

A SEVENTEENTH-CENTURY HOUSE AT FERRYLAND,  
NEWFOUNDLAND (CgAf-2, AREA B)

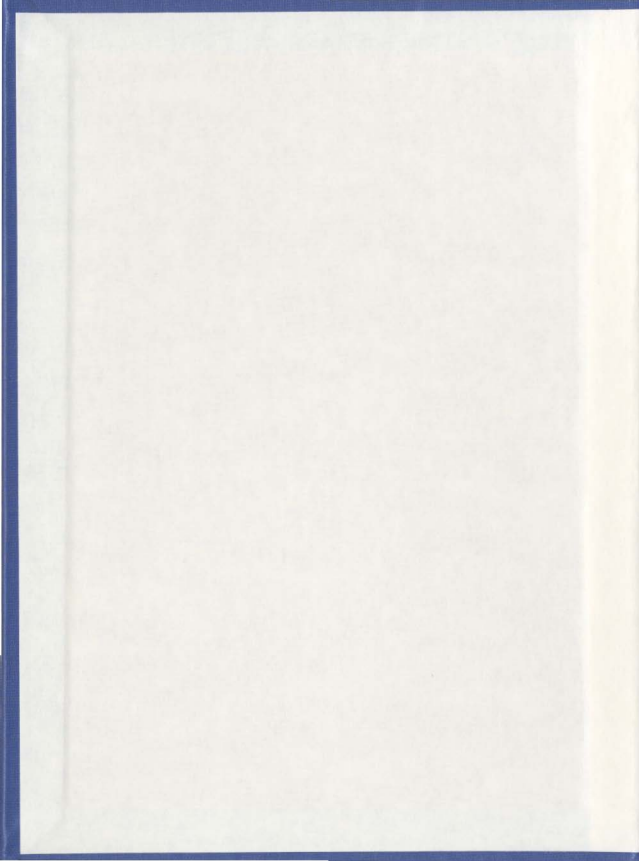
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A SEVENTEENTH-CENTURY HOUSE AT FERRYLAND, NEWFOUNDLAND  
(CgAf-2, AREA B)

by

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School of Graduate Studies  
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## ABSTRACT

This thesis focuses on the remains of a 17th-century house excavated at Ferryland, Newfoundland (CgAf-2, Area B). The goal of this research was to date the period of occupation and to learn more about the origins, social standing and activities of its occupants. The structural remains of the house are examined and compared with contemporaneous houses in colonial North America and England. To date the house occupation, the ceramic, tobacco pipe and bottle glass assemblages are analysed. This analysis also indicates the nature of 17th-century trade with Newfoundland and suggests the social standing and activities of the household. Metal artifacts are studied in an attempt to identify other activities carried out within the house and to determine the social position of the household.

The results of these analyses indicate that the house at Area B was a timber-framed structure built ca.1660 and abandoned in 1696. The permanent residents appear to have been of the middling sort and were participants in the cod fishery. The evidence suggests they also were engaged in other seasonal activities, including hunting and boat-building, or repair.

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## CHAPTER 1

### INTRODUCTION

Research into the 17th-century English settlement of Newfoundland has received scant attention (Pope 1992:4). While certain aspects of the history of Sir George Calvert's 1621 "Colony of Avalon" have been documented (Cell 1969, 1982; Matthews 1968), the use of archaeological evidence to interpret and substantiate this history has begun only recently. Although the location of Calvert's colony, later Sir David Kirke's "Pool Plantation", near "The Pool" in Ferryland was recorded in documents of the 17th century, its exact location was not pinpointed until the mid-1980s. Systematic archaeological excavations of the original colony have been carried out since 1992 and have produced not only a wealth of artifacts but have also led to a growing interest in what is one of the earliest permanent English settlements in North America.

The research presented here focuses on the remains of one domestic structure and its associated ceramic, glass, and metal assemblages. The examination of this material was undertaken not only to date the occupation of the structure itself, but, through comparison of these assemblages with those from other documented sites in colonial North America and England, to learn more about its occupants, their activities, and their social standing, not only within the context of this Newfoundland settlement, but as a part of the larger experience of colonization of North America in the 17th century. The use of

archaeological data, in conjunction with the interpretation of historical documents, allows the study not only of the social and economic development of this particular settlement and region but the examination of the lifestyle of those often neglected in the histories of the elite. As such, this study is undertaken as an effort to “illuminate the lives of the illiterate and the ignored, among whom we must count most of the inhabitants of the early modern fishing periphery” (Pope 1992:vii).

The research undertaken in this study is presented in the following six chapters, with conclusions and directions for further research presented in Chapter 8.

Chapter 2 describes the location and local geography of Ferryland site, details the 17th-century history of settlement at Sir George Calvert’s “Colony of Avalon”, and provides an outline of the social and economic context of early settlement on the English Shore of Newfoundland’s Avalon Peninsula.

Chapter 3 details the history of archaeological research at the site and introduces areas of excavation examined to date. This introduction provides not only an understanding of the chronological development of the settlement itself, but some impression of the degree of planning and investment made by George Calvert in this colonial venture.

Chapter 4 focuses on the excavations carried out at Area B. This chapter documents the stratigraphy and features recorded during the excavation of the house located in its northern half. It also provides a brief summary and interpretation of the stratigraphy and features that relate not only to the house itself, but also the earlier forge located in the southern half of the same area. As such, this chapter provides an insight into the chronological development of this particular area of excavation.

Chapter 5 examines the structural remains of the house itself. These remains are compared to structures documented from the early colony itself, as well as contemporaneous houses in colonial North America and England. Interpretations of the techniques used in the construction of the house, its layout and the use of space within, and what these might indicate about the activities, origins, and social standing of its occupants are made.

Chapter 6 outlines the examination of the ceramic assemblage recovered from the house. This study establishes not only the dates for its construction and demise, but investigates what this assemblage might reveal about the domestic activities and social position of its occupants.

Chapter 7 details the study of clay tobacco pipes and bottle glass, as well as metal artifacts, recovered from the excavation of the house. The examination of tobacco pipes

and bottle glass provides additional support for dates of the house's occupation suggested by the ceramic assemblage. Moreover, the frequency of pipes from England's West Country confirms its dominant role in trade with the settlement at Ferryland throughout the 17th century. The analysis of iron, lead, copper and pewter artifacts further illustrates not only the variety of activities carried out by the occupants of the house, but also suggests the social standing of some of its residents.

A catalogue of the ceramic assemblage, with illustrations of some of the vessels identified, is included in Appendix A. The results of the analysis of clay tobacco pipes, also with illustrations, is included in Appendix B.

## CHAPTER 2

### SITE LOCATION, HISTORY AND SOCIAL CONTEXT

#### 2.0. Location

The community of Ferryland is located on the east coast of Newfoundland's Avalon Peninsula, approximately 80 km south of St. John's, at latitude 52°53'45"N and longitude 47°01'00"W (Figures 2.1 and 2.2). Sir George Calvert's Colony of Avalon was established in 1621 on the south side of "The Pool" (Figure 2.3). This sheltered harbour is located at the western end of a small peninsula that stretches eastward to form Ferryland Head (Figure 2.4). Archaeological and historical evidence show that Portuguese, Basque, French, and English fishers of the 16th and 17th centuries visited this location on a seasonal basis prior to Calvert's arrival (Matthews 1973:69; Tuck 1996:28; Pope 1992:28). The name Ferryland appears to be a corruption of either the Portuguese *farelhão* meaning "steep rock, little island, reef, or point" or the French *forillon* meaning "cape, or point" (Seary 1971:28, 210, 303). Verrazano's world map of 1529 names this location "Farilham", while the English called it "Farillon" in the 1590s (Pope 1986: 1). Sir George Calvert's colony later became known as the Pool Plantation under the proprietorship of the Kirke family.

#### 2.1. Local Geography

The site is located on the water's edge in a low-lying area sheltered by two heights

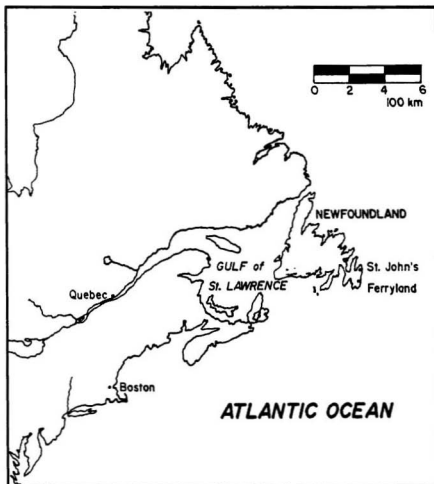


Figure 2.1. Location of Newfoundland, from Pope (1992:10).



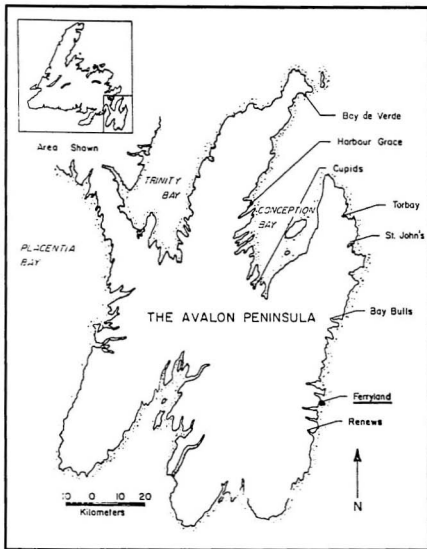


Figure 2.2. The Avalon Peninsula showing the location of Ferryland, from Pope (1986:2).

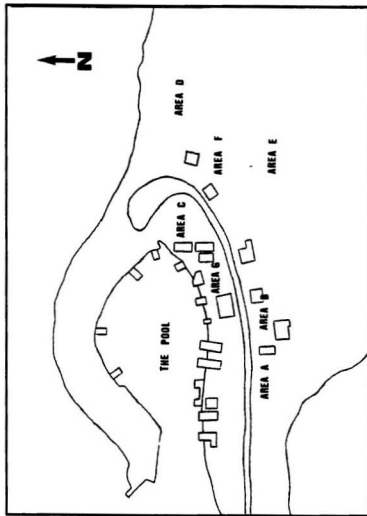


Figure 2.3. The location of Culvert's 1621 Colony of Avalon on the south side of "The Pool". Areas A-G represent areas of excavation. Revised from Tuck (1993:298).



Figure 2.4. Aerial view of The Pool (foreground), The Downs, and Ferryland Head looking northeast.

of land, the “Gaze” (approximately 80 m.a.s.l) to the west and “Ferryland Head” (approximately 41 m.a.s.l) to the east. The site’s situation afforded easy access to ships and the surrounding land, as well as an easily-defended position.

Influenced by its proximity to the Atlantic Ocean, Ferryland’s climate is relatively cool but moderate with average July temperatures ranging from 13 to 16°C and temperatures for December to February ranging from -4 to -2°C. Total mean annual precipitation for the area is 100 to 165 cm (Heringa 1981). Local soils are coarse to medium coarse in texture, stony, acidic to extremely acidic, and wet. These soils support stands of balsam, fir, black and white spruce, tamarack, white and yellow birch, and alder (Heringa 1981). This environment supports both caribou and nesting sea birds; cod, salmon and other marine species are also available (Pope 1986: 3).

## 2.2. Site History 1550-1700

Late 16th-century English expansion in the European fishery was spurred by the collapse of Spain and Portugal’s fleets following the defeat of the Spanish Armada, as well as internal conflicts in France (Pope 1992:31; Cell 1969:20-33; Matthews 1973:71-72). Prior to the 17th century, the inshore Newfoundland fishery required an onshore component for shelter and the procurement of wood and fresh water, but this was seasonal in nature. For the most part, cod were processed and dried onshore in advance of the return of the various fleets to Europe. Onshore facilities for the “making of fish” consisted

of stages (for the processing of fish), flakes (for the drying of fish), train vats (for the rendering of oil), tilts (for the protection of partially made fish from poor weather), and cookrooms (for the shelter of those in the fishery) (Pope 1992:43-47). During this time there was little need to establish permanent onshore facilities. In fact, these structures were often recycled as firewood at the end of each season (Pope 1986: 8).

Evidence of this seasonal European fishery has been found in the lowest levels of Area B where 16th-century ceramics and hearths have been found (Tuck 1986:28). Beothuk hearths and stone tools recovered from these same levels suggest that native people also visited Ferryland on a seasonal basis. Whether the Beothuk at Ferryland were trading with European fishers, scavenging iron or other materials, or exploiting other local resources remains unclear (Pope 1993a:286).

By the turn of the century an English interest in New World colonisation arose. Attempts to establish permanent settlements in Virginia, Bermuda and Newfoundland were underwritten by European companies formed to exploit overseas trade (Pope 1986: 9). Efforts to settle the Avalon Peninsula were made in 1610 by John Guy of the London and Bristol Company at Cupids, Conception Bay (Gilbert 1996), in 1617 by William Vaughan at either Renew's or Aquaforte, and in 1618 by Bristol merchants at Harbour Grace (Cell 1969:83). These early attempts to Newfoundland met with varying degrees of commercial success, but none managed to survive the long term.

The Colony of Avalon was established in 1621 under a title granted to Sir George Calvert, later the first Lord Baltimore, by King James I. One year earlier Calvert had acquired a proprietary patent to a section of William Vaughan's original grant of land, that portion between Aquaforte and Caplin Bay. This area was later expanded north to the borders of the St. John's lot in 1623 (Pope 1986:18). Sir George Calvert's colony was positioned to take advantage of the increasingly profitable fishery and to establish a permanent English presence on Newfoundland's English Shore (Pope 1993a:279-280). During Calvert's proprietorship of the colony his investment was substantial. Sir George Calvert suggested an investment of between £12,000 and £17,000, while his son Cecil estimated his father's investment at £20,000 to £30,000 (Pope 1986:18). Whatever the figure, it is clear that Sir George Calvert heavily subsidized the venture.

On 4 August 1621 Captain Edward Wynne arrived with 11 men and supplies to begin building the colony. Letters from Wynne to Calvert provide descriptions not only of the land and its abundant resources, but also details of a well-planned and ambitious building program. By the spring of 1622 Wynne and his men had built a "Mansion House", a kitchen, a hen house, a storehouse, a forge, a well, saltworks, and a wharf (Wynne 28/7/1622). All was protected by a seven foot high palisade that enclosed four acres. Following the arrival in 1622 of Captain Daniel Powell, with additional settlers and provisions, Wynne planned to construct a brewhouse and tenements, as well as to continue to cut and fill land so that "another row of building may be so pitched, that the

whole may be made a pretty street"(Wynne 28/7/1622). With Captain Powell's arrival the overwintering population of the newly established colony grew to 32. By 1625 the population is reported to have reached 100, although Pope (1992:211-212) suggests that this number represents a summer, as opposed to an overwintering, population. By this time the colony's subsistence base had expanded to include horses, cattle, goats and fowl.

The retirement of Captain Wynne after four years of service, Sir George Calvert's own retirement from office, as well as Calvert's dissatisfaction with the new manager of his colony, led him to visit his venture at Ferryland in 1627 (Cell 1969:93; Pope 1986:20). Calvert must have been pleased with what he saw for he returned to the colony in 1628 with his extended family and 40 Roman Catholic settlers (Lahey 1977:29). Calvert's stay at Ferryland was, however, short-lived. An unusually harsh winter, harassment of the fishery by the French, and a severe decline in the fishery led George Calvert to quit Ferryland for Virginia in 1629 (Pope 1986:20-21). In a letter to Charles I Calvert stated, "I am determined to commit this place to fishermen, that are able to encounter storms and hard weather, and to remove myself with some 40 persons to your Majesty's Dominion of Virginia" (Calvert 19/8/1629). Later, Calvert's son, Cecil, founded the Colony of Maryland.

Although absent from the Newfoundland colony, the Calverts retained possession and controlled its operations by maintaining a deputy there. The Calverts remained in

control until April 1638 when Sir David Kirke arrived and ousted the Calverts' deputy, Captain William Hill, from the Mansion House. One year earlier Kirke, an accomplished trader, investor and military campaigner, had been granted the Island of Newfoundland by Charles I (Tuck 1996:22; Pope 1998:64). Suits and counter-suits between the Calverts and Kirkes over rightful possession of the colony continued into the third quarter of the 17th century (Pope 1998). Regardless of the legalities of rightful possession, Sir David Kirke and later his wife and children retained control of the fishing operations at Ferryland until the close of the century by simply occupying them.

While it remains uncertain whether or not the early Colony of Avalon under the Calverts' control was financially successful, it is clear that the fishing operations at Ferryland under Sir David Kirke's control were highly profitable. Ferryland eventually grew into one of the largest English settlements on the Southern Shore (Pope 1986:23-27, 1992). Kirke's ability to turn the fledgling resident fishery into a financial success was based on rent charged for fishing rooms, the sale of tavern licenses, and a 5% tax charged on fish shipped in foreign vessels. Sir David Kirke's financial success at Ferryland, as well as his political allegiances during England's Civil War, eventually led to his being recalled to London in 1651 to account for his proprietorship (Pope 1998:65). Kirke died in prison "at the suit of Lord Baltimore" in 1654, but his wife Lady Sara Kirke and her three sons retained control of the Ferryland venture until the late 1690s (Tuck 1996:22).



At the same time that David Kirke was recalled by the Commonwealth, the Council of State authorized John Treworgie and five others to seize Kirke's assets in Newfoundland. Treworgie, a New England-based merchant, remained at Ferryland until 1660 acting as a kind of governor (Pope 1986:28). This period, marking the beginning of extensive Yankee trade at Newfoundland, as well as the period of Sir David Kirke's reorganization of Calvert's former colony, should be well-represented archaeologically.

Following the Restoration the life of Ferryland's residents was made difficult by a decline in the fish trade, official restrictions on permanent settlement in Newfoundland, and continuing hostilities with the Dutch (Pope 1986:29). In 1673 these hostilities came ashore when four Dutch ships under the command of Nicholas Boes sacked the settlement. Dudley Lovelace, the Governor of New York, a prisoner aboard one of the ships reported, "the enemy plundered, ruined, fired, and destroyed the commodities, cattle, household goods, and other stores" (Lovelace 29/3/1675). However, the raid did not completely destroy the settlement. The Dutch forced the inhabitants to pay "6 hogs, and one bullock, to each ship" in order to protect what was left of the settlement. Evidence of this attack has been revealed in the destruction and rebuilding of structures located adjacent to the stone-built quayside (Gaulton 1997:52).

The French, under the command of de Brouillan, attacked Ferryland in the fall of 1696. As part of a campaign to drive the English from Newfoundland the French attack

was well-planned and devastating. Close to 700 troops landed and surrounded the settlement. Following the surrender of the inhabitants the French “burnt all [our] houses, household goods, fish, oil, train vats, stages, boats, nets and all [our] fishing craft to the value of £12,000 and above” (Clappe et al. 1697). Some of the inhabitants were taken as prisoners to the French capital Placentia, while the majority were transported back to Appledore, Devon. This attack left the settlement at Ferryland deserted and in ashes (Gibson 1697; Cleasby 1708). Many of Ferryland’s former residents returned in 1697 with support from the Board of Trade, but it appears that settlement shifted away from the original site of the colony to other parts of the harbour (Pope 1986:31; Tuck 1996:23).

While settlement at Ferryland has continued from 1697 to the present, the destruction of the plantation at The Pool in 1696 closed the chapter on the 17th-century occupation of George Calvert’s original colony. The research presented here is limited to the 17th-century settlement of Ferryland from 1621 to 1696. More detailed information about the development of the English fishery in Newfoundland, Calvert’s Colony of Avalon, and the settlement of Ferryland may be found in Pope’s *Ceramics from Seventeenth Century Ferryland, Newfoundland (CgAf-2, Locus B)* (1986), *The South Avalon Planters, 1630-1700: Residence, Labour, Demand and Exchange in Seventeenth-Century Newfoundland* (1992) and *Documents Relating to Ferryland 1597-1726* (1993b), Gaulton’s *Seventeenth-Century Stone Construction at Ferryland, Newfoundland (Area C)* (1997), Carter’s *The Archaeological Investigation of a Seventeenth-Century Blacksmith*

*Shop at Ferryland, Newfoundland* (1997), in three published volumes of the *Avalon Chronicles*, as well as on-line at [www.heritage.nf.ca/avalon](http://www.heritage.nf.ca/avalon).

### 2.3. Social Context: Stratification and Class

Certain aspects of the social and economic lives of Ferryland's settlers will be expanded upon as necessary in the following chapters. However, it is worthwhile, at this point, to provide a basic understanding of Ferryland's social organization and how it appears to have changed through the course of the 17th century. Terms used to describe Ferryland's seasonal and permanent residents, as well as their social standing or economic position will also be introduced and defined. This description of social stratification or class structure is drawn from the research of Pope (1986, 1992) into the history of 17th-century settlement at Ferryland and on Newfoundland's English Shore.

Pope (1986:55-63) proposes a model of social structure that is divided into three categories, based on the social position, wealth, and occupation of those who were either full-time residents or seasonal workers at Ferryland. This model is based on the social structure proposed by Laslett (1965:32) for Stuart period England.

Those who occupied the top of the social structure were the gentry, who possessed a degree of political power, held either land or office, and, in many cases, significant wealth. Sir George Calvert and Sir David Kirke, and their families, as well as

Fishing Captains and Reverends would qualify for standing in this class. Many of those who invested in larger colonial ventures might also be included. Some of those considered to be of the gentry class were permanent residents at Ferryland.

Those immediately below the gentry occupied a broader middle class which included craftsmen, husbandmen, and planters. These people were considered contributors to the well-being of the settlement, through their ability to earn a living by either their trade or craft (for example a blacksmith), their cultivation of crops or raising of livestock, or their employment of others as crewmen on their own smaller fishing boats, or as servants in the maintenance of the household. Most of those who might be considered of the middling sort were permanent residents, at least so long as their economic position remained strong. They either purchased or, more likely, rented property for their houses and fishing rooms from the gentry proprietors of the plantation, either George Calvert, or his family during the first 17 years of the colony, or later from David Kirke and his family following 1638. Moreover, it should be noted that those of the middle class, although mostly dependant on the profits earned in the cod fishery, were also planting their own crops, raising livestock, cutting timber, and building boats, in season (Pope 1992:35-37).

The lowest social position was occupied by the fishing crews, servants and other labourers. This group was comprised of paid employees or indentured servants. Most

were younger and might be considered migrant labourers inasmuch as fishing crews arrived at the beginning of the fishing season and returned to England at its close, while servants generally overwintered, but often served only for the period of their indenture, a period of one or two years.

Pope (1986:59-64) suggests that this rigid social structure characterised Ferryland's settlement until ca. 1660, but that by the last quarter of the 17th century the distinction between the gentry and non-gentry middle class, had become instead one between larger (and potentially more successful) planters and smaller planters who had invested in the growing and lucrative bye-boat fishery (Pope 1992:34). Moreover, Pope suggests that even this separation was further diminished by a series of bad fishing seasons following 1684 that not only left larger planters heavily indebted to West Country financiers, but further minimized the separation between planters and servants to the extent that they could be considered, essentially, equals.

It is worth noting that during the early years of Calvert's colony it appears that some of the early residents lived in a fairly communal fashion. Their success in the fishery, the planting of crops, and the construction of the fishing station's infrastructure allowed for the continued growth of the colony and would have, eventually, allowed Sir George, his partners, or his family to recoup some of his significant original investment. With the arrival of Sir David Kirke in 1638, it appears that activities at Ferryland slowly shifted

from those that might be considered “community-oriented” toward those that might be considered more “individually-” or “household-oriented”. The success of individual planter families in the fishery tended to serve the family itself more than the community at large.

The following chapters examine the remains of a house from this 17th-century settlement, dating ca. 1660-1696, in order to identify the activities and social standing of this particular household.

### CHAPTER 3

#### HISTORY OF EXCAVATION

##### 3.0. History of Excavation

For over 100 years the location of Sir George Calvert's Colony of Avalon has been sought by archaeologists and historians. The first attempt to locate the site was made by Bishop Michael F. Howley in 1880. Although the exact location of his excavations remains unknown, he recovered a number of artifacts including a silver snuff spoon with the initials G.K. which may have originally belonged to George Kirke, one of the sons of Sir David and Lady Sara Kirke (Howley 1979:124). Howley also noted that foundations of Lord Baltimore's house were still visible. In 1937 Dr. Stanley Brooks, an entomologist at the Carnegie Institute, Pittsburgh, conducted excavations around The Pool and on the adjacent mainland to the west of the site's present location (Tuck 1996:24). Brooks' unpublished report suggested that the Mansion House was located near the present-day Colony of Avalon Interpretive Centre (Brooks cited in Barakat 1976:17). Unfortunately, the excavated materials are unavailable for study (Tuck 1985:379).

In 1959 J.R. Harper, under the auspices of the Historic Sites and Monuments Board of Canada, excavated a 6-x-6 ft. test unit in an abandoned garden south of The Pool near the present location of Area B (Harper 1960). Artifacts recovered represented three centuries of occupation including mid-to late-17th-century pipe bowls, sgraffito-

ware, case bottle glass, deteriorated wood and iron nails. Harper dated the lowest stratum ca. 1625-1650 and suggested that this represented a wing or outbuilding of the main Baltimore house located just to the west (Harper 1960; Pope 1986:78).

In 1968 Dr. James Tuck of Memorial University conducted test excavations south of The Pool near the site of a present-day restaurant. These excavations exposed a slate drain and produced a quantity of 17th-century artifacts (Tuck 1996:24).

In the early 1970s R.K. Barakat of Memorial University carried out a series of excavations on Bouys Island, just north of Ferryland Head, and to the east of Harper's earlier excavations south of The Pool (Tuck 1996:24; Pope 1986:80). Artifacts recovered from Bouys Island date to the 18th century and likely relate to British fortifications from the Seven Years War (Pope 1986:80). Unfortunately, there is no report describing Barakat's excavations.

Despite earlier archaeological and historical research into the location of Calvert's colony, nobody had provided conclusive proof of its whereabouts. In order to re-locate the site of Calvert's colony and to assess site potential Memorial University began methodical testing of the area in the mid-1980s. Under the direction of Dr. James Tuck a series of excavations were carried out at four locations (Areas A-D) over three field seasons (1984-1986) (Tuck 1985, 1989; Tuck and Robbins 1986). These



excavations produced 17th-century artifacts in each of the four Areas and structural remains in Areas B and C. The quantity of artifactual and structural remains, their quality of preservation, and the complexity of the site itself indicated that further excavations would require a major investment in time and funding (Tuck 1996:24). The areas of excavation were reluctantly backfilled in the fall of 1986.

In conjunction with the land-based archaeological survey The Pool underwent an underwater survey in 1984 (Skanes and Deichmann 1985). This survey confirmed that The Pool had been dredged frequently but also located an undisturbed baulk of stratified sediments. Dredged material from The Pool contained materials dating from the early 17th century. Although Skanes continued underwater surveys and excavations in 1991 and 1992, his findings remain unavailable.

In 1989, during the re-excavation of a waterline, M.P. Stopp conducted salvage excavations at the eastern end of the site on behalf of Newfoundland's Historic Resources Division, Department of Culture, Recreation and Youth (Stopp 1989). One 4-x-1 m trench excavated adjacent to what is now Area F produced evidence of both 17th- and 18th-century occupation. Two features were identified, the first the remains of a cobble road, the second, a disturbed stone wall similar to those found in Area C.

In 1991 funding from the Canada-Newfoundland Tourism and Historic Resources

Cooperation Agreement was secured to begin full-scale, long-term excavations at Ferryland. Excavations resumed in the summer of 1992 and have continued to present. These systematic excavations have now investigated seven different areas (Areas A-G) revealing a variety of structures and unearthing over 1,000,000 artifacts.

### 3.1. Areas of Excavation

What follows is a brief description and interpretation of each of the Areas excavated. Figure 2.3 shows the location of each Area described.

Area A In the fall of 1984 four 1 m<sup>2</sup> test units were excavated at the western end of The Pool in order to locate fortifications that may have protected the colony from attack via the mainland. 17th-century artifacts were recovered, but no evidence of fortifications was found. Based on experience gained through excavations at other locations on the site, it is possible that Area A was not excavated deeply enough. Future work may refocus on this location (Tuck 1996:27).

Area B Located east of Area A, this is the likely location of J.R. Harper's 1959 test excavations. Excavations began here in 1984 and continued in 1985. Early excavations opened an area of approximately 60 m<sup>2</sup> revealing the remains of a 17th-century forge and produced an extensive collection of artifacts including blacksmith's tools and domestic materials. Pope (1986) has documented the ceramic assemblage and Carter (1997) has

completed a study of the forge and related blacksmithing activities.

Excavations resumed in 1994 and completely exposed the forge before expanding northward. The total area excavated at Area B was approximately 200 m<sup>2</sup> with depths of over 2 m reached in some locations. At the northern boundary of the area two 17th-century features were discovered. The first was a section of cobblestone road that roughly parallels the present asphalt lane. The second was the remains of a stone foundation that overlaid the cobblestone road's southern edge by roughly 30 cm and ran parallel to it. Excavations to the west and east in 1995 revealed the shorter end walls of a domestic structure. It is this structure, a house, and the artifact assemblage derived from its excavation that are the focus of this thesis. What is immediately clear is that this structure overlies the cobblestone road and therefore post-dates its construction. It is currently accepted that this cobblestone road is the same "pretty street" that Captain Wynne referred to in 1622 (Tuck 1996:31).

Below the 17th-century occupation layers evidence was found for the use of Ferryland by earlier migratory European fishers as well as native Beothuk. The lowest layers, over the original sand and gravel beach, contained small cobble hearths surrounded by scattered wood charcoal, burnt bone, seeds and fir needles, as well as lithic debitage, stone tools and arrowpoints (Tuck 1996:27). In the same layers were found iron objects, mostly fishhooks and nails, and ceramics of European origin. No evidence for clay

tobacco pipes was found with these European remains, suggesting that this material predates their introduction ca.1580. The ceramics are a mixture of Spanish, Portuguese, Norman/Breton, and English West Country wares indicating the seasonal presence of Spanish, Portuguese, Basque, and English fishers. Separating these earlier layers from the overlying 17th-century materials was a course of rough-laid beach rocks that likely represent an artificial beach used for the drying of fish. These were probably constructed by West Country English fishers in the third quarter of the 16th century concomitant with an increase in the English West Atlantic fishery (Tuck 1996:28-29).

Area C In 1986 a number of exploratory trenches excavated in a vacant lot adjacent to the southeast edge of The Pool revealed evidence of substantial stone structures, as well as thousands of 17th-century artifacts (Tuck 1989:298). Large-scale excavations resumed there in 1992. Over the next four years at least two different stone-built structures, a massive seawall, as well as flagstone and cobblestone floors, a tide-flushed privy, and a wealth of 17th-century materials were exposed. Detailed research into the structures at Area C has been completed by Barry Gaulton (1997); a summary is offered here.

The lowest levels above the original beach consisted of a thin deposit of organic remains including fragmentary wooden planks, wood chips, bone and rich black soil. Immediately below these levels in the beach sand were found ceramics similar to those from the lowest levels of Area B indicating an extensive early-16th-century use of the

harbour (Tuck 1996:32). Above these layers was found another organic-rich deposit with sherds of North Devon ceramics and tobacco pipes with small bowls and large stem bores. This deposit may represent refuse laid down prior to or during the first years of the founding of Calvert's colony.

Overlying these early levels is a thick deposit of subsoil and rock that served as a fill layer upon which substantial stone buildings were constructed. At the northern edge of Area C is a massive stone wall that served as both a retaining wall for this fill and as a quayside along the southern edge of The Pool. With a single finished face on its north side, this wall still stands as high as 1.2 m in places and runs roughly 50 m to the west (Tuck 1996:32).

This area underwent two phases of construction. The first was contemporaneous with the filling of land and the construction of the seawall. This phase saw the construction of a stone-walled, slate-roofed storehouse that measured approximately 56-x-16-ft., along with a 4-x-9-x-4-ft. deep stone-lined privy. These structures were in use until the third quarter of the 17th century but were leveled in the Dutch raid of 1673 (Gaulton 1997:20). The second phase of construction produced a two-bayed outbuilding, a byre or cowhouse, located directly south of the earlier storehouse. A covered slate drain served to transfer waste from the cowhouse to the modified privy, which now served as a dungpit. This structure was destroyed in the

French attack of 1696 (Gaulton 1997:21).

Area D Located at the eastern margin of the settlement this area produced the first evidence of a 17th-century domestic complex. Excavations in the 1980s conducted by Memorial University field schools exposed an early-19th-century fireplace foundation which overlay the earlier structure (Tuck 1996:36). Excavations in 1993 and 1994 revealed the remains of a substantial timber-framed structure and an associated stone-built well. This domestic structure contained a stone fireplace with a cobble hearth that stretched across the width of its eastern end, suggesting a gable-end construction. Its internal measurements were roughly 39-x-17-ft. 6-in. Artifacts recovered from the house point to its construction and occupation in the second half of the 17th century. The house appears to have been destroyed by fire during the French attack of 1696 (Tuck 1996:36-37).

The house, well, and their associated artifact assemblages are the focus of current research by Amanda Crompton, a graduate student at Memorial University of Newfoundland. Because the occupation of this house is roughly contemporaneous with that of the house in Area B, the focus of this research, comparisons will be made, where possible, between each structure and their corresponding artifact assemblages.

Area E In 1993 excavations explored a conspicuous mound of earth located on the crest

of a hill to the south of the early colony. With a commanding view of the settlement, The Pool, and the outer harbour it was anticipated that this location would produce remains of the fortifications of the original settlement. A series of building phases was identified. The most recent structure appears to have been a tavern with a fireplace in each of its gable ends. Drinking vessels, bottles and tobacco pipes date this structure from the early- to mid-18th century (Tuck 1996:39). Below this was a substantial earthwork mound that may relate to the 1694 strengthening of Ferryland's defenses under Captain William Holman. The lowest levels produced evidence for what may have been part of the colony's original fortifications. A 1 m wide trench revealed the remains of a sod-built structure built above a sterile humus layer at a depth of more than 2 m. This has been interpreted as a gun platform (Tuck 1996:40).

Area F Excavations began here in 1996. Located south of Area C it is separated from these earlier excavations by only the present-day asphalt road that runs eastward to a parking lot. This separation is of a distance no greater than five metres. Excavations here over the past three seasons has revealed a variety of 17th-century structures and produced a diverse assemblage of artifacts (Carter et al. 1998). The eastern margin is delineated by an excavated defensive ditch. On the western edge of the ditch, a distance back from the ditch itself, another stone retaining wall has been located which buttressed soil removed from the ditch thrown up to form an earthen rampart which, according to Captain Wynne, was topped by a palisade. This ditch, rampart and palisade fortification likely coincides

with the early construction of defenses outlined by Wynne in 1622 with the statement that they raised “a face of defense to the water-side ward” (Wynne 28/7/1622). The earthen rampart was constructed over a thin Beothuk occupation layer which was itself immediately above the original gravel and clay subsoil.

A carefully laid cobblestone road exposed at the northern edge of Area F measures roughly 13 ft. in width and has been exposed for a length of over 20 m. It seems clear that this section of cobblestone road connects with a section exposed earlier at Area B of similar construction and width. If this is the case, then this street indicates the western and eastern boundaries of the original colony. Moreover, if this is the street that Captain Wynne referred to in his 1622 letter to George Calvert stating, “for the comfort of the neighbourhood, another row of buildings may be so pitched, that the whole may be made a pretty street” (Wynne 28/7/1622), then it is possible to understand not only the layout of the early colony, but also the order in which buildings were constructed. Gaulton (1997:24) suggests that the first series of structures were built south of the cobblestone street, while a second series of structures, including the stone-built storehouse located in Area C, was constructed shortly thereafter.

Excavations in the summer of 1998 uncovered a large midden deposit south of the cobblestone road, as well as a number of wall segments, some cobblestone pavements that likely represent both interior and exterior spaces, another slate-lined drain, and evidence



for at least two structures based on the orientation of two probable fireplaces and their associated chimney falls. The excavation of Area F is currently confined by existing roads. However, structural remains, as well as ceramic and glass artifacts recovered to date suggest not only a substantial house nearby, but also a house occupied by someone of high status (Carter et al. 1998:61). A large proportion of the ceramic assemblage is of Continental tin-glazed earthenware (compared to collections from domestic structures at Areas B and D) and the occurrence of *terra sigillata*, an expensive and rare Portuguese coarse earthenware, further illustrates that this assemblage is unusual (Gaulton and Mathias 1998). It is optimistic to think that the Mansion House, occupied first by the Calverts and later by the Kirkes, may finally have been located.

Area G In 1996 excavations were begun in a vacant lot to the west of Area C. Area G is located on the edge of The Pool to the west of Area C, to the east of Area B, and north of the present asphalt road. Two trenches were excavated, one a 1-x-9 m north-south trench, the other a east-west trench running parallel to the high tide mark. The first trench revealed a cobblestone pavement and produced late-17th- and early-18th-century artifacts. The depth of the cobblestone feature and the nature of the artifacts are similar to those found at the western edge of Area C. Below this cobblestone pavement evidence of earlier 17th-century activity was found in the form of filling or leveling activities (Carter et al. 1998:50). This deposit overlay ceramics and iron nails found on the original beach surface that are further evidence of a seasonal Basque presence at Ferryland sometime in

the 16th century. Excavations at the high tide mark uncovered preserved segments of the seawall along with a series of wooden posts attached to horizontal logs which abutted the seawall. These may have served as strouders for boats to moor on (Gaulton 1997:25) and to prevent damage to their wooden hulls.

A rich deposit of 18th-century material was found above and to the south of the seawall. Artifacts from this deposit suggest they were derived from a nearby house dating from the third quarter of the 18th century.

Excavations in Area G were expanded in 1997 producing additional 17th-century material, but no structural remains (Carter et al. 1998).

These are the Areas of Excavation that are, on occasion, referred to in following chapters. The research presented here focuses on the 17th-century domestic structure and its associated artifact assemblages located in the northern half of Area B. The next chapter details the stratigraphy and features identified during the excavation of Area B.

## CHAPTER 4

### AREA B STRATIGRAPHY, FEATURES, AND WALL SEGMENTS

#### 4.0. Introduction

This chapter outlines the stratigraphy and features identified during the excavation of Area B. Since this research focuses on the domestic structure located in the northern half of Area B, only those Events and Features considered directly relevant to the chronology of its development are discussed. For more detailed analyses of the earlier forge located in the southern portion of Area B see Carter (1997) and Pope (1986). To date, no detailed research into the 16th-century European or the Beothuk occupations identified at Area B has been carried out.

As noted in Chapter 3, excavation of Area B began in 1984 during the initial survey of Ferryland. It is likely that Area B is near the location of Harper's 1959 test excavations (Harper 1960). Some evidence of his excavations were found in the northeastern section of Area B, within excavation units N7 E2 and N6 E2, where clearly disturbed materials were found. This disturbance did not significantly impact the 17th-century occupation levels (Tuck 1999: personal communication). Excavations in the 1980s revealed the remains of a forge. Pope (1986) interpreted this structure as serving as a forge, and, on occasion, as a cookroom where fishing crews may have taken meals and enjoyed a casual drink. Further excavations in 1994 and 1995 completely uncovered the

forge located at the south end of Area B, as well as the domestic structure and cobblestone road located in its northern half. Because of the somewhat complex nature of Area B and the fact that it was excavated using different methods of identifying strata/events and features, it is useful to describe and collapse these designations in order to clarify their contemporaneity, stratigraphic position, and areal extent. This might be best accomplished by dealing with each structure, the forge and the house, separately, and by working forward chronologically from earlier to more recent excavations. It should be noted that the earlier identification of strata is not significantly different from that of events, except that the latter allows for the delineation of discrete layers or lenses within larger deposits, such as a layer of fill deposited when the house was built (Tuck 1996:26). This method allows for the combination of events that may be recognized as contemporaneous only after their excavation.

Figures 4.1- 4.5 illustrate the stratigraphy of Area B and plan views of Feature and Wall Segment locations. Figure 4.6 shows an aerial view of Area B. Tables 4.1. and 4.2. list Strata and Features from earlier excavations with their more recent equivalents and their cultural interpretation. Descriptions and cultural interpretation of Strata and Events are presented below, followed by Features and Wall Segments.

#### 4.1. Strata and Events

Pope (1986:87) described Stratum I as a disturbed plough zone that covered all of

Figure 4.1. Area B Profile at East 3, facing east.

N8E3

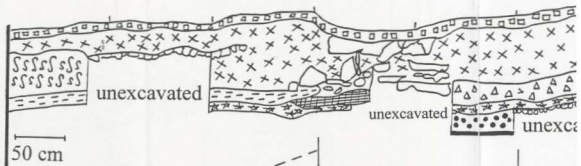
N7E3

N6E3

N5E3

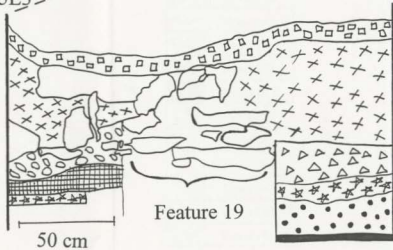
N4E3

N3E3



N5E3

N3E3



N3E3

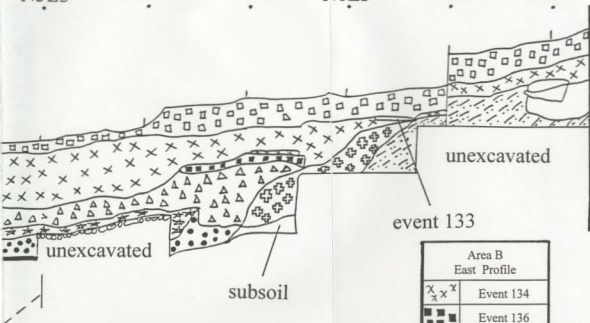
N2E3

N1E3

N0E3

S1E3

S2E4



### Area B Profile at East 3, facing east.

Note: profile section between S1E3  
and S2E4 taken 1m further east.

Area B East Profile	
	Event 134
	Event 136
	Event 137
	Event 138
	Event 139
	Event 140
	Event 142
	Event 143
	Event 145
	Event 146
	Event 148
	Event 149
	Event 150





Figure 4.2. Area B Profile at East 4, facing east.

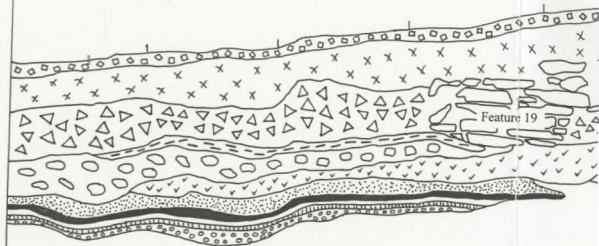
N8E4

N7E4

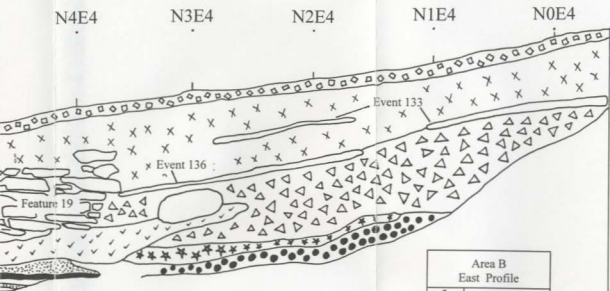
N6E4

N5E4

N4E4



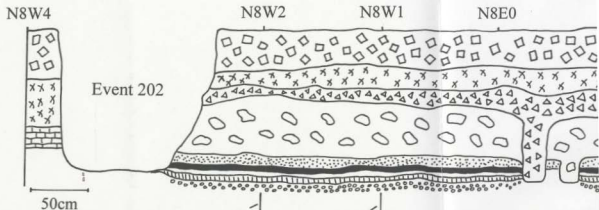
50 cm



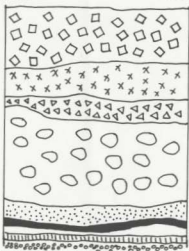
Area B Profile at East 4,  
facing east.

Area B East Profile	
	Event 134
	Event 137
	Event 138
	Event 143
	Event 145
	Event 148
	Event 149
	Event 150
	Event 183
	Event 186
	Event 187
	Event 188
	Event 191

Figure 4.3. Area B Profile at North 8, facing north.

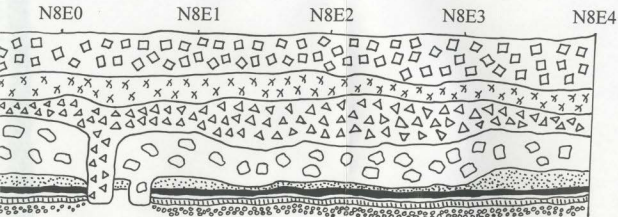


N8W2 N8W1



50cm

Area B North Profile	
	Event 137
	Event 134
	Event 138
	Event 145
	Event 177
	Event 149
	Event 186
	Event 187
	Event 191
	Wall Segment 15



Area B North Profile	
	Event 137
	Event 134
	Event 138
	Event 145
	Event 177
	Event 149
	Event 186
	Event 187
	Event 191
	Wall Segment 15

Area B Profile at North 8,  
facing north.



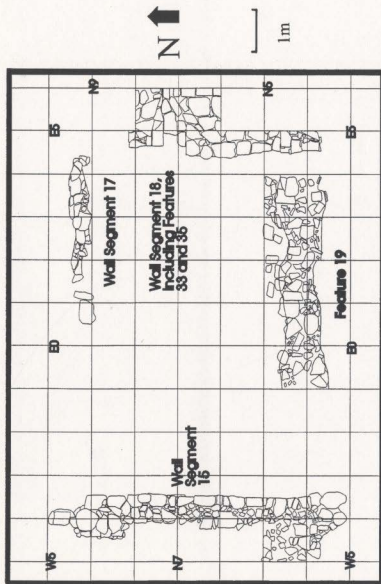


Figure 4.5. Plan view of the house at Area B.





Figure 4.6. Aerial view of Area B, looking south. Reconstructed forge at top, exposed wall segments and partially excavated hearth in foreground.

Table 4.1. Strata and Events from Area B.

Stratum (Pope 1986)	Event	Interpretation
1	137	Plow Zone
2a	133	Destruction Event
2b	134	Fill Event
2c		Fill Event
2d	157	Fill Event
2e		Forge-Related Activity
2f		Fill Event
3a		Forge Structure
3b	154	Working Forge Floor
3c		Original Forge Floor

Table 4.2. Features from Area B.

Feature (Pope 1986)	Feature	Interpretation
1		Forge Room
1a		Forge Slag
1b	26	Stone-built Forge
2	25	Unidentified Burnt Structure
3	18	Wall Overlying Forge
4	19	House Footings, south wall

Area B. This stratum contained artifacts of the 19th and 20th century as well as some from the 17th century, presumably as a result of the disturbance of underlying Stratum 2. Stratum 1 was later designated Event 137. No structural remains were identified in Stratum 1.

Stratum 2 was subdivided into six discrete strata (2a-2f). Pope (1986:88) described Stratum 2a as a thin relatively undisturbed charcoal layer immediately below Stratum 1 consisting of the charred remains of boards running east-west with artifacts dateable to ca.1670. Located in the southern portion of Area B and covering an area roughly 0.75-x-3.0 m (2 ft. 6 in.-x-9 ft. 11 in.), Stratum 2a has been interpreted as the remains of a building destroyed by fire. Equivalent with Feature 2, Stratum 2a was later designated Event 133, while Feature 2 became Feature 25.

Stratum 2b is described as a layer of fill that covered all of Area B. Immediately below Stratum 2a, this layer was artifact rich. The presence of case bottles suggests a date earlier than that of Stratum 2a. Mean pipe stem bore measurements provide dates ranging from ca. 1640 (Pope 1986:88) to ca. 1659 (Carter 1997:207). No living floors or structural remains were identified in Stratum 2b. It was later designated Event 134.

More recent excavations to the north of the forge located lenses of Event 133/Stratum 2a within Event 134. This suggests that the building represented by this

Event was destroyed by fire at either some time prior to, or contemporary with, the in-filling of Area B. Event 133 occurred stratigraphically above the house occupation layers, southeast of the structure in excavation units N2 E3, N1 E3, N0 E3, and S1 E3. Based on its stratigraphic position it is unlikely that the structural remains evident in Event 133 are related to the destruction or demise of either the earlier forge or the later house located to the north. Event 134 appears to represent a large-scale in-filling of Area B following the abandonment of both the forge and the house.

Stratum 2c was a deposit of limited extent within the Feature 1 "Room" (Pope 1986:88). Stratum 2c lay immediately above Feature 31 and represents the abandonment and initial in-filling of the forge. Pope (1986:92) suggests a mean median date for Stratum 2c of ca. 1660 based on pipe bowl styles, while Carter (1997:203) arrives at a mean pipe stem bore date of 1643, albeit from a sample of only 64 stems.

Stratum 2d lay to the south of Feature 4 in the central portion of Area B, immediately below Stratum 1. It contained mostly 17th-century pipes and North Devon ceramic wares. It was later designated Event 157.

Stratum 2e was a limited deposit within the forge room. Stratum 2f, a fill layer, overlay the Feature 1 "Room" at the southern-most edge of Area B. Artifacts were similar to those of Stratum 2b/Event 134, with a mean median date of 1635 based on pipe

bowl styles (Pope 1986:92).

Stratum 3 was subdivided into 3 discrete strata (3a-3c). Stratum 3a was a thin organic layer below Stratum 2f to the south of the Feature 1b forge and likely represents the decayed walls or roof of the Feature 1 "Room". Pope (1986:92) suggests a mean median date for this deposit of 1635 based on pipe bowl styles. Carter notes that Stratum 3a may be related to Stratum 2c and arrived at a mean pipe stem bore date of 1648 from a sample of 24 stems (Carter 1997:203).

Stratum 3b was a thick black deposit adjacent to and south of the Feature 1b forge. This extremely rich layer contained forge refuse and a quantity of pipe bowls and fragments. It overlay Stratum 3c, a dark compacted layer interpreted as the original floor of the forge area. Pope suggests a mean date for Stratum 3b of 1640 based on pipe stem bore measurements, as well as a date of ca. 1647 based on bowl styles (Pope 1986:90, 92). Carter (1997:202) arrived at a mean pipe stem bore date of 1644. Stratum 3b was later designated Event 154.

Stratum 3c was located immediately below Stratum 3b. This compacted layer represents the original floor of the forge area. Pope (1986:90) dated this deposit prior to 1620 based on pipe stem bore measurements from nine stems. Carter (1997:205) arrived at a mean pipe stem bore date of 1629 from a sample of 13 stems.

Event 135 was a thick discrete deposit of charcoal and artifact fragments located near the house, stratigraphically below Event 134 but above Event 138. It represents refuse from either the destruction of the house, or the in-filling of Area B, but was located stratigraphically above two other fill layers, Events 138 and 169, which were themselves confined within the stone footings of the house.

Event 136 was similar to Event 135 in composition and stratigraphic position. This event had a wider distribution than Event 135 and occurred outside and to the south of the house. This event also appears to represent either refuse from the destruction of the house or some form of in-filling of Area B.

The presence of some ceramic cross-mends between Events 135 and 136 with those events representing the occupation of the house (Events 143 and 145) suggests they represent some disturbance of the house's original occupation levels during the large-scale in-filling of Area B represented by Event 134.

Event 138 was a thick deposit of brown soil and cobbles which underlay Event 136 outside the house and Event 134 within the house. Event 138 overlay the majority of the house structure. This event is considered to represent filling activities that occurred shortly after the house's abandonment and its subsequent demolition. Within the house Event 138 overlay those deposits representing its occupation, Events 143 and 145. Event

138 did not overlie Feature 19, the partially dismantled footings for the south wall of the house. In the area between the house and forge Event 138 overlay Event 148.

Event 142 was a deposit of light brown gravelly soil with beach cobbles of limited extent located north of Feature 19 but stratigraphically below the house's occupation levels. It likely represents fill used to level the area prior to the construction of the footings for the southern wall of the house.

Event 143 was a dark brown to black artifact-rich layer confined to the interior of the house. It was located in the eastern half of the house and overlay Event 145 in this area. While this event contained no clear evidence for the destruction of the house, inasmuch as it lacked any obvious structural remains, it is clear that this event represents its occupation. It may represent either an area of specific activity within the house during its occupancy, or, potentially, the collapse of an upper loft during its destruction. Materials recovered include ceramics, pipes, glass, and iron artifacts dating to the latter half of the 17th century. Numerous joins in ceramic vessels were made between Events 143 and 145. Excavation of this event revealed the upper layers of Feature 33, the stone-built chimney and hearth located at the east end of the house.

Event 144 was assigned to the disturbance caused by Harper's 1959 test excavations. Mixed soil and artifacts from the 17th to the 20th centuries were

encountered to a depth of roughly 50 cm (1 ft. 7 in.). Event 144 was limited to excavation units N7 E2 and N6 E2.

Event 145 was a thick, dark, artifact-rich deposit restricted to the interior of the house. Stratigraphically below Event 143, it covered the majority of the interior of the structure. It yielded a variety of artifacts dating to the second half of the 17th century. Feature 33 was contained within this event. Burnt floor boards, designated Feature 35, also occurred within this deposit. Event 145 lay below Event 138 and above Events 148 and 177.

Event 148 was a sticky brown soil with sand and large beach cobbles. Event 148 was located in the eastern half of Area B. South of Feature 19 it occurred below Event 138 and above Event 150. North of Feature 19 it lay below Events 143 and 145. Event 148 appears to be a fill of some sort laid over earlier cobble flakes constructed atop Event 150. This filling activity occurred prior to the construction of the house, perhaps in an effort to provide level ground for the house's footings. It may also date to the earlier construction of what is likely Captain Wynne's cobblestone street, Feature 56, located at the northern margin of Area B. Such an activity could have used material cut from the slope to the south in order to provide a location for the earlier forge. This material could easily have been thrown northward to provide both level ground for the construction of the cobble street, and level access to the forge itself (Tuck 1993:300).



Events 149 and 150 represent seasonal European occupation of Ferryland prior to the establishment of Calvert's colony. The former was composed of a layer of burnt or decayed wood with many nails that covered most of the northern half of Area B. The latter was a sterile light brown soil upon which artificial cobble beaches, Features 20 and 21, were built. Event 149 lay below Event 150 to the south and below Event 177 to the north.

Event 169 was a light brown, rusty soil with small rocks and cobbles found below Event 134 and above Event 145 in the western half of the house to the east of Wall Segment 15. This event is similar in composition to Event 138, a fill deposit that covered much of the eastern interior of the house following its destruction. Event 169 was disturbed during the excavation of a waterline trench, Event 202, to the east of Wall Segment 15.

Event 177 was a distinct layer of grayish loose sand and gravel located in the northern profile of Area B below Event 145 and above Events 149 and 178. Spread sporadically over the northern end of Area B it may represent a sand and gravel floor upon which the later house occupation layers were formed, but it is more likely evidence of a filling event, contemporaneous with Event 188, that took place either when the cobblestone road to the north was constructed, or at some time prior to the construction of the house itself.

Event 178 was a mottled soil containing early-17th-century artifacts that lay below Event 177. It appears to have been some sort of occupation layer that was sanded over prior to the occupation of the later house. This deposit was tightly concentrated in an area roughly 3 m north-south by 5 m east-west (9 ft. 11 in.-x-16 ft. 5 in.) below the eastern half of the later house structure. This event likely represents waste left behind prior to or during the construction of either the house, the forge, or the cobblestone street. Ceramic joins found between this event and the stratigraphically higher house occupation levels may be the result of the collapse and disintegration of the house floor.

Event 183 was a narrow band of sterile yellow clay found in the eastern profile of Area B. It ran underneath Feature 19 and measured roughly 3 m (9 ft. 11 in.) in length. Within the limits of the house it was overlain by Event 145 and covered Event 188. This event is similar to Event 142 and likely represents a fill deposit laid down in order to level the southern footings of the house prior to its construction.

Event 184, a small patch of burnt clay and charcoal atop Event 178, was located to the west of Feature 33, the stone-built hearth at the east end of the house.

Event 186 was a layer of fine gray sand with little gravel located in the northern half of Area B below Event 149 and above Event 187. It appears to be the remnants of a natural beach formed by high tides or seas pushing fine sand southward from the original

beach of the Pool.

Event 187 was a dark organic layer of decomposed wood, charcoal and peat below Event 186 and above Event 191. Event 187 contained the remains of at least two Beothuk hearths.

Event 188 was a uniform layer of gravel about 10 cm (4 in.) thick located in the northern end of the eastern profile of Area B. Within the house it lay below Events 145 and 183, above Event 149, and ran underneath Feature 19. It occurred at the same stratigraphic level as Event 150 to the south and appears to be a fill layer. I suspect that Event 188 represents another early fill used to not only cover the earlier artificial cobble beach, but also to provide a level surface for the construction of the cobblestone road, Feature 56 to the north, as well as easy access to the forge located to the south.

Event 191 was similar to Event 186 in composition and represents the original beach surface. Event 191 lay beneath Event 187 and contained evidence of Beothuk occupation.

Event 202 designates a deep roughly 1 m (3 ft. 3 in) wide trench excavated for a modern waterline. This trench was located along the western edge of Area B just inside Wall Segment 15 where it ran north-south. It turned west near the end of Wall Segment

17. This excavation resulted in the destruction of the western ends of the northern and southern footings of the house and disturbed the context of artifacts and events along its path. Disturbance of the occupation levels caused by the waterline is evident in the relative absence of iron nails and ceramic vessels along its course at the western end of the house (Section 5.7.).

Event 222 was a large deposit of loosely packed rocks located immediately west of Wall Segment 15. Located below Event 137 this deposit appears to have been deposited after the house fell into disuse.

Event 227 was a thin layer of wood charcoal located to the west of Wall Segment 15. Event 134 lay over top while Event 177 lay beneath. This event is likely associated with the destruction of the house.

Event 246 was a deposit of burnt wood and ash located below Event 145 and associated with the hearth, Feature 33, in the east end of the house. It likely represents materials cleaned from the hearth.

#### 4.2. Features

Feature 1 was the 17th-century "Room" excavated into the slope at the south end of Area B. The Room measured roughly 4 m (13 ft. 1in.) wide, west to east, with its

northern limits defined by the edge of Stratum 3 (Pope 1986:85). Features 1a and 1b were located within the Room.

Feature 1a was a concentrated deposit of charcoal, slag and iron concretions below Stratum 2b to the north of Feature 1b. Feature 1b designates the forge itself. The forge was a rectangular structure roughly 1.85 -x- 1.25 m (6-x-4 ft.) constructed of flat rocks that remained standing to a height of about 40 cm (1 ft. 4 in.). Feature 1b was later designated Feature 26.

Feature 2 was located in Stratum 2a and designates a structure destroyed by fire. The feature consisted of a layer of burnt boards with artifacts dating to ca. 1670 (Pope 1986:85). Feature 2 designates the structure itself while Stratum 2a contained its remains. Feature 2 was later designated Feature 25, while Stratum 2a was designated Event 133.

Feature 3 was a section of stone wall located in Stratum 2. It ran parallel to the base of the southern slope into which the forge room was cut and overlay the forge itself. Chronologically and structurally it is related to neither the forge room (Pope 1986:87) nor the later house. Feature 3 was later designated Feature 18.

Feature 4 was a broad alignment of stones running west-east at the northern edge of the early excavations of Area B. Feature 4 was located below Stratum 2. To the north

of Feature 4 was a deep layer of thoroughly mixed stony fill. This feature was interpreted as either a house wall foundation or a section of the palisade that enclosed the early colony. Feature 4 was later designated Feature 19.

Feature 19, originally Feature 4, was an east-west alignment of dry-laid stones now interpreted as the footings for a house constructed in the north end of Area B (Figure 4.7). Measuring 5 m (16 ft. 5 in.) in length, its width was roughly 1 m (3 ft. 3 in.), but this is likely a result of the destruction of the house or the dismantling of the footings following the demise of the structure itself. Video tape recorded during the excavation of this feature show it to have been carefully constructed and purposefully leveled.

Features 20 and 21 designate two rough cobble and rock pavements laid in the northern half of Area B. These "artificial beaches" for the drying of fish date to the third quarter of the 16th century and lay below the 17th-century occupation layers. These earlier flakes began in the open area between the earlier forge to the south and ran north below the later house.

Feature 33 was a collection of flat stones with a quantity of associated charcoal, with no evidence of burning, located in the northeastern corner of Area B (Figure 4.8). This feature occurred in Events 143 and 145 and was later fully excavated to reveal a collapsed stone chimney and hearth.



Figure 4.7. Feature 19, partially excavated, facing east.



Figure 4.8. Feature 33, partially excavated, in background. Feature 35, upper right, Feature 34 in foreground, facing east.



Feature 34 was a cobble floor or fill directly below the house in the northern end of Area B associated with Events 178 and 188.

Feature 35 was a series of burnt boards approximately 7.5 cm (3 in.) wide laid side by side running east-west immediately adjacent to and slightly below the hearth's opening, Feature 33, located in the northeast corner of Area B (Figure 4.9). Feature 35 lay at the transition between Events 145 and 143 (above) and 177 (below) indicating that the hearth's foundation were laid over Event 177 and that the floor relates to the occupation of the house. The extent of this feature was somewhat more than 1 m<sup>2</sup> (9 ft.<sup>2</sup>).

Feature 56 was the 17th-century cobblestone road that ran east-west at the northern boundary of Area B. The northern footings of the house, Wall Segment 17, encroached roughly 30 cm (1 ft.) over the road's southern edge. Feature 56 was overlain by Event 145 and appears to have been built upon fill layers represented by Events 177 and 188.

#### 4.3. Wall Segments

Wall Segment 15 was a carefully constructed dry-laid stone footing that supported the west end of the house (Figure 4.10). Running north-south this feature measured approximately 4.9 m (16 ft.) in length, averaged 50 cm (1 ft. 7 in.) in width, and 55-65 cm (1 ft. 9 in.- 2 ft. 1 in.) in thickness. A scatter of rocks and cobbles to the west of its



Figure 4.9. Feature 35, facing east.



Figure 4.10. Wall Segment 15 at right, facing southwest.

southern end, outside the structure, may represent an exterior cobbled area or entrance to the house; however, excavation in this area was limited. Video tape recorded during its excavation shows this wall segment to have been carefully constructed and that fill had been added beneath the footing prior to its construction in order to level the area.

Wall Segment 17 overlapped Feature 56, the cobblestone road, by roughly 30 cm and ran east-west (Figure 4.11). Its western half was not found but may either have been dismantled following the destruction of the house or was destroyed during the installation of a waterline which ran westward at this location. The remains of Wall Segment 17 measured roughly 4 m (13ft. 1 in.) in length and 50 cm (1 ft. 7 in.) in width.

Wall Segment 18, located in the northeastern corner of Area B, encompassed the stone-built chimney and hearth, Feature 33, associated with the house occupation (Figure 4.12). This feature appears to have been partially dismantled following the destruction of the house. The remaining length of this wall segment was approximately 3.65 m (12 ft.). Its width was at least 60 cm (2 ft.) where fully exposed. These measurements exclude the full depth of the hearth which was only partially excavated.

This chapter has provided a basic outline and interpretation of the Events, Features, and Wall Segments identified during the excavation of Area B in general, and, in particular, of the house located in its northern half. The preliminary introduction of dates



Figure 4.11. Wall Segment 17 overlying Feature 56, the cobblestone road, in foreground, facing west.

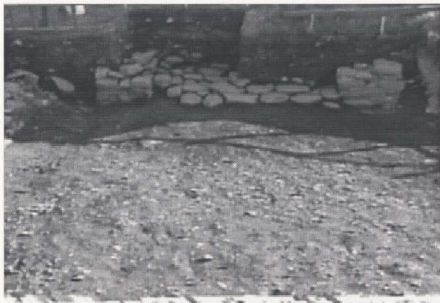


Figure 4.12. Wall Segment 18 encompassing Feature 33, the hearth, in background, facing east.

derived from the analysis of clay pipe stem bore measurements, the identification pipe bowl types, as well as the identification of particular ceramic wares and bottle types, has provided some basic information regarding the chronological development of this area. The following chapters detail and interpret the structural remains and artifact assemblages recovered from the excavation of this domestic structure.

## CHAPTER 5

### HOUSE CONSTRUCTION AND LAYOUT

#### 5.0. Introduction

While descriptions of the construction and layout of the Mansion House and other structures at the colony exist for the early years of its establishment, there is no corresponding documentation of later buildings or building practices. A map drawn by ships' surgeon James Young following his visit to Ferryland in 1663 shows only two stages and two houses, both with gable chimneys, with one house labeled "Lady Kirke" (Figure 5.1). Historical documentation and archaeological excavations show that Young's map was impressionistic and records few of the buildings that actually stood at that time. As a result, the excavation of structures and documentation of construction techniques has been undertaken in an effort to understand not only building methods, but also stages in the development of the colony. To date, the construction of the forge and quayside warehouse complex have been the basis for research (Carter 1997; Gaulton 1997). Documentation of the house at Area D is ongoing (Crompton 1999:personal communication), while the house at Area B is the focus of this research. Although both of these houses date to the second half of the 17th century, earlier buildings at the same colony might reasonably be examined for clues as to how later ones were constructed. This analysis studies the house at Area B in order to describe its construction and to suggest what its layout might imply about the activities and social standing of its



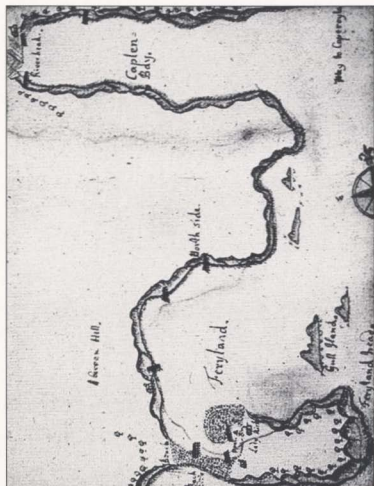


Figure 5.1. James Yonge's map of Ferryland ca. 1663. From F.N.L. Poynter, ed., *The Journal of James Yonge, 1647-1721*, Plymouth Surgeon (London: Longman, Green & Co. Ltd., 1963). Plate 4 A: "Part of the coast of Newfoundland, showing Ferryland".

occupants. Documented examples of houses and their construction from England and colonial North America are included for comparative purposes.

### 5.1. Early Building at Calvert's Colony of Avalon

The building program undertaken by Captain Edward Wynne to establish Sir George Calvert's colony is documented in letters written to his employer (Pope 1996). This ambitious project involved the construction of a number of buildings including the Mansion House, a kitchen, a parlour, and tenement. Descriptions are included which provide dimensions and some structural information about each building. The Mansion House is described as a wooden-framed structure 44-x-15-ft. containing an 18 ft. hall with stone chimney, a 6 ft. entry and a dug cellar 20 ft. in length. The height of the ground floor is recorded as about 8 ft. with the story above that divided into four chambers. Above the second floor was an attic or loft 4 ft. high to the roof, giving a two and a half story structure. This structure was roofed with a combination of deal boards and thatch, the latter being described as being "a far better covering than boards, both for warmth and tightness" (Wynne 28/7/1622). The 18-x-12-ft. kitchen is described as built of stone-work 8 ft. in height to the eaves with a large stone chimney and a chamber above accessed by a staircase. The 14-x-12-ft. parlour had a stone chimney and a chamber also with staircase access. The tenement's dimensions are not included but was of two rooms and a height of one and a half stories.

These descriptions of the early structures, although limited, allow some observations about building construction at Ferryland. Wood was apparently used for the Mansion House based on a reference to the “rearing” of its frame and was also likely used for both the parlour and tenement. The only clear reference to stone-built structures, with the exception of hearths and chimneys, is Captain Wynne’s kitchen. It is apparent from this that the early colonists were familiar with both stone and timber construction techniques. The use of both wood, thatch and slate for roofing illustrate a similar flexibility with materials. The ability to build with a variety of materials and techniques is demonstrative not only of the local availability of materials, but also of the range of skills available among the colonists. The trades- or craftsmen already resident at the early settlement or requested sent there included blacksmiths, a stone layer, quarry men, masons, carpenters and slaters (Wynne 17/8/22). Whether building in wood or stone, the early colonists were clearly knowledgeable and competent.

Excavations at Area C have produced evidence of large-scale stone construction in the form of a substantial seawall or quayside, as well as a large slate-roofed storehouse (Gaulton 1997). The earlier forge located at the south end of Area B was also roofed in slate, likely to reduce the risk of fire (Carter 1997:34). The seawall, storehouse and forge, as well as those structures mentioned in Wynne’s letters to Calvert serve not only as an indication of the breadth of building techniques available in the context of the early

settlement, but also of the careful planning behind the effort to make the colony a success. Decisions as to what materials and construction techniques would be best suited to which structures were purposefully made.

Whether similar building programs were undertaken during the later proprietorships of David Kirke, John Treworgie or Lady Kirke and her sons remains unclear, although some degree of re-organization of facilities from that of Calvert's original plan is likely (Pope 1986:26). Maintenance of the storehouse in Area C is found in the later addition of a new flagstone floor (Gaulton 1997:56). The construction of the cow byre in Area C, following the Dutch raid of 1673, also illustrates that the building of new structures, or re-working of old ones, continued into the last quarter of the 17th century (Gaulton 1997:53). The construction of houses at Area B and D some time after 1650 provides further evidence for continued building and development at Ferryland.

## 5.2. The House at Area B

An understanding of the construction and layout of the house at Area B is best arrived at through a combination of archaeological evidence and historical documentation from Ferryland, England and colonial North America. A description of the excavated structural remains from the house at Area B will be followed by an examination of other documentation in order to aid in their interpretation.

Excavations at the north end of Area B uncovered the remains of dry-laid stone footings, a stone-built hearth and collapsed chimney (Figure 4.5). These footings, where complete, had an average width of 50 cm (1 ft. 7 in.). Feature 19 and Wall Segment 17 each ran east to west and comprised the footings for the north and south walls of the structure. Both have been disturbed, on the one hand by the likely scavenging of building materials following the destruction of the house, and on the other, and at their western ends, by the construction of a more recent waterline. However, their original length of approximately 30 ft. (9.0 m) can be estimated from their inferred intersection with their north-south mates, Wall Segments 15 to the west and 18 (which includes the chimney and hearth, Feature 33, and the remnants of wood flooring, Feature 35) to the east. Wall Segments 15 and 18 also averaged 50 cm (1 ft. 7 in.) in width, where exposed, and measured approximately 17 ft. ( 5.25 m) in length. Each undisturbed section of footing displayed careful workmanship as well as purposeful filling and leveling of the underlying grade, prior to their construction. No builders' trenches were identified. Wall Segment 17 encroached approximately 30 cm (1 ft.) onto the cobblestone road, Feature 56, at the north of Area B, which provided not only a secure substrate for the footing but a level surface to which the other footings, as well as the hearth and its chimney, could be matched. These footings would have supported an overlying timber-framed structure of approximately 30-x-15-ft. (9.0-x-4.6 m).

Stonework associated with the collapse of the chimney was found overlying and surrounding the hearth, Feature 33, at the east end of the house. The full dimensions of the hearth remain uncertain. Excavation exposed a section 2 m (6 ft. 6 in.) in length, north to south, and 1.5 m (5 ft.) in depth suggesting the presence of a relatively large hearth.

Feature 35, a section of what appears to be burnt floor boards, was located immediately west of the hearth opening (Figure 4.9). This series of burnt boards, each approximately 3 in. (7.5 cm) wide, ran east-west and were located, stratigraphically, at the interface between Events 143/145, the occupation levels of the house, and Event 177, a thin layer of fill deposited prior to the construction of the house.

The footings, chimney collapse, hearth, and section of flooring represent the excavated structural components of the house. More than 2,000 iron nails were recovered during excavation indicating that they played a role in its construction. In order to interpret these remains and place them in context, it is worthwhile to examine domestic structures built at Ferryland, England and colonial North America. This examination is based on two assumptions. First, that the building styles and techniques employed by Ferryland's settlers were drawn from the English traditions with which they were most familiar (Deetz 1977:36). Second, that the building styles and techniques described here, suggested in early documents from Ferryland and recorded in England, remained

essentially unchanged through the 17th century. No attempt is made to determine if building styles at Ferryland contributed to a tradition of vernacular architecture in Newfoundland.

### 5.3. Timber-Framed Construction

The construction of timber-framed structures on stone-laid footings or foundations is well-documented in 17th-century England (Brunskill 1997:175,177; Innocent 1916:118; Beacham 1990). New England (Deetz 1977:97; Cummings 1979), and Newfoundland (Mills 1996:58; Gilbert 1998: 9). Evidence for the use of wooden sills in domestic construction has been found elsewhere on-site in association with the house at Area D which dates to the second half of the 17th century (Tuck 1996:36) and the possible Mansion House at Area F which was built during the first quarter of the 17th century (Carter et al. 1998:58).

The use of cruck and box-frame timber construction techniques for building houses was common in England throughout the 17th century. While the use of cruck frame construction in English houses dates back to the Medieval Period, it was becoming somewhat less popular by the mid-1600s, in part because of the expense of timber which was in short supply (Innocent 1971:76). The use of cruck construction for structures at Ferryland would have required timber of substantial dimensions not readily available in

nearby forests that were predominantly of fir, and black or white spruce. Moreover, none of these species possess the trunk curvature necessary for this form of construction. It is likely that any timber of significant size was used instead for the construction or repair of ships or boats, or was sold for export. Because of the declining use of the cruck in house construction, as well as a lack of suitable timber, it seems most likely that Ferryland's houses were built using box-frame construction.

Box-frame timber construction consists of a two longer wood-framed walls, one or more bays in length, tied together by beams oriented perpendicular to their length (Brunskill 1997:176-178; Isham and Brown 1895). These framed walls, raised atop stone footings, consist of upright posts and wooden studs let into wall plates at the top and sills at the bottom. Diagonal and horizontal bracing of studs and posts add strength and rigidity to these framed wall sections. The spacing of studs and horizontal rails between posts allows for the location of window and doors. Close studded buildings have fewer gaps between post and stud and somewhat less horizontal and diagonal bracing. As such, these buildings, although requiring more timber for their construction, were likely easier and faster to build as the need for complicated joinery used for braces and horizontal rails was reduced. Close studding may have been a preferred framing technique at Ferryland because of the relative ease of construction and an ample supply of timber. Mills (1996:59) cites the same reasons for suggesting the use of close-studding in a smaller



17th-century fisherman's house at Renew's, located 10 km south of Ferryland.

Gaps between studs and post required in-filling. This fill could consist of staves, woven wattle, clay, mud, wood or brick used either individually or in combination. These in-filled panels could then be plastered over (Brunskill 1997:177, 180). Close-studded framing would reduce the number and size of gaps to be filled. No evidence indicating the type of material used for in-filling has been found in excavations at Area B, D or F although the absence of brick, an expensive import to Ferryland in any case, shows that some organic material, now deteriorated in the burial environment, was most likely used. Likewise, no evidence for the use of plaster for covering the in-filling on either the interior or exterior of walls was found. The exterior cladding of timber-framed walls could be of tile, plaster, or clapboard (Brunskill 1997:177, 180). An abundant supply of timber most likely led to the use of clapboard for siding domestic structures at Ferryland. The numerous nails found in the excavation of the house seems to support this suggestion, since the construction of the house frame itself would have been based on joinery. Moreover, Wynne's letters to Calvert document not only the sawing of boards in winter but also a request for a supply of clapboards (Wynne 28/7/1622, 17/8/1622). During the 17th century millions of feet of "deal" or clapboard were also imported by England from Scandinavia. Clapboard siding was used throughout New England and the Chesapeake and has been interpreted as a colonial adaptation to the New World (Cummings 1979;

Deetz 1977:104; Carson et al. 1981; Hawke 1988:48).

#### 5.4. The Roof and Roofing Materials

The timber-framed box was capped by rafters whose weight, and that of the roof itself, was carried by both the tie beams and the framed walls. The roof was constructed using either trussed rafters with collars, that may have required crown-post support, or principal rafters tied with purlins (Brunskill 1997:178). Although it cannot be determined which style of roof construction was used in the house at Area B, it seems likely the latter would have been preferable not only because of its relatively straightforward construction, but also for the additional loft space it provided. The position of the hearth and chimney in the end of the houses at Area D and B, as well as in those houses portrayed in Yonge's 1663 map, indicate that gabled roofs were common at Ferryland.

The materials used to roof domestic structures at Ferryland remains uncertain. The use of local slate for the earlier storehouse and forge roofs, both non-domestic structures, indicates its ready availability, as well as the residents', or at least builders', familiarity with it. However, the excavation of the houses at Area B and D, both built after 1650, yielded few roof slates. Whether or not this indicates a general shift away from the use of slate for roofing in the later years of the settlement is unclear (Gaulton 1997:95). It is possible that domestic structures were purposefully roofed in other

materials. Wynne's letter to Calvert records the use of a combination of deal boards and thatch, the latter being described as being "a far better covering than boards, both for warmth and tightness" (Wynne 28/7/1622). That thatch was used, in part, to roof the Mansion House is not surprising as its use was ubiquitous throughout England, Ireland and Scotland (Brunskill 1997:190; Robinson 1979:22; Blades 1981:41), and its use is documented in the Chesapeake (Hawke 1988:48) and New England (Cummings 1979:141). However, it is unclear whether or not thatch was used to roof all the domestic structures at Ferryland. To date, excavations have found some evidence for thatched roofing only at the cow byre in Area C (Gaulton 1997:113). Although the techniques used to thatch a roof are relatively straightforward (Alcock 1995 quoted in Mills 1996:57), the local availability of materials sufficient to roof the houses of Ferryland may have been limited. Mills (1996:57) suggests that a relative lack of materials suitable for thatching a roof led to the use of sod or turf to roof a smaller house in Renews. It may have been a similar shortage of materials at Ferryland that led Wynne to roof the Mansion House with a combination of thatch and boards. If such a shortage existed during the early years of the colony, it is unlikely that more material for thatching would have been available later in the settlement's development. For this reason, it is tentatively suggested that the house at Area B was roofed instead with boards and/or wooden shingles. The ready availability of wood, as well as the abundance nails found in the excavation of the house lends additional support to this suggestion. The use of wooden boards and shingles

for roofing is documented in New England (Cummings 1979), the Chesapeake (Carson et al. 1981) and on “English” style tenant houses at Ireland’s Londonderry Plantation (Blades 1981:48).

### 5.5. Flooring and the Hearth

Excavation of the house at Area B provided some evidence of a wooden floor. Feature 35, in the form of an area approximately  $1 \text{ m}^2$  (9 ft.<sup>2</sup>) of burnt boards roughly 3 in. (7.5 cm) wide, oriented parallel to the length of the house, adjacent to the hearth at the structure’s east end. Whether or not this serves as evidence of a full wooden floor in this house is uncertain. It may be the remains of a hearth-side platform similar to that found by Mills in a smaller mid-17th-century house at Renew’s (Mills 1996:56). However, the platform at Renew’s was built, in part, because of the wet conditions of the original earthen floor, which was subsequently re-laid. The house excavated at Area D also lacks clear evidence of a wooden floor but had a large semi-circular area of cobbles, gravel and stone in front of the hearth (Tuck 1996:36; Crompton 1999:personal communication). Excavation of a larger domestic structure at Cupids, Newfoundland, which was likely built between 1610 and 1620, has clear evidence of a full wooden floor, as well as separate rooms with cobblestone pavements (Gilbert 1998:10).

Full wooden floors would likely have been preferred in domestic structures in most

any geographic context, and in particular at Ferryland, given its cold damp climate. However, their absence, and instead the presence of earthen, flagstone or cobbled floors has been noted in 17th-century houses of the Chesapeake (Carson et al. 1981:144), New England (Hawke 1988:49), and England (Barley 1961). Whether or not a full wooden floor was built for the house at Area B cannot be determined with certainty. However, the absence of any obvious flagstone or cobbled flooring as well as the lack of any purposefully packed earthen floor suggests that a full wood floor may have been present. Nevertheless, it is clear that at least a portion of the house adjacent to the hearth was floored with wood.

The size and location of the stone-built hearth and chimney is, on the one hand indicative of the household's requirements for cooking and heating, and on the other, suggestive of the origin of either the house's builder and/or occupants. Although only partially excavated, the hearth appears to have been substantial and likely stretched the width of the house, similar to the hearth excavated in the house at Area D (Tuck 1996:36). Sizable hearths have also been found in domestic structures at Cupids and Renews (Gilbert 1998:10; Mills 1996:52).

The location of the hearth in the house's gable end is most likely indicative of the continued influence of West Country builders and residents. Gaulton (1997:111-112)

suggests that Captain Wynne's planning and construction of Calvert's original colony was not only inspired by the Devon port of Plymouth, and but was also likely carried out by West Country tradesmen. The renovation of the cow byre in Area C, following the Dutch raid of 1673, shows similar influences (Gaulton 1997:113). Analysis of the ceramic assemblage (Section 6.5) and clay tobacco pipes (Section 7.1.1) from the house confirms a continued dominance of the West Country in trade with Ferryland and is potentially indicative of the tenants' origin. The location of the hearth and chimney in a house's gabled end is documented as a trait common in the West Country by Brunskill (1997:56), Blades (1981:45), and Barley (1990:65, 79).

#### 5.6. House Layout

The domestic structures built by Captain Wynne during the early years of the colony include a 44-x-15-ft. Mansion House, a 14-x-12-ft. parlour and a tenement, all assumed here to be timber-framed. Each of these structures included stone-built chimneys. The Mansion House, parlour, and stone-built kitchen included chambers above their ground floors. In the case of the Mansion House it is clear that these chambers were of full height and constituted, essentially, a second floor, or a structure of one and a half stories. The chambers mentioned in the kitchen and parlour may well have been located in the loft, immediately below the roof. These structures should be considered as only one story. The use of loft space for chambers and/or storage, as well as their access by ladder

or staircase, was common in 17th-century English and colonial North American houses (Deetz 1977:12; Hawke 1988:48; Brunskill 1997:88; Robinson 1979:23; Blades 1981:41). While no mention is made of a staircase to access the Mansion House's second story chambers, it seems likely that one existed since both the parlour and kitchen were so outfitted. The manner of access to the loft of the two room tenement is also not recorded, which may indicate, in this instance at least, that no staircase was built.

The documented presence of second story or loft chambers and their access by staircase or ladder in earlier domestic structures at Ferryland, as well as in England and colonial North America, suggests that the ground floor of the house at Area B was similarly enclosed and that some use, be it as chambers or storage, was made of the loft space above. The distribution of metal artifacts (Section 7.4) in Event 143, considered here to represent the loft and its use for some amount of storage, shows a distinct concentration of artifacts along what would have been the peak of the roof, the tallest space most accessible for storage. The means and location of access to this space, be it ladder or staircase, remains uncertain. The enclosing of the main floor to create loft space for storage or accommodation may also have allowed somewhat more efficient heating of the ground floor living area. More than 80% of the ceramic assemblage recovered from the house, most of which was comprised of vessels relating to Kitchen and Dairying activities (41%) (Section 6.2), was recovered from Event 145, which is considered here to

represent the main floor living area of the house. Such a distribution indicates at least some degree of separation of certain activities between the ground floor and the proposed loft.

Besides the potential presence of a loft, little else about the internal layout of the house at Area B can be determined with certainty. No additional structural remains were identified. That the house would have had windows and a door, is certain, but their location less so. The virtual absence of window glass and lead caming (Section 7.3.2) is not surprising, as leaded windows were common only in houses of those of some means and were uncommon in more modest English houses prior to ca. 1640 (Cummings 1979:146). While the absence of lead caming may be the result of deterioration in Area B's particular burial environment, window glass and lead comes have been identified both at the larger Area D house (Crompton 1999:personal communication), as well as from the midden in Area F, which appears to be located in close proximity to a house of the gentry, possibly the earlier Mansion House (Mathias 1999:personal communication; Carter et al. 1998:61). This shows that glazed windows were present in at least some of the domestic structures at Ferryland, perhaps of those holding a higher social position, but the absence of lead caming and a lack of window glass, indicate that this house lacked glazed windows. More likely shutters were used, perhaps with either transparent waxed cloth or horn for light, or simple hardwood mullions for added security (Hawke 1988:48;



Cummings 1979:12, 146). The presence of a pintle and smaller hinge in the iron assemblage (Section 7.4.1) suggest the possibility of shutters but not their location.

The same is true for the position of the entry to the house. Once again, one iron strap hinge confirms the presence of a door, but its exact location is unknown. The location of the substantial hearth in the east end of the house dictates against the placement of the door in that end of the house. What seems more likely is that the entry to the house, as well as perhaps a pair of shuttered windows, would have faced north onto the cobblestone street over which the house itself was built. The relatively high frequency of ceramic artifacts associated with the occupation of the house that were found along the northern margin of the house and on the cobblestone street, indicates that of the materials cleaned from the house, at least some were dumped outside the house onto the cobblestone street. Based on cross-mends in vessels, ceramics clearly related to the house's occupation were virtually absent in the open area located south of the house. This tends to support a street-side entry to the house, if one accepts that household waste was carried out of the house only as far as necessary for its disposal. No midden deposit associated with the house's occupation has been identified. This suggests either that household waste was dumped across the street or into The Pool, or that it was recycled as fill elsewhere on the site.

### 5.7. The Use of Interior Space

How interior space was divided within the house at Area B, by activity or function, remains unclear. The subdivision of the earlier gentry Mansion House is recorded by the presence of a large hall and entry, while the tenement is described as being of two rooms, although their functions are not described. Most English domestic structures of the 17th century, regardless of the social position of their inhabitants, slowly became divided into "high" and "low" ends, the former being closest to the hearth, the latter at the opposite end of the house was commonly separated from the former by a cross-passage or wooden partition (Brunskill 1997; Barley 1961, 1990; Hewett 1973). The activities commonly carried out in specific areas or rooms of the house have been determined through the analysis of probated wills and inventories (Horn 1988; Beaudry et al. 1983; Hall 1991; Deetz 1977:10). The "high" end of the house was commonly used for general household activities and entertaining, while the "low" end was often subdivided for a buttery, food preparation, and storage activities, with loft areas above commonly used for chambers and/or storage. The social and political significance of the location of certain activities carried out in particular areas of the house has also been studied (Johnson 1993; Yentsch 1991; St. George 1982). Studies of change in interior layout, of the household activities carried out indoors, and the social and political meanings which might be ascribed to them has added greatly to our understanding of activities carried out within 17th-century houses. However, the research presented here will not deal in detail with all of these

issues. This is for two reasons. One is the result of the archaeological assemblage examined here, the other relates to the difficulties of comparing archaeological and historical data drawn from different geographic regions, economies, and temporal periods.

First, the excavation of the house at Area B has revealed a relatively large amount of disturbance in its western end by the construction of a more recent waterline. Figures 5.2. to 5.5 portray the distribution of iron nails and ceramics within the house, as well as their virtual absence from the location of the waterline at the "low" end. This indicates that activities which might have taken place there cannot be readily identified and that, as a result, the portrayal of indoor activities cannot avoid being incomplete. At the same time, however, the distribution of ceramics vessel fragments within the house, based on their categorization by use or function (Section 6.2), shows no clear concentration of any one particular activity in any specific part of the house. This suggests that the ground floor of the house was not purposefully separated, but instead served more likely as a general area for a variety of activities. Such a pattern of use was not uncommon in the 17th-century homes of those of lesser means in England (Brunskill 1997:88) or Ireland (Blades 1981:52), as well as among many settlers of the Chesapeake (Horn 1988:317; Carson et al. 1981) and New England (Hawke 1988:52; Cummings 1979:22). Moreover, the physical subdivision of what was a relatively small house (15-x-30-ft.) by the insertion of a partition or cross-passage would have resulted in a certain reduction of useful floor space.

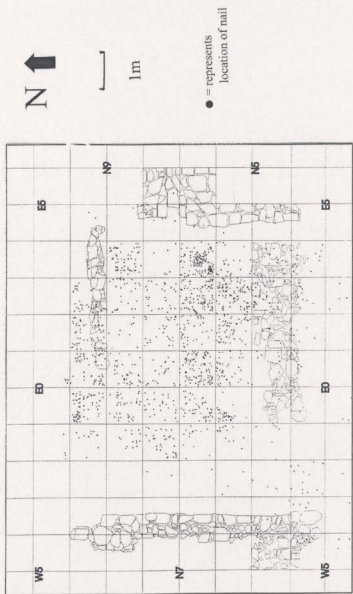


Figure 5.2. Distribution of iron nails in the occupation levels of the House at Area B, Events 143 and 145.



W5				E0					E5	
				8	4	1	5	4		
N8					1	4	3	3		
				1	1	3		4		
N6				2		2	1	2		
				1		2	2	3		
N4						1				
W5				E0					E5	

Waterline Disturbance

Figure 5.4. Distribution of Fragments from Cooking-Related Ceramic Vessels by Excavation Unit.

[illegible]

Figure 5.5. Distribution of Fragments from Food Service-Related Ceramic Vessel by Excavation Unit.

Second, attempting to find direct parallels for the house at Area B with contemporaneous structures in England and colonial North America is complicated not only by biases of the historical and archaeological records but by differences in geography and economy. Horn (1988) has illustrated that differences in living standards, house size and construction between The Vale of Berkely, Gloucestershire and St. Mary's County, Maryland, make direct comparison of the housing of those considered to be of similar social standing in colonial North America *versus* England extremely difficult. Hall (1991) has illustrated an overlap in the style and layout of houses of English yeomen *versus* gentlemen within England. As well, Carson et al. (1981), Faulkner (1985) and Hawke (1988:50) suggest that particular geographic locations and economic focuses resulted in variations in building construction. At this point in time, the study of the nature of the economy and of social relationships at Ferryland remains relatively new (Pope 1992, 1998). As such, it is perhaps safest to pursue a comparison of housing styles on only the most general terms.

#### 5.8. Parallels in Domestic Structures

The roughly 15-x-30-ft. timber-framed house excavated at Area B is similar in construction and layout to smaller contemporaneous houses built in the West Country of England (Brunskill 1997:56) and those described as tenant houses built at the Londonderry Plantation (Blades 1981:49-50). In terms of overall dimensions this house is



not particularly small by the standards of those recorded built at Massachusetts Bay from 1637-1706 (Cummings 1979:212-215) and appears larger than those described as typical of the Chesapeake (Horn 1988:317). On the basis of gross dimensions alone, which is admittedly as general a basis for comparison as possible, the house is comparable, in size but not construction, to what was recommended by a 1684 pamphlet to Pennsylvania settlers as a medium-sized house, 30-x-18-ft. (Carson et al. 1981:141). Based on this information, it seems reasonable to conclude that the house at Area B was neither particularly small, nor large, and might, therefore, be considered the house of a Ferryland planter of at least some means.

Comparison of the house at Area B with other contemporaneous Newfoundland examples also tends to support such an interpretation. Excavations at Cupids (Gilbert 1998) have uncovered the remains of a 36-x-12-ft. timber-framed domestic structure with an associated stone-built cellar constructed between 1610 and 1620 and destroyed ca. 1660. This structure had glazed windows and was subdivided into a 16-x-12-ft. wooden-floored room heated by a large stone-built gable-end fireplace and a smaller cobble and flagstone floored storage area, itself further divided by a stone wall. This structure represents construction beyond the means of the average Newfoundland planter and was likely paid for by the financiers of the Cupers Cove Plantation, the London and Bristol Company (Gilbert 1998:48). This building is remarkably similar to the 44-x-15-ft.

Mansion House with hall, entry, stone-built chimney and cellar constructed at Ferryland by Captain Wynne ca.1621. If these structures are typical of those built to house the gentry overseers of Newfoundland plantations, then the house at Area B is clearly no such residence.

It remains unclear, at present, just what sort of residents may have inhabited the 39-x-17-ft.6-in. timber-framed house with stone-built chimney located at Area D. However, its size and location outside the original boundaries of the colony, as well as the presence of glazed windows and a variety of upscale artifacts suggest the inhabitants were likely of a somewhat higher social position than those who occupied the smaller house at Area B (Tuck 1996:36-37; Crompton 1999:personal communication).

If the house at Area B, based on its size, as well as its proposed construction and layout, falls short of those constructed for the gentry overseers at Ferryland and Cupids, it does, however, stand in some respects above a contemporaneous small planter's house located in Renews (Mills 1996). This approximately 14-x-21-ft. structure was timber-framed, likely with close-studding, sod-roofed, and had an earthen floor which was covered near the hearth by a wooden platform. Both the house at Renews and that at Area B lacked glazed windows and appear to have shared a similar open floor plan dominated by a large hearth at one end of the structure. However, it seems clear that each

structure was constructed differently and each was occupied for different lengths of time by residents of slightly different social standing. The house at Renew's appears to have been built somewhat less substantially based on its size and the choice of building materials, when compared to those used for the house at Area B. It also appears that the house at Renew's was not only built and occupied earlier than that in Area B (ca. 1640-1670 for the house at Renew's (Mills 1996:47) *versus* a proposed date of occupation ca. 1660 to 1696 for the house at Area B). The house at Renew's was likely occupied by a smaller household for a shorter period of time. A difference in the social standing of the occupants of the Renew's house, as opposed to those of the house at Area B is suggested by variations in the ceramic assemblages recovered from each. The assemblage from Area B is more diverse in terms of the variety of wares and contains a higher proportion of imported wares, Rhenish coarse stonewares and Iberian tin-glazed earthenware vessels for example, when compared to those found in the house at Renew's (Section 6.7.1).

### 5.9. Summary

Considering the evidence presented here, it appears that the house excavated at Area B represents a well-constructed domestic structure built in the West Country tradition that utilized readily available timber for framing and cladding, and, potentially, for roofing and flooring. It appears that the main floor of the house may not have been purposely divided into discrete functional areas but served instead as an open multi-

purpose space. A loft, accessed by either ladder or staircase, was likely located above the main floor and served for both accommodation and storage. An examination of similar domestic structures elsewhere in 17th-century England, Ireland, and colonial North America, as well as in Newfoundland suggest that the occupants of this house were likely of the middling sort, most likely permanent residents at Ferryland of at least some means.

The following chapter focuses on the ceramic assemblage recovered from the house. This analysis considers what this assemblage might reveal about the date of its occupation, as well as the activities and social standing of those who occupied it.

## CHAPTER 6

### THE CERAMIC ASSEMBLAGE

#### 6.0. Introduction

The analysis of the ceramic assemblage from the house at Area B was undertaken in an effort to answer a number of questions regarding its occupation. When was the house occupied? Who lived there and what sort of activities did they carry out indoors? Some of these questions are straightforward, others less so. The nature of these questions requires a variety of approaches be used in order to arrive at meaningful answers, an exercise in inference that attempts to turn pots into people. This chapter describes the analysis of the assemblage, its identification and quantification, its dating, and what it suggests about those who assembled and used it. This latter point will be examined in terms of what the assemblage can tell us about the activities and social status of the house's occupants.

#### 6.1. Quantification: Determining a Minimum Vessel Count

For purposes of analysis the ceramic assemblage was divided into distinct vessels. While the comparatively direct approach of counting or weighing ceramic sherds allows the comparison of ware frequencies between sites, the identification of individual vessels was chosen in order to facilitate both the functional analysis of vessels using the Potomac Typological System (POTS) (Beaudry et al.:1983) and the comparison of data from this

assemblage with others excavated at Ferryland (Pope 1986; Crompton 1999:personal communication) and elsewhere in colonial North America and England. The development of a Minimum Vessel Count (MVC) does not restrict the ability to compare ware frequencies with those of other sites, however final figures may vary slightly (Pope 1986:137).

In order to identify individual vessels the ceramic assemblage from the house at Area B was initially sorted by event. Smaller sherds and larger vessel fragments were then laid out by event according to their respective one metre excavation unit. Sherds and fragments were matched with one another on the basis of similarities in manufacturing technique, ware, glaze and form. Joins between sherds and fragments, when identified, were made and their respective provenience recorded. Coarse earthenware vessels made up the majority of the sample and were dealt with first, followed by tin-glazed earthenwares and coarse stonewares. Intrusive refined earthenwares and stonewares of the 18th century were separated and are not included in this analysis. Vessel forms and ware types identified in this process are described below in Sections 6.2. and 6.3. respectively. This procedure focused on those events (Event 143 and 145) that represent the occupation of the house. Once vessels had been identified and their corresponding sherds grouped, events above and below the occupation level, as well as those outside the house, were examined to find additional joins and to aid in the identification of incomplete forms. The ceramic assemblages from these other layers (Events 134, 138, 169 and 177)

were not separately analysed. Vessel joins and matches made between occupation levels and surrounding events allowed the identification of contemporaneous events. Appendix A includes a catalogue of the vessels identified in this analysis, Table A.1 documents joins made in vessels, and Figures A.1-A.8 illustrate some of the wares and forms identified in this assemblage.

The resulting MVC is a conservative estimate of the total number of vessels present within the ceramic assemblage. Fragments that joined to form a portion of a larger vessel, as well as those found in close proximity, were combined to count as one vessel. In those instances where it was difficult to attribute similar sherds to one vessel or another those sherds were grouped as a “best guess” to the vessel in closest proximity. Although this was an arbitrary decision, such an approach avoided an unnecessary inflation of the MVC. Lids that would have originally accompanied vessels, for example North Devon coarse earthenware tall pots, were identified but not included in the total MVC as they could have belonged to any tall pot already identified. A new vessel was designated in situations where clearly unusual wares or forms were encountered that could not reasonably be placed with an already-identified vessel. The total vessel count for the assemblage from the house at Area B is 188, subtracting 6 coarse earthenware lids results in a MVC of 182.

Each vessel, once identified, was assessed in the following manner: its form, ware,

and date of manufacture, based on published examples, was recorded; measurements were taken, where possible; the catalogue numbers associated with the vessel were recorded and the provenience of each sherd noted by one metre excavation unit and event; comments regarding glaze colour or other finishing techniques, as well as the nature of the fragments or sherds comprising the vessel, were made; and each vessel was assigned to a POTS functional category (Section 6.2).

The MVC was used for the calculation of ware frequencies in order to define which wares were most or least common in the assemblage, and, in turn, to examine what these frequencies might suggest about the activities and social position of those who produced the assemblage. Frequencies comparing the country of origin of wares can be used to delineate trade patterns, which can be considered indicative of trade partners, preferences, and/or shortages in supply. The MVC also allows comparison of these frequencies with those from other sites. Values used in the calculation of POTS frequencies are the same as those derived from the MVC. The frequency of particular vessel forms offers the opportunity to better understand the activities (eating, drinking, or food preparation) represented by those vessels.

As layers representing the occupation of the house, Events 143 and 145 were extremely difficult to separate. Event 145 covered the entire house interior, while Event 143 occurred only in the eastern half of the structure and overlay Event 145.



Stratigraphically they occupied similar positions. Chronologically these events are the same, the material from each is alike, and numerous joins and matches were found between them. For the purpose of this analysis these events have been combined. Whether or not each event indicates a different form, intensity or duration of occupation, cannot readily be determined. It is also possible that Event 143 represents ceramic vessels used in the house's loft which later collapsed onto the ground floor (Event 145) following its abandonment and subsequent destruction. The results of this analysis are summarized in Table 6.1, and are discussed in greater detail below.

## 6.2. Vessel Form and Function: The Potomac Typological System

Individual vessels in the assemblage were identified on the basis of form and function following conventions used in an earlier examination of ceramics wares from Area B (Pope 1986:123-136). Pope's earlier examination utilized the Potomac Typological System (POTS) (Beaudry et al. 1983) with minor modifications.

POTS was developed by archaeologists working with colonial-period material from the Chesapeake region in an effort to account for the functional variability identified within assemblages. The system recognizes that certain vessel forms relate to specific functions, for example coarse earthenware pipkins are used for cooking while coarse stoneware mugs are used for drinking. The attribution of particular vessel forms to functional classes documented in the historical record allows the opportunity to consider

Table 6.1. Vessel Forms and Wares: Minimum Vessel Count and Percentage of Total, Events 143 and 145, Area B.

Vessel	N. Dev.	S. Som.	Totnes	Merida	Tin	CSW	Other Wares	TOTAL	%
Pot	10		1				1 unident. CEW	12	6
Tall Pot	30							30	16
Jar				7			2 Span., 1 Montelupo CEW.	10	5
Bottle				7				7	4
Lid	6							6	3
Bowl	4	7		1				12	6
Milk Pan	2	2					1 Saintonge	5	3
Pipkin	7		1				1 Border Ware	9	5
Flesh Pot	2							2	1
Pan	2							2	1
Oven	1							1	.5
Porringer	3	2			1		1 unident. CEW	7	4
Bowl					7		2 N. Ital., 2 unident. CEW	11	6
Dish	5				7		2 N. Ital.	14	7
Plate					4			4	2
Cup	3	5			5	2	3 Bristol., 1 unident. CEW	19	10
Mug						7		7	4
Jug	3		1			4	1 Midlands., 2 Bristol., 1 N. Ital., 2 unident. CEW	14	7
Bottle						13	2 unident. CSW	15	8
Ointment					1			1	.5
TOTALS	78	16	3	15	25	26	25	188	99
PERCENT	41	9	2	8	13	14	13	100	

Abbreviations used in Table 6.1.

N. Dev. = North Devon Coarse Earthenwares, including Gravel Temper, Smooth Temper and Calcareous wares.

S. Som. = South Somerset Coarse Earthenware

Tin = Tin-glazed Earthenwares including English, Dutch, Iberian, Portuguese and Italian wares.

CSW = Coarse Stonewares including Rhenish (Frechen and Westerwald) and English (Bristol and Brown) wares.

Unident. = Unidentified origin for ware

CEW = Coarse Earthenware

Span. = Spanish Heavy Coarse Earthenware

N. Ital. = North Italian Slipwares, including sgraffito and marbled slipwares.

Bristol. = Bristol Slipwares

Midlands. = Midlands Purple Coarse Earthenware

food-related activities represented by a ceramic assemblage. The system also provides a nomenclature for vessel types based on their form and metrical attributes. When compared to the straightforward calculation of sherd counts, this approach can provide a greater understanding of the people who purchased, used, and discarded these wares. Moreover, the use of this system allows the comparison of data between sites in disparate locations.

Using POTS, identified vessels were separated into the following five functional categories based on ware and form: 1) Kitchen and Dairy, including pots, jars, lids, bowls, and milk pans, commonly of coarse earthenware, used for the preparation, maturing and storage of foods; 2) Cooking, including pipkins, flesh pots, pans and ovens, also of coarse earthenware, used in the cooking of foods; 3) Food Service, including dishes, plates, saucers and porringers of coarse or tin-glazed earthenware, used in the serving of foods; 4) Beverage Service, including cups, mugs, drink pots, jugs and bottles of coarse or tin-glazed earthenware and coarse stoneware, used in the serving and consumption of drink; and 5) Hygiene, including fuming pots, chamber pots and ointment jars of coarse or tin-glazed earthenware and coarse stoneware, used in the maintenance of health and hygiene.

It should be noted that in cases where vessel form could not be attributed with certainty, the POTS category to which that vessel could be assigned did not change significantly. For example, whether a vessel was a jug or a mug it could still be

categorized as an item of Beverage Service. Likewise, a bowl or pot would still be categorized as an item used for Kitchen or Dairy purposes. Moreover, the POTS system considers only the primary function for which ceramic vessels were produced. It does not consider the possibility that certain vessels may have been used for other functions, such as the mixing of paint in a cooking pot. The data produced by the use of this system of categorization is summarized in Figure 6.1. The results and their comparison with other colonial-period sites in England and North America is discussed in Section 6.7.2.

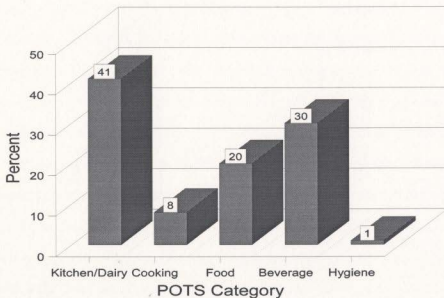
### 6.3. Identification of Wares

Vessels identified in the ceramic assemblage were distinguished and categorized on the basis of their fabric or ware. The identification of wares is based on Pope's (1986:97-122) earlier research into ceramics recovered during the early excavations of the forge in Area B. Other wares were identified from published sources and by John Allan, Curator of Antiquities, Royal Albert Memorial Museum, Exeter, during a visit to Memorial University's Archaeology Unit in the spring of 1998. Pope provides a detailed description of the 17th-century wares commonly found at Ferryland. These wares will be summarized here. Other wares identified in the assemblage will be described where appropriate.

#### 6.3.1. Coarse Earthenwares

North Devon wares were developed in Bideford and Barnstable prior to the 17th century and were exported to North American colonies (Allan 1984:130; Watkins 1960).

Figure 6.1.  
Vessel Frequency by POTS Category,  
Area B, Events 143 and 145



Total Sample = 182 vessels

Kitchen/Dairy = 41% (n=76)

Cooking = 8% (n=14)

Food Service = 20% (n=36)

Beverage Service = 30% (n=55)

Hygiene = 1% (n=1)

The wares occur in two major varieties, Gravel Temper and Smooth Temper, with two minor varieties, Calcareous Temper and White Bodied. North Devon Gravel Temper wares are roughly thrown, have a pink orange or gray fabric with large quartz temper and/or micaceous inclusions, and have brown or dark green lead-glazed interiors.

Common vessel forms include: jugs, bowls, cups, skillets, pipkins, pots, pans and portable ovens (Grant 1983:136). North Devon Calcareous Temper wares are similar to Gravel Temper wares but lack the larger quartz temper, using a finer white calcareous material instead. This material leaches out over time producing a pitted surface (Allan 1984:148). North Devon Smooth Temper wares also have an pink orange or gray fabric, but lack coarse temper producing a ware with a hard, smooth, and uniform fabric. These wares are roughly thrown with a green or brown lead-glazed interior. Eating and drinking vessels are often smoothed and have a light coloured slip below the lead glaze (Pope 1986:102). Vessel forms include: dishes, jugs, bowls, porringers, cups and pots (Grant 1983:136). North Devon Smooth Temper wares may also be decorated using trailed slip and/or the *sgraffito* technique. North Devon Smooth Temper White Bodied ware has not yet been identified in the Ferryland assemblage (Pope 1986:101). Published examples of North Devon wares can be found in Grant (1983), Watkins (1960), Allan (1984), Fairclough (1979), and Gaskell-Brown (1979).

North Devon wares account for 41% of all vessels identified in the assemblage. A total of 72 North Devon coarse earthenware vessels were identified: 46 North Devon

Smooth Temper vessels (27 of which were tall pots); 23 North Devon Gravel Temper vessels; and 3 North Devon Calcareous Temper vessels.

South Somerset wares were produced, for the most part, at Donyatt, a prominent pottery in South Somerset (Coleman-Smith and Pearson 1988). The wares produced in South Somerset have been found in Bristol, Exeter and North America (Coleman-Smith 1979:13; Allan 1984:132; Noël Hume 1970:105; Pope 1986:157-162). The ware is characterized by a pink or buff fabric with fine quartz inclusions and scattered lumps of iron oxide (Allan 1984a:135). Vessels are commonly lead-glazed on the interior in either yellow or yellow brown, but copper green and black manganese glazes were also used (Pope 1986:104). Vessels were also often slipped in white on the interior/exterior and further decorated using trailed slip or *sgraffito*. Vessel forms include: bowls, dishes, porringers, cups, jugs, and milk pans (Allan 1984a:150). Published examples of South Somerset vessels can be found in Coleman-Smith and Pearson (1988), Gaskell-Brown (1979), Fairclough (1979), and Allan (1984a). Some 16 South Somerset vessels were identified in the assemblage. South Somerset wares are the second most common English coarse earthenware after the North Devon wares.

Totnes coarse earthenware vessels were produced in south Devon from the late thirteenth until the second half of the 18th century (Allan and Pope 1990). The ware is grey to grey brown in colour and is characterized by a coarse sandy fabric with scattered



black mica and iron ore inclusions (Allan and Pope 1990:53). The interior of vessels are commonly lead-glazed dark green or brown, while exterior decoration is limited to incised bands of white slip. Vessels forms include: dishes, bowls, jugs, storage jars and pipkins. Published examples of Totnes vessels can be found in Allan and Pope (1990), Allan (1984b) and Griffiths and Griffith (1984). Three vessels of this ware type were identified in the assemblage.

Border Ware vessels were produced along the Surrey-Hampshire border during the 16th and 17th centuries (Pearce 1992: 1). The hard fabric is sandy in texture and off-white to buff in colour with occasional red inclusions. Vessels are lead-glazed in yellow, green, olive or brown. Typical forms include pipkins, porringers, bowls, cups, jugs and dishes (Pearce 1992). Border Ware vessels have been found at ports trading with Newfoundland, including Portsmouth, Southampton, Poole, Plymouth and Exeter (Barton 1981; Allan 1984a; Broady 1979). This ware is equivalent to Pope's (1986:107) Southern White Bodied earthenware. One Border Ware tripod pipkin was identified in the assemblage.

Midlands Purple or Buckley coarse earthenware vessels were produced in North Wales from the 16th to late-18th century and shipped to the colonies from Liverpool (Brears 1971; Barton 1981; Noël Hume 1970). The ware has a mixed red and yellow fabric. Unglazed, the fabric is dark purplish-red, while the lead glaze itself is shiny black

and lustrous after firing. Vessels are sometimes decorated with trailed white slip. Vessel forms include pans, jars, pitchers and dishes. One undecorated Midlands Purple jug was identified in the assemblage.

Bristol Slipware vessels were produced by both Bristol and Staffordshire potteries from ca. 1670 to ca. 1780 (Barton 1964; Coleman-Smith 1979; Celoria and Kelly 1973). These highly decorated, often delicate wares have a fine buff fabric with some red and brown inclusions. A dark brown slip is commonly trailed or combed onto an underlying white slip and sealed under a clear yellow lead glaze. Vessel forms include mugs, cups, jugs, dishes, plates, bowls and porringers. Examples of these vessels have been published from Plymouth (Gaskell-Brown 1979), Staffordshire (Celoria and Kelly 1973), Exeter (Allan 1984a) and Williamsburg (Noël Hume 1969). Five Bristol Slipware vessels, three cups and two jugs, have been identified in the assemblage.

Saintonge coarse earthenware vessels were produced from the thirteenth century through the 18th century in southwest France for export to English and northern European markets (Hurst et al. 1986:76). The off-white or buff fabric has a fine hard texture with micaceous and occasional red inclusions. Vessels commonly have a bright green lead glaze on their interior, but may also be decorated with a combination of orange and brown glazes over a white slip (Hurst et al.:83). Vessel forms include large cooking pots, jugs, milk pans and chafing dishes. This ware can be difficult to distinguish from

English Border Ware, but variations in form, colour of glaze, and micaceous inclusions in the fabric can be used to separate one from the other. Saintonge wares have been found in Southampton (Platt and Coleman Smith 1975), Exeter (Allan 1984a), Plymouth (Clark 1979a) and French Canada (Barton 1981; Chapelot 1978). One Saintonge coarse earthenware milk pan was identified in the assemblage.

North Italian Slipware vessels were produced during the 16th and 17th centuries in Northern Italy and were been exported from Pisa (Clark 1979b; Hurst et al. 1986:30,33). These distinctive wares have a smooth fine chaulky brick-red fabric that is slipped variously in white, brown, and sometimes red or green. These slips are usually combined to produce a marbled effect and are sealed by a clear lead glaze. *Sgraffito* work is also common on these wares, usually only on those with a white slip. Applied yellow or green tints accompany *sgraffito* designs. Forms include jugs, dishes, and bowls. North Italian Slipware vessels have been found in Plymouth (Gaskell-Brown 1979), Exeter (Allan 1984a), Totnes (Allan 1984b), and Virginia (Noël Hume 1970:140). Five vessels were identified in the assemblage.

Merida type coarse earthenware vessels were produced in southwestern Spain probably from Roman times and continue to be made in central Portugal today (Pope 1986:110). Merida type vessels were imported into England as early as 1400 (Hurst 1977:96) and appear on Spanish New World sites around 1490 (Deagan 1987:31; Goggin

1960). The fabric ranges in colour from red yellow to dark red, with a mid-orange most common at Ferryland. Large white quartz and smaller micaceous inclusions are characteristic of the ware. Vessels are normally unslipped. Lead-glazing of interiors in green or yellow occurs on some bottles. Exteriors are often burnished. Vessel forms include pans, bowls, globular jars, jugs, bottles and costrels (Broady 1979, Clark 1979c, Allan 1984a). Fifteen Merida coarse earthenware vessels were identified in the assemblage, seven jars, seven bottles and one bowl, making Merida vessels not only the most common imported earthenware, but the third most common earthenware in the assemblage after North Devon and South Somerset wares.

Montelupo type coarse earthenware vessels were produced in central Italy and exported throughout western Europe, England, and the colonies in the 18th and 19th centuries (Ashdown 1972). The fabric varies from pink to brick-red and is micaceous with small dark red and white inclusions. The vessel form appears to be restricted to large storage jars with thick folded broad flat rims, flattened shoulders, crescent-shaped handles, a flat base, and sometimes, applied plaques. These vessels have olive green lead-glazed interiors and occasionally a white slipped band below the rim on the exterior. Examples have been found at Exeter (Allan 1984a:217, item 2902), Louisbourg (Barton 1981:40) and in Virginia (Noël Hume 1969, 1970:143). One vessel of this type has been identified in the assemblage.

Spanish Heavy coarse earthenware storage jars in globular or conical forms were produced in Andalusia since Early Modern times (Williams 1984). These vessels are often called “olive jars”, although they were shipped with a variety of different goods inside, and were often recycled (Pope 1986:108). The coarse granular fabric ranges in colour from terracotta to buff-white with white, red or black inclusions. Vessel interiors can be lead-glazed in olive green, yellow, orange, or brown, while exteriors are frequently slipped in white (Clark 1979c). Examples have been found at Exeter (Allan 1984a), Plymouth (Clark 1979c), and Ferryland (Pope 1986:171). Two vessels of this type were identified in the assemblage.

Unidentified coarse earthenwares, described individually in the catalogue (Appendix A), account for seven vessels in the assemblage.

### 6.3.2. Tin-Glazed Earthenwares

Large-scale production of English tin-glazed wares began at Southwark ca. 1612 (Hinton 1988). In this analysis English tin-glazed vessels were distinguished from Dutch wares based on variations in form, fabric, glaze, and decoration. While it is recognized that a distinction between English and Dutch wares is tenuous at best (Noël Hume 1977:16) those vessels identified as English are clearly different from those identified as Dutch. English fabrics have a firm chaulky texture, range in colour from cream, buff, or yellow to pink, and sometimes contain pebble inclusions (Pope 1986:116). English glazes

are often crazed or spalled and have a purplish tinge (Genet 1980:40; Noël Hume in Pope 1986:116). Prior to ca.1670 it has been noted that dishes or plates were fired with a thinned tin glaze or simple lead glaze *au verso* (Noël Hume 1977: 1). Vessel forms include dishes, plates, bowls, cups, jugs and drug pots and ointment jars related to food and beverage service or the maintenance of hygiene. Published examples of English tin-glazed wares include: Bloice (1971), Noël Hume (1977), Hinton (1988), Archer (1997), Allan (1984a), and Garner and Archer (1972). Nine vessels have been identified as English in the assemblage, two more have been attributed as either English or Dutch.

Dutch tin-glazed vessels began to be produced in the Netherlands ca. 1510. The fabric is very soft and chalky, buff or yellow in colour, and binds more tightly with the glaze resulting in less crazing or spalling compared to English wares (Genet 1980, Pope 1986:115). Glazes vary from a matte grey or blue-grey to a brilliant white, the result of a transparent overglaze. Vessel forms are similar to those of the English, but stylistic variations in form and painted decoration can help to distinguish origin. Published examples of Dutch tin-glazed wares include: Allan (1984a), Broady (1979), Hurst et al. (1986), Scholten (1993), Genet (1980) and de Jonge (1970). Two Dutch tin-glazed vessels, one dish and one cup, were identified in the assemblage.

Iberian tin-glazed vessels were identified as distinct from their northern European cousins based on clear differences in ware, form and decorative style. As a broad

category "Iberian" does not distinguish Spanish from Portuguese wares. The separation of Spanish from Portuguese wares is possible using petrographic analysis, however results are not consistent (Vince 1984:146). In general, fabrics have a sandy texture and range in colour from light cream to yellow and beige. Glazes may be of uneven thickness and vary in tone from off-white to grey (Genet 1980). One distinctive bowl form, the *escudilla*, is typical of Spanish wares (Deagan 1987:56). Decoration consists of free brushwork in blue or magenta and includes dots, rings, and bands, as well as stylized floral and geometrical motifs (Pope 1986:114). Published examples of Iberian tin-glazed wares include: Goggin (1968), Deagan (1987), Hurst (1977), Hurst et al. (1986), Noël Hume (1977), Broady (1979), and Allan (1984a). Those vessels identified specifically as Portuguese are based on direct correspondence with similarly attributed published examples. A total of nine vessels were identified as Iberian, three of which are considered Portuguese. In addition, two dishes have been identified as either Iberian or Italian.

Italian tin-glazed earthenware from Montelupo has a soft chalky fabric that is buff to pink in colour with small red inclusions. Glazes tend to be a bright white and thick on both interior and exterior surfaces. Decorative brushwork in vivid magenta, yellow, orange, and green, in floral, linear or geometric motifs is characteristic of this ware (Gaskell-Brown 1979; Allan 1984a; Pope 1986:117). One cup of this ware has been identified in the assemblage.

### 6.3.3. Coarse Stonewares

Coarse stonewares recovered in the excavation of the house were predominantly of Rhenish origin. Some 85% of the coarse stoneware vessels identified in the assemblage are Rhenish. These wares can be divided into two categories, Westerwald and Frechen. Because these wares are related both technically and genetically, the actual source of each ware is difficult to establish with certainty (Gusset 1980).

Frechen type coarse stoneware was produced at Frechen in the 15th century and at Cologne in the 16th century (Clark 1979d). The coarse dark grey fabric sometimes includes quartz inclusions. The interior of vessels are fired to yellow, orange or pink, while the exterior is salt-glazed over a light to dark red brown glaze that is mottled (Reineking-von Bock 1971; Hurst et al. 1986). Vessel forms include jugs, mugs, and drink pots, but the best-known form is the bellarmine, decorated at the neck with a bearded mask and medallion(s) on the body (Noël Hume 1970:55-57). While these vessels can be dated in a broad fashion based on changes in body form and quality of masks, the accuracy of these dates is questionable (Holmes 1951; Thwaite 1973; Clark 1979d; Hurst et al. 1986). The identification of identical medallions from well-dated contexts provides the best opportunity to date these vessels (Gaimster 1997). Eleven Frechen coarse stoneware bottles were identified in the assemblage.

Westerwald type coarse stoneware began to be produced in the Westerwald towns of



Grenzau, Höhr and Grenzhausen in the late 1500s and became one the most widely traded German wares in the 17th and 18th centuries (Hurst et al. 1986). The fabric is a light grey with an overall blue-grey salt glaze. The fabric is finer and glassier than Frechen wares. Decoration includes wheel-turned cordons combined with applied, incised and rouletted decoration. Gusset (1980) identifies applied floral or heraldic motifs as common on earlier wares with incised and rouletted decoration characteristic of later wares. The sharpness of detail in decoration deteriorates as time passes. Brushed cobalt blue is used to highlight decoration prior to ca. 1665. After ca. 1665 purple is used in addition to blue (Noël Hume 1970:281; Hurst et al. 1986:222). Vessel forms include mugs, jugs and chamber pots. Eleven vessels, four jugs and seven mugs, were identified in the assemblage.

The remaining identified coarse stoneware vessels are of English origin and are divided equally between Bristol Gray and English Brown wares. Bristol Gray stoneware began to be produced in Bristol ca. 1700 for export to Ireland and the colonies. Its production continued well into the 19th century (Oswald et al. 1982). The fabric is smooth, without inclusions, and varies in colour from a dark beige to light grey with either a clear or light brown mottled salt glaze (Oswald et al. 1982; Noël Hume 1970, Allan 1984a). Wares were slipped overall in white prior to firing with mug and cup rims also dipped in an iron-oxide slip. Forms include storage jars, bottles, and mugs. Two cups of this ware were identified.

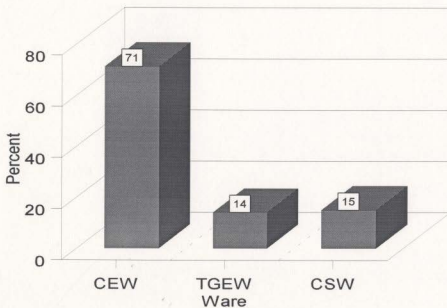
English Brown stoneware is used here as a catch-all for English wares that could not readily be distinguished from those of Bristol. These wares may have been produced in London, Fulham, Nottingham, or Burslem. These salt-glazed wares began to be produced in the late 17th-century in a variety of forms from bottles, cups, and mugs to inkwells (Oswald et al. 1982). The fabric is a light brown to grey. A smooth dark brown mottled exterior is characteristic of this ware (Noël Hume 1970). Two bottles of this ware were identified.

Two unidentified coarse stoneware bottles were found in the assemblage.

#### 6.4. Ware Frequencies

Having described the ware types identified in the assemblage, it is useful to present the frequencies of occurrence for each in terms of ware. Figure 6.2 shows the total frequency of ware types by ware category: coarse earthenware, tin-glazed earthenware, and coarse stoneware. Coarse earthenware vessels account for 71% of the assemblage ( $n=129$ ) with tin-glazed earthenwares and coarse stonewares accounting for the balance in almost equal parts, comprising respectively, 14% ( $n=25$ ) and 15% ( $n=28$ ) of the assemblage. Figures 6.3 and 6.4 show the frequency of coarse earthenware and tin-glazed earthenware types, respectively, by their country of origin. Coarse stoneware frequencies for wares of known origin are Rhenish (including Frechen and Westerwald) 85% ( $n=22$ ) and English (including Bristol Gray and English Brown) 15% ( $n=4$ ). These figures exclude two

Figure 6.2.  
Vessel Frequency by Ware,  
Area B, Events 143 and 145



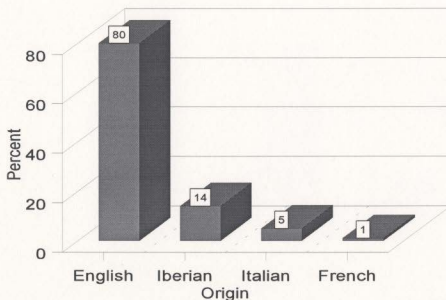
Total Sample = 182 Vessels (CEW lids (n=6) not included in total sample)

CEW = Coarse Earthenware = 71% (n=129)

TGEW = Tin-Glazed Earthenware = 14% (n=25)

CSW = Coarse Stoneware = 15% (n=28)

Figure 6.3.  
Vessel Frequency by Origin,  
Coarse Earthenwares: Area B, Events 143 and 145



Total Sample = 122 vessels (Unidentified Coarse Earthenware Vessels (n=7) not included)

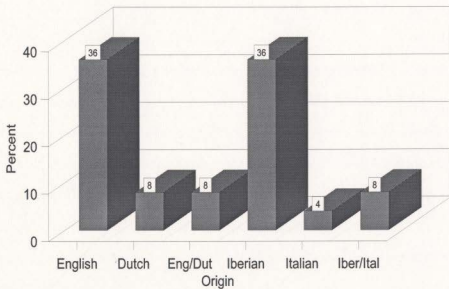
English includes North Devon, Totnes, South Somerset, Midlands Purple, Borderware, and Bristol Slipware vessels = 80% (n=98).

Iberian includes Merida and Spanish Heavy vessels = 14% (n=17).

Italian includes North Italian Slipware and Montelupo vessels = 5% (n=6).

French includes one Saintonge vessel = 1% (n=1).

Figure 6.4.  
Vessel Frequency by Origin,  
Tin-Glazed Earthenwares: Area B, Events 143 and 145



Total sample = 25 vessels

English = 36% (n=9)

Dutch = 8% (n=2)

English/Dutch = 8% (n=2)

Iberian = 36% (n=9)

Italian = 4% (n=1)

Iberian/Italian = 8% (n=2)

vessels of unknown provenance. The significance of these frequencies will be discussed in greater detail below (Sections 6.6. and 6.7) in order to determine what they might indicate about those who occupied the house and produced the assemblage.

### 6.5. Ceramic Dating

The use of ceramic dating provides the opportunity to date the period of the house's occupation and to draw some conclusions about the people who lived there. The recognition that ceramic vessels change in terms of ware, form, and style over time and space, allows a site's occupation to be dated by an examination of the ceramic assemblage. The location of manufacture, date ranges for production, and trends in formal or stylistic change have been determined for many European ceramics of the 17th century. By recording dates associated with each vessel identified in the assemblage, the date of the house's occupation can be estimated.

The assemblage can be dated in two ways: first, the overlap of production dates can be used as boundaries to "bracket" the occupation indicating both the earliest and latest dates for occupation (South 1971; Salwen and Bridges 1977); second, the median dates of production for each vessel can be combined and a Mean Ceramic Date (MCD) calculated that will indicate the mid-point of the occupation represented by the assemblage (South 1971). Both techniques arrive at dates that characterize the assemblage to which they are applied. However, each has shortcomings. In the first instance dates derived from the

assemblage can produce a time bracket that is much broader than that documented historically. In the second, a MCD can be calculated that is either too early or too late based on either the length of production of certain wares, the frequency of occurrence of wares because of differential rates of breakage and varied housekeeping habits, or the curation of older wares as either heirlooms or as hand-me-downs (Deetz 1977:18; Salwen and Bridges 1977:166). Moreover, the MCD gives a point in time that at best estimates only the middle of the occupation which produced the assemblage and ignores the time span it represents. In both cases reference to historical documents and analysis of other artifact categories must be used to interpret the results (South 1971:74-75; Salwen and Bridges 1977:167; Turnbaugh and Turnbaugh 1977:368).

In the analysis presented here dates for the production of identified wares and forms were recorded for each vessel, where possible. Some of these dates are very broad. North Devon Gravel coarse earthenware pipkins, for example, have a production date range of 1450-1750 (Grant 1983) which, on its own would produce a MCD of 1600, prior to the documented establishment of Calvert's colony. Other wares or forms with a narrower date range are more "temporally sensitive" within the Ferryland context. For example, Westerwald coarse stoneware with magenta accents, while still produced today, came into fashion sometime after ca. 1660 (Noël Hume 1970:281). The presence of such a ware within the assemblage is more useful for dating the occupation as its presence is indicative of a later 17th-century occupation.

For the purposes of dating the occupation of the house at Area B a MCD was not calculated because of problems with its accuracy and those inherent in interpreting the significance of a single mean date. Since historical documents clearly indicate the dates for the 1621 establishment and 1696 abandonment of the site at Ferryland, I have chosen to focus here on those ceramics that are most likely to distinguish occupation within this 75-year time frame. To that end I have concentrated on identifying “temporally sensitive” vessels that were introduced within the brackets of “early”, “middle”, or “late” periods of occupation at Ferryland using the following arbitrary periods: 1620-1640, 1640-1660, and 1660-1700. While recognizing that these periods do not readily correspond with the periods of Calvert’s, Treworgie’s, or the Kirkes’ command of the colony and the potential changes in the colony under their control, they can still serve to distinguish relative differences in time. The results of this analysis are presented in Tables 6.2 through 6.4.

The separation of vessels in the assemblage into three periods consistent with their dates of production allows the following observations to be made. Eight vessels, or 15% of the temporally sensitive vessels analysed (n=55), fall in the “Early” period ca.1620-1640 (Table 6.2). All have production dates that run as late as 1650 and could, therefore, have also been produced and utilized in the “Middle” period ca. 1640-1660. The more expensive North Italian Slipware and Portuguese tin-glazed vessels may also have been curated and the Frechen coarse stoneware bottle re-used. The presence of these “earlier” wares, while suggesting a pre-1650 occupation, does not conclusively prove it.



Table 6.2. "Early" Vessels ca. 1620-1640, Events 143 and 145, Area B.

Frequency	Vessel	Vessel Number	Date Range
1	South Somerset CEW bowl	79	1600-1650
1	North Italian Slipware CEW bowl	108	1625-1650
2	North Italian Slipware CEW dishes	106, 107	1625-1650
1	North Italian Marbled Slipware CEW bowl	109	1600-1650
1	North Italian Marbled Slipware CEW jug	110	1600-1650
1	Portuguese TGEW dish	157	1600-1650
1	Frechen CSW bottle	163	1600-1650

CEW: Coarse Earthenware, TGEW: Tin-Glazed Earthenware, CSW: Coarse Stoneware

Total: 8 vessels

Note that "Early" vessels identified here could have been in production as late as 1650. Curation of the more expensive North Italian Slipware vessels and the Portuguese tin-glazed dish, as well as re-use of the Frechen Stoneware bottle could account for their presence in a later assemblage.

Table 6.3. "Middle" Vessels ca. 1640-1660, Events 143 and 145, Area B.

Frequency	Vessel	Vessel Number	Date Range
4	North Devon Smooth CEW sgraffito dishes	66, 67, 68, 69	1640-1700
2	North Devon Smooth CEW jugs	73, 74	1640-1750
1	Saintonge CEW milk pan	105	1650-1750
1	Totnes CEW pot	96	1640-1670
1	Totnes CEW jug	97	1640-1670
1	Totnes CEW pipkin	95	1640-1670
1	English TGEW plate	141	1640-1720
1	English TGEW cup	142	1650-1685
1	English TGEW dish	140	1650-1730
2	English TGEW bowls	138, 139	1650-1730
2	Iberian/Italian TGEW dishes	158, 159	1650+
1	Frechen CSW bottle	161	1650-1670
1	Frechen CSW bottle	166	1650-1725
4	Westerwald CSW jugs	179, 180, 181, 182	1650-1700
5	Westerwald CSW mugs	172, 174, 176, 177, 178	1650-1700

CEW: Coarse Earthenware, TGEW: Tin-Glazed Earthenware, CSW: Coarse Stoneware

Total: 28 vessels

Note that all "Middle" vessels have production dates that run into and in most cases fully overlap those of "Late" period vessels.

Table 6.4. "Late" Vessels ca.1660-1700, Events 143 and 145, Area B.

Frequency	Vessel	Vessel Number	Date Range
3	Bristol Slipware CEW cups	100, 101, 102	1670-1720
2	Bristol Slipware CEW jugs	103, 104	1670-1720
2	English TGEW porringers	136, 137	1670-1700
1	English TGEW ointment pot	144	1680-1735
1	English? TGEW cup	143	1675-1730
1	Dutch? TGEW dish	145	1670+
1	English /Dutch TGEW dish	147	1688-1710
2	Portuguese TGEW bowls	155, 156	1660-1685
2	Bristol Gray CSW cups	183, 184	1690+
2	English Brown CSW bottles	185, 186	1690+
2	Westerwald CSW mugs	173, 175	1660-1700

CEW: Coarse Earthenware, TGEW: Tin-Glazed Earthenware, CSW: Coarse Stoneware

Total: 19 vessels

The "Middle" period ca. 1640-1660 is the best-represented of the three with 28 vessels accounting for 51% of the total assemblage of temporally sensitive vessels (Table 6.3). All have production dates that run into and in most cases fully overlap those of the "Late" period ca. 1660-1700. This situation, similar to that above, makes it difficult to conclude that these vessels indicate an occupation as early as 1640. However, the sheer number of vessels from this period reasonably points to an occupation that could have begun ca. 1650.

The "Late" period ca. 1660-1700 is also well-represented by 19 vessels accounting for 35% of the sample (Table 6.4). Comparatively expensive wares such as Bristol Slipware cups and jugs, as well as English, Dutch, and Portuguese tin-glazed ceramics account for 13 of these vessels. The relative abundance of these "Late" wares, which could readily include all those of the "Middle" period above, point to an occupation of the house that dates to least 1700.

Results of this analysis of "temporally sensitive" ceramic vessels suggests the assemblage recovered from the house at Area B represents an occupation that began ca. 1650 and ended ca. 1700. In order to more carefully define the period of occupation clay tobacco pipes and bottle glass were examined. The results of those analyses are presented in Chapter 7.

## 6.6. Trade

Trade relations between Ferryland's 17th-century colonists and England, as well as western Europe, New England, Virginia, and the Carribean, might reasonably be examined through an analysis of the frequencies and origins of ceramic wares. However, direct trade relations with foreign countries should not be assumed by the simple presence or absence of "non-English" wares. Trade relations between England and her colonies, as well as those colonies and the rest of Europe were also dictated by politics and changes in economy. Moreover, trade transactions as recorded in port books and other documents reveal what may have been available for purchase but not necessarily what colonists chose, or were able, to purchase, based on their means. Questions relating to the choice and ability of Ferryland's planters to purchase available wares, as well as the activities these wares may represent, are dealt with below (Section 6.7). The significance of particular ware frequencies in the assemblage will be examined here.

As illustrated in Figures 6.3 and 6.4 the majority of coarse and tin-glazed earthenwares identified in the assemblage, 80% and 36% respectively, are of English origin in general and, in the case of coarse earthenwares, of West Country origin in particular. Iberian coarse and tin-glazed earthenwares are the second most frequent comprising 14% and 36%, respectively, of each assemblage. The same pattern was observed by Pope (1986:191) in his analysis of ceramics from the earlier forge at Area B leading him to observe that at a crude level this "accords remarkably well with the historical record,

confirming that trade relations were primarily with South West England and secondarily with Mediterranean countries". Taken together, English and Iberian wares account for a total of 94% of all coarse earthenwares identified, while the same combination accounts for 72% of all tin-glazed wares.

The dominance of West Country ports over trade to Newfoundland has been the focus of research by Stephens (1956), Matthews (1968), and Pope (1986, 1992). Port Books from Exeter document the export of earthenware to Newfoundland (Allan 1984a). It seems likely that the majority of coarse earthenware vessels were supplied regularly in small amounts by returning sack or fishing ships, either as storage containers used to transport foodstuffs or other supplies from England, in the case of North Devon tall pots, or as particular orders for other particular vessels such as bowls, pans, cups, jugs or dishes (Pope 1984:192, 1992:124). This distribution is indicative of the direct trading relations between West Country ports and Newfoundland. It is also likely that those bound to settle at Ferryland transported at least some of their own wares on the outward voyage.

Iberian vessels, Merida, and Spanish Heavy wares account for 14% of coarse earthenwares. Their presence is illustrative of the trade of Newfoundland fish and oil for Spanish and Portuguese wines, salt and other products indicated by ports of call listed for West Country ships in censuses of 1675 and 1676 (Pope 1993b) as well as in a 1667 deposition regarding the Newfoundland fishery that states, in part, that ships, "at the end

of their fishing voyages carried their loading of fish and train oil for a market to Spain, Portugal, France and other places and brought home their return in foreign commodities, a great part thereof in silver and plate" (Cull 27/11/1667). Whether or not wares obtained in such trade were purposely purchased as empty vessels or as containers already holding goods purchased is unclear. Pope (1986:200) notes that Merida wares were inexpensive and commonly used for ship's stores. As well, it is recognized that these storage vessels were commonly reused and recycled (Watkins 1973; Fairbanks 1974). It is uncertain just how much of this material was off-loaded in England before a ship's return to Newfoundland. What is clear, however, is that direct trade with foreign ports occurred and that the opportunity to purchase other "outlandish" wares existed. The exact nature of these transactions remains poorly understood, but in light of these facts the presence of foreign wares at one of Newfoundland's most prosperous fishing stations is not surprising given the market for fish in the Mediterranean and Western Europe. Moreover, the relatively high frequency of Iberian wares at Ferryland is not unusual when compared to similarly high frequencies at some West Country ports (Pope 1986:207).

The frequency of Iberian tin-glazed vessels is equal to that of English, with each ware accounting for 36% of the assemblage (Figure 6.4). Even if those vessels of uncertain attribution, either English/Dutch (8%) or Iberian/Italian (8%), are each added to those of certain provenance, the result is the same. This may simply be the result of the small sample size ( $n=25$ ), where an extra vessel or two, one way or the other, can make an

overall difference of 4 or 8% in frequency representation. Nonetheless, it is clear that in general terms tin-glazed wares identified in the assemblage are equally distributed between English and foreign wares. This may be the result of a lack of access to, or a shortage in supply of English wares, differences in cost between English and foreign wares, or is an indication of choices purposefully made by those who acquired and used these tin-glazed vessels. Why English and foreign tin-glazed wares appear in equal proportions in this assemblage cannot be readily determined. However, with access to English and foreign wares virtually guaranteed by the nature of the trade in fish, it appears that foreign wares were purposefully chosen at least as often as those from England. Issues relating to the availability, choice and expense of certain wares are closely tied to the social position of those who purchased them. The question of status is examined in more detail in Section 6.7.

The presence of other finer and likely more expensive coarse earthenwares, two bowls, two dishes and a jug of North Italian Slipware for example, tends to confirm the breadth of the Mediterranean trade in Newfoundland fish.

The dominance of Rhenish vessels (85%, n=22) in the coarse stoneware assemblage is not, however, indicative of direct trade with either the Rhineland or the Netherlands but represents down-the-line trade of these wares via London to the West Country and on to Ferryland (Pope 1986:117-118). Following 1650, however, direct import of Rhenish



stonewares to Exeter increased (Allan 1984a:123). These stonewares were likely sent to Ferryland either as space allowed or as demand required and a profit could be turned on their sale. The relatively small representation of English coarse stoneware in the assemblage (15%, n=4) is most likely a result of the fact that English stoneware production did not begin until ca. 1670 and was centered, for the most part around London, until production began in Bristol ca. 1700 (Oswald et al. 1982).

The absence of ceramic wares in this assemblage that might be termed Anglo-American is unusual considering documented trade with Virginia and direct ties to New England throughout John Treworgie's tenure at Ferryland from 1651 to 1660 (Lounsbury 1930, 1934; Bailyn 1964). Pope (1986:209) tentatively identified two coarse earthenware vessels as possibly Anglo-American from the fill layer (Event 134) that overlay the house and forge in Area B. It may well be that the unidentified coarse earthenwares in this assemblage (n=7) are also Anglo-American, but this has not been confirmed. In this context it would appear that the influence of American and Caribbean trade, as represented by the presence of ceramic wares at least, was minimal on Ferryland's residents.

#### 6.7. Status

Interpreting the ceramic assemblage from the house at Area B in terms of the activities and status of those who produced it, requires that it be compared with those recovered

and documented in England and colonial North America. Research into the use of ceramics and the meanings that might be ascribed to assemblages recovered in 17th-century Newfoundland remains relatively new with the research of Pope (1986) serving as the cornerstone for such study. The analyses of ceramics from a fisherman's house in Renew's (Mills 1996, 1999: personal communication), John Guy's plantation at Cupids (Gilbert 1996, 1998) and from the house located in Area D at Ferryland (Crompton 1999: personal communication) are ongoing.

While recognizing that the use of ceramics was not *de rigueur* among 17th-century colonists, that the decision to purchase particular wares was based on need, availability, choice, and the means of those who acquired them, and that the calculation of simple frequencies can lead to misleading interpretations (Beaudry et al. 1983), it is necessary to compare both ware and POTS frequencies from contemporaneous sites in order to place this assemblage in context. When such an approach is taken it is best to interpret the results with caution since ceramic frequencies alone provide only a limited understanding of the full range of a household's activities. For example, the use of pewter, treen and leather for food and beverage service is well-documented in the 17th century (Beaudry et al. 1983; Deetz 1977; Martin 1989; Brown 1973; Horn 1988; Platt and Coleman-Smith 1975), however these materials are rarely preserved archaeologically. Moreover, pewter wares were valuable, readily portable, often recycled, and, in the case of the assemblage from the house at Area B, it is possible that whatever pewter vessels were used in the

house were either looted by the French during their attack in 1696 or were retrieved by those forced to return to England.

#### 6.7.1. Ware Frequencies

The comparison of ware frequencies from this assemblage with those from other locations is based on the following assumptions: 1) that accessibility to foreign wares and the ability to purchase such wares was roughly comparable in each context; 2) that the situations in which these wares were purchased and used were approximately the same; and 3) that status and class structures, or aspirations to the same, were more or less equivalent in each case. While these assumptions clearly do not hold true in each instance, the general pattern of ceramic use can provide at least a starting point for discussion. It is in those situations where obvious differences exist that the interpretation of this assemblage becomes meaningful.

The additional expense of tin-glazed earthenwares, stonewares and imported coarse earthenwares, when compared to that of local wares, has led to the seemingly reasonable conclusion by most researchers that the presence of tin-glazed earthenwares, and other high-quality foreign wares, is indicative of some degree of wealth and, in turn, that this can be equated, at least roughly, with the social status or class of those who produced the assemblage (Deetz 1977; Brown 1973; Horn 1988; Miller 1980). That tin-glazed earthenwares were more expensive than coarse earthenwares has been clearly

demonstrated by Pope (1986:195-198). The equation of the presence of tin-glazed and foreign wares with status or class position has also been shown to have some correlation at Exeter. Allan (1984a:101) has demonstrated that higher frequencies of these wares coincide with houses containing more hearths, the higher number of hearths being indicative of houses of the yeomen and gentry.

For comparative purposes the assemblage from the house at Area B was subdivided into "local" and "foreign" wares. Local wares included only those produced in the West Country, while foreign wares comprised all other wares not of English origin, excluding wares of uncertain or unidentified origin. The resulting frequency of foreign wares (33%) could be higher if English tin-glazed wares, as well as those wares produced outside the West Country, for example, Bristol Slipware, were included. Nonetheless, comparison of this figure with those from Exeter shows this assemblage to have a relatively high proportion of foreign wares (Allan 1984a:101). Sites excavated at Exeter with similarly high frequencies lie within the wealthier district. While Allan (1984a:104-105) warns against the direct comparison of import frequencies from Exeter with those from other ports, noting on the one hand that 78% of Exeter's collection comes from "poorer" areas, and on the other that the transshipment of expensive foreign wares by lighter to Exeter's quayside likely increased their cost even more. In this instance the comparison is useful for at least illustrating that the Area B assemblage has a comparatively high frequency of foreign wares. Allan points out that few of the assemblages from Exeter have more than

20% “foreign content”, but also observes that frequencies of imported wares at the ports of Plymouth, Southampton, Hull and Newcastle, although biased by sampling techniques and sometimes derived from poorly documented contexts, average more than 30%.

In the context of a prosperous port town, it remains unclear just what the proportion of foreign wares in an assemblage need be in order to be considered indicative of elevated social status. The inclusion in any calculation of inexpensive utilitarian Iberian storage vessels, common at many English ports, will certainly skew results. However, in comparing the frequency of foreign wares in this assemblage to those previously analysed by Pope (1986:199-202) a foreign content of 33% falls between that of the earlier forge (25%) and the later domestic fill (46%) thought, at the time, to be derived from the nearby Mansion House. This suggests that this assemblage represents a difference in household status that lies somewhere between those who used the forge for an occasional meal and those who produced the domestic fill which overlay it. The foreign content of the ceramic assemblage from the house at Area D (29%) shows a similarly high frequency of foreign wares (Crompton 1999:personal communication). It is clear that the assemblage examined here is not dramatically different from those common at other ports in England. In the context of the West Country port of Exeter, however, it is an assemblage that is suggestive of neither a poor nor an excessively wealthy household. At the same time, when compared with the foreign content (11%) of the assemblage from the smaller fisherman’s house at Renew (Mill 1999:personal communication), the frequencies from

each of the assemblages at Ferryland indicate not only the cosmopolitan nature of the settlement itself, but also, potentially, the somewhat elevated social position of those who lived and worked there.

The comparison of tin-glazed earthenware frequencies of the Area B house assemblage with those from other English and colonial North American sites may support the position that this assemblage is indicative of a household of middling status. This comparison uses data tabulated by Pope (1986:201) from sites at Martin's Hundred Virginia ca. 1620-1645, St. Mary's City Maryland 1638-1660, a combination of Exeter sites ca. 1640-1670, Plymouth's Castle Street ca. 1550-1750, Renews ca. 1640-1670 (Mills 1999:personal communication), and Ferryland's Area D ca. 1675-1696 (Crompton 1999: personal communication). The results of this comparison (Table 6.5) show that the assemblage falls in the middle of those sites compared. On the basis of tin-glazed earthenware frequencies the assemblage from the house at Area B (E 143/145) (14%) is similar to households in the West Country ports of Exeter (12%) and Plymouth (14%) and is relatively close in frequency to that of a gentry household at Martin's Hundred (17%). Once again the assemblage frequency appears to lie between that of the domestic fill of Strata 2b and 2f from Area B (18%), and that derived from the L3 forge floor (9%). This suggests that the assemblage was created by those of a roughly middling status, similar to those of English urban centres, though not quite of the gentry class as defined by those at Martin's Hundred or the occupants of the putative Mansion House near Area B. This also

Table 6.5. Tin-Glazed Earthenware Frequencies from Selected 17th Century Sites.

Site	Dates and Character	Vessels	%Tin
Renews	ca. 1640-1670, Domestic Unit	n=45	4%
Martin's 100 B	ca. 1620-1640, Domestic Unit	n=194	8%
Ferryland B L3	ca. 1630-1640, Forge	n=32	9%
Ferryland D	ca. 1675-1696, Domestic Unit	n=287	11%
Martin's 100 H	ca. 1620-1622, Domestic Unit	n=95	11%
Exeter Sites	ca. 1640-1670, Urban Sites	n=329	12%
Plymouth, Castle Street	ca. 1550-1750, Urban Sites	n=1,1072	14%
Ferryland B E 143/145	ca. 1650-1700, Domestic Unit	n=182	14%
Martin's 100 A	ca. 1625-1645, Gentry Residence	n=126	17%
Ferryland B L2b, 2f	ca. 1640-1670, Secondary Deposit	n=78	18%
St. Mary's ST1-23	ca. 1638-1660, Gentry Residence	n=90	40%

Adapted from Pope (1986:201) with Renew's figures from Mills (1999:personal communication) and Ferryland Area D figures from Crompton (1999:personal communication).

indicates a status somewhat higher than that of the ordinary settler at Martin's Hundred, the fishing crews who made use of the earlier forge, and the household living at Renews.

#### 6.7.2. POTS Frequencies

Having gained some understanding of the status of those who created the assemblage it is useful to compare it with others in order to identify the activities that it may represent. The use(s) to which a particular vessel form was put is identified by its designated POTS category with the understanding that vessel form can be equated with the function(s) it served (Beaudry et al. 1983). Comparison of representative frequencies of particular POTS categories from a variety of sites should reveal information about the practices relating to food and beverage storage, preparation and consumption followed by those who produced the assemblage (Anderson 1971; Deetz 1977). This analysis employs the same samples used by Pope (1986:223-235) in order to allow comparison between this assemblage (E 143/145), those representing both the earlier forge (L3) and later domestic fill (L2) from Area B, the domestic unit at Area D, as well as those from England and colonial North America (Table 6.6).

Utilising historical documents Pope (1986:215-221) attempted to distinguish vessel forms and the materials out of which they were made, in an effort to identify vessels or assemblages that might allow the distinction of activities from those considered to be sea-



Table 6.6. POTS Frequencies as Percentages from Selected 17th-Century Colonial Sites.

	Storage	Preparation	Dairy	Cooking	Food Service	Beverage service	Health	Other	Total
Martin's 100 H, ca. 1620-1622	23	1	14	16	26	16	4		100
Martin's 100 B, ca. 1620-1640	12	8	12	14	34	13	7		100
Martin's 100 A, ca. 1625-1645	13	4	23	15	22	15	7	1	100
Exeter Sites, ca. 1600-1650	13	18	2	11	16	20	8	10	98
St. Mary's ST1-23, ca. 1638-1660	10	7	21	9	42	7	3	1	100
St. Mary's ST1-13, ca. 1667-1680	13	9	9	1	33	34	1	1	101
HMS Sapphire, 1696	17	10	9	14	20	25	5	1	101
Renews, ca. 1640-1670	42			16	11	24	7		100
Ferryland Area B, L3	36	3		18	12	30			99
Ferryland Area B, L2	26	4	7	13	20	29	1	1	101
Ferryland Area B, E 143/145	32	7	3	8	20	30	1		101
Ferryland Area D, ca. 1675-1696	38	4	4	10	12	22	3	6	99

Adapted from Pope (1986:235) with Renew's figures from Mills (1999:personal communication) and Crompton (1999:personal communication).

or land-based, culinary or non-culinary, and crew or planter. As a result he suggested that vessel forms from the forge fit quite well with those used by fishing crews and that those from the domestic fill somewhat matched a pattern suggestive of "middle or gentle culinary functions" (Pope 1986:221). A comparison of his figures with those derived from the occupation of the house shows that this assemblage is most similar to the domestic fill which overlay it.

Differences between the house (E 143/145) and fill (L2) assemblages are noticeable in the frequencies of Kitchen and Dairy-related vessels, although these are not dramatic. The same is true of figures derived from the Area D assemblage. It is clear that food storage and preparation activities were emphasized, while dairying appears to have played a somewhat less important role in this particular household. This may be a result of the use, perhaps communally, of the nearby post-1673 cow byre located in Area C from which a large number of milk pans and colanders were recovered. Compared to all other sites this household assemblage has one of the highest frequency of storage vessels (32%), placing fourth after the forge (L3) (36%), the house at Area D (38%), and the Renew's assemblage (42%), an apparently average frequency of preparation vessels (7%), and one of the lowest frequencies of dairying-related wares (3%). Compared to the other three Ferryland assemblages the high frequency of storage vessels is not out of line, but the Newfoundland examples are significantly different from those recorded elsewhere. The low frequency of dairying is comparable only to that of Exeter's urban sites (2%), the house at Area D

(4%), and those of the forge and Renewes, neither of which produced evidence of dairying activities.

That dairying was carried out at Ferryland has been confirmed in historical documents through the mention of cattle and archaeologically by the identification of milk pans in Area B's domestic fill layer (L2), the household assemblages from Areas B and D (Crompton 1999:personal communication), and in excavations of the cow byre at Area C. Dairying activities are better represented at the Chesapeake sites and form a large part of domestic assemblages from the New England colony of Plymouth which supplied cattle to the Massachusetts Bay colony (Deetz:1973:26, 1977:53). It is tempting to suggest that the low representation of dairying vessels in the Ferryland and Renewes assemblages serves as evidence of either a limited ability to, or a lack of interest in grazing cattle. A reliance on imported/stored foodstuffs and fats in the form of butter or oils, is clearly indicated by consistently high frequencies of storage vessels in the Ferryland and Renewes samples (Pope 1986:240-241). It may also be that dairying activities were simply not practiced to any great extent in the Area B domestic units represented by Events 143/145 or L2, but instead, elsewhere on site. Moreover, if the categories of storage, preparation and dairying are combined to produce one larger Kitchen/Dairy category, which plainly masks some of the finer detail of each of the three, then the five Newfoundland assemblages appear less unusual, albeit they are still in the upper range of those assemblages compared (Table 6.7).

Table 6.7. A Combination of Storage, Preparation and Dairy POTS Frequencies as Percentages from Selected 17th-Century Colonial Sites.

	Kitchen/Dairy
Martin's 100 H, ca. 1620-1622	38
Martin's 100 B, ca. 1620-1640	32
Martin's 100 A, ca. 1625-1645	40
Exeter Sites, ca. 1600-1650	33
St. Mary's ST1-23, ca. 1638-1660	38
St. Mary's ST1-13, ca. 1667-1680	31
HMS Sapphire, 1696	36
Renews, ca. 1640-1670	42
Ferryland Area B, L3	39
Ferryland Area B, L2	37
Ferryland Area B, E 143/145	42
Ferryland Area D, ca. 1675-1696	46

Representation of cooking activities in Events 143/145 is low (8%) compared to those from Martin's Hundred (14-16%), HMS Saphire (14%), and the L3 forge (18%). However, St. Mary's ST1-23 (the gentry house of John Lewgar) and urban sites at Exeter have similar frequencies of 9 and 11%, respectively. The house at Area D has a similarly low frequency (10%). Such a low frequency is, therefore, not evidence for a lack of cooking, but more likely is evidence that cooking may have taken place in iron or copper kettles/cauldrons, fragments of which have been identified in the household assemblage of metal artifacts (Section 7.4.3). Whether or not the presence of copper or iron cooking vessels can be considered indicative of elevated status is an open question.

Representation of food service vessels in the Event 143/145 assemblage (20%) matches that of the domestic fill (2b) and the HMS Saphire, is higher than that of urban Exeter sites (16%) and slightly below that of Martin's 100 A (22%), a gentry household. Pope (1986:237) has characterized the L3 forge frequency of 12% as "a reflection of the low socio-economic status of mariners", which suggests that a higher representation could be assumed to be indicative of a somewhat higher social position. It is interesting to note that the assemblage from Renew's contained a frequency of food service vessels (11%) similar to that of the forge. The house at Area D also had a low frequency (12%). That other vessels, be they of pewter or wood, were most likely used for food service within the house at Area B is indicated by the presence of only four plates, all of tin-glazed earthenware (Table 6.1). The higher frequency of food service vessels found at St. Mary's

ST1-13 (33%) is reasonably explained by its function as an “ordinary” or tavern.

The frequency of beverage service vessels in all of the Ferryland samples is particularly high with the household assemblage (E 143/145), the domestic fill (L2) and the forge (L3) having frequencies of 30, 29, and 30% respectively. The frequencies closest to these come from the English frigate HMS Saphire (25%) and St. Mary’s ST1-13 (34%), the above-mentioned ordinary. The explanation for such high frequencies at Ferryland might be found in the following facts, that there was a strong demand for alcohol at Newfoundland, that “mariners were avid consumers of alcohol” (Pope 1986:75, 243), and that historical documents confirm not only that licences were sold for the operation of taverns at Ferryland, but that planters’ houses served, at least occasionally, as such (Pope 1986:243, 1993b).

The representation of hygiene or health related vessels in the household assemblage (E 143/145) is low (1%) and consists of a single tin-glazed earthenware ointment pot. This figure is the same as that of the L2 domestic fill, consisting of one tin-glazed chamber pot, and St. Mary’s ST1-13. Similarly low frequencies were found at Area D (3%), St. Mary’s ST1-23 (3%), Martin’s 100 H (4%) and on the HMS Saphire (5%). This low frequency seems to confirm Pope’s suggestion that “Newfoundland populations of the period were relatively healthy” likely as a result of the retirement of the elderly to England, the relative isolation of Ferryland, as well as its moderate climate (Pope 1986:242).

### 6.8. Discussion

The ceramic analysis presented in this chapter has provided an outline of the wares identified in the assemblage, their forms and frequencies, a date of occupation for the house from ca. 1650 to 1700, as well as an understanding of the inferences that might be drawn from the assemblage in terms of trade, the activities, and social status of the household that produced it.

It is clear from both documentary and archaeological evidence that this prosperous colony was directly connected by trade to both the West Country and the Mediterranean. The same evidence shows that at least some of its planters were of sufficient means to maintain permanent residences, oversee successful fishing operations, and purchase expensive wares (Pope 1986, 1992). The abundance of Iberian tin-glazed and fancy imported earthenwares excavated in Areas C and F (Gaulton and Mathias 1998) is a further indication of the wealth of at least some of Ferryland's residents. What remains unclear is the exact nature of social or class divisions among fishing crews or servants, planters, and the gentry. It is possible, as Pope (1986:61-62) suggests, that these divisions slowly collapsed from that of a clear tripartite system of gentry, planter, servant, that characterized the early years of the settlement to a simpler planter-servant distinction in the later 1600s. However, the ability to clearly define exactly what type of ceramic assemblage might characterize each class division or time period remains tenuous. In this instance it is likely easier to describe an assemblage by what wares and frequencies should

be expected as characteristic of either end of the spectrum than to attempt to clearly demarcate the middle. What the results of this analysis suggest is that this assemblage does, in fact, fall somewhere between. However, whether or not it represents a firmly entrenched middling household or a well-to-do planter on his way up or down is unclear. Additional comparative work with Newfoundland assemblages from a variety of temporal and social contexts is necessary to clarify this issue. What the evidence suggests, however, is that this household was of reasonable means based on a relatively high representation of foreign and tin-glazed earthenwares, that it relied heavily on stored foods or fats, that cooking likely took place in copper or iron cauldrons, and that wooden or more likely pewter vessels were used for food service. A high frequency of cups, mugs and jugs suggests the possibility that the house may also have functioned, on occasion, as a tavern.

Examination of clay tobacco pipes, bottle glass and metal objects is the focus of the following chapter. Additional information gleaned from these analyses should help to better define the date of the house's occupation, as well as the activities and status of its occupants.



## CHAPTER 7

### PIPES, GLASS AND METAL ARTIFACTS

#### 7.0. Introduction

The previous chapter described the analysis of the ceramic assemblage recovered from the house at Area B and provided an understanding of the activities and social status of those who occupied it. This chapter outlines the results an examination of clay tobacco pipes, bottle glass and metal artifacts from the same household. Tobacco pipes and bottle glass have been analysed in order to define more closely the dates of occupation for the house. The analysis of other glass and metal artifacts is included in an effort to provide a better understanding of the activities and social position of the household. This information complements the conclusions reached through the analysis of the ceramic assemblage.

#### 7.1. Pipe Dating

Having arrived at an approximate date for the house's occupation of ca. 1650-1700 based on an analysis of the ceramic assemblage, it is useful turn to other artifact categories to more closely fix the date of its construction and demise. The analysis of clay tobacco pipes recovered from the house itself, as well as layers above and below it will help to clarify the period of occupation.

The analysis of clay tobacco pipe stems and bowls has been used to date colonial sites in North and South America, Africa, and Australia, as well as historic sites in England and on the Continent. Clay pipes began to be produced in England by the 1580s following the introduction of tobacco smoking to Europe. By the early 17th century pipe smoking had become popular and clay pipes became ubiquitous not only in Europe, but in the expanding colonies (Deetz 1977:19; Noël Hume 1970:296). Although the 17th century also saw clay pipes produced in the Netherlands, France and Virginia, relatively few of these have been recovered at Ferryland, most likely as a result of its close ties to England. The style of clay tobacco pipes varied regionally and chronologically. Generally speaking, early forms were quite small with a constricted bowl that angled away from the smoker, a relatively short stem, and a large-diameter stem bore. As the 17th century passed bowls became larger, less constricted and began to tilt back toward the smoker, while stems became longer and stem bore diameters decreased. The high frequency of clay tobacco pipe stems, bowls and fragments on historic sites is a result of not only the pipe's popularity, but also because they were inexpensive and fragile (Noël Hume 1970:296).

Clay tobacco pipes can be used in two ways to date archaeological sites and strata. One method uses the measurement of pipe stem bore diameters to determine the date of a deposit (Harrington 1954; Binford 1961), while the other examines stylistic changes in pipe bowl shapes and makers' marks that differ from region to region and through time.

Each approach has shortcomings, but when used together they can provide a more accurate date than that arrived at through ceramic analysis alone.

The use of pipe stem bore measurements for dating was developed by Harrington (1954) and refined by Binford (1961). It is based on the recognition that pipe stem bore diameters undergo a regular reduction in size from roughly 1620 to 1800. Bore measurements for each pipe stem is taken using drill bits graduated in 64ths of an inch with 9 being the largest and 4 the smallest. The frequency of occurrence of each measurement is then graphed and compared to Harrington's chart which indicates measurement frequencies typical of particular time periods (Harrington 1954:64). This method allows for the identification of the particular period of time represented by the sample. Binford (1961) developed a straight-line regression formula that utilizes the frequency occurrence of stem bore measurements to arrive at a median date for the sample.

The use of stem bore measurements as a dating technique is not without its problems. Harrington (1954:64) noted that the presence of Dutch stem fragments may distort the accuracy of dates because of a smaller bore size relative to their chronologically similar English counterparts. Likewise, pipes produced in different regions of England have different bore diameters from those produced in the West Country (Belcher and Jarrett 1971), while pipes of the Chesapeake region generally have bore diameters larger than their contemporaneous English cousins. Of the six events examined here, comprising

a total sample of 85 complete or mostly complete bowls, only one bowl has been identified as Dutch, while three fragments of Chesapeake-style pipes have been found. The stem fragments of Chesapeake red clay pipes were neither measured nor included in the calculation of frequencies. The stem fragments that accompanied the one Dutch bowl are likely included in those measurements for Event 143, however, with a sample of 571 stems it is unlikely that the results have been influenced significantly.

Sample size is also a concern since too small a sample can produce an inaccurate mean date or date range. At the same time it is unclear how large a sample is necessary to produce accurate dates (Harrington 1954:64; Binford 1961:67; Noël Hume 1970:300). For this reason only relatively large samples have been analysed in detail in an attempt to arrive at more accurate dates. Finally, it is recognized that the accuracy of the mean date is questionable prior to ca. 1680 with dates falling consistently earlier than those provided by other evidence (Noël Hume 1970:300-301; Hanson 1971). For the purpose of the research presented here, dates arrived at using each of these methods are meant to characterize individual samples and to differentiate them from one another rather than to serve as absolute dates for each event. The stylistic variation in pipe bowls and the identification of makers' marks, when considered in combination with these dates, provides a clearer understanding of the chronology of the events from which the samples are derived.

Temporal and spatial variations in English pipe bowl styles have been studied extensively in England and North America (Atkinson and Oswald 1969; Noël Hume 1970; Oswald 1975; Pope 1988; Walker 1977). In many instances type series have been devised which facilitate the identification of complete and relatively complete pipe bowls. Pope (1988, 1992) has developed a typology of bowls recovered in excavations at Ferryland. Recent research by Gaulton (1997) and Carter (1997) expanded this typology. Pope's typology is used here to identify bowl types. Pipe bowls recovered from the house were analysed and grouped by the event from which they were derived. Appendix B provides a summary of pipe bowl styles, stem bore measurements, and makers' marks from the events examined. Figure 7.1 illustrates the range of bowl types found in the occupation layers, Events 143 and 145.

The presence of makers' marks on the bowl, heel, or stem of pipes often allows for the attribution of these pipes to particular makers. The identification of makers' marks on specific bowl types within the typology further confirms the origin and date range assigned. Those bowls, stems, or heels bearing makers' marks have been identified, where possible, and are included with the event from which they were recovered.

The use of pipe bowl forms and makers' marks to date archaeological sites is not without shortcomings. Certain bowl forms were produced in a number of different locations while other forms were produced for relatively long periods of time. For

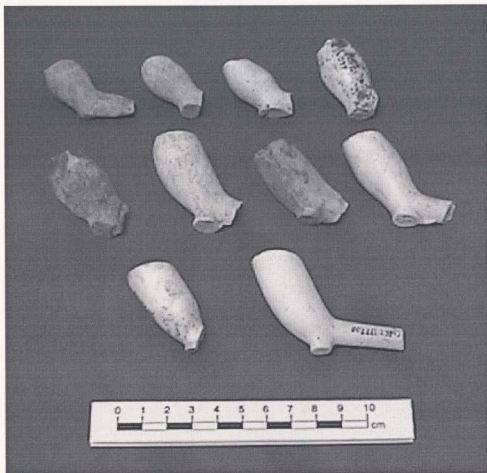


Figure 7.1. Pipe Bowls Recovered From Occupation Events 143 and 145. Top Row, Left to Right - Type A, Type B, Type D, Type J. Middle Row, Left to Right - Type K, Type P, Type V, Type WP. Bottom Row - Dutch Bowl, left, Reuben Sydney Bowl with makers' mark, right.

example the Type “P” pipe bowl at Ferryland can be attributed with certainty to Devon, or more precisely to Barnstaple, but has a production date that spans 50 years from 1660-1710 (Pope 1988, 1992). In this instance, the presence of this bowl form can confirm West Country ties, but can indicate either a last half of the 17th- or an early 18th-century occupation. Likewise, the identification of makers’ marks is generally based, at least initially, on a pipe bowl’s form which is used to identify its origin and approximate date of production. Widely-produced forms with long production ranges are difficult to attribute with certainty. Records of pipe makers and their corresponding marks or initials are incomplete, particularly in the early 1600s. Moreover, different pipe makers shared the same initials and similar marks. These problems notwithstanding, it is possible to attribute most bowls to the area in which they were produced and the date range of their production, based on the tentative identification of one or more makers. Dates arrived at using both bowl types and makers’ marks provide a date range for events and are more accurate than using stem bore measurements alone.

#### 7.1.1.1. Dating the Events: Pipe Stem Bores, Pipe Bowl Types and Makers’ Marks

The analysis of the pipe bore measurements, pipe bowl styles, and makers’ marks is detailed in Appendix B. The results are summarized below.

Calculation of a mean pipe bore stem date for Event 134, a fill layer which covered both the forge and house in Area B, produced a date of 1689. When results calculated

here are combined with those of Carter (1997:207) for Stratum 2b a mean stem bore date of 1682 is produced. Recognizing that mean stem bore dates are relatively inaccurate and provide a date which indicates the approximate middle age of a deposit, it is important to note that both dates differ significantly from Carter's original mean stem bore date of 1659, as well from that of the early 1640's originally noted by Pope (1986:88). The reason for this variation is unclear although it may indicate that Event 134/Stratum 2b is composed of a variety of material derived from different locations on-site, use to in-fill Area B over an extended period of time (Pope 1986:204), or a disturbance and corresponding mixture with the overlying plow zone (Event 137/Stratum 1). Event 134 also contained pipe bowls of mid-18th-century manufacture.

Both Pope's and Carter's analyses of material from Stratum 2b were directed toward determining the earliest date for the deposit, the date at which the forge fell out of use. Each arrived at different dates. Carter (1997:49) suggests a date in the late 1640s or early 1650s, while Pope (1986:91) suggests the forge was no longer functioning by ca. 1640. Despite this difference, both agree that Stratum 2b/Event 134 is a secondary deposit or fill layer laid down following the demise of the forge (Carter 1997:48; Pope 1986:204). Event 134 was a continuous layer that also overlay the house indicating that it was deposited following its abandonment and destruction. It will be shown below that the house itself dated to the second half of the 17th century. Exactly when the large-scale in-filling of Area B occurred remains in question. However, it is clear that it occurred at



some time following the destruction of the house itself, likely in the early 18th century.

Analysis of the pipe bowl styles and makers' marks from Event 134 indicates a date range that spans the 1640s to 1720s. Pope's (1988:32) identification of bowl styles from the forge's Stratum 2b shows a similar range, while Carter (1997:52) notes that the majority (71%) of pipe bowls recovered from Stratum 2b have a date range of 1650-1710. In this context dating of the fill that overlay not only the earlier forge, but also the later house, is less important than fixing the date of occupation of the house itself.

Analysis of pipe stems from Event 169, a fill deposit located within the west end of the house, produced a mean stem bore date of 1680. This event, located above the occupation layers (Events 143 and 145) and below Event 134, was disturbed during the construction of the waterline (Event 202). This disturbance is probably responsible for the presence of two earlier bowls (one Type A and one Type D) likely intrusive from Event 178 further below. The remaining bowl types and makers' marks date this deposit ca. 1650 to 1720. Based on its stratigraphic position and composition, this deposit appears to represent a partial in-filling of the house itself shortly after its destruction.

Analysis of pipe stems from Event 138 produced a mean stem bore date of 1685. This fill deposit, located within the eastern half of the house, shared the same stratigraphic position as Event 169. Event 138 also continued south of Feature 19, but was truncated

by it. Pipe bowl analysis and makers' marks date this deposit ca. 1660 to 1720. It seems likely that Event 138 represents the same in-filling activity as Event 169 to the west. Whether or not both deposits were laid down simultaneously is uncertain. However, both date to roughly the same period and likely represent secondary deposits derived from elsewhere on site.

Analysis of pipe stems from Events 143 and 145, the occupation levels of the house, produced a combined mean stem bore date of 1682. Bowl type frequencies and makers' marks have been analysed separately by event in Appendix B, but are combined here to acknowledge the difficulty encountered in clearly separating one event from the other. Both events are similar in terms of the frequency and occurrence of bowl types and maker's marks. Dating of makers' marks and bowl types indicates a period of occupation dating ca. 1650 to 1710, although the relative frequency of bowls and makers' marks suggests an occupation beginning closer to ca. 1660. This excludes three Type A bowls (ca.1610-1630) that are considered intrusive from underlying Events 177 or 178. The predominance of the West Country in trade with Ferryland is indicated by the frequency (65%, n=28) of pipe bowls from that region identified in this particular assemblage.

Event 178, an earlier occupation level stratigraphically below Events 143/145, produced two pipe bowls from the first half of the 17th century dated ca. 1620-1650. Stem bore analysis of 37 stems produced a mean stem bore date of 1661. This stem bore

date is clearly incorrect and is the result of too small a sample. Event 178 is contemporaneous with either the forge to the south or with the construction of the cobblestone street to the north, but pre-dates the construction and occupation of the house itself.

Dates derived from the analysis of clay tobacco pipes indicate that the house was occupied ca. 1660-1700. This matches an occupation date of ca. 1650-1700 derived from the analysis of the ceramic assemblage. Analysis of the bottle glass from the house was undertaken to further confirm these dates.

## 7.2. Bottle Glass: Dating the Sample

Bottle glass recovered from the house's occupation levels (Events 143 and 145) was analysed in an effort to confirm the date of its occupation. Bottle glass from Events 177 and 178 which pre-date the house's construction was also examined. Those events representing the in-filling of the house following its abandonment (Events 138 and 169) and Area B in general (Event 134 and 137) were examined, but not analysed separately because of the size of these assemblages. It was decided that the interpretation of the occupation of the house itself would not be expanded by further analysis of these overlying fill layers. Suffice it to say that these layers contained a mixture of glass from the 17th and 18th centuries. In the area of the house these layers were disturbed by the construction of a waterline (Event 202) to the west, and Harper's earlier excavations

(Event 144) to the east.

Bottle glass from Events 143, 145, 177 and 178 was first separated by individual event, then grouped by one metre excavation unit in an effort to find cross-mends and identify individual vessels. Additional mends were sought between events. Glass that could represent the remains of glazed windows was separated for further analysis. Glass recovered from the disturbed west end of the house, identified as clearly 18th-century or later, based on lip and base form, as well as the presence of mould seams, was also separated. This material was not included in this analysis.

The identification of wine and case bottle types was aided by the research of John Wicks, a graduate student at Memorial University of Newfoundland studying 17th- and 18th-century bottle glass from the settlement at Ferryland.

The identification of individual case and wine bottles was based on the separation of partial and complete bases from the assemblage. Complete bases were counted as one vessel. Fragmentary bases that were clearly from different bottles based on form, size, or colour were also counted as one. Case and wine bottle necks were identified, but their count was not included as they could have been from any of the bottles already accounted for. Neck, shoulder, and body fragments were not attributed to individual bottles except when joined. This procedure has certainly underestimated the total number of bottles

present in each event. The count arrived at here is an extremely conservative minimum vessel count. It should be noted that no complete bottles were found. In fact, all vessels identified were represented by less than roughly 20% of their original form. Moreover, it should be noted that no evidence for burning of the occupation levels, indicated by the presence of melted glass, was found in the assemblage. Melted glass indicative of destruction by fire has been identified in the cowhouse at Area C (Wicks 1999: personal communication) and in the house at Area D (Crompton 1999: personal communication).

#### 7.2.1. Case Bottles

The dating of case bottles was based on form, method of manufacture, and metrical attributes (Table 7.1). Bottle forms were initially identified using type series from Noël Hume (1970) and Dumbrell (1983). Case bottles were divided into two Types (1 and 2) based on size, form and, potentially, country of origin. Wicks (1999:personal communication) suggests that case bottle fragments that are very thin and light-green in colour were produced in wood-fired furnaces used by the Dutch until the end of the 17th century, while English case bottles produced in coal-fired furnaces are more robust and darker green, similar to that of wine bottles. Noël Hume (1970:62) recognizes the Dutch production of case bottles, but suggests that the English also produced a large number of case bottles in the first half of the 17th century. He does not, however, describe how or if these bottles differed from one another. McNulty (1971:107) notes that case bottles were produced by Spanish and Bohemian glassmakers as well. Faulkner and Faulkner

Table 7.1. Case Bottles By Event and Type: House at Area B.

Catalogue Number	Event	Resting Point Diameter (mm)	Pontil Mark Diameter (mm)	Base Diameter (mm)	Sides	Colour	Type	Date
114347	143	43	22		straight	light green	1	1625-1675
116740	143				straight	light green	1	1625-1675
111802	143	41		51	tapered	dark green	2	1670-1700
113097	145				straight	light green	1	1625-1675
114496	145				straight	light green	1	1625-1675
116350	145				straight	light green	1	1625-1675
141827	145				straight	light green	1	1625-1675
143465a	145				straight	light green	1	1625-1675
143951	145				straight	light green	1	1625-1675
144620a	145	54	24		straight	light green	1	1625-1675
114497	145				tapered	dark green	2	1670-1700
114856	177				straight	light green	1	1625-1675
134366	177				straight	blue green	1	1625-1675
137325	177	38		45	straight	light green	1	1625-1675
114983	178	30	13	47	straight	light green	1	1625-1675

\* Those case bottles represented by bases too fragmentary for measurements were typed by form and colour.

(1987:234) and Baker (1980:60) describe case bottles recovered from 17th century colonial sites in Maine and Rhode Island, respectively, but choose not to attribute them with certainty to either England or Holland. Regardless of problems with geographic attribution, it is apparent that case bottle form changed only slightly through the 17th century.

Earlier case bottles (ca. 1625-1675), Type 1a, were fairly large with rounded, sloping shoulders and a short collared neck that accepted a pewter cap (McNulty 1971:103-104; Noël Hume 1970:69; Faulkner and Faulkner 1987:232). A variant of this form, Type 1, had no pewter top, but instead a sheared off and tooled out neck. Type 2 case bottles had a thicker, shorter neck with an everted lip. After 1650 the sides of this form began to taper and the glass became thicker and darker (McNulty 1971:104-105). Type 2 case bottles began to outnumber (or replace) Type 1 bottles in Area C following the Dutch raid of 1673 (Wicks 1999:personal communication). Type 2 case bottles at Ferryland have been assigned a production date of ca. 1670-1700, recognizing, of course, that Type 2 case bottles continued to be produced into the 18th century. The frequency of each type of case bottle is recorded in Table 7.1. Examples are illustrated in Figure 7.2.

Although the number of case bottles identified from occupation events (Events 143 and 145) is small (n=11), two Type 2 case bottles dating ca. 1670-1700 were found. The



Figure 7.2. Case Bottles. Type 1 Bottle Bases - Event 145, 144620, top left, Event 143, 114347, bottom left. Type 2 Bottles - Neck, Event 145, 143677, top right, Bases, Event 145, 114497, centre, right, Event 143, 111802, bottom right.



relative abundance of Type 1 case bottles in these events points to the house having been constructed and occupied prior to 1675 at least, and suggests an occupation that dates sometime prior to 1670. Case bottles ( $n=4$ ) from occupation and fill levels that predate the construction of the house, Events 178 and 177, respectively, are all of the earlier Type 1 variety. This indicates that these levels could date to the construction of either the cobblestone road (Feature 56) to the north or the forge to the south during the early years of the colony.

### 7.2.2. Wine Bottles

Research by Wicks (1999:personal communication) has produced a typology of English wine bottles from the 17th century. This typology identifies six types (A-F) based on formal and metrical attributes taken from dated examples in England and North America. This typology has been further supplemented by well-dated examples from Ferryland. In general, this typology incorporates the measurement of certain formal characteristics that are known to change through the 17th century and is similar to the research of Jones (1986) on English wine and beer bottles. Early “shaft and globe” bottles have noticeably longer, narrower necks and spherical bodies when compared with later “onion” bottles whose necks become shorter and wider, while their bodies become lower and broader. These characteristics can be measured, compared, and differentiated to produce a typology that identifies and quantifies these changes. The advantage of this typology is that it allows the opportunity to date wine bottles that are represented by only

their base. A variety of measurements were taken from wine bottle bases, both complete and fragmentary. These measurements were then compared to those characteristic of each type. These measurements and their corresponding types are shown in Table 7.2.

All wine bottles (n=8) identified in the occupation levels of the house date to the last quarter of the 17th or first quarter of the 18th century. No dateable wine bottle fragments were recovered from the earlier occupation and fill events (Events 178 and 177 respectively). Two wine bottle fragments were recovered from these events. Of those bottles identified in the house's occupation levels, all but one could be identified as Type E (ca. 1682-1705). Four of the bottles recovered are definitely Type E, while three others could be either Type E or F. The one bottle attributed with certainty to Type F (ca. 1698-1721) was recovered from outside the house and may represent activities following the abandonment of the house.

One wine bottle seal "Slofs 1699" (Figure 7.3) was recovered during the excavation of the house (Wicks 1998). This seal was found in a fill deposit (Event 222) outside and adjacent to Wall Segment 15 at the western end of the house. This fill deposit appears to post-date the abandonment of the house.

The presence of wine bottles dating to the last quarter of the 17th century demonstrate that the house was occupied following the Dutch raid of 1673 and at least as

Table 7.2. Wine Bottles From Occupation Levels: House at Area B.

Catalogue Number	Event	Resting Point Diameter (mm)	Pontil Mark Diameter (mm)	Base Diameter (mm)	Indent Height (mm)	Type	Date
141854	145					E or F	1682-1721
144347	145	90	50		12	E	1682-1705
156690	145	90			13	E	1682-1705
156845	145					E or F	1682-1721
158642	145	92	51	125	20	E	1682-1705
161721	145					F	1698-1721
162255	145					E or F	1682-1721
166554	246 <sup>1</sup>					E	1682-1705

\* Those wine bottles represented by bases too fragmentary for measurements were typed by form.

<sup>1</sup> Event 246 represents the clean out of the hearth (Feature 33) associated with the occupation of the house.



Figure 7.3. "Slofs 1699" wine bottle seal from Event 222, Area B. Image not to scale.

late as the French attack of 1696. The occurrence of Type 1 case bottles (ca. 1625-1675) suggests that the house was occupied prior to the Dutch raid. Although the total sample size is small ( $n=19$ ), it is interesting that the later Type 2 case bottles are much less frequent in the sample than wine bottles which overlap their date of manufacture. Stated another way, at a later date (ca. 1682), wine bottles are more frequent than case bottles in this assemblage. Whether or not this is a merely a result of the methods used here to quantify bottles, an indication of a shift in bottle preference, supply, or consumption, is unclear.

### 7.2.3. Pharmaceutical Bottles

Two pharmaceutical bottles were recovered from the occupation levels of the house. One is represented by only a fragmentary base. This small-diameter bottle has a light blue-green colour, a relatively high conical kick and dates to the second half of the 17th century (Noël Hume 1970:74). The other bottle is represented by body sherds and a complete neck and shoulder. This flat-sided, square-shaped bottle is light blue-green in colour and has a relatively tall, slightly tooled out neck. This bottle may be from France. It appears similar to the Type I *flacon* identified in excavations at Louisbourg and dates to the early 18th century (Harris 1979:96,125).

### 7.3. Other Glass

In addition to case and wine bottle glass the remains of wine glasses and probable window glass were examined.

#### 7.3.1 Wine Glasses

The remains of at least three wine glasses were identified. The stem and base of two different lead crystal glasses were found, the former similar in form to Noël Hume's Inverted Baluster, Type IX (ca. 1700-1725) (1970:190). Bowl fragments of another extremely thin, carefully finished bowl, likely of Venetian origin (Noël Hume 1970:186; Mathias 1999:personal communication), account for the third glass. All three were located in Event 145, considered here to represent the main floor of the house. Their

presence lends support to the notion that the consumption of alcohol was popular at Ferryland (Section 6.7.2). The expense of such vessels also suggests that only those of some means could afford such a small luxury.

### 7.3.2. Window Glass

In the analysis of the glass assemblage recovered from the house those fragments that could potentially have been identified as window glass were set aside. The differentiation of window glass fragments from those of case bottles was difficult because of their similarity in colour and thickness. Although a difference in the manufacturing of case bottles *versus* window glass should be evident in terms of the direction of air bubbles within the glass, the fragments examined were too small to allow such a distinction. Only those fragments that were flat and of a sufficient thickness not to be case bottle glass were considered as possible window glass. This highly subjective separation of potential window glass from the assemblage resulted in the identification of only five fragments which showed no pattern in either their horizontal or vertical distribution within the house. Such a low figure suggests that the house did not have glass windows. The absence of any lead comes or turned leads that would have held the glass quarries in place further supports the suggestion that the house lacked glass windows (Noël Hume 1970:233).

#### 7.4. Metal Artifacts

A brief analysis of the various metal artifacts recovered from the house is included here because they are suggestive of some of the activities carried out by its occupants. The presence of certain artifacts might also be considered indicative of the social status of the household. Finally, iron cannon balls found within the house provide some evidence for its demise, likely as a result of the French attack of 1696.

This analysis is purposefully cursory for two reasons. The first relates to problems with the preservation of metal artifacts, the second to the interpretation of an archaeological assemblage of metal items. In the first case it must be realized that the preservation of metal artifacts on historic sites is biased as a result of variations in burial environments at both intra- and inter-site levels. In some cases preservation of metal artifacts is poor or non-existent, while in others preservation is excellent. Variation in metal preservation aside, it should also be recognized that the age and function of a particular site, the activities carried out there, the metal-working abilities of a site's occupants and the construction techniques used for building will also result in variations in the metal assemblage used at a site. For example, comparison of metal artifacts recovered from an urban *versus* a rural context, or the house of a boat-builder or cooper with those of a middling planter would probably show some differences, just as an assemblage derived from an area where houses were commonly constructed of wood, as opposed to stone or brick, would also likely differ. As a result, intra- or inter-site comparisons of

household assemblages can be misleading because certain metal artifacts may have, on the one hand, not been used in either household originally, or on the other, not have been preserved in the burial environment. No such comparison is made in this analysis.

However, it should be noted that the quality of preservation of metal artifacts from excavations at Ferryland is good with the house and forge at Area B displaying relatively better preservation than other areas of the site (Mathias 1998, 1996). This offers potential for the comparative analysis of a variety of household assemblages from the same site at some time in the future.

The second difficulty in interpreting archaeologically-derived metal assemblages is a direct result of the nature of the metal artifacts themselves. Metal artifacts, be they complete, worn, repaired or broken prior to their deposition, will corrode in any burial environment. The degree to which an artifact has deteriorated during burial directly affects the ability to identify it positively upon excavation. In many instances corrosion products make it difficult to identify these artifacts. X-radiography of iron artifacts allows the identification of some items, as does the chemical or mechanical removal of corrosion products. However, a majority of the iron artifacts recovered from the house remain unidentified. Iron artifacts as well as relatively softer copper, lead, and pewter items can also become deformed in the burial environment. It is particularly difficult to identify accurately all bent or flattened lead and copper items. This analysis includes only those metal artifacts that were readily identifiable. Iron nails and spikes, which numerically



account for the vast majority of the iron artifacts recovered from the house, are not included.

The results of this analysis are presented in Table 7.3. Identified metal artifacts have been grouped into functional categories (Weaponry, Fishing, Hardware and Tools, and Domestic) by material type. This table provides evidence for a range of activities that occurred either within the house itself or in which members of the household participated. Artifacts are discussed in more detail below by material type and functional category.

#### 7.4.1. Iron Artifacts

Excluding lead gun balls and shot, iron artifacts account for the largest proportion of identified metal artifacts recovered from the house (56%, n=40). Unidentified iron artifacts such as strap iron, hinges and staples would likely increase representation in the hardware and tools category while unidentified iron fragments, most likely from iron kettles, could similarly increase representation in the domestic category. A list of those artifacts discussed here is included in Table 7.4.

Three cannon balls were identified. Their presence is suggestive of at least a partial destruction of the house by the French in 1696. Two of these were found in Event 143, which may represent the remains of the loft over the eastern end of the house, indicating, perhaps, that the roof of the house was “holed” by the French.

Table 7.3. Metal Artifacts by Material Type and Functional Category from the House at Area B, Events 143 and 145.

Function	Iron	Lead	Copper
Weaponry	3 cannon balls 1 gun plate 1 gun barrel? 1 gun hammer 1 sword hilt	32 gun balls* 3,097 shot** 5 sprue	
Fishing	6 fish hooks 1 fish prong 1 splitting knife	2 weights	
Hardware and Tools	3 hinges      2 strap iron 1 pintle4 rings 1 handle      1 chisel 2 locks 1 cooper's axe 1 staple      1 dividers	5 sheet lead 2 sheet lead off-cuts	3 rivets 1 nail
Domestic	5 knives 2 scissors 1 lamp	1 lid	10 kettle/cauldron fragments 2 buttons 2 buckles 1 bulb/pendant 2 coins

\* Lead gun ball count includes 28 from E 143 and 4 from E 145.

\*\* Lead shot count includes 2,720 from E 143, 377 from E 145.

Table 7.4. Identified Iron Artifacts from Area B, Events 143 and 145.

Object	Catalogue Number	Event	Excavation Unit
Cannon Ball	109008	143	N4 E1
Cannon Ball	117081	143	N7 E2
Cannon Ball	139302	145	N6 W4
Gun Plate	157221	145	N9 E1
Gun Barrel?	109399	143	N7 E1
Gun Hammer	160011	145	N9 W1
Sword Hilt	117970	184	N7 E3
Fish Hook	109010	143	N6 E0
Fish Hook	109012	143	N6 E0
Fish Hook	112108	143	N6 W1
Fish Hook	112813	145	N5 E0
Fish Hook	142734	145	N9 W1
Fish Hook	160008	145	N9 W1
Fish Prong	117845	145	N4 E3
Splitting Knife	109871	143	N7 E2
Hinge	109614	145	N7 W1
Hinge	112077	143	N7 E1
Hinge	142744	145	N8 E0
Pintle	163379	145	N6 E4
Handle	163709	145	N9 W1
Ball Lock	109619	145	N7 W1
Padlock	112111	143	N6 E1

Table 7.4. Identified Iron Artifacts from Area B, Events 143 and 145, continued

Object	Catalogue Number	Event	Excavation Unit
Staple	117846	145	N5 E3
Strap Iron	106927	143	N5 E3
Strap Iron	109343	143	N7 E1
Ring	109617	143	N6 E1
Ring	115236	143	N5 W1
Ring	117344	145	N5 E2
Ring	117958	143	N7 E2
Chisel?	115213	145	N6 W1
Cooper's Axe	157793	145	N9 W1
Dividers	157311	145	N9 E1
Knife Handle	97882	143	N7 E2
Knife Blade	97885	143	N4 E2
Knife Tang	109782	145	N7 W1
Knife Blade	142731	145	N8 E1
Knife or Straight Razor Handle	160119	145	N6 E4
Scissors	117434	145	N6 E0
Scissors	142052	145	N3 W4
Lamp	112100	143	N6 E0

Since evidence for the rapid destruction of the house is lacking in the form of burnt structural remains, fire-reddened soil, relatively complete vessels, and burnt or melted ceramics or glass, it is possible that the French damaged this house only to the extent that it was beyond easy repair. The temporary abandonment of the settlement in the winter of 1696-1697, following the French attack, likely led to the further demise of the structure. Two cannon balls are illustrated in Figure 7.4.

Three gun-related parts, a gun plate, a possible gun barrel, and gun cock can be taken as evidence of either hunting carried out by the household or of defense. The style of gun plate has not been determined because of its degree of deterioration (Figure 7.5). However, the presence of a gun cock, as well as 16 gun flints indicates that flintlock mechanisms were common on firearms used by the household. The presence of English or dog lock firearms at Ferryland has been noted in the analysis of materials from the earlier forge (Carter 1997:98). The section of a possible small-bore gun barrel (Figure 7.5) has been heavily damaged by crushing at one end. It seems likely that this damage occurred prior to deposition, but just how remains unclear. The length of this possible barrel suggests that it may have been a section from a longer piece since its present length is apparently too long for a pistol. The presence of a large amount of lead shot (Section 7.4.2) for fowl or game suggests that hunting may have been the prime use of firearms in the household. The low representation of lead gun balls could be taken as evidence for either the hunting of larger game or of defensive purposes.



Figure 7.4. Iron Artifacts: Ball Locks and Cannon Balls. Ball Lock from Area C, top left. Ball Lock, Area B, Event 145, 109619, top right. Cannon Balls from Area B, Event 143, 117081, bottom left, Event 143, 109008 bottom right. Ball Locks require further mechanical treatment.



Figure 7.5. Iron Artifacts: Gun Plate, Sword Hilt, and Gun Barrel. Gun Plate, Event 145, 157221, top left. Sword or Dagger Hilt, Event 184, 117970, top right. Possible Gun Barrel, Event 143, 109399, bottom. Gun Plate before treatment, Sword Hilt after treatment, Gun Barrel after chemical treatment -requires further mechanical treatment.

One iron hilt from a sword or dagger (Figure 7.5) was found in front of the hearth in association with a deposit related to the house's occupation. This item may have served as either a defensive weapon or as a symbol of social position.

Fishing activities are represented in the iron assemblage by the presence of at least six fish hooks, one fish prong and a splitting knife (Figure 7.6). Fish hooks were distributed equally between Events 143 and 145 and were located in the middle of the house, while the fish prong was recovered from the southeast corner of the house in Event 145 and the splitting knife found in the centre of the house, west of the hearth in Event 143. This distribution suggests that no specific location was used to store such equipment in the house. Moreover, items are indicative of the occupation of at least some in the household.

The category of Hardware and Tools is the best-represented of all identified iron artifacts. This category includes those items used in either the construction or maintenance of the house itself and of boats or other structures. Artifacts that likely relate to the construction of the house include: three hinges, one pintle, one handle and two locks, one a ball lock, the other a padlock. Most of these items are illustrated in Figures 7.4, 7.7 and 7.8. The occurrence of these objects indicates the presence of doors and windows, although their distribution within the house does not clearly indicate the location of these openings. The recovery of two locks suggests a need to protect the house and/or





Figure 7.6. Iron Artifacts: Splitting Knife and Fish Hooks. Splitting Knife, Event 143, 109871, top. Fish Hooks from Event 143, 109010, bottom left, 109012, bottom centre, 112108, bottom right.



Figure 7.7. Iron Artifacts: Padlock and Hinges. Padlock, Event 143, 112111, top. Hinge, Event 145, 109614, centre. Hinge, Event 145, 142744, bottom.



Figure 7.8. Iron Artifacts: Iron Rings, Staple and Handle. Iron Ring, Event 143, 115236, top left. Iron Ring, Event 145, 117344, top centre. Iron Ring, Event 143, 109617, top right. Staple, Event 145, 117846, bottom left. Handle, Event 145, 163709, bottom right.

its contents from destruction or theft. The interior mechanism of the ball lock has been lost to corrosion, although the lock's key has apparently corroded in place. X-radiography shows the interior mechanism of the padlock (Figure 7.9).

The maintenance and repair of structures or boats is represented by hardware and tools. One staple, two pieces of strap iron, and four iron rings are likely indicative of some sort of repair activities, while the presence of a chisel, a cooper's axe and dividers suggests a certain amount of woodworking. Some of these items are illustrated in Figures 7.8 and 7.10. The distribution of these objects within the house, although confined to the central and eastern portions, does not show any distinct patterning. However, the strap iron and three of four iron rings were found in Event 143, while the woodworking tools came from Event 145. If Event 143 does represent a loft chamber or storage area, this suggests that some hardware-related materials were purposely stored upstairs, while woodworking tools were kept on the main floor.

The category of Domestic function is represented by five knives, two pair of scissors of mid-17th-century form (Noël Hume 1970:268) and one iron lamp (Figures 7.10 and 7.11). Knives were found most frequently in the eastern half or hearth end of the house with three from Event 143 and the other two from Event 145. Both pair of scissors were found in Event 145, one from the southwest corner and the other in the middle of the house. The iron lamp was found in the centre of the house in Event 143. The distribution

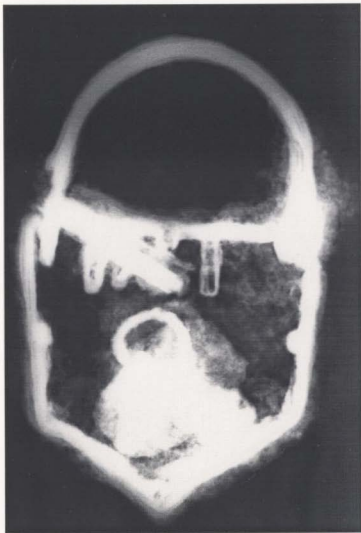


Figure 7.9. X-radiograph of iron padlock interior (112111). Image not to scale.



Figure 7.10. Iron Artifacts: Dividers, Knife Tang, Scissors, and Knife/Straight Razor Handle. Dividers, Event 145, 157311, top left. Knife Tang, Event 145, 109782, top right. Scissors, Event 145, 117434, bottom left. Knife/Straight Razor Handle, Event 145, 160119, bottom right. Dividers and Knife Tang after treatment. Scissors and Knife/Straight Razor Handle require further mechanical treatment.



Figure 7.11. Iron Lamps. Area B, Event 143, 112100, left. Area B, 139028, Northern Section, right. Both lamps are fragile and require further mechanical treatment and restoration.

of knives and scissors does not appear meaningful. The position of the iron lamp in the centre of what might have been a loft which potentially served for both accommodation and storage would have provided illumination and some heat in such an enclosed space.

#### 7.4.2. Lead Artifacts

Identified lead items account for 14% (n=10) of the assemblage of metal artifacts, excluding gun balls and shot. Counts for lead shot (n=3,097) and gun balls (n=28) have not been included in the calculation of percentages because of the large amounts of each found during excavation of the house. Lead artifacts, excluding shot and gun balls are listed in Table 7.5.

Ammunition and sprue (Figure 7.12) have been included in the functional category of Weaponry in order to illustrate on the one hand, that gun balls and shot were found in the house in relatively large quantities, and on the other that at least some shot was likely manufactured, as necessary, by the occupants of the house as evidenced by the presence of sprue, as well as sheet lead. The distribution of shot and gun balls by event within the house suggests that the vast majority was stored in the proposed upper loft or chamber, represented by Event 143. Shot and gun balls from both events were concentrated in the centre of the house. A total of 3,097 pieces of lead shot were found with 88% (n=2,720) recovered from Event 143. The pattern is the same for gun balls with 88% (n=28) of the total (n=32) found in Event 143. The predominance of lead shot suggests that hunting,



Table 7.5. Lead Artifacts from Area B, Events 143 and 145.

	Catalogue Number	Event	Excavation Unit
Sprue	112114	143	N6 E1
Sprue	115225	145	N5 E1
Sprue	117070	143	N7 E3
Sprue	117071	145	N6 E0
Sprue	157038	145	N9 E0
Fishing Weight	107847	143	N5 E1
Fishing Weight	115224	145	N5 E1
Sheet Lead	109624	143	N6 E3
Sheet Lead	142702	145	N8 W1
Sheet Lead	157024	145	N9 E0
Sheet Lead	157679	145	N7 E4
Sheet Lead	157680	Feature 33	N7 E4
Off-Cut	117350	145	N5 W1
Off-Cut	157273	145	N9 E1
Lid	109625	143	N6 E1



Figure 7.12. Lead Artifacts: Gun Balls, Shot and Sprue. Gun Balls from Event 143, 97952, 97204, 97950, top. Lead Shot from Event 143, 109170 and 109169, centre. Sprue, Event 145, 117071, bottom left, Event 143, 117070, bottom centre, Event 143, 112114, bottom right.

rather than defense, was the main purpose which ammunition and firearms served in the household.

The distribution of sprue, which might be considered indicative of a location where shot was manufactured indoors, shows no clear pattern. The majority is concentrated in the centre of the house, with three of five pieces recovered from Event 145. This may indicate that the manufacture of lead shot took place on the main floor of the house where the hearth would have been accessible.

Fishing activities are represented by the presence of two lead weights, one of which is clearly a net sinker (Figure 7.13).

Repair or maintenance of boats or buildings is represented by the presence of five pieces of sheet lead and two off-cuts (Figures 7.13 and 7.14). Sheet lead could easily be used for the patching of holes and other short-term repairs, as well as the manufacture of fishing weights or ammunition. Folded or perforated sheet lead and off-cuts occurred most often in Event 145, the main floor of the house but show no clear distribution. Two pieces of sheet lead were, however, recovered immediately west of the hearth, which may indicate their use for the production of ammunition. This suggests that the hearth may have been used to melt sheet lead off-cuts for the production of ammunition or fishing weights.



Figure 7.13. Lead Artifacts: Sheet Lead Off-Cuts, Fishing Weights and Lid. Sheet Lead Off-Cuts from Event 145, 117350 and 157273, top left and centre. Fishing Weights, Event 143, 107847, top right, Event 145, 115224, bottom right. Lid, Event 143, 109625, bottom left.



Figure 7.14. Lead Artifacts: Sheet Lead. Folded Sheet Lead, Event 143, 109624, top left. Sheet Lead, Event 145, 157204, top right. Folded Sheet Lead, Event 145, 157679, bottom left. Perforated Sheet Lead, Feature 33, 157680, bottom right.

Domestic function is represented by a single flattened lid found in the centre of the house which likely served to cap a case bottle (Figure 7.13).

#### 7.4.3. Copper Artifacts

Copper artifacts account for 30% (n=21) of the metal assemblage. Identified copper artifacts are listed in Table 7.6. A total of 19 unidentified copper fragments were recovered which may represent either copper cauldron fragments or sheet copper used for patching and repair. No items were identified in the Weaponry or Fishing categories.

The Hardware and Tools category is represented by three rivets and one nail. These rivets may be parts of deteriorated copper cauldrons or may represent spare rivets reserved for repair purposes. The nail is represented by only a portion of its tapered shaft and point. Its function has not been determined. No clear patterning is evident in the distribution of these items.

The Domestic functional category is the best-represented. Ten copper cauldron fragments were identified including rim and bail sections, as well as longer riveted seams that correspond to the sides of these vessels (Figure 7.15). Based on differences in rim form and quality of construction, it is apparent that at least two different vessels are represented. Fragments tend to cluster along the approximate east-west mid-line of the house, with six of the ten fragments recovered from Event 145. However, beyond this no

Table 7.6. Copper Artifacts from Area B, Events 143 and 145.

	Catalogue Number	Event	Excavation Unit
Rivet	109753	143	N7 E1
Rivet	109818	145	N7 E0
Rivet	157806	145	N9 W1
Nail	157269	145	N9 E1
Kettle/Cauldron Fragment	109162	143	N7 E0
Kettle/Cauldron Fragment	109521	143	N7 E2
Kettle/Cauldron Fragment	109754	145	N7 W1
Kettle/Cauldron Fragment	109758	145	N7 W1
Kettle/Cauldron Fragment	109761	143	N7 E1
Kettle/Cauldron Fragment	109762	143	N7 E3
Kettle/Cauldron Fragment	112248	145	N6 W1
Kettle/Cauldron Fragment	145386	145	N8 E3
Kettle/Cauldron Fragment	157259	145	N9 E1
Kettle/Cauldron Fragment	157678	145	N7 E4
Button	107620	143	N5 W1
Button	157108	145	N9 E0
Buckle	142193	145	N5 W1
Buckle	145219	145	N2 W5
Bulb/Pendant	107615	143	N5 E1
Coin, English	160303	145	N9 E1
Coin, French?	109141	143	N5 E0



Figure 7.15. Copper Artifacts: Cauldron Fragments. Rim and Bail Sections, Event 145, 157259, 157678, 109758, top. Seam Fragments, Event 143, 109762, centre left, Event 145, 109754, bottom left, Event 143, 109162, bottom centre, Event 143, 109521, bottom right.



pattern is evident in their distribution. The presence of copper cauldron fragments in the house makes it clear that the use of such vessels can account for the low proportion of ceramic cooking vessels observed in the ceramic assemblage.

Copper items relating to the clothing or adornment of those who occupied the house include two ball-shaped copper buttons, two buckles, one a shoe buckle, and one hollow bulb or pendant (Figure 7.16). The presence of these objects suggests that some in the household were of sufficient means to afford at least a few of these more expensive items. Noël Hume (1970:86) suggests that copper shoe buckles were commonly worn by those “on the next rung down the ladder” from the gentry.

Two copper coins, one an English William III Sixpence (dated 1694-1702), the other possibly French based on its similarity in size to a 2 Denier, were found. The presence of the dated English coin confirms that the house was occupied at least as late as 1694. The possible French coin could easily have been lost during the attack of 1696.

#### 7.4.4. Pewter Artifacts

One pewter artifact, possibly a lid from a Westerwald mug, was recovered from Event 145 at the western end of the house. This item was fragmentary and heavily deteriorated. The nature of its corrosion was similar to that of a large pewter plate excavated outside the house from a fill layer that covered the forge. The occurrence of

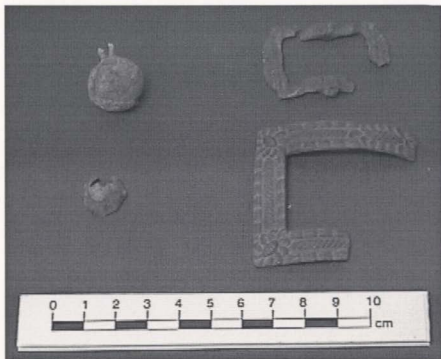


Figure 7.16. Copper Artifacts: Bulb/Pendant, Buckles and Button. Hollow Bulb or Pendant, Event 143, 107615, top left. Buckle, Event 145, 142913, top right. Ball-Shaped Button, Event 143, 107620, bottom left. Shoe Buckle, Event 145, 145219, bottom right.

one pewter artifact from within the house indicates that such items were used by its occupants, however, the nature of the burial environment in Area B has dictated against their survival (Mathias 1999:personal communication). It may also be the case that pewter objects, being valuable, readily portable, and easily recycled were removed from the house by either French looting or by its former occupants prior to their forced departure.

This brief summary of the metal artifacts recovered from the house has identified a variety of different items and suggested activities that might be inferred by their presence. Cannon balls found within the house indicate that at least some damage to the house was caused by the French attack of 1696. The presence of firearms and ammunition show that hunting was carried out by some in the household. These items also hint at the possibility that defense was of some concern. The presence of fishing gear is not surprising given the fishery-focused orientation of the majority of Ferryland's residents. The variety of hardware and tools of iron, lead and copper indicates that a range of building or maintenance tasks were carried out by occupants of the house. The production of lead shot, suggested by the presence of sprue and sheet lead, may have taken place indoors. The location of some activities and the storage of certain materials is further suggested by the distribution of artifacts within the house. Domestic activities are reasonably well-represented by knives, scissors, kettle or cauldron fragments, and a lamp. Ceramic vessels, described in the previous chapter, clearly played a significant role in the domestic

activities of the household. Copper buttons, buckles, a bulb or pendant, as well as an iron sword or dagger hilt could be interpreted as indicative of a household of some means.

This chapter has provided an analysis of clay tobacco pipes and bottle glass in order to determine the dates for the construction and destruction of the house. Clay pipe dates indicate an occupation commencing ca. 1660 and continuing into the 1690s. Bottle glass evidence tends to confirm these dates. The presence of an English copper coin confirms that the house stood at least as late as 1694. The analysis of metal artifacts included here has provided a broader understanding of the activities and status of the household. This analysis complements those conclusions reached through the analysis of the ceramic assemblage in Chapter 6.

## CHAPTER 8

### CONCLUSION

#### 8.0. Summary

This thesis has presented the results of the examination a domestic structure located in Area B, its structural remains and its associated artifact assemblages. This research was undertaken in an effort not only to identify the dates of its construction, its demise, and the chronological development of this one area of excavation but also to learn more about the activities and social position of its occupants within the larger context of the settlement at Ferryland, as well as in colonial North America.

The description and preliminary interpretation of the stratigraphy and features found during excavations at Area B, presented in Chapters 2 and 3, illustrates the chronological development of this area. The lowest levels of original beach indicated the presence of Beothuk Indians, as well as migratory European fishers of the 16th century. Overlying this was a cobble platform likely constructed by English fishers in the later 1500s. With the establishment of Sir George Calvert's Colony of Avalon in 1621, the slope to the south of Area B was cut back to accommodate the early forge and provide fill that was likely thrown northward to provide easy access to the newly-built forge, as well as level ground for the construction of Captain Wynne's cobblestone street. The forge ceased operations at some time in the 1650s. Following this layers of fill were added in

the north half of Area B to provide level ground for the dry-laid stone footings that supported a timber-framed house. Dates derived from the analysis of the ceramic, glass, and clay tobacco pipes suggest a construction date ca. 1660. Historical documents record the French destruction of the settlement at Ferryland in the fall of 1696, as well as the forced departure of its residents. While evidence for the destruction of the house by fire is lacking, the presence of three cannon balls within the occupation layers of the house point to its partial destruction. Following the return of Ferryland's former residents, it appears that a portion of the stone footings of the house were scavenged for use as building materials. Area B was filled in and leveled at some time near the turn of the century.

The analysis of the structural remains of the house, presented in Chapter 5, has provided an understanding of the building techniques used in its construction, as well as an impression of how the interior space within the house may have been used. The construction, outfitting and layout of the house point to a continued West Country influence at Ferryland and suggests that its residents were of a middling sort. In 17th-century England and colonial North America, the use of the main floor as an area for a variety of activities was not uncommon, nor was the use of upper stories for accommodation or storage.

The detailed analysis of the ceramic assemblage in Chapter 6 allowed assignment of a tentative date for house occupation of ca. 1650-1700. The examination of ware

frequencies illustrates more than the range of trade in Newfoundland fish. The relatively high frequency of foreign wares also indicates that this household not only had access to this market but was of sufficient means to be able to acquire some of the more expensive items. The study of vessel type frequencies illustrates the continued reliance of Ferryland's residents on imported fats and oils, as evidenced by the high frequency of food storage and preparation vessels, as well as an apparent lack of dairying. The relatively low frequency of ceramic cooking vessels suggests that vessels of other materials must have been used for cooking. The presence of copper kettle fragments in the metal assemblage shows that this was, in fact, the case. An average representation of food service vessels could be interpreted as either the middling status of the household but may also be indicative of the use of either wooden or pewter vessels for this purpose, neither of which has been preserved. The high frequency of beverage service vessels serves not only as evidence for a continued high demand for alcohol but also hints at the house's occasional use as a tavern. A low frequency of hygiene-related ceramic vessels may be considered evidence for a relatively healthy household.

The analysis of clay tobacco pipes and bottle glass in Chapter 7 served to date more accurately the occupation of the house to ca. 1660-1696. The high representation of clay tobacco pipes of West Country origin identified in the assemblage emphasizes its dominance in trade with the settlement. The relative absence of window glass suggests the house lacked glazed windows common in homes of the gentry. However, the presence

of wine glasses hints that the household may have had aspirations to a more elevated position.

The study of the metal artifacts, also in Chapter 7, revealed not only that a variety of activities were carried out by the household, from hunting and fishing to, potentially, the manufacture of lead shot. The distribution of some of these artifacts within the house is also suggestive of how interior space was utilized. Moreover, some of these artifacts, an iron sword or dagger hilt and copper buckles and buttons, are further indications that some of the occupants of this house were of some means.

### 8.1. Conclusion

The research presented here has presented an interpretation of the lifestyle and activities of one resident household at the location of Sir George Calvert's original Colony of Avalon. What seems clear is that this household occupied a timber-framed structure that was built ca. 1660 and abandoned in 1696. It is likely that this household was of the middling sort and participated in the lucrative cod-fishery. These planters may well have owned a couple of small fishing boats and a stage, and employed fishing crews which traveled to Ferryland on a seasonal basis. They were also likely involved in the raising of crops and livestock, as well as hunting.

Whether or not this particular household can be considered representative of the



middle class at Ferryland remains an open question. To date, only one other domestic structure, the house at Area D, has been completely excavated. The excavation of what may to be a house of the gentry class in Area F, based on the frequency of expensive and rare imported ceramic wares, continues. The ceramic assemblage recovered from the forge is considered to represent those of the lower class, the fishing crews, and there are some obvious differences between this assemblage and that recovered from the house at Area B. Likewise, comparison with the smaller house of a Renew's fisherman shows some clear differences. However, it should be noted that the settlement at Ferryland was one of the largest on the Avalon Peninsula. Because of its involvement in the fishery, its residents had access to wide-ranging trade links. Moreover, when the fishery was successful, those involved profited handsomely. Therefore, the comparison of ceramic frequencies with sites located elsewhere in England and colonial North America, whose economies and trade ties differed, can lead to interpretations that can be misleading.

## 8.2. Directions for Future Research

If the research presented here can be considered as a contribution toward the analysis of the correspondence between the historical documentation of English settlement on the Avalon Peninsula and the material evidence uncovered through archaeological excavations, then it would be useful and informative to compare this assemblage not only with other assemblages from Ferryland itself but also with local sites of the same time frame and orientation. Such research could identify differences and similarities in the

activities and status of those who were roughly contemporaries. Moreover, the comparison of materials from Ferryland with those of John Guy's 1610 plantation at Cupids, Conception Bay, or William Vaughan's 1617 plantation at Renews or Aquaforte would be crucial in identifying the material changes likely to be found in the transition between these earlier planters and those who arrived on the English Shore in the mid-17th century.

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APPENDIX A: CERAMIC CATALOGUE FROM AN ANALYSIS OF THE HOUSE  
AT AREA B, EVENTS 143 AND 145.





Figure A.1. North Devon Coarse Earthenware Vessels. North Devon Gravel Temper Lid Fragments, Vessel 19, top left, Vessel 22, bottom left. North Devon Smooth Temper Tall Pot Rim and Base, Vessel 44, top right. North Devon Gravel Temper Pipkin Handle and Fragmentary Rim, Vessel 4, bottom right.

- |     |   |                 |           |
|-----|---|-----------------|-----------|
| 6.  | Pipkin ND Gravel  | base dia. ~20cm | 1450-1750 |
|     | 158640, 162215, 119764, 114864, 158352, 119124, 111292, 144585, 114932, 159770, 156634, 144520, 158831, 159509, 111615  |                 |           |
|     | N9 E1 (E 134), N9 E0, N7 E0 (E 143), N7 E3 (E 143), N9 E2, N4 E2 (E 143), N7 E1 (E 143), N8 E1, N6 E2 (E 143), N9 E1, N9 E0, N8 E0, N9 E0, N9 W1, N7 E1 (E 143) |                 |           |
|     | E 134, E 145, E 143   |                 |           |
|     | Comments: deteriorated green lead glaze interior, a number of sherds matched with base, no rim, burnt, foot attachment  |                 |           |
|     |   |                 | Cooking   |
| 7.  | Pipkin ND Gravel  | mid. dia. ~23cm | 1450-1750 |
|     | 122247  |                 |           |
|     | N6 E3   |                 |           |
|     | E 145   |                 |           |
|     | Comments: deteriorated orange brown lead glaze interior, body fragment, near handle   |                 |           |
|     |   |                 | Cooking   |
| 8.  | Pipkin ND Gravel  | rim dia. ~21cm  | 1450-1750 |
|     | 116013  |                 |           |
|     | N6 E1   |                 |           |
|     | E 143   |                 |           |
|     | Comments: deteriorated lead glaze interior, rim fragment, burnt   |                 |           |
|     |   |                 | Cooking   |
| 9.  | Pipkin ND Gravel  |                 | 1450-1750 |
|     | 111633, 113017, 113946, 111285  |                 |           |
|     | N5 W1, N6 E1, N5 E3, N7 E1  |                 |           |
|     | E 143   |                 |           |
|     | Comments: deteriorated honey brown lead glaze interior, base sherds, one with foot attachment, burnt  |                 |           |
|     |   |                 | Cooking   |
| 10. | Pan ND Gravel   |                 | 1450-1750 |
|     | 144565a, 98864, 146562, 116245, 114484, 114572, 144656, 156830, 156991, 146740  |                 |           |
|     | N8 E3, N5 E2, N8 E2, N5 E1, N4 E1, N5 E1, N8 E1, N9 E3, N9 E2, N8 E2  |                 |           |
|     | E 145   |                 |           |
|     | Comments: deteriorated orange brown lead glaze interior, a very gravelly texture, exfoliated, burnt, handle attachment  |                 |           |
|     |   |                 | Cooking   |

- |     |   |  |
|-----|---|--|
| 11. | Pan ND Gravel<br>121635<br>N6 W1<br>E 143<br>Comments: strap handle, burnt  | 1450-1750<br><br><br><br>Cooking       |
| 12. | Oven ND Gravel<br>156434, 164105<br>N9 E0, N9 W1<br>E 145<br>Comments: clay oven fragments, Grant (1983) Fig. 17a,b   | 1630-1900<br><br><br><br>Cooking       |
| 13. | Pot ND Gravel base dia. ~20cm<br>159201, 113092, 141856+141867+141771<br>N7 E4, N6 E0, N6 W4+N6 W4+N3 W4<br>E 145<br>Comments: deteriorated yellow green lead glaze interior,<br>rim sherds burnt | 1450-1750<br><br><br><br>Kitchen/Dairy |
| 14. | Pot ND Gravel base dia. ~20cm<br>158092, 156852<br>N9 E2, N9 E3<br>E 145<br>Comments: deteriorated green lead glaze interior, base burnt  | 1450-1750<br><br><br><br>Kitchen/Dairy |
| 15. | Pot ND Gravel mid. dia. ~13cm<br>158320+158928+158054<br>N9 E2+N9 E2+N9 E1 (E 138)<br>E 145, E 138<br>Comments: deteriorated light green lead glaze interior                                      | 1450-1750<br><br><br><br>Kitchen/Dairy |
| 16. | Pot ND Gravel<br>146247<br>N8 E2<br>E 145<br>Comments: deteriorated green lead glaze interior, body sherd   | 1450-1750<br><br><br><br>Kitchen/Dairy |

17. Pot ND Gravel 1450-1750  
162670  
N9 W1  
E 145  
Comments: deteriorated green lead glaze interior, body sherd  
Kitchen/Dairy
18. Tall Pot ND Gravel rim dia. ~21cm 1550-1720  
116353, 156989, 121213, 144288, 121582, 158091, 111602, 144455  
159638, 156990  
N7 W1, N9 E2, N4 E2 (E 143), N8 E1, N4 E3, N9 E2, N7 E1 (E 143),  
N8 E0, N9 E2, N9 E2  
E 145, E 143  
Comments: deteriorated dark green lead glaze interior, one rim fragment, a  
grouping of similar sherds  
Kitchen/Dairy
19. Lid ND Gravel rim dia~18cm 1450-1750  
164090  
N9 W1  
E 145  
Comments: rim and body, handle missing. Illustrated in Figure A.1.  
Kitchen/Dairy
20. Lid ND Gravel rim dia. ~14cm 1450-1750  
158314, 158926, 158634  
N9 E2, N9 E2, N9 E1  
E 145  
Comments: rim and body sherds  
Kitchen/Dairy
21. Lid ND Gravel rim dia. ~13cm 1450-1750  
141760, 156992, 158107, 141513  
N3 W4, N9 E2, N9 E2, N7 W4 (E 137)  
E 145, E 137  
Comments: rim and body sherds  
Kitchen/Dairy

22. Lid ND Gravel rim dia. ~16cm 1450-1750  
 146324, 100938, 152724+154003+154010  
 N8 E2, N0 E3 (E 134), N9 W5 (E 137)+N9 W5 (E 137)+  
 N9 W5 (E 137)  
 E 145, E 134, E 137  
 Comments: deteriorated honey brown lead glaze interior, rim  
 and body fragments. Illustrated in Figure A.1. Kitchen/Dairy
23. Lid ND Gravel 1450-1750  
 143845  
 N8 W3  
 E 145  
 Comments: rim fragment Kitchen/Dairy
24. Bowl ND Gravel 1450-1750  
 143797, 146584  
 N2 W4, N2 W5  
 E 145  
 Comments: deteriorated light green lead glaze interior, base fragment,  
 body sherd Kitchen/Dairy
25. Bowl ND Gravel 1450-1750  
 121613  
 N4 E3  
 E 145  
 Comments: deteriorated yellow green lead glaze interior, body sherd  
 Kitchen/Dairy
26. Bowl ND Gravel base dia. ~17cm 1450-1750  
 98297, 98350, 119918  
 N5 E2, N5 E2, N7 E2  
 E 143  
 Comments: mottled green lead glaze interior, spilt exterior,  
 base and body sherds Kitchen/Dairy
27. Milk Pan ND Gravel rim dia. ~38cm 1450-1750  
 158445  
 N9 E1  
 E 145  
 Comments: dark green lead glaze interior, fragmentary rim Kitchen/Dairy



28. Milk Pan ND Gravel rim dia. +40cm 1450-1750  
 146697, 146715, 159839, 144586  
 N8 E2, N8 E2, N9 E1, N8 E1  
 E 145  
 Comments: rim and body sherds Kitchen/Dairy

North Devon Smooth Temper

29. Pot ND Smooth rim dia. ~18cm 1550-1720  
 143468  
 N3 W4  
 E 145  
 Comments: deteriorated lead glaze interior, burnt, rim fragment  
 Kitchen/Dairy
30. Pot ND Smooth 1550-1720  
 121255, 113099, 116326, 111505, 114348, 122969, 114208, 111295,  
 116563, 114222, 114645  
 N6 W1, N6 E0, N7 W1, N6 E1 (E 143), N7 E1 (E 143), N6 E0 (E 143),  
 N7 E0 (E 143), N7 E1 (E 143), N6 W1, N6 E0, N6 W1  
 E 145, E 143  
 Comments: deteriorated mottled green lead glaze interior,  
 a grouping of body sherds Kitchen/Dairy
31. Pot ND Smooth rim dia. ~17cm no date  
 498+147162+141523+146533+152701, 1876+152701,  
 151535+152701b+141764, 155044b+152701c+143070, 143067,  
 152862, 146741, 143112, 144277, 143564, 143675, 141775,  
 144270, 144276, 143705, 143794, 141203, 143511, 151494,  
 141153, 141253, 138731+141981+144276, 143675+1876,  
 N1 W1+N5 W5 (E 134)+N7 W4 (E 137)+N3 W5 (E 134)+  
 N5 W4 (E 134, Wall 15), N3 W3 (L1)+N5 W4 (E 134, Wall 15),  
 N3 W4 (fall in)+N5 W4 (E 134, Wall 15)+N4 W4, N5-4 W5 (E 134)+  
 N5 W4 (E 134, Wall 15)+N8 W4 (E 137), N1 W3 (E 202),  
 NW W5 (E 222), N4 W5 (E 134), N8 W4 (E 137), N3 W4, N4 W4,  
 N3 W4, N3 W4, N3 W4, N3 W4, N2 W4, N4 W4, N3 W4,  
 N3 W4 (fall in), N2 W3 (E 134), N2 W3 (E 134), N3 W3 (E 137)+  
 N2 W4+N3 W4, N3 W4+N3 W3 (L1)  
 E 145, E 134, E 137, E 202, E 222, fall in, L1  
 Comments: applied "pie crust" rim detail, joins form 4 large body fragments,  
 body sherds, provenance: John Allan (pers. comm., April 1998) Kitchen/Dairy

32. Pot ND Smooth rim dia. ~25cm 1550-1720  
 116144, 119125, 113503, 121944, 123351, 110410, 119124, 113964,  
 116731, 100505, 121944, 116831, 111502, 116524, 113948, 111808  
 N3 E2, N4 E2, N7 W1, N7 E2, N6 E0, N5 E1, N4 E2, N5 E1, N5 E3,  
 N7 E2, N7 E2, N4 E3, N6 E1, N6 E2, N5 E3, N6 E1  
 E 143  
 Comments: deteriorated honey brown lead glaze interior, body sherds  
 Kitchen/Dairy
33. Pot? ND Smooth base dia. ~9cm 1550-1720  
 161725, 121505, 113659  
 N10 E1, N6 E3, N7 E0 (E 143)  
 E 145, E 143  
 Comments: deteriorated mottled green lead glaze interior Kitchen/Dairy
34. Tall Pot ND Smooth base dia. ~10cm 1550-1720  
 144650+144651, 164425  
 N8 W1+N8 W1, N8 E4  
 E 145  
 Comments: deteriorated dark green lead glaze interior, base  
 Kitchen/Dairy
35. Tall Pot ND Smooth rim dia. ~12cm 1550-1720  
 122499, 116242, 111577, 121918, 144456, 114567  
 N6 E3, N5 E1, N7 W1 (E 143), N5 E3, N8 E0, N5 E1  
 E145, E 143  
 Comments: deteriorated honey brown lead glaze interior Kitchen/Dairy
36. Tall Pot ND Smooth mid. dia. ~14cm 1550-1720  
 111620, 122119, 156988, 144554, 159638, 116596, 114473  
 N7 E1 (E 143), N7 E2 (E 143), N9 E2, N8 E3, N9 E2, N6 W1, N5 E1  
 E 145, 143  
 Comments: deteriorated green lead glaze interior Kitchen/Dairy
37. Tall Pot ND Smooth 1550-1720  
 143753, 141713, 144345, 113955, 116242, 141205, 158346  
 N8 W1, N2 W4, N8 W1, N7 E2 (E 143), N5 E1, N4 W4, N9 E2  
 E 145, 143  
 Comments: deteriorated light green lead glaze interior, body sherds  
 Kitchen/Dairy

38. Tall Pot ND Smooth 1550-1720  
113593, 144238, 119610, 119700  
N7 E3, N8 E3, N5 E3, N5 E3  
E 145  
Comments: dark green lead glaze interior, spilt exterior, rim fragmentary  
Kitchen/Dairy
39. Tall Pot ND Smooth base dia. ~10cm 1550-1720  
121850 a+b  
N5 E3  
E 145  
Comments: mottled green lead glaze interior, partial base and body  
Kitchen/Dairy
40. Tall Pot ND Smooth rim dia. ~13cm 1550-1720  
158051, 144098, 143974, 140624, 116333, 162708  
N9 E2, N6 W4, N8 E3, N6 W4, N7 W1, N9 W1  
E 145  
Comments: mottled green lead glaze interior, body and base sherds  
Kitchen/Dairy
41. Tall Pot ND Smooth rim dia. ~12cm, mid dia. ~14cm 1550-1720  
116839, 141863, 114335, 116840, 144678, 144463, 114483, 121803,  
114463, 156638, 146713, 113101, 159196, 159027, 113116  
N6 W1, N7 W3, N7 E0, N6 W1, N8 E1, N8 W1, N8 E3, N7 E0, N5 E1, N9 E3,  
N8 E2, N6 E0, F 33, F 33, N6 E0  
E 145, F 33  
Comments: deteriorated green lead glaze interior, spilt exterior  
Kitchen/Dairy
42. Tall Pot ND Smooth mid dia. ~9cm 1550-1720  
146656+146603+146529, 113170, 119171, 144675, 116595  
N8 E2+N8 E2+N8 E2, N7 E3 (E 143), N7 E2 (E 143), N8 E1, N6 W1  
E 145, E143  
Comments: deteriorated brown lead glaze interior, spilt exterior  
Kitchen/Dairy

43. Tall Pot ND Smooth mid dia. ~9cm 1550-1720  
156838, 146413  
N9 E3, N8 E2  
E 145  
Comments: deteriorated lead glaze interior Kitchen/Dairy
44. Tall Pot ND Smooth mid dia. ~10cm, rim dia. ~11cm 1550-1720  
141144, 146501, 121989, 144296, 143968  
N6 W4, N8 E2, N6 E3, N3 W4, N8 E3  
E 145  
Comments: mottled green lead glaze interior, partial base and body, with body sherds and rim. Illustrated in Figure A.1. Kitchen/Dairy
45. Tall Pot ND Smooth mid dia. ~9cm 1550-1720  
121506, 121850, 121583, 119463+121614  
N6 E3, N5 E3, N4 E3, N4 E3+N4 E3  
E 145, E 143  
Comments: mottled green lead glaze interior, body sherds Kitchen/Dairy
46. Tall Pot ND Smooth base dia. ~9cm 1550-1720  
158643, 158929, 146520, 144621, 146416, 16950, 121803  
N9 E1, N9 E2, N8 E2, N8 E1, N8 E2, N6 E2 (E 143), N7 E0  
E 145, E 143  
Comments: green lead glaze interior, base, body sherds Kitchen/Dairy
47. Tall Pot ND Smooth base dia. ~10cm 1550-1720  
121604, 122246+122241+121988+122258+122251, 114219  
All N6 E3, 114219 from N6 E2  
E 145  
Comments: mottled light green lead glaze interior, partial base, body sherds Kitchen/Dairy
48. Tall Pot ND Smooth rim and base dia. ~10cm 1550-1720  
121917+121850, 122500, 122226, 121383, 162789, 111395, 123546,  
111313, 111315, 111314  
N5 E3+N5 E3, N6 E3, N6 E3, N6 E5, N7 E2 (E 143),  
N7 E2 (E 143), N5 E2, N5 E2, N5 E2  
E 145, E 143  
Comments: mottled light green lead glaze interior, base and body sherds Kitchen/Dairy

49. Tall Pot ND Smooth rim dia. ~11cm, base dia. ~9cm 1550-1720  
 158413, 146611+146744, 111713, 114332, 114848, 144594, 122853,  
 121938, 159760, 146561, 114583, 158354, 146739, 158351, 159512,  
 114480, 164036, 144630, 144621  
 N9 E1, N8 E2+N8 E2, N5 E1 (E 143), N7 E0, N6 E0, N8 E0, N6 E0 (E 143),  
 N3 W1, N9 E1, N8 E2, N6 W1, N9 E2, N8 E2, N9 E1, N9 E1, N6 E2, N9 W2,  
 N8 E1, N8 E1  
 E 145, E 143  
 Comments: deteriorated lead glaze interior, rim, base and body sherds  
 Kitchen/Dairy
50. Tall Pot ND Smooth 1550-1720  
 121254, 143976, 159774  
 N6 W1, N8 E3, N9 E1  
 E 145  
 Comments: rim fragments Kitchen/Dairy
51. Tall Pot ND Smooth rim dia. ~11cm 1550-1720  
 144468+144598  
 N8 E0  
 E 145  
 Comments: deteriorated lead glaze interior Kitchen/Dairy
52. Tall Pot ND Smooth rim dia. ~12cm 1550-1720  
 143006  
 N2 W4  
 E 145  
 Comments: fragmentary rim Kitchen/Dairy
53. Tall Pot ND Smooth rim dia. ~14cm, mid dia. ~11cm 1550-1720  
 141631, 116594, 144464, 114193, 156986, 111303, 116349+114734  
 N2 W4, N6 W1, N8 W1, N7 E1 (E 143), N9 E2, N7 E1 (E 143),  
 N7 E1 (E 143)+N7 W1  
 E 145, E 143  
 Comments: deteriorated dark brown lead glaze interior, rim and  
 body sherds Kitchen/Dairy

54. Tall Pot ND Smooth rim dia. ~12cm 1550-1720  
 114924, 111637, 111160a,b, 113500a-c, 123348, 114206, 111298,  
 113957  
 N6 E2, N5 E0, N6 E0, N7 W1, N6 E0, N7 E0, N7 E1, N6 E2  
 E 143  
 Comments: mottled brown green lead glaze interior, rim and  
 body sherds Kitchen/Dairy
55. Tall Pot ND Smooth dia. ~13cm 1550-1720  
 98839a,b+98854, 111798a,b  
 N5 E2+N5 E2, N6 E0  
 E 143  
 Comments: rim fragments Kitchen/Dairy
56. Tall Pot ND Smooth rim dia. ~15cm 1550-1720  
 156828a, 162807, 161869a  
 N9 E0 (E 143), N9 W1, N9 E0  
 E 143, E 145  
 Comments: light green lead glaze interior, rim sherds Kitchen/Dairy
57. Tall Pot ND Smooth rim dia. ~13cm 1550-1720  
 111373  
 N5 W1  
 E 143  
 Comments: deteriorated honey brown lead glaze interior, rim  
 fragment Kitchen/Dairy
58. Tall Pot ND Smooth rim dia. ~15cm, base dia. ~10cm 1550-1720  
 156987, 156777, 144159, 156633  
 N9 E2, N9 E2, N5 W4, N9 E3  
 E 145  
 Comments: deteriorated honey brown lead glaze interior, spilt  
 exterior, base and body sherds Kitchen/Dairy
59. Tall Pot ND Smooth 1550-1720  
 162276, 121851  
 N6 E4, N5 E3  
 E 145  
 Comments: deteriorated black brown lead glaze interior,  
 body sherds Kitchen/Dairy

- |     |   |           |                |               |
|-----|---|-----------|----------------|---------------|
| 60. | Tall Pot  | ND Smooth | rim dia. ~15cm | 1550-1720     |
|     | 116583  |           |                |               |
|     | N6 W1   |           |                |               |
|     | E 145   |           |                |               |
|     | Comments: rim sherd   |           |                | Kitchen/Dairy |
|     |   |           |                |               |
| 61. | Lid   | ND Smooth | dia. ~16cm     | 1550-1720     |
|     | 111157  |           |                |               |
|     | N6 E0   |           |                |               |
|     | E 143   |           |                |               |
|     | Comments: rim fragment  |           |                | Kitchen/Dairy |
|     |   |           |                |               |
| 62. | Porringer   | ND Smooth |                | 1600-1720     |
|     | 111697, 102012  |           |                |               |
|     | N3 W1, N4 E0 (E 157)  |           |                |               |
|     | E 145, E 157  |           |                |               |
|     | Comments: deteriorated lead glaze interior, white-slipped incised horizontal lines exterior                 |           |                | Food Service  |
|     |   |           |                |               |
| 63. | Porringer   | ND Smooth |                | 1600-1720     |
|     | 144180  |           |                |               |
|     | N3 W4   |           |                |               |
|     | E 145   |           |                |               |
|     | Comments: white slip interior and exterior  |           |                |               |
|     |   |           |                |               |
| 64. | Porringer   | ND Smooth | base dia. ~6cm | 1600-1720     |
|     | 111161  |           |                |               |
|     | N6 E0   |           |                |               |
|     | E 143   |           |                |               |
|     | Comments: deteriorated yellow brown lead glaze interior, deteriorated slip exterior, base and body fragment |           |                | Food Service  |
|     |   |           |                |               |
| 65. | Dish  | ND Smooth |                | 1640-1700     |
|     | 140631  |           |                |               |
|     | N6 W4   |           |                |               |
|     | E 145   |           |                |               |
|     | Comments: deteriorated slip interior and exterior, rim  |           |                | Food Service  |

66. Dish ND Smooth, sgraffito rim dia.~25cm 1640-1700  
 144482, 144741, 146309, 158927, 164479  
 N8 E3, N8 E1, N8 E2, N9 E2, N6 E5  
 E 145  
 Comments: incised white slip under yellow lead glaze interior,  
 pouring gutter, rim and base sherds Food Service
67. Dish ND Smooth, sgraffito 1640-1700  
 144484, 159164, 144622, 144575, 146724, 146329, 111216  
 N8 E3, N9 E0, N8 E1, N8 E1, N8 E2, N8 E3, N7 E2 (E 143)  
 E 145, E 143  
 Comments: incised white slip under yellow lead glaze interior,  
 white slip and lead glaze spilt exterior, rim and base sherds. Illustrated in  
 Figure A.2. Food Service
68. Dish ND Smooth, sgraffito 1640-1700  
 158757, 159525, 156620, 114126  
 N9 E2, N9 E1, N9 E0, N7 E3  
 E 145  
 Comments: incised white slip under yellow lead glaze interior, rim and body  
 sherds, wavy combed lines on one sherd, pie-crust edge Food Service
69. Dish ND Smooth sgraffito 1640-1700  
 111665  
 N6 E0  
 E 143  
 Comments: white slip with deteriorated yellow brown lead glaze  
 interior, trailed slip with spilt lead glaze exterior, body sherd  
 Food Service
70. Cup ND Smooth no date  
 158106+158344a  
 N9 E2  
 E 145  
 Comments: green brown lead glaze interior, off-white slip exterior,  
 body fragment Beverage Service





Figure A.2. North Devon Sgraffito and Bristol Slipware. North Devon Smooth Temper Sgraffito Dish, Vessel 67, left. Bristol Slipware Cup, Vessel 100, right.

71. Cup ND Smooth 1650-1700  
143734  
N8 E0  
E 145  
Comments: deteriorated yellow brown lead glaze interior and exterior.  
Illustrated in Figure A.3. Beverage Service
72. Cup/Jug ND Smooth, sgraffito 1600-1720  
144683, 138637+134421, 158613  
N8 E1, N4 W3 (E 134)+N7 W2 (E 169), N9 E2  
E 145, E 169, E 134  
Comments: deteriorated lead glaze interior and exterior, incised  
and punctated white slip exterior, handle and body sherds,  
Grant (1983) Plates 24, 25. Illustrated in Figure A.3. Beverage Service
73. Jug ND Smooth base dia. ~10cm, mid dia. ~14cm 1640-1750  
161038, 140634  
N8 E4, N6 W4  
E 145  
Comments: light green lead glaze interior, rim fragmentary  
Beverage Service
74. Jug? ND Smooth 1640-1750  
140642, 146583  
N6 W4, N2 W5  
E 145  
Comments: deteriorated green brown lead glaze interior, body sherds  
Beverage Service
75. Jug? ND Smooth sgraffito 1600-1720  
114830  
N4 E0  
E 143  
Comments: white slip interior and exterior, deteriorated yellow  
gold lead glaze, rim sherd Beverage Service



Figure A.3. Coarse Earthenware Cups. South Somerset Cup, Vessel 90, top left. South Somerset Sgraffito Cup, Vessel 93, top right. North Devon Smooth Temper Cup, Vessel 71, bottom left. North Devon Smooth Temper Sgraffito Cup/Jug, Vessel 72, bottom right.

North Devon Calcareous Temper

76. Tall Pot ND Calcareous 1550-1720  
 146516, 146585, 100165  
 N8 E2, N8 E2, N7 E2 (E 143)  
 E 145, E 143  
 Comments: light green lead glaze interior, body sherds Kitchen/Dairy
77. Tall Pot ND Calcareous rim dia. ~12cm 1550-1720  
 123349+121919, 119449+98827  
 N5 E3+N5 E3, N5 E3+N5 E2  
 E 145  
 Comments: light green lead glaze interior, rim, body sherds Kitchen/Dairy
78. Bowl ND Calcareous rim dia. ~20cm 1450-1750  
 141875, 158414  
 N2 W4, N9 W2  
 E 145  
 Comments: deteriorated green brown lead glaze interior, body fragments Kitchen/Dairy

South Somerset

79. Bowl S. Somerset 1600-1650  
 159832+144234, 144628, 146894, 159838, 156639+156414  
 N9 E1+N8 E3, N8 E1, N8 E2, N9 E1, N9 E2 (E 138)+N9 E3 (E 138)  
 E 145, E 138  
 Comments: traces of deteriorated lead glaze interior, exterior exfoliated, Coleman-Smith and Pearson (1988) 12/38 Kitchen/Dairy
80. Bowl S. Somerset mid dia. ~21cm 1600-1700  
 164878+164792  
 N7 E5 (E 246)+N6 E5  
 E 246, E 145  
 Comments: yellow green lead glaze interior, spilt exterior Kitchen/Dairy

81. Bowl S. Somerset base dia. ~15cm 1600-1700  
 141197+140643, 141199  
 N5 W4+N6 W4, N5 W4  
 E 145  
 Comments: deteriorated yellow green lead glaze interior,  
 base fragments Kitchen/Dairy
82. Bowl S. Somerset 1600-1700  
 162803  
 N7 E4  
 E 145  
 Comments: deteriorated yellow orange lead glaze interior,  
 body sherd Kitchen/Dairy
83. Bowl S. Somerset 1600-1700  
 111634  
 N7 E2  
 E 143  
 Comments: yellow green lead glaze interior, rim sherd Kitchen/Dairy
84. Bowl S. Somerset 1600-1700  
 119242  
 N5 W1  
 E 143  
 Comments: deteriorated light green lead glaze interior, base fragment  
 Kitchen/Dairy
85. Bowl? S. Somerset mid dia. ~24cm 1600-1700  
 156844+111342, 111796, 155272, 162650, 156131, 156132  
 N9 E0+N7 E1 (E 143), N6 E0 (E 143), N9 W3 (E 137, waterline),  
 N9 W1, N9 W2 (top of F 56), N10 W2 (top of F 56)  
 E 145, E 143, E 137, top of F 56  
 Comments: gritty pink fabric, mottled light green lead glaze  
 interior Kitchen/Dairy

86. Milk Pan S. Somerset rim dia. ~40cm 1500-1700  
 143564, 143680, 143512, 144279, 141780b, 141766, 143003, 144269b,c,  
 143861, 116348, 138502, 138362, 156640, 138736a,b, 141240  
 N3 W4, N3 W4, N3 W4, N3 W4, N3 W4, N3 W4, N2 W4, N3 W4,  
 N2 W4, N7 W1, N3 W3 (E 134), N2 W3 (E 134), N9 E2 (E 138),  
 N3 W3 (E 137), N2 W3 (E 134)  
 E 145, E 138, E 134, E 137  
 Comments: deteriorated orange yellow lead glaze interior. Illustrated in  
 Figure A.4. Kitchen/Dairy
87. Pan? S. Somerset 1600-1700  
 116342+125143+116532  
 N7 W1+N6 W1+N6 W1  
 E 145  
 Comments: lug handle, Coleman-Smith and Pearson (1988) 12/39  
 Kitchen/Dairy
88. Porringer S. Somerset 1600-1750  
 114854, 158856, 114866, 113655+113040, 113762, 114200, 144611,  
 121804  
 N6 E0 (E 143), N9 E0, N6 W1, N7 E0+N7 E0, N6 E2, N7 E0 (E 143),  
 N8 E1, N7 E0  
 E 145, E143  
 Comments: deteriorated yellow lead glaze interior Food Service
89. Porringer S. Somerset 1600-1700  
 161870, 161869  
 N9 W1, N9 E0  
 E 145  
 Comments: orange green lead glaze interior, rim fragment and  
 body sherd Food Service
90. Cup S. Somerset rim dia. ~7cm, base dia. ~4cm 1550-1700  
 116387+111770+122460+119078  
 N6 W1+N6 W1 (E 143)+N5 W1 (E 143)+N5 W0 (E137)  
 E 145, E 143, E 137  
 Comments: deteriorated yellow lead glaze interior and rim exterior,  
 white slip brushed decoration exterior, side-handled, provenance:  
 John Allan (pers. comm., April 1998). Illustrated in Figure A.3.  
 Beverage Service



Figure A.4. South Somerset and Merida Coarse Earthenware Vessels. South Somerset Coarse Earthenware Milk Pan, Rim and Body Fragments, Vessel 86, left. Merida Coarse Earthenware Bottle, Vessel 120, right.

91. Cup S. Somerset 1550-1700  
162126a, 144560  
N9 W1, N8 E1  
E 145  
Comments: deteriorated lead glaze over white slip interior and exterior,  
body sherd Beverage Service
92. Cup S. Somerset 1550-1700  
122643, 122117, 122245, 113959, 143983, 158713  
N7 E2, N7 E2, N6 E3 (E 145), N5 E2, N8 E3 (E 145), N9 E2 (E 145)  
E 143, E 145  
Comments: light orange green lead glaze interior, body sherds  
Beverage Service
93. Cup S. Somerset, sgraffito rim dia. ~12cm no date  
110387+108486, 118179, 134421, 114832, 126599  
N6 W1 (E 143)+N6 W1 (E 143), N6 W1 (E 143), N7 W2 (E 169),  
N5 E2, N7 E0 (fall in)  
E 143, E 145, E 169, fall in  
Comments: thin slip with green yellow lead glaze interior and  
exterior, slip incised exterior, rim and body sherds, provenance:  
John Allan (pers. comm., April 1998). Illustrated in Figure A.3.  
Beverage Service
94. Cup S. Somerset rim dia. ~10cm, base dia. ~4cm 1550-1700  
113333, 111613+144467, 132669  
N5 E1 (E 143), N7 E1 (E 143)+N8 E0 (E 145), N6 W2 (E 169)  
E 143, E 145, E 169  
Comments: white slip interior and exterior, light apple green  
lead glaze interior and exterior, base fragment, handle and rim  
sherd Beverage Service

### Totnes

95. Pipkin Totnes 1640-1670  
158932, 156854+156855, 158159, 125142  
N9 E2, N9 E3+N9 E3, N9 E2, N6 W1  
E 145  
Comments: light brown green lead glaze interior, spilt exterior,  
body sherds and handle fragment Cooking



96. Pot Totnes base dia. ~9cm 1640-1670  
 144015+144016+114863+111974+140295, 144617, 144727  
 N8 E3+N8 E3+N7 E3 (E 143)+N7 E3+fall in, N8 E1, N8 E1  
 E 145, E 143  
 Comments: green brown lead glaze interior, spilt exterior Kitchen/Dairy
97. Jug? Totnes 1640-1670  
 141003+141004+144346+144281a, 143965+135922+137004  
 N8 W2 (E 169)+N8 W2 (E 169)+N8 W1+N3 W4, N8 W1+N7 W2 (E 169)+  
 N7 W2 (E 169)  
 E 169, E 145  
 Comments: deteriorated green brown lead glaze interior, spilt exterior,  
 body fragments Beverage Service

#### Border Ware

98. Pipkin Border Ware rim dia. ~15cm 1600-1700  
 98853+122546, 119604, 149489  
 N5 E2+N5 E3, N5 E3, N1 W4  
 E 145  
 Comments: yellow green lead glaze interior, spilt exterior,  
 rim fragment, handle and body sherds, Pearce (1992) Fig. 8.  
 Cooking

#### Midlands Purple

99. Jug Midlands Purple base dia. ~9cm 1600-1750  
 119677, 114554+159204, 161848  
 N5 E3, N5 E1+N7 E4 (F 21), N9 W1 (F 56)  
 E 145, F 21, F 56  
 Comments: thick purple black lead glaze interior and exterior,  
 base and body sherds Beverage Service

Bristol Slipware

100. Cup Bristol Slipware rim dia.~8cm, base dia.~7cm 1670-1720  
 116355+143847+134062+141355+111775+111774+134332+143759+141054,  
 137588+ 134444a+126590, 144327+146750, 152100, 116523  
 N7 W1+N8 W1+N7 W2 (E 169)+N8 W2 (E 169)+N6 E0 (E 143)+  
 N7 W1 (E 143)+N7 W2 (E 169)+N8 E3+N8 W2 (E 169)+N7 W2 (E 169)+  
 N7 W2 (E 169)+N7 E0 (fall in), N5 W4+N4 W5 (E 134), N5 W4 (E 137),  
 N6 E2 (E 143)  
 E 145, E 169, E 137, E 143, E 134, fall in  
 Comments: full profile, height ~8.5cm, Allan 1984b: #2905, Celoria and Kelly  
 1973 #161. Illustrated in Figure A.2.  
 Beverage Service
101. Cup Bristol Slipware rim dia.~7cm 1670-1720  
 146326+118369, 119195, 143762, 104985, 141054  
 N8 E2+N6 E3 (E 134), N6 E1 (E 134 below F20), N8 W1,  
 N7 E3 (E 134), N8 W2 (E 169)  
 E 145, E 134, E 169  
 Comments: body and rim sherds  
 Beverage Service
102. Cup Bristol Slipware rim dia.~7cm 1670-1720  
 158277, 162661, 121626, 140625+159769  
 N8 E4 (E 138), N9 W1, N5 W1 (E 143), N6 W4+N9 E1  
 E 138, E 145, E 143  
 Comments: rim and body sherds  
 Beverage Service
103. Jug Bristol Slipware base dia. ~7cm 1670-1720  
 155955+132308+159240a,b, 158046+158094a,b,c, 143007+146210,  
 146541, 141967, 155029a,b, 146780, 146214, 146727a  
 N9 W2 (E 134)+N7 W2 (E 134)+N9 E1, N9 E1 (E 138)+N9 E2,  
 N7 W4 (E 169)+N3 W5 (E 134), N4 W5 (E 134), N2 W4,  
 N5-4 W5 (E 134), N4 W5 (E 134), N3 W5 (E 134), N4 W5 (E 134)  
 E 134, E 145, E 138, E 169  
 Comments: base, body and rim sherds  
 Beverage Service
104. Jug Bristol Slipware 1670-1720  
 159772, 158848, 158367, 158847, 158772+137742  
 N9 E1, N9 E4 (E 137), N9 E1, N9 E0, N9 E3+N4 W3 (E 134)  
 E 145, E 137, E 134  
 Comments: body sherds and handle fragment  
 Beverage Service

Saintonge

105. Milk Pan Saintonge 1650-1750  
 140987, 116744, 113499, 161654, 144632, 158420  
 N8 W2 (E 169), N7 E1 (E 143), N7 E1 (E 143), N10 W1, N8 E1, N9 W2  
 E 169, E 143, E 145  
 Comments: deteriorated light green lead glaze interior, spilt exterior,  
 base, body and rim sherds Kitchen/Dairy

North Italian Slipwares

106. Dish N. Italian Slipware, sgraffito 1625-1650  
 100106, 116747, 152859, 146198  
 N7 E2, N7 E2, N4 W5 (E 222), N3 W5 (E 134)  
 E 143, E 222, E 134  
 Comments: incised yellow white slip with splashed green interior,  
 yellow white slip with green band exterior, rim and body sherds,  
 Hurst et al. (1986) Fig. 13.25. Food Service
107. Dish N. Italian Slipware, sgraffito rim dia. ~30cm 1625-1650  
 158365, 116777, 113962, 98337, 111769, 158850, 100028,  
 114986, 104954, 131087  
 N9 E1, N7 E2 (E 143), N6 E3 (E 143), N1 E1 (E 136), N3 W1 (E 135),  
 N9 E2 (E 138), N3 E0 (E 134, below F19), N4 W1 (E 138),  
 N2 W1 (E 134), N2 W2 (E 169)  
 E 143, E 145, E136, E 135, E 138, E 134, E 169  
 Comments: incised yellow white slip with splashed green interior,  
 rim and body sherds. Illustrated in Figure A.5. Food Service
108. Bowl N. Italian Slipware, sgraffito 1625-1650  
 146323  
 N8 E2  
 E 145  
 Comments: incised cream white slip interior, clear lead glaze,  
 body sherd Food Service

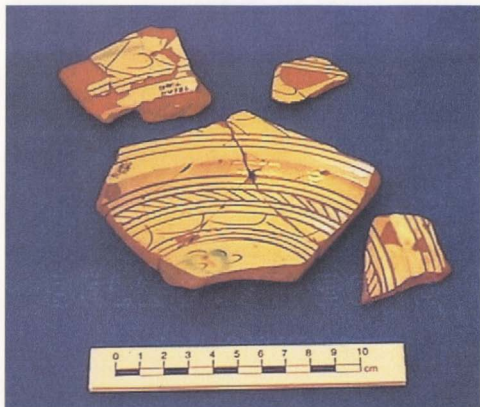


Figure A.5. North Italian Slipware Dish. North Italian Coarse Earthenware Slipware Dish with Sgraffito decoration, Vessel 107.

109. Bowl N. Italian Marbled Slipware 1600-1650  
 144731, 122262  
 N8 E1, N6 E3  
 E 145  
 Comments: white marbled slip interior, clear lead glaze,  
 Hurst et al. (1986:33) Food Service
110. Jug/Bottle N. Italian Marbled Slipware 1600-1650  
 144566, 96624  
 N8 E1, N5 E2 (E 143)  
 E 145, E 143  
 Comments: marbled white slip exterior, body sherds,  
 Hurst et al. (1986) Fig. 14.31 Beverage Service

### Merida

111. Bowl Merida 1300-1800  
 156390, 111662, 141915  
 N9 E0, N6 E0 (E 143), N7 W3  
 E 145, E 143  
 Comments: Kitchen/Dairy
112. Jar Merida 1300-1800  
 121385, 119470, 146180, 143964, 162763  
 N6 E3, N5 E3, N6 E2, N8 W1, N9 W1  
 E 145  
 Comments: deteriorated interior glaze, off-white slipped  
 exterior, body sherds Kitchen/Dairy
113. Jar Merida 1600-1700  
 146423, 144599+144655, 162230+156688, 161655, 158440, 144460,  
 159553, 159994, 159442, 158954, 111297, 111284, 114541, 114104,  
 114093, 116521  
 N8 E2, N8 E1+N8 E0, N9 E0+N9 E0 (E 138), N10 W1, N9 E1, N8 E3,  
 N9 E1, N9 E0, N7 E4 (E138), N6 E4 (E 138), N7 E1 (E 143),  
 N7 E1 (E 143), N7 E1 (E 143), N7 E2 (E 143), N7 E2 (E 143),  
 N6 E1 (E 143)  
 E 145, E 143, E 138  
 Comments: deteriorated light green glaze interior, body sherds  
 Hurst et al. (1986:66) and Fig. 29.80 Kitchen/Dairy

114. Jar Merida 1300-1800  
 114735, 114744, 116736, 113118, 159631, 116576  
 N6 E2 (E 143), N6 E2 (E 143), N4 E3 (E 143), N6 E2, N7 E4, N6 W1  
 E 145, E 143  
 Comments: burnished exterior, body sherds Kitchen/Dairy
115. Jar Merida 1300-1800  
 156853+156636+100118, 156993, 158160, 156848  
 N9 E3+N9 E3+ N6 E2 (E 137), N9 E2, N9 E2, N9 E3  
 E 145, E 137  
 Comments: white-slipped horizontal bands exterior, burnished  
 Kitchen/Dairy
116. Jar Merida mid dia. ~20cm 1300-1800  
 144514+154860, 143001, 141162, 138503, 122669, 121257a,  
 114865, 114333, 114220, 111790, 159739  
 N2 W4+N5-4 W5 (E 134), N2 W4, N2 W3 (E 134), N3 W3 (E 134),  
 N6 E0 (E 137), N6 W1, N6 W1, N7 E0, N6 E0, N5 E1 (E 143), N9 W1  
 E 145, E 134, E 137, E 143  
 Comments: white slip exterior Kitchen/Dairy
117. Jar Merida 1300-1800  
 100101, 111486, 114481, 119306, 122104, 122113, 111345, 95667  
 N7 E2, N7 E2, N6 E0, N5 E3, N7 E2, N7 E2, N7 E1, N0 E2 (E 135)  
 E 143, E 135  
 Comments: traces of white slip exterior, body sherds Kitchen/Dairy
118. Jar Merida mid dia. ~19cm 1300-1800  
 144271, 162741, 162233  
 N3 W4, N9 W1, N9 W1  
 E 145  
 Comments: deteriorated maroon lead glaze interior, slipped exterior,  
 body sherds Kitchen/Dairy

119. Bottle (Costrel?) Merida mid dia. ~20cm 1300-1800  
 143675+143689+146640+154516+146605, 144270, 144527,  
 152853+147416, 146487, 141982  
 N2 W4+N3 W4+N3 W5 (E 134)+N3 W5 (E 134)+N2 W5,  
 N3 W4, N4 W5 (E 222), N3 W5 (E 134)+N1 W5 (E 169),  
 N3 W5 (E 134), N2 W4 (E 134)  
 E 145, E 134, E 222, E 169  
 Comments: two body fragments, body sherds Kitchen/Dairy
120. Bottle Merida 1300-1800  
 104228+5352+110560+121057+113590+158062+114360, 114871,  
 116966, 165107, 122852, 113023+111703, 113115, 114361, 143564  
 S4 E0 (E154)+S3 W3 (L3b)+S6 E0 (E 154)+S4 E1 (E154)+N7 E3+  
 N9 E2+N7 E0 (E 143), N6 W1, N7 E1 (E 143) N8 E4 (E 138),  
 N6 E0 (E 143), N7 E0 (E 143)+N6 E0 (E143), N7 E0, N7 E0 (E 143),  
 N3 W4  
 E 154, 3b, E 143, E 138, E 145  
 Comments: white slip exterior, mamiform. Illustrated in Figure A.4.  
 Kitchen/Dairy
121. Bottle Merida 1600-1700  
 144085, 144599, 158366, 159873, 156725, 143859b, 121809, 121644,  
 111617, 114121, 114855, 116515, 122647, 111065, 111265, 111326, 111365,  
 111601, 111656  
 N8 E0, N8 E1, N9 E1, N9 E1, N9 E0, N8 E1 (E 138), N7 E1 (E 143),  
 N7 E0 (E 143), N7 E1 (E 143), N7 E2 (E 143), N6 E0 (E 143),  
 N6 E2 (E 143), N7 E2 (E 143), N6 E1 (E 143), N7 E2 (E 143),  
 N7 E1 (E 143), N6 W1 (E 143), N7 E1 (E 143), N6 E0 (E 143)  
 E 145, E 138, E 143  
 Comments: yellow lead glaze interior, spilt exterior, Hurst et al.  
 (1986:66) and Fig. 29.80 Kitchen/Dairy
122. Bottle Merida 1300-1800  
 113323, 114356  
 N7 E2, N7 E1  
 E 143  
 Comments: body sherds Kitchen/Dairy

123. Bottle Merida 1300-1800  
 111555, 111376, 111894+121295  
 N6 E0 (E 143), N6 W1 (E 143), N4 E3 (E 134)+N6 E1 (E 134)  
 E 143, E 134  
 Comments: traces of slip exterior, neck and body sherds Kitchen/Dairy
124. Bottle Merida 1300-1800  
 141759+141143, 143678  
 N4 W4+N3 W4, N3 W4  
 E 145  
 Comments: handle fragment and handle take-off Kitchen/Dairy
125. Bottle? Merida 1300-1800  
 98858, 159025, 114103  
 N5 E2, N9 E1, N7 E2 (E 143)  
 E 145, E 143  
 Comments: exterior burnished Kitchen/Dairy

#### Montelupo

126. Jar Montelupo 1700-1900  
 158411, 123547  
 N9 W2, N7 E2 (E 143)  
 E 145, E 143  
 Comments: deteriorated light green lead glaze interior, very thick body  
 sherds, provenance: John Allan (pers. comm., April 1998) Kitchen/Dairy

#### Spanish Heavy

127. Jar Spanish Heavy 1500-1800  
 141285  
 N6 W4  
 E 145  
 Comments: deteriorated olive green lead glaze interior, body sherd  
 Kitchen/Dairy



128. Jar Spanish Heavy 1500-1800  
 141140  
 N4 W4  
 E 145  
 Comments: bright light green lead glaze interior, one small body sherd  
 Kitchen/Dairy

#### Unidentified Coarse Earthenwares

129. Pot/Bowl unidentified CEW no date  
 116564  
 N6 W1  
 E 145  
 Comments: gritty orange brown micaceous fabric, body sherd  
 Kitchen/Dairy
130. Porringer unidentified CEW base dia. ~7cm no date  
 159991+158833+155482+132610, 111074, 162895  
 N9 E0+N9 E0+N9 W3 (E 137, waterline)+N5 W2 (E 137),  
 N7 E2 (E 143), N9 W1  
 E 145, E 137, E 143  
 Comments: smooth grey orange fabric with small black inclusions,  
 white slip with deteriorated lead glaze interior, base fragment and  
 body sherds Food Service
131. Bowl unidentified CEW no date  
 122648, 100198, 100163, 114091, 114092, 116741, 144657  
 N7 E2, N7 E2, N7 E2, N7 E2, N7 E2, N8 E1 (E 145)  
 E 143, E 145  
 Comments: smooth dark beige fabric with small red inclusions,  
 slightly micaceous, traces of deteriorated lead glaze interior,  
 body sherds Food Service
132. Bowl? unidentified CEW no date  
 161040  
 N9 E0  
 E 145  
 Comments: smooth grey orange fabric, slipped interior with  
 deteriorated lead glaze, base fragment Food Service

133. Cup Unidentified CEW base dia. ~5cm no date  
 98831  
 N5 E2  
 E 145  
 Comments: smooth orange brown fabric with quartz? inclusions,  
 cup base Beverage Service
134. Jug? unidentified CEW rim dia. ~9cm no date  
 111799+113954, 111141  
 N5 E3 (E 143)+N5 E1 (E 143), N5 E2 (E 143)  
 E 143  
 Comments: smooth orange grey fabric, mottled orange green  
 lead glaze interior and exterior, incised horizontal lines below rim,  
 rim fragments Beverage Service
135. Jug? unidentified CEW base dia. ~10cm no date  
 162272  
 N7 E4  
 E 145  
 Comments: gritty orange fabric, deteriorated green brown lead glaze  
 interior, black grey unglazed exterior surface, base sherd Beverage Service

### Tin-Glazed Earthenwares

#### English

136. Porringer English TGEW base dia. ~11cm 1670-1700  
 158432, 111327  
 N9 E2, N7 E1 (E 143)  
 E 145, E 143  
 Comments: buff fabric, thick white tin glaze interior and exterior,  
 purplish tinge, footless base, base and body fragment Food Service
137. Porringer English TGEW base dia. ~11cm 1670-1700  
 164023, 162748, 162948  
 N6 E4, N7 E4, N7 E5 (E 138)  
 E 145, E 138  
 Comments: pinkish buff fabric, thick grey white tin glaze interior,  
 body sherds Food Service

138. Bowl English TGEW 1650-1730  
 143980  
 N8 E3  
 E 145  
 Comments: thick white tin glaze interior and exterior, body sherd,  
 Bloice (1971) Fig. 53:47-48 Food Service
139. Bowl English? TGEW footring dia. ~10cm 1650-1730  
 158361  
 N9 E1  
 E 145  
 Comments: pinkish buff fabric, thin white tin glaze interior and  
 exterior, careful medium blue decoration interior base, base fragment  
 Food Service
140. Dish English TGEW footring dia. ~5cm 1650-1730  
 159547, 146496, 159767, 113427  
 N9 E1, N8 E2, N9 E1, N7 W1 (E 143)  
 E 145, E 143  
 Comments: buff fabric, thick white tin glaze interior and exterior,  
 undecorated, rim and body sherds, fluted? Food Service
141. Plate English? TGEW 1640-1720  
 143961  
 N8 E3  
 E 145  
 Comments: soft pinkish buff fabric, creamy white tin glaze  
 interior thin lead/tin glaze exterior, rim sherd, 2 medium blue lines  
 at rim Food Service
142. Cup English TGEW 1650-1685  
 116811, 162340  
 N6 W1, N9 W1  
 E 145  
 Comments: chalky buff fabric, thick white tin glaze interior and  
 exterior, body sherds, Noël Hume (1977) Fig. VI:1-3 Beverage Service

143. Cup English? TGEW 1675-1730  
 159919, 121790, 141508  
 N9 E1, N7 W1 (E 134), N8 W2 (E 169)  
 E 145, E 134, E 169  
 Comments: light orange buff fabric, blue white tin glaze interior and exterior, double light blue lines surround footring, base sherds  
 Beverage Service
144. Ointment Pot English TGEW rim dia. ~5cm 1680-1735  
 100767  
 N4 E2  
 E 143  
 Comments: light buff fabric, purplish white tin glaze interior and exterior, rim and body fragment, Bloice (1971) Fig. 55:99  
 Hygiene

#### Dutch

145. Dish Dutch? TGEW rim dia. +25cm post-1670  
 113141, 114798, 121528  
 N7 E0, N6 E2, N7 E0  
 E 143  
 Comments: mid-beige fabric with small inclusions, matte grey white tin glaze interior and exterior, everted rim, trace of blue decoration interior  
 Food Service
146. Cup? Dutch TGEW no date  
 111291  
 N7 E1  
 E 143  
 Comments: chaulky buff fabric, grey white tin glaze interior and exterior, medium blue cross-hatching interior, base sherd  
 Beverage Service

English/Dutch

147. Dish English/Dutch TGEW c. 1688-1710  
 159505, 143990, 113136, 158435, 162334, 159511, 159986, 162342,  
 156026, 156116  
 N9 E1, N8 E3, N7 E0 (E 143), N9 E1 (E 143), N9 W1, N9 W1 (F 56),  
 N9 E0, N9 W1, N10 W2 (top of F 56), N10 W2 (E 138)  
 E 145, E 143, E 138, F 56  
 Comments: soft chalky buff fabric, white tin glaze interior and  
 exterior, polychrome decoration interior, rim and body sherds,  
 lobed dish, provenance: John Allan (pers. comm., April 1998),  
 see Allan (1984a) #2832. Illustrated in Figure A.6. Food Service
148. Plate English/Dutch TGEW rim dia. ~21 no date  
 114105  
 N7 E2  
 E 143  
 Comments: chalky buff fabric, thin white tin glaze interior,  
 light blue decoration interior, thin blue band at rim, rim sherd  
 Food Service

Iberian

149. Bowl Iberian TGEW footring dia. ~5cm 1550-1600  
 114115+116844, 122041  
 N7 E2 (E 142)+N7 E2 (E 143), N6 E3 (E 145)  
 E 142, E 143, E 145  
 Comments: reddish buff chalky fabric, grey white tin glaze interior  
 and exterior, light blue and magenta brushed design interior. Isabella  
 Polychrome? Illustrated in Figure A.6. Food Service



Figure A.6. Tin-Glazed Earthenwares. Iberian Tin-Glazed Bowl, Vessel 150, top left. English or Dutch Tin-Glazed Dish, Vessel 147, top right. Iberian Tin-Glazed Plate, Vessel 153, bottom left. Iberian Tin-Glazed Bowl, Vessel 149, bottom right.



154. Cup/Jug Iberian TGEW base dia. ~8cm undated  
 146558+146570, 122645, 159503, 144728  
 N8 E2 (E 138)+N8 E2 (E 138), N7 E2 (E 143), N9 E2, N8 E1  
 E 138, E 143, E 145  
 Comments: greyish white tin glaze interior and exterior, chaulky buff  
 fabric, flat base, straight-walled, base and body sherds, form unidentified  
 Beverage Service

### Portuguese

155. Bowl Portuguese TGEW footring dia. ~5cm 1660-1685  
 144672, 161486, 158840  
 N8 E1, N10 E1, N9 E1  
 E 145  
 Comments: chaulky buff fabric, creamy white tin glaze interior  
 and exterior, magenta/black linear decoration interior base, base  
 fragments and body sherds, Noël Hume (1977) Fig. XVI:4  
 Food Service
156. Bowl Portuguese TGEW 1660-1685  
 96618  
 N5 E2  
 E 143  
 Comments: chaulky buff fabric, white tin glaze interior and exterior  
 dark blue decoration exterior, body sherd, provenance: John Allan  
 (pers. comm., April 1998)  
 Food Service
157. Dish Portuguese TGEW 1600-1650  
 162259, 137873  
 N8 E4, N3 W3 (E 134)  
 E 145, E 134  
 Comments: light buff fabric, white tin glaze interior and exterior,  
 dark blue decoration interior, blue brush stroke exterior, Hurst et al.  
 (1986) Fig. 30.82  
 Food Service



Iberian/Italian

158. Dish Iberian/Italian TGEW rim dia. ~20cm 1650+  
 121197+105553, 118333, 110915, 96625, 121904, 110323+123347,  
 114933, 158050+146328+146559  
 N6 E2 (below F20)+N6 E2 (E 134, below F20), N6 E0  
 (E 134, below F20), N6 E2 (E 143), N5 E2 (E 143), N5 W1  
 (E 134, below F20), N7 E2 (E 146)+N6 E0 (E 134, below F20),  
 N6 E1 (E 143), N9 E1 (E 138)+N8 E2 (E 145)+N8 E2 (E 138)  
 E 134, 143, 146, 138, 145  
 Comments: off-white thin tin glaze exterior, blue bands at rim and  
 surrounding interior base, magenta sprigs and squiggles at rim,  
 provenance: John Allan (pers. comm., April 1998), similar to Vessel 159.  
 Illustrated in Figure A.7. Food Service
159. Dish Iberian/Italian TGEW rim dia. ~20cm 1650+  
 158955+114106, 113329, 155316, 146328, 146559, 113438,  
 146245, 121197, 121902+121904  
 N7 E4 (F 33)+N7 E2 (E 143), N7 E3 (E 143), N5 W5 (E 230, Wall 15),  
 N8 E2 (E 145), N8 E2 (E 138), N7 W1 (E134), N3 W5 (E 134),  
 N6 E2 (below F 20), N5 W1 (E 134, below F20)+N5 W1 (E 134,  
 below F20)  
 E 143, E 230, E 145, E 138, E 134, F 33  
 Comments: off-white thin tin glaze exterior, blue bands at rim and  
 surrounding interior base, magenta sprigs at rim, provenance:  
 John Allan (pers. comm., April 1998), similar to Vessel 158.  
 Illustrated in Figure A.7. Food Service

Italian

160. Cup Italian TGEW, Montelupo? no date  
 162343  
 N9 W1  
 E 145  
 Comments: light buff fabric, creamy white tin glaze interior and  
 exterior, light and medium blue with magenta decoration exterior,  
 delicate rim fragment Beverage Service



Figure A.7. Tin-Glazed Earthenwares. Iberian or Italian Dishes, possibly from a set, Vessel 158, left, Vessel 159, right.

Coarse StonewaresRhenish - Frechen

161. Bottle Frechen CSW 1650-1670  
 119467+116527+113595+114852+121376, 158066+158311,  
 159508  
 N7 E3 (E 178)+N7 E2 (E 143)+N7 E3+N7 E2 (E 178)+N6 E3, N9 E2+  
 N9 E1, N9 E1  
 E 145, E 143, E 178  
 Comments: Illustrated in Figure A.8. Beverage Service
162. Bottle Frechen CSW 1550-1725  
 164426, 105363, 164215, 146613, 158308, 144614, 116316  
 N8 E4, N4 E3 (E 134), N8 E4, N2 W5, N9 E1, N8 E1, N6 E1 (E 143)  
 E 145, E 143, E 134  
 Comments: medallion fragment Beverage Service
163. Bottle Frechen CSW 1600-1650  
 121581, 132623  
 N5 E3, N5 W2 (E 137)  
 E 145, E 137  
 Comments: medallion fragment, similar to Moorhouse (1970:79),  
 match Hurst et al. (1986: plate 44 middle). Illustrated in Figure A.8.  
 Beverage Service
164. Bottle Frechen CSW 1550-1725  
 140988, 116070  
 N8 W2 (E 169), N6 E1 (E 143)  
 E 169, E 143  
 Comments: medallion fragments with light blue Beverage Service
165. Bottle Frechen CSW 1550-1725  
 156775+156641, 156643  
 All N9 E3  
 E 145  
 Comments: Beverage Service



Figure A.8. Frechen Coarse Stoneware Bellarmine Medallions. Vessel 166, left, Vessel 163 centre, Vessel 161 right.

166. Bottle Frechen CSW 1650-1725  
 116525+134370+111621, 114488+111070, 116525+123525,  
 144679+123526, 114355, 116836, 114853, 114331, 126516,  
 111368, 114815, 118791, 144499, 114576  
 N7 E2 (E 143)+N5 W2 (E 134)+N7 E1 (E 143), N7 E1 (E 143)+N7 E2 (E 143),  
 N7 E2 (E 143)+N7 E3 (E 183), N8 E1+N7 E3 (E 178), N7 E1 (E 143),  
 N7 E1 (E 143), N6 W1, N7 E0, N7 E2 (fall in), N6 E2 (E 143), N6 E1 (E 178),  
 N6 W1, N8 W1, N6 W1  
 E 143, E 183, E 145, E 178, fall in, E 134  
 Comments: shoulder and medallion fragment, body sherds, crown  
 and heart medallion in Gaimster (1997) Fig. 3.73. Illustrated in Figure A.8.  
 Beverage Service
167. Bottle Frechen CSW 1550-1725  
 134890, 116334, 162242, 116526, 114489, 114815+122227,  
 122234+1369+118054  
 N6 W2 (E 169), N7 W1, N9 W1, N7 E2 (E 143), N6 E2 (E 177),  
 N6 E1 (E 178)+N6 E3, N6 E3+L1+N6 E0 (E 178)  
 E 145, E 143, E 177, E 178, E 169, L1  
 Comments: neck and body sherds  
 Beverage Service
168. Bottle Frechen CSW 1550-1725  
 143679, 134373, 122116, 116906, 116526, 164482  
 N3 W4, N5 W2 (E 169), N7 E2 (E 143), N6 E0 (E 178), N7 E2 (E 143),  
 N6 E5  
 E 145, E 143, E 178, E 169  
 Comments: body sherds  
 Beverage Service
169. Bottle Frechen CSW 1550-1725  
 144604, 162241, 111379, 116905, 155501  
 N8 E0, N9 W1, N5 W1 (E 143), N5 W1 (E 143), N9 W3 (E202)  
 E 145, E 143, E202  
 Comments: body sherds  
 Beverage Service
170. Bottle Frechen CSW 1550-1725  
 144605  
 N8 E0  
 E 145  
 Comments: shoulder sherd  
 Beverage Service

171. Bottle Frechen CSW 1550-1725  
 159875, 123317  
 N9 E1, N7 W1 (E 143)  
 E 145, E 143  
 Comments: body sherds Beverage Service

Rhenish - Westerwald

172. Mug Westerwald CSW 1650-1700  
 161727, 156380, 162659+162745  
 N10 E1, N9 E0, N9 W1+N9 W1  
 E 145  
 Comments: applied and incised design, no colour, rim fragments  
 Beverage Service
173. Mug Westerwald CSW rim dia. ~10cm 1660-1700  
 119943, 144157, 111152  
 N7 E3 (E 178), N5 W4, N7 E8 (E 143)  
 E 178, E 145, E 143  
 Comments: rim fragments, double grooves, blue and magenta  
 Beverage Service
174. Mug Westerwald CSW rim dia. ~10cm 1650-1740  
 141794  
 N6 W4  
 E 145  
 Comments: rim fragment, double grooves, blue only Beverage Service
175. Mug Westerwald CSW 1660-1700  
 119919, 111071, 111322  
 N7 E2, N7 E2, N7 E1  
 E 143  
 Comments: thin body sherds, applied and incised floral decoration,  
 blue and magenta Beverage Service

176. Mug Westerwald CSW 1650-1700  
 144172  
 N3 W4  
 E 145  
 Comments: thin body sherd, incised floral decoration, blue only  
 Beverage Service
177. Mug Westerwald CSW 1650-1700  
 158845  
 N9 E0  
 E 145  
 Comments: body sherd, single groove with splashed blue below  
 Beverage Service
178. Mug Westerwald CSW 1650-1700  
 111214  
 N7 E2  
 E 143  
 Comments: body sherd, single groove, blue only, deteriorated  
 salt glaze, burnt?  
 Beverage Service
179. Jug Westerwald CSW 1650-1700  
 156056+161860+162743+162651, 161650, 164087, 162673  
 N9 W1 (top of F56)+N9 W1+N9 W1+N9 W1, N10 E0, N9 W1, N9 W1  
 E 145, F56  
 Comments: light buff fabric, rim, shoulder and handle attachment,  
 medallion fragment, no decorative colour visible, decoration  
 applied and incised  
 Beverage Service
180. Jug Westerwald CSW 1650-1700  
 121125, 141374, 123264, 159743, 110520, 111290, 141781  
 N7 E0 (E 134), N5 W4, N7 W1 (E 143), N9 W1 (F 56), N5 E1 (E 143),  
 N7 E1 (E 143), N3 W4  
 E 134, E 145, E 143, F 56  
 Comments: light blue with incised and stamped floral decoration,  
 handle fragment and body sherds  
 Beverage Service

181. Jug Westerwald CSW rim dia. ~6cm 1650-1700  
 111781  
 N7 W1  
 E 143  
 Comments: rim fragment, single groove with incised decoration,  
 blue only Beverage Service
182. Jug? Westerwald CSW 1650-1700  
 141137  
 N4 W4  
 E 145  
 Comments: body sherd, incised decoration, blue only Beverage Service

### English

#### Bristol Gray

183. Cup Bristol Gray CSW rim dia. ~5cm 1690+  
 105171+123352+118180, 123353, 111760, 121636  
 N6 W1 (E 134)+N6 E0 (E 134, below F20)+N6 W1 (E 143), N6 E0 (E 143),  
 N6 W1 (E 143), N6 W1 (E 143)  
 E 134, E 143  
 Comments: white "engobe", rim and handle fragment,  
 body sherds, provenance: John Allan (pers. comm., April 1998)  
 Beverage Service
184. Cup Bristol Gray CSW base dia. ~5cm 1690+  
 121636, 121895, 118178, 116904+118172+114394  
 N6 W1 (E 143), N5 W1 (E 134), N6 E1 (E 143), N6 E0 (E 178)+  
 N6 W1 (E 143)+N7 E0 (E 143)  
 E 143, E 134, E 178  
 Comments: white "engobe", base fragment and body sherds  
 provenance: John Allan (pers. comm., April 1998) Beverage Service



English Brown

185. Bottle English Brown CSW 1690+  
 143068, 141896, 144171  
 N4 W2, N3 W4, N3 W4  
 E 145  
 Comments: numerous body sherds Beverage Service
186. Bottle English Brown CSW base dia.~7cm 1690+  
 140632+140119, 140640+140633  
 N6 W4+N5 W4, N6 W4+N6 W4  
 E 145  
 Comments: base and body fragments Beverage Service

Unidentified Coarse Stoneware

187. Bottle unidentified CSW mid. dia.~9cm no date  
 140716, 146502+2010  
 N6 W4, N2 W5+N2 E2 (bottom of L2)  
 E 145, L2  
 Comments: smooth beige fabric, deteriorated glaze exterior,  
 body fragments with handle Beverage Service
188. Bottle/Jug unidentified CSW no date  
 158754, 146742  
 N9 E1, N8 E2  
 E 145  
 Comments: smooth dark grey fabric, salt glazed Beverage Service

Table A.1. Vessel Joins in Ceramics from the House at Area B.

Vessel	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Provenience (Event/Feature and 1 metre excavation unit)
2	158756	156837				E 145, N9 E2+N9 E3
4	119238	114084	284	6038		E 143, N7 E3+E 145, N7 E3+L3, N1 W2+L3, S1 W1
13	141856	141867	141771			E 145, N6 W4+N6 W4+N3 W4
15	158320	158928	158054			E 145, N9 E2+E 145, N9 E2+E 138, N9 E1
34	144650	144651				E 145, N8 W1
42	146656	146603	146529			E 145, N8 E2
45	119463	121614				E 145, N4 E3
47	122246	122241	121988	122258	122251	E 145, N6 E3
48	121917	121850				E 145, N5 E3
49	146611	146744				E 145, N8 E2
51	144468	144598				E 145, N8 E0
53	116349	114734				E 143, N7 E1+E 145, N7 W1
55	98839	98854				E 143, N5 E2
70	158106	158344				E 145, N9 E2
72	138637	134421				E 134, N4 W3+E 169, N7 W2
77	123349	121919				E 145, N5 E3
77	119449	98827				E 145, N5 E3+N5 E2

Table A.1. Vessel Joins in Ceramics from the House at Area B, continued.

Vessel	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Provenience (Event/Feature and 1 metre excavation unit)
79	159832	144234				E 145, N9 E1+N8 E3
79	156639	156414				E 138, N9 E2+N9 E3
80	164878	164792				E 246, N7 E5+E 145, N6 E5
81	141197	140643				E 145, N5 W4+N6 W4
85	156844	111342				E 145, N9 E0+E 143, N7 E1
87	116342	125143	116532			E 145, N7 W1+N6 W1+N6 W1
88	113655	113040				E 145, N7 E0
90	116387	111770	122460	119078		E 145, N6 W1+E 143, N6 W1+E 143, N5 W1+E 137, N5 W0
93	110387	108486				E 143, N6 W1
94	111613	144467				E 143, N7 E1+E 145, N8 E0
95	156854	156855				E 145, N9 E3
96	144015	144016	114863	111974	140295	E 145, N8E3+E 145, N8 E3+E 143, N7 E3+Fall In
97	141003	141004	144346	144281		E 169, N8 W2+E 169, N8 W2+E 145, N8 W1+E 145, N3 W4
97	143965	135922	137004			E 145, N8 W1+E 169, N7 W2+E 169, N7 W2
98	98853	122546				E 145, N5 E2+N5 E3
99	114554	159204				E 145, N5 E1+F 21, N7 E4
101	146326	118369				E 145, N8 E2+E 134, N6 E3

Table A.1. Vessel Joins in Ceramics from the House at Area B, continued.

Vessel	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Provenience (Event/Feature and 1 metre excavation unit)
102	140625	159769				E 145, N6 W4+N9 E1
103	155955	132308	159240			E 134, N9 W2+E 134, N7 W2+E 145, N9 E1
103	158046	158094				E 138, N9 E1+E 145, N9 E2
103	143007	146210				E 169, N7 W4+E 134, N3 W5
104	158772	137742				E 145, N9 E3+E 134, N4 W3
113	144599	144655				E 145, N8 E1+N8 E0
113	162230	156688				E 145, N9 E0+E 138, N9 E0
115	156853	156636	100118			E 145, N9 E3+E 145, N9 E3+E 137, N6 E2
116	144514	154860				E 145, N2 W4+E 134, N5-4 W5
119	143675	143689	146640	154516	146605	E 145, N2 W4+E 145, N3 W4+ E 134, N3 W5+E 134, N3 W5 +E 145, N2 W5
119	152853	147416				E 134, N3 W5+E 169, N1 W5
124	141759	141143				E 145, N4 W4+N3 W4
130	159991	158833	155482	132610		E 145, N9 E0+E 145, N9 E0+E 137 (waterline), N9 W3+E 137, N5 W2
134	111799	113954				E 143, N5 E3+N5 E1
150	121516	118709	121411	113843		E 134, N4 E3+E 143, N5 E3+E 134, N4 E3+E 134, N4 E3

Table A.1. Vessel Joins in Ceramics from the House at Area B, continued.

Vessel	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Provenience (Event/Feature and 1 metre excavation unit)
150	143749	110880				E 138, N8 W1+E 143, N6 E2
154	146558	146570				E 138, N8E2
158	158050	146328	146599			E 138, N9 E1+E 145, N8 E2+E 138, N8 E2
159	158955	114106				F 33, N7 E2+E 143, N7 E2
161	119467	116527	113595	114582	121376	E 178, N7 E3+E 143, N7 E2+E 145, N7 E3+E 178, N7 E2+E 145, N6 E3
161	158066	158311				E 145, N9 E2+N9 E1
165	156775	156641				E145, N9 E3
166	116525	134370	111621			E 143, N7 E2+E 134, N5 W2+E 143, N7 E1
166	114488	111070				E 143, N7 E1+E 143, N7 E2
166	116525	123525				E 143, N7 E2+E 183 N7 E3
166	144679	123526				E 145, N8 E1+E 178, N7 E3
167	114815	122227				E 178, N6 E1+E 145, N6 E3
167	122234	1369	118054			E 145, N6 E3+L1+E 178, N6 E0
172	162659	162745				E145, N9 W1
179	156056	161860	162743	162651		top of F 56, N9 W1+E 145, N9 W1 (the rest)
183	105171	123352	118180			E 134, N6 W1+below F 20, N6 E0+E 143, N6 W1

Table A.1. Vessel Joins in Ceramics from the House at Area B, continued.

Vessel	Cat. No.	Cat. No.	Cat. No.	Cat. No.	Provenience (Event/Feature and 1 metre excavation unit)
184	116904	118172	114394		E 178, N6 E0+E 143, N6 W1+E 143, N7 E0
186	140632	140119	140640	140633	E 145, N6 W4+N5 W4, N6 W4+N6 W4
187	146502	2010			E 145, N2 W5+bottom of L2, N2 E2

Note: This table does not include joins identified in Vessels 31, 100 and 120. See ceramic catalogue (Appendix A.1.) for information on these specific vessels.

APPENDIX B: AN ANALYSIS OF CLAY TOBACCO PIPES FROM THE HOUSE AT  
AREA B.

**APPENDIX B: AN ANALYSIS OF CLAY TOBACCO PIPES RECOVERED FROM  
THE HOUSE AT AREA B: PIPE BOWL TYPES, MAKERS' MARKS AND STEM  
BORE MEASUREMENTS.**

This analysis makes use of the typology established by Pope (1988) for pipe bowls recovered from Ferryland. Some date ranges for production and geographic attributions have been revised (Pope 1992). Only those bowl types identified in the assemblage will be discussed. For profiles and descriptions of these types see Pope (1988, 1992) and Carter (1997).

I have included one additional type (Type "WP") because it occurred frequently within the assemblage and did not fit comfortably within the existing typology. One example of this form has been identified in Area C, Event 9, which dates to the Dutch raid of 1673 (Gaulton 1997:279). This type sometimes occurs with a makers' mark "WP" stamped on a distinctive tear drop-shaped heel. The pipes are carefully made, often with rouletting at the mouth, and have a bore size of 7/64. The bowl shape is similar to Pope's Type "P", but is consistently smaller. Its shape, however, suggests a West Country or Bristol origin and likely dates to the last half of the seventeenth century (Gaulton 1999: personal communication). The makers' mark may be attributed to either William Philips of Bristol (c. 1689-1690) or William Price of Barnstaple (c. 1660-1675) (Walker 1977:1245; Grant and Jemmett 1985:471-472). See Figures B.1 and B.2 for profile and heel illustration of Type "WP".





Figure B.1. Profile of Type "WP" bowl, to scale.

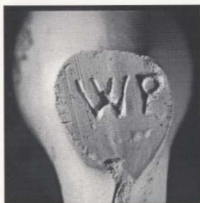


Figure B.2. WP maker's mark on heel, not to scale.

Some other pipe bowls did not readily fit within Pope's typology but occurred occasionally as single examples in separate events. When these bowls were encountered they were categorized using other typologies (Oswald 1961 in Walker 1977:1514-1521; Oswald 1970 in Walker 1977:1522-1523; Atkinson and Oswald 1969 in Walker 1977:1528-1533; Noël Hume 1969:303; Noël Hume 1963 in Walker 1977:1540-1545; Noël Hume 1970 in Walker 1977:1546-1551).

The frequency of those pipes categorized using Pope's (1988, 1992) typology, with the addition of Type "WP", is presented in Table B.1 in order to facilitate comparison of events. Those pipes not accounted for in this chart, as well as those bearing makers' marks, will be dealt with below by event. Timelines depicting the periods represented in each assemblage and Figures illustrating the results of the pipe stem bore analysis will follow their respective event.



#### Additional Pipe Bowl Types from Event 134

3 incomplete bowls with spur - identified as English (1690-1750), Noël Hume (1969:303).

1 complete bowl with spur - identified as Broseley Type 4 (c. 1690-1720), Atkinson and Oswald 1970 in Walker (1977).

1 bowl fragment of Chesapeake red clay pipe, bore size 5/64, undated.

#### Makers' Marks from Event 134

**RVB SID NEY** - 2 stamped stems, attributed to Reuben Sydney (1687-1748), Southampton, Oswald (1975).

**BA RVM** - 3 stamped heels, attributed to Barnstaple, Oswald (1969); bowl shape date 1660-1710, Pope (1988); 1660-1710, Grant and Jemmett (1985).

**I.H.** - 1 stamped heel, attributed to John Hunt of Bristol (1651-1653), Walker (1977).

**RT** - 1 bowl fragment, stamped facing smoker, attributed to Robert Tippet of Bristol (1660-1750), Walker (1977).

**Circular Cartouche** - 1 incomplete bowl with moulded cartouche on right side of bowl, impression unclear, cartouche and bowl form suggest Robert Tippet of Bristol (1660-1750), Walker (1977).

**Circular Cartouche, W Tippet** - 1 bowl fragment with moulded cartouche, attributed to William Tippet (1689-1739), Walker (1977).

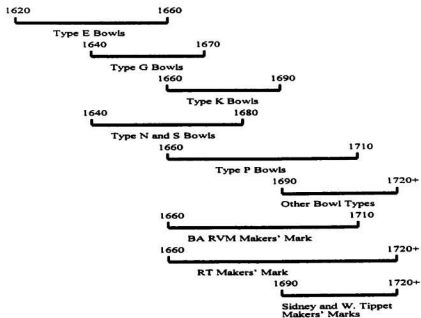
**Rouletting** - 3 stems, Dutch (no date), Oswald (1969).

**W** - 1 stamped heel, bore size 6/64, unidentified.

18<sup>th</sup> Century Pipe Bowls and Stems from Event 134

4 stems and 2 fragmentary moulded bowls of the mid-eighteenth century were identified (Noël Hume 1969:305). These are likely intrusive from the overlying plow zone (Event 137) or indicate disturbance of this event during the construction of the waterline or Harper's excavations.

Figure B.3. Pipe Bowl and Makers' Mark Timeline, Event 134, Area B.



\*Does not include I.H. Makers' Mark, 1651-1653.

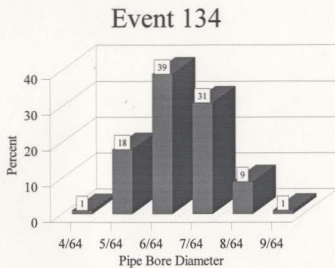
Figure B.4. Stem Bore Analysis, Event 134, Area B.

Stem Bore	Number
4/64	6
5/64	140
6/64	301
7/64	241
8/64	67
9/64	11
10/64	1

TOTAL .. 767

Mean pipe stem bore is 6.339

Mean date for Event 134 is 1689



### Additional Pipe Bowl Types from Event 138

1 complete bowl with spur - identified as English (1690-1750), Noël Hume (1969:303).

### Makers' Marks from Event 138

**RVB SID NEY** - 3 stamped stems, attributed to Reuben Sydney (1687-1748),

Southampton, Oswald (1975).

**BA RVM** - 1 stamped heel, attributed to Barnstaple, Oswald (1969); bowl shape date

1660-1710, Pope (1988); 1660-1710, Grant and Jemmett (1985).

**ER** - stamped on 1 bowl facing smoker, attributed to Edward Reed (1706-1723), Bristol,

Walker (1977), or Edward Randall (1699-1719), London, Walker (1971).

**LE** - stamped on 1 stem with rouletting and diamonds, attributed to Llewellyn Evans

(1661-1686), Bristol, Walker (1977), Oswald (1975).

**Stamped Fleur de Lys within Diamond** - 1 stem, Dutch (no date), Oswald (1969).

**Rouletting** - 2 stems, Dutch (no date), Oswald (1969).

**Sun or Wheel within Circle** - 2 stems, stamped design, bore measurement 7/64,

unidentified.

**Castle Tower** - in relief on left side of 1 bowl, bore measurement 6/64, unidentified.

Illustrated in Figure B.5.

### 18<sup>th</sup> Century Pipe Bowls and Stems from Event 138

1 fragment of a moulded bowl with raised design, and 2 moulded stems with raised design were recovered. These are intrusive from overlying events, or Harper's earlier



excavations and date to the mid-eighteenth century (Noël Hume 1969:305).



Figure B5. “Castle Tower” maker’s mark in relief, not to scale.

Figure B.6. Pipe Bowl and Makers' Mark Timeline, Event 138, Area B.

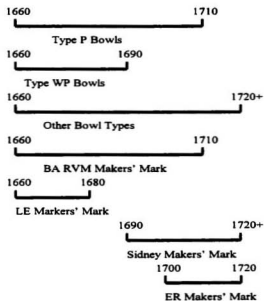


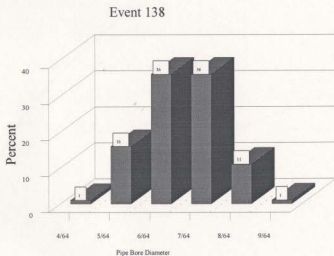
Figure B.7. Stem Bore Analysis, Event 138, Area B.

Stem Bore	Number
4/64	2
5/64	46
6/64	105
7/64	105
8/64	33
9/64	4

TOTAL .. 295

Mean pipe stem bore is 6.451

Mean date for Event 138 is 1685



### Additional Pipe Bowl Types from Event 143

1 complete bowl, incised at rim, bore size 7/64 - identified as London (c. 1640-1660), Atkinson and Oswald 1969 in Walker (1977).

1 complete bowl with spur - identified as English (1690-1750), Noël Hume (1969:303).

1 complete bowl, finely-made, rouletting at rim, burnished, bore size 6/64 - identified as Dutch (Gaulton 1999: personal communication), late 17<sup>th</sup> or early 18<sup>th</sup> century.

### Makers' Marks from Event 143

**RVB SID NEY** - 3 stamped stems, attributed to Reuben Sydney (1687-1748), Southampton, Oswald (1975).

**LE** - 1 fragmentary bowl, stamped facing smoker, attributed to Llewellyn Evans (1661-1686), Bristol, Walker (1977), Oswald (1975).

**RC** - 1 complete bowl, stamped on heel, incised rim, bore size 7/64, similar to Pope's Type "R" (Pope 1988), London or Bristol, 1640-1670. Counted as Type "R" in Table B.1.

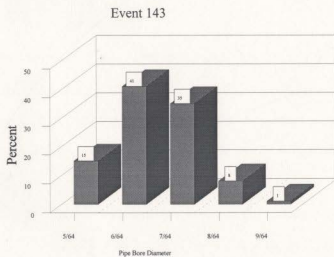
Figure B.8. Stem Bore Analysis, Event 143, Area B.

Stem Bore	Number
5/64	88
6/64	235
7/64	201
8/64	43
9/64	3
10/64	1

TOTAL .. 571

Mean pipe stem bore is 6.371

Mean date for Event 143 is 1688



### Additional Pipe Bowl Types from Event 145

1 fragmentary bowl, 1 pipe stem, heelless form, bore size 7/64 - identified as English (1680-1710), Noël Hume (1969:303).

1 complete bowl, rouletting at rim, bore size 8/64 - identified as London (c. 1640-1660), Atkinson and Oswald 1969 in Walker (1977).

1 almost complete bowl, rouletting at rim, bore size 8/64 - identified as London (c. 1660-1680), Atkinson and Oswald 1969 in Walker (1977).

1 almost complete bowl, rouletting at rim, fragmentary spur, bore size 7/64 - identified as London (c. 1660-1680), Atkinson and Oswald 1969 in Walker (1977).

1 complete bowl, rouletting at rim, bore size 8/64 - identified as English (c. 1620-1650), Oswald 1961 in Walker (1977).

1 stem fragment of a Chesapeake red clay pipe, bore size >10/64, undated.

### Makers' Marks from Event 145

**RVB SID NEY** - 1 complete bowl with heel and stem. Stem stamped, **RS** moulded on either side of heel, attributed to Reuben Sydney (1687-1748), Southampton, Oswald (1975).

**BA RVM** - 3 stamped heels, attributed to Barnstaple, Oswald (1969); bowl shape date 1660-1710, Pope (1988); 1660-1710, Grant and Jemmett (1985).

**EL** - 1 stamped heel, bore size 7/64, can be attributed to Edward Lewis I (1631-1641), Elizabeth Lewis (1652), or Edward Lewis II (1678 or 1722) all of Bristol, Walker (1977).

**BS** - 1 fragmentary bowl, stamped facing smoker, rouletting at rim, bore size 6/64,

unidentified.

**Rouletting and Stamped Fleur de Lys within Diamond** - 1 stem, Dutch (no date), Oswald (1969).

**Eight-Spoked Wheel** - 1 fragmentary bowl with stamped heel, form similar to Pope's Type "J" (Pope 1992), Exeter, 1650-1670.

#### 18<sup>th</sup> Century Pipe Bowls and Stems from Event 145

Intrusive material from overlying events, the construction of the waterline, or Harper's excavation is represented by 2 fragmentary bowls with moulded decoration, 1 rouletted stem with moulded decoration, and 4 stem/heel fragments (Noël Hume 1969:305).

Figure B.9. Stem Bore Analysis, Event 145, Area B.

Stem Bore	Number
4/64	1
5/64	55
6/64	208
7/64	320
8/64	74
9/64	13

TOTAL .. 671

Mean pipe stem bore is 6.671

Mean date for Event 145 is 1677

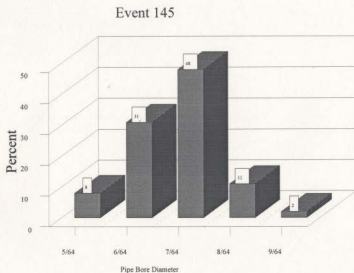
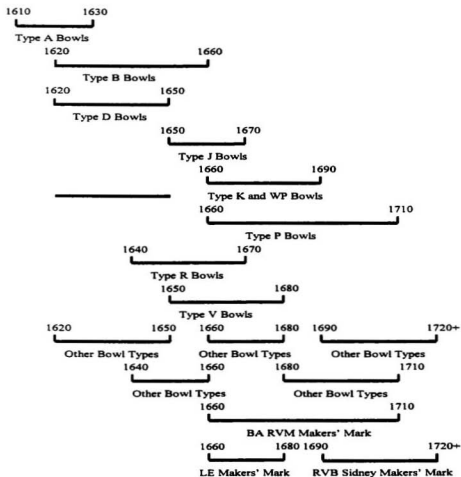




Figure B.10. Pipe Bowl and Makers' Mark Timeline, Events 143 and 145 Combined, Area B.



\* Does not include EL Makers' Mark, 1631-1722.

Figure B.11. Stem Bore Analysis for Events 143 and 145 Combined, Area B.

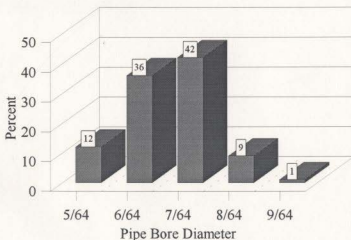
Stem Bore	Number
4/64	1
5/64	143
6/64	443
7/64	521
8/64	117
9/64	16
10/64	1

TOTAL . 1,242

Mean pipe stem bore is 6.533

Mean date for Events 143 and 145 is 1682

## Events 143 and 145



Additional Pipe Bowl Types from Event 169

2 complete bowls, rouletting at rim, bore sizes 7/64 and 8/64 - identified as London (c. 1640-1660), Atkinson and Oswald 1969 in Walker (1977).

1 complete bowl, bore size 6/64 - identified as London (c. 1680-1710), Atkinson and Oswald 1969 in Walker (1977).

1 stem fragment of a Chesapeake red clay pipe, bore size 7/64, undated.

Makers' Marks from Event 169

**Circular Cartouche** - 1 relatively complete bowl with moulded cartouche on right side of bowl, impression unclear, cartouche and bowl form suggest Robert Tippet of Bristol (1660-1750), Walker (1977).

Figure B.12. Pipe Bowl and Makers' Mark Timeline, Event 169, Area B.

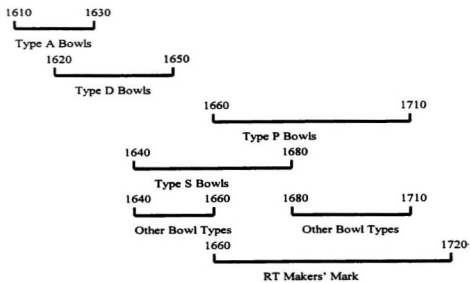


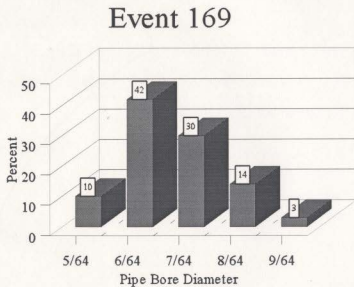
Figure B.13. Stem Bore Analysis, Event 169, Area B.

Stem Bore	Number
5/64	15
6/64	61
7/64	44
8/64	21
9/64	5

TOTAL . . 146

Mean pipe stem bore is 6.589

Mean date for Event 169 is 1680



Additional Pipe Bowl Types from Event 178

1 complete bowl, no bore size - identified as London (c. 1610-1640), Atkinson and Oswald 1969 in Walker (1977).

Makers' Marks from Event 178

**Stamped Fleur de Lys within Diamond with Rouletting** - 1 stem, Dutch (no date), Oswald (1969).

18<sup>th</sup> Century Stems from Event 178

Intrusive material from overlying events, the construction of the waterline, or Harper's excavation is represented by 1 rouletted stem with moulded decoration, and 1 red clay pipe mouth piece with a bore size of 5/64 which likely dates to the 19<sup>th</sup> century (Noël Hume 1969:305).

Figure B.14. Stem Bore Analysis, Event 178, Area B.

Stem Bore	Number
5/64	1
6/64	9
7/64	16
8/64	8
9/64	3

TOTAL ... 37

Mean pipe stem bore is 7.081

Mean date for Event 178 is 1661

