brick lining for Well III. However, the ceramics consisted primarily of coarsewares, and similar non-luxurious dominated the overall artifact assemblage. In addition, none of the adult graves contained coffins, and at least two of the wells were barrel-lined, suggesting that it was low status individuals who were living and dying at 44JC568.

Chesapeake pipes outnumbered English ball clay pipes in nearly every feature by a three-to-one ratio, and overall at the site 306 to 102. Archaeologists continue to debate the ethnic identity (English, Algonquian, African, or mixed) of those who manufactured and used these items (Harrington 1951, Potter 1993, Deetz 1993, Moen and King 1999). At the center of this debate are the intricate and varied pipe decorations that were found in abundance at the Buck site. English expansion during the second quarter of the 17th century met little Algonquian resistance in Jamestown’s hinterland, and 44JC568’s material assemblage, excluding the controversial local pipes, contained virtually no indisputably indigenous artifacts. Likewise, the historical records concerning the Buck children, spouses, guardians, and overseers at Neck-of-Land mentioned only one “Negro” in the 1624-25 Virginia Census, a servant of Richard and Jane Kingsmill named Edward (Meyer and Dorman 1995).
The Colono ware pot of possible Afro-Caribbean origin was the only artifact, again not including the local pipes, that might reflect an African ethnicity of the site's inhabitants.

A James City Court record from October 11, 1627, notes the presence of Caribbean natives near Jamestown during English occupation at the Buck site. A man named Captain Sampson brought "Indians of the Carib Ilands" to the colony with the intention of selling them (McIlwaine 1924:154-5). He was unsuccessful in this endeavor, and "the said Indians [ran] away & hid themselves in the woods." According to information given to the Court, the Caribbean natives promptly joined forces with local Powhatans, "steal[ing] away divers goods, & attempt[ing] to kill some of our [English] people." The elite judiciary members of James City- Governor Yeardley, Captain West, Doctor Pott, Captain Smith, Secretary Peirsey, Captain Tucker, and Mister Ferrar- "admonished the said Captain Sampson" for his actions, claimed that the Caribbeans he brought to Virginia were "a means to overthrow the whole Colony," and ordered that they be found immediately "& hanged till they be dead" (McIlwaine 1924:155). No additional historical documents refer to this matter, suggesting that English officials neither located nor executed the foreign renegades. The material presence and archaeological recovery of the Colono ware pot may reveal past interaction between these notorious Caribbean natives and the inhabitants of 44JC568. On the other hand, historical records alluded to many English indentured servants living in and around the Buck site. Dr. Owsley made a positive identification on the race of three of the nine burials, asserting that each was "white." Neiman and King posited a correlation between the use of Chesapeake pipes at 17th-century sites and the presence of indentured servants, further supporting the notion that many of 44JC568's occupants were indentured servants.

Diet & Food Procurement

Individuals living at the Buck site from 1630-50 sustained themselves on both domestic and wild animals. Although faunal remains are not necessarily proof of human consumption, multiple butchery marks strongly suggest the slaughtering and eating of animals at 44JC568. Furthermore, the inventory of the site's faunal remains (cow, pig, deer, fish, bird, etc.) is for the most part consistent with a typical of diets for 17th-century English colonists in the Chesapeake. The hack mark on the horse radius/ulna was an exception to traditional expectations concerning settler food ways and suggests possible horse consumption. Differential frequencies of skeletal elements of horse, cow, pig, and deer across the entire site may indicate a difference in methods of food procurement (Lapham, personal communication). For horse, cow, and pig remains

<table>
<thead>
<tr>
<th>Meat Bearing Element</th>
<th>Non-Meat Bearing Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horse</td>
<td>0</td>
</tr>
<tr>
<td>Cow</td>
<td>0</td>
</tr>
<tr>
<td>Pig</td>
<td>0</td>
</tr>
<tr>
<td>Deer</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 73. Non-meat bearing elements versus meat bearing elements for horse, cow, pig, and deer.
at the site, non-meat bearing elements (head and feet) outnumber meat-bearing elements (forequarters and hindquarters) by at least 7:1. To the contrary, meat bearing deer elements and non-meat bearing elements are nearly equal.

The horse, cow, and pig frequencies follow an expected slaughter pattern in which butchery waste (head and feet) greatly outnumbers animal limbs. However, the deer remains seem to be lacking butchery waste, suggesting that these animals were being slaughtered elsewhere and that the meat bearing elements were brought to the site.

Many aspects of the Buck site remain in question, especially those concerning the identity of its residents. The answers to these queries may lie in further research of certain features and artifacts—like the two backwards burials, the possible coin bracelet around the left forearm of the young woman in Burial II, or the nearly complete Colono ware vessel. This report presents the final results of the excavation of 44JC568, but only preliminary ideas on its many potential meaningful interpretations.
Conclusions

Excavations undertaken in the summers of 1996 and 1997 in the Peleg's Point residential subdivision under the then future location of Flowerdew Court and Deliverance Drive revealed significant insights into the daily lives of those residing at Neck-of-Land, one of the leading Jamestown suburbs during the second quarter of the 17th century. The archaeology and history of the area blend together well, telling similar yet distinct stories of frequent change and challenging times in Jamestown's hinterland. The site location and overall chronology corresponds with the original land patent, as do the intra-site occupation periods and sequential property owners.

Archaeological and historical narratives at times coalesce, describing similar general and specific aspects of life at 44JC568. Analysis of the site's features suggested multiple occupations, and likewise, the historical records listed a series of separate land owners for the Neck-of-Land property north of the original Buck patent. In fact, the four documented land owners superficially match up with the four occupation periods identified by chronological, spatial, and stratigraphic analyses of the site's features. Court records described personal hardship-mismanaged inheritance, land squabbles, diseased cattle, potential kidnappings, and murder. Similarly, the Buck site's graveyard was full of individuals who died at a young age (averaging 12.5 years old at the time of death), and included evidence of skeletal trauma.

Archaeological and historical research strongly suggested that the Reverend Buck's children and their guardians, overseers, and kin were the series of resident and non-resident owners at 44JC568 from ca. 1630-50. The tenants and indentured servants in their employ most likely worked this farmstead, digging ditches and wells, cultivating adjacent fields, maintaining livestock, erecting buildings, and thus contributing to Neck-of-Land's overall hinterland prominence. As they labored to pay off their debt to Thomas Crump, Gercian Buck, Peleg Buck, Elizabeth Crump, and the like, they interacted socially, attempted to raise families, and added to the expansion of America's first permanent English settlement and the beginnings of the colony's post-Uprising boom.

Figure 74. Historical and archaeological correspondence.

<table>
<thead>
<tr>
<th>People</th>
<th>Features</th>
<th>Burials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thomas Crump (1635-36)</td>
<td>Well III (1630-40)</td>
<td>Burials I, VI, VII (1630-45)</td>
</tr>
<tr>
<td>Peleg Buck (1638-42)</td>
<td>Well II (1640-50)</td>
<td>Burials II, VIII (1640-50)</td>
</tr>
<tr>
<td>Elizabeth Crump (1642-1654)</td>
<td>Shed II (1640-7)</td>
<td>Burial IX (1645-1650)</td>
</tr>
</tbody>
</table>
Appendix A

<table>
<thead>
<tr>
<th>Master Context</th>
<th>Montelupo, 1575-1650</th>
<th>Starred Costrel, 1580-1670</th>
<th>Red Border Ware, 1630-65</th>
<th>Colonoware (Afro-Caribbean)</th>
<th>Rhenish Stoneware, 1550-1775</th>
<th>Delftware, 1600-1800</th>
<th>Coarseware</th>
<th>Jamestown Coarseware, 1630-45</th>
<th>Jameshen Stoneware, 1550-1700</th>
<th>North Devon Fine Gravel</th>
<th>Border Ware, 1550-1750</th>
<th>Martin’s Hundred Coarseware, 1620-40</th>
<th>North Devon Sgraffito Slipware, 1630-1700</th>
<th>Merida Costrel, 1550-1650</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide Ditch I</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Well III</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Narrow Ditch III</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Wide Ditch II</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Well I</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Well II</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Narrow Ditch I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Notes

1 The 1623/24 muster lists Elinor Sprad [Sprage] living at Neck-of-Land (Hotten 1980:178). She likely resided in the household of Thomas Alnutt with two other servants, John Paine and Roger Redes (Ibid.).
2 Another John Jackson lived in the vicinity, working as a servant in 1625 for Richard Kingsmill (see Meyer and Dorman 1987:36).
3 The Langmans were indentured to Thomas Alnutt in 1625, but later records suggest that they cared for Benoni and Peleg as part of their service to Alnutt (see VMHB 1917, 33-34). The Langmans owned at least one indentured servant, Abraham Porter, who originally was indentured to Richard Buck in 1622 (VMHB 1917, 34; McIlwaine 1979, 103).
4 Porter was indentured to Richard Buck in 1622 (McIlwaine 1979, 103). In 1623 he was living in the household of John Isgrane and Mary Ascombe with the Buck children (Hotten 1980, 175). A year later, Porter lived on a small farm with Thomas Sawyer, likely serving Thomas Alnutt (Meyer and Dorman 1987, 32). By 1628 Porter was dead, his friend Thomas Crump (husband of eldest Buck child Elizabeth) acting as executor of his will (VMHB 1922, 359).
5 It is unknown whether William Reade was related to Roger Redes, the indentured servant who had won a year of freedom in 1625 from Thomas Alnutt.
6 Documents indicate that Christopher Burroughs, living in Lower Norwich County in the 1640s and 1650s, produced a son whom he named Benoni, suggesting that Christopher was a son of John Burrows (VMHB 1911, 236).
7 Nugent incorrectly cites the date of Crump’s acquisition of the 500 acres as 1633.
8 “Boom” can refer to any sort of pole, be it a pivoted spar at the foot of a sail enabling the angle of the sail to be changed, a long rod over a television or film set that carries a microphone or other film equipment, a floating barrier across the mouth of a river or harbor, or a long extendible arm of a crane (OED:1995).
9 1582 was both the Reverend Buck’s birth year and the initial production year of this type of English sixpence.
10 NISP, or bone count, is the number of identified specimens per taxa regardless of whether the specimen is identified to species, class, or a higher taxonomical level. MNI is the minimum number of individuals necessary to account for all of the identified bones.
Bibliography

Allan, John
1999 Personal communication.

Beaulieu, J./William Trumbell
1609 (30 Nov.) Brussels Correspondence, Board of Customs and Excise, Bodleian Library Class, Berkshire Record Office, Reel 554, 07119.

Brown, Alexander

Bruce, Philip Alexander

Cotter, John L.

Crisp, Frank
1924 Medieval Gardens John Lane, the Bodley Head Limited, London.

Crossley, David

Davis, Richard B.

Deetz, James


Fausz, J. Frederick

Ferguson, Leland

Goodwin, Mary R.M.

Harrington, J. C.


Hatch, Charles E., Jr.

Hazzard, David
1999 Personal communication.

Henry, William W., ed.
1823 The Statutes At Large Being a Collection of All the Laws of Virginia. Samuel Pleasants, Richmond.

Hodges, Robert L., P. Ben Sabo, David McCloy, and C. Kent Staples

Hotten, John Camden

Hurst, John G., David S. Neal, and H. J.E. Vanbeuningen
1986 Pottery Produced and Traded in North-west Europe 1500-1650, Museum Boynans-van Beuningen, Rotterdam.

Jester, Annie Lash, and Martha Woodroof Hiden

Josephy, Alvin M., Jr.

Kelso, William M.
1998 Personal communication.


<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Page References</th>
</tr>
</thead>
<tbody>
<tr>
<td>1904-05</td>
<td>&quot;Virginia in 1639,&quot;</td>
<td>XII:390-393.</td>
</tr>
<tr>
<td>1909</td>
<td>&quot;Minutes of the Council and General Court,&quot;</td>
<td></td>
</tr>
<tr>
<td>1911</td>
<td>&quot;Minutes of the Council and General Court,&quot;</td>
<td>XIX:236.</td>
</tr>
<tr>
<td>1913</td>
<td>&quot;Minutes of the Council and General Court,&quot;</td>
<td>XXI:49-51.</td>
</tr>
<tr>
<td>1917</td>
<td>&quot;Minutes of the Council and General Court,&quot;</td>
<td>XXV:34, 228.</td>
</tr>
<tr>
<td>1919</td>
<td>&quot;Minutes of the Council and General Court,&quot;</td>
<td>XXVII:261.</td>
</tr>
<tr>
<td>1964</td>
<td>Welsh, Peter C. Tanning in the United States to 1850: A Brief History</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Museum of History and Technology, Smithsonian Institution, Washington, D.C.</td>
<td></td>
</tr>
</tbody>
</table>