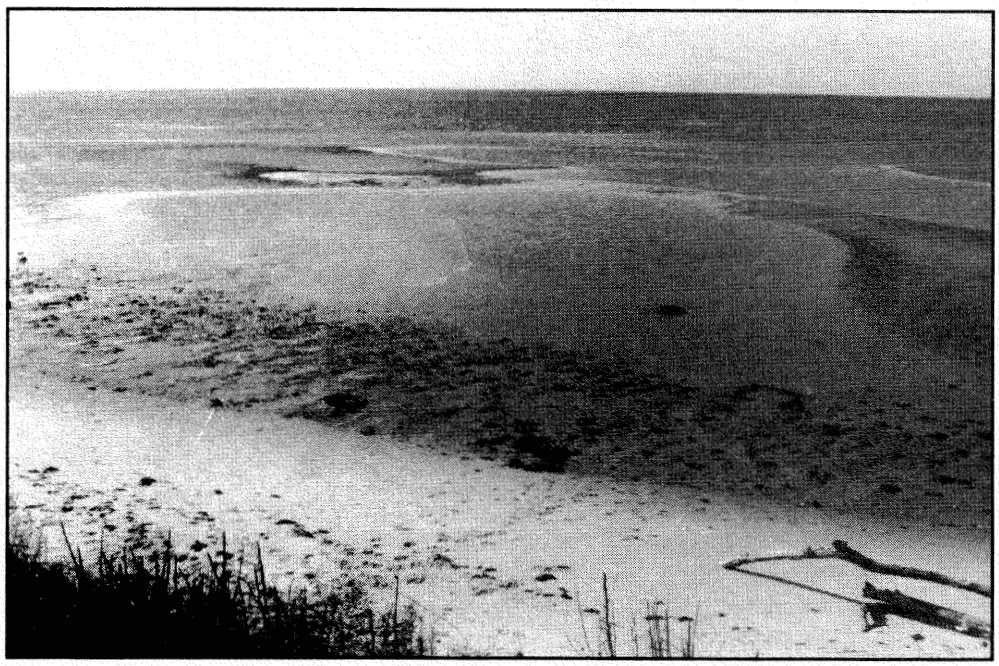
NH-008

ARCHAEOLOGICAL EXCAVATIONS AT 44NH8, THE CHURCH NECK WELLS SITE, NORTHAMPTON COUNTY, VIRGINIA



Technical Report Series No. 4

1997

Virginia Department of Historic Resources
221 Governor Street
Richmond, Virginia 23219

ARCHAEOLOGICAL EXCAVATIONS AT 44NH8, THE CHURCH NECK WELLS SITE, NORTHAMPTON COUNTY, VIRGINIA

Virginia Department of Historic Resources
Technical Report Series No. 4

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1997

ABSTRACT

The Church Neck Wells site is located along the western shore of the Chesapeake Bay in Northampton County, Virginia (Figure 1). Property owners observed several barrels exposed in the beach at low tide and a scatter of late seventeenth/early eighteenth-century artifacts which they reported to the Virginia Department of Historic Resources. Subsequent to a field inspection by state archaeologists, the VDHR contracted with the James River Institute for Archaeology, Inc., to conduct a salvage excavation of eight barrel and/or box wells that had been largely lost to erosion. The project also tested several exposed features in a nearby cliff including a partial cellar or tanning pit and a possible ninth intact well.

The eight wells on the beach, the cellar/pit, and the possible ninth well all dated to ca.1670-1725. Parts of at least 10 leather shoes were recovered from the wells including a complete child's shoe. Leather offcuts and a leather belt fragment were found as well as a complete wooden tool box.

The Church Neck Wells site represents part of a seventeenth-century plantation owned by the affluent Charlton family. Documents show that they established a small tannery on the property.

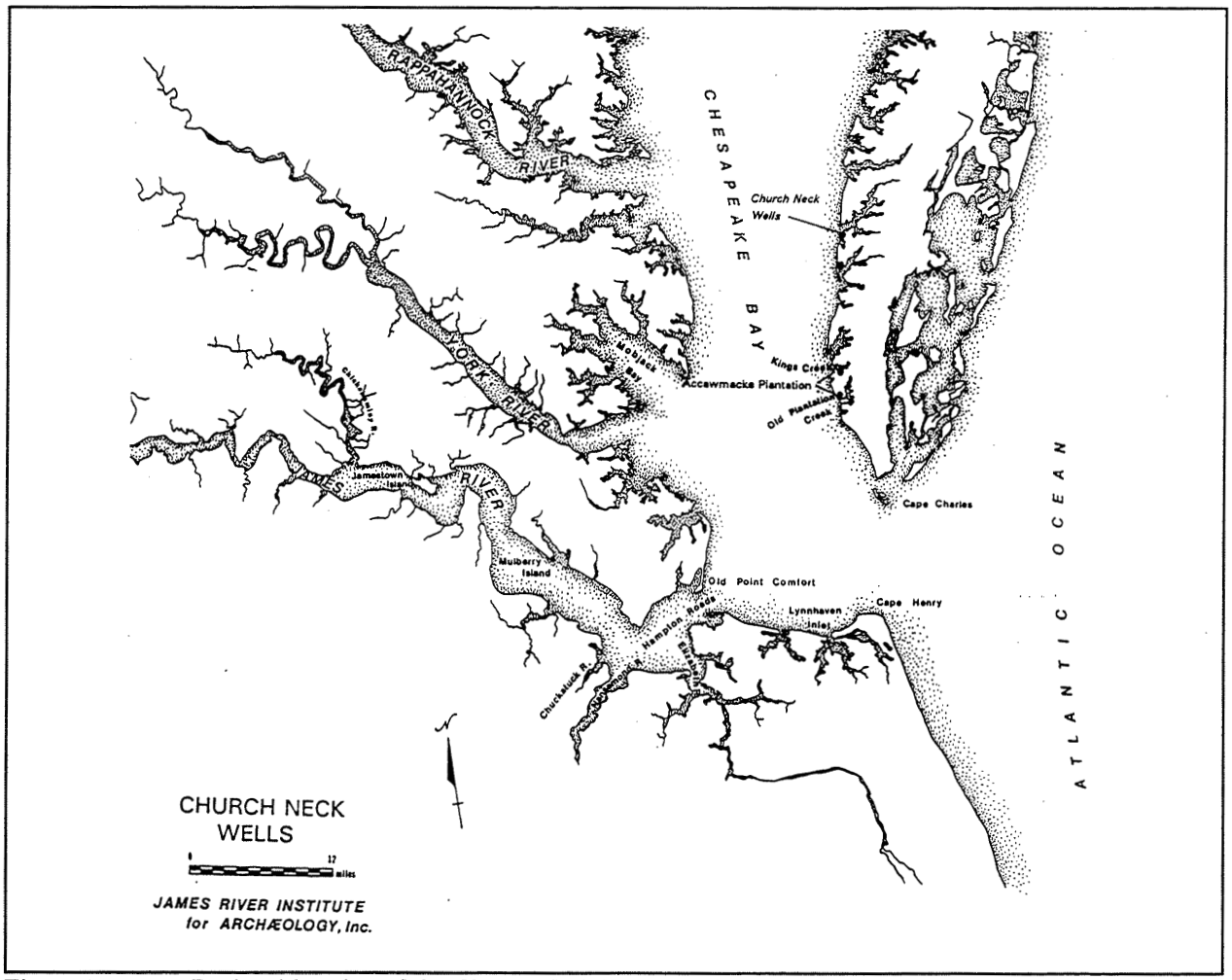

Figure 1. Regional location of the Church Neck Wells site in Northampton County of the Eastern Shore of Virginia.

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INTRODUCTION

The Church Neck Wells Site (44NH8) is located along the eastern shore of the Chesapeake Bay on Hungars Neck Glebe Farm in Northampton County, Virginia approximately three quarters of a mile south of the mouth of Nassawaddox Creek (Figure 2). The archaeological salvage project conducted in September of 1987 was prompted by John and Suzanne Wescoat, owners of Hungars Neck Glebe Farm, who reported to the Virginia Department of Historic Resources (VDHR) that they had found several barrels protruding from the beach and had collected some artifacts from within the barrels including a complete copper mug. A subsequent site inspection by VDHR archaeologists David Hazzard and Keith Egloff documented the remains of seven barrel-lined or wooden box-lined wells within 56 feet of each other at the water's edge. Severe prolonged erosion destroyed all of the well shafts except for the bottom barrels and/or boxes and exposed numerous features in the adjacent cliff (Figure 3). Further, artifacts collected from some of the barrels, which were covered by water except at low tide, and the surrounding beach indicated the site dated to ca.1670-1725.

Due to the continued threat of erosion, the VDHR employed the James River Institute for Archaeology, Inc. (JRIA) in 1987 to undertake a one-week excavation to record and test the archaeological features and salvage the remains of the wells. JRIA was also contracted to produce a preliminary descriptive report of the work (Luccketti and Straube 1987).

The excavation uncovered an eighth well on the beach. Five of the wells consisted of the bottom one or two barrels which formed the shaft linings. Two of the remaining wells were barrel-lined shafts contained within wooden boxes, while one well apparently was constructed as only a wooden box without a barrel-lined shaft. The wells contained pieces of at least ten shoes and a complete wooden tool box.

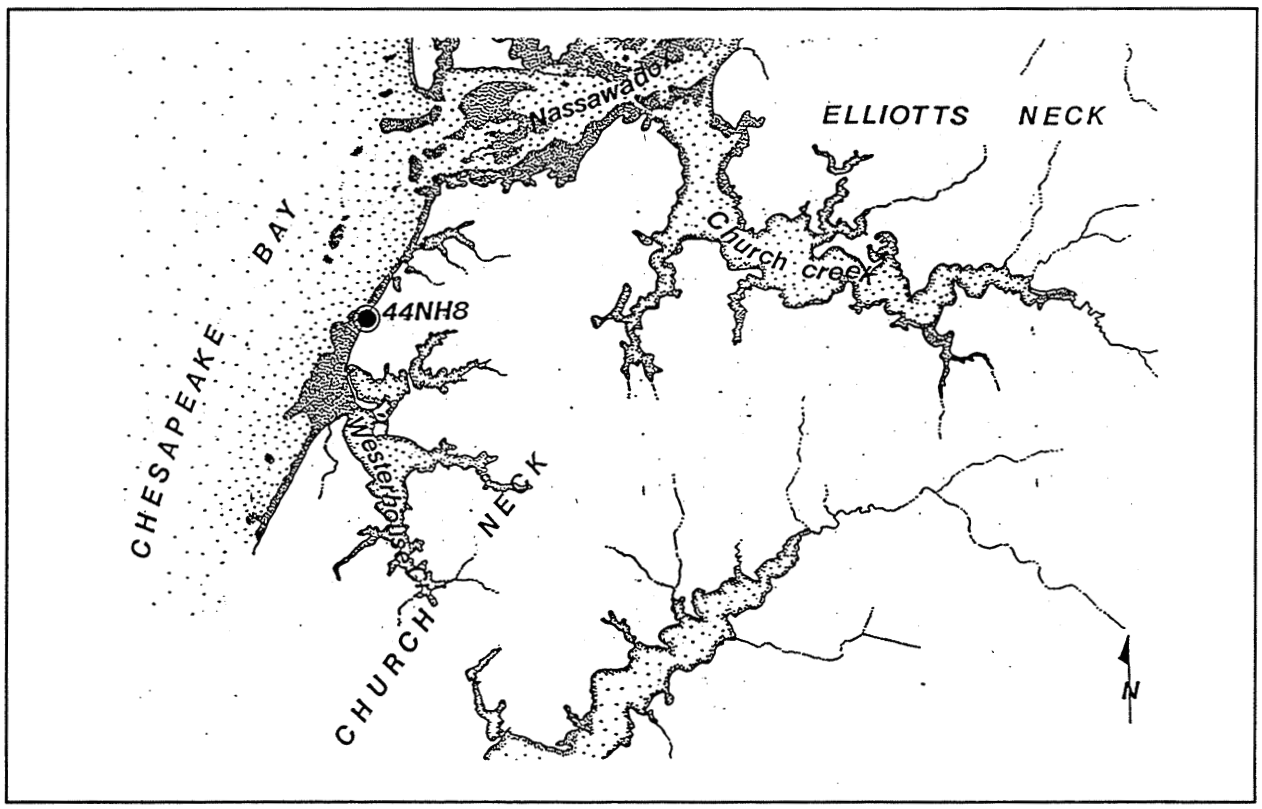

Figure 2. The immediate vicinity of the Church Neck Wells site.

Two significant features were found in the cliff. One was a pit which may prove to be a ninth well; the second feature appears to be either a cellar or possible tanning pit.

The excavation was conducted by Barbara Heath, William Leigh, Nicholas Luccketti, and Wyatt Vrooman. Major assistance was provided by David Hazzard of the VDHR, while volunteers Carolyn Jones, Jean Mihalyka, and Suzanne Wescoat also aided in the excavation of a large number of features during the one-week fieldwork. Jamie E. May drew Figures 7, 11, 13, and 19 and Annette Loomis drew Figures 26-27, 30-34. Diane E. Masters directed the production of the report.

Historical research for this final summary report was undertaken by Principal Investigator Dr. Timothy E. Morgan. Nicholas M. Luccketti was responsible for the archaeological background and results. Research was conducted to determine the history of the property and whether the occupants engaged in leather manufacture and/or shoemaking. Artifact research was conducted by Beverly Straube, and cordwainer Al Saguto analyzed the shoe remains. Research for this report was conducted at Christopher Newport University Library, the Colonial Williamsburg Research Library, The Mariners' Museum Library, the Northampton County Courthouse, the Swem Library at the College of William and Mary, and the Virginia State Library. Cartographic depictions of the region and the site area are found on several maps beginning from the late seventeenth century and continuing to the 1990s. Photographic reproductions of selected maps are included at appropriate points in the text.

The authors would like to acknowledge the VDHR for funding the Church Neck Wells excavation, analysis, and report preparation, and especially the VDHR Threatened Sites Program archaeologists for their endless dedication and vigilance in protecting the unique archaeological treasures of the Commonwealth against overwhelming odds. We would particularly like to thank the Wescoats and Mihalykas for the many courtesies they extended to the crew during the fieldwork. Also, we are indebted to Mr. Jim Eagle, Director of Sponsored Programs, and Dr. James Morris, Chairman of the History Department at Christopher Newport University, for their cooperation in the report production phase of this project. Finally, the extraordinary finds from the Church Neck Wells site would have forever been lost had it not been for the abiding concern of Suzanne Wescoat and Jean Mihalyka to preserve the history of the Eastern Shore of Virginia.

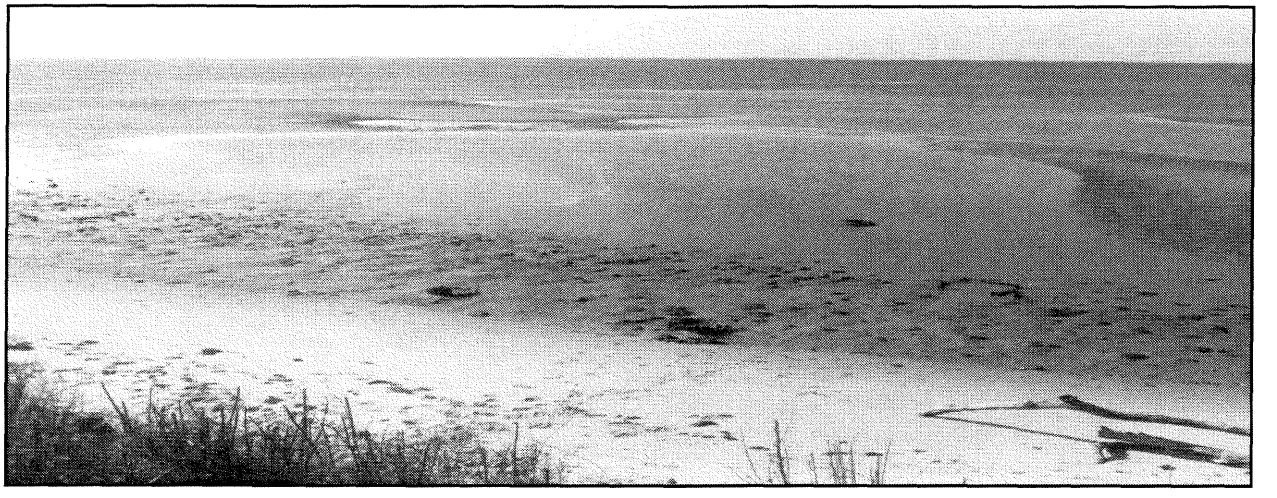

Figure 3. Site as viewed from the west showing exposed wells.

HISTORY OF THE CHURCH NECK WELLS SITE

English settlement on Virginia's Eastern Shore was initiated in the 1620s and early 1630s between Cherrystone Creek and Cape Charles. English settlers generally patented lands on the western side of the peninsula, prizing parcels at creek mouths or along the creeks emptying into the bay (Figure 4). The oceanside was avoided for settlement until bayside lands were claimed. The Church Neck Wells Site (44NH8) is part of a 1,000-acre tract on the bay close to the south bank of the mouth of Nassawaddox Creek that was patented by Stephen Charlton in 1638 (Nugent I 1934:82). By the time Charlton received the patent, the colony had begun to politically subdivide through the creation of counties.

Accomack County was one of the original eight shires or counties created when the Virginia colonial Assembly directed the creation of county courts to oversee and administer daily life in 1632 (Ames 1940:6). During the seventeenth century, the colony generally gave Eastern Shore counties more responsibility and authority for self management because distances from Jamestown government were so great. During the mid-seventeenth century, Eastern Shore residents experimented with names, changing Accomack's name to Northampton, dividing the shire into two counties Northampton and Accomack, later recombining the two as Accomack, and finally confirming the earlier division into two counties -- the southern named Northampton, the northern Accomac[k]. Occahannock Creek was, and still is, the dividing line between the two counties.

The creation of the Eastern Shore counties encouraged ambitious men, such as Stephen Charlton, to seek political and religious preferment and recognition through membership on the county courts and/or on a parish vestry. Both types of positions were appointive in the seventeenth century, with selections taken from a list kept by Virginia's governor. Recommendations for additions to the lists from which court members or vestrymen were selected came from important, influential men in the localities, often members of the two local bodies themselves. Generally those who recommended additions to the lists were councilors who advised the governor on a wide variety of colonial policies. Councilors sat as the upper house of the bicameral Virginia Assembly and, in company with the governor, acted as the executive board of the colony and the General Court, the seventeenth-century equivalent of a supreme judicial court.

Preferment for such offices as vestries or county commissions necessitated acquisition of land in acreages sufficiently large to impress one's neighbors and command their respect. The Eastern Shore had abundant acreage in the 1630s and 1640s for purchase as the native peoples retreated northward, up the peninsula, in the face of increased English presence along the creeks.

Stephen Charlton evidently received the first patent to lands on Nassawaddox Creek. The patent abstract describes the 1,000-acre tract granted him on May 10, 1638, in what was then Accomack County. The grant ran:

> N(orth). E(ast). upon main cr(eek). of Nuswattocks, adj(acent). William Andrewes and the main bay (Nugent I 1934:82).

Charlton received the grant for transportation of 20 persons for each of whom he was entitled to receive 50-acre headrights, according to Virginia law. Three years later, he received another 500 acres adjacent to the original patent (Nugent I 1934:129). Charlton, in 1637, had patented 200 acres farther south on the Shore on a creek bordering Lady Dale's lands (Nugent I 1934:79). In August 1650, he received a patent for another 1,000 acres on Matchipongo Creek on the ocean side of the peninsula. The last recorded patent for Charlton occurred March 16, 1653, when he received 1,700 acres, "adj(acent). his own land" (Nugent I 1934:412). Eastern Shore historian Ralph Whitelaw does not think this last patent possible, for there was not enough land next to Charlton's property to warrant an additional 1,700 acres. Whitelaw believes that the patent intended to include the original patents plus whatever extra land existed near the mouth of the creek. Another interpretation of the records suggests that this was a re-patent for the 1,700 acres already given Charlton on the creek near Lady Dale's lands. The property, however interpreted, is located at the

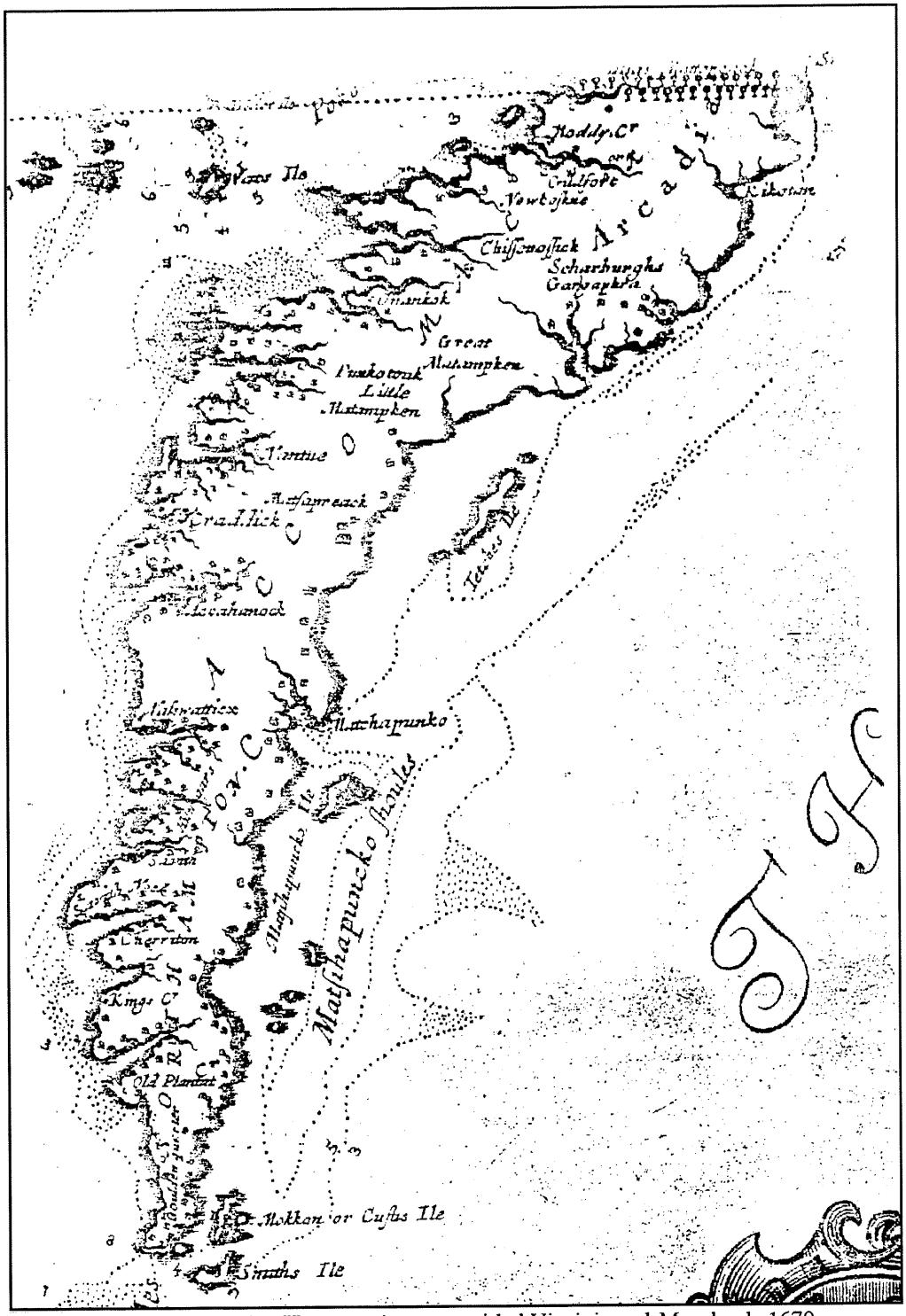

Figure 4. Augustine Herrmann's map entitled Virginia and Maryland, 1670.

mouth of Nassawaddox Creek and runs southward along the Bay coastline. It includes archaeological site 44NH8, the Church Neck Wells Site.

The land on which 44NH8 is located remained in Charlton family hands until 1704, when Bridget[t] Charlton Foxcroft, elder daughter of Stephen Charlton and widow of Isaac Foxcroft, died. After a long legal battle involving Andrew Hamilton, the tract was given to the Anglican Church as a glebe (lands the proceeds of which are used to support an Anglican parish priest). Charlton had willed his estate to his daughters Bridget and Elizabeth upon the death of his widow Ann. They, in turn, were to bequeath the estate to their heirs, unless they died without legitimate issue. If that were to be the case, then the estate was to remain a glebe forever (Deeds, Wills, Etc., Book No. 5 (1654-1655), fol. 57).

When Charlton died in 1654, he left a plantation house, mill, orchards, garden, and outbuildings to be shared in traditional partible inheritance. Ann Charlton received a "widow's portion," one-third of the estate. The net receipts from the other two-thirds were to support Charlton's two daughters, Bridget and Elizabeth, until Bridget reached the age of fourteen. Bridget, moreover, was to retain possession of the Nassawaddox Creek estate after the death of their stepmother Ann (Deeds, Wills, Etc., book Nol 5 (1654-1655), fols. 56-57).

In April 1661, Bridget married Isaac Foxcroft. The following September, John Gethings married twelve-year-old Elizabeth whom he had kidnapped from the Northampton County school she attended. Unable to find a minister on the Shore willing to marry them, Gethings took Elizabeth out of the county for the ceremony. The young bride died approximately midsummer 1662, and Gethings laid claim to her estate that fall. In February 1663, Foxcroft entered, on behalf of Bridget, a suit in Northampton County court against Gethings for recovery of the estate. The court was already aware of the situation but in the debate over the suit, Edmund Scarborough presented a four-page statement defending Charlton's will and argued on the basis of reason and justice, not law, that the land belonged to Bridget, not Gethings. The court agreed, and the lands were restored to the rightful Charlton heir (Whitelaw I 1968:427-430; Stitt 1969:261).

In 1702 Foxcroft died, having served Northampton County as sheriff, vestryman, justice of the peace, and in many other public capacities. His will left the whole estate to Bridget. When she died in 1704, she willed to her friend Andrew Hamilton "all my devident of Land whereon I now live scituate upon Nuswattox Creek" (Whitelaw I 1968:431; Stitt 1969:262; Northampton County Records, XIV (1698-1710), 110-111 (Foxcroft's will), 188-190 (Bridget's will)). Bridget left specific bequests to seventeen different people in her will and then bequeathed "all the Rest of my Estate, both Reall, personall, moveables And immoveables . . . wheresoever In Virga. or elsewhere," to Hamilton (Northampton County Records, XIV (1698-1710), 190). This was the same Hamilton destined to become a leading lawyer in provincial America.

Hamilton's control of the estate was almost immediately challenged, for the terms of Bridget's father's will were clear and precise; the estate was to become a glebe upon her passing without legitimate heirs. Hamilton eventually left Virginia for Maryland in 1709 under something of a cloud; he was not well-liked, at least in the judgment of William Byrd II who commented: "he [Hamilton] is a man of a bad character and he got the estate nobody knows how" (quoted in Stitt 1969:262). Whether Byrd was referring directly to the Charlton estate or to Hamilton's wealth in general is not known.

How long it took for the parish to recover the estate and convert it to the intended glebe is not known, but by 1745 the parish had accomplished such action (Whitelaw I 1968:431; Stitt 1969:263). References to the glebe and its ministerial use recur in eighteenth-century sources, including a surviving vestry book for the years 1758 to 1782. By the late eighteenth century, Shoremen called it the Charlton glebe. Anglican, then Episcopal, ministers continually occupied the glebe until Reverend John Ufford's residency ended in 1850.

As part of Anglican disestablishment and implementation of separation of church and state,

the Virginia Assembly passed an act in 1802 removing from vestry control all glebes in the state and ordering the sale of the property. Not, however, until 1839 did the Overseers of the Poor in Northampton County (the agency charged by the Act to carry out sales of glebes) begin action to sell the Charlton glebe. This was met with legal resistance from the vestry seeking to protect the glebe from secularization. The vestry's legal position was that the Charlton glebe did not conform to the description of those glebes defined for sale. This was because Charlton's bequest had provided for a residuary legatee in the person of John Walton or his heirs were the parish left vacant six months or more.

The situation was finally resolved legally in favor of the State of Virginia in 1859, and the land was formally recognized as private (Stitt 1969:267-269; Whitelaw I 1968:431). William Floyd was finally able to take possession of the land which he had purchased 20 years earlier. The legal opinions which constituted the decision in the case emphasized the decision to separate church and state and the consequences resultant from that public decision (Stitt 1969:270).

In 1876 the manor section of the land was sold to John T. Wilkins who in 1888 made a deed of gift of the property to his son John T. Wilkins, Jr. The latter conveyed the lands to his son John T. Wilkins III, who willed it in 1929 to his wife, Margaret (nee Spady). Following her death in 1946, their daughters Margaret W. Wescoat and Anne Wilkins, who later married William W. Holland, inherited the land on which the house known as Hungars Glebe still stood when Whitelaw completed his study of land and housing on Virginia's Eastern Shore in 1951 (Whitelaw I 1968:432-433). The manor portion of the Charlton glebe remains in Wescoat hands today.

Whitelaw believed that Hungars Glebe had been constructed in the seventeenth century based on the size and shape of brick used in both the front and rear walls, and on a documentary reference. In 1643, Charlton sued Argoll Yardley, claiming that he had lured away a carpenter named John Knight with an offer of higher wages. Charlton had agreed to pay Knight 14 shillings per week wages plus provide food, lodging, and drink "to build him a house in what belongeth to a Carpenter" (Whitelaw I 1968:432). Whitelaw suggests that the house may have been the one still standing on the glebe land, since the phrase "in what belongeth to a Carpenter" suggests that the rest of the house was brick.

The archaeological excavations at 44NH8 on the beach just to the south of the Hungars Glebe site revealed features suggestive of a manufacturing process such as tanning. The documentary records reveal that Stephen Charlton had a tannery in the mid-seventeenth century, but there is no mention of it in the documents during the Foxcroft tenure or thereafter. The first mention of such an enterprise is in Charlton's will of 1654 which leaves operation of the tannery to a Thomas Benthall. Charlton's will permits Benthall to work the tannery and to crop his forests for the bark to produce the necessary tanning solutions (Deeds, Wills, Ets., Book No. 5 (1654-1655), fol. 57).

The next mention of the tannery occurs two years later when Benthall petitioned the Northampton County Court. In his petition, Benthall stated that on September 26, 1654, Charlton had agreed that Benthal would have one acre of land, a dwelling house, the tanhouse, and a stock of leather from which to begin his work. As his part of the arrangement, Benthall was to provide sufficient servants, one of which was to be a tanner, currier, or shoemaker. The overseers of Charlton's children, however, sued Benthall for not finding such a servant, thereby breaking the agreement. Benthall petitioned for suspension of the suit because he felt he had made a good faith effort to fulfill this obligation, citing the 4,000 pounds of tobacco and cask he had offered for such a servant. Benthall further stated that although several people had been delivered to the tannery, only Robert Morehead seemed qualified as a tanner. Benthall claimed that Morehead, however, did not appear to be one of the Charlton family's servants. Benthall asked that the county court declare the suit against him null and void (Deeds, Wills, Etc., Book No. 5 (1654-1655), p. 123).

SEVENTEENTH-CENTURY BARREL WELLS IN VIRGINIA

Excavations by the National Park Service at Jamestown Island in the 1930s and 1950s uncovered numerous wells that were lined, at least in part, with barrels (Cotter 1994:152-159). Seven barrel wells were found at Jamestown, each containing a single barrel at the bottom of an otherwise unlined well shaft. It is possible, of course, that originally six of these wells had shafts completely lined with barrels and only the bottom barrels, kept wet by the water table, survived. The seventh Jamestown well had a framed casing at the bottom. The casing, 4.7' by 3.7', was built of vertical shakes attached to squared sills. Five wells, sometimes referred to as dirt wells, were excavated that had no form of lining. The depth of the Jamestown wells ranged from 8.8' to 12' below existing grade.

At least three barrel wells were excavated at the Drummond Site just west of Jamestown Island (Outlaw 1995). Dating to ca.1650-1690, two of the wells had a single barrel at the bottom of the shaft, while the third consisted of a barrel inside a wooden box. The three wells were 10-12' below existing grade, and one well may be associated with a bloomery and possible pipe making operation.

A barrel well dating to the last quarter of the seventeenth century was excavated at the Bennett Farm site in York County. The barrel well was represented by a complete barrel that extended 1' below the water table and the stain of a completely decomposed barrel directly above the intact barrel. The intact barrel and barrel stain were contained in a builder's trench only slightly wider than the barrels. The total depth of the Bennett Farm barrel well was 10' below modern grade (Luccketti 1990: 34-39)(Figure 5).

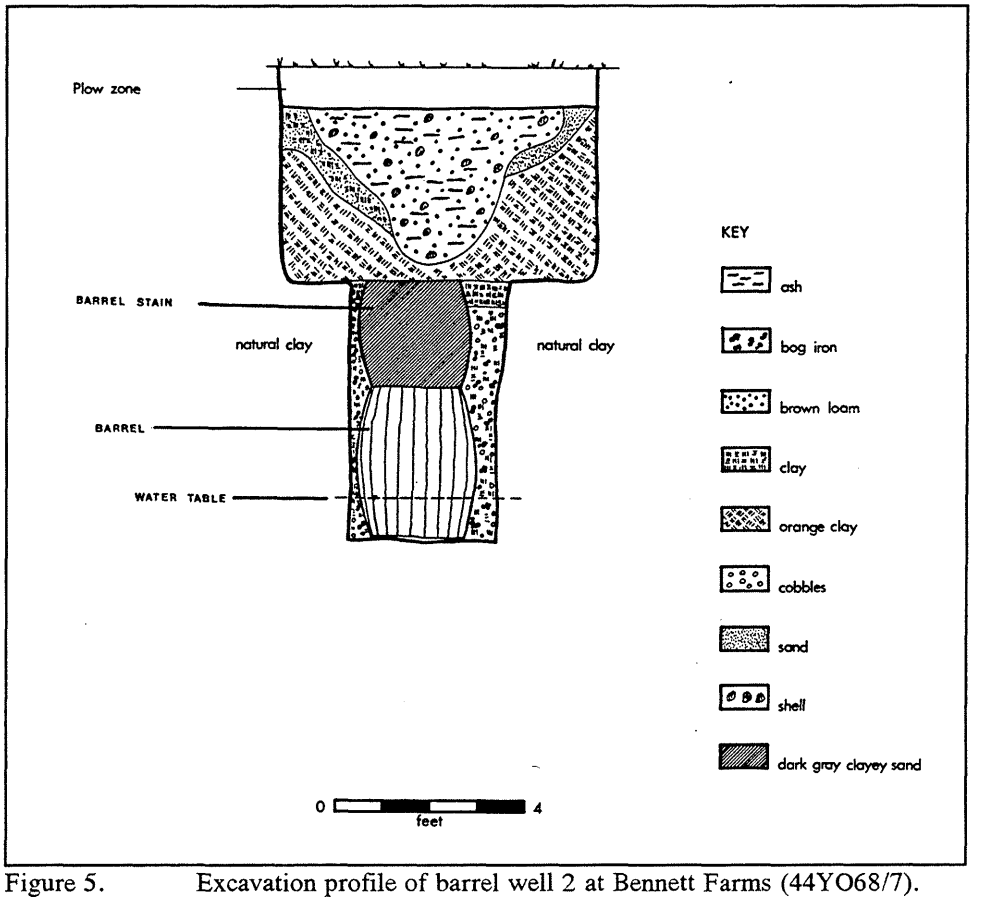

Figure 5. Excavation profile of barrel well 2 at Bennett Farms (44YO68/7).

The bottom barrel of an eroded barrel-lined shaft was excavated on the former Dow Badishe property along the north bank of the James River in eastern James City County (Figure 6). Virginia Research Center for Archaeology archaeologists excavated a complete barrel in the beach at the base of a twelve foot cliff (VRCA 1977). A discernible depression was exposed in the eroded cliff face extending from the beach up to top of a cliff; clearly the remains of a well shaft. The lower part of the

shaft contained fragments of withes from a barrel that had been removed by fishermen. The only artifact that was found in the intact barrel was a sherd of lead glazed coarse earthenware. Despite the loss of most of the well, the Dow-Badishe barrel well provides additional evidence that barrel wells were not necessarily shallow wells.

Figure 6. Barrel well at Dow Badishe.

LEATHER MANUFACTURE AND SHOEMAKING IN SEVENTEENTH-CENTURY VIRGINIA

Tanning as a craft seems to have been known to prehistory. Paleolithic man apparently used scrapers and other tools to prepare hides and skins for wearing apparel. When the craft became an industry linked to sedentary ways of life is unclear, but by the eleventh century A.D., the tanning industry as practiced in colonial Virginia had already taken shape.

The tanning process required substantial numbers of hides or skins, tanbark, plenty of fresh water, lime, and a few tools and utensils. It is known today that three layers, epidermis, corium, and subcutaneous membrane, in order from the surface, comprise the hide or skin of animals. To make leather, the epidermal and subcutaneous layers must be removed, followed by stabilization of collagen substances in the corium to prevent their putrification (Thomas 1983:1).

Once the hides are separated from the flesh, they were sold to tanners whose work could be broken into four general steps: cleaning, liming, tanning, and finishing. The first step was a washing which might require up to thirty hours to clean the last residues of blood and rotting flesh from the hide (Welsh 1964:18-19; Hazen 1837:68). The purpose of the second step, called raising the hairs, was to clean the epidermal and subcutaneous layers from the corium, requiring many months. Probably many colonial tanners in the eighteenth century attempted to shorten this time, employing chemical or physical departures from the traditional method.

Lime vats containing milk of lime as the swelling agent were used to loosen the hairs. There were usually three vats: dead, weak, and live. The dead vats were those whose lime milk was virtually exhausted. Weak vats contained lime solutions which had been already used, but not exhausted. Live vats were those in which no hides had yet been immersed. As hides were passed from dead to weak to live vats, the solutions weakened or died in the weak and live containers. Once limed, the hides were washed in fresh water, shaved with a beaming knife and beam to remove the hairs (epidermal layer) and again washed in fresh water. The hide was then turned over on the scraping beam and scoured with the fleshing knife to remove what was left of the tissues and fats (subcutaneous layer), followed, once again, by washing in fresh water. Often, before the beaming (the scraping part of the process), the limed hides were placed in bating vats, consisting of a mixture of hen dung, salt, and fresh water to soften the skins. To clean the skins after the bating, they were rinsed in vats full of fresh, preferably soft, water. The liming and beaming process might take as long as four months (Hazen 1837:68; Welsh 1964:19-21).

The third step in the process was the actual tanning portion. Traditionally, tanners placed the hides in vats alternately layered with prepared tanbark, hides, and water, followed by a cover. Each hide required twice its weight in bark plus twelve gallons of water. Tanners used most commonly the barks of the white, red (Spanish), or black (quercitron) oaks for tanning. Not finding these varieties in an area, they used hemlock, sumac, willow, cherry, or horse chestnut to secure the necessary tannin (Welsh 1964:66). All these trees, including the oaks, were found historically on the Eastern Shore, from Virginia to Delaware (Thomson 1981:161-166; Welsh 1964:66).

To make the bark useable, it had to be ground or crushed, requiring a grinding mill consisting of mill wheels and horse power. Just as with the liming procedure, the tanning operation used three solutions of tanning material, dead, weak, and live, and the hides were moved from one vat to the next to achieve uniform and consistent levels of tanning. Twelve to 18 months were necessary to produce superior leather during the tanning step. It was in the tanning procedure that many in the mid- to late eighteenth century experimented with ways to shorten the process, without much success. The Virginia Assembly addressed this practice in its 1691 law in an attempt to prevent production of poor quality leather (Clarkson 1983:11-17; Welsh 1964: 21-29).

Once the tanning stage was finished, the tanner dressed (the fourth step) the leather. It was dried and finished (rubbed with soft stones) to give it a sheen and glisten. The hides could then be cut for shoe leather, bags, bridles, saddles, or any other of

the many uses to which leather was put in the late seventeenth century (Welsh 1964:33-34).

There were considerable variations from the general pattern described above, but tanning procedures changed very little through the mid-nineteenth century. A description of a mid-nineteenth-century tanyard probably reflects the appearance of its seventeenth-century counterpart.

> The rude appointments of a tannery . . .embrace a greater or less number of oblong boxes or hogsheads sunk in the earth near a small stream, and without cover or outlet below, to serve as vats and leeches. A few similar boxes above ground for lime vats and pools, an open shed for a beam house, and a circular trough fifteen feet in diameter, in which the bark was crushed by alternate wooden and stone wheels, turned by two old blind horses, at the rate of half a cord a day, completed in most cases the arrangements of the tanyard (Bishop 1861-64:I: 453).

Although neither his will nor his inventory contain any description of his tanhouse, Stephen Charlton's tannery most probably appeared much like this description (CCR 5 (1654-1655):fol. 56-59). From the archaeological evidence from 44NH8, there were at least eight barrel wells used for the collection, storage, and usage of fresh water for the tanning process. Unfortunately, over three centuries of erosion have washed away much of the site except for the well bottoms and some associated pits.

By the time settlement began on the Eastern Shore, the leather industry had developed several unique manufacturing disciplines. Among the most frequently cited were tanning, currying, and shoemaking. Although currying and tanning are often conflated, they were two separate trades and defined as such in English law as early as 1488. The Oxford English Dictionary defines a currier as "one whose trade is the dressing and colouring of leather after it is tanned" (author's emphasis) (Simpson and Weiner 1989: IV:152). As evidence for the distinction, the OED's editor noted 1488 Act I Hen. VII, C 5, sect. 2 "That no Tanner whiles he occupieth the mistere of a Tanner. . . use the mistere of Coriour nor blak no leder to be put to sale" (ibid). As late as 1837, writers distinguished between the two trades, for Edward Hazen noted then in The Panorama of Professions and Trades that tanning and currying were distinct and different trades, though commenting that in the United States

> the business of tanning and currying are usually united in the same individual; or, at least, the two branches of business are carried on together, by the aid of workmen skilled in their respective trades (Hazen 1837:69).

By 1650, leather industries were common on many of the larger plantations in the colony. Samuel Mathews maintained a tannery on his Mathews Manor in what is now Newport News. On the Eastern Shore Edmund Scarborough had an extensive leather industry including shoemaking. Leather was a common commodity, used in a variety of products: shoes, clothing, buckets, bridles, saddles, boat equipment such as shrouds and other rigging, furniture including chairs and beds, firearm accessories like powder and shot bags, bags, drinking cups and goblets.

Virginia's colonial government directed and controlled the leather industry during the seventeenth century, from fixing prices for shoes and other leather products in the 1620s to instructing leather makers how to pursue their trade in order to insure good quality products in the 1690s ("Virginia in 1625-326" 1908:369; Hening II 1969:123; Hening III 1969:75-80, 123-124, 356-358). The legislation included several attempts at promoting leather production through embargoes on the exportation of tanned hides and skins as well as specific directions to counties to provide for public tanneries within their borders (Hening I 1969:174, 307, 314, 396, 476; Hening II:124-25, 179, 216, 287, 482-83, 493-94).

At its March 1661/62 session, the Assembly reiterated its 1660 instructions to the counties to erect tanneries. The new law directed that

> there be erected in each county at the expense of the county one or more tanhouses, and they provide tanners, curryers, and shoomakers, to tanne, curry, and make the hides of the country into leather and shoes.

Moreover, the Assembly directed that each county appoint an overseer to watch over the workmen, manage the trade, and provide for payment according to law for the goods produced. Each hide a countyman brought into the tannery would fetch a price of 2 pounds of tobacco per pound of dry hide. Finished shoes were to be sold at 30 pounds of tobacco per pair of plain shoes, 35 for wooden heels and French falls of the largest sizes. Smallest sizes were to be sold at 20 pounds of tobacco per pair. To insure compliance with the law, the Assembly levied a fine of 5,000 pounds of tobacco on any county which balked at the law (Hening II 1969:123).

Surry County had already complied with the 1660 law, according to vestry minutes for May 24, 1661. That day the vestry agreed with Mr. Thomas Warren and Captain William Marriott that they should build the county's tanhouse. The new industry was to be erected on the "east side of the mill Runn on Coll: Th: Swann his land." The tanhouse was to be "Forty Foote long, & twenty brood." Included in the complex was to be a dwelling house "with what Chimneys & other additions necessary." The tanner should also dig a minimum of eight tanpits "& Finish them as they ought to be."

While the construction was proceeding, the tanner was to gather tanbark, sufficient to last for that first year of operation. The county agreed to pay Warren and Marriott 10,000 pounds of tobacco and cask at the next levy raised. To keep them from taxfarming, the vestry specifically forbade them from taking any salary while collecting the tobacco. The tanner was to get one half the hides for each of the first two years he pursued the tanning business (Stewart 1939:531-2). Reinstatements of export embargoes on leather products came in March 1661/2, December 1662, and October 1665. In each successive piece of legislation, the Assembly demonstrated a growing economic sophistication. Overlooked in the 1662 laws were shipmasters and tanners; the October 1665 law decreed that they too fell under the embargo, paying heffty fines if they broke the ban (Hening II 1969:124-125, 179, 216).

Quite probably this type of tanning manufactory was similar to the one which Stephen Charlton erected on the Eastern Shore sometime before his death. He does not appear to have been the county tanner, however, for county court records indicate that Edmund Scarborough held that office during the mid-seventeenth century. Charlton and other Shoremen developed their own tanneries to provide the self-sufficiency believed necessary to "successful living" and to supplement incomes made from tobacco during the seventeenth century. Anglo-Virginians who achieved high levels of wealth, social status, and power in the seventeenth century relied on whatever means necessary to increase their wealth. Tobacco was only one way to wealth; the need for leather products like shoes, bridles, saddles, and horse furniture offered opportunities for enrichment as well (Bailyn 1957: 93-96; Morgan 1975:129, 140, 143; Perry 1990: 228-230). Trade between the Shore and other European colonies, especially New Netherland and New England in the 1640s and 1650s, reflects the Shoremen's relative economic independence of Jamestown and London, their willingness to find outlets for their products, leather included (Ames 1940:45-47; Perry 1990:13-31, 139-140).

Virginia provided ample support for the development of the leather industry during the seventeenth century through laws limiting or prohibiting leather export. The Virginia Assembly also sought quality control in leather production through legislation designed to stop practices harmful to leather markets. The Assembly tried to encourage diversification of labor and industry using the legislation. It also identified leather as a crucial manufacture during time of war.

In February 1631/32, the Assembly embargoed the export of all hides and skins, setting a penalty of three times the value of the skins for those who broke the law. Six months later the next session reenacted the law but exempted beaver skins, otter skins, and other furs. In November 1645, the Assembly again prohibited the exportation of all leather and hide products, the purpose being "that

all manufactors should be sett to work, and encouraged in this collony." A few months later the Assembly repealed the legislation (Hening I 1969:174, 199, 307, 314). The embargoes came during the 1622-1632 and 1644-1646 wars with the Powhatan chiefdom, demonstrating the colony's need for leather goods and products during those periods. The exemption of furs and skins, however, suggests the political strength of men such as William Claiborne, the Indian trader whose fur business conflicted with the establishment of Maryland and who had established a post on Kent Island to carry on his trade during the 1630s.

Virginia's Assembly directed in 1660 that each county provide support for a tanyard within its jurisdiction (Hening II 1969:123). This legislative effort to provide subsidies and support to tanning arose from the need for leather products and the effort to diversify Virginia's colonial economy. Virginia planters depended on tobacco by 1660 for their commercial sustenance. Tobacco was a high demand item in Europe, but English Navigation Laws (beginning in 1651), overproduction, and mid-century war curtailed markets for "the stinking weed" (as King James I had called it in his "Counterblast to Tobacco" written in 1607). Virginians had marketed their primary commercial product directly and through New England and Dutch merchants during the mid-seventeenth century. Eastern Shore growers were especially active in exploiting Dutch and New England connections, perhaps because that peninsula was populated by either very Low Church or Puritan and Puritan-sympathetic settlers (Ames 1940:45-50; Hiden 1939:34-41).

Efforts to diversify Virginia's economy began before the 1650s; when Sir William Berkeley arrived in 1642 to assume his duties as governor, one specific instruction was that he use his

> beast [sic] endeav'r to cause ye people there to apply themselves to the raising of more staple commodities as. . . Pitch & Tarr for tanning of Hides and Leather (King in Council 1895:287).

Similar instructions accompanied Virginia's governors as they came to the colony during the rest of the seventeenth century. In 1691, newly-arrived Lieutenant-Governor Francis Nicholson, according to instructions issued him by the King and Privy Council secured passage of two acts directly related to Virginia's leather industry (see below).

The act which best describes the Assembly's economic policy, however, passed in September 1671, entitled "An act permitting the exportation of wool, hides, and iron." The preamble to the act clearly states the economic, labor, and social goal the Assembly had in mind:

> Whereas it was hoped that weavers, tanners, and smiths would have been encouraged with greater diligence and cheerfulness to have improved their severall callings for the good of the country when they were sencible what tender care was taken for supplying them with materials for to work upon. . ., but no successe answering the conceived hopes and apparent losses occurring to all inhabitants by the refusall of those concerned to buy the comodityes aforesaid.

The Assembly repealed all the special legislation, "every one permitted to make the best he can of his owne comodity" (Hening II 1969:287). Assemblymen indicated that the export embargoes on leather and hides were meant to ensure sufficient supplies of those materials for tanners and curriers, not only to maintain their own markets, but to "have improved their own calling". The Assembly indicated that it was willing to provide special economic protection to manufactors if they, in turn, took advantage of the protection, but the experiment suggested the "refusall of those concerned to buy the comodityes aforesaid" (wool, leather, and iron). The Assembly placed on the individual artisan's shoulders the responsibility for his own success.

A change of heart occurred by 1680, however, due in part to the economic hard times brought on by continued low prices for tobacco, the colony's staple. Once again the Assembly encouraged the iron, wool, and leather industries. This time, the Assembly's motive rested on the need to find work for the

> many men, women and children

> in this country which lye idle for want of imployment, and some naked for want of such necessaries as might be wrought out of the same (iron, wool, and leather products).

An embargo on exports of those products was once again laid on the country. Language and specifications were sophisticated, legalistic, and coercive. The Assembly intended that the poor in the country have an opportunity to find work and to make finished products from the prepared materials ironmongers, woolens makers, and tanners produced (Hening II 1969:493-497).

By the late seventeenth century, then, the Assembly had provided substantial support, in its own eyes, for expansion of the leather industry. On the Eastern Shore, the records indicate that many engaged in leather production although the breakdown by occupation (shoemaker, tanner, or currier for instance) is not known. As mentioned earlier, the abundance of tanbark trees, substantial numbers of domestic animals from which hides and skins could be taken, plentiful supplies of fresh water, and sufficient lime, which could easily be made on the Shore from oyster and other shellfish, gave anyone interested in the tanning industry ample quantities of raw materials from which to work.

The single most important item of the Virginia leather trade was shoemaking. Robert Beverley complained in 1705 that Virginia leathers and shoes were of poor quality:

> and most of their Hides lie and rot, or are made use of only for covering dry Goods, in a leaky House. Indeed some few Hides with much adoe are tann'd, and made into Servants Shoes; but at so careless a rate, that the Planters don't care to buy them, if they can get others... (Beverley 1947:295).

Beverley's acidic appraisal of Virginia's leather industry reflects his own biases and prejudices against the presiding governor, Francis Nicholson, but there is a grain of truth to his allegations. Virginia planters seeking tanners and shoemakers usually had a surplus of hides awaiting processing, many of which eventually rotted for lack of tanning. Those who already had tanners and/or shoemakers wanted more, advertising for them to correspondents and connections in England. It was probably the lack of skilled tanners and shoemakers rather than "shortcuts" in manufacturing processes which produced the poor quality hides and shoes to which Beverley alludes (Bruce II 1907:477-478; Ames 1940:136-137).

There is very little archaeological information on leather manufacture and shoemaking in seventeenth-century Virginia. In fact, Jamestown is the only seventeenth-century site that has yielded evidence of shoes and possibly shoemaking. A shoemaker's iron last, a form used in making or repairing of shoes, was excavated from Structure 50 at Jamestown which dated to ca.1650-1750 (Cotter 1994:92). Also, two Jamestown wells contained pieces of shoes. Well 20, an unlined well dating to ca. 1620-1650, yielded many leather shoe pieces including soles, liners, and one large part of an upper. Well 21, a ten foot deep well with a barrel at the bottom, dating to the first half of the seventeenth century, contained many shoe fragments and part of a shoe that had a wooden heel (Cotter 1994:157-1158, 193).

An eighteenth-century site at Kingsmill, about four miles east of Jamestown in James City County, had clear evidence of shoemaking. The 1738-1744 ledgers of James Bray III, an affluent planter, reveal that he had a miller doubling as a shoemaker (Kelso 1984:38-40). Archaeological monitoring of construction at a mill dam on the former Bray plantation recovered waste shoe leather and a wooden tool for pegging soles (Kelso 1984:193-194).

Archaeological examples of tanning and shoemaking sites from the post-medieval period in England are also slender. In his study of leather manufacture in Northamptonshire, Thomson (1981: 174) reported only two post-medieval tanning sites had been excavated, Northampton and St. Albans. The Northampton site was identified as a leather working site due to the presence of several pretanning pits. No leather working tools were found on either site.

ARCHAEOLOGY

Background

Wells 44NH8/1, 2, 4, 5, 6, and 18 were excavated during the project, while the fill in Wells 44NH8/3 and 7 was previously removed by Mmes. Wescoat, Jones, and Mihalyka. All fill removed from barrel wells 44NH8/1, 2, 4, 5, 6, and 18 was water-screened in the bay through ¼" wire mesh. The fill removed from the barrels of boxed wells was separated from that found outside the barrels, and multi-barrel wells were assigned arbitrary layers for the fill in each barrel.

The limits of features 44NH8/8 and 44NH8/9 were determined through shovel-testing and were subsequently exposed by stripping the topsoil and plowzone using a backhoe with a smooth edge bucket. The soil from these features was excavated following the natural stratigraphy and was dry-screened through ¼" wire mesh.

Results

A total of ten wells, two pits, and several unidentifiable features in the cliff were examined during the project (Figure 7). Artifacts recovered from the features suggest they were filled ca. 1690-1730.

44NH8/1: Barrel Well

This well consisted of a half-barrel within the remains of a wooden box (Figure 8). The box was 2'5" square and was framed around dressed posts that ranged in size from 2" to 2¼" by 2⅝"-3". About 6" of the posts survived, and each one has been sharpened to a point. The box was

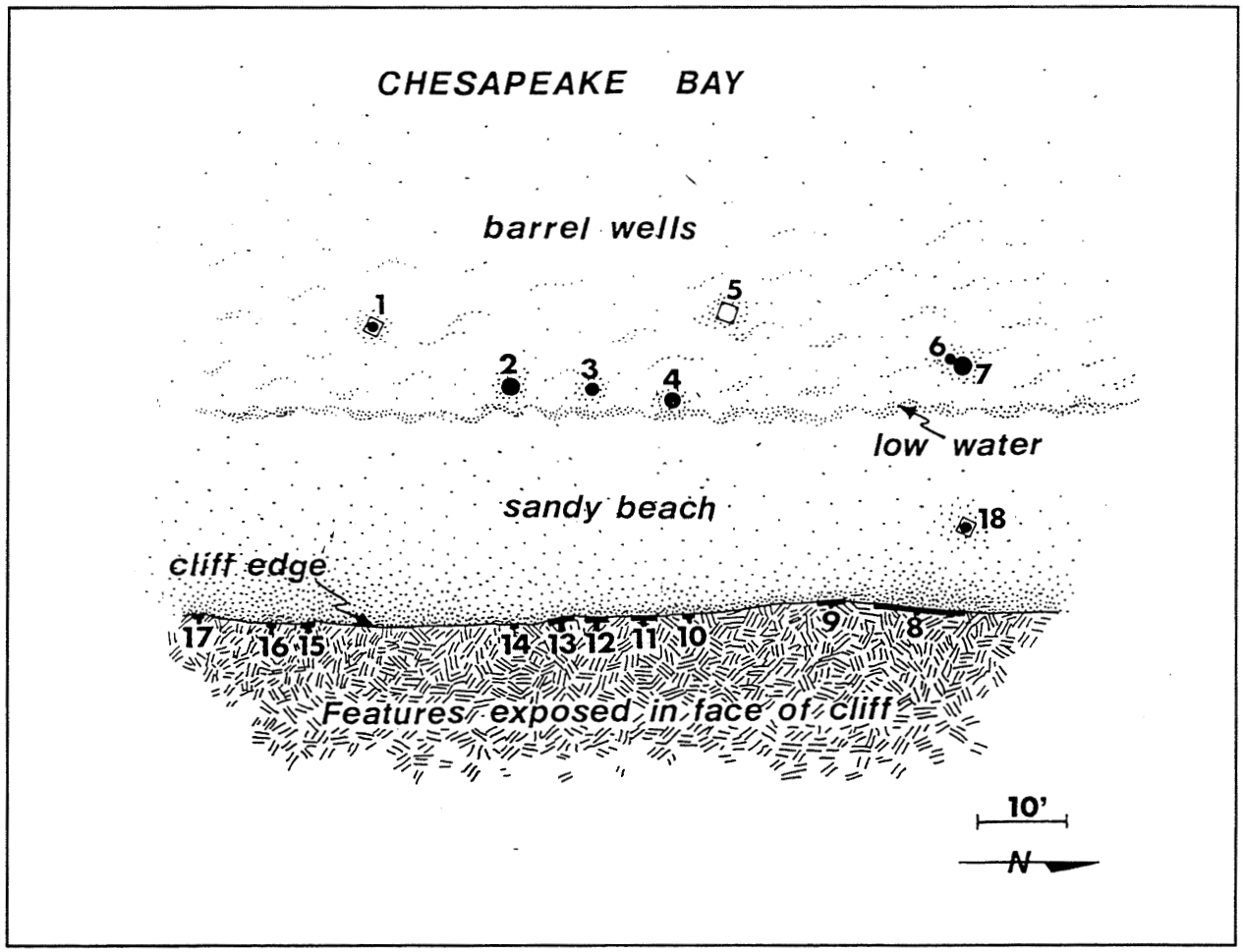

Figure 7. Site plan of 44NH8.

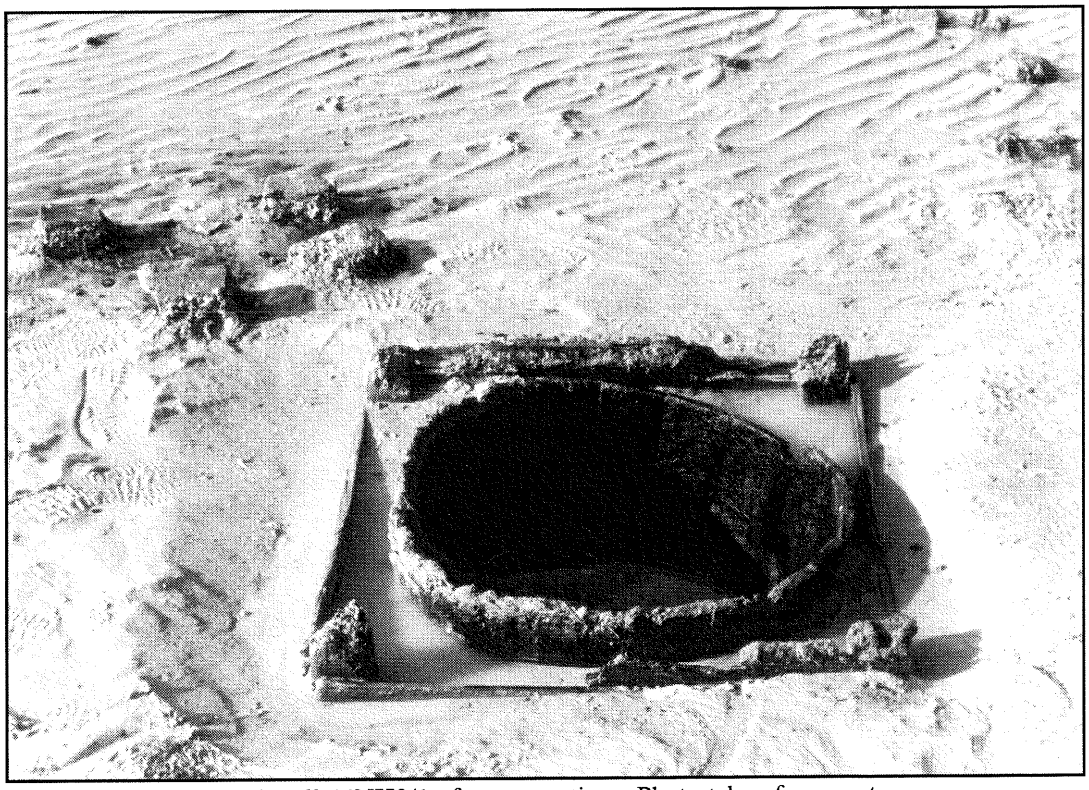

Figure 8. Barrel well 44NH8/1 after excavation. Photo taken from east.

Figure 9. Detail of barrel well 44NH8/1 showing mortised bracing.

strengthened by braces that were mortised into the posts; the wood framing was nailed to the outside of the posts (Figure 9).

The surviving half-barrel appeared to have been sawn in half rather than bisected by erosion. The length from the center of the bunghole to the stave end was 1'4" while the diameter of the barrel at the bung hole was 1'11". Both the box and the half-barrel were removed.

Artifacts were found only within the fill of the half-barrel. Mixed with some modern objects were a wooden stopper, the wooden handle from an iron tool with the initials "JH" engraved into the handle, and a Low Countries coarseware cooking pot rim sherd.

44NH8/2: Barrel Well
A single barrel which protruded 10" above the beach level was all that remained of this well. The total height of the barrel was 2'5", and the diameter 2'11". The fill in the barrel was excavated in three layers beginning with the surface sand (44NH8/2) which covered 3-4" of sand wash (44NH8/2A) that sealed a thick layer of dark grey clay (44NH8/2C). The surface layer had several barrel stave fragments and a Spanish olive jar sherd. Layers 44NH8/2A and 2C yielded artifacts dating to the late seventeenth century such as North Devon, Midlands Blackware, and Spanish olive jar coarseware sherds, English Brown stoneware, Staffordshire combed slipware, and 10 sherds of a blue and white delftware William and Mary royal plate. Dutch brick, an iron knife blade, a brass lock escutcheon, and shoe leather including one heel with five peg holes were also found in this well. The William and Mary plate crossmends to sherds in 44NH8/9C and 9D.

44NH8/3: Barrel Well
This well consisted of a single barrel which was 2'5" in diameter. Its contents had been excavated previously by Mmes. Wescoat and Mihalyka who had collected a Dutch clay tobacco pipe stem with a molded floral motif, part of a decorated local tobacco pipe bowl, and pieces of leather which they carefully kept wet. The leather pieces ultimately mended together to form a complete child's shoe. The barrel had since refilled. It was not re-excavated to obtain a depth measurement and was left in place.

44NH8/4: Barrel Well
A double-barrel well constructed of an inner barrel 1'11" in diameter within a larger barrel, 2'8" in diameter had been partially excavated by Mmes. Wescoat and Jones, who recovered pieces of Dutch brick, a delftware sherd, a complete copper mug, leather pieces from at least three different shoes, and leather offcuts. The remaining fill consisted of a dark grey clay with lenses of sand wash (44NH8/4A). It contained a mixture of modern and seventeenth-century artifacts, including salvaged shoe leather fragments and the end of a buff leather belt with a punched hole.

The inner barrel survived for a total length of 2'6". Artifacts were recovered only from the inner barrel fill. The barrels were left in place.

44NH8/5: Box Well
It is unclear whether this well was built originally as a box or had been lined with a barrel. There was an in situ barrel remnant or discernable barrel stain; however, pieces of barrel staves and withes were found in the fill inside the box. The 3'3" square box was framed around dressed posts that were 4¼" square (Figure 10). Two posts were removed and found to have sharpened points and measure nearly 4' in length. There was no evidence that the box was braced like 44NH8/1. The fill was excavated as one layer. Two of the posts and several side boards were removed.

This well was among the richest in number of artifacts yielded at 44NH8. Aside from a handful of modern objects, there were ceramics dating to the late seventeenth century, a Venetian star glass bead, a lead whirligig, and a brass strap that may be a tinker's dam. Forty-four English clay tobacco pipe stems were recovered, providing a stem hole diameter date of 1691. Also, the well had pieces of shoe leather from at least five shoes.

44NH8/6: Barrel Well
All that remained of this well was part of a single barrel that measured 1'10" in diameter. It was cut by the barrels from Well 44NH8/7. Well 44NH8/7 was excavated first, the barrels removed, and the hole quickly backfilled to prevent Well

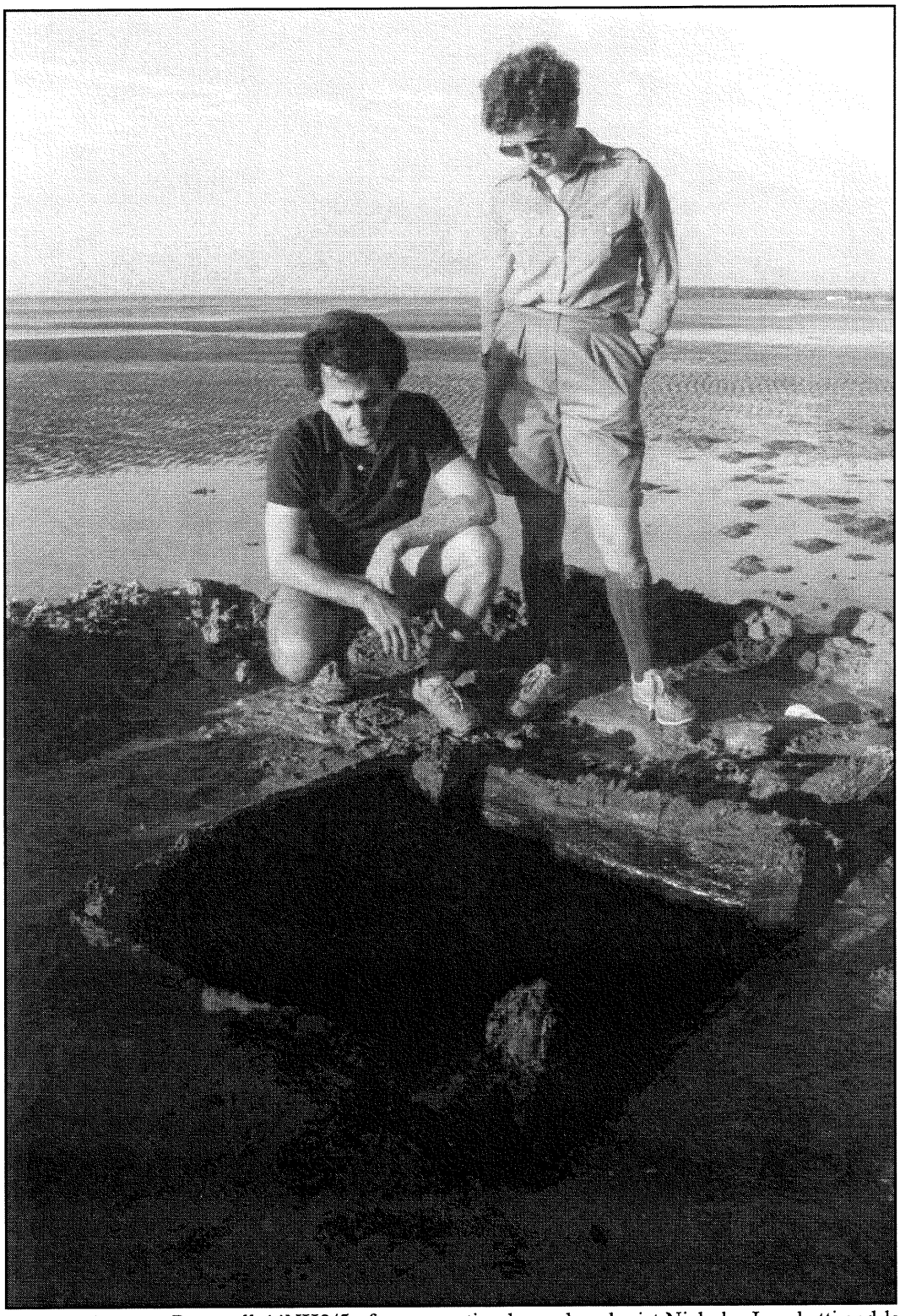

Figure 10. Box well 44NH8/5 after excavation by archaeologist Nicholas Luccketti and landowner Suzanne Wescoat. Photo taken from southeast.

44NH8/6 from collapsing. There were four posts set nearly edge-to-edge outside the barrel which may have served to anchor the well shaft. There was a single layer of grey clay (44NH8/6A) in the barrel with only a few artifacts. The barrel was left in place.

44NH8/7: Barrel Well

This well consisted of three barrels - a small barrel set inside a larger barrel with a half-barrel in the bottom. The barrels cut through Well 44NH8/6. The outer barrel was nearly intact; it had a slightly eroded top, and measured 3'2" in length. Approximately one-half of the inner barrel survived; the half-staves were 1'11" long. The lower barrel was 2'6" long with a slightly eroded edge. None of the barrels had a bung hole. All three barrels were removed.

The inner barrel was filled with dark grey clay (44NH8/7A) and contained a few seventeenth-century artifacts mixed with modern objects. The lower barrel was also filled with dark grey clay (44NH8/7B), but no artifacts were found in it. All the barrel staves, were removed. Three staves had marks - a broad arrow, the letters "TB", and the number "8".

44NH8/8: Pit or Cellar

This apparent rectangular feature was severely impacted by erosion that left an exposed profile in the cliff face at an angle to the axis of the feature (Figure 11). The surviving dimensions of the feature were at least 12' on the east side and minimally about 3' on the north side. The pit extended nearly 3'6" below modern grade and had a relatively flat bottom (Figures 12 and 13).

There were no postholes or other features around the outside of the pit/cellar. As a consequence of the prevailing conditions, the fill was extremely hard and difficult to excavate. Only the northeast corner was tested to see if there was a posthole in the corner of the feature.

The feature fill (see Figure 12) was sealed by a layer of plowzone (44NH8/8B) that lay beneath the topsoil. The uppermost layer in the pit/cellar was a dark brown loam (44NH8/8C) that defined the outline of the feature and contained a glass wine bottle fragment, and sherds of Midlands Blackware and a Rhenish stoneware tankard. Local coarseware sherds from this layer crossmended to coarseware in layer 44NH8/8G. Under 44NH8/8C was a thick stratum of grey sandy loam with some whole oyster shells (44NH8/8D) and few artifacts - six fragments of case bottle glass, one local pipe stem, part of a local pipe bowl, and oyster shell mortar. This layer covered a deposit of mottled sandy loam (44NH8/8E) that had a single sherd of Midlands Blackware, one local pipe bowl fragment, and two pieces of case bottle glass. Beneath this were three layers of sand and wash fill with few artifacts. The artifacts from the feature indicate that it was filled ca.1670-1700.

44NH8/9: Possible Well

A possible well, this roundish pit is approximately 8' in diameter (Figure 14) and located 4' south of Pit/Cellar 44NH8/8 (see Figure 11). The southern two-thirds of the feature was partially excavated to obtain a backfill date.

The pit was sealed by topsoil on top of a plowzone layer (44NH8/9A) that contained several ceramic types and a base of a wine bottle that all dated to ca.1680-1700. Beneath the plowzone, the top layer of fill in the feature consisted of 10 inches of dark brown loam with clam and oyster shells and charcoal (44NH8/9B). North Devon coarseware, Midlands Blackware, Staffordshire coarseware, and wine bottle glass dated this layer to ca.1670-1700. Below this was a 10" thick layer of brown loam with a pocket of whole oyster shells (44NH8/9C) that sloped downward toward the center of the pit. Six English pipe stems, two local pipe stems, Midlands Blackware, Staffordshire ironglazed, and a sherd from a William and Mary blue and white delftware royal plate, all dating to ca.1690-1695, were recovered from this layer. The William and Mary plate sherds crossmended to sherds from Well 44NH8/2C. The last layer uncovered before excavation was suspended was brown loam mixed with white sand and orange clay (44NH8/9D). It contained English and local pipe stems and pipe bowl fragments, Midlands Blackware and Staffordshire mottled glazed sherds, and a William and Mary delftware plate sherd that crossmended with sherds from 44NH8/9C and 44NH8/2C.

44NH8/18: Barrel Well

This well was located near the base of the cliff.

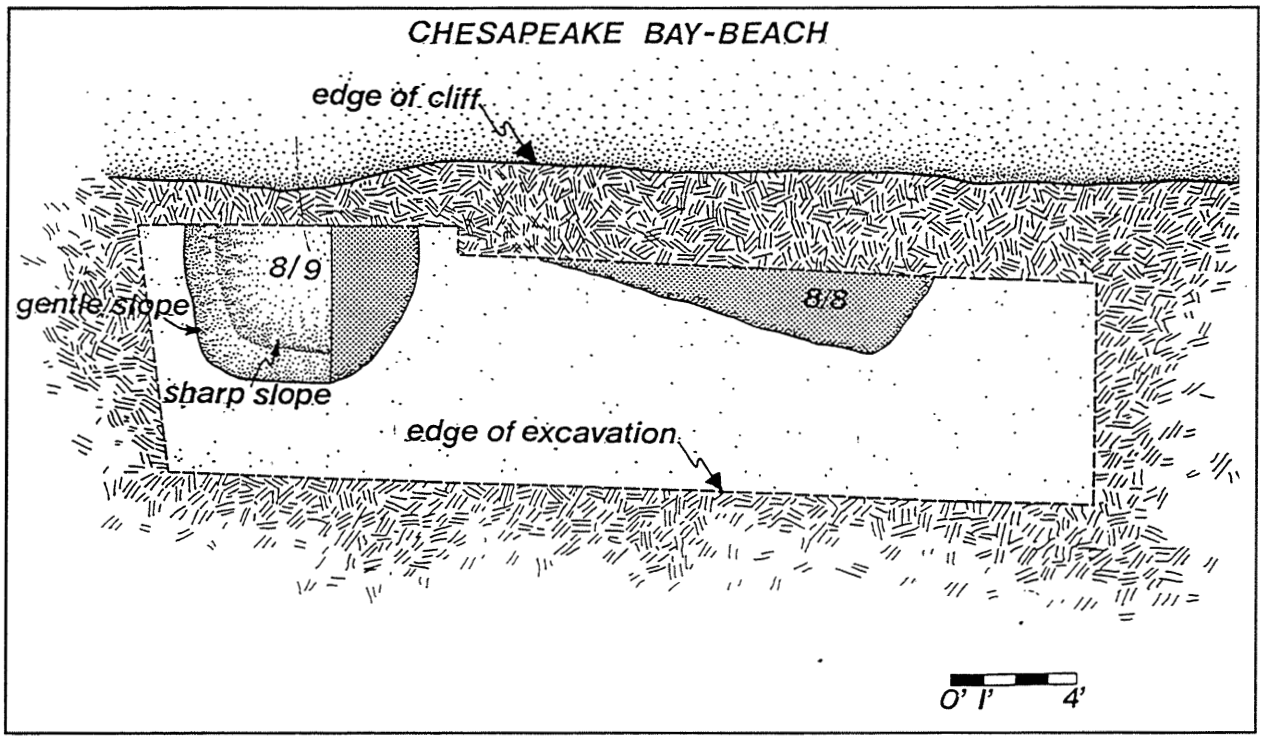

Figure 11. Plan view of features 44NH8/8 and 44NH8/9.

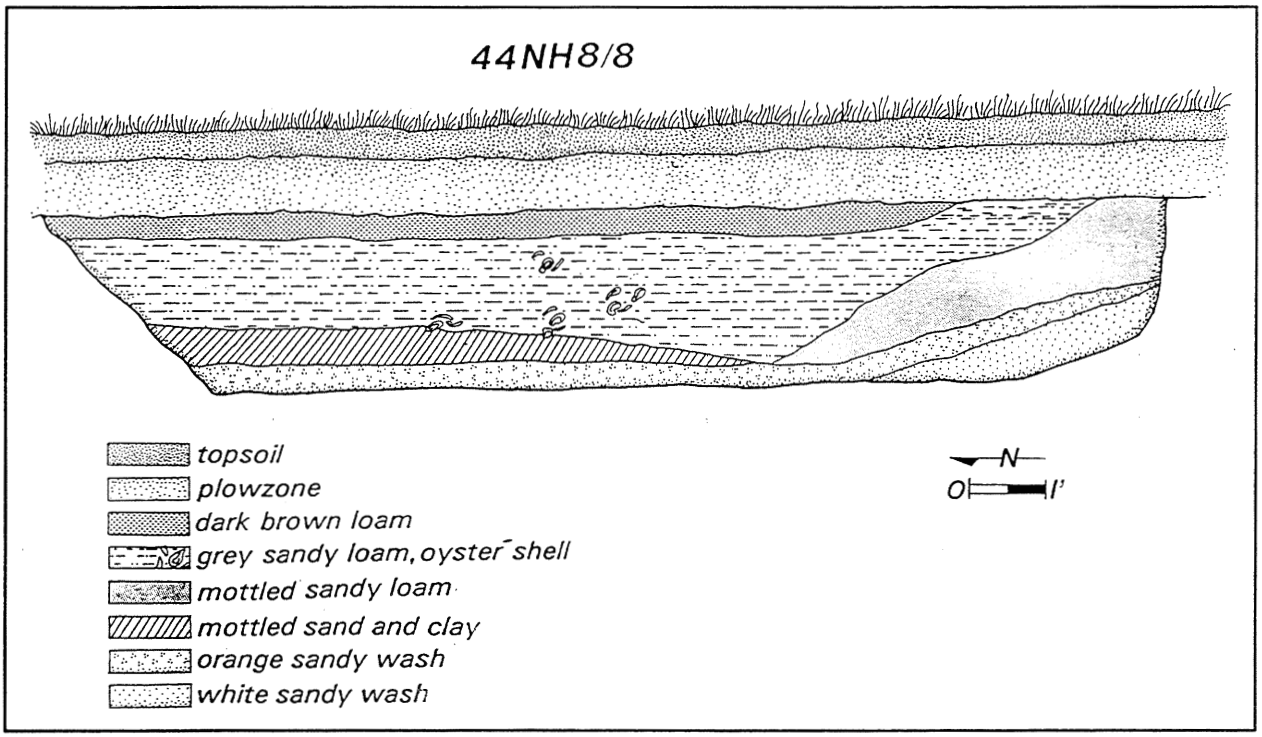

Figure 12. Excavation profile of 44NH8/8.

Figure 13. Remains of 44NH8/8, possible basement, cellar, or pit. Photo taken from north.

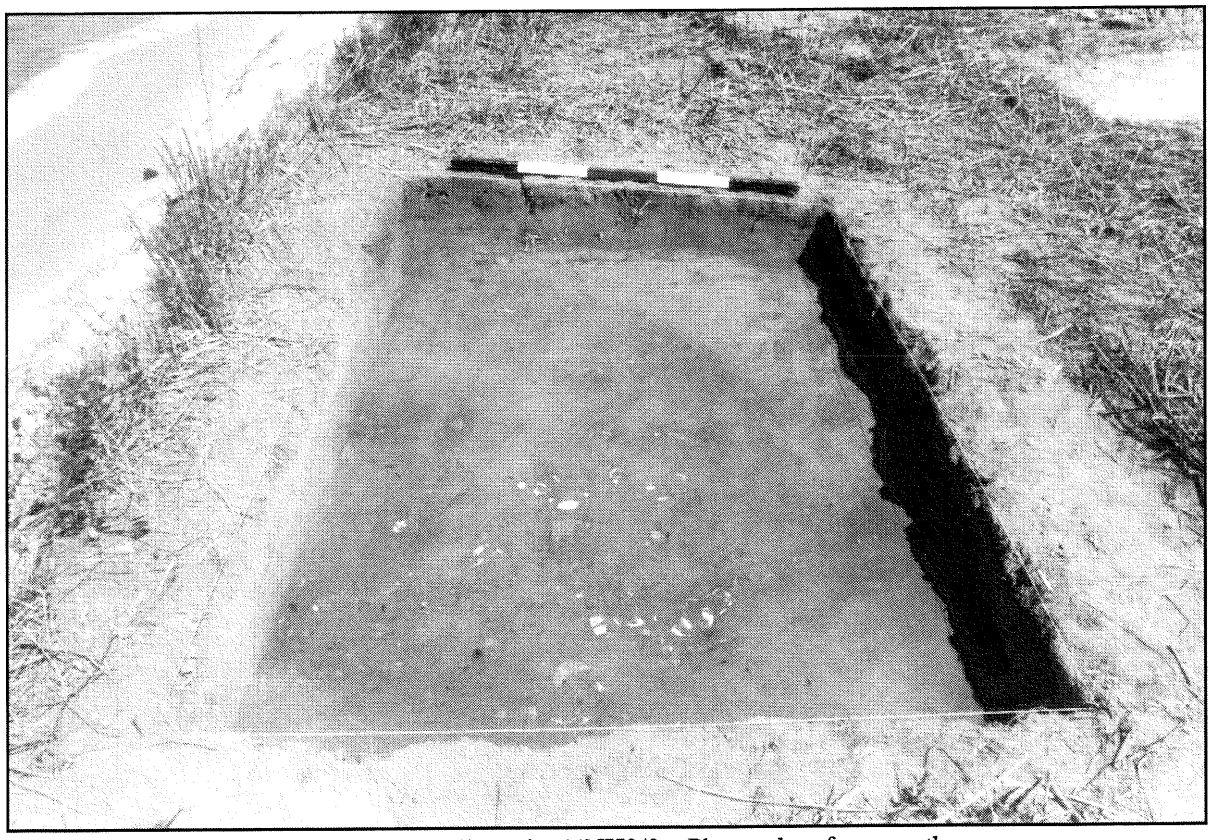

Figure 14. Remains of possible well or pit, 44NH8/9. Photo taken from south.

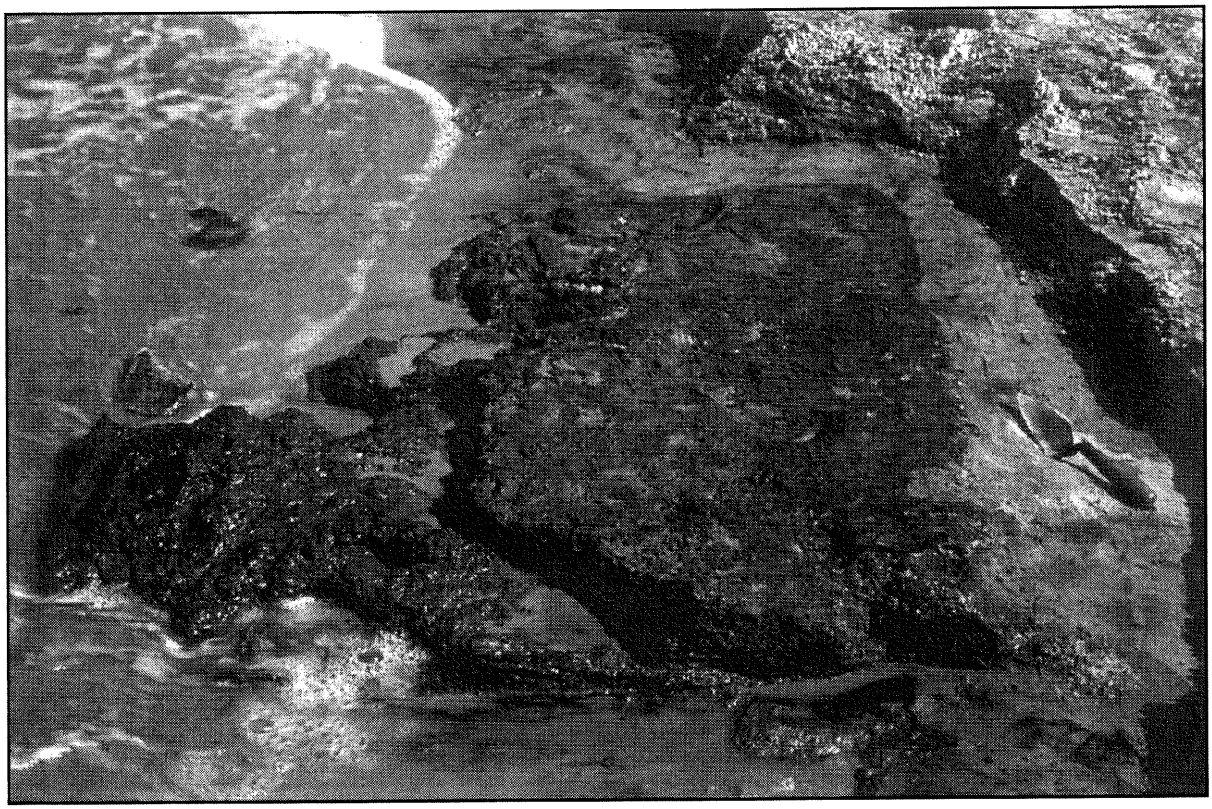

Figure 15. Well 44NH8/18 before excavation.

Figure 16. A complete intact tool box in upper barrel of well 44NH8/18 during excavation.

The well was exposed by a storm and manifested as a dark square rather than an exposed barrel or box as the other wells (Figure 15). Excavation of the dark brown sandy loam surface revealed the top of a barrel inside a box. The box was a slight parallelogram, measuring 4'5" on the west and south and 4' on the east and north. The posts for the box were limbed and sharpened trees; two were 5" in diameter, and the third was 4" and still retained the bark. Three posts were recovered for possible dendrochronological analysis.

Within the box was an intact barrel 3'4" long, with a half-barrel (1'1" from end to center bung hole) placed in the bottom of it. A complete wooden tool box was found in the upper barrel (Figure 16). The fill in each barrel was excavated separately as was the fill between the box and the barrel. Both barrels were removed.

Other Features

A total of eight other possible features that were exposed in the eroded cliff face appeared as areas of dark brown loam extending below the plowzone into the subsoil. These were investigated by cutting trenches by machine and trowel-cleaning the cliff face. Seven of the areas exhibited irregular shapes in plan and profile and were interpreted as probable tree holes. Area 44NH8/17 was clearly a cultural feature, most likely a ditch. It varied in width between 1' and 1'6" and was about 10" deep. It extended at least five feet back from the cliff edge, but was not apparent in a test trench made 40' inland from the cliff edge. It had uniform fill of brown loam with charcoal flecks and a light brick scatter (44NH8/17A). Pieces of bone and shell were found in the ditch as well as a single sherd of North Devon coarseware.

Artifacts

The ceramic wares at the site are predominantly from the Midlands region of England and include Staffordshire mottled glaze, slipware, blackware, as well as "Midlands" yellow ware. These ceramics were all in production ca.1670-1700.

Non-ceramic artifacts, dating to the late seventeenth century based on stylistic features, include a brass keyhole escutcheon recovered from well 44NH8/2 (Figure 17) and a copper tankard from well 44NH8/4 (Figure 18). The tankard's broad short shape reflects the form of silver tankards dating ca.1685 - 1695 rather than the taller, more vertical proportions of the eighteenth century (Ward:125-127). Silver specimens, usually marked, provide a chronology of form which was closely followed by base metal objects. The molded baseband and lip typical of a silver tankard are reflected in the rolled rim and extended base on the copper mug.

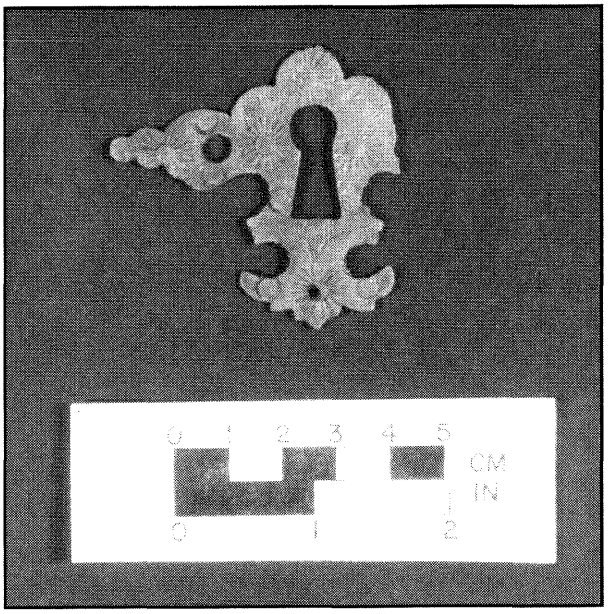

Figure 17. Brass diamond-shaped escutcheon chased with rosettes, rocovered from 44NH8/2A.

An unusual lead-alloy tobacco pipe stem was excavated from well 44NH8/5. A similar artifact was excavated at Jamestown from a structure which had definite occupation in the third quarter of the seventeenth century (Cotter:54-57).

The watery contexts provided by well features allowed for the preservation of many organic materials which normally do not survive archaeologically. Outstanding among these materials, and important for interpretation of site function, are the remains of at least ten leather shoes recovered from four of the nine wells. Six partial shoes, all seemingly from different pairs, were made for children and one example (Figure 19) is complete. The Church Neck Wells shoes parallel English footwear in the third quarter of the seventeenth century. They and other leather materials, such as leather offcuts and a leather belt fragment, appear to be local products of the

Figure 18. Copper tankard found in 44NH8/4A.

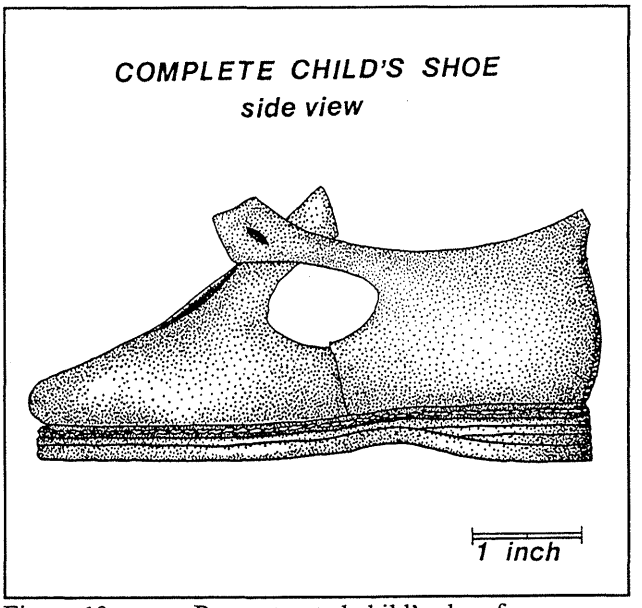

Figure 19. Reconstructed child's shoe from 44NH8/3.

historically-documented thriving leather industry on the Eastern Shore. The shoes are discussed in detail at the end of the artifact section.

The wells' wet environment also preserved wood artifacts worthy of note. Unusual for its completeness and excellent state of preservation is a pine tool box with oak handle (Figure 20). The box, which has slant-top ends, is constructed in the same way that tool boxes, including metal ones, are made today. Although not stylistically dateable, the box was excavated from a seventeenth-century context. Only 13¾" long, the box is too small to carry standard carpenter's tools, such as hammers, chisels, and saws (Jay Gaynor, personal communication:October 1987). It is enticing to conjecture that the box is another indication of leatherworking at the site, and that its purpose was to carry shoemaker's tools although there is no known precedent for this. "Most (shoemakers) seem to carry kit in a soft sack or bag, or possibly the apron, which was usually recommended. There are some more solid boxes later, but they are usually big enough to sit on" (June Swann personal communication:December 16, 1987). Unfortunately, no tools which may have indicated the profession of its owner were found in association with the box.

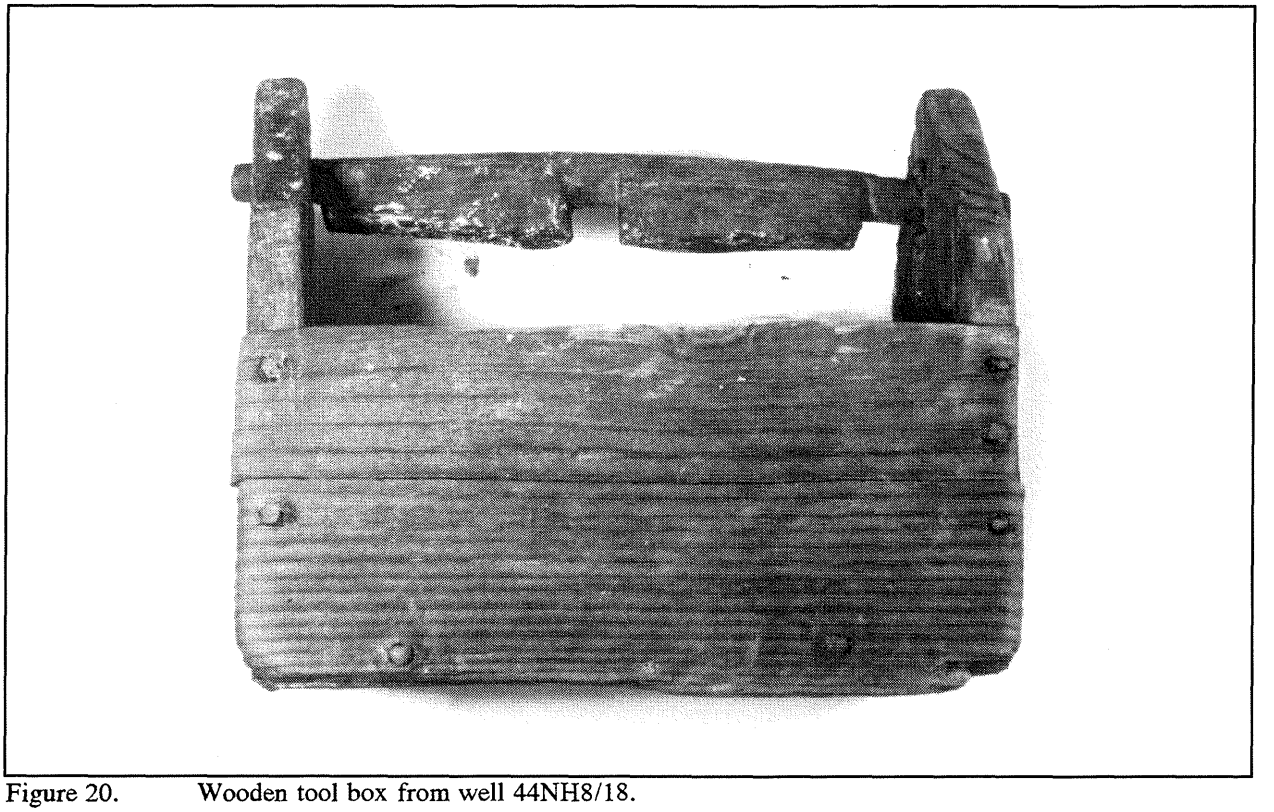

Figure 20. Wooden tool box from well 44NH8/18.

A tool was found, however, in well 44NH8/1 (Figure 21). As yet unidentified, the tool consists of a section of iron blade with a chamfered wood handle bearing the faint impression of two initials "IH". The "I" is crossed, making it a colonial "J." The iron is too corroded to identify with certainty, but cordwainer and footwear specialist D.A. Saguto suggests that the tool could be a shoemaker's hooked knife (personal communication:October 1987). This type of tool

Figure 21. Wooden tool handle with carved initial "H".

is visible lying on a workbench of a shoemaker in a ca.1650 painting by David Teniers (Figure 22). Also preserved beneath the site's water table were the bottom sections of the seven barrels, each part of the lining of a well shaft. These were examined, and only the barrel from well 44NH8/7 was found to bear marks. Markings on coopered vessels "may represent makers' marks, owners' marks, contents, origin, destination, or simple graffiti (Allen n.d.:3). The barrel from well 44NH8/7 had three distinct symbols: an apparent "broad arrow" (Figure 23), a "figure-8" (Figure 24) incised near the bunghole, and the joined letters "TB" (Figure 25) branded on another stave. Rather perplexing is the "broad arrow" mark which usually signifies Royal Naval issue. Perhaps this indicates secondary use of a container which originally contained British naval provisions or that Charlton and/or Foxcroft were supplying the navy with goods.

The other two marks are most likely cooper's marks ensuring the capacity and quality of the cask, or suppliers symbols providing an identification for shipment. In 1619, "the Virginia Assembly passed an act requiring coopers and suppliers to place their initials on casks to prevent tampering"(Shackelford:41). Alternatively, the initials could represent Thomas Benthall, the man to whom the tannery was left by Charlton in 1654 (see history section). Perhaps the marking shows that the barrel was either made for him or was filled with goods intended for him.

Before describing the shoes recovered at 44NH8, it is necessary to define the terms relating to footwear (Figure 26). This lexicon is based on Audrey Noël Hume's analysis (1973:22) and on personal communication with leather specialist D.A. Saguto (1987).

> Upper: Piece of leather or other material which covers the upper part of the foot.
>
> Bottom: Composed of I) insole upon which the foot rests; and 2) outsole which is between the ground surface and insole.

Figure 22. David Tenier's (1610-1690) *Shoemaker*. Reproduction courtesy of Northampton Museums and Art Gallery, Northampton, England.

Figure 23. "Broad arrow" mark on barrel stave from well 44NH8/7.

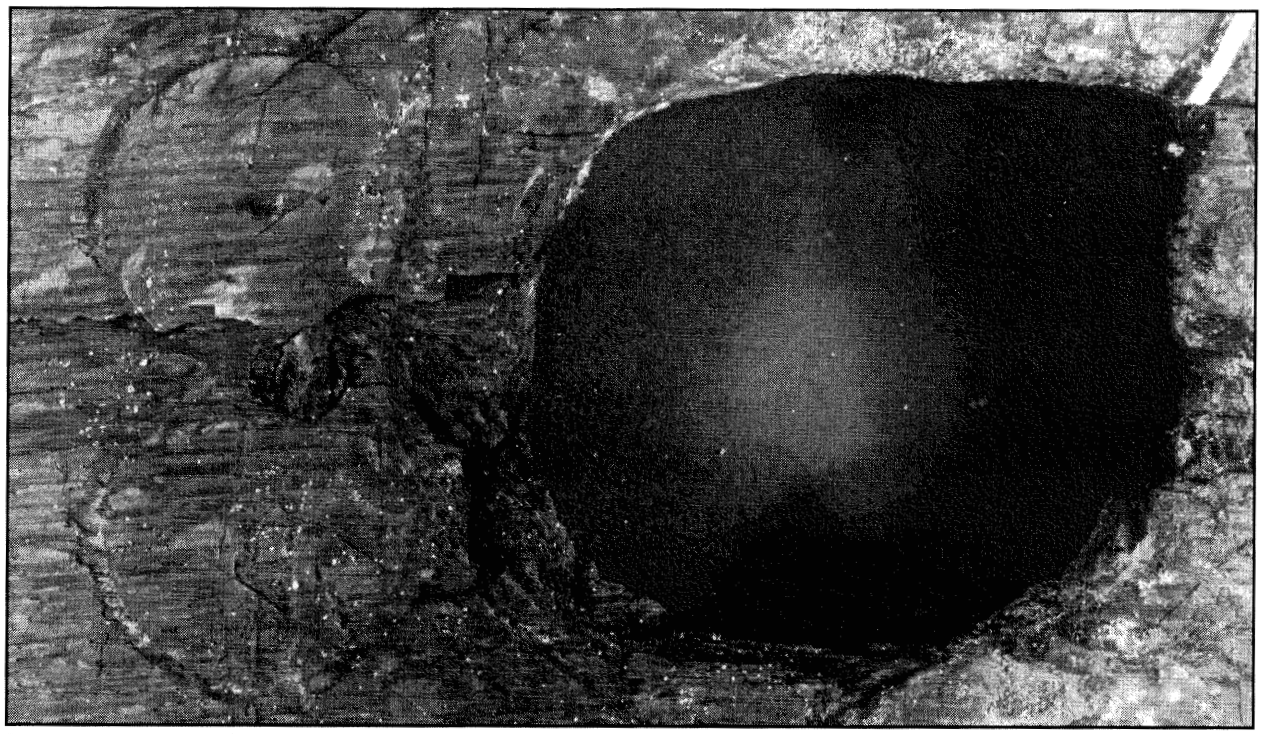

Figure 24. "Figure 8" mark stamped near bung hole of barrel stave from 44NH8/7.

Figure 25. Initials "TB" branded onto barrel stave from well 44NH8/7.

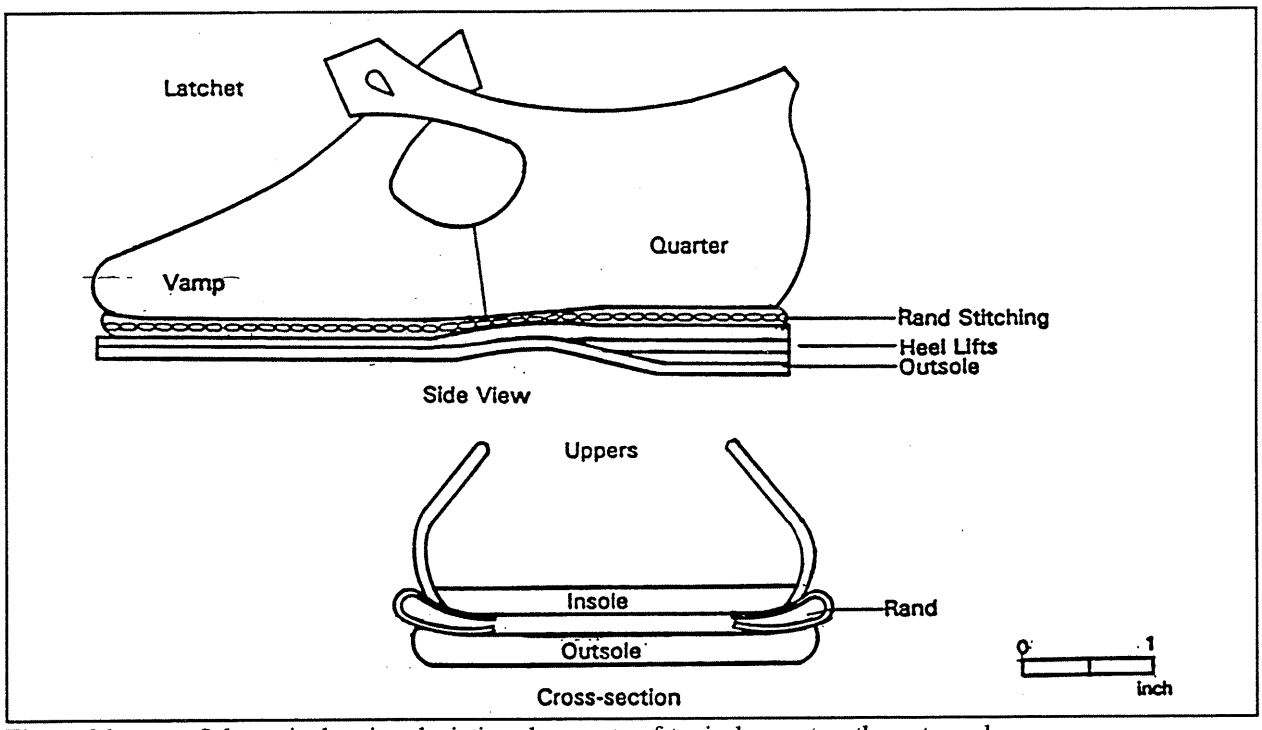

Figure 26. Schematic drawing depicting shoe parts of typical seventeenth-century shoe.

Vamp: Front half of upper which covers toes and instep.

Quarter: Back half of upper which covers heel.

Latchet: Straps on quarter which attach to vamp with a buckle or by laces through holes pierced in both latchets and vamp.

Heel: Heeled footwear was not widely adopted until the late sixteenth century and is "not a basic component for a successful shoe" (Saguto 1984:5). The heel is composed of lifts or layers of wood which are pegged or nailed together.

Rand: Folded strip of leather reinforcement lying between insole and outsole and held in place before stitching by rand bracing, threads which manifest themselves as criss-crossed impressions on insole bottoms and outsole tops.

Welt: Leather reinforcement folded over outside edge of insole and stitched to both insole and outsole; represents the best method of shoemaking.

The following analysis relies heavily on consultation with footwear specialist D.A. Saguto for the dating of the leather shoe parts. At present, there are few extant examples of seventeenth-century shoes from excavated contexts and even fewer from British colonial sites. Excavations at Jamestown recovered parts of nine or ten shoes but these are fragmentary, appearing to date primarily to the second half of the seventeenth century and, in some instances, coming from questionable contexts.

Most intact seventeenth-century footwear resides primarily in museum collections, a situation which poses a new set of questions to researchers trying to use them as stylistic parallels. What factors led to the survival of these shoes? Were they in some way atypical of the shoes worn by the population, i.e. too large, too small, or too fancy, thereby insuring that they would not be worn out?

> Clothing that reaches a museum collection has been culled by time, by curatorial selectivity, and by a process we might call 'survival of the finest.' (Baumgarten 1986:13)

Would shoes worn, and made, by the Virginia colonists tend to be more conservative than their English counterparts, retaining characteristics of earlier English shoes? Would class differences be reflected in shoe styles? These are some of the many unanswered questions on the subject of early footwear. The dates attributed to the shoes in this study must therefore be considered tentative until more examples of similar footwear from verifiable contexts can be located.

All the Church Neck Wells shoes are "straights", shoes made to fit either foot and not formed for specific use on left or right. Straights and heels, both introduced to footwear ca.1590, were used continually until ca.1800 (Swann 1982:7).

Shoe #1 (44NH8/3) (Figures 27 and 28)
Date: ca. third quarter seventeenth century.

Shoe #1 is a complete and fully-randed child's shoe showing signs of wear. Figure 27 provides an exploded view of the shoe's components. The shoe has a two-lift spring heel, square toe, and a slit vamp. Butted seams attach the vamp to the quarters which have a center back seam. Latchets extend from the top of the quarters to be tied over the two slits in the top vamp with a ribbon leaving small open sides. Impressions of the rand bracing are visible on the bottom of the insole.

This was the only shoe excavated from well 44NH8/3. Children's shoes are difficult to date as not many have been excavated from tightly dated contexts. While the styles of children's shoes are generally similar to those worn by adults (Friendship-Taylor 1984:323), some styles appear to continue for long time periods and do not seem as vulnerable to the whims of fashion as adult shoes. According to June Swann, the shoe styles of children may reveal how their society regarded them, such as "a miniature adult, or something to be seen but not heard" (Swann 1982:6).

This style of shoe has been attributed to the 1620s

(Friendship Taylor 1984: 331,#59), but it continues into the 1660s and 1670s (Swann:personal communication). A parallel is illustrated on the feet of a school boy in *The Schoolmaster* by Jan Steen (Figure 29) dating ca.1663-65 (National Gallery of Ireland, Dublin).

Other artifactual material from this context includes a Dutch tobacco pipe stem, a locally-made rouletted pipe bowl, Staffordshire iron-glaze coarseware, and case bottle glass suggesting a seventeenth-century construction date for the well.

Shoe #2 (44NH8/4) (Figure 30)
Date: mid-seventeenth century.

Shoe #2 is an adult male's square-toed vamp and insole fragments. The shoe has full welt construction and possibly was heel-less.

Shoe #3 (44NH8/4) Not illustrated
Date: mid-seventeenth century.

Shoe #3 is a child's insole toe fragment with square toe and sewn construction.

Shoe #4 (44NH8/4) Not illustrated
Date: ca. third or fourth quarter seventeenth century.

Shoe #4 is an adult male's stacked leather heel which has wooden pegging.

Other leather materials from Well 44NH8/4 include offcuts and a salvaged shoe quarter with a portion removed, possibly suggesting shoe or leather repair. Also retrieved from this context were a locally-made pipe stem, North Devon coarseware and Blackware, Dutch brick, case and wine bottle glass, and a complete copper alloy mug. The latter reflects a late seventeenth-century shape suggesting a post-1680 backfilling date for the well.

Shoe #5 (44NH8/5) (Figures 31)
Date: ca. third or fourth quarter seventeenth century.

Shoe #5 is an adult female's shoe with "eared toe." Fragments include the insole, outsole, wooden heel, and leather heel cover and exhibit rand construction on the forepart. The shoe probably had textile uppers.

Shoe #6 (44NH8/5) (Figure 32)
Date: third quarter seventeenth century.

Shoe #6 is represented by youth's square-toed quarter and vamp fragments; it is latchet-punched with square holes of inferior leather and sewn construction.

Shoe #7 (44NH8/5) (Figure 33)
Date: ca. third quarter seventeenth century.

Shoe #7 is a child's square-toed vamp of sewn construction. Like Shoe #6, it has a square hole punched in the latchet which suggests that the two shoes were made by the same person. Shoe #7 may be part of Shoe #8.

Shoe #8 (44NH8/5) (Figure 34)
Date: third quarter seventeenth century.

Shoe #8 is a child's square-toed shoe including the welt, outsole, and a three-lift stacked leather heel. The shoe had fully-welted construction. It is possibly part of Shoe #7.

Shoe #9 (44NH8/5) Not illustrated
Date: ca. mid-seventeenth century.

Shoe #9 is a child's square-toed insole exhibiting sewn construction.

Assorted delaminations and a fragment of goatskin make up the other leather finds from Well 44NH8/5. The pebble-textured goat skin would have been used for a good quality shoe. Other artifactual material includes North Devon coarseware, Staffordshire slipware, locally-made tobacco pipe bowls and pipe stems, late seventeenth-century - early eighteenth-century English tobacco pipe bowls, and a Venetian glass bead. The presence of a Yorktown brown stoneware mug fragment gives a second quarter eighteenth-century date for backfilling of the well.

Shoe #10 (44NH8/2) Not illustrated
Date: ca. second half seventeenth century.

Shoe #10 is an adult male's stack leather heel with wooden pegs.

Shoe #10 is an adult male's stack leather heel with wooden pegs.

Shoe #10 is the only footwear excavated from well 44NH8/2. This well is one of the more interesting because it contained fragments of an English delftware plate which crossmend with delftware in well 44NH8/9, approximately 55' away. The plate bears the royal portrait of William and Mary thereby placing the backfilling of wells 44NH8/2 and 44NH8/9 at ca.1688, the year in which these English monarchs ascended the throne.

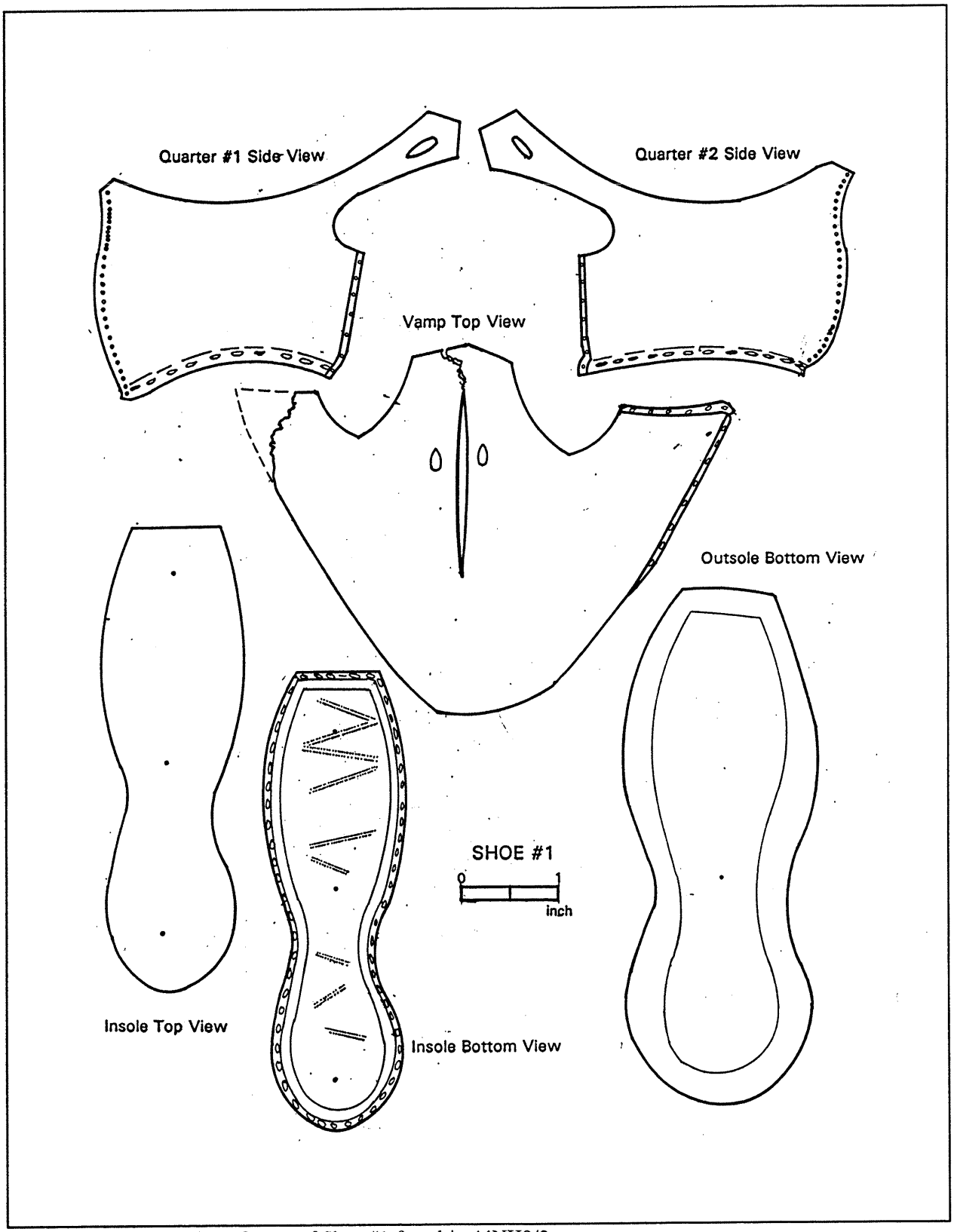

Figure 27. Drawing of parts of Shoe #1 found in 44NH8/3.

Figure 28. Shoe #1, as reconstructed.

Figure 29. Jan Steen's The Schoolmaster (1663-1665). Reproduction courtesy of the National Gallery of Ireland, Dublin.

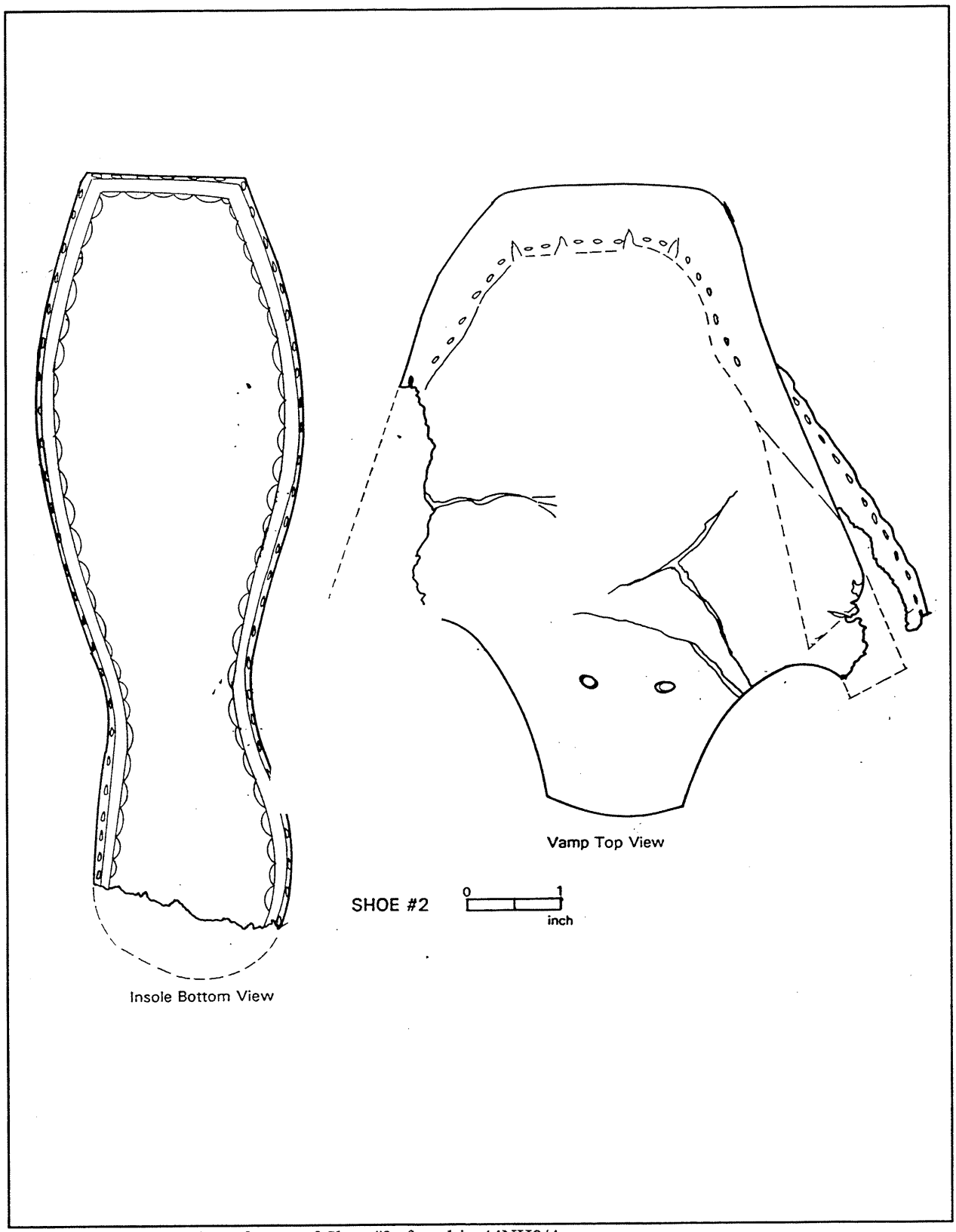

Figure 30. Drawing of parts of Shoe #2, found in 44NH8/4.

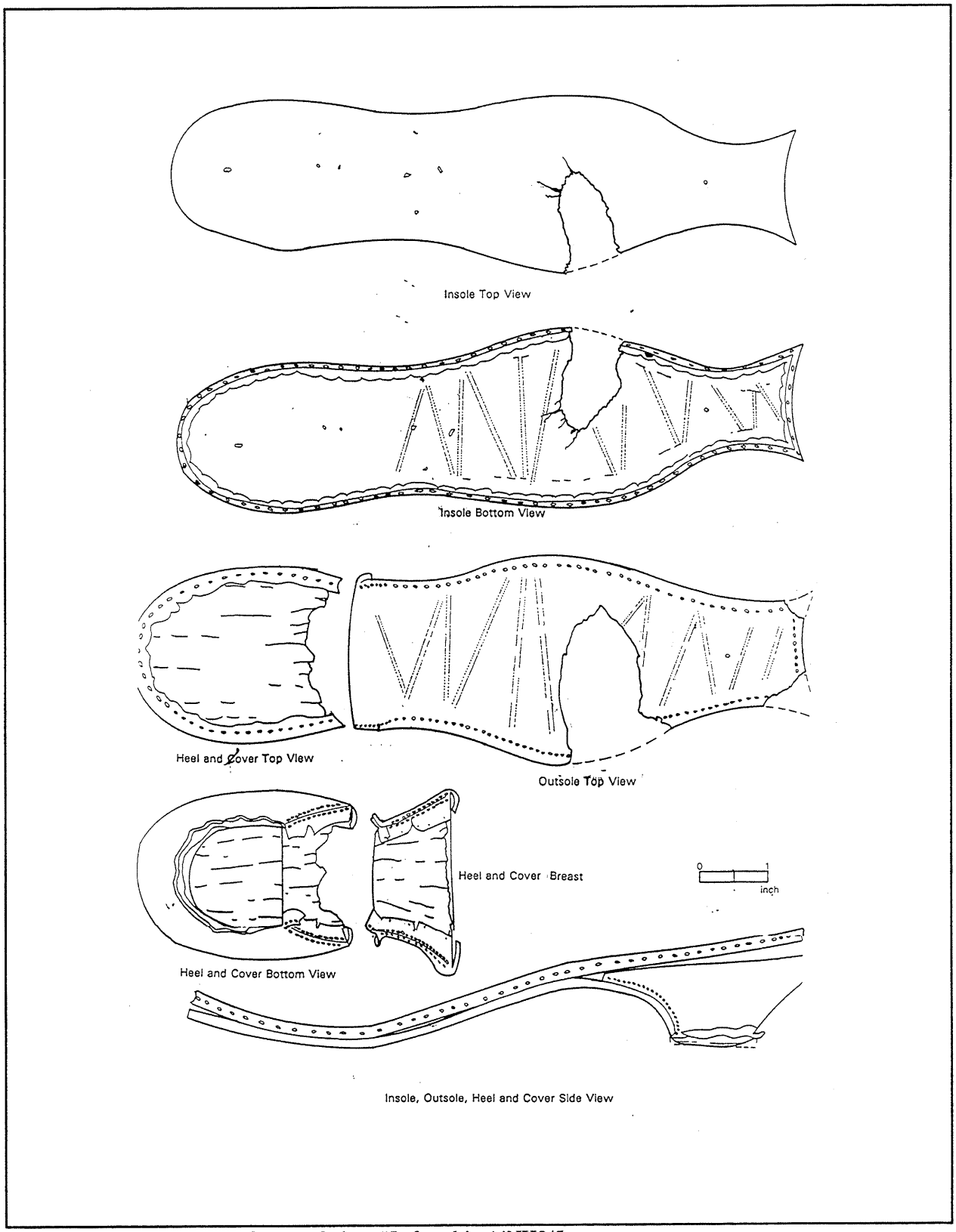

Figure 31. Drawings of parts of Shoe #5, found in 44NH8/5.

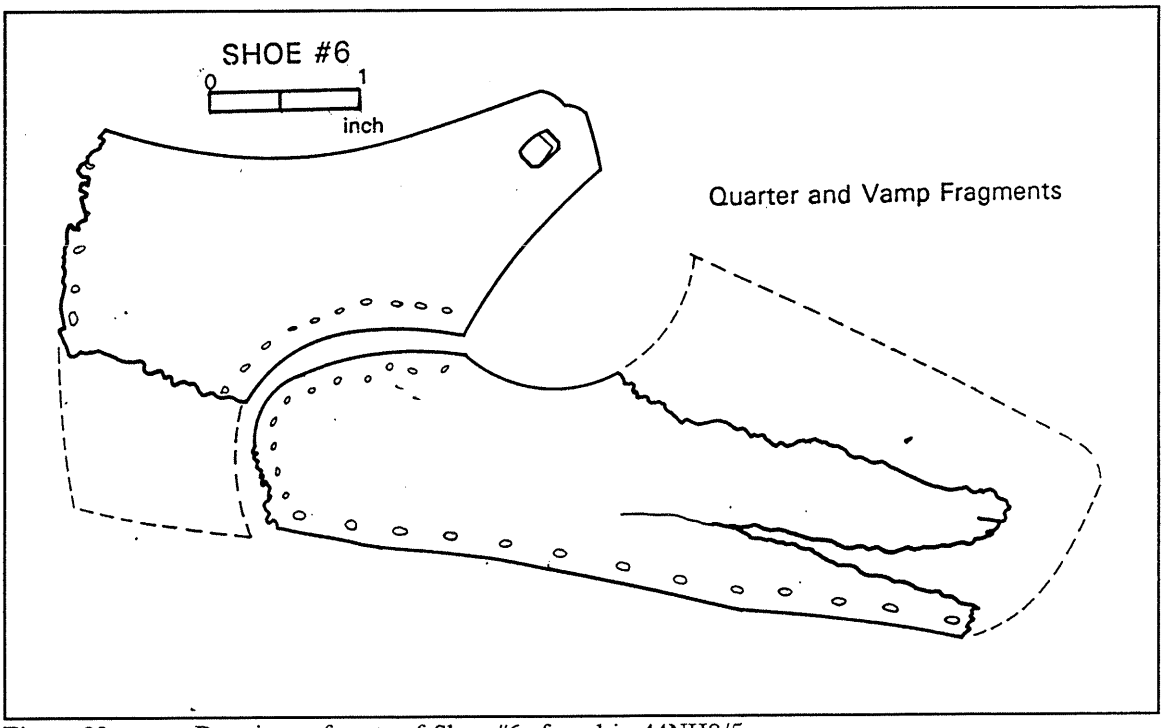

Figure 32. Drawings of parts of Shoe #6, found in 44NH8/5.

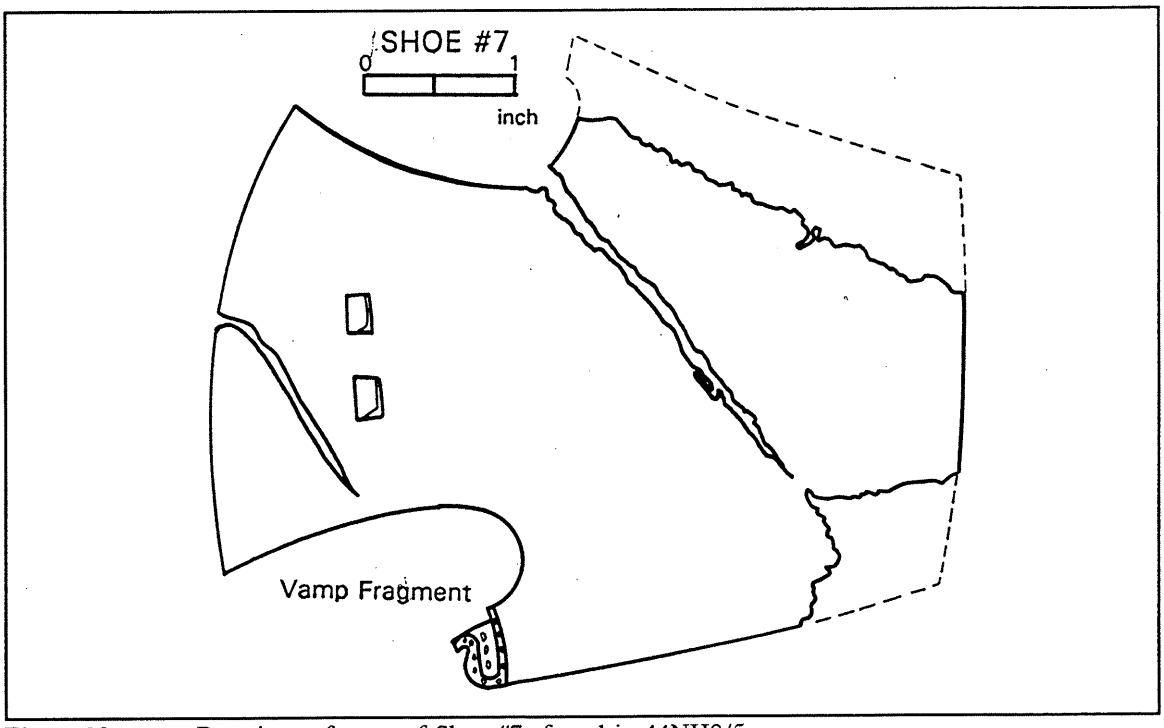

Figure 33. Drawings of parts of Shoe #7, found in 44NH8/5.

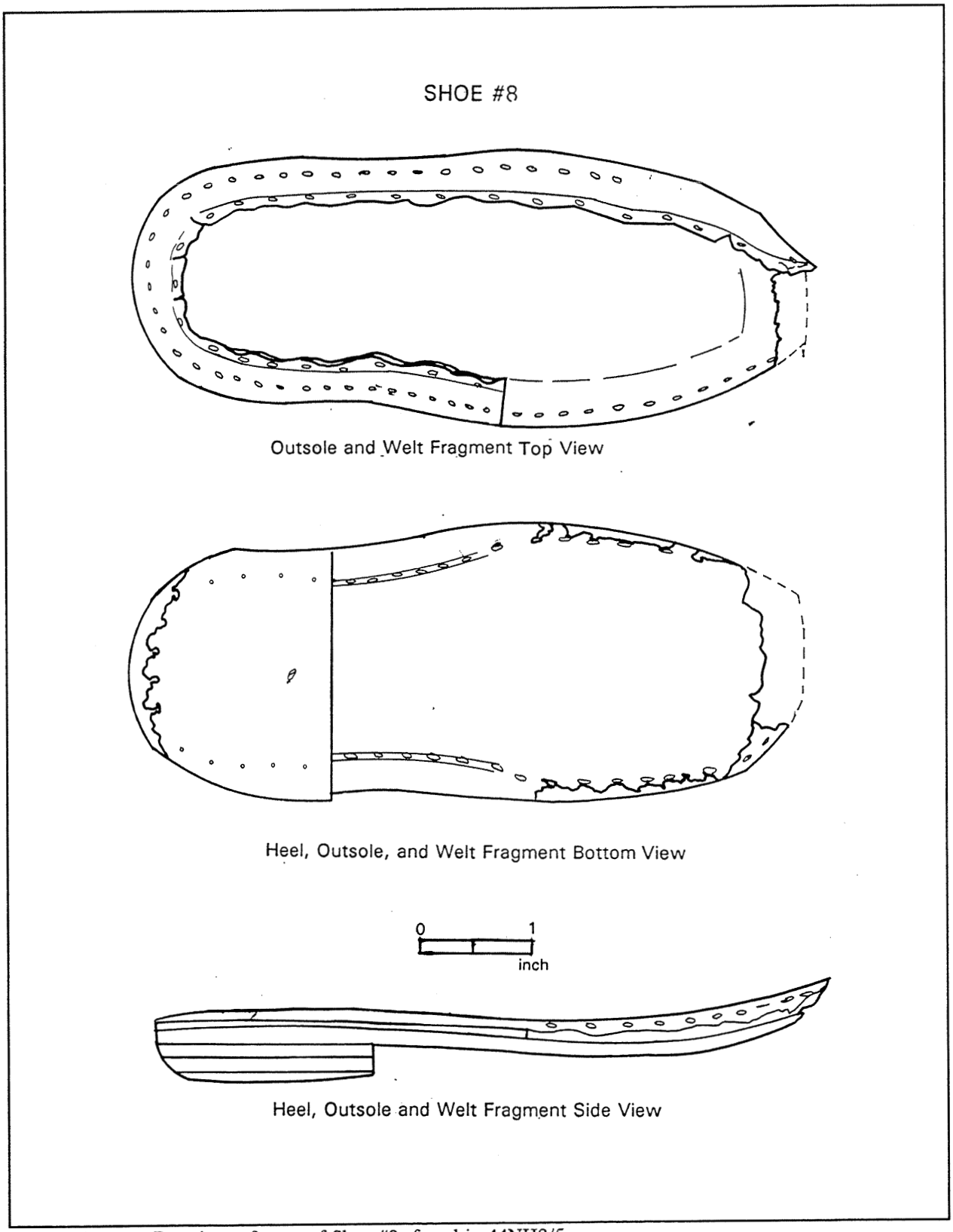

Figure 34. Drawings of parts of Shoe #8, found in 44NH8/5.

SUMMARY

Nearly 200 years of rising sea level and erosion have consumed most of the Church Neck Wells site. In addition to the truncated wells and severed features, remnants of the colonial settlement were scattered along the beach, these include a Rhenish stoneware Bartmann jug section with a mask and medallion, a Dutch tobacco pipe stem with a fleur-de-lis decoration, a rouletted local tobacco bowl with two running deer, and several seventeenth-century iron hoes. Although all the structures apparently are lost, the surviving evidence implies that some forms of leather processing, cobbling, and possibly tanning, were conducted at this site during the second half of the seventeenth century.

The artifact collection from the various features at 44NH8 is homogeneous, suggesting a contemporaneous fill date prior to ca.1690-1725. This relationship is further substantiated by crossmending ceramic sherds from one of the barrel wells on the beach (44NH8/2) and what is believed to be a ninth well (44NH8/9) in the cliff. The sherds are from an English delftware plate which, if complete, would have depicted the portrait of King William III and Queen Mary (Figure 35). These plates were produced between 1688 and 1694, the years of William and Mary's joint reign.

A pipe bowl and a fragment of Yorktown stoneware, both dating to the second quarter of the eighteenth century, were found in well 44NH8/5, indicating that perhaps this feature was the last to be filled. The rest of the material in this well dates firmly within the 1690-1725 time frame and, as there are eighteenth-century artifacts scattered around the site, these later objects in well 44NH8/5 can be considered intrusive to the late 17th/early 18th-century context.

Parts of at least ten shoes, as well as shoe fragments indicative of cobbling waste and salvaged leather collected for repair, were excavated from four of the nine wells at the Church Neck Wells site. The footwear includes an adult female shoe, three adult male shoes, one youth's shoe, and five children's shoes. All appear

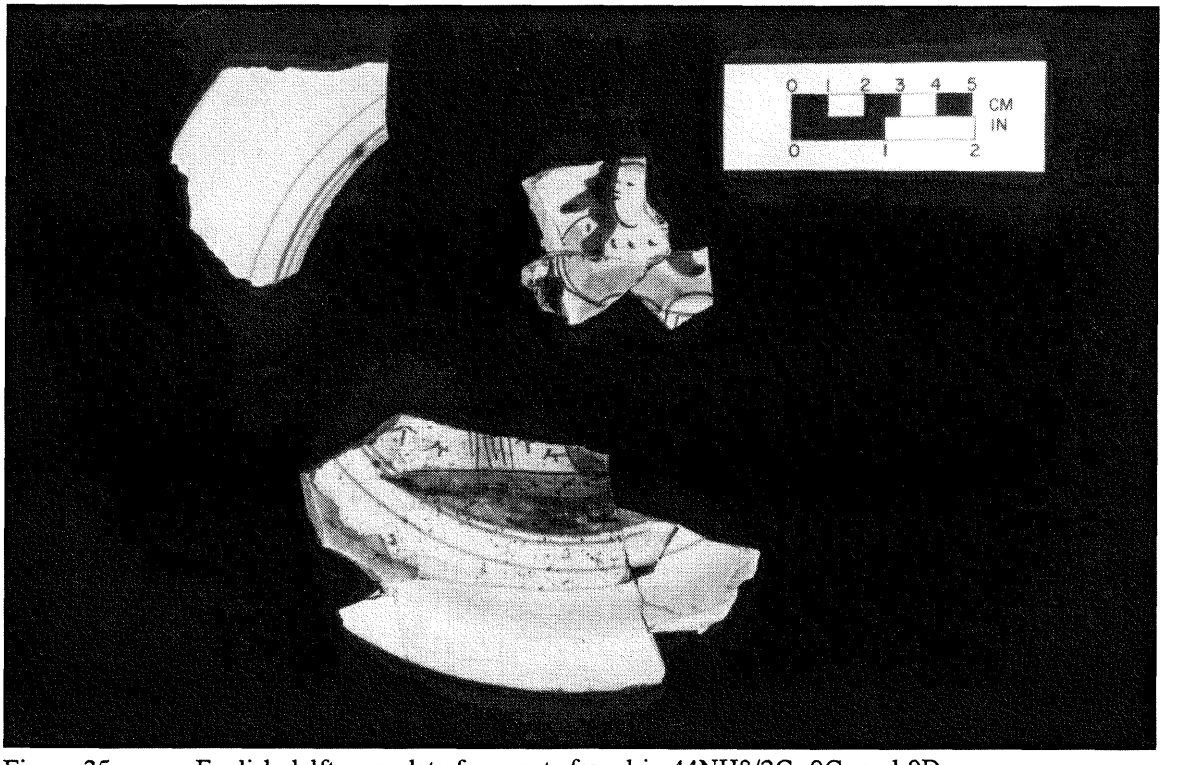

Figure 35. English delftware plate fragments found in 44NH8/2C, 9C, and 9D.

to date to the second half of the seventeenth century. By itself, the material does not point to anything beyond shoe repair, however, the presence of nine contemporary wells on the site is suggestive of leather processing.

The contents of the wells imply that several were active at the same time, and ceramic crossmends between two of the wells strengthen this supposition. It seems obvious that all the wells were not contemporary. This is clearly the case for Well 44NH8/6 which was cut through by Well 44NH8/7. Also, the different forms of well design may relate to different phases of activity at the site. For example, wells 44NH8/1 and 44NH8/18 were built using barrels within wooden boxes, perhaps implying that they were constructed at the same time. A large number of wells appears unnecessary for normal domestic needs and perhaps indicates an industry requiring large amounts of water was operating on the site. One possible explanation is a tannery which 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).

The tannery hypothesis for 44NH8 is even more appealing after examining the documentary record. Susie Ames has written that "Various records show that the manufacture of shoes was a flourishing industry on the Eastern Shore during the second half of the seventeenth century" (1940:133), and that " . . . the Eastern Shore was manufacturing shoes in sufficient quantity not only to supply its own needs but also to make some contribution across the Chesapeake Bay" (1940:137). Apparently hindered by the small land base, Eastern Shore planters found it advantageous to diversify economic activities from a complete dependence on tobacco (Breen 1980:48). Many, like Colonel Edmund Scarborough who had fourteen shoemakers in his employ in 1668 (Ames 1940:138), invested in light industry that could be marketed on the mainland.

In sum, the combination of documentary and archaeological evidence demonstrates the likely presence of a tannery, even if little detail about its layout, architecture, and operation have survived. The archaeological record, consisting of a highly unusual concentration of barrel wells, the location near the water, the large pit, the shoes, and the cobbling waste, points to the likelihood of a tannery. The historical record, including Charlton's will, Benthall's petition, and scattered references to the tannery in the 1650s Northampton County documents support this contention.

Despite the fact that much of the site is gone, it was important to document the archaeological remains at the Church Neck Wells site. Evidence of 17th-century leather working and cobbling in Virginia are quite rare, thus enhancing the significance of even a severely damaged site.

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APPENDIX

Artifact Finds List

44NH8/01's: Mapped Beach Finds

44NH8/01A
Hoe, iron, Type I

44NH8/01C
Hoe, iron, Type I

44NH8/01D
Hoe, iron

44NH8/01E
Hoe, iron, Type I

44NH8/01F
Hoe, iron, Type I

44NH8/01G
Plow moldboard, iron

44NH8/01H
Hoe, iron

44NH8/01J
Plow moldboard, iron

44NH8/01L
Brown stoneware, Rhenish: Bartmann jug section, mask and medallion splashed with cobalt

44NH8/01M
Hoe, iron
Plow moldboard, iron

44NH8/01N
Clay tobacco pipe stem, Dutch with fleur de lis in triangular cartouche, SHD: 8/64
Clay tobacco pipe, local: 1 stem; 1 bowl rouletted with two running deer

44NH8/01P
Hoe, iron

44NH8: General Beach Finds

Brown stoneware, Rhenish: bottle base
Brown stoneware, English:; jar or bottle base and body fragments. 2
Chinese porcelain, underglaze: jar or bottle base and body fragments. 2
Chinese porcelain, under and overglaze: plate base
Coarseware, Spanish (Seville): olive jar fragments, 4
Coarseware, North Devon: pan base
Coarseware, Blackware: pan rim; pan base; jar fragments, 3; fragment
Rhenish stoneware: tankard fragment

Clay tobacco pipe stems, local: 9

44NH8: General Beach Finds, (cont.)
Clay tobacco pipe stems, "English": 9, SHD: 9/64-1; 8/64-3; 7/64-1; 6/64-3; 5/64-1
Clay tobacco pipe stem, Dutch with fleur de lis in cartouche SHD: 8/64

Case bottle glass
Wine bottle glass including 1 neck and 1 base, c. 1680-1700

Nails: wrought, 4; fragments, 7
Nut, octagonal with internal screw threads
Scrap brass

Bone
Oyster shell mortar
Flint

44NH8: General Finds by Landowner

Clay tobacco pipe stem, English, SHD: 8/64
Clay tobacco pipe stems, local, 2
Coarseware, Spanish (Seville) : olive jar fragment

Wine bottle glass, including 1 neck c. 1680-1700

Nails: wrought, 4; fragments, 4

Bone
Chalk
Brick fragment
Wood fragments: poles and sawn board pieces, some burned

44NH8/1: Barrel With Framing, Well

Coarseware, Low Countries: cooking pot rim

Window glass
Wine bottle glass
Machine molded glass, clear (intrusive)

Tool, iron with chamfered wooden handle; engraved "IH"
Wire, iron, twisted

Bone
Peach pit
Stopper, wood

44NH8/2: Barrel Well

Coarseware, Spanish (Seville): olive jar fragment

Nail fragment

Wood, including barrel stave fragments, twigs, bark

Soil sample

44NH8/2A: Well, Barrel

Clay tobacco pipe stem, local
Clay tobacco pipe stem, English, SHD: 7/64
Coarseware, Spanish (Seville): olive jar fragment
Coarseware, North Devon: fragment

Wine bottle glass fragments, 2
Lock escutcheon, brass diamond-shaped, chased w/rosettes (late seventeenth-century)
Nails: wrought, 2; fragments, 6

Oyster shell
Seeds, watermelon, 3
Wood, including barrel stave and withe fragments, one with nail; bark, charred wood
Shoe leather, including 1 heel with 5 peg holes

44NH8/2C: Well, Barrel

Brown stoneware, English: fragment
Clay tobacco pipe stem, local
Clay tobacco pipe stem, English, 4 SHD: 6/64-1; 7/64-2
Coarseware, Blackware: jar rim; fragments, 4
Coarseware, North Devon: pan rim
Delftware, blue and white: William and Mary royal plate fragments, 10
Delftware, burned: mug base fragments 2 (1); strap handle terminal fragment
Slipware, Staffordshire: combed hollow ware fragment

Lead shot
Knife blade, iron
Nails, wrought: 18+8 fragments
Strap, iron

Bone
Oyster shell
Brick, including Dutch brick
Charred wood
Flint fragment

<u>Crossmends:</u>
Blue and white delftware plate with 44NH/9C, 44NH/9D

44NH8/3: Well, Barrel

Clay tobacco pipe stem, Dutch, molded with floral motif
Clay tobacco pipe bowl, local, rouletted star motif infilled with white slip

Shoe leather: child's shoe, complete

44NH8/4: Well, Barrel Within Barrel

Delftware, blue and white: dish fragment with lead glazed exterior
Mug, copper
(late c.17-early c.18)

Shoe leather: parts to at least 3 different shoes (2 adult male, 1 child, including pegged heel); leather off-cuts and salvaged quarter w/portion cut off
Dutch brick fragments, 2
Soil sample

44NH8/4A: Well Barrel Within Barrel

Clay tobacco pipe stem fragment, local
Coarseware, North Devon: pan rim
Coarseware, Blackware: cup base fragment; fragment

Case bottle glass
Wine bottle glass
Machine molded glass: aqua bottle base; clear fragment (intrusive)

Nail fragments, 8
Tin can fragments, including rolled rim (intrusive)

Shoe leather: salvaged fragments
Buff leather: belt end with punched hole
Seeds, including sunflower seed
Peach pit
Crab claws (intrusive)
Mussel shell (intrusive)
Oyster shell
Brick fragment

44NH8/5: Well Frame Only

Brown stoneware, Yorktown: mug fragment
Clay tobacco pipes, local
- 8 stems, including 1 rouletted and infilled with white slip
- 15 bowl fragments, rouletted (1 infilled with white slip, zigzag rouletted)

Clay tobacco pipes, English (including 4 heels)
- 41 bowls (2 c.1690-1700: 1 c.1720-1820)
- 44 stems, SHD: 7/64-20; 6/64-22; 5/64-1 (1 stem end)

Coarseware, Low Countries: fragment
Coarseware, North Devon: fragments, 2

44NH8/5: Well Frame Only, (cont.)
Coarseware, "Midlands" yellow: bowl rim; base fragment
Delftware, blue and white: punch bowl rim
Slipware, Staffordshire: combed cup fragment
White ware: plate fragment (intrusive)

Window glass
Star bead, Venetian glass
Light bulb fragment (intrusive)
Wine bottle glass
Case bottle glass
Machine molded glass: 4 fragments, including 1 painted" . . . NC" (intrusive)
Wine glass bowl

Whirligig, lead, with 4 holes
Brass strap, possible tinker's dam
Upholstery tack, brass
Turned lead
Case bottle collar, lead
Scrap lead
Pipe stem, lead
Nails: wrought, 8; cut, 1, fragments 27

Brick,including Dutch brick
Bone
Shell, oyster and clam
Mortar
Chalk
Flint flake
Peach pits
Asphalt shingle fragment (intrusive)
Concretions (bog iron?) with English pipe stem, local pipe bowl, Staffordshire slipware attached
Wood fragments: barrel staves and withes some charred; bark; sawn wood, twigs
Shoe leather: parts of at least 5 shoes (1 adult female, 1 youth, *3 child's); assorted delaminations; fragment of goatskin.*(2 child's shoes made by same person, latchets punched w/square holes; locally- made, inferior)

<u>Prehistoric</u>
1 sherd pottery, shell-tempered, fabric impressed

44NH8/5A: Well, Frame Only

Clay tobacco stem, local
Bone

44NH8/6A: Well, Barrel

Clay tobacco pipe bowl, local, rouletted in zigzag motif

Machine molded glass fragment, clear, 2 (intrusive)

Nails: wrought,4; fragments, 4
Slag

44NH8/6A: Well, Barrel, (cont.)
Wood fragments, including barrel staves and withes, bark
Peach pits
Fish scale, Drum
Seed

44NH8/7: Well, Barrel

Clay tobacco pipe stems, English, 2; SHD: 7/65-1; 8/64-1 (including 1 with notched end from tooth wear)
Clay tobacco pipe bowl, local, rouletted
Coarseware, Spanish (?): sandy grayish-pink fabric with micaceous inclusions, olive green interior lead glaze fragment

Marble, glass (intrusive)

Nut and bolt, iron
Bucket handle attachment, iron, with wood still attached
Nails: wire, 1 (intrusive); wrought, 4; fragments, 14

Flint
Fish scale
Bone, including charred fragment
Peach pits
Concretion forming shape of tin can (possibly once the contents of can)
Acorns
Seeds
Wood, including barrel staves, bark, twigs

44NH8/7A: Well, Barrel

Nail: wrought, 1; fragment, 1

Fish scales, Drum

Wood fragments, including barrel staves, withes, bark
3 barrel staves have marks: broad arrow, "TB", "8"

44NH8/8: Root Cellar to Post Structure

Bone

Brick, 1 3/4" x 4 1/2" x ?

44NH8/8A: Root Cellar or Tanning Pit

Coarseware, Blackware: fragments, 2

Bottle glass, brown (intrusive)

Brick fragment

44NH8/8C: Root Cellar or Tanning Pit

Clay tobacco pipe stems, English, 3
Coarseware, Blackware: fragments, 2
Coarseware, local: sandy pink-orange fabric with hematite inclusions, interior ginger brown lead glaze, fragments, 2 (1)
Rhenish stoneware: tankard fragments, 2, including 1 with applied rosettes

Wine bottle glass fragment

Strap hinge, iron
Pike head, iron
Straight pin, brass
Nail, wrought
Turned lead fragments

Brick
Charred wood
Bone
Daub

Crossmends
Coarseware, local with 44NH/8G

44NH8/8D: Root Cellar or Tanning Pit

Clay tobacco pipes, local
1 stem; 1 bowl, rouletted and punctate, infilled with white slip

Case bottle neck fragments, 6

Iron fragments, 4

Brick, glazed
Mortar, oyster shell
Bone

44NH8/8E: Root Cellar or Tanning Pit

Clay tobacco pipe bowl, local
Coarseware, Blackware: cup base

Case bottle glass fragments, 2

Nail, wrought

Oyster shell
Bone

44NH8/8F: Root Cellar or Tanning Pit

Oyster shell

44NH8/8G: Root Cellar or Tanning Pit

Coarseware, local: sandy pink-orange fabric with hematite inclusions, interior ginger brown lead glaze, fragments, 4 (1)
Coarseware, Blackware: fragment

Brick
Bone

Crossmends
Coarseware, local with 44NH/8C

44NH8/9A: Well

Brown stoneware, Rhenish: fragment
Coarseware, Staffordshire iron glaze: fragment
Coarseware, Staffordshire: flanged bowl rim and body fragments, 4 (1)
Delftware, blue and white: fragment
Clay tobacco pipe stems, English, 2, SHD: 7/64-1; 5/64-1
Clay tobacco pipe stems, local, 2

Wine bottle glass, including 1 base c. 1680-1720

Nails: wrought, 3; fragments, 7

Bone
Oyster shell
Mussel shell

44NH8/9B: Well

Clay tobacco pipes, English
2 stems, SHD: 6/64-1; 7/64-1; 2 bowl fragments
Coarseware, North Devon: pan base fragment
Coarseware, Blackware: fragments, 4 (3 of which are burned); storage jar rim
Coarseware, Staffordshire: fragment

Wine bottle glass

Turned lead fragments, 2
Nails, wrought,7; fragments,8
Strap hinge, iron

Brick fragments, including 1 glazed fragment and 1 measuring 2 1/2" x 1 3/4" x ?

Shell, oyster and clam

44NH8/9C: Well

Clay tobacco pipe stems, English, 6, SHD: 7/64-2; 6/64-2
Clay tobacco pipe stems, local, 2
Coarseware, Blackware: fragments, 5 (2 of which are burned)
Coarseware, Staffordshire iron glaze ware: fragments, 4
Delftware, blue and white: William and Mary royal plate fragment

Nails: wrought, 8; fragments, 12

Shell, clam and oyster
Flint fragment

Crossmends
Blue and white delftware plate with 44NH/2C, 44NH/9D

44NH8/9D: Well

Clay tobacco pipes, English
    2 bowl fragments; 2 stem fragments, SHD: 6/64-2
Clay tobacco pipes, local
    1 stem; 1 bowl with rouletting, including a midsection band of sideways "V's"
Coarseware, Staffordshire mottled glaze: fragment
Coarseware, Blackware: fragment; handle fragment
Delftware, blue and white: William and Mary royal plate fragment
Delftware, burned: fragment

Bone
Shell, clam and oyster

Scrap lead
Nails: wrought, 18; fragments, 11

Crossmends
Blue and white Delftware plate with 44NH/2C, 44NH/9C

44NH8/10A: Tree Hole

Colono ware: fragment

Wine bottle glass
Machine molded glass, aqua (intrusive)

Bolt, iron, with hexagonal head

Flint flake
Oyster shell

44NH8/10B: Tree Hole

Coarseware, Staffordshire mottled glaze ware: mug

Nail fragment

Brick fragments
Bone
Clam shell

44NH8/12: Tree Hole

Dutch brick

Bone

44NH8/17A: Possible Backfilled Ditch

Coarseware, North Devon: fragment

Bone
Shell
Slag

44NH8/18: Well, Barrel In Frame

Coarseware, Low Countries: fragment

Wine bottle base, c. 1680-1700

Nail fragments, 4

Bone, including turtle shell
Brick
Wood fragments, including barrel staves and withes (some with bark appearing as birch bark)

44NH8/18A: Well, Barrel in Frame

Coarseware, North Devon: pan rim
Coarseware, Blackware: fragments, 2
Delftware, blue and white: drug jar fragment

Wine bottle glass

Nail fragments, 23

Brick fragment, glazed

Soil sample

44NH8/18B: Well, Barrel In Frame

Clay tobacco pipe stem, English; SHD: 4/64
Delftware, plain: fragment

Nail fragments, 6

Bone
Brick fragments, including Dutch brick
Peach pits
Charred wood
Wood, including sawn fragments, bark pole; 1 fragment 13" long with nail attached and a carved notch
Tool box, pine with oak handle

Soil sample

44NH8/18C: Well Barrel In Frame

Clay tobacco pipe bowl fragments, English, 2 (including 1 heel)
Coarseware, Blackware: jar rim
Coarseware, North Devon: fragment

Wine bottle neck, c. 1st quarter of the eighteenth-century

Nail fragments, 10

Chalk
Oyster shell
Brick, including Dutch brick
Bone
Unidentified organic material
Wood fragments, including barrel staves and withes, sawn wood fragments, bark

44NH8/18D: Well

Nails, wrought, 5

Bone
Peach pits
Wood fragments, including some with bark still attached, appears to be birch

APPENDIX B

Excerpts from Stephen Charleton's Will

Transcripts of Items
from Stephen Charleton's Will
Pertaining to his Tannery

Northampton Co., Va. Book 5, pa. 57.
"Item I doe give & bequeath unto Peter Severne Twoe thousand pds of tobacco And Casks to bee pd yearely out of ye p[ro]duce of my Tanhouse, (as by Covenant due from Thomas Be[?]ll, the wch is to bee continued unto him foure years...." (The name is obscured by a hole in the paper, but is Benthall, by evidence from a formal agreement entered between Charleton and Benthall in September 1654 for Benthall to work Charleton's tannery and by evidence from an item in the will a few lines below the one just transcribed.)

Northampton Co., Va., Book 5, pa. 57.
"That my will is that Thomas Benthall may have my Carte, to bringe in his Barke; out of ye woode...." (The bark was to be used form preparing the tanning solutions.)

Source: Photocopy of Charleton's will, dated October 28, 1654, from Northampton County Records, Book 5, fol. 56 - fol. 57.