

THE ARCHAEOLOGY OF GENTRY LIFE IN  
SEVENTEENTH-CENTURY FERRYLAND

BARRY C. GAULTON









**THE ARCHAEOLOGY OF GENTRY LIFE  
IN SEVENTEENTH-CENTURY FERRYLAND**

by

Barry C. Gaulton

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## Abstract

*The archaeology of gentry life in seventeenth-century Ferryland* revolves around the excavation and analysis of a large timber-framed dwelling occupied by Sir David Kirke and family more than 350 years ago. The midden deposits associated with the house contained an impressive collection of artifacts, which not only assisted in dating the site and its range of occupation but it also provided a valuable opportunity to learn about the day-to-day activities of this gentry family. Clay tobacco pipes, coins and other datable objects clearly demonstrate that this structure was erected sometime in the 1640s and that occupation continued until the latter years of the seventeenth century – likely coinciding with the devastating French attack of 1696.

The Kirke house was very large by Colonial Newfoundland standards. The principal dwelling was 21 by 53 feet but there was also a 12 by 22 foot lodging/servants' quarters, an 8 by 8 foot well house and a cobblestone courtyard. This domestic compound underwent a series of structural modifications and improvements over the course of the seventeenth century including the addition of a 14 by 14 foot buttery/pantry and an 8 by 12 foot dairy. These different phases reveal a household that was far from stagnant after the death of Sir David Kirke in 1654. Rather, they show a family that sought to expand upon their existing accommodations and diversify their business operations in light of changing social and economic times.

The range of activities conducted in this series of buildings included everything from food preparation, cooking and sewing to serving alcoholic beverages in a tippling room, conducting business transactions relating to the family's Pool Plantation, frequently partaking in fine and elaborate dining practices, and possibly providing medical attention to those in need. Some of the latter activities distinguish the Kirkes from the majority of Newfoundland planter society, for the artifacts reveal that they were both literate and numerate, were involved in international commerce that may have relied upon close personal contacts and were surrounded by a diverse, and in some cases rare, collection of expensive household items and personal adornments.

The Kirkes were not alone in their conventions regarding a lifestyle befitting their social and economic position. A comparison with contemporaneous gentry occupation in English North America illustrates numerous similarities; yet some lifestyle choices were influenced and shaped by specific environmental, economic or social conditions. Comparatively speaking, the Kirke occupation at Ferryland appears to be "average" in terms of architecture but truly exceptional with regard to other material culture.



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## **Chapter 1**

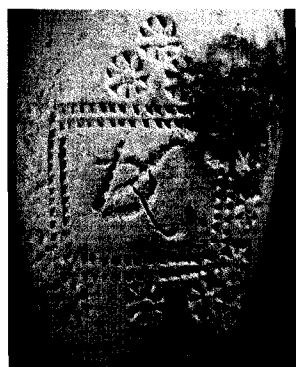
### **Introduction**

Research on status differences as reflected in the archaeological record has very broad international significance. Whether someone is studying the French colonization of Quebec, a Dutch settlement in South Africa or one of the early English colonies in the Chesapeake, New England or Newfoundland, all these early colonial ventures were composed of various members of society with disparate economic means. These differences were exhibited in many aspects of daily life including the houses people lived in, the food they ate and the clothing they wore. In particular reference to British North America, seventeenth-century settlers residing from Newfoundland to South Carolina were linked to their parent society through strong and enduring political, social and cultural ties – but at the same time they had to struggle with unfamiliar economic and environmental circumstances encountered in the colonies, with the result that their material culture and daily lives also changed.

This thesis focuses on the archaeological manifestations of gentry life in seventeenth-century Ferryland and illustrates how one English gentry family adapted to the unique conditions of Colonial Newfoundland. Discussion will centre around the excavated remains of a large domestic compound and the tens of thousands of associated artifacts, all of which date from approximately 1640 to 1700. For such a substantial



group of features and a relatively lengthy occupation, it is surprising that there are no detailed references to this residence in the historic record; nor is it represented on a map of Ferryland drawn by Plymouth surgeon James Yonge in 1663. Despite these limitations, we know exactly who lived here. Scattered amongst the domestic refuse was a small collection of clay tobacco pipes manufactured in Virginia and a lone merchant's token, both of which bore the familiar initials DK (Figure 1). The individual who once smoked these pipes and issued this token was none other than the merchant-gentlemen Sir David Kirke, co-proprietor of the Island of Newfoundland, who settled at Ferryland along with his family in 1638.



**Figure 1.** (left) Clay pipe bowl and (right) lead merchant's token bearing the initials "DK" for David Kirke.

The remains of this dwelling (located at a site designated Area F) comprises the largest and best-preserved seventeenth-century house excavated in the former English territories of what is today Canada. The artifacts found both inside and outside the Kirke house number more than 90,000 specimens, demonstrating a consumption of goods well-beyond that of any middling planter and even that of other gentry families residing

in the southern colonies of the present day United States. Together, these domestic remains provide a valuable opportunity to chronicle the evolution of this structure, the daily life of those who resided within and how the experiences of this transplanted gentry family compared to others in Newfoundland and elsewhere in British North America.

With this in mind, the objectives of this dissertation begin with specifics relating to site dating and sequence of construction, and then expand to include aspects of daily life and how this conveys a broader understanding of lifeways in seventeenth-century Ferryland. The primary aims of this research are:

- 1) to establish when and how these buildings were constructed, what they may have looked like, how long they were occupied and the particular functions they served. This section will also consider questions relating to modifications and renovations that took place over the course of the seventeenth century;
- 2) to identify and analyze the material remains left by these people so as to ascertain different aspects of their lives including foodways (food procurement, storage, preparation, serving, consumption and waste disposal), their personal attire and belongings, and their health and socio-economic status;

3) to evaluate how the lives of Area F's residents compared to Ferryland's other inhabitants and also those living in other parts of Newfoundland's English Shore;

4) to compare the architectural and artifactual remains from the Kirke house with other families of similar wealth and social standing in British North America to see whether, if at all, different colonial contexts influenced lifestyle choices and in what form these are manifested in the archaeological record.

As a secondary goal, I also hope to discern what the archaeological record can tell us about the success of the Kirke family's business operations during the second half of the seventeenth century, after the death of Sir David in 1654. Did business and family fortune wane during this time or does the evidence suggest continued prosperity, expansion or diversification?

To answer these questions, this thesis is broken down into four main components. The first (Chapter 2) encompasses several topics relating to socio-economic status and consumption, the context behind seventeenth-century British colonization and how the history and archaeology of Ferryland fit into this larger picture. The latter discussions will span from seasonal visitations by European fishers and native Beothuk Indians in the sixteenth century, to Sir George Calvert's colony of Avalon established in 1621, the Pool Plantation presided over by Sir David Kirke in 1638 and the devastating

French attack that destroyed the entire settlement in 1696. Excavations at Area F and the site formation processes that occurred over the past 500 years will also be talked about in detail.

The next chapter (Chapter 3) develops an in-depth and tightly-dated chronological sequence for the occupation and construction activities that occurred at Area F between roughly 1621 and 1696. Clay tobacco pipes, coins and other datable objects are used in conjunction with the stratigraphic record to show how the site was first dug down and levelled off to make way for several Calvert-era buildings. These were later dismantled/modified to accommodate the Kirke house. The evolution of the Kirke house and its associated architectural remains are then dealt with in a chronological progression and this demonstrates that the dwelling was not a static edifice but a vibrant and ever-changing structure which underwent several alterations over the course of the seventeenth century. The house frame, the floors, several fireplaces, its roof covering and possible locations for windows and doors are all discussed in detail, as is the overall house plan and the general function(s) of each room.

The myriad facets of daily life at the Kirke house are the focus of Chapter 4. This is subdivided into six different sections. The first deals with activities relating to foodways including food procurement, preparation, cooking, consumption and preservation. Details on the occupants' health, hygiene and general refuse disposal practices

comprise the next section of this chapter. This is followed by a discussion of the frequent leisure activities of smoking and alcohol consumption and then, the possibilities regarding archaeological manifestation of religious ritual and folk beliefs. The many ways the Kirkes' expressed their affluence – some obvious and others subtle – were a very important part of who they were and how they were perceived by themselves and by the entire community. For this component of our discussion, we look at the manner of their housing, furnishings, decorative ceramics, clothing and costume-related accessories and other material culture. The final segment investigates household economics and by extension, the Kirke family's influence in terms of local production and international commerce.

Chapter 5 incorporates both architectural and artifactual evidence from Area F to discuss similarities and differences between the Kirke house and other contemporaneous domestic units excavated in Newfoundland. The initial focus is a comparison with two other residences at Ferryland, but then expands to include a planter's dwelling at Renews, and to a much more limited extent, an early seventeenth-century house at Cupids. How the archaeological remains from Area F fit into the larger picture of North American colonization by various members of the English gentry are examined next. The results not only illustrate some very common patterns between the seventeenth-century colonial gentry but furthermore, how some of their domestic lifestyle choices were influenced, to a degree, by social, economic and environmental conditions.

The compilation of this research represents an important step toward a more comprehensive understanding of the social and economic diversity of European settlement in seventeenth-century Newfoundland. In fact, the examination of the Kirke occupation at Ferryland is the first archaeological analysis to detail the lifeways of a seventeenth-century colonial gentry family in what is now Canada. This helps complete the picture of life in the early colonial period by showing how the day-to-day existence of wealthy colonial proprietors compared to that of an ordinary fishing family and to all those whose lives played out somewhere between these extremes. Even though David Kirke was an integral figure in this story, this analysis is also about the lives of the other Kirkes, including Lady Sara, her sons and possibly Sara's sister Lady Francis Hopkins. All these players likely resided within the house at one point or another, and it was from here that the daily operations of the Pool Plantation were overseen for more than four decades after Sir David's death.

## Chapter 2

### Socio-economic, Historical and Archaeological Contexts

#### 2.1 Status and consumption in England and its North American colonies

Living according to one's social and economic means was a basic precept shared by all members of seventeenth-century English society. Gentlemen, wealthy merchants and prosperous yeomen all held certain beliefs about the types and variety of material culture that best suited their particular needs and social standing – being quite different from that shared by a poor husbandman or labourer. In turn, this affected many aspects of daily life including one's accommodations and diet to your health, hygiene and personal attire. As Henry Glassie states “anything can be made to signify status”; hence, the key to unravelling the function of an artifact is to understand the specific temporal, social, religious, environmental and economic context in which it operated (1999:313). The material culture found on seventeenth-century colonial sites in North America performed in a similar manner to contemporaneous contexts overseas; yet, it also took on different meanings in response to the unique conditions of a new land. Archaeologists studying the early colonial period recognize the value of using material culture as a status indicator, but should also be aware of the pitfalls and limitations inherent in such a process. Status and wealth can be reflected in everything from pipestems to processional

staffs and all objects in between. The important thing to remember is that status-sensitive artifacts cannot be viewed in isolation from other associated material culture.

Any discussion of material culture and status in Colonial North America must first begin with an understanding of seventeenth-century society. The composition of English society, and that of many other European nations, can best be described as a dynamic and shifting hierarchy rather than one based upon fixed or rigid classes. A person's status within such a society could not always be easily defined since there were many factors including birth, title, wealth, occupation, mode of land tenure, legal status, lifestyle and positions of authority that made well-defined, formal distinctions difficult (Wrightson 1986:180). Despite these ambiguities, there was a basic hierarchy of social stratification described by contemporaries. This usually followed a consistent pattern with the titular nobility and gentry at the top, followed by professional people (such as merchants, lawyers and surgeons) and yeomen, craftsmen, husbandmen and the labouring poor. An equally valid, and increasingly adopted, perception of society during this period was one of *sorts*, whereby people were viewed as simply being of the "better", "middling" or "poorer" sort (Ibid., 191).

Whether discussing a baronial mansion of 40 residents or a small labourer's family of four, the basic unit of production and consumption was the household. This domestic environment had a profound influence on everyday life in seventeenth-century



England and Colonial North America, for it was in the house that people ate their meals, they slept, enjoyed leisure time, socialized and displayed their furnishings and valued possessions (Horn 1994:295). Thus, the house and the goods within it expressed a family's identity, aspirations and wealth.

English probate inventories from the seventeenth century indicate that a household's expenditures were largely dedicated to the basic necessities of food, clothing and shelter (Weatherill 1996). Food and drink alone often averaged between 50-60% of a labouring family's total expenditure (Shammas 1990:293). Despite a growing national market containing consumer goods with a vast price differential, many labourers, small craftsmen and husbandmen had limited funds to expend on nonessentials such as decorative tableware, expensive furniture or fine clothing. These households could at best acquire only a few treasured items and some of their favoured possessions may have consisted of family heirlooms or gifts. At the same time, they were not totally isolated from the new commodities of the period. Economic limitations aside, even the laboring poor seemed to have enough disposable income to enjoy the first mass-marketed New World product – tobacco.

At the opposite end of this spectrum are the nobility and gentry. Gentility was based on landed wealth conspicuously displayed in superior clothing, grandiose houses, domestic furnishings, a varied diet and an entourage of servants. Up until the beginning

of the seventeenth century, the English Crown encouraged gentlemanly distinction by passing sumptuary laws to ensure that individuals dressed, ate and purchased goods according to their social station. The universal law of society during this period was that the higher the status of a household or family, the more conspicuous was their display of wealth and status (Laslett 1984). Probate records show that gentlemen on both sides of the Atlantic also invested their money into objects such as pewter tableware, silver plate, clocks, mirrors, pictures and books (Weatherill 1996; Horn 1988).

Between the gentry and poor householders were the “middling sort” of society, who increasingly had the financial means to divert portions of their income into improved housing, servants, furniture and other consumer goods. Yeomen, merchants, master craftsmen and urban professionals all enjoyed a qualitative and quantitative increase in domestic furnishings, tableware and nonessentials compared to that of the labouring poor. In fact, they made up the largest market for new and imported goods in the seventeenth century (Weatherill 1993:210). Whereas the nobility and gentry used personal adornment and domestic commodities to buttress their position *vis-à-vis* the rest of society, it might be asked what motivated wealthy merchants and prosperous yeomen to purchase and consume the same types of goods. Was this simply a matter of social emulation? Lorna Weatherill has argued that social emulation alone cannot explain this phenomenon as it was the urban merchant, not the nobility, who often purchased many new commodities first, and thus led the way in fashion innovation and

consumer behaviour (1996:169,183). Arjun Appadurai supports this idea, for he perceives merchants as “the social representatives of unfettered equivalence, new commodities and strange tastes”, while political elites are “the custodians of . . . established tastes and sumptuary customs” (1986:33). It seems that a merchant’s access to new market commodities, along with the ability and personal desire to purchase these goods, played an important part in their acquisition. A similar pattern of commodity usage can be seen in maritime communities, where by their very nature, they had an opportunity to acquire and sample novel goods prior to their adoption by large segments of the population (Pope 2004:358).

The similarities and differences between the consumption patterns of wealthy merchants and the gentry are one of the first limitations to consider when associating material culture with status. While status, wealth and income are definitely related, they are not necessarily interchangeable. A gentleman, for example, could have been rich in lands and title yet only have moderate sums of disposable income to spend on buildings, household goods and extravagant clothing. On the other hand, a prosperous London merchant may have had property, material commodities and monetary wealth that far exceeded the gentleman but nevertheless was considered to be of lesser status because he lacked inherited title and rural land holdings. Given this fact, attributing “rich” archaeological deposits simply to the social status of those who deposited them would be somewhat misguided as market accessibility and an available cash income are equal-

ly important variables. It is because of this ambiguity in status, wealth, disposable income and consumption patterns that many archaeologists and anthropologists have adopted the term “socio-economic status”, rather than simply “status”, to refer to an individual’s (and by extension a household’s) position in society based primarily on social and economic factors (Spencer-Wood 1987:6).

Differences in the material culture of households can be seen in structural remains, furnishings, ceramics and glass, clothing or costume-related accessories and a plethora of other artifacts. For the most part, this diversity is exhibited in the quantity and quality of material culture, rather than differences in kind. This homogeneity in domestic possessions prevailed in both England and its colonies during the seventeenth century. The gentry, wealthy planters and merchants owned goods similar to their less well-off neighbours, they just owned more of them and these commodities were often of superior quality (Crowley 2001:173). For example, instead of a single woolen cloak worn by a labourer, a gentleman may have several made of silk or sewn with gold-wrapped thread. Likewise, a small table setting of pewter and treen vessels in a husbandman’s household paled in comparison to an extravagant arrangement of silverware displayed on the table of a wealthy merchant.

In an age when the majority of the population was illiterate, these material goods were imbued with enormous symbolic and social significance, constituting a clear and

tangible reflection of a family's economic well-being and place in the community (Horn 1994:295). This can be seen in certain objects whose very presence in the archaeological record directly reflects specific cultural behaviour, regardless of their quantity. At the same time, it is useful to compare relative numbers of objects common to all sites because this can point to equally valid social and economic conclusions. By quantifying artifact collections and using fair judgment to determine the quality of objects, it is possible to produce a clearer picture of a household's socio-economic status than either procedure could do alone (Kelso 1984:176).

Although there is a correlation between particular socio-economic groups and the material remains they leave behind, it is important to remember that material culture is also an active and changing medium (Johnson 1996:186). What may be considered a rare and expensive commodity during one period, may be a common item in another. Chinese export porcelain, sugar, coffee and tea could be categorized in this way during most of the seventeenth century; however, by the middle of the next century these items were found in many homes in both England and North America.

Material culture can likewise be invested with different, sometimes multiple, meanings depending on the cultural, social and economic context in which it is found. Clay tobacco pipes, for example, represent not only the leisure activity of smoking but in some contexts can be used to convey the status of the smoker (Higgins 1999; Mouer

1993). The function of any object may also change over the course of its lifetime. What may once have been a commodity, could later become an object of loan or barter and in another situation a gift (St. George 1998:385). The problems commonly associated with interpreting such complexities are compounded in archaeology because only partial information is ever available about why certain artifacts are found in some contexts and not in others (Orser 1996:255). Hundsichler sums up this dilemma by stating that “an archaeologist is working with a sample (what he has excavated) of a sample (what has survived) of a sample (what has been deposited) of a sample (the material culture) of the past.” (1997:50). Even though archaeology may not reveal all the subtleties and variations in the material lives of past people, it is still one of the most objective and unbiased sources of information available concerning *all* levels of colonial society.

Colonists living in the early settlements were still very much connected to their parent culture and they likely shared certain notions regarding what was appropriate to their social and economic station. The architectural and artifactual remains on seventeenth-century colonial sites should therefore exhibit many of the same physical characteristics and cultural meanings as those from contemporaneous archaeological sites in England and the Continent. However, this same material culture also served different purposes and took on new meanings because of the unique social, economic and environmental conditions encountered during the process of New World colonization. The archaeological remains from seventeenth-century colonial sites must therefore be

viewed not as a limited or restricted example of English, Dutch or French material culture, but rather something that developed according to the peculiarities of life in the New World. Everything from the smallest glass bead to the largest stone foundation has to be considered in light of the situation and setting in which it historically operated.

## **2.2 The seventeenth century: A time of colonization**

In the first half of the seventeenth century a number of European colonies were established along the east coast of North America. The majority of these were English, spanning from Virginia to Newfoundland, while the Dutch focussed their attention on the Delaware and Hudson River Valleys and the French on the Gulf of St. Lawrence and Acadia. Prior to this time, the east coast of North America had been “discovered” in the fifteenth century and was frequented by migratory fishers and explorers in the century thereafter. So why did permanent English settlement only transpire in the seventeenth century? The emergence of a permanent, settled population of Englishmen in North America was not the result of one particular event but a steady concatenation of factors that led to conditions favourable to colonization.

The English drive toward exploitation and expansion began in the 1570s-80s. This was a time when poor relations with Spain brought an increase in privateering and colonial promotional literature; which in turn, gave rise to a powerful sense of nationalism (Andrews 1984). Steady growth in international trade and the migratory cod fishery

helped to strengthen the nation's maritime fleet and bolster the number of merchants and investors involved in it. Voyages of exploration were taking place with more frequency and by 1585, England's first New World colony – at Roanoke Island, North Carolina – was settled for a short time. Unfortunately, this year coincided with the Anglo-Spanish War and much of the nation's wealth and resources henceforth became tied up into this long running conflict.

The early seventeenth century saw a revival of English interest in overseas trade, exploration and colonization. James I's ascension to the throne and the signing of the Anglo-Spanish Treaty in 1604 seemed to provide a backdrop against which peace might return. Conditions in England were becoming increasingly favorable for investment as improvements in agriculture, trade, industry and the growth of a national market brought prosperity to an increasing number of people. Peace with Spain also brought an end to privateering and released much of the private initiative and resources previously diverted into it (Ibid.). Furthermore, mariners and merchants had gained considerable experience in trans-Atlantic crossings and knowledge about the West Indian Islands and the coast of North America. Combined with a growing sense of national pride, all of these factors set the foundation for a series of new undertakings, that drew investors at unprecedented levels into commercial and colonial projects.



These enterprises were largely undertaken by joint stock companies, which were structured to allow large numbers of investors to pool their resources into financial ventures that required expenditures on a scale that no single investor or small group of partners would have been able to support alone. Unlike the earlier, monopolistic, trading companies, the joint stock company made its shares available to any buyer, enabling promoters to attract capital from the larger investing public (Rabb 1967:3).

The focus of the joint stock companies was twofold. Some endeavors were based on trade to distant lands for the acquisition of exotic goods (and sometimes people) to be sold in the burgeoning national market and for re-export. Others promoted colonization for the purpose of exploration and the extraction of New World wealth and other marketable commodities. Some of the early trading companies included the East India Company (1600), Guiana Company (1604), Bermuda Company (1609) and the Africa Company (1618). Early colonial projects included the Virginia Company (1606), Newfoundland Company (1610), the Plymouth Venturers (1620) and the Massachusetts Bay Company (1628). Between 1609 and 1615 there was a great surge of investment and more than 3,500 admissions were recorded in these seven years alone (Ibid.,82). A change of emphasis in the character of English colonial enterprise is thus discernable, taking on a kind of “commercializing of colonization” as Englishmen of all sorts were now willing and able to lend their support (Andrews 1984:19). Regardless of the fact that colonial joint stock projects turned out to be an economic failure, they did have a

great bearing on the eventual colonization of North America. Without the resources which only a joint stock company could mobilize, the expansion of trade and colonization to these distant lands would have been impossible at this time (Wilson 1984:173).

The expansion of trade resulting from the creation of joint stock companies also brought a quantitative and qualitative increase in the range of commodities arriving in England for home consumption and re-export. As more and more of this trade was being conducted by English merchants sailing in English ships, this situation helped strengthen the economy – and at the same time limit the reliance upon Continental merchants for goods and services. The shared perception that an increase of one's own trade and commerce would weaken that of the competition is a concept better known as mercantilism (McCusker and Menard 1991:35). It was this kind of thinking that helped promote and justify the establishment of English colonies in the New World. An increased demand for staples brought on by growing national and European markets also encouraged exploration, colonization and the development of extractive industries such as the fishery and fur trade.

If mercantile thinking encouraged North American colonization, then it likewise dictated the expectations that England had for those colonies (McCusker 1996:341). Colonists were to extract commodities from the land/sea and sell or exchange these goods to English merchants for products shipped out from the home country. For those

settlers living in English colonies during the early seventeenth century, it was a balancing act between the desires of the English Crown and its merchants and the practicalities of survival. Living and working under uncertain and erratic supply lines stretching more than 3,000 miles forced most colonists to sell or exchange their goods when the opportunity for a fair price presented itself. In many instances, trade occurred between Dutch rather than English sack ships. This practice was contrary to the expansion and promotion of English trade, yet it helped solidify the settlement of England's early colonial population by ensuring a steady inflow of supplies and enabling them to acquire a competitive price for the goods they produced.

Although differing widely in size, settler demographics and location, many of the early joint stock company colonies underwent a consistent pattern of development, wherein the expected profits never materialized, and financiers withdrew their support in an attempt to recover much of their investment (Bailyn 1982:10). Despite the dissolution of these companies, some settlers stayed behind and formed the beginnings of effective, permanent settlement. These pioneers had learned valuable experiences from these early "failures" and they found an economic niche that enabled them to wrest a living from this new, and sometimes hostile, environment.

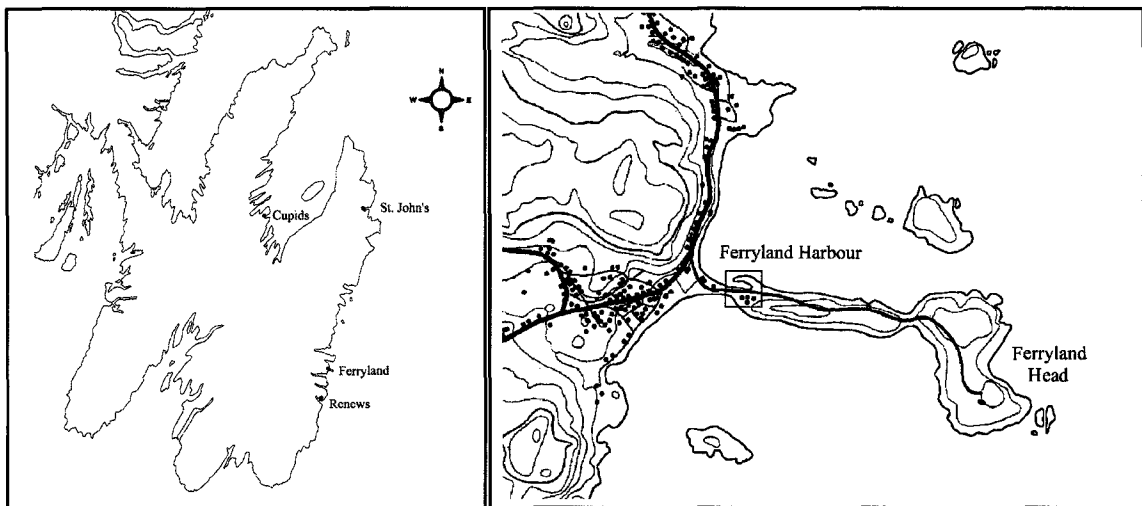
For those English men and women who settled in Newfoundland, New England and the Chesapeake during the first half of the seventeenth century, life centered around

extractive industries and the demand for cash crops. By the 1620s-30s, colonial populations were steadily increasing and people were spreading out along the coastline and probing deeper into the hinterland to cultivate, trade and fish, while colonial goods in the form of tobacco, fur and codfish continued to supply overseas markets thanks to the yearly visitation of hundreds of sack ships. The early years of failure, uncertainty and experimentation were coming to an end. It was from this improved economic and demographic climate that emerged a form of merchant enterprise new to Colonial North America. These “new men” were not part of large corporate joint stock companies or London high society but usually the sons of lesser gentry or yeomen who started out as small domestic merchants or sea captains (Brenner 1993:114). By emigrating to the colonies, these merchants could forgo the costs associated with middlemen by personally taking part in the lucrative market for provisions in exchange for colonial commodities. Their increased presence was partly responsible for continued growth in the colonies as they connected the financial and human resources of England to the North American periphery (Horn 1994:1).

### **2.3 Ferryland in context**

The town of Ferryland is located on the Southern Shore of Newfoundland’s Avalon Peninsula, approximately 80 kilometres south of St. John’s and its present population of about 750 people is spread out along several kilometres of coastline between the adjacent communities of Calvert and Aquaforte (Figure 2a-b). Prior to the imposition

of a cod moratorium in 1992, much of the town's economy was based on harvesting and processing this once abundant ocean resource. Today, the people of Ferryland rely upon the lucrative crab and shrimp fisheries, employment in the offshore oil industry and increasingly, seasonal tourism-related jobs in bed & breakfasts, restaurants/cafes and dinner theatres. This burgeoning tourism industry is heavily dependent upon the town's anchor attraction – which draws between 15-20,000 visitors annually – The Colony of Avalon archaeological site and interpretation centre.



**Figure 2a.** (left) Map of the Avalon Peninsula showing the location of Ferryland.

**Figure 2b.** (right) Map of Ferryland with specific reference to the inner harbour (The Pool).

### 2.3.1 Historical background

Although there is documentary and archaeological evidence to demonstrate that Ferryland was occupied on a seasonal basis by both European fishers and native Beothuk in the sixteenth century, it was not established as a permanent English colony until 1621. On August 4<sup>th</sup> of that year, Captain Edward Wynne and 11 other settlers

sailed into Ferryland harbour on behalf of Sir George Calvert, (later the first Lord Baltimore) and began construction on what is recognized today as one of the most substantial and well-built seventeenth-century settlements in English North America. Surprisingly, this colonial enterprise was not set up as a joint stock company but instead was funded largely by Calvert himself, who spent an estimated £20,000 on the project (Rabb 1967:29; Cell 1982:298). As this was George Calvert's first New World venture, he chose to name the colony "Avalon" in recognition of the legendary Avalon where Christianity was supposedly introduced into England. The Avalon settlement was likely envisioned not just as a base for exploiting the lucrative cod fishery but also as an expansion of England's overseas empire and a place where religious freedom could be practised without fear of persecution.

The site chosen for construction was described by Wynne in 1621 as the "fittest, the warmest, and most commodious of all about the Harbour" (Cell 1982:256), while Ferryland resident Daniel Powell pinpointed its location in 1622 as:

at the foot of an easie ascending hill, on the South-east, and defended with a hill, standing on the furtherside of the Hauen on the North-west: The Beach on the North and South sides of the Land locke it, and the Seas on both sides are so neere and indifferent to it, that one may shoot a Bird-bolt into either Sea. ...the Seas doe make the Land behind it to the South-East, being neere 1000. Acres of good ground for hay, feeding of Cattell and plenty of Wood, almost an Iland, safe to keepe any thing from rauenuous beasts. (Ibid., 200).

For those familiar with the topography in and around Ferryland, this account matches only one location, the sheltered inner harbour known as "The Pool" (Figure 3). The first

series of structures erected by Captain Wynne and his crew included a 15 by 44 foot dwelling with a semi-attached kitchen and parlour, a tenement, forge, henhouse and a 16 foot well. Expansion plans continued as Wynne fitted out a quarry, built defensive works facing toward the mouth of the harbour and requested a group of masons, carpenters, quarrymen, slaters, strong maids and labourers (Wynne 7/28/1622, 8/17/1622 in Cell 1982). He also embarked upon a series of ambitious excavation and land reclamation



**Figure 3.** Aerial view of The Pool.

projects that drastically changed the landscape of seventeenth-century Ferryland. In a letter to George Calvert from July of 1622, Wynne stated that he was breaking ground for a brewhouse and other tenements and at the same time building a wharf toward the low water mark. He said that this would afford a double benefit, “one of ridding and preparing the way to a further worke, the other of winning so much voyd or waste

ground, . . . so that within the same, for the comfort of neighbour-hood, another row of building may be so pitched, that the whole may be made a prettie streete.” (Ibid., 198).

By the winter of 1622-23, the colony had grown to a population of 32. Among these residents were a variety of craftsmen including two blacksmiths, carpenters, a stone layer, quarryman, a cooper and a tailor; along with other necessary professions such as fishermen, boats-masters, a salt-maker, husbandman and a surgeon. Despite a setback caused when Edward Wynne relinquished his governorship around 1625, the colony was maintained for a short period under the new leadership of Sir Arthur Aston (Ibid., 53).

In 1627, George Calvert had his first opportunity to visit what was certainly a well-built and well-planned colony – and what he saw must have pleased him, for in the following year he returned with his family and 40 additional settlers. Unfortunately for the Calverts, the winter of 1628-29 proved exceptionally harsh and many people became ill, nine or ten of whom later died. In a letter to Charles I, Calvert stated that “from the middest of October, to the middest of May there is a sadd face of wynter vpon all this land, . . . besides the ayre so intolerable cold as it is hardly to be endured . . .” (Ibid., 295-6). Such bitter weather convinced the Calverts to return to England, seek lands further south in the Dominion of Virginia for which to build another colony and leave the daily operations at Ferryland in the hands of a loyal representative. With the Calvert’s



departure and subsequent death of the colony's founder, the Ferryland settlement managed to endure but certainly did not receive the same level of financial backing or detailed attention it obtained during its formative years.

On November 13<sup>th</sup> 1637, Sir David Kirke, the Marquis of Hamilton and the Earls of Pembroke and Holland were made co-proprietors of the entire island of Newfoundland in a grant issued by Charles I. Included in this charter was a coat of arms issued by the king and designed by the Garter King of Arms at the College of Heralds to represent the granted territory – the same arms which today are that of Newfoundland and Labrador (Kennedy 2005: personal communication). Sir David was appointed by the group to oversee directly the business end of this venture and in the following year (1638), he arrived at Ferryland with his wife and young family, along with about 100 other settlers (30 of which were believed to have been servants) (Pope 1993). Why Kirke specifically chose to settle at Ferryland may never be fully ascertained but it has been suggested that he stopped there prior to his military excursions in the Gulf of St. Lawrence and Quebec sometime between 1627-1629 (Moir 2000). With prior knowledge of its existing infrastructure, along with the fact that the Calverts had withdrawn from any first-hand administration of the colony, Kirke likely seized the opportunity to establish Ferryland as his primary base of operations.

One of the first orders of business upon his arrival in 1638 was to expel the residing governor, Captain William Hill, and take up residence in Calvert's mansion house. By occupying and utilizing many of the extant buildings belonging to the Calverts, Kirke was able to settle quickly into the role of the region's principal merchant. However his plans were not restricted to mercantile endeavours, and he soon began to levy a 5% tax on foreign fishing ships, collect rents for fishing rooms and charge to issue tavern licenses to the local residents (Pope 1992).

Beside these early references to Kirke's activities in Newfoundland, very little is known about the development of his "Pool Plantation." A few suggestive statements can be found in the written depositions collected during the lawsuit filed by Cecil Calvert (the second Lord Baltimore) against Sir David and his associates (Pope 1998:65). This suit came directly on the heels of the English Civil War and complaints from West Country merchants stating that Kirke was tampering with the long-standing success of the English seasonal fishery. With the death of Charles I in 1649 and the implementation of parliamentary government, Kirke's activities were looked upon unfavourably, probably in part because he was known to be a staunch royalist. In 1651, Kirke was recalled to London for an official inquiry on the Newfoundland colony and its administration (Cell 1969:121). Calvert took this opportunity to press suit over ownership of the Ferryland colony, resulting in David Kirke's imprisonment and the forfeiture of his lands and colonial possessions to the Commonwealth. To ensure that the Newfoundland

fishery and its resident colonists were sufficiently managed, Parliament appointed John Treworgie as its sole commissioner from 1653-1660, during which time he resided at Ferryland (Ibid., 123). David Kirke lived the remainder of his days in London, dying in prison “at the suit of Lord Baltimore” in 1654.

Despite the forfeiture and Treworgie’s presence, the Kirkes appear never to have given up possession of their plantation. After the restoration of Charles II in 1660, Ferryland was again under the control of the Kirke family, particularly Sir David’s widow, Lady Sara Kirke, but also their four sons who by now were all well into adulthood (Tuck et al., n.d.). Even though the Kirkes no longer had legal title to Ferryland, since competing claims for the proprietorship were settled in the Calvert’s favour, they simply refused to vacate their plantation and eventually secured their place (Pope 1992).

Life at Ferryland remained uneventful, historically speaking, until September 4<sup>th</sup> 1673, when the colony was attacked by four Dutch warships, under the command of Admiral Nicholas Boes. According to Captain Dudley Lovelace, a prisoner on board one of the ships, “... the enemy plundered, ruined, fired, and destroyed the commodities, cattle, household goods, and other stores belonging to these inhabitants... .” (Lovelace 1673, in Pope 1993:110). Lovelace also mentions that the fort at Ferryland was out of repair and without a commander, so the Dutch took four great guns. Laden with large quantities of salted cod and several prize ships in tow, the raiders left both the settlers

and their houses intact but much of the fishery-related infrastructure in ruins, no doubt leaving the inhabitants in a difficult financial position.

The residents of the Pool Plantation, especially the Kirkes, were quick to rebound from this setback. A census taken by Captain John Berry in 1675 shows Lady Sara Kirke and her sister Lady Frances Hopkins (who had been living there at least sporadically since 1648) as owning 8 boats, 2 stages, 2 train vats and employing 40 men (Pope 1993, 2004). Sir David's sons, George, Philip, David and Jarvis also kept numerous fishing facilities and employed many men, although not as many as their mother and her sister. Sara Kirke, the colony's matriarch and undeniably one of the first successful female entrepreneurs in the New World, vanishes from the historic record by the early 1680s. Local legend has it that she is buried somewhere out on the Ferryland Downs not far from her Pool Plantation (Gaulton and Tuck 2003).

Despite having avoided total catastrophe at the hands of the Dutch in 1673, the entire colony was razed by the French in the fall of 1696. This attack was part of a larger campaign to disrupt the English fishery in Newfoundland by expelling planters residing along the "English Shore" (between Bonavista and Trepassey). Pierre Le Moyne D'Iberville was charged with overseeing this objective but it was actually a group of nine warships and 700 men commanded by Placentia's governor Jacques-François de Brouillan who sailed into Ferryland harbour and "... burnt all of our houses, household

goods, fish, oil, train vats, stages, boats, nets, and all our fishing craft... ." (Clappe 1697, in Pope 1993:151). Those inhabitants not shipped back to Appledore, Devon were taken prisoner and sent to the French stronghold at Placentia. Among these prisoners were George, Philip and David Kirke, all three of whom perished over the winter of 1696-97. However, this was not the end of the Kirke family legacy at Ferryland, for David (II) Kirke's wife, Mary returned the following spring and took possession of all hereditary lands. Many of the other dispossessed residents also returned in 1697, although archaeological evidence indicates that the focus of settlement moved away from the inner harbour to the mainland. Mary Kirke later remarried a man named James Bengier, who then claimed title to the entire Pool Plantation. Despite objections from members of the Kirke family still residing in Newfoundland, the Bengers retained these lands well into the eighteenth century.

### 2.3.2 History of excavation

The location of the 1621 Ferryland colony has never been lost to history, but in the late nineteenth and early twentieth centuries there was some confusion as to its exact whereabouts. As early as 1880, there were test excavations conducted at Ferryland by M.F. Howley at a presently unknown location (1979:124). In 1937, Dr. Stanley Brooks, an entomologist from the Carnegie Institute in Pittsburgh, Pennsylvania, tested some areas around the sheltered inner harbour of The Pool and also on the adjacent mainland

(Tuck 1996:24). Brooks' interpretation was that Baltimore's mansion house was on the mainland of Ferryland (Brooks 1937).

The opposite conclusion was reported by J.R. Harper in 1959, with the excavation of a 6 by 6 foot unit near the south shore of The Pool. Artifact finds included mid-to late seventeenth-century pipe bowls, North Devon sgraffito earthenware, case bottle glass, deteriorated wood and wrought iron nails, all of which convinced Harper that part of the mansion house had been discovered (Harper 1960:111). Memorial University began test excavations at The Pool in 1968, under what is now the site of the Colony Café restaurant. This exposed a slate drainage feature along with a scatter of seventeenth-century artifacts (Tuck 1996:24). During the 1970s, R.A. Barakat, also from Memorial University, carried out brief excavations to the east of Harper's test square (Ibid.).

Of all the small-scale excavations briefly described above, not one had provided conclusive evidence for the location of Ferryland's early colony. It was for this reason, along with assessing site potential, that Memorial University began a second series of excavations in the mid-1980s. Under the direction of Dr. James A. Tuck, excavations were carried out over three years (1984-6) and concentrated on four specific locations (Areas A-D). A broad range of seventeenth-century artifacts were found in all four areas, with structural features in Areas B and C. As encouraging as these finds were, the excel-

lent preservation and complexity of the site were such that a major effort in both time and funding would be required if excavations were to proceed (Tuck 1993:296).

Therefore, the site was backfilled reluctantly in 1986.

The spring of 1991 brought new opportunity in the form of a Canada-Newfoundland Tourism and Historic Resources Cooperation Agreement. This agreement provided enough funding to enable Memorial University to conduct a multi-year investigation of the Ferryland site and excavations were planned again for the summer of 1992. In anticipation of these efforts, Tuck devised a system of stratigraphic notation that would allow for the proper recording of the site's complex stratigraphy over large areas that were not contiguous. Instead of using the traditional "stratum" designation, each new layer was given a consecutive "event" number, in reference to the fact that every layer or lens was the product of something that happened during the site's formation and development (Ibid., 297). This "event" system has not only proved highly effective for Ferryland but has since been adopted on other archaeological sites throughout Newfoundland and Labrador.

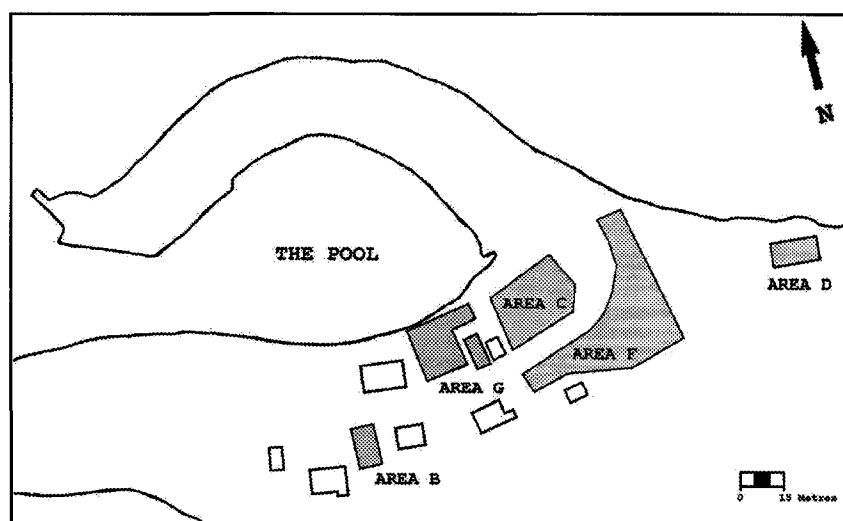
From 1992 until the present, excavations at Ferryland have continued to reveal a settlement that was much more substantial and well planned than documentary records indicate. The majority of the physical infrastructure appears to have been built during the first few years of Avalon, no doubt under the careful direction of the enigmatic

Edward Wynne, a lesser recognized but integral figure in the success of this early Newfoundland settlement. The Ferryland colony was laid out very much like an English port town, with a large stone quay and several waterfront buildings along the inner harbour. To the south was a series of dwellings, tenements, outbuildings and a forge. Both rows of buildings were connected by a cobblestone street 13 feet wide and 400 feet in length, spanning the distance of the colony's original boundaries. Probably the most obvious difference between Ferryland and a contemporaneous English outpost was that the former was heavily fortified and enclosed within a palisade, in keeping with experiences learned from earlier Irish settlements and hostilities encountered in the southern colonies of North America.

### 2.3.3 Site location, formation processes and sequence of occupation at Area F

During the 1997-2002 and 2004 field seasons, excavations focussed on a large tract of land encompassing the eastern end of the original four acre colony. Designated Area F, this site presently consists of an area roughly 1000 square metres and is situated directly south of the road that provides access to the outer arm of The Pool (Figure 4). A large part of the land upon which excavations were conducted was once home to Ferryland resident and folk painter Arch Williams and his wife, both of whom are now deceased. Other parcels of adjacent land owned by Parks Canada, Ray Costello, Clarence Costello and Leo Walsh have all been acquired or purchased and are now property of the Province of Newfoundland and Labrador. These generous land purchases





**Figure 4.** Map of The Pool showing excavation areas (shaded).

have afforded archaeologists the opportunity to continue unabated in their goal to uncover, record and interpret the remnants of Calvert's Avalon and Kirke's succeeding Pool Plantation.

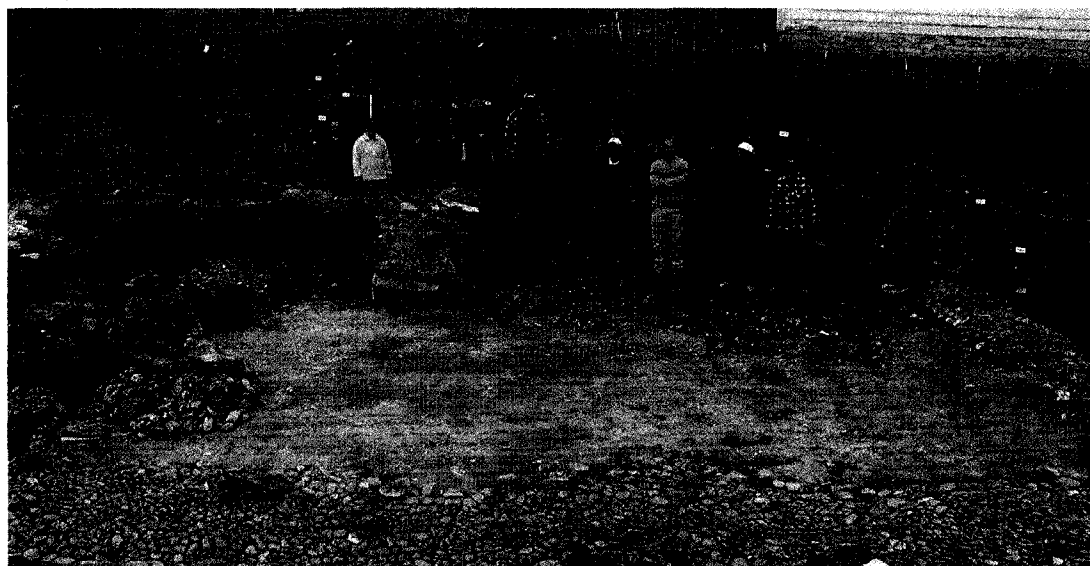
The stratigraphy at Area F consists of a complex series of natural and cultural deposits. The lowest sediments are sterile substrate weathered from underlying bedrock and glacial till deposited during the last glacial retreat about 10,000 years ago. A very thin, dark soil slowly accumulated atop these sterile deposits, no doubt representing the decayed organic matter from an early sod layer that covered the site prior to any human activity. The site topography, as it probably looked to the first people who set foot in the area, consisted of a gently sloping hill to the east heading toward the Ferryland Downs and a more prominent, steeper hillside immediately south. Nestled between these two

geographic features, there would likely have been a grassy meadow that angled down north toward the inner harbour and tidal zone.

Despite the fact that extensive levelling/landscaping activities occurred at Area F in the 1620s, there is still some evidence for earlier pre-colonial occupation. This is in the form of a roughly rectangular alignment of large flat stones, scattered European ceramics, a series of small postmolds and a single Beothuk hearth containing a handful of local chert flakes and a single projectile point. These artifacts and features were located under a section of Avalon's earthen rampart and have been interpreted as a temporary room/shelter used by migratory fishers in the sixteenth century and a contemporaneous Beothuk encampment (Gaulton 2001). It is uncertain, if not unlikely, whether these two groups ever came into contact.

As will be described in the next chapter, the earth moving and construction episode that transpired during the Calvert period resulted in a huge modification to the landscape at Area F. The majority of this area also contained archaeological evidence for contemporaneous structural remains and associated refuse deposits. Within several years after the arrival of the Kirkes in 1638, a second major reorganisation took place on the site, leaving another indelible mark on the stratigraphic record. The most visible impact was the partial dismantling and/or renovation of several Calvert-era buildings. At the same time, many loads of sand were dumped onto the site and the Kirke house was con-

structed. Several relatively minor, and archaeologically-isolated, renovation episodes occurred throughout the remainder of the seventeenth century and all of these structures appear to have been destroyed prior to 1700. An essentially sterile slope wash originating from a man-made promontory to the south, gradually accumulated over most of these seventeenth-century strata. In the southernmost excavation units, this sterile wash is upwards of 80cm thick. Combined with the early occupation/destruction layers below it and additional deposits above, excavation profiles have been recorded at more than 2 metres in depth (Figure 5).

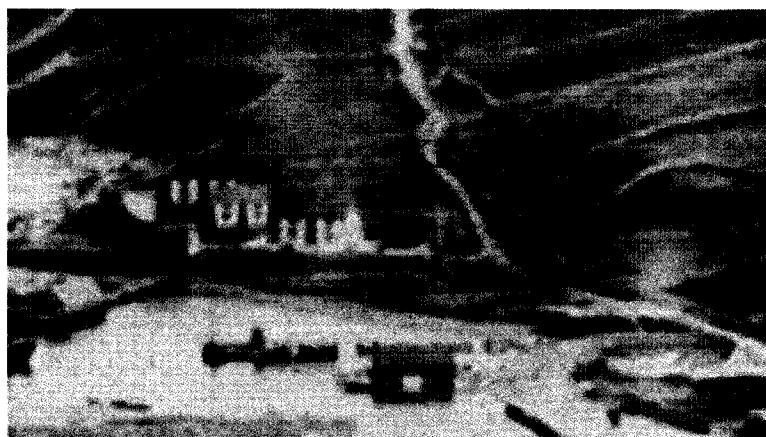


**Figure 5.** South profile at Area F behind the Kirke house.

Evidence for subsequent eighteenth-century occupation is somewhat diffuse. Occasional refuse was dispersed directly above the seventeenth-century destruction layers and amongst the overlying slope wash, but no consistent or readily-discernable cultural deposit had accrued over the century. These sporadic remains do not suggest inten-

sive re-occupation and activity in the immediate area around the Kirke house and not surprisingly, evidence for post-1696 occupation was only discovered at the western extremity of the site in 2002 and 2004.

Nineteenth-century occupation of the site is even more ephemeral than that of the previous century. No distinguishable lenses were revealed during excavations around the Kirke house and the only material culture from the period was in the uppermost mixed cultural layer. However, a photograph of The Pool taken by Robert Holloway around 1900 does show several houses around the northeastern perimeter of Area F. Superimposing a current photograph of the same area, taken from the exact location on the Ferryland Gaze as Holloway, demonstrates that one of these structures was very close to, but did not actually encroach upon, the Kirke house (Figure 6).



**Figure 6.** Holloway photograph (ca. 1900) of The Pool, with arrow added to show the location of the Kirke house.

Stepping back chronologically to the early part of the eighteenth century, there is archaeological evidence for a major storm or tidal wave that deposited a 10-20cm layer of beach pebbles across much of the site. This natural depositional process seems to have been a recurrent, yet infrequent, phenomenon at Ferryland. Almost 200 years later, in 1895, a much stronger tidal wave struck Ferryland and reportedly caused a great deal of damage to the fishery-related infrastructure in The Pool (Evening Telegram, October 8, 1931). Evidence for this tumultuous event is also clearly visible in the archaeological record. Starting at the northeast end of Area F is a 80cm thick layer of fist-sized and smaller cobblestones that washed in from the nearby beach. This lens of cobblestones continues south and west for over 45 metres and filled in what must have been a depression in the area around the cobblestone street and Kirke house, for approximately 60cm of loose cobblestones were deposited in this location. This physical agent is a very interesting archaeological episode but likely considered something of a natural disaster to the former residents of The Pool.

Immediately above this storm surge/tidal wave deposit is a cultural layer from the twentieth century. In many cases, this modern layer was churned up during the construction of several nearby houses and also because of intensive gardening activities. As a result, it often contains a mix of seventeenth- to twentieth-century artifacts. This uppermost stratum represents the last and most recent occupation of the site.

## **Chapter 3**

### **Seventeenth-century Occupation and Construction at Area F**

#### **3.1 Methodologies for dating the site**

The first step in the temporal ordering of Area F was to determine the sequence of cultural and natural deposits found in the stratigraphic record, thus allowing for the separation of construction, occupation and destruction layers associated with each of the buildings. The next stage is to date each event so it can be placed into a chronological time frame with particular reference to the Kirke house. A variety of artifact types (Table 1) were employed in this detailed analysis including glass vessels, ceramics and other miscellaneous objects – but the most reliable artifact utilized by historical archaeologists is the clay tobacco pipe.

The clay tobacco pipe bowl, in particular, is an exceptional dating tool because its size and shape underwent a series of stylistic changes over its history of production. The importance of these stylistic changes becomes apparent when you consider that the fragile nature and low cost of clay pipes resulted in their being smoked, broken and discarded all within the period of a year or two, thus providing an accurate date for the contexts in which they are found. Makers' marks and decorative motifs applied to these pipes can likewise be very useful in defining a date range and helping to determine a fragment's provenance. All of the pipe bowls, bowl fragments and makers' marks from

**Table 1.** Artifact categories and quantites from Area F broken down by feature, occupation and/or event(s).

Area F	Ceramics	Tobacco pipes	Glass	Metals	Misc.	Total
<b>Early Occupation</b> (Events 491 and 551)	116	43	N/A	N/A	N/A	159
<b>Brewhouse/bakery</b> (Events 360, 367, 480, 492, 520/525, 530, 515 and 519)	N/A	3,674	N/A	3 coins only	N/A	3,677
<b>Kirke house (overall)</b>	26,741	18,194	8,242	34,568	2,916	90,661
<b>a. Inside house</b> (Events 357, 361, 366, 369, 384, 407, 462, 463, 464, 465, 469, 470, 473, 474, 478, 482, 494 and 532)	2,513	4,105	1,580	6,040	119	14,357
<b>b. Outside house</b> (Events 287, 333, 349, 352, 353, 358, 359, 361, 370, 376, 458, 467 and 483)	22,645	12,433	6,404	25,649	2,602	62,178 at the north end; 7,552 in remaining areas
<b>c. Buttery/pantry</b> (Events 357, 468 and 518)	571	478	73	1,241	128	2,491
<b>d. Dairy</b> (Event 536)	314	30	52	45	41	482
<b>e. Lodging/servants' quarters</b> (Events 379, 380, 381 and 475)	698	1,148	133	1,593	26	3,601
<b>Adjacent stone building</b> (Events 506, 508 and 509)	Terra sigillata costrel	894	TT bottle seal	N/A	N/A	896

seventeenth-century contexts at Area F were separated by event and dated using regional bowl typologies based upon studies such as Oswald's *Clay Pipes for the Archaeologist* (1975), Walker's *Clay Tobacco Pipes with Particular Reference to the Bristol Industry* (1977) and various articles within the massive 15 volume series *The Archaeology of the Clay Tobacco Pipe* (1979-1999).

Pipestem dating techniques were not used in this analysis because of the many limitations inherent in this method. Since this immediately disregards approximately 20,000 pipe fragments for dating purposes, some clarification and discussion seem justified. First of all, every pipestem in the 52 events being studied from Area F was initially examined for marks or decorations. Those fragments showing distinguishing features were combined with bowls and heel fragments for further investigation, while the thousands remaining were returned to the collections.

An attempt to glean more information from pipestems was first reported by J.C. Harrington in 1954, after he observed that pipe bowls exhibited a consistent decrease in their stem bore diameters from the early seventeenth to the late eighteenth century. He then measured the stem bore sizes from a large collection of pipe bowls and came up with a chart illustrating the percentage of sizes common to five separate time periods (Harrington 1954). These findings were later modified into a straight-line regression formula by Lewis Binford in 1962 so that pipestem data could be used to produce a mean date for site occupation (Binford 1978). During a period when scientific principles were being touted by Stanley South and others as the future of historical archaeology, pipestem dating techniques were seen as a breakthrough for dating colonial sites. Many people embraced these ideas wholeheartedly, without much consideration as to whether or not they were truly effective in light of the vastly different contexts encountered on seventeenth- and eighteenth-century sites.



However, since this time archaeologists have become increasingly disenchanted with the method's validity. Harrington himself stated that this approach was untested on Dutch pipes, while Binford limited the usefulness of his regression formula to the period before 1780. Others, such as Audrey Noël Hume (1979) and Dennis Pogue (1991), challenged its consistency on sites predating 1680. Regional pipe bowl forms, such as those manufactured in the West Country of England, further compound these problems for some early to mid-seventeenth-century examples exhibit exceptionally small stem bores (5-6/64ths); whereas those later in the century often have larger bore diameters (7-8/64ths). The end result in places like Newfoundland, where West Country pipes are frequently found, is that pipestem dates are recurrently 20 years later for pre-1650 contexts and 20 years earlier for late seventeenth- to early eighteenth-century occupations (Gaulton 1997; Tuck and Mills 2004).

The exact year calculated by Binford's mean date formula is also problematic to site interpretation because it tells you nothing about the overall temporal range of occupation and often provides a mean date that is clearly out of sorts with other datable objects. Casting further doubt into pipestem dating techniques and theories regarding the consistent decrease in stem bore measurements is the recent discovery of the seventeenth-century Dutch shipwreck *Vergulde Draeck*. Within its hold were several crates of identical pipes manufactured from the same workshop but with stem bore measurements of *at least* two different sizes (Higgins 1997:131).

All of these factors, more often than not, leave archaeologists scrambling to find reasons why their stem bore analysis does not match up with dates provided by bowl typologies and makers' marks, when the answer is simply in front of them. Too many independent variables make this technique largely inaccurate and unreliable. My point is *not* that pipestem dating techniques are entirely without value, but rather, best used as a cautionary first step in lieu of bowls and/or makers' marks – or as James Deetz (1993) once illustrated, for purposes of gauging changes in site occupation over time. Pipestem bore sizes did change over the course of several centuries but not with the overall consistency and dependability that allows it to be used as a fine-tuned dating technique often necessary for historic sites, especially those from the seventeenth century. Although both Harrington and Binford should be applauded for attempting to develop methods to date colonial sites using these largely neglected artifacts, we are at a level in our understanding of clay tobacco pipes to break free of the stem bore dating shackles that both constrained and confused us.

Glass objects such as bottles, wine glasses and other miscellaneous vessels are often studied in conjunction with pipes, and together comprise the two principal artifact types used to date seventeenth-century colonial sites. In the same manner as pipe bowls, the form and shape of wine bottles underwent a series of changes starting around the mid-seventeenth century. These variations have been analysed by both Jones (1986) and Wicks (1999) and developed into typologies based upon a series of measurable

attributes. Bottles dating from the 1650s to 1721 are covered by Wicks' typology and those dating from 1735 to 1850 by Jones. By measuring specific attributes on excavated wine bottle fragments, it is possible to place them into a designated period of manufacture based upon form. In rare instances, wine bottles can also be found stamped with a circular glass seal bearing the initials or name of its owner(s) and sometimes even a date. A more economical method involved scratching and/or pecking one's initials onto the body of a plain bottle. Positive identification of these individuals helps further refine the date for when such bottles were used, broken and discarded.

A variety of case bottles and wine glasses, along with some flasks, decanters and other decorative drinking vessels likewise assisted in dating the domestic occupation attributed to the Kirke family. The specific form and decoration of these artifacts were often confined to a fairly limited production date. Examples of English, Dutch, Venetian and possibly even German glass were found in association with the Kirke house and these vessels were compared with collections published in Noël Hume (1969), Henkes (1994), Bossche (2001) and Willmott (2002).

Coins are another useful object because they provide a *terminus post quem* or "date after which" they were first minted and used. Thirteen coins were found in association with the Kirke house including specie from its initial construction layer, overlying midden deposits and also amongst the domestic remains inside the house. Given the fact

that some of these strata were rapidly deposited and capped off, while others slowly accumulated over the course of several decades, the coins themselves have excellent potential to enhance our understanding of the overall time frame for the Kirke house occupation. All of these coins have recently been examined by Paul Berry, Chief Curator of the National Currency Collection in Ottawa and the results published in the *Avalon Chronicles* (2002). Unless otherwise stated, the coinage considered in this thesis will be taken from Berry's article.

Ceramics are not particularly helpful in trying to pinpoint the occupation of a seventeenth-century site, since many of the excavated wares were manufactured in the same place using the same vessel forms by many generations of potters. Their strength instead lies in detailing aspects of trade, foodways, health/hygiene and status. At the most basic level, the ceramics from the Kirke house clearly point to an exclusive seventeenth-century occupation, for the collection is laden with a diversity of English wares from North Devon, South Somerset, Totnes and the Surrey/Hampshire border (Border ware), along with Continental wares from different parts of The Netherlands, Germany, France, Spain, Portugal and Italy. Certain decorative and ornate ceramics, which functioned as formal service vessels or simply for aesthetic and display purposes, often have brief periods of manufacture, yet normally did not receive the same kind nor amount of use as everyday utilitarian wares. Utilizing such vessels for dating a site can sometimes

be problematic as they may have seen active use for several decades or even been regarded as heirloom pieces.

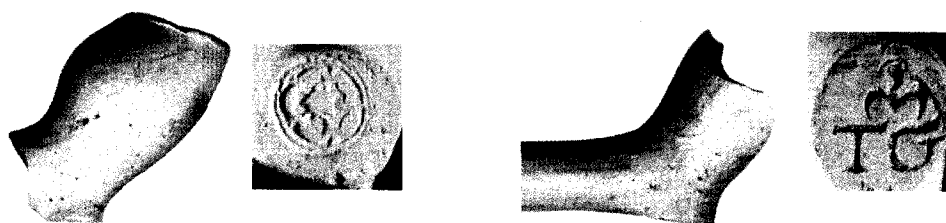
For the purpose of this chapter, ceramics are probably most important by their absence or limited presence. This is because by the early decades of the eighteenth century, certain ceramics are frequently found on British colonial sites the world over – regardless of geographic location or physical isolation – a good example being English white salt-glazed stoneware. English earthenware produced in both the Staffordshire region and Bristol also begins to appear around 1675 and is found in increasing frequency afterward. A paucity of evidence for this earthenware, and a total absence of the above-mentioned stoneware, would imply that occupation did not continue into the eighteenth century.

Other miscellaneous artifacts used to help corroborate dating evidence provided by pipes, glass, coins and ceramics include objects such as lead bale seals, gravestone fragments or anything bearing a name, initials or date. This category also encompasses architectural evidence, in the form of construction techniques or materials that can be attributed to specific periods in the development of seventeenth-century Ferryland.

### 3.2 Vestiges of initial colonization

Underlying both the Kirke house and earlier refuse layers associated with the Calvert period structures are the scattered remains of what appears to be an occupation dating from the first year(s) of Avalon. This relatively isolated deposit (Events 551 and 491) was concentrated in a two square metre area of the site and contained a small collection of early seventeenth-century clay tobacco pipes, many iron nails and some Border ware and North Devon ceramics. If these remains are not from the founding years of the colony then the only other plausible suggestion is that they represent a slightly older migratory fishery component.

The pipes in particular seem to indicate a colonial occupation, for many of the same bowl forms and makers' marks were also uncovered in the later Calvert period layers at Ferryland. This includes bowl forms of both Dutch and English provenance, some of which were marked on the heels with a Tudor rose or the initials TG (Figure 7). The latter mark is likely that of Thomas Graunt, a London pipe maker listed in the 1619 charter or Thomas Gilbert, a former Plymouth pipe maker residing in Amsterdam in



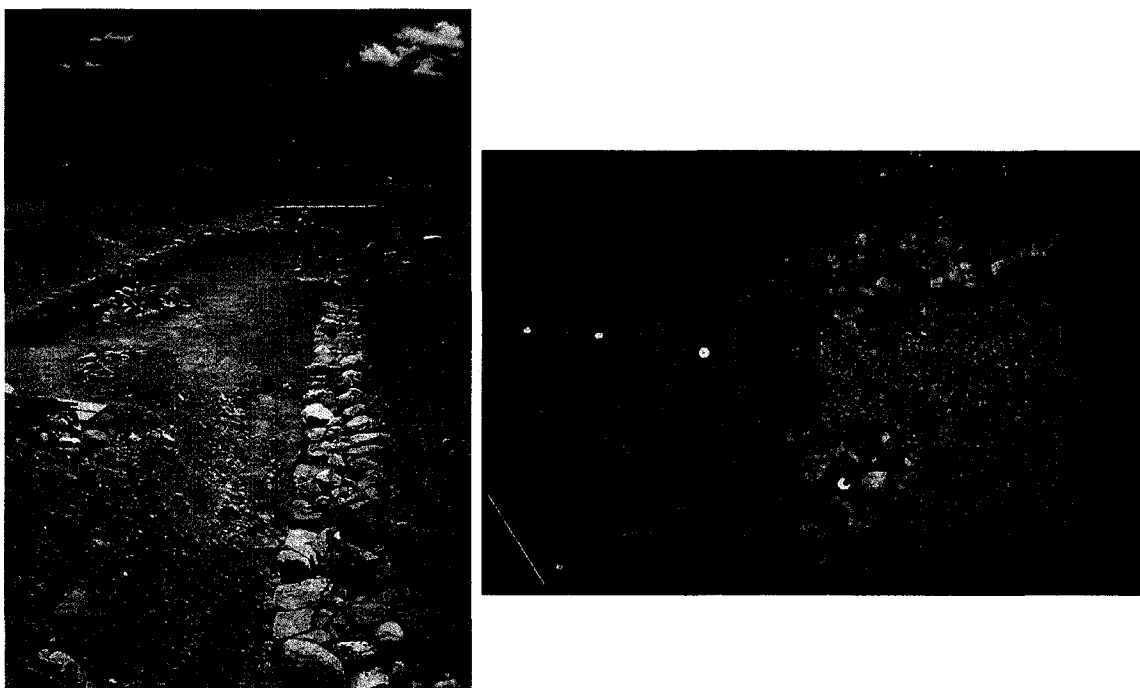
**Figure 7.** (left) Dutch pipe bowl (1:1 scale) with Tudor rose mark on heel; (right) incomplete pipe bowl (1:1 scale) with TG mark on heel.

1629 (Oswald 1975; Duco 1981). This distinctive TG marked pipe has also been found at excavations in Plymouth, Devon and Martin's Hundred, Virginia (Oswald 1969; Noël Hume 1979). Both finds are important to this discussion because Captain Wynne and the first 11 settlers sailed out from Plymouth in 1621 laden with supplies; while the clay pipes found in Martin's Hundred (ca.1619) were deposited prior to the "Indian Uprising" of 1622. If these TG marked pipes were in circulation prior to 1622, then they could easily have been purchased as part of the provisions for Ferryland and smoked and discarded soon after arrival.

It is also worthy to note the relative proportion of Border ware in this early deposit compared to other ceramics. Of the 116 coarse earthenware fragments in both Events 551 and 491, about 13% are recognized as Border ware, including at least two pipkins and a lid. As a general observation, there appears to be a greater frequency of Border ware vessels in many early colonial layers and in preceding migratory fishery deposits at Ferryland, which is not seen in later seventeenth-century contexts. This was readily apparent during excavations at the bottom of the defensive ditch (ca.1622) at Area F and in the preliminary analysis of a sixteenth-century European occupation at Area B. Although a much more detailed analysis of the Ferryland Border ware fragments and their associated contexts needs to be completed before any sound conclusions can be made, there certainly seems to be a clear temporal pattern in the trade and supply of these vessels.

### 3.3 Digging, levelling and building: The Calvert era

The first of the major occupation and construction phases at Area F involved an extensive earth moving operation that saw the completion of a defensive ditch at the east end of the colony and the digging and levelling of a large tract of land directly to the west. More than 45 metres (150 feet) of this defensive ditch has been excavated and it consists of a 20 foot wide by 4 foot deep ditch partially faced in stone along its scarp and counter-scarp walls (Figure 8a). The earth removed during the ditch construction was thrown up to the west to form a 4 foot high by 20 foot wide earthen rampart which, according to Wynne's early letters, was topped with a seven foot high palisade "... sharpened in the toppe, the trees being pitched vpriight and fastened with spikes and



**Figure 8a.** (left) Defensive ditch showing scarp and counter-scarp walls.

**Figure 8b.** (right) Bridge sills and the beginning of the cobblestone street.



nayles.” (Cell 1982:197). Access to and from the east end of the colony was via a bridge that crossed the defensive ditch, the footprint of which was revealed as three deteriorated sills, some still containing regularly-spaced mortise cuts where support posts once stood (Figure 8b).

Immediately west of the bridge was the beginnings of a cobblestone pavement measuring 13 feet wide (Figure 9a). Excavations proceeded to follow this cobblestone feature to the west for a distance of 17 metres (56 feet) before it continued under The Pool road. Sections of what seem to be this same pavement, also measuring 13 feet wide, were unearthed at the west end of Morris Breen’s property several hundred feet



**Figure 9a.** (top) Cobblestone street at the east end of the colony.

**Figure 9b.** (bottom) Western extent of the same cobblestone street 400 feet away.

away (Figure 9b). Although there are some curves and undulations in its overall orientation, a rough measurement of this cobblestone pavement from east to west totals approximately 400 feet in length. Based on the premise that unexcavated sections underlying the present road also form a single continuous pavement, a preliminary estimate of the actual number of cobblestones used in the construction was tabulated at around 75,000 units. This does not even take into account the vast amounts of sand bedding needed to set the cobblestones. Artifacts found directly on top of, and trodden down between, the cobblestones suggest a construction date sometime within the first decade of Avalon. Clearly, this feature must have served as the principal road or street running through the early settlement and in all likelihood, is the same “prettie streete” Captain Wynne was hoping to build sometime after 1622 (Ibid., 198).

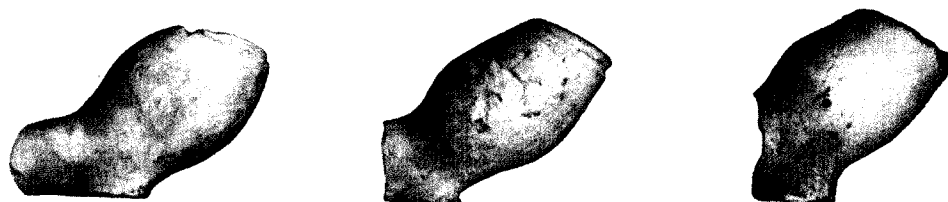
South of the cobblestone street in Area F, excavations exposed the first of several Calvert-era structures and its associated midden. The most prominent feature of this early building was a large stone fireplace with two upright slatestones in its centre, likely for supporting a large pot or kettle (Figure 10a). A North Devon clay oven was built into each of the back corners of the fireplace. Immediately east of the fireplace, but likely contained within the same structure, was a 12 foot deep wooden well (Figure 10b). The presence of a well, two large baking ovens and stone supports for holding pots/kettles all suggest that this early structure was a combination brewhouse/bakery, possibly the same “brewhouse roome” Wynne mentions breaking ground for in 1622 (Ibid.).



**Figure 10a.** (left) Large fireplace with North Devon ovens.

**Figure 10b.** (right) Wooden well enclosed in brewhouse/bakery.

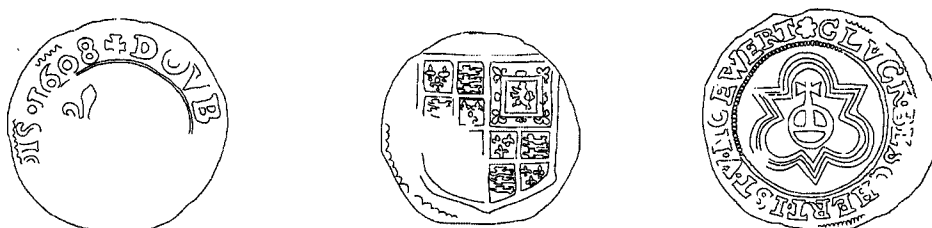
The rich midden (Events 360, 367) originating from this structure contained a total of 177 pipe bowls, while 65 more were found in the refuse (Events 480, 492) that accumulated inside and an additional 142 directly behind and west of its large fireplace (Events 530, 520/525). This impressive collection of bowls, makers' marks and stem decorations were clearly deposited in the first half of the seventeenth century, with the exception of Events 520/525, which dated upwards of ca. 1660 and are a part of the Kirkes' rubbish pile at the back of their house. A comparison with existing pipe bowl typologies demonstrates that the majority of forms in these early layers are attributable to the 1610-40 period, many of which were unquestionably smoked and discarded in the 1620s-1630s (Figure 11).



**Figure 11.** Selection of pipe bowls from brewhouse/bakery (1:1 scale).

Augmenting the pipe bowl dates are three early seventeenth-century coins found in Events 367, 480 and 530 (Figure 12). The first piece of coinage is a French *double tournois* from the reign of Henry IV and dated 1608; the second, an English James I silver penny minted in 1603-04; and the last, a copper token manufactured by Hanns Krauwinkel II of Germany between the years 1586-1635 (Berry 2002). Even though these coins do not give us any real indication as to the beginning or length of occupation, the fact that all three date from the early part of the seventeenth century helps to substantiate the claim that the construction of the brewhouse/bakery can be placed firmly within the Calvert Era.

Excavations also showed that the brewhouse/bakery incorporated a subsurface drainage system and that its midden spread out far enough north to cover sections of the cobblestone street. This stratigraphic evidence is particularly important with regards to dating these two early features, for it shows that the drain was constructed before the brewhouse/bakery was fully operational and that the cobblestones for the street were



**Figure 12.** Three coins (obverse, not to scale) found in the brewhouse/bakery occupation layers. (Left) *Double tournois*, (centre) James I silver penny, (right) Hanns Krauwinckel token. Images courtesy of Paul Berry, National Currency Collection, Ottawa.

laid before refuse had a chance to accumulate. How much earlier cannot be stated for certain, but was likely only a matter of days or weeks based upon a simple progression of tasks that first saw the completion of a mechanism for adequate drainage. The presence of many roof slate waste fragments used in the drain construction – and numerous complete roof slates found in the brewhouse/bakery dismantling episode – suggests that both were not built until at least 1622, the year Wynne requested a group of slaters, masons, quarrymen and other tradesmen be sent over (Figure 13). Coincidentally, this was the same year Wynne wrote that he had “. . . broken much ground for a Brewhouse roome and other Tenements” (Cell 1982:198). Since the artifacts found in the early midden deposits point to an occupation starting in the 1620s, it is likely that the drain and other Calvert period structures at Area F were built during the period of Wynne’s governorship – a time frame in accordance with both the archaeological and historic records.



**Figure 13.** (left) Slate drain associated with the brewhouse/bakery; (right) detail of drain showing the use of roof slate to level the walls.

The overall length of occupation for the brewhouse/bakery is suggested by a small number of bowl forms that have a date of manufacture starting around 1640 and also by the presence of many makers' marks found on the heels of pipes, examples of which include CA, EL, AR, PS, IS and RC marks. These were the products of pipe makers like Cornelis Ariensz (apprenticed in 1626), Edward Lewis (1630-40/1), Anthony Roulstone (1630s-70s) and Peter Stephens (1640s-70). IS and RC pipes are two of the most common makers' marks associated with both the earlier Calvert period structures and the later Kirke house occupation layers at Area F. This suggests that there was no appreciable break between the two occupations and that the time span between the dismantling of the brewhouse/bakery and the overlying construction of the Kirke house

was very short. The IS marked bowls were manufactured in London, possibly by John Smith (1634) or John Stevens (1644). The three types of RC marks, stamped primarily on three different bowl forms (1630-60), could be “export” varieties made specifically for overseas trade based on the fact that parallels for these pipes have not been found in the U.K. Another possibility is that these were products manufactured in Southern Ireland and were acquired along with other provisions when fishing and sack ships stopped there en route to Newfoundland (Higgins 2006, personal communication). A positive identification with Irish pipe makers from this 1630-1660 period would have some important implications because the provisioning trade with Ireland was thought only to have become established during the last third of the seventeenth century (Head 1976:109).

As would be expected from any multi-component site, there is some evidence for intrusive material in the form of a few late seventeenth-century pipe bowl forms. However, these should not be looked upon as tainting the rest of the collection. The overlying layers associated with the dismantling of the brewhouse/bakery and the subsequent re-occupation by the Kirkes also contain a substantial number of pipe bowls, makers’ marks and other artifacts that date from the 1640s. By this very fact, the lower stratigraphic deposits must predate these layers and thus, the construction and occupation of the brewhouse/bakery can firmly be placed within a 1620s-1640s time frame.

About 18 feet northwest of the brewhouse/bakery, was the remains of a small dwelling also constructed during the formative years of Avalon (Figure 14a). This 12 by 22 foot building was fully timber-framed, set on a stone footing, contained a stone fireplace in its east end and still retained traces of floor joists and upright nails that once fastened floorboards. To the southwest of this small dwelling, sections of a large stone building were excavated in the 2002 and 2004 field seasons (Figure 14b). At present, all that we can say about these partially-excavated remains is that: 1) the substantial, mass-walled, stone construction dates to the Calvert period; and 2) the presence of a large fireplace and evidence for the use of interior finish plaster strongly suggests a domestic function.



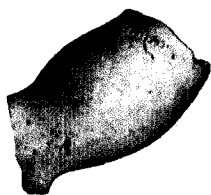
**Figure 14a.** (left) 12 by 22 foot dwelling built in the 1620s and later incorporated into the Kirke house as a lodging/servants' quarters.

**Figure 14b.** (right) Partially excavated stone building also adjacent to the Kirke house.



Unlike the brewhouse/bakery, these two structures were occupied into the latter part of the seventeenth century and modified to suit the needs of the Kirke family – a factor which can make their construction date somewhat more difficult to establish. This is exacerbated by the fact that the midden from the small dwelling is actually buried underneath the west end of the Kirke house and that most of the stone building and its associated refuse deposits were not excavated at the time this research was completed. Although the early artifactual remains are not as prevalent compared to that uncovered at the brewhouse/bakery, what was found can be used in conjunction with the architectural evidence to demonstrate that these buildings were also constructed during the Calvert era.

One hundred and thirty five pipe bowls were found in the occupation and destruction layers inside the small dwelling (Events 475, 379, 380 and 381), while 70 were recorded in a small area inside the stone building and also immediately outside its north door (Events 506, 507 and 509). The vast majority of both collections date from the 1640s onward, which is not surprising considering the Kirke occupation represents a period of some 58 years as opposed to 18 by Calvert's colonists, a ratio of more than three to one. A few bowl forms found inside the small dwelling, such as *Spur Bowl 1* (Figure 15), clearly date from the first decades of the seventeenth century and would certainly not look out of place in the early years of Avalon. Other bowl forms have an overall date range of 1620-40. Together, the early pipes from the small timber-framed



**Figure 15.** Spur bowl 1.

dwelling comprise only 15% of the total sample. Although somewhat broader in temporal scope, approximately 35% of the recognizable bowl forms recorded inside the partially-excavated stone structure date from the first half of the seventeenth century, likely representing both Calvert and early Kirke occupations.

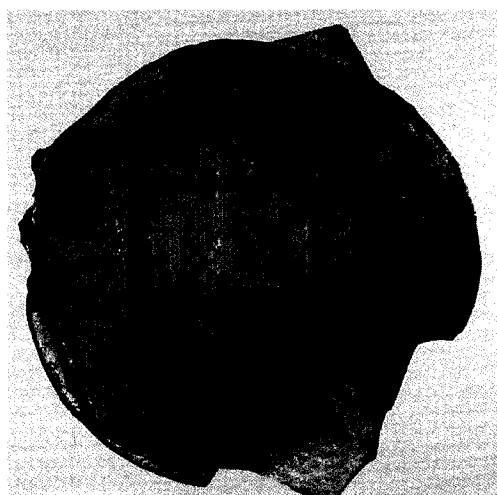
The physical placement of the Kirke house in relation to the small timber-framed dwelling and stone building helps provide an overall sequence of construction and thus, a time-line for site occupation. For reasons that will be discussed in more detail below, those charged with building the Kirke house erected the dwelling so that its western end butted up directly against the east wall of the stone building, while portions of its north wall were set against the south end of the small dwelling. Hence, both structures were standing prior to the Kirke house and must therefore date prior to the 1640s. Likewise, the orientation of these buildings – aligned slightly northeast to southwest along its long axis – is different from that of the Kirke house. Their direction instead closely matches that of the large stone warehouse and seawall at Area C, suggesting that they were all part of one large planned operation. Previous research dates the waterfront features to the 1620s, which in turn, provides additional support for the early construction of the

small dwelling and stone building at Area F (Gaulton 1997). The presence of many slates in the overlying roof collapse also indicate that these two buildings were covered with the same material used on the brewhouse/bakery, waterfront warehouse and forge at Area B. Dwellings, outbuildings and other seventeenth-century structural remains postdating the Calvert era show no evidence for the use of roof slate, but instead were roofed with boards, shingles and in rare cases, thatch.

As stated above, evidence for the continued occupation of these two structures is primarily in the form of clay tobacco pipes, many of which date from the second half of the century, while others are specifically from the last couple of decades. The most prevalent pipe bowls originate from the West Country of England and date from 1680-1720. Such pipes were not only common at Ferryland, but are frequently found on other English sites in Newfoundland occupied from the last quarter of the seventeenth to the early eighteenth century (Gaulton 2003; Pope 1999; Tuck and Mills 2004).

Other artifacts that denote continual occupation into the late seventeenth century include a bottle seal stamped with TT initials found outside the north door of the stone building and late seventeenth-century bottle fragments and a lead seal impressed with *EXON 78*, inside the small dwelling. The TT bottle seal (Figure 16a) is a type that was embossed with single letter stamps set into a wooden handle as a cheaper alternative to paying an engraver to produce and cut a brass die (Wicks 1998:100). Although gentle-

men rarely purchased these kinds of stamps, two individuals who may have owned this bottle are Thomas Toper, master of the *Ruby* of Barnstaple fishing at Ferryland in 1681 or Thomas Tediman, master of the *Penelope* of London fishing at Ferryland or Aquafort in 1699 (Tuck, n.d.). The “Exon” in the *EXON* 78 lead seal is Latin for Exeter, while 78 represents the year 1678 in which it was stamped (Figure 16b). These kinds of lead seals are well documented on other colonial sites in the U.S. and attest to the importance of Exeter’s serge trade that peaked between 1671-1681 (Egan 1989:48, 1995:24). Its discovery inside the small dwelling not only places the occupation after 1678, but it is also a tangible reminder of the strong connection between Ferryland and this English port town.



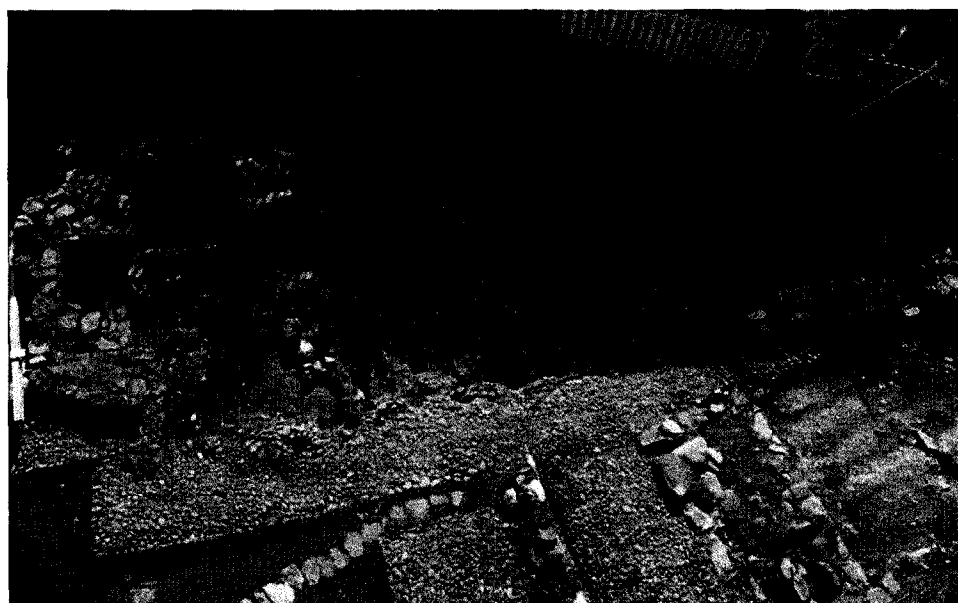
**Figure 16a.** (left) TT glass bottle seal.  
**Figure 16b.** (right) EXON 78 lead bale seal.

### **3.4 Dismantling, rebuilding and renovating: The Kirke period**

Under ideal burial conditions and controlled excavation, archaeologists often have the ability to detail the complete evolution of a dwelling from its inception to final occupation, and any changes or modifications that occurred in between. The Kirke house at Area F is one such dwelling. Fortunately, there was very little re-occupation in this area during the eighteenth century, thus allowing for a thick lens of slope wash – originating from the hillside to the southeast – to accumulate atop large sections of the dwelling. This not only helped preserve some of the more ephemeral features such as ground-sills and sleepers but also prevented any significant scavenging of stone from the fireplaces. As one would expect of any building occupied for approximately 50 years, the house had undergone several renovations or phases including its construction and initial occupation, a renovation episode in the 1660s, a fireplace collapse and rebuilding sometime around the last quarter of the seventeenth century and, finally, its violent destruction at the hands of French forces on September 21<sup>st</sup>, 1696.

#### **3.4.1 Phase I (Construction and architectural features)**

As will be described in more detail below, datable artifacts discarded in the Kirke house construction and occupation layers have helped to establish that this large dwelling was built sometime in the 1640s. Once completed, the entire residence encompassed an area over 1400 square feet on the ground floor and it was also fronted by an expansive cobblestone courtyard (Figure 17). The principal dwelling measures 21 by 53



**Figure 17.** Aerial view of the Kirke house showing some of the architectural features discussed below.

feet and was likely comprised of three rooms on the ground floor including a tavern in the west end, a central unit with a lobby/service area and staircase, and a hall or parlour at the east end. Just outside the east end of the dwelling was an 8 by 8 foot well house possibly connected by a lean-to, while at the northwest end of the Kirke house a small 12 by 22 foot Calvert era dwelling was also assimilated and likely served as some sort of lodging/servants' quarters accessible via the tavern. Bearing in mind that both the main house and lodging/servants' quarters also had chambers on the upper floor, a conservative estimate would place the "original" house size upwards of nine rooms. Viewed in its entirety, these intercommunicating spaces added up to quite a large dwelling. This complex of buildings comprise the largest seventeenth-century domestic compound yet excavated in Newfoundland and must have certainly served as a visible symbol of wealth and power for the Kirkes.

The construction techniques and architectural remains revealed during the excavation of the Kirke house have obvious similarities, yet subtle differences, compared to domestic structures from the earlier Calvert period. The craftsmen employed during both these times drew upon knowledge of English (and in the earlier period Welsh) vernacular traditions to build fully timber-framed houses with substantial stone fireplaces. They also relied heavily upon local materials from the forest, stone outcrops and nearby beaches, with very little brick, tile or lime mortar having to be imported. On the outside, the Kirke house would not have looked out of place in Calvert's Avalon and in fact, this dwelling typifies many seventeenth-century houses found throughout England. However, it is in the finer points illuminated through archaeology that we can see a clear distinction – and one that exposes some effective and practical construction techniques, but also some serious oversights.

#### Preparation, framing and floors

The first step in preparing the site for construction involved dismantling the brewhouse/bakery. Yet, rather than demolishing all traces of this former structure, its large fireplace and well were incorporated into the Kirke house. The fireplace apparently served as a lateral hearth in the southeast end of the dwelling and the well was situated just outside the eastern gable end and may have continued to provide water for the family. Judging by the almost sterile conditions encountered during the well excavation in 2002, it must have remained enclosed within some sort of separate well house or semi-

attached lean-to, in a manner similar to that within the original brewhouse/bakery. It is even conceivable that the original structural members and/or frame were retained, for no distinctive changes or modifications could be detected archaeologically. The remainder of the area west of these early colonial features was essentially free from any major obstructions, for it had been cleared and levelled – but not built upon – by Calvert's colonists some 20 years previous.

The next task was to erect the frame of the house. Typically, this would involve the preparation of a footing or supports upon which the sill would rest. However, instead of utilizing one of many nearby stone outcrops to acquire stone for a footing, the Kirke house sill was set directly upon the ground. This sill-on-grade construction technique was visible along sections of the north and south walls of the long axis of the house, in the form of a deteriorated beam running along the ground (Figure 18). Why the craftsmen responsible for building this house chose not to set it upon a stone footing may never be fully ascertained. It is possible that this was decided upon as a matter of expedience depending upon the time of year the house was built. This also may have been the construction technique most familiar to the craftsmen charged with doing the work.

Such building methods were common in seventeenth-century England but generally seen in outbuildings rather than domestic dwellings. This is in clear contrast to contemporaneous colonial dwellings in the Chesapeake, where the absence of a prepared



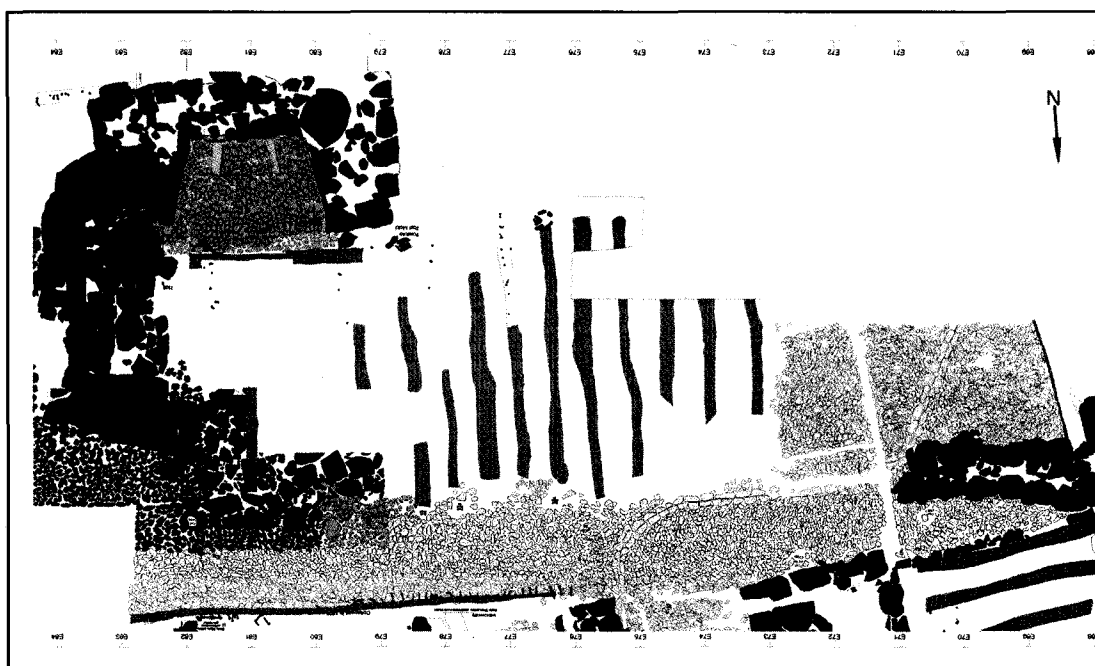


**Figure 18.** Remains of deteriorated sill (with many horizontal nails/spikes *in situ*) running along the north side of the Kirke house.

stone footing is often the norm. The practice of setting a sill or structural members directly upon or in the earth, without benefit of a stone footing, is one of several methods commonly referred to as “earthfast” construction (Carson et al. 1981). Such methods have been criticized in the past as impermanent or of a lesser quality compared to dwellings set upon a prepared stone or brick footing, however these theories are increasingly being brought into question (Moser et al. 2003). For many people living in seventeenth-century Colonial North America, whether it be Newfoundland, Massachusetts or Virginia, the permanence of a stone footing was likely of little importance or concern. In light of evidence revealed during excavations at the Kirke house, this clearly did not matter. For the dwelling was still standing after 50 years of occupation, had outlasted its

original owners and was brought down not by natural forces or gradual deterioration but by a group of marauding Frenchmen.

Around the same time the framing members were erected, a series of small posts were dug down inside the house (and through the Calvert period occupation layers) and set into the subsoil. The remnants of these posts, now no more than soft, organic postmolds, average approximately 8 inches in diameter and run east-west across the long axis of the house in the same orientation and angle as the ground-sill. Eight postmolds were still visible just inside the sill at the south end of the house, while the six to the north were located several feet in from the sill, along the perimeter of a cobblestone passage that runs through most of the dwelling. The purpose of these posts was to provide a level footing for a series of long, horizontal, wooden beams commonly referred to as sleepers, the function of which was to support and secure a wooden floor (Figure 19). Traces of 14 sleepers were recorded inside the house, all oriented in a north-south direction, averaging about 2 feet apart and some still set directly upon the posts. A tally of both visible sleepers and their companion support posts reveals that there would have been a total of 16 wooden sleepers set along the eastern two-thirds of the dwelling. The presence of many nails still protruding from the sleepers proves beyond a doubt that this section of the Kirke house was floored over with boards. Sand (Event 470) was dumped inside the house between the sleepers, up against the ground-sill and all the way to the western end of the dwelling. Such a large amount of sand helped to keep the sleepers,



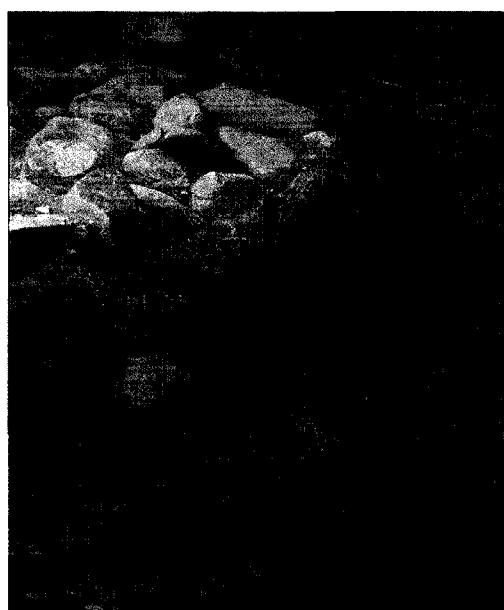
**Figure 19.** Map of excavated features inside the Kirke house showing traces of numerous sleepers (centre).

and to some extent the ground-sill, relatively dry and stable; thus helping prevent rot and prolonging the structural integrity of the house. Another function of this sand was as a bedding (Event 407) for the 5 foot wide cobblestone passage at the north end of the house and also for the cobbles that covered the western end of the residence. Both the sand and cobblestones were likely obtained from nearby beaches to the west and north-east of Area F.

### Fireplaces

There were always two fireplaces in operation at the Kirke house during any given time, although the location of one changed slightly over the period of occupation. The oldest and probably best built of all these fireplaces was located at the southeast

corner of the main house. It had 3 foot thick slate-stone walls, a domed North Devon clay oven in each of its corners and a pair of large, upright slate-stones in the centre of the hearth. The hearth itself was 7.5 feet wide at its opening and 4 feet deep. This feature was the fireplace constructed for the brewhouse/bakery and later reused as a lateral fireplace in the Kirke house. The original hearth floor of hard-packed earth stained with fire-reddened clay and charcoal was covered over with a layer of sand and reset with a floor of cobblestones, clearly a material of choice for the craftsmen building the house (Figure 20).



**Figure 20.** Cross-section through the hearth floor inside the brewhouse/bakery fireplace. Upper cobblestones represent a reflooring by the Kirkes and the lower floor of earth, charcoal and fire-reddened clay is from the Calvert period.

The second fireplace was part of the original Kirke house construction and is a hearth feature clearly different from typical fireplaces in seventeenth-century Newfoundland. It is situated on the western gable end of the house and constructed so that it rests directly against, and is partially supported by, the stone-walled structure

built during the Calvert period. Instead of a fireplace with flanking walls constructed entirely of stone, this feature was built with a 9 foot long back wall of stone but side walls made of wood. The remains of two wooden radial arms terminating in 9 inch posts extended out 7 feet from the sides of the fireplace and enclosed the hearth area in exactly the same way as would a traditional stone fireplace (Figure 21). The principal difference was that these thin wooden walls (consisting of approximately 2 inch boards) could not have housed ovens or held many heavy iron supports for hooks, cranes and other fireplace equipment, because of their insubstantial nature and increased risk of fire. The wooden walls instead served as a smoke hood (or fire hood) used to contain and redirect the smoke and hot embers from the ground floor hearth upwards into the flue, while at the same time radiating heat outward into the room.



**Figure 21.** Smoke (or fire) hood at the west end of the Kirke house.

The actual hearth area contained within the smoke hood walls is distinguished from the rest of the cobblestone floor by the telltale concentration of fire-reddened and cracked cobbles against the scorched back wall of the fireplace. Its wooden side walls were most likely parged over with some sort of clay or daub mixture; while a collapsed mass of bricks found atop the centre of the hearth (Event 465) further demonstrates that the chimney flue was appropriately lined where it penetrated the roof (Figure 22). This would have provided adequate fire protection so long as there was no prolonged or intensive heat directed against the side walls. Although this feature seems peculiar compared to other contemporaneous fireplaces excavated at Ferryland, the use of wood and clay (or wattle and daub) for chimney construction was common in many parts of England, is especially prevalent in the southern Chesapeake colonies and has been recorded archaeologically as far north as Maine (Smith 1975:267; Carson et al. 1981:124; Baker 2001). As will be discussed further below, this fire hood was well suited to the activities taking place in this part of the dwelling.



**Figure 22.** Bricks found in the hearth area of smoke hood.

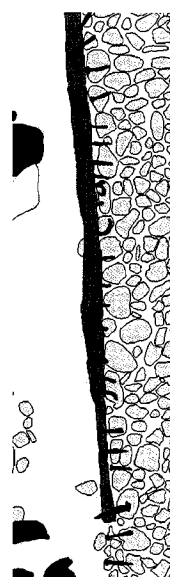
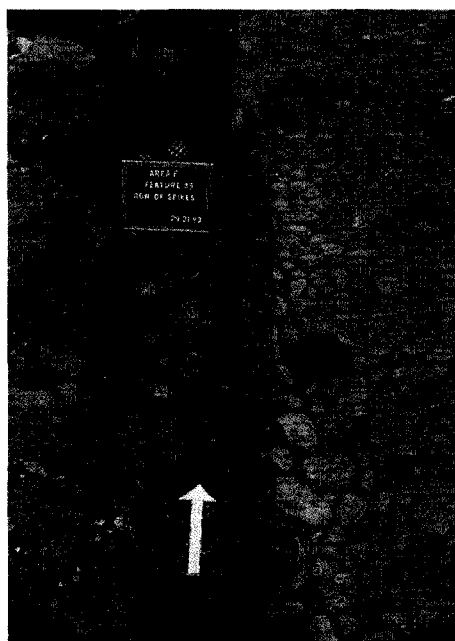
### Walls and roof – Doors and windows

With the house frame erected and the floors and fireplaces near completion, there were several important jobs remaining: enclosing the walls; covering the roof; installing windows and doors; and adding interior features such as partitions and stairs. For the most part, these tasks did not leave any visible trace in the ground and therefore, much of this section requires a bit of speculation and deduction rather than definitive archaeological evidence.

#### Walls

The major exception is the structural framing and exterior wall cladding. In this matter we are very fortunate to have enough *in-situ* architectural evidence to demonstrate that the carpenters who built the Kirke house employed a fast and inexpensive framing and walling technique commonly seen in New England. A small section of horizontal spikes found imbedded directly into the ground-sill at the north end of the house provides unequivocal proof for the practice of vertical plank framing (Figure 23a-b). The fact that these spikes were driven into the sill from the outside and evenly-spaced at approximately 6-8 inches apart, fits perfectly with Cummings description of vertical plank-framed houses in Massachusetts, whereby the planks were raised into a vertical position and secured to the braced frame by pinning them to the first story girts and spiking them to the sill (1979:91). Furthermore, he states that a typical English box-framed house, with a full compliment of joints, was much more costly in terms of time

and labour than a plank-framed dwelling, in which the complex joinery is reduced to an absolute minimum (Ibid., 90). This practical alternative would certainly require much more wood than a dwelling in-filled with wattle and daub or brick nogging, but the abundance of nearby stands of timber would have made this fact a non-issue, especially if expedience was sought in the construction of the Kirke house – a hypothesis which seems to be gaining increasing validity in light of the absence of a prepared stone footing and re-use of an extant fireplace rather than constructing one specifically suited to the frame and layout of the dwelling. Even though this may be the earliest known example of vertical planking north of New Hampshire, it is far from an architectural anomaly, for plank-framing techniques were still practised in outport Newfoundland during the twentieth century (Pocius 2005: personal communication).



**Figure 23a.** (left) Sill with spikes driven horizontally.

**Figure 23b.** (right) Map detailing a portion of the same feature.



To ensure adequate weatherproofing, the vertical planking was then covered with an exterior finish. Plaster or whitewash can be discounted as a finish coating for there is no evidence of limestone-based products in any of the construction, occupation or destruction layers. On the other hand, the many thousands of iron nails found both inside and outside the dwelling suggest that wood, likely in the form of clapboards, was used to complete the exterior.

## Roof

The roof of the Kirke house was undoubtedly constructed using a system of tie beams, rafters, collars and purlins but specifics regarding the types or number of supports are uncertain. The shape of the roof appears to have been gabled, as evidenced by the placement of the western fireplace and later, the addition of another fireplace at the eastern gable end, both of which were built so as to form part of the exterior of the house. Hypothetically, several different local materials could have been used to cover the roof of the principal dwelling and its outlying buildings including: slate, thatch, sod or wood. Slate was certainly not used as an overall roofing material as it leaves a very obvious presence when it collapses and also because it appears to have been utilized only during the Calvert period. The only building associated with the Kirke house that appears to have been roofed in slate is the small 12 by 22 foot dwelling constructed in the 1620s and which was incorporated as a lodging/servants' quarters at the northwest end of the house.

Thatch or sod do not seem like feasible choices either. The only mention of a thatched dwelling at Ferryland is in a letter written by Captain Edward Wynne in 1622, whereby he stated that part of the first house was covered with “sedge, flag and rushes” found growing about the harbour (Cell 1982:196-97). In all likelihood, thatch was largely abandoned early in the colonial period because of its impracticality due to increased fire risk and because suitable sources for usable thatch-like material were generally lacking in Newfoundland. Sods would have been somewhat messy, dirty and generally not befitting a large dwelling with a gabled roof, especially one occupied by a family as wealthy and prominent as the Kirkes. The only remaining roofing material – wood – is also the most plausible covering for the house. Wood was used for almost all other components of the house and is manifested in the archaeological record by either deteriorated wood itself or iron nails. The availability of timber would also have made wood an attractive choice, as would the fact that it is relatively easy to manipulate and modify compared to other materials like slate. If the house were roofed in wood then it was most likely in the form of horizontal boards or shingles.

## Doors

Evidence for the presence and position of several doors can be demonstrated primarily by looking at both the architectural remains and stratigraphic record. Directly outside the north end of the house, and roughly at its centre, is a 16 foot wide by 23 foot long cobblestone courtyard that leads down to the similarly-paved street. Such a feature

not only indicates that this was the front of the house, but that its primary entryway had to have been situated within the confines of the 16 foot area where it intersects the courtyard. Given the fact that seventeenth-century disposal practices commonly involved throwing household refuse out a nearby window or door, there should also be a visible pattern of accumulation nearby. The stratigraphy shows exactly such a pattern in the form of a thick, dark midden (Event 287) concentrated largely on the eastern half of the cobblestone pavement but continuing for several metres to the north and east. Therefore, it is only logical to suggest that the front door of the Kirke house opened up onto the eastern half of the courtyard.

An accumulation of refuse at the back (south) of the house likewise implies another doorway. This midden deposit actually consists of two distinct episodes and is largely confined to an area that starts about 6.5 feet west of the lateral fireplace but continues behind it and tapers out further south. The artifacts from the lowest deposit (Events 520, 525 and 530) date from the occupation of the brewhouse/bakery, its dismantling and the re-use of the fireplace and well by the Kirkes. The overlying midden (Event 467) represents the period between a later renovation episode which took place at the eastern end of the Kirke house after 1660 and its subsequent destruction in 1696. Some of the artifacts in Event 467, such as a Border ware sweetmeat dish, a Merida bowl, a polychrome tin-glazed lobed dish and a Portuguese blue and white decorated plate, cross-mend with fragments from the principal midden at the front of the house,

indicating that this deposit is another Kirke house midden. Judging by the thickness and deposition pattern of this midden, it appears to have originated from an opening about 6.5 feet west of the lateral fireplace. If a doorway was situated in this approximate area, then it was almost directly opposite the proposed location for the front door of the dwelling – a possibility which may suggest that this was a cross-passage house plan or in the very least, that its doors were inserted along roughly the same north-south position.

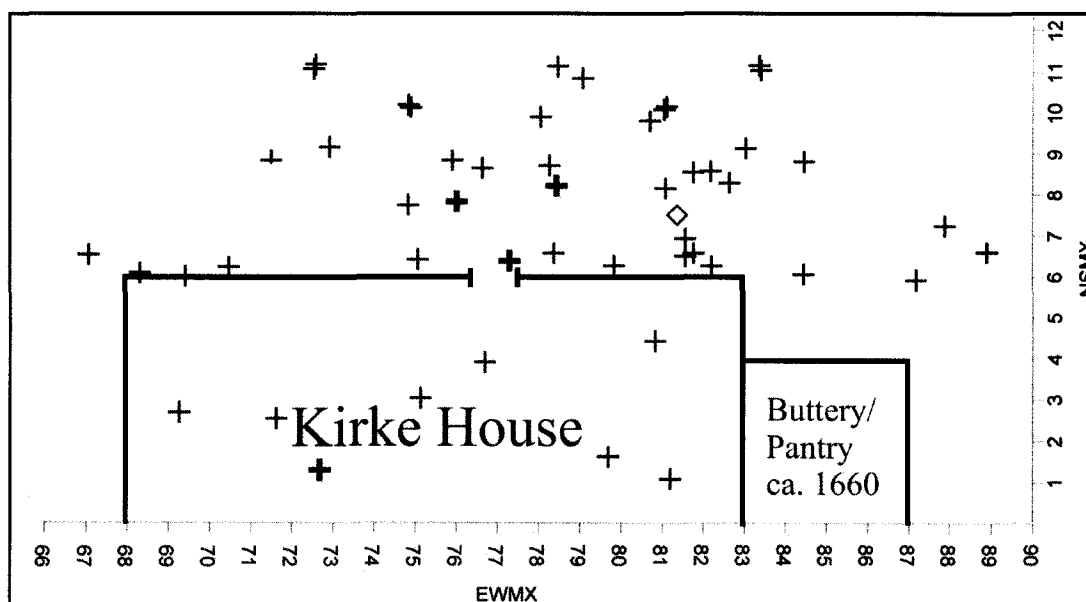
Both the well house and lodging/servants' quarters also operated as part of the Kirke house and as such, there must have been some form of access to and from the main dwelling. Since the well house was only about 2 feet from the east end of the Kirke house, it is conceivable that some accommodation was made to connect it by a covered passage and door. However, because the Kirkes' servants would have fetched this water, such a convenience may have never been given much consideration. The lodging/servants' quarters on the other hand was incorporated into the northwest end of the house and access would have most likely been in this area.

The locations of doors indicated by the structural and stratigraphic evidence was compared with that shown by the iron structural hardware, in the hope of providing corroborative evidence of door placements proposed above and/or to suggest some alternate access points and interior doorways. The first step entailed a search of the Ferryland

database to identify all the iron artifacts found in those events associated with the Kirke house. This totalled 30,807 specimens, of which 29,579 iron nails were disregarded for the purposes of this research. A detailed or distributional analysis of the nails would have added nothing new to the interpretation of the house, as we already know the dimensions of the dwelling, that it was fully framed with vertical planking and clad in boards and/or shingles. The remaining 1,228 iron objects in the catalogue were examined for structural hardware such as hinges, pintles, stock lock and padlock fragments, keys and door/window latches. All of these objects (n=51) were then plotted on a map of Area F to identify possible door placements. The program used to process and arrange this information was Surfer 7.0 for Windows, a relatively basic and user-friendly interface that allows the analyst to work with artifact information from a database and convert it into a two dimensional plan which highlights areas of concentration.

Figure 24 shows the distribution of these artifacts both inside and outside the house. Almost immediately it became clear that no pattern exists between the locations of these objects and the proposed door locations. Instead, the majority of structural hardware is concentrated in the midden at the front of the house – which is expected considering that over 62,000 of the approximately 90,000 artifacts associated with the Kirke occupation were found in this same refuse deposit. The only notable exception is two hinges found in E77 N6, exactly where the north wall of the house meets the eastern section of the cobblestone courtyard. Since this is the same area where the front door is

believed to be situated, these hinges likely represent a more precise placement for the main entrance.



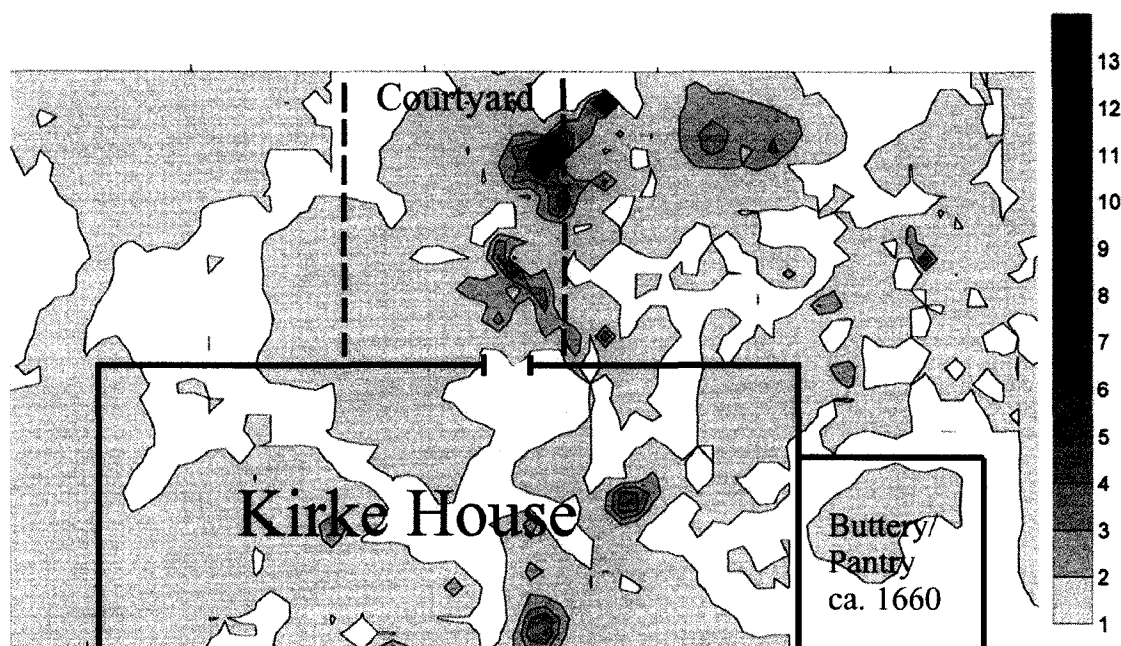
**Figure 24.** Distribution of iron structural hardware in and around the Kirke house (+ symbols are hinges, diamond symbol is a key).

## Windows

For the purpose of clarity, only those glass fragments readily identifiable as window glass were plotted on the site map of Area F to assess their distribution. This totalled 2,055 fragments, some of which allowed for the identification of window pane shapes including rectangular, square and diamond. The lead comes in which these window panes were set are just as reliable an indicator as the glass itself, if not more so. Their distinctive H-shaped cross section is easily recognizable and not often confused with other long, thin, lead artifacts like sprue. Lead window comes are also well preserved in the burial environment at Area F and malleable enough so that they are not

broken into many tiny pieces. The only drawback is that these objects were sometimes salvaged and melted down to be reused in another form. By combining the lead comes (n=122) and window glass fragments (n=2,055) together we can obtain a relatively accurate and reliable indication for the locations of glazed windows placed in the Kirke house.

The distribution of these artifact types reveals two obvious concentrations (Figure 25). One is outside the north wall of the house and the other is a smaller cluster along the south wall. Although the placement of windows at the front of the Kirke house is expected, it appears that the majority of window glass and lead comes are distributed around the eastern half of the cobblestone courtyard and thus, many of the glazed windows were set in the eastern half of the house facade. The small cluster of window glass just inside the south wall of the house coincides almost perfectly with the proposed location for the back door. If this door was opposite the front entrance, then this south window would have been located in the area between the back door and the lateral fireplace. Not a great deal can be said about the fenestration of the small lodging/servants' quarters at the northwest end of the Kirke house until excavations can proceed under the present-day road. In addition, the limited presence of window glass and lead coming within the immediate area of the later built buttery/pantry and dairy (discussed below) demonstrates that these structures likely had unglazed windows.



**Figure 25.** Distribution of window glass and lead coming in and around the Kirke house (intensity of shading indicates the number of pieces in each excavation unit).

### Interior finish

The final topic covered in this section deals with interior features such as partitions and stairs. The most obvious division inside the Kirke house is between the cobblestone floor on the west end of the house and wooden floor on the approximately eastern two-thirds. Such a clear separation indicates that an interior partition would have been erected at the junction of these two floors, to separate them into individual rooms.

A close examination of the sleepers at the east end of the house revealed that one horizontal timber was much larger than the rest. It is located along the E77 line and measures 1 foot wide as opposed to the majority of other sleepers which averaged only



about 8 inches wide. Differential levels of deterioration certainly affected the overall visibility of these sleepers; yet, since they were all covered in the same sand and subjected to the same burial conditions, it may be more than coincidence that this particular structural member is so much broader. It is conceivable that this large timber was part of the house frame and as such, was meant to separate this area into two smaller units or bays, both on the ground floor and above. Such a separation makes perfect sense in terms of heating. If the eastern end of the house were an open 21 by 33 foot space, then it would be next to impossible to heat from a single lateral hearth on the back wall. The square footage (693 feet) of this area is not only comparable to, but actually larger than, the entire ground floor from each of the two planter's houses excavated at Ferryland, (683 and 450 square feet) and both of which were partitioned into two rooms (Crompton 2001; Nixon 1999). A division in this part of the Kirke house would provide a comfortable, heated room at the east end and a second unheated space in the middle of the dwelling.

Evidence for the location and orientation of the staircase is much more ambiguous. No interior post molds or footings that would have supported such a feature were found. Although possible, it is highly unlikely that a house as large and relatively well built as this one would simply have a ladder to gain access into the upper chambers. The only recourse for now is to suggest that the stairs may have been built in the same loca-

tion as that seen in many other seventeenth-century English and colonial dwellings – up against or within proximity to a fireplace.

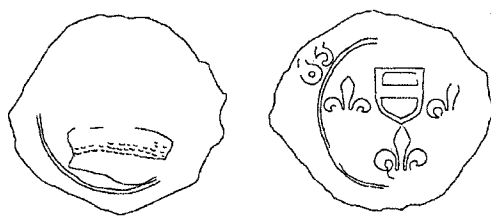
### 3.4.2 Phase I (Dating the house construction)

There are no known records that refer to the construction or modification of the Kirke house. The only direct references concerning the habitation of the Kirkes are: 1) a series of depositions from 1652 that, among other things, detail how David Kirke took possession of Calvert's mansion house in the summer of 1638 and "planted or placed himself, his lady and family therein . . . "; and 2) a statement by Thomas Cruse in 1667 that Sir David kept a common tavern in his own house (Pope 1993:54, 104). Neither of these documents reveals the fact that the large dwelling at Area F was built; however, the first provides a time-line for when it could have been started. Considering that the Kirkes did not arrive at Ferryland until midsummer and undoubtedly spent much time and effort in establishing themselves and securing their business operations, it would be reasonable to suggest that the new house was not constructed until at least 1639.

We may never know for certain what month or year the Kirkes decided to expand upon their existing accommodations but the artifactual remains and stratigraphic record provides a strong indication of the decade. This is in the form of a dismantling/construction layer (Event 370) sandwiched between the brewhouse/bakery and the Kirke house. The clay tobacco pipes and other datable objects associated with the earlier brew-

house/bakery structure indicate an occupation terminating around 1640; therefore, the overlying strata representing its dismantling and the subsequent Kirke house construction and re-occupation, should date from this period forward.

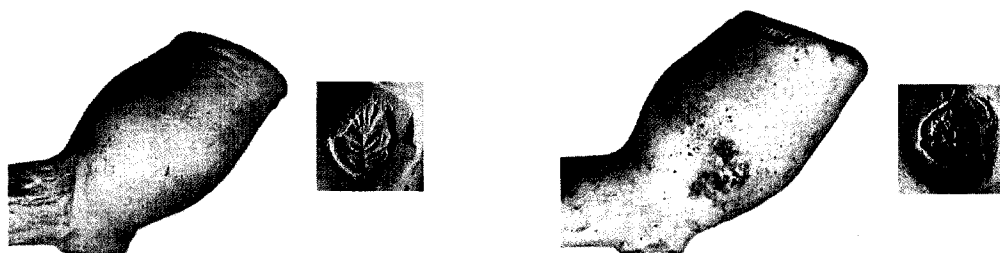
The first piece of artifactual evidence to provide an accurate *terminus post quem* for the transitional period between construction and re-occupation is a single copper coin struck in France. It is one of four French *double tournois* found in association with the Kirke house and this particular issue dates between 1636 and 1641 (Berry 2002:47). Portions of the second and third numerals 63 on the reverse of the coin clearly place it within the period 1636-39 (Figure 26). The presence of this coin in the dismantling/construction episode is important for two reasons. First, it indicates that the large timber-framed house at Area F could not have been built until *at least* 1636; and second, it places this reorganisation within close approximation to the arrival of Sir David Kirke in 1638.



**Figure 26.** French *double tournois* (obverse and reverse, not to scale) found in Kirke house construction layer, dated between 1636 and 1641. Image courtesy of Paul Berry, National Currency Collection, Ottawa.

The clay tobacco pipes tell a story similar to that of the excavated coin. The vast majority (91%) of pipe bowls and makers' marks found in this deposit have a datable range that falls within the 14 years of David Kirke's residency. This includes some of the same forms and marks seen in the previous occupation layers, such as IS and RC pipes. If the brewhouse/bakery was occupied until ca. 1640, then the construction date for the large dwelling at Area F can be defined to the period between 1640-1651. The discovery of a small collection of pipes bearing David Kirke's own monogrammed initials, in the midden outside the house brings us one step closer, for it demonstrates that these items were smoked and discarded prior to his recall in 1651. Since the house was already standing before his departure, and likely for several years previous, the entire dismantling and new construction episode that occurred at Area F must have taken place in the 1640s.

Whereas many of the clay tobacco pipes found in Event 370 are the same as those from the lower events, others are quite distinctive with regard to their provenance, a fact which may help us further refine the date for the Kirke house construction. No fewer than four different pipe bowl forms, three distinct makers' marks and several decorated pipestems of Dutch manufacture were recorded in this stratum (Figure 27). Such a variety was not present in the earlier occupation layers, which often had just one or two clay pipes attributable to Dutch provenance. This pattern of diversification is visible in other events associated with the Kirke house and even expands to include several



**Figure 27.** Two Dutch pipe bowls (scale 1:1) and heel marks from the Kirke house construction layer.

types of pipes manufactured in the American colonies. The presence of small numbers of non-English pipes is in no way definitive, but they do allude to a subtle change or shift in the trade, supply and consumption of pipes starting around the time when the Kirke house was built. Could this shift be indicative of the English Civil War period (1642-1649) whereby many of the English colonies in the New World experienced shortages in supplies/provisions – and increasingly turned to other sources, mainly the Dutch, to fill this void? A clear-cut example of this can be seen at the English Civil War era site of Pope's Fort in St. Mary's City, Maryland. Occupied from approximately 1645-1655, this fortified enclosure contained a profusion of Dutch and locally-made terra cotta pipes but very few of English manufacture (Miller 1991). In fact, three of the four Dutch bowls from Event 370 and one type of American-made pipe from the upper Kirke house occupation layers are the same forms illustrated in the Pope's Fort assemblage. The precise temporal control provided by this site, in turn, strengthens the 1640s

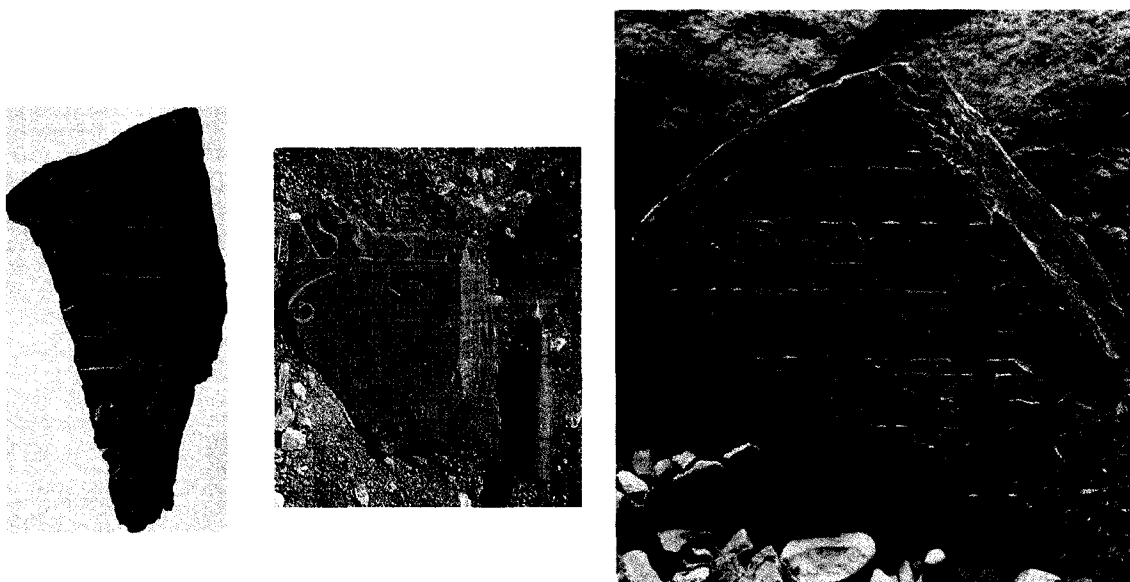
interpretation for the Kirke house. It also gives further credence to the possibility that its construction occurred during the time of the English Civil War.

It is because of this tightly-dated context that we have an important opportunity to go one step further with our clay pipe analysis. Not only can we use the collection of bowls and makers' marks from the Kirke house construction layer to help date the site, but such a "closed group" can help us rethink and refine existing bowl typologies. Pioneers like Adrian Oswald, David Atkinson and Ian Walker developed pipe bowl typologies in the 1960s-70s as a basic guideline for archaeologists studying historic sites. Unfortunately, these important publications are now looked upon as all-encompassing and unequivocal, without much consideration given to possible variants in the model. Instead of totally relying upon previous works, historical archaeologists need to ask more questions of their immediate data, so we can move forward in our understanding of the types and variety of pipes smoked in archaeological contexts. The independent dates provided by such narrowly-dated pipe groups have long been touted by specialists like David Higgins as the best method for expanding our knowledge with regards to dating clay tobacco pipes (1997).

The collection of pipe bowls and makers' marks from Event 370 is particularly well suited for such analysis. Not only does this stratum overlie a well-dated context but it is also capped off by another refuse layer that first accumulated in the 1640s.

Likewise, there appears to be minimal “interference” or disturbance from this later occupation, for only 10% of identifiable pipe bowl forms are out of sorts with regards to the rest of the assemblage (See Appendix A, Event 370). This stratigraphic integrity ensures that we are dealing with a “closed group” and thus, the recorded bowl forms and makers’ marks illustrate a range of clay pipes consumed in a short time span and dating to the mid-1640s – a very useful archetype for the study of seventeenth-century Newfoundland specifically, and Colonial North America, in general.

Two other datable, yet unexpected, objects were unearthed while excavating the debris strewn about from the dismantling of the brewhouse/bakery and its underlying occupation. Just metres apart from one another were two gravestone fragments, a small upper portion containing the letters Th[e] ...Fa[...] and a larger base fragment with the partial words [L]ast E... and a date of [1]62[?] (Figure 28). A third, and much more complete, grave marker was found while excavating the lower layers of the defensive ditch approximately 10 metres east of where the other two were located. Its inscription reads H[ere] Lyeth T[he body of] Nichholos [??] who depar[t]ed [thi]s life t[he??] day of Ma[r]ch [???]. The only reference we have concerning documented deaths at Ferryland during this period is George Calvert’s letter to Charles I in 1629, stating that “. . . my howse hath beene an hospitall all this wynter, of 100. persons 50. sick at a tyme, myself being one and nyne or ten of them dyed.” (Cell 1982:296). Considering that grave markers were expensive and uncommon in England (and the colonies) until the latter part of



**Figure 28.** Three gravestone fragments found at Area F as described in text.

the seventeenth century, their presence at Ferryland was likely associated with individuals of some prominence and importance. In this respect, the gravestone carved for “Nicholos” – if not for some unknown individual with the same first name – may have marked the resting place of Nicholas Hoskins the gentlemen, rather than Nicholas Hinkson the carpenter, both who were listed as residing at Ferryland in 1622-23.

A closer examination of these pieces revealed that they were all manufactured from local slate, were very similar in overall form and style, and that their fragmentary state was not simply a result of spalling due to weather and time. These gravestones were clearly smashed and broken. How is it that several gravestones, apparently dating



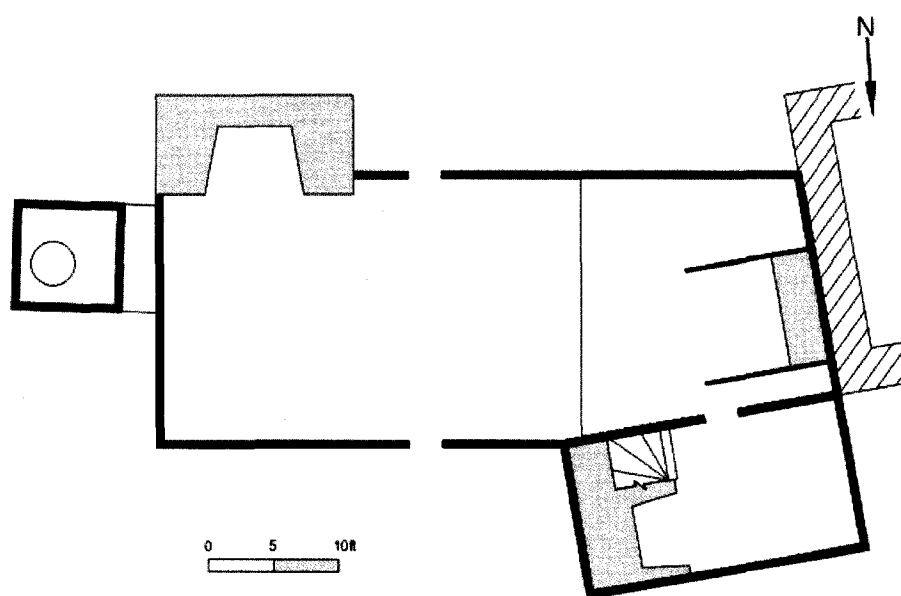
from the 1620s, were ruined and discarded prior to the first half of the seventeenth century? Is it even conceivable that someone ordered the desecration of grave markers associated with some of Calvert's early colonists? Could this act of defilement be related to religious affiliation? Such treatment would certainly not be beyond our understanding of religious persecution in sixteenth- and seventeenth-century England, for this was a time when the activities of Papists were restricted and priests were frequently imprisoned or even threatened with death simply if they said mass (Garman 1999). This kind of oppression was one of the reasons George Calvert envisioned Ferryland as a place of toleration, where his family and other Catholic settlers would have freedom to worship. David Kirke certainly did not share this same sense of compassion, for he adamantly stated his displeasure of "Jesuits and Scismaticks" and wished to "discourage forever all seditious spirits to mingle with us" (Kirke to Archbishop Laud, October 2, 1639 in Pope 1993:37). The fact that Kirke referred to other religious practices as "seditious" is by no means proof that he directed these actions, but it does suggest that *any* Catholic presence at Ferryland was seen as treasonous to the Church of England. We may never know the true answer to the mystery surrounding these artifacts; however, the archaeological evidence demonstrates that some of these gravestone fragments found their way into the occupation and destruction deposits underling the Kirke house and thus predate its construction.

### 3.4.3 Piecing it all together: Floor plan and room functions

The previous sections have helped to “flesh out” the Kirke house by providing details on its construction, dimensions, flooring, window and door placements and interior partitions – with the result that a clear floor plan begins to emerge. The principal residence and its associated buildings were planned and constructed for particular functions and their functional attributes are reflected in the architectural details, artifactual remains and their physical placement. By gathering this evidence together it allows for the functional classification of individual rooms and structures, although any number of different tasks may have been performed in them over the approximately 50 year occupation.

#### The main dwelling

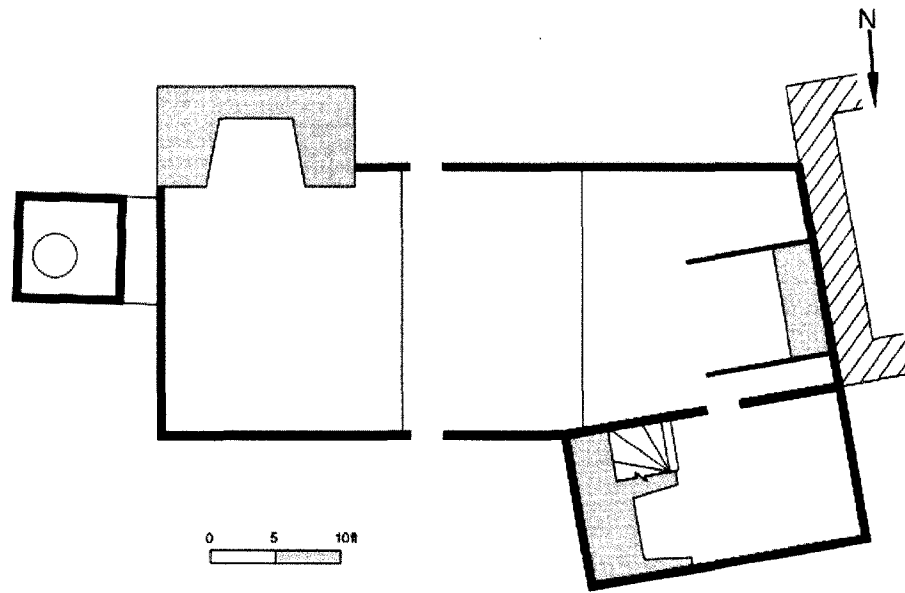
As described above, the main 21 by 53 foot dwelling was divided into at least two ground-floor rooms, with the distinct possibility of a further subdivision at the eastern end. Viewed as a two-room plan (Figure 29), the Kirke house would have consisted of a 21 by 33 foot room at the eastern end and a 21 by 20 foot room at the western end. The larger eastern unit had a boarded floor and partition wall separating it from the cobblestone floor in the west end. The front door of the house would have opened up directly into the large east room, while access to the west end would have been via a door in the partition wall, most likely in the vicinity of the 5 foot wide cobblestone passage at



**Figure 29.** The Kirke house as a two-room plan.

the north end of the house. Judging by the accumulated refuse behind the house, a back door was also placed in the eastern unit.

If we look at the house in terms of a three-room plan, quite a different picture materializes (Figure 30). The western bay essentially remains the same but the eastern end changes the whole outlook of the dwelling. Another interior partition wall located along the remains of the large horizontal timber found in E77 would divide this area into a roughly 18 foot long room at the far eastern end and a smaller 15 foot long room in the centre. The east room would have been heated by a lateral fireplace along the south wall, while the other bay was unheated and likely functioned as a service room. This would make the heated rooms on each gable end a comparable size and access into the

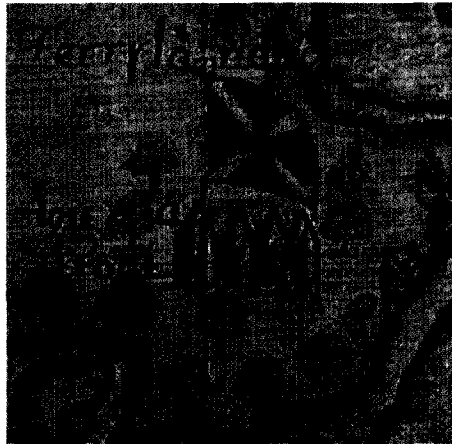


**Figure 30.** The Kirke house as a three-room plan.

house would now be through a doorway opening directly into the service room/lobby. Such a three-room plan strengthens the overall symmetry of the house, as there is a similar-sized room on each end and a smaller service room/lobby in the centre. This hypothesized plan for the Kirke house turns out to be a relatively common English house form and is very similar to that described by Brunskill as a “house with central service room” (1982:76-78). According to Brunskill, such an arrangement is “quite an advanced plan ... since no room opens off one another” but instead circulation was achieved independently through the central room/lobby (Ibid., 76). The Kirke house may very well be some derivative of this house plan, a form which often has its staircase located at the centre of the house as opposed to against a fireplace.

Regardless of their location, the stairs lead to the upper chambers. The important question is whether this second floor was a full story, half-story or simply a loft. Unfortunately, the stratigraphic record is mute on this subject for no distinguishable layers were found inside the house to help isolate or confirm the presence of an upper floor. The artifacts recovered from the various events are likewise of little help in this matter, except that their sheer number indicates a very large household. Considering the actual size of the house, the prominence of its owners and the fact that their retinue of servants likely outnumbered actual family members, a half-story or full story above divided into chambers seems only appropriate. This is further supported by the belief that two story construction was the ideal for English gentry and yeomanry by the early seventeenth century (Stone 1982:357).

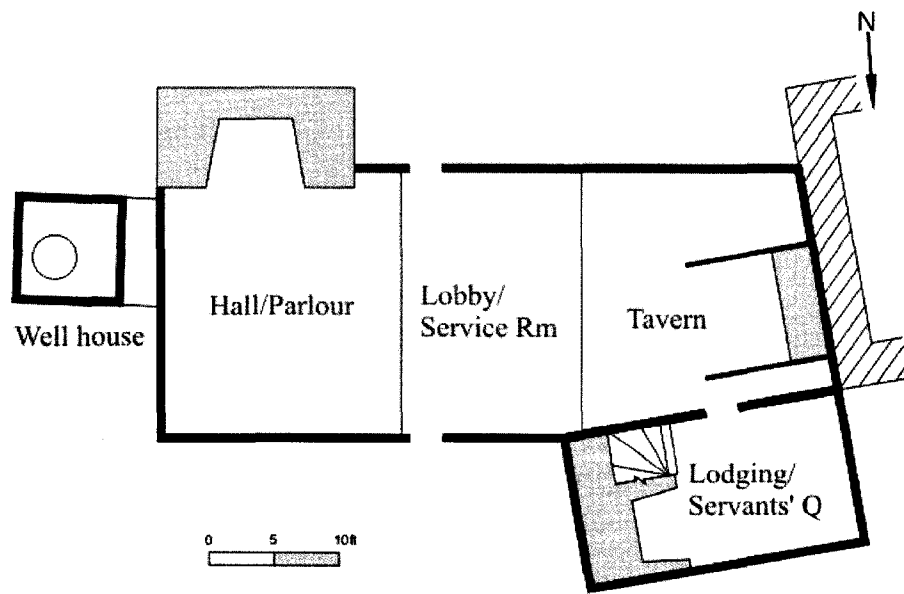
If the upper chambers mirrored the ground floor plan in any way, then it is probable that the second floor was also arranged into two or three rooms. Add to these upper chambers a bit of speculative embellishment – in the form of three projecting gables – and what we have is a house very similar in appearance to one found on an inset map of Ferryland drawn by Augustine Fitzhugh in 1693. This map shows a large two-story dwelling divided into three units or bays, atop of which flies a flag bearing the combined crosses of St. George and St. Andrew (Figure 31). Even if not entirely realistic, the house as depicted may have represented an iconic ideal. Present archaeological evidence also indicates that the Kirke house was, by far, the largest and most commanding



**Figure 31.** Detail of 1693 Fitzhugh map showing large house at Ferryland.

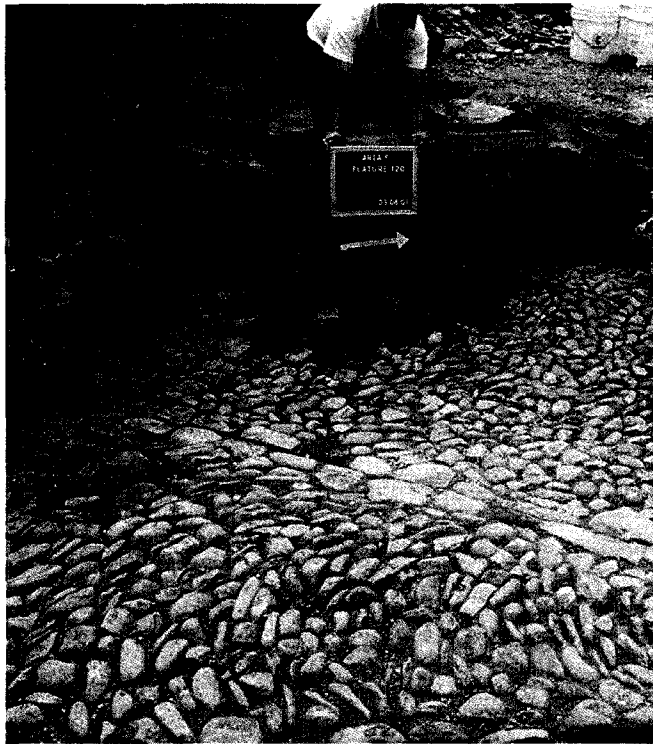
domestic structure on the Ferryland landscape, a fact which would make it memorable at the time Fitzhugh sketched this map (Gaulton and Tuck 2003:214). Whether this was a mere coincidence or purposeful rendition, this dwelling is as close a portrayal of the Kirke house as we will likely ever find.

Determining the actual function(s) of each room and the different activities that took place within requires a closer look at both the architecture and artifacts (Figure 32). Starting at the western end of the dwelling is a 20 by 21 foot room floored in cobblestones and containing a smoke/fire hood. Both are somewhat unusual features. First, because cobblestone floors are believed to have been used only rarely for interior surfaces in seventeenth-century English dwellings. Second, because a smoke hood has never been found in any other seventeenth-century domestic structure excavated in Newfoundland. A shallow drainage channel set into the cobblestone floor runs along in



**Figure 32.** Proposed room functions discussed in text.

front of the smoke hood and continues across the cobbled passage and outside to the courtyard (Figure 33). Were it not for the presence of a hearth and the heavy accumulation of domestic refuse, the cobblestones and drain feature may have been interpreted as a floor from a cowhouse or byre. However, viewed from a domestic perspective, cobblestones make an ideal surface in areas of heavy activity as they are easily cleaned, rot-proof and would not burn as a result of an errant ember or spilled brazier. The drainage feature would also channel away any liquids resulting from spills or other related mishaps. These practical attributes are not what one would expect to see in the Kirkes' parlour – a private, formal space wherein occupants slept, displayed their prized heirlooms and received honoured guests (Deetz 1977:57).



**Figure 33.** Shallow drainage channel in front of smoke (fire) hood at the west end of the Kirke house.

Another room frequently found in a majority of vernacular houses in seventeenth-century England and Colonial North America is the hall. The hall was a heated ground-floor room where much of the cooking, eating and socializing took place. The insubstantial nature of the smoke/fire hood at the west end of the Kirke house was not suitable for the amount of cooking needed to sustain the entire Kirke household, nor would it have been adequate for the prolonged and steady periods of heating necessary in a hall. This is also reflected in the actual number of cooking vessels found on the cobblestone floor, which are largely confined to a few pipkins, kettles and iron pots for boiling pottage. On the other hand, there is much greater evidence for activities relating to both smoking and drinking. Of all the clay pipe fragments found inside the dwelling, 45% were recorded on the cobblestone floor at the far west end of the house. Based



upon square footage, that is 74% more than anywhere else in the dwelling. The number of wine and case bottles show an even greater concentration. Fifty-four percent of all the vessels identified inside the house were deposited in this same 420 square foot room. Ceramic beverage consumption and service vessels produce the same overall percentage (54%) as that of case and wine bottles. The only notable difference is the quantity of glass stemware, 67% of which was found at the east end of the house. Finally, there was found a lead merchant's token bearing the initials of David Kirke himself. Its discovery at the southernmost extent of this same room indicates that it likely served as a form of currency and was given a set value based upon either monetary standards or goods/services. Chances are it was employed as a convenient substitute for hard currency which was often in short supply in seventeenth-century Colonial North America (Berry 2002:24). Given the fact that these lead tokens were likely distributed by Sir David Kirke, this makes it the earliest known piece of money manufactured in what is now Canada and possibly even all of the North American colonies (Berry 2004; Jordan 2004: personal communications).

Considering both the architectural and artifactual evidence, the implication is that the 20 foot wide room at the west end of the house did not function as a parlour or hall, but rather, as a tippling room or tavern. In this particular case, there is documentary evidence to support this interpretation. The 1667 deposition of Thomas Cruse stated that "Sir David Kirke himself did keep a common tavern in his own house, which did draw

and keep ship masters, fishermen and others from their fishing employments to the great prejudice and hinderance of their voyages” (Pope 1993:104).

Before moving east to the other room(s) in the house, several important points need to be addressed concerning the fireplace at the west end. Irrespective of its form and construction, this hearth and smoke hood was an operational and fully-functional feature and one that was best suited to the functions taking place within this part of the house. First of all, this type of fireplace took up less space in the room, while at the same time retaining a large 9 foot wide by 7 foot deep hearth area. Second, the use of this room as a tavern fits well with the capabilities of the fireplace, which operated mainly for heating the room, providing hot coals for lighting tobacco pipes and to a lesser extent, providing a hot bowl of pottage for cold or hungry patrons. Finally, the construction of a wooden fire hood allowed for unhindered access to and from the lodging/servants’ quarters incorporated into the northwest end of the Kirke house. A “traditional” stone fireplace of similar proportion and depth would have encompassed a greater surface area inside the house and likely hindered entry to this attached structure.

Directly east of the tippling room/tavern was a much larger 33 foot long room(s) with a wooden floor. Other structural features in this location include a 5 foot wide cobblestone passage at the north side of the room, a possible room partition in E77, a lateral stone fireplace and after ca.1660, a large stone fireplace in the gable end. Considering

that the hearth and smoke hood at the west end of the house served the tavern, the presence of a large stone fireplace at the opposite end of the dwelling hints at a more domestic function. The same can be said of the wooden floor at this end of the house, which was not only warmer, but more comfortable to walk on than cobblestones. Although there were two large stone fireplaces in operation at different times in the east end of the Kirke house, both exhibit evidence for considerable use. In addition, the earlier lateral fireplace also has a fair bit of burning on the cobblestones in each of its inside corners, suggesting that the two clay baking ovens were still functioning.

Most of the artifacts recorded inside these fireplaces were small shattered pieces, likely all that remained after periodic cleaning. Of notable exception are a small silver cross and a ¼ section of a silver oak tree shilling. As stated above, the majority of clay tobacco pipes, ceramic beverage service and glass service vessels found inside the Kirke house were located at the far western end – and this is in keeping with its function as a tippling room. It appears that the artifacts excavated in the eastern part of the house support the architectural evidence for it serving as a domestic and/or private space for the family. From the collection of identified food service vessels recorded inside the house, 18 out of 28 (64%) were found at the eastern end. Glass stemware, some of which include decorative and fragile wine glasses, was also concentrated (67%) at this end of the house. Fragments of Portuguese *terra sigillata* show an even higher percentage (73%), and there was even part of an early seventeenth-century porcelain plate found

between the deteriorated floorboards. So it seems that there was less physical evidence for smoking and drinking but more evidence for eating meals, consuming beverages from fine glassware and displaying some of the household's expensive and rare ceramic pieces. Thus, both the architecture and artifacts fully support the idea that at least part of this area served as hall and/or parlour. On the same note however, the artifactual evidence is inconclusive with regard to the placement of a central lobby.

The last two features associated with the main dwelling are the cobblestone passage and outer courtyard. The function of the 5 foot wide cobblestone passage, running along approximately two-thirds of the north axis of the house, is largely self-explanatory – it served as a means of intercommunication between rooms. Given the fact that this same passage was later extended to include access into the 14 by 14 foot buttery/pantry, this suggests that it also served as a convenient means to provision the entire residence. The exceptional width of the passage lends support to this idea, for a 5 foot wide space is more than ample for personal traffic, yet wide enough to roll a 45 gallon barrel of spirits from the unheated buttery/pantry to the tippling room at the other end of the house.

Cobblestone passages must have been somewhat common in seventeenth-century England or at least a feature familiar to craftsmen working at the time, for a very similar, yet narrower (3 foot) pavement was found running along portions of the long axis of

an early seventeenth-century dwelling excavated in Cupids, Newfoundland (Gilbert 2003:121-2). The Kirke house and the Cupids' house are two of only a half-dozen dwellings presently excavated on Newfoundland's seventeenth-century "English Shore." The presence of a longitudinal cobblestone passage in two of six dwellings implies that this attribute was not an aberration but one employed with regularity.

Outside the front door of the Kirke house was a 16 foot wide by 23 foot long cobblestone courtyard that led straight to the cobblestone street. This courtyard is asymmetrically divided by a drain which actually begins as a shallow channel inside the west end of the house. At the point where the interior drain meets the exterior courtyard, it changes into a V-shaped brick drain and continues north for an undetermined distance (Figure 34). The location of this courtyard, aligned toward the centre of the Kirke house,



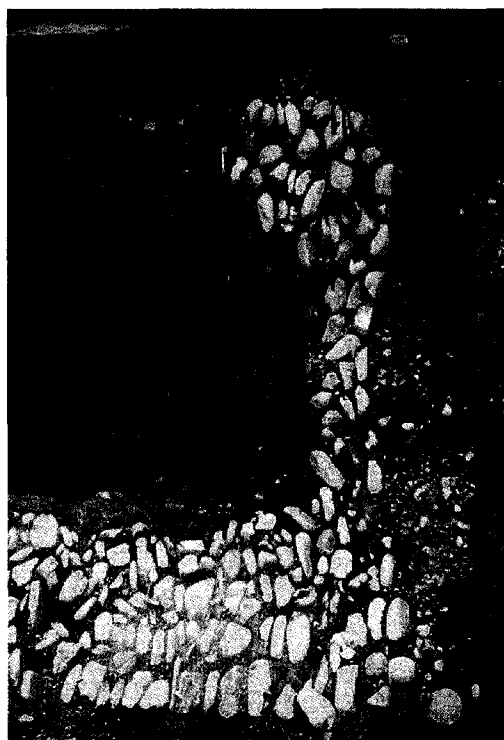
**Figure 34.** Cobblestone courtyard at the front of the Kirke house. Note the later stone footing built on top of the courtyard just to the east of the brick drain.

gives further credence to the idea of a three-room house plan. Since there was a formal courtyard leading up to the house, it would be appropriate to have a lobby or central room for residents, visitors or patrons to enter. The location of the front door, as indicated by the archaeological evidence, also opens up directly into this third room.

#### Well house and lodging/servants' quarters

At least two other buildings operated in conjunction with the first phase of the Kirke house including an 8 by 8 foot well house and a 12 by 22 foot lodging/servants' quarters, both of which were originally built during the Calvert period. The first of these was the brewhouse/bakery well and the structure which enclosed it. Although there is no definite evidence to indicate what structural modifications took place, if any, during the construction of the Kirke house, its original architectural features consisted of an outer cribwork of logs inside of which were two layers of planks that formed the actual walls of the well shaft. The surface around the top of the well was surrounded by an 8 by 8 foot cobblestone pavement and in each of its corners were as the remains of a wooden post, likely once forming the frame for the well house (Figure 35).

A small gable-ended fireplace, prepared stone footing and the remains of several floor sleepers still containing upright nails, mark the location of a small but freestanding 12 by 22 foot dwelling built in the early years of Avalon and later merged into the northwest end of the Kirke house as a lodging or servants' quarters. As described in Section



**Figure 35.** Partial outline of cobblestone pavement inside the well house with modern posts added to show location of post molds.

3.3, the architectural features and early clay tobacco pipes found inside firmly date this structure to the 1620s. The artifacts within this small building encompassed a broad collection of ceramic forms, pipe bowls ranging in date of manufacture from the 1620s to 1720s and an assortment of glass, lead and other objects. As only one discernable occupation layer (E475) and several hearth-related events (379-81) were recorded inside, it was impossible to separate these artifacts for the purpose of distinguishing between the functions served by the house during the Calvert and Kirke periods. Regardless of this limitation, the overall pattern of artifact types and their quantities can shed some light on the general activities that took place over the course of the seventeenth century.

The ceramic assemblage from these four events comprises a total of 15 vessels including 8 North Devon sgraffito vessels, 3 North Devon storage pots, 1 Merida jar, 1 Staffordshire mug or cup, 1 small Saintonge bowl or drinking cup and a Totnes pipkin or fleshpot. There was also a single case bottle and wine bottle, at least 105 pipe bowls, a small number of glass beads, a few dozen lead shot and musket balls, copper kettle fragments, an iron pot hook and a lead bale seal bearing an *Exon 78* stamp. This assemblage clearly indicates a domestic component. Its proximity and accessibility to the tavern further suggest that it served as a lodging room for visitors/patrons or as living quarters for servants. The latter possibility is somewhat strengthened by the large collection of North Devon sgraffito vessels, which include 4 dishes, 3 jugs and 1 cup. These eight pieces comprise over half (8 out of 15) the collection of North Devon sgraffito vessels associated with the entire Kirke occupation at Area F. Clearly, this type of decorative ceramic was not collected to any great extent by the residents of the principal dwelling – who preferred tin-glazed wares and fancy Portuguese earthenware – but the ceramics obviously held a place of importance within this small room. It could be that these were the prized belongings of a longtime servant, possibly even given in thanks or handed down by the Kirkes in exchange for loyal service.

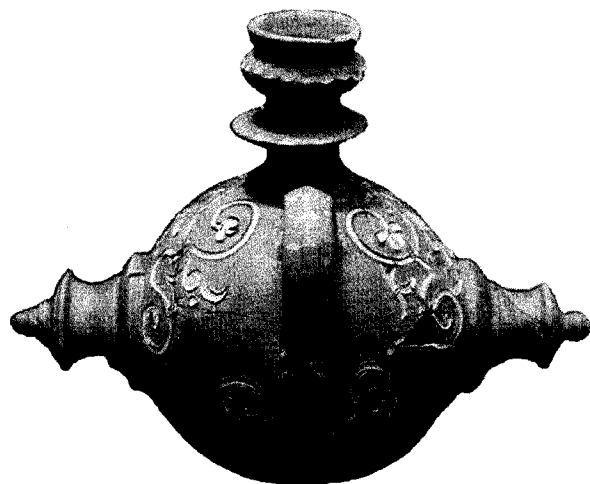
Some important questions still remain concerning this lodging/servants' quarters. Why was so much trouble taken to accommodate and incorporate such a modest domestic unit into the Kirke house, when there is definitive evidence that another nearby



Calvert era building (the brewhouse/bakery) was largely dismantled? The simple answer may be that this building was more useful left standing than it was torn down. If the overall house plan initially included provision for a tavern, then this existing structural unit would be well suited as an adjacent lodging. It is also possible that this was not the only building assimilated into the Kirke house but one of at least two domestic buildings intended for the purpose of creating a series of separate, yet incorporated structures commonly referred to as a “unit system.” The unit system was a practice whereby the construction of a new house was integrated into an area containing an existing domestic unit, thus forming two separate but associated dwellings (Barley 1990:129). The Kirke house may have been built so as to incorporate this small 12 by 22 foot dwelling and possibly the large adjacent stone building. The same kind of building technique has been documented in many English counties and in Colonial North America and usually involves members of a large family unit choosing to live close to one another, and continuing to share common resources such as service rooms (Smith 1975; Smith 2002).

If this theory proves correct, then David Kirke may have decided to build in this manner because his young family accompanied him to Ferryland. The construction of the Kirke house would have enabled Sir David to have accommodated himself, Lady Sara and the remainder of the family and servants in one large, extended, domestic compound. Evidence from the adjacent stone building seems to support this interpretation, for there are structural modifications attributable to the Kirke period. These are in the

form of a cobblestone pavement and brick drain built just outside its north wall and doorway. These cobblestones are of the same size, vertical height and bedded in the same sand matrix as those found both inside and outside the Kirke house, in contrast to the smaller, more closely laid cobbles of the earlier Calvert period. Therefore, it would not be out of sorts to suggest that they are part of the same construction episode. The massive deposit of ceramics, clay tobacco pipes and wine glass fragments found directly on top of the cobbles and brick drain (Event 509) likewise corroborate a post-1640 date for this exterior addition. Since very little of this stone building was excavated at the time this research was completed, the function(s) it may have served during the 1620s-1630s cannot be stated with certainty; however, the presence of at least one large stone fireplace does suggest a domestic component. Judging by the impressive variety and quantity of faunal material found outside this building, along with the presence of finished plaster and an almost complete Portuguese *terra sigillata* costrel in the building collapse (Figure 36), it is certainly plausible that members of the Kirke family may have appropriated this structure and taken up residence within.

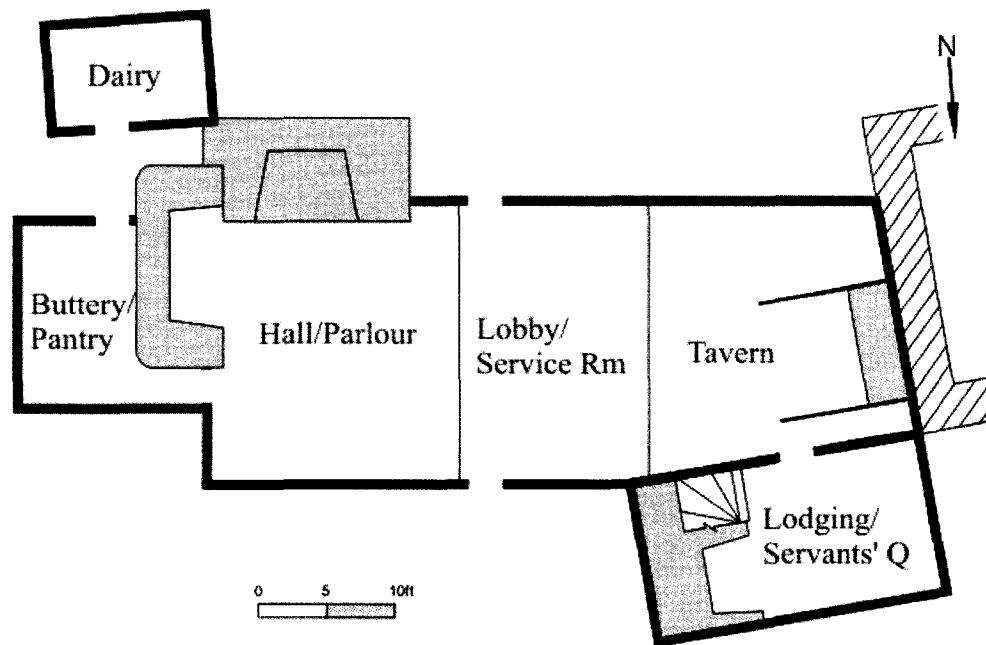


**Figure 36.** Portuguese *terra sigillata* costrel found in the stone building adjacent to the Kirke house. Height 14.5cm.

#### 3.4.4 Phase II (Renovation)

The second phase of development in the Kirke house occurred sometime around the 1660s and its focus was primarily at the east end of the dwelling. Related activities involved tearing down the well house and infilling the well, dismantling the lateral chimney, constructing a new fireplace along the eastern gable-end and adding a 14 by 14 foot buttery/pantry and a detached 8 by 12 foot dairy in the area of the former well (Figure 37). As it turns out, those in charge of this matter were not blessed with a great deal of foresight. Instead of filling the well with earth and rock to ensure that this new addition to the house would be on a secure and stable footing it was filled in with a combination of sterile clay/gravel and many of the boards and structural timbers that once enclosed it (Event 518). This action was a costly mistake that did not result in any immediate structural distress, yet one that would eventually cause the floor in the buttery/pantry to subside and the nearby fireplace to tumble into the resulting depression.

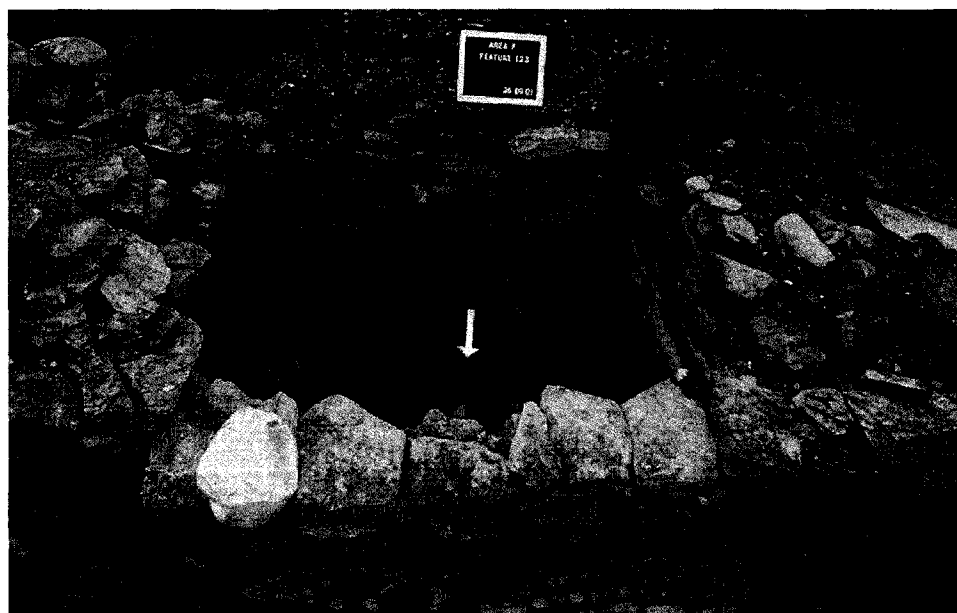
After the well had been filled in and the area levelled for this new construction, the next step involved the partial dismantling of all but the lower 3 feet of the lateral fireplace, while simultaneously filling in the hearth area and facing up the opening with stone (Figure 38). No architectural evidence could be found to disclose why this large, well-built fireplace was decommissioned, for its base still is structurally sound. It is possible that there were numerous problems undetectable in the archaeological record or maybe it was a deliberate attempt to improve living conditions inside the house. The



**Figure 37.** Phase II of Kirke house (ca.1660s).

smoke/fire hood, located at the west end of the house, could not have provided the kind of structural support necessary for an additional fireplace on the upper floor, nor was the original brewhouse/bakery fireplace likely constructed with consideration for an upper chamber hearth. If the first phase of the Kirke house only had the capacity for ground floor heating, then the renovation and addition of a large gable-ended fireplace – likely complete with a hearth opening in the upper chamber – would have greatly improved the level of comfort for whomever was living in the house during this period.

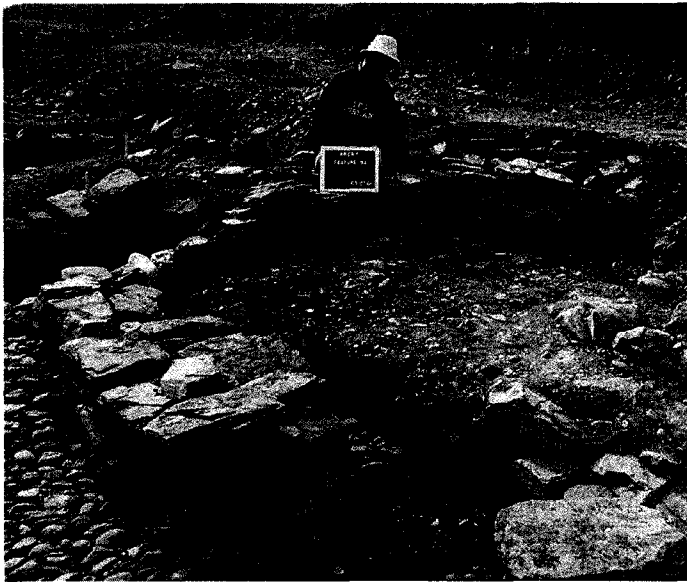
The new fireplace at the east end of the house was constructed entirely of stone and clay fill, and its hearth area measures 9 feet wide and 4 feet deep. The hearth floor



**Figure 38.** Stone facing covering up the lateral fireplace.

was covered with large flagstones that form a finished edge at the western or open end (Figure 39). The south wall of this new fireplace was actually built directly atop the disassembled east wall of the earlier fireplace, thus providing a clear time-line for its construction. It likewise indicates that both fireplaces could not have been in use at the same time. The dismantling of one stone fireplace and the construction of a new stone fireplace adjacent to it would imply that much of the same material was reused, a theory which is proven by the presence of fire-reddened stones in sections of the new fireplace that would normally not receive any heat.

The presence of over a dozen fragments of North Devon clay oven from the lateral fireplace in the well fill and the reuse of many rocks from this same fireplace, demonstrate that the new structural features associated with the second phase of the



**Figure 39.** New fireplace built at the east end of Kirke house (ca. 1660s).

Kirke house were all part of a single operation rather than a gradual series of additions/alterations. That being said, dating this very specific renovation episode involved two distinct parts. Datable artifacts found on the hearth floor of the lateral fireplace, from an associated deposit at the back of the house and in the fill used to cap off the well were all first examined to help define when these features were last used and subsequently torn down. The same method was then undertaken for the new gable-ended fireplace and its overlying occupation layer in an attempt to determine when this feature was first constructed.

The datable pieces found on the cobblestone floor of the lateral fireplace were few. The only identifiable pipe bowl dates from 1640-70, which is somewhat encouraging considering that the two datable pipes thrown into the well fill were also manufac-

tured between 1640-60 and 1650-80. Perhaps most significant was the discovery of a quartered New England oak tree silver shilling (Figure 40). Because of its modified and somewhat damaged appearance, only a small portion of the legend ASATH can be discerned on the obverse and the letters AN and numbers 16 on the reverse. Fortunately, enough remained for it to be positively identified as an oak tree issue minted in the Massachusetts Bay colony between 1660-67, the full legend reading MASATHVSETS: IN: (obv); NEWENGLAND : AN. DOM 1652 / XII (rev) (Berry 2005: personal communication). Judging by the detail and clarity of the piece, it was most likely minted fairly early in the eight year period of its issue, before the dies had a chance to become worn and the details faded. For this same reason, it appears not to have been in active circulation for a long time prior to its eventual loss between two cobblestones on the hearth floor.



**Figure 40.** Quarter section of an oak tree shilling minted in Massachusetts between 1660-67.

The rich midden layer behind the lateral fireplace is a clear contrast to the dearth of artifacts found inside. This deposit represents both the earlier Calvert period occupation and subsequent reuse by the Kirkes. As would be expected from such a combined

deposit, some artifacts date from the early colonial period, while others were not manufactured until the 1650s-1660s. At the top of this midden were pieces of North Devon clay oven and fragments of slate-stone, undeniable proof for the dismantling of the lateral fireplace. Immediately above this lens is another occupation layer (Event 467) containing an assortment of domestic refuse with dates of manufacture between 1660 and 1720. The latest datable objects in the lower layer and the earliest artifacts in the upper layer provide an excellent point of overlap, signifying that the second renovation episode occurred sometime in the 1660s. Disappointingly, there was not a great deal of artifactual material deposited in and around the new gable-ended fireplace to support this proposed date. The scarcity of material certainly does not betray the amount of use the fireplace had seen, for this is clearly visible in the form of a thick build-up of charcoal spread across the fire-reddened and shattered rocks in the hearth and outward onto its cobblestone threshold.

The artifacts and architectural features associated with both the buttery/pantry and dairy were of little assistance with regards to dating this renovation episode, yet they were diagnostic enough so that they could be isolated from the original Kirke house construction. The buttery/pantry is characterized by a series of postmolds forming the outline of a roughly 14 by 14 foot room floored in cobblestones (Figure 41). These postmolds are noticeably smaller (5 inches) than those associated with the sleeper supports in the main dwelling but are of roughly the same distance apart. Their function



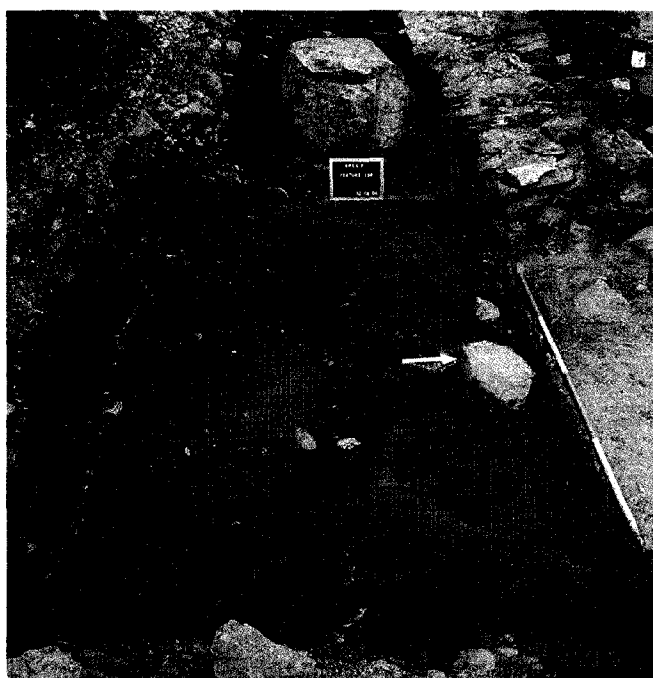


**Figure 41.** Cobble-floored buttery/pantry built at the east end of the Kirke house (ca. 1660s).

obviously does not relate to flooring but rather to provide structural support for a sill, portions of which were visible in the south end. Although the cobblestone floor in this new structural addition was at the same level (as would be expected) as those in the principal dwelling, they are readily distinguished by the largely sterile clay matrix in which they were bedded. In addition, two distinct flooring episodes are visible. The cobblestones which once ran along the north side of the Kirke house were extended southward (seen as two abutting edges) to form a cobble pavement in front of the new hearth and eastward as a small 3 foot wide passage, leading into the buttery/pantry behind the fireplace.

Six feet to the south of the buttery/pantry was a detached 8 by 12 foot dairy. Excavations revealed that neither posts nor cobblestones were used in the construction

of this outbuilding, but rather, its wooden sill and single floor sleeper were set into small trenches dug in the ground. Both the sill and sleeper also contained numerous upright nails, demonstrating that it had a boarded floor (Figure 42). A concentration of refuse in the 6 foot space between the southwest end of the buttery/pantry and northwest side of the dairy indicates that this was the only point of entry.



**Figure 42.** Outline of dairy (looking west) built to the south of the buttery/pantry. Flag tape markers indicate nails.

The physical placement of these two new structural additions with regard to the main dwelling is the first hint as to the functions they served. In many seventeenth-century English houses, service rooms were generally located at one end of the dwelling and could include a kitchen, buttery, pantry, dairy/milkhouse, brewhouse and bakery. These rooms were separated from the main activity areas of the hall and parlour, yet close enough to provide convenient access.

The architectural features uncovered during the excavation of these two additions did not include a fireplace, hearth or heating source of any kind, hence they were not employed for cooking, brewing or baking. A more reasonable suggestion would be that they functioned to store and/or prepare household provisions, tasks usually performed in a buttery, pantry and dairy/milk house. According to Cummings “multiple service rooms were customary in even the very modest seventeenth-century English farmhouse . . . the buttery is almost an invariable feature, while the dairy or milk house can be found in fully one-half of the dwellings appraised”(1979:28). These service buildings often contained a diversity of domestic goods. A buttery was used to house large containers or barrels (butts) of liquids and also an assortment of storage vessels, dishes, pots, pans and eating utensils (Ibid., 29). The pantry kept a variety of foodstuffs and other dry goods, while the dairy/milk house centred on milk and cream storage and butter and cheese production.

If this new 14 by 14 foot room and 8 by 12 foot outbuilding were constructed for a similar purpose(s), then the associated artifacts should reflect this fact. However, the paltry 65 artifact fragments (excluding nails) found directly on the cobblestone floor of the 14 by 14 foot room included only a single milkpan, a storage pot, a jar, one mug, a few clay tobacco pipes and some lead musket balls and shot. Such a small number of artifacts does not really come as a surprise for two reasons. First, large sections of this space may have been reserved for barrels, casks and a selection of other foodstuffs and

dry goods that leave no physical trace in the ground. Second, over two-thirds of this floor later slumped down into the well and any *in-situ* items became mixed with the fill used to later stabilize and resurface the area. The juxtaposition of this cobblestone-floored room and the main dwelling, as well as the fact that it was much larger in relation to the dairy, indicates that it served (after 1660) as the principal storage area (or buttery/pantry) for the Kirke house.

The placement of the smaller outbuilding behind both the buttery/pantry and main house provided ideal conditions for the cold storage of provisions. What these provisions may have been is clearly implied by the presence of numerous milkpan fragments found on the floor and directly outside its north door/passage. Of the 10 ceramic vessels recorded in this structure, eight were milkpans, at least half of which appear to have been broken *in situ* (Figure 43). Significantly, very few clay tobacco pipes or bottle



**Figure 43.** Selection of milkpans recovered from the dairy and other Kirke house deposits.

glass fragments were found inside the room, suggesting that some manner of cleanliness was sought. The preponderance of milkpans associated with this structure, vessels used for the production and storage of cream, butter and cheese, demonstrates clearly that this area was used as a dairy. In fact, the ceramics found in this room correspond almost perfectly to those enumerated in seventeenth-century English dairies. According to Deetz “. . . lead-glazed earthenware containers were preferred for ease of cleaning. Milkpans, colanders, jars and crocks of earthenware might have been found in the yeoman’s dairy.” (1977:53). Anderson provides a similar inventory and his descriptions of seventeenth-century dairies not only include their typical locations “usually affixed to the back of the house” but also that great stress was placed upon cleanliness, “far more so than any other room in the house” (1971:122).

Now that we know when, and possibly part of the reason why, this renovation and extension took place, some speculation about who may have ordered this work is in order. It seems safe to assume that the Kirkes continued to reside in this dwelling after Sir David’s recall to London in 1651 and throughout the Interregnum period, for there is no archaeological or documentary evidence to indicate otherwise. After Charles II was restored to the throne in 1660 and the Parliament’s appointed commissioner, John Treworgie, was thereby stripped of any authority he may have exercised at Ferryland, power over the Pool Plantation was relinquished again to Lady Sara Kirke and her four sons, George, David, Philip and Jarvase. It cannot be said however, which members of

the Kirke family lived in this house during the latter decades of the seventeenth century. By the 1670s, census records show that Lady Sara, Lady Francis Hopkins and George, David II and Jarvase all owned dwelling houses, outbuildings and fishery-related infrastructure (Pope 1993:124-25). Out of all these individuals, ownership of the Kirke house may have remained with Lady Sara, regardless of the fact that her eldest son George undoubtedly inherited much of the property and wealth of his late father by way of primogeniture. Not only was this the family home built for Sara and Sir David in the 1640s and in which she raised their sons, but Sara continued to be an active entrepreneur, employed many seasonal fishermen and was frequently mentioned in records pertaining to management of the Pool Plantation. As late as 1661, she actively maintained a leadership role by acting on George's behalf to petition the King to reinstate and transfer Sir David's former governing powers over to him (Ibid., 91).

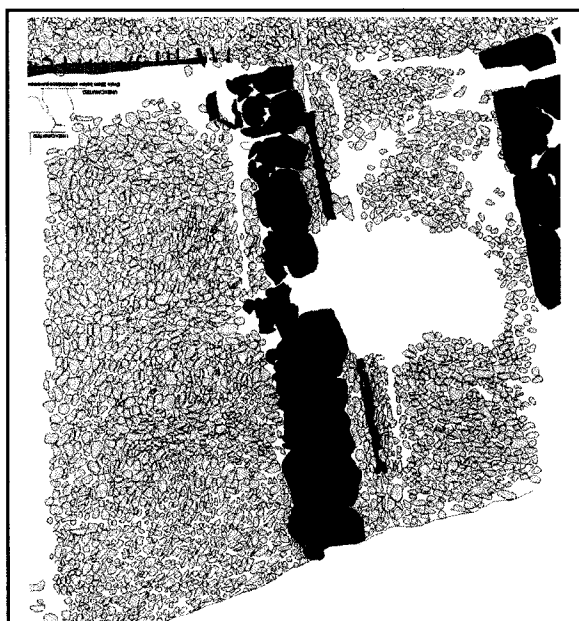
The archaeological record helps shed some additional light on this matter of ownership, for there is no evidence to demonstrate a shift in occupation based upon changes in the artifact assemblage. Instead, the exterior middens and interior living surfaces both show a single continuous deposition of the same types and variety of artifacts throughout the Kirke occupation at Area F. For example, fragments of decorative Portuguese tin-glazed earthenware and *terra sigillata* were recorded at every depth – and many of these were unquestionably part of the same household collection. A change of occupants, regardless of family ties, would bring noticeable differences in material

culture, especially considering that by this time George was also married with several children.

If it was in fact Lady Sara who continued to dwell in this house until the time of her death around 1680, then it was she who directed these modifications. With the addition of a new 14 by 14 foot buttery/pantry and 8 by 12 foot dairy, the living space on the ground floor expanded to slightly over 1700 square feet spread across five or six rooms. This physical change not only represents a desire for improved domestic comfort but more important, continued success and prosperity. A stagnating fishery and declining business operation certainly would not justify or necessitate household expansion and improvement. The construction of a new room for the express purpose of storing fresh dairy products would also demonstrate the ownership of cattle; and in fact, the Kirkes are known to have kept a substantial herd. With the nearby establishment of a large cowhouse/storage shed (ca. 1670s) on the other side of the cobblestone street, opposite the Kirke house, this can be construed as yet another way they developed and diversified their business – by providing year-round planters and visiting fishermen alike with fresh milk, cream, butter and cheese (Gaulton 1997).

Sometime between the first household renovation episode and the destruction of the Kirke house in the latter years of the seventeenth century, a north-south footing was built on top of the cobblestone courtyard, directly along the eastern edge of the brick

drain (Figure 44). This slate- and field-stone feature is a single course high, one course deep and set upon a thin (10cm) layer of household refuse that accumulated prior to its construction. The underlying midden is thick enough to suggest that some time had passed before this footing was laid. The south edge of this feature was also built directly against the north wall of the Kirke house but its northern extent is undetermined because it runs beneath the present paved road. Since there was no evidence for any associated structural features to the east of this footing, it appears to have been laid so as to enclose the area around the western part of the courtyard where it butts up against the lodging/servants' quarters. If this was the case, then its purpose may have been to form a covered entryway or porch. A new door could then be inserted directly into the tavern, instead of having the patrons enter through to the main dwelling. On the cobblestones outside is proposed entrance were found four Rhenish stoneware bottles, five glass wine



**Figure 44.** Detail of site map showing north-south footing built atop the cobblestone courtyard.



bottles, numerous West Country pipe bowls, a Westerwald jug and half the stoneware mugs associated with the Kirke occupation – all of which date to after 1660 (Events 349 & 352) and all likely originating in the tavern. Considering that the majority of cobblestones at the west end of the courtyard were dug up during the installation of a twentieth-century well, the discovery of an undisturbed and obviously-tipping related assemblage in the remaining area strongly supports the above suggestion.

#### 3.4.5 Phase III (Collapse and rebuilding)

The third stage in the development of the Kirke house came about not because of any desire for improved domestic comfort or an economic diversification scheme but due to a series of unfortunate, yet related, circumstances. Sometime during the last quarter of the seventeenth century, the cobblestone floor in the buttery/pantry began to sink down as a result of the slow deterioration of unstable materials used to fill the well. The large gable-ended stone fireplace, also built in this location, exacerbated the problem by exerting additional downward pressure in the same area. This increased weight caused portions of the floor and fireplace to collapse into the former well, an event which certainly would have caused some concern to its occupants.

The new fireplace construction that followed was not so much a rebuilding from the foundation up as it was a repair job utilizing what remained of the original fireplace. The greatest amount of work involved the back wall, which was reset approximately one

foot to the west, just far enough away from the in-filled well shaft so that it would not be in any immediate danger of foundering again. The side walls of the fireplace, largely undamaged by the collapse, were also extended inward to accommodate the placement of the new back wall (Figure 45). All of these changes diminished the interior surface area of the hearth, which now measured 6 feet wide by just less than 3 feet deep. The stonework laid during this repair/rebuilding episode was not as tightly-fitted or carefully-set as the original construction and was likely undertaken not by a professional mason but by someone who was simply able to do an adequate and timely repair job.



**Figure 45.** Evidence for the rebuilding of stone fireplace at the east end of the Kirke house. The new side wall is visible in the centre of the photograph.

Exactly when this collapse and rebuilding occurred is rather difficult to discern. Artifacts found in the events attributed to the collapse are both few and undiagnostic. The same can be said for those found between the side walls (Event 549) built during the second fireplace construction. Late seventeenth-century pipe bowls were found on

the hearth floor but they more likely represent the last years of occupation rather than initial use. The only thing that can be stated with confidence is that this gable-ended fireplace was rebuilt sometime after the 1660s, firmly placing its construction within the last few decades of the seventeenth century.

#### 3.4.6 Length of Occupation

By far the greatest number and variety of datable objects found at Area F were associated with the activities conducted inside the Kirke house and later discarded in the abundant midden deposits located immediately outside. These artifacts should not only give us an accurate indication of the overall length of occupation but also its terminal date. Pipes, coins, glass and even ceramics all play a significant part in this regard.

##### Clay tobacco pipes

A staggering 18,194 clay tobacco pipe fragments were recorded in the 39 events from the Kirke house, representing a minimum number of 1,623 individual pipes, which included 787 identifiable bowl forms and 35 different makers' marks and decorated bowls/stems (See Appendix A). Approximately 33.9% of these bowls date from the first half of the seventeenth century, signifying a fairly intensive occupation up to 1650. Pipe bowls ranging in date from 1650 to 1680 comprise 46.8%, while forms exclusive to the latter part of the seventeenth to early eighteenth century make up the remaining 19.3%. As a general observation, every decade from 1610 to 1720 is covered by the bracketed

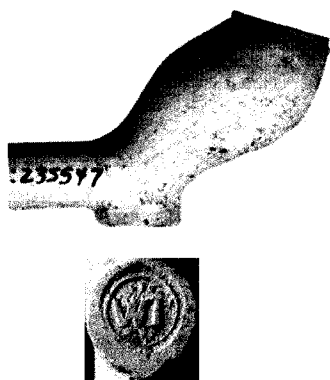
date ranges provided by existing pipe bowl typologies. Surprisingly, only two pipe bowls amongst this massive collection date from 1610-30, implying both a high level of precision in field recording and a lack of mixing with underlying colonial deposits. In addition, none of these pipes is of the quintessential eighteenth-century English form, with characteristic straight-sided walls, lack of rouletting around the rim and the top of bowl running parallel to the angle of the stem. Since it has already been established that construction did not occur until sometime in the 1640s, the evidence provided solely by pipe bowls place the Kirke house occupation upwards to ca. 1700.

As would be expected, all of the marked pipes follow a similar date range.

Makers' marks identified from the Kirke house events were always stamped on the heel of the bowl or rolled across the stem. None was identified on the sides of the heel or as a cartouche on the side of the bowl, both of which are typical traits of eighteenth-century English clay tobacco pipes. Previously recorded marks associated with the earlier brewhouse/bakery and the Kirke house construction lens were also identified in the house occupation layers. This consisted of 11 IS marked pipes, 3 varieties of RC (2 RC mark #1, 8 RC mark #2, 15 RC mark #3), 3 AR's and 2 PS stamps. Other marked pipes from the Kirke house included 9 WT marks (William Tyler, 1644), 5 PE (Philip Edwards I, 1649/50-1668-9 or II, 1680/81-1696), 14 IH (John Hunt, 1651-53), 2 EF (unknown), 3 BARUM (Latin for Barnstaple, 1680-1720) and 1 WD (Willem Duijff, 1693-95), LE (Llewellyn Evans, 1661-86) and RVB SIDNEY (Reuben Sidney, 1687-

1748). Several varieties of rose and wheel stamps were also impressed into the heels of many pipes. Prominent among these were 27 wheel marks attributed to Barnstaple or Exeter (1660-80) and 9 rose marks manufactured in Gouda from 1670-90.

As illustrated by their date ranges, several varieties of marked pipes are clearly attributable to the 1640s-1650s, while the majority fall within the third quarter of the seventeenth century and a few others specifically to the latter years of the century. Of particular importance, in terms of identifying the period of initial occupancy, are the IS, RC and AR pipes but also the WT marks, which were most likely produced by Southampton pipe maker William Tyler in 1644 (Figure 46a). At the other end of this spectrum are several BARUM pipes and a Reuben Sidney mark, extending the site occupation into the 1680s and conceivably much later (Figure 46b). In this respect, both the bowls and makers' marks clearly establish a continuous occupation from the 1640s onward to the closing years of the seventeenth century.



**Figure 46a.** (left) Pipe bowl (scale 1:1) and makers' mark likely produced by Southampton pipe maker William Tyler.

**Figure 46b.** (right) Reuben Sidney makers' mark on stem.

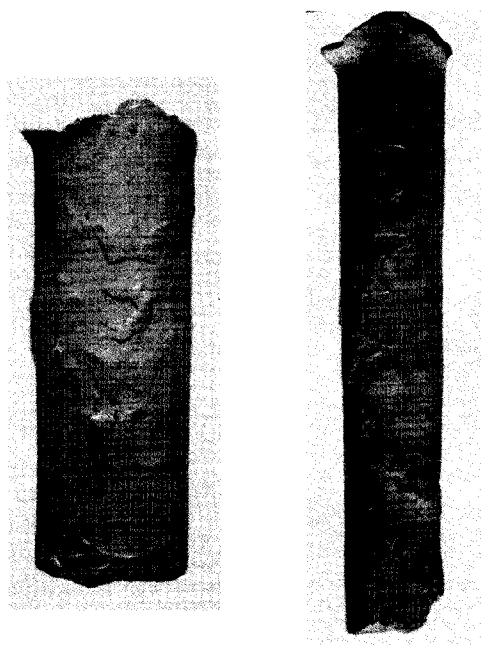
Decorated pipes also assist in dating the Kirke house occupation. A total of 7 “Jonah” pipe bowls, 5 relief-moulded pipes marked with IC initials and 4 varieties of fleur-de-lys decorated stems comprise the majority of this collection. Other scattered finds include several partial bowls and relief-moulded stem fragments of Dutch provenance. In fact, all of the decorated pipes from the Kirke house (with the exception of the DK pipes) are attributed to Dutch manufacture and date from the second half of the seventeenth century. The most recognizable of all these pipes are the so called “Jonah” bowl forms; yet, the seven examples from Area F are somewhat debased and the facial features on the bowl so faint that fragmentary pieces can easily be overlooked (Figure 47). Another distinguishing feature of these pipes is the decoration on the stem. Instead of the diagnostic whale or crocodile with a scaled body and mouth agape, there is a pattern of foliate ornamentation best described by Faulkner and Faulkner as a “fruit and vine” motif (1987:177). Such relief-moulded stems and bowls are a frequent product of



**Figure 47.** Crude “Jonah” pipes likely made in The Netherlands.

The Netherlands, although crude Jonah pipes were supposedly also made in London (Le Cheminant 1981:156). The bowl itself clearly dates to around 1660-80 and based upon its overall form and stem decoration, there is nothing that can identify this pipe as an English as opposed to a Dutch product.

The second type of relief-moulded, decorated pipe comprises an unusual group of stem fragments for which no comparative sources could be found. The stem decoration, although somewhat muddled as a result of a worn or crudely-made mold, has two distinct parts. A small section closest to the heel exhibits a set of crowned IC initials enclosed within a wreath-like border on each side of the stem, above which is another crowned symbol, possibly that of a fish (Figure 48). The remainder of the stem is embellished with a collection of loosely-spaced fleur-de-lys. No bowl fragments were



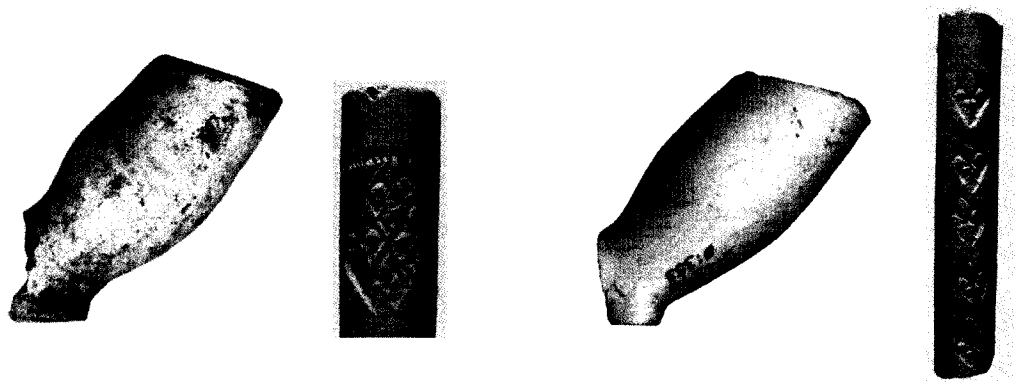
**Figure 48.** Relief-moulded Dutch pipestems with crowned IC initials.

found with, or could be joined to, these decorated stems; yet, the style is clearly Dutch in origin and commonly referred to as “Baroque.” Many archaeological specimens of relief-moulded Baroque Dutch pipes are attributed to the first half of the seventeenth century; however, only the very finely engraved and artistic decorations typify this period (Duco 1981:383). In light of the post-1640 date for the Kirke house, these pieces likely fall within the second half of the century, a time when Baroque pipes are more crude, rough and show little evidence for pride in craftsmanship (Ibid.). Possible Dutch pipe makers include Jan Cornelisz (1666-1670) from Gouda, Jan Claesz (1662) in Leiden and although somewhat earlier than the proposed time period, even Amsterdam pipe makers John Coenen (1631) or Jan Classs (1636).

Decorations stamped or rolled across the stem round out the final section of this discussion on Dutch pipes. Four distinct types recorded in the occupation layers were all impressed with fleur-de-lys stamps running along the top of the stem. The first two varieties have been referred to as a “four-on-diamond” or quadruple fleur-de-lys pattern because four symbols are arranged within a diamond-shaped border (Faulkner and Faulkner 1987:176; Miller 1991:80). One consists of a somewhat random placement of diamond stamps and the other, more common variety, has a slightly different type of stamp and a single band of rouletting on either side of the diamond. The latter decoration was likely applied to *Dutch rosemark bowl 3*, based upon the fact that one of the more complete specimens also exhibits a single rouletted band approximately 4cm down



from the heel (Figure 49a). This pipe was manufactured in Gouda between 1670-90. The other two fleur-de-lys stamps frequently found in the Kirke house strata are more crude, less visually appealing, stem decorations. Both are single symbols impressed five or six times in an overlapping, sometimes crooked pattern. One type has a well-defined, diamond-shaped border and fleur-de-lys, while the other is more obscure (Figure 49b). The cruder of the two stamps can be found on *Dutch bowl with fleur-de-lys stem* seen below, which incidentally was also made in Gouda between 1670-90.



**Figure 49a.** (left) Dutch pipe bowl (scale 1:1) with four-on-diamond decoration.

**Figure 49b.** (right) Dutch pipe bowls (scale 1:1) with series of fleur-de-lys.

Beside English and Dutch clay pipes, there were fragments of 30 additional tobacco pipes produced in the American colonies, for which we have excellent comparative contexts. The first are DK monogrammed pipes, a heelless pipe bowl form, light-brown to buff in colour and manufactured in Virginia. Of all the clay tobacco pipes presently excavated at Ferryland, these seven pipes are the most decorative. Starting at

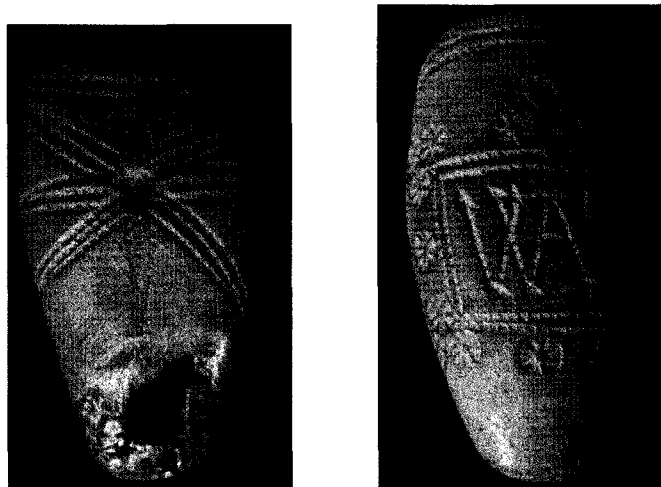
the back of the bowl, facing the smoker, is an eight-pointed star with a centre-stamped circlet. The front of the bowl exhibits a set of monogrammed DK initials within a double rouletted line panel. Around the panel is a series of circlets, three at each corner, another set of three at the top, and single circlets on the sides and at the bottom. At the junction of the bowl and stem is a series of three rouletted lines followed approximately 2.5cm down the stem by a decorative pattern of circlets surrounding five rouletted lines (Figure 50).



**Figure 50.** DK pipes associated with the Kirke house. (left) Back of bowl, (centre) front of bowl, (right) stem decoration.

An almost perfect match to these DK pipes, with the exception of the initials, was found on a seventeenth-century site in Charles City County, Virginia once occupied by Walter Aston, a wealthy Virginia gentleman, militia colonel and justice of the peace (Lucchetti 2002; Kiser 2006: personal communications). Several examples from the Walter Aston site bear the monogrammed initials WA (Figure 51), whereas those from

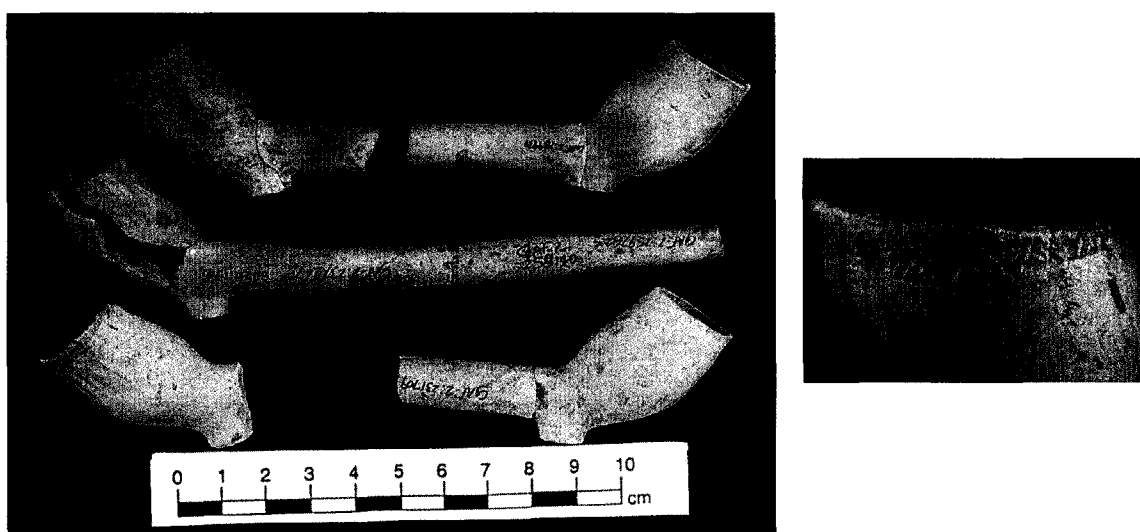
the midden outside the Kirke house are marked DK. What makes these Virginia-made pipes unique is that they bear the initials of those who purchased and/or smoked them, rather than that of the pipe maker (Deetz 1993; Emerson 1988). Clearly, these pipes were the possessions of Walter Aston and David Kirke. Very little is known about the actual pipe maker except that he or she is believed to have been an indentured servant working at the Charles City site (44CC178) on the James River in the 1630s-40s (Kiser 2006: personal communication).



**Figure 51.** WA pipes smoked by Virginia gentleman Walter Aston. Images courtesy of Taft Kiser.

The second variety of American-made pipe was also produced in Virginia but this time using a mix of yellow and orange clays. These 19 marbled pipes are very similar in form to English pipe bowls and were made from two slightly different molds based upon visible differences in the size and height of the heels (Figure 52a). A decorative band of alternating triangles, each containing three smaller triangles, was applied

around the rim of each bowl (Figure 52b). Many varieties of marbled pipes have been found on seventeenth-century sites in both Maryland and Virginia; however the earliest dated context for these particular pipes are at Pope's Fort (ca.1645-55), suggesting that the marbled pipes found at the Kirke house could have been shipped to Ferryland as early as the 1640s. Like the previous DK variety, these pipes were also utilized exclusively by the Kirkes as evidenced by both their concentration in the midden and absence in other outlying domestic deposits.

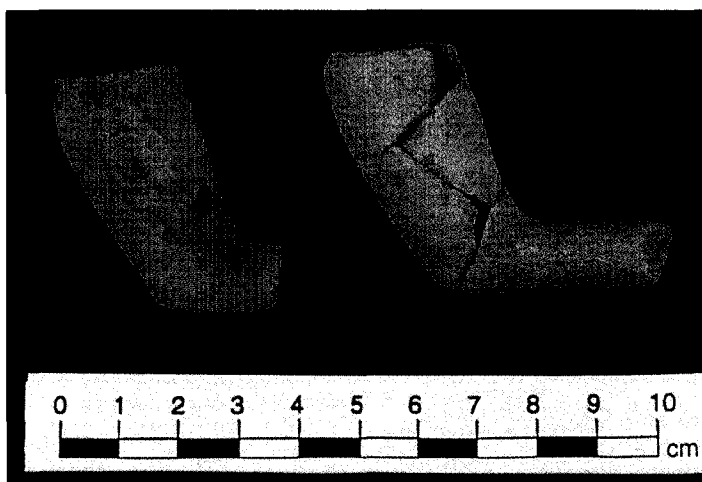


**Figure 52a.** (left) Selection of Virginia marbled clay pipes.

**Figure 52b.** (right) Detail of rim decoration.

The last type of American-made pipe is the same general form encountered in small numbers on many mid-to late seventeenth-century domestic sites in both Newfoundland and New England (Figure 53). These heelless red clay pipes were likely produced as an extension of the early New England pottery industry, and some authors even go as far as to suggest Charleston, Massachusetts as a possible location for their

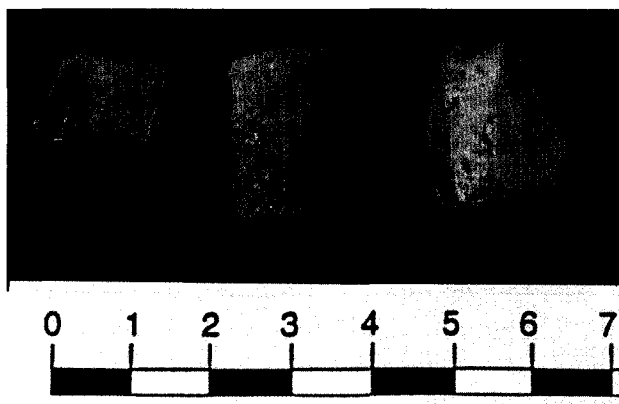
manufacture (Faulkner and Faulkner 1987; Turnbaugh 1985). Compared to the previous examples, these red clay pipes are crudely-made and plainly-decorated. The two specimens from the Kirke house could have either been handmade or mold-made and the clay fabric is soft and chalky enough to imply a low firing temperature. None is decorated beyond a simple rouletted finish around the rim. The archaeological evidence from Ferryland indicates that these pipes could have been used by any or all members of seventeenth-century society and may be a residual item associated with the New England trade in the latter part of the century.



**Figure 53.** New England red clay pipes from Ferryland.

One other variety of clay tobacco pipe discovered in very limited numbers in the Kirke house midden was an octagonal bowl form also originating from Virginia. Although not considered as one of the three main types of American-made pipes discussed above, fragments of two octagonal red clay bowls (Figure 54) provide additional dating evidence since they are typically found in contexts ranging from the 1640s to the

late seventeenth century (Emerson 1988). With the exception of a single piece found at Area G, octagonal red clay pipes have only been found in association with the Kirke occupation at Area F, again implying that these pipes were not widely distributed within the community but kept instead by a select few individuals.



**Figure 54.** Octagonal red clay pipe bowl fragments from Ferryland.

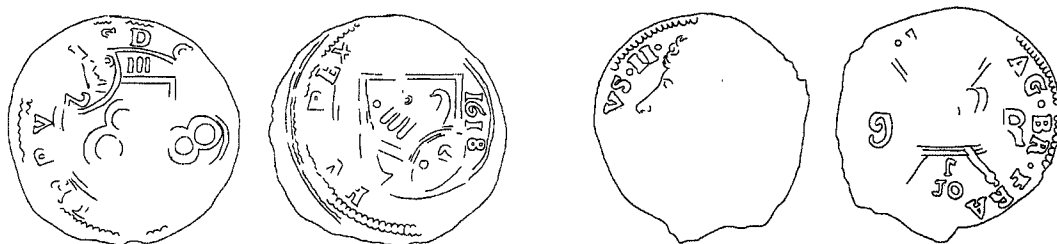
### Coins/varia

Coinage and varia play an integral role in dating the Kirke residency at Area F because they provide strong evidence to help refine the period for when the house was first and last occupied, and any changes or modifications that may have occurred in between. Thirteen coins and one unique merchant's token comprise the collection of currency associated with the Kirke house, a quantity that is quite large compared to that recovered from other seventeenth-century domestic deposits at Ferryland. The first of these coins, a *double tournois*, has already been discussed in some detail above, since it was deposited in the rapidly accumulated lens attributed to the Kirke house construction. Its mint date of 1636-39 augments the dating evidence provided by clay tobacco pipes

and together, they establish a *terminus post quem* of around 1640. Seven other coins, four silver and three copper, were unearthed in the sizable midden outside the front of the house. The copper issues were all Louis XIII *double tournois*, the same variety found in the construction deposit. Even though one is indecipherable, the other two were struck in the 1640s. The addition of a Charles I silver 20 pence (1637-42) and silver penny (1630s-50s) places four – possibly even five – of the seven coins from the midden within the same period as the formative years of the Kirke occupation. Of course, this does not prove they were deposited during this time, but instead likely saw extensive use well past their mint date. Others, such as a Philip II silver 100 *reis* (1598-1621) and a Dutch silver 6 *stuivers* (161?), obviously changed hands for decades prior to their eventual deposition.

On the living surface inside the house were five more coins. The first and only silver coin discovered within the confines of the dwelling was the quartered New England oak tree shilling deposited directly on the cobblestone pavement inside the lateral fireplace. Two of the four copper coins also found inside the Kirke residence are of particular numismatic interest because of their unusual nature (Figure 55). The first was an 8 *maravedis* issued by Philip III of Spain in 1618 and later overstruck during the reign of Philip IV between 1636-1664, resulting in a somewhat jumbled appearance. The second piece is a James II copper shilling issued in Ireland as part of a group of coins called “Gun money” because they were manufactured out of scraps from old can-

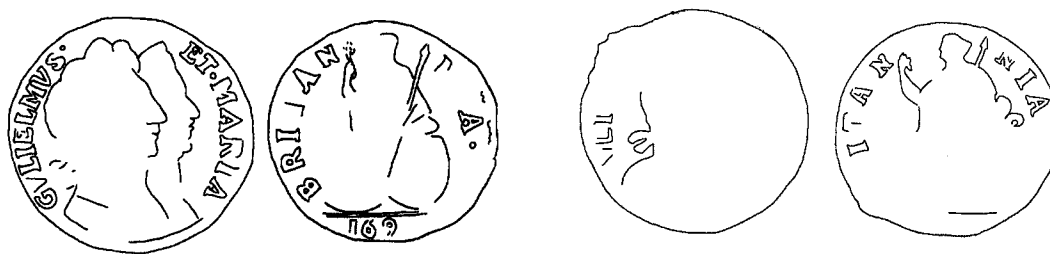
nons (Berry 2002:43) The mint mark on this shilling is also exceptional as it bears the month of issue on the legend, that being December 1689 (Ibid.). The exact date of manufacture displayed on this piece places the Kirke house occupation into the last decade of the seventeenth century.



**Figure 55.** (left) Spanish 8 *maravedis* (ob. and rev. not to scale); (right) James II copper shilling (ob. and rev. not to scale). Images courtesy of Paul Berry, National Currency Collection, Ottawa.

The final two pieces of hard currency are not only the most recent, but probably the most important, in terms of ascertaining when the house ceased to be used. Both coins were recovered on the cobblestone floor at the west end of the dwelling and they are certainly large enough to suggest that the reason for their abandonment was not simply a matter of lost and never found. The smaller of the two is a William and Mary copper farthing dating from 1690-94 and the larger piece a William III half-penny issued between 1695-98 (Figure 56). Both reinforce the latter range of occupation indicated by the pipe bowls and makers' marks, while the half-penny proves that the house was still standing until at least 1695 – a fact which is very important in light of the catastrophic event that took place in the following year.





**Figure 56.** (left) William and Mary farthing (ob. and rev. not to scale); (right) William half-penny (ob. and rev. not to scale). Images courtesy of Paul Berry, National Currency Collection, Ottawa.

### Glass and ceramic

The ceramic and glass vessels from the Kirke house are the last components of material culture to help determine its duration of occupation. Their principal role in this respect is to corroborate, broaden or oppose the previous dates ranges provided by the clay tobacco pipes and coins.

Of the 531 ceramic jars, pans, plates, cups and other containers found in the midden deposits and on the living surface inside the dwelling, not one could be attributed solely to eighteenth-century manufacture. The vast majority are ware types and forms commonly found in many seventeenth-century households, whereas others were often exclusive to the best homes in England and the Continent. There was absolutely no evidence for English white salt-glazed stoneware or large German stoneware mugs from the Westerwald region bearing AR (1702-1714) or GR (1714-1760) medallions repre-

sentative of the reigning English monarch. Both types of vessels are ubiquitous on early eighteenth-century sites in British North America. There were also very limited amounts of Staffordshire/Bristol slipware (MNV 5), which only begins to appear on colonial sites during the last quarter of the seventeenth century. The complete absence or low frequency of these types of ceramics suggest that the Kirke house was not occupied into the eighteenth century.

Datable glass objects include a variety of wine bottles and drinking glasses, case bottles and an assortment of fine and decorative vessels from Venice, The Netherlands and possibly Germany. A minimum of 18 wine bottles were identified from the Kirke house occupation layers including 7 Type A-B shaft and globe bottles, 2 E-F forms and 9 bottles ranging from Types C to F based on partial measurements. According to Wicks' typology, these bottles were produced in 1652-1675, 1682-1705 and 1670-1721, respectively (1999:99). One of the early shaft and globe bottles found on the floor of the house has a partial set of initials scratched into the body. Regrettably, only enough remains to distinguish the latter initial **P**. A complete bottle seal with the letters WHI was also recorded in the midden outside (Figure 57). This type of three-initialled seal always has the surname "W" at the top, followed by the first names of the husband and wife at the bottom. The closest match to a prominent individual known to have frequented the area during the Kirke house occupation was Henry Wickley, the captain of the



**Figure 57.** Glass bottle seal with the initials WHI.

*Barnstable Merchant* fishing at Ferryland and Aquaforte during the 1690s (Wicks 1998:107).

The known production dates for the 34 case bottles likewise conform to that provided by the wine bottle fragments. Even though the sizes of these bottles varied greatly, they were almost exclusively ( $n=33$ ) the Type I variety (1625-1675), which is not really surprising considering that Type II forms only began to replace the earlier bottles around 1675 (Wicks 1999). Similar to Staffordshire/Bristol earthenware, the sporadic presence of Type II case bottles demonstrates that occupation continued into the last quarter of the seventeenth century but not later. Two English lead-crystal wine glass stems found in the midden and inside the house correspond with this latter occupation. The first dates to 1675-85 and the other from the late seventeenth century (Noël Hume 1969:191). Compared to these vessels, non-English wine glass fragments and other more decorative glass forms date noticeably earlier. Among the collection owned by the Kirkes was fine

Venetian or *façon de Venice* wine glasses, several varieties of other drinking glasses such as goblets, beakers and *roemers*, a multicolored flecked glass salt or comfit and a deep amethyst decanter/tankard (Appendix C). The vast majority of these decorative glass artifacts date from the first half of the seventeenth century, suggesting that much of it could have been in the family's possession prior to 1638 and subsequently brought over with them from England.

#### 3.4.7 Phase IV (Destruction)

The clay tobacco pipes, coins and other datable artifacts found inside, outside and beneath the Kirke house conclusively demonstrate that it was constructed during the 1640s and continuously occupied until the closing years of the same century. For all that the archaeological record does tell us, it falls short of revealing the exact reason why this dwelling was abandoned. It would not take a great deal of imagination to suggest that the demise of this house was directly related to the well-documented French attack in the fall of 1696, whereby according to one resident they “dealt very hardly with us, and burnt all of our houses, household goods, fish, oil, train vats, stages, boats, nets, and all our fishing craft” (Clappe 1697, in Pope 1993:151). The only piece missing from this puzzle is the lack of evidence for any intense or prolonged burning, with the exception of that seen in the hearth areas at either end of the house. It is plausible, yet unlikely, that all traces of the charred structure were eradicated by both weather and time.

Maybe the Kirke house was not simply set fire as were most of the buildings at Ferryland. Archaeological evidence from the stone building adjacent to the Kirke house suggests that an explosive charge may have been set directly inside, for a great deal of its walling and roofing material appears to have collapsed outward, is scattered throughout a wide area and is often of a very fragmentary nature. Could the Kirke house have shared a similar fate? This is certainly not beyond the realm of possibility for David Kirke and his brothers were born in Dieppe and their later excursions into New France under the English banner were viewed as treasonous to their native countrymen. Any ill feelings still harboured by the French would make the Kirkes a particularly important target and a symbolic gesture much more explosive than a smouldering fire may have been desired.

Regardless of whether its destruction was by way of fire or black powder, the Kirke house was the largest and most prominent dwelling in the harbour, well appointed with several ground floor rooms, a fireplace at each gable end, a buttery/pantry, a dairy and a small lodging/servants' quarters in the northwest corner. Commander de Brouillan himself may have walked up the cobblestone courtyard to view this house and wondered what life was like for those who once resided within – a question to which we now turn our attention.

## **Chapter 4**

### **The Archaeology of Daily Life at the Kirke House**

#### **4.1 Overview**

The 90,661 artifacts unearthed during the excavation of the Kirke house embody a roughly 50 year habitation by one of the most prominent and enterprising seventeenth-century gentry families in what is today Canada. The dwelling in which almost all of these objects were utilized was not only the principal residence for the Kirkes, their retinue of servants and possibly other seasonal employees, but it also served as a place of business, a warm and inviting tavern, a likely meeting place to discuss matters pertaining to life at the colony and finally, a very visible and symbolic seat of power for Newfoundland's governor. Given these points, it comes as no real surprise that the sheer quantity and quality of seventeenth-century material culture vastly exceed that found on any other contemporaneous domestic site in Newfoundland.

Now that we know when and for how long the Kirke house was occupied – and detailed aspects of its construction, layout and appearance – the next logical step is to ascertain the different activities of those who once resided here. This chapter endeavours to answer questions relating to the Kirke family's dining practices and culinary preferences, their health and hygiene, opportunities for leisure and business activities, their

attire, personal belongings and other material trappings, and the means by which they acquired many of these goods. This information was extracted from an artifact assemblage consisting of 26,741 ceramic fragments, 18,194 pieces of clay tobacco pipe, 8,242 glass artifacts, 3,761 items of copper/brass, lead, pewter and precious metal, 30,807 iron objects, 1,833 faunal specimens, 545 pieces of flint or other stone and 538 fragments of coal, slag, leather, wood and composite or unidentified material.

With such an overwhelming number of artifacts, some creative methods had to be employed to make this collection less daunting and more manageable, while still retaining all of its interpretative potential. This was further necessitated by the fact that the Ferryland collections are in a state of transition and soon slated for consolidation in a central location with adequate storage and research space. Acquiring all of the artifacts from the Kirke occupation at Area F was therefore not simply a matter of extracting the thousands of glass and ceramic fragments from a series of drawers, but rather, involved an extensive search through all of the storage units housed in both St. John's and Ferryland. Prior to a detailed search through the collections, the decision was made to examine every piece of pipe, ceramic and glass, yet remove only those pieces necessary for further analysis. This included all pipe bowls, heel fragments and marked or decorated stems, the complete inventory of rim, base and external attachments from ceramic and glass vessels and any unusual or distinct body fragments which may likewise yield important information (refer to Appendices A-C).

Such an analytical technique probably produced fewer cross-mends between contemporaneous events and fewer restorable vessels than otherwise, although the quantitative result remained the same. Furthermore, the stratigraphy in and around the Kirke house was so obvious and well-recorded that any possible issues relating to contemporaneity and association could easily be addressed. Numerous cross-mends also were identified (in both past and present analyses) between artifacts in the various midden deposits located outside the house and the occupation layers inside. The recording of vessel profiles was unnecessary as there are already numerous reports and publications that detail the majority of forms associated with the Kirke house. Since these forms are well known, it would be wasteful of time and resources to draw North Devon tallpot rim profiles, for example, when we already know that exacting standards were not used in their manufacture. Those archaeological specimens that are distinctive by their form, decoration or rarity were photographed and illustrated in the text, which provides a much more effective visual cue of the intricacies of fabric, glaze and decoration than any black and white line drawing.

A somewhat different approach was taken when analysing the remaining copper, brass, lead, pewter, iron and stone artifacts. With the exception of iron, these artifact types are relatively small in number and easily accessible. They are also readily identifiable and because of this, objects such as lead shot, sprue, window comes and gunflints were analysed solely using the database. Other artifacts including copper or brass kettle



fragments and any unusual or unidentified base metal objects were examined and their context and quantity recorded. As mentioned in the previous chapter, tens of thousands of iron nails and nail fragments were discounted from this analysis because they would yield little or no new information on either the house construction or the daily life of its occupants. The remaining 1,228 iron objects are, for the most part, still stored in sodium hydroxide solution or are in the final stages of conservation and thus, essentially inaccessible. The only logical recourse was to extract pertinent information from the database, thus ensuring an acceptable level of consistency. A few of the more notable iron artifacts were temporarily extracted for photographic purposes and these are illustrated further below.

Several other research projects, both past and present, were integrated into the overall analysis of the material culture from the Kirke house. All were very specific in their scope and include work by Dr. Lisa Hodgetts on the faunal remains from Area F, clothing and costume-related items by Cathy Mathias, and tin-glazed earthenware and coarse stoneware by Eleanor Stoddart and Nicole Brandon, respectively. Hodgetts (2005) research is summarized in the foodways section, whereas Stoddart's (2000a) and Brandon's (2005: personal communication) analyses are detailed throughout but expanded upon slightly to encompass the ceramic vessels recorded after the 2000 field season. The buttons, buckles, beads, bodkins, boot spurs, pins, thimbles and scissors are current-

ly being studied by Cathy Mathias and some of her findings are also incorporated herein.

The following six sections detail many of the activities performed at the Kirke house over its approximately 50 year occupation. As would be expected, some of the artifacts included in this discussion are relevant to more than one household activity. For example, a polychrome lobed dish was not only used for the presentation of food or for washing ones hands at the table, but also as a means to convey knowledge of mannerly dining behaviour. This kind of stratified interpretation is at the core of modern-day contextual archaeology, for it views the household and its associated artifacts as complex matrices that contain an immense amount of data about past cultural activities (Beaudry 1999:122). Accordingly, the analysis of the Kirke house is not meant to be simply a thorough and objective summation of its material culture, but a commentary on some of the deeper, underlying meanings that this seventeenth-century English family held with regard to these objects and how they functioned in everyday life.

## **4.2 Foodways**

The term foodways was first coined by Jay Anderson as “the whole interrelated system of food conceptualization, procurement, distribution, preservation, preparation and consumption shared by all members of a single group.” (1971:2). For the purposes of this research, a “single group” entails every individual who resided under the roof(s)

of the Kirke house complex including the immediate family, servants and seasonal employees. Therefore, we should expect to see not only a wide variety of material culture relating to the foodways of the merchant-gentry but also the “poorer sort” who served them. It is easy to get lost in the fact that this was Sir David Kirke’s house, and give little afterthought or archaeological consideration to the historically-silent population who also dwelt within. But we must consider them, for the servants prepared, cooked and served the food during mealtimes and likewise cleaned and stored everything after it was finished. Thus, many of the decorative and expensive objects used by the Kirkes also have a strong physical, albeit ephemeral, connection to their attendants. For even though they did not purchase these items or share in their social or ideological value, they were the ones who ensured their longevity and protection by handling them with care on a daily basis.

In spite of the most careful housekeepers, objects get broken, discarded and lost. The most fragile and thus frequently found artifact class relating to foodways is ceramic. These earthenware and stoneware vessels performed a variety of tasks relating to every aspect of food preparation, presentation, consumption and storage. Although they are believed to represent only a small percentage of material culture in a seventeenth-century household, a disproportionately large amount of interpretative value is heaped upon them (Deetz 1977; Horn 1988). This is because containers of wood, leather and other organic materials have long since deteriorated in the ground, while receptacles of pewter

and silver were often sold and/or recast owing to their value and durability (Martin 1989:1). The goal of this section is not to detail the various manufacturing techniques, glazes, vessel forms and provenance for each ware type associated with the Kirke occupation, for these kinds of descriptions have already been completed on the Ferryland site in general by Pope (1986), Stoddart (2000a), Crompton (2001) and others. Instead of reiterating much of the same information, the focus here will be on illustrating how the various vessel forms, their functions and relative quantities all convey an overall sense of household activities with regard to foodways.

The identification of vessel forms and function was based upon the Potomac Typological System (POTS), a standardized and widely-adopted method that allows for comparison between seventeenth-century sites (Beaudry et al. 1983). The functional divisions within POTS have been slightly reorganised and adjusted to fit the idiosyncrasies encountered by researchers studying colonial sites in Newfoundland (Pope 1986; Stoddart 2000a; Crompton 2001). This study will be modelled after these earlier works and divide all ceramic forms into six basic categories of: 1) kitchen and dairy; 2) cooking; 3) food service; 4) beverage service; 5) hygiene; and 6) other. The final category is particularly relevant to the Kirke house analysis as there were ceramic vessels which clearly had no affinity to foodways but instead, were firmly placed within the realm of socio-technic or ideo-technic functions (Deetz 1977:51). Quantifying the entire ceramic assemblage was achieved by first sorting all rims, bases, external attachments and any

other unusual or distinctive fragments into ware type, and then further subdividing by form and decoration. From each of these smaller groupings, a minimum number of vessels (MNV) were tabulated. As has been done in the past, this analysis erred on the side of caution and lumped together vessel fragments that did not join yet were similar enough to suggest association, rather than giving a separate vessel designation to each piece. The result often produces an overall vessel count that slightly underestimates the true total.

After all the sorting, categorizing, matching and tabulating, a total of 531 ceramic vessels were identified from the Kirke house, 519 of which were recognizable by form and function. This breaks down into 166 kitchen and dairy, 23 cooking, 168 food service, 114 beverage service, 38 hygiene and 10 vessels categorized as other (See Appendix B). Instead of discussing all the different forms and functions within each category, ceramics were combined with other relevant material culture and then related to individual aspects of foodways and/or other components of daily life addressed further below. A wide range of archaeological objects besides ceramics pertain to the foodways of a seventeenth-century household, especially those relating to consumption. This can include glass bottles of various forms, wine glasses and other decorative glass containers, tableware of pewter and accompanying utensils of iron, brass or pewter, and a diverse assemblage of faunal material. There are also artifacts associated with the procurement and preparation of food such as fish hooks, line weights, lead musket balls,

shot and sprue, farming implements, iron strike-a-lights and tinder flints, and metal cooking hardware including cauldrons, pots and kettles. Many of these objects, and the contexts in which they are found, will be addressed in the following sections.

#### 4.2.1 Procurement and preparation

The initial components of a household's foodways obviously revolved around procurement and preparation. Artifacts associated with food procurement will be treated as a general activity without any clarification as to their two-dimensional location, for these enterprises usually took place outside the confines of the house. Objects attributed to preparation and cooking were examined according to their distribution inside the dwelling, to determine where these kinds of activities may have occurred.

#### Procurement

Food procurement covers everything from animal husbandry and farming to hunting, fishing and trapping. Probably the most ephemeral of all these activities, with regards to identifying diagnostic tools and implements, is animal husbandry. In many parts of Colonial North America, as in England and Europe, domesticated species were generally allowed to roam free. Fences would be erected to keep these animals out rather than corral them in and thus, it was common in a seventeenth-century settlement to see pigs and chickens milling about and cattle and sheep grazing in a pastureland (Hawke 1988:34). Some specific structures such as hen houses and byres were erected

but these were meant to keep animals warm over the winter months rather than as year-round housing. The overall nature of these activities was such that domesticated animals were dispatched and prepared with little need for specialized tools and therefore, we must turn to other sources of information to demonstrate whether or not the Kirkes were actually involved in animal husbandry.

The documentary record clearly indicates that some members of the Kirke family were in possession of a sizable herd of cattle toward the latter part of the seventeenth century (Pope 1993). The identification of a large number of milkpans (45 MNV), the addition of a small dairy at the southeast end of the Kirke house after 1660 and the presence of a substantial quantity of faunal material from several domesticated species in the midden outside, all provide clues for these kinds of activities. The use of milkpans, in itself, is not indicative of dairying or animal husbandry for these large utilitarian vessels may have served a variety of other purposes. Nor does the mere presence of domestic food bone demonstrate active involvement in keeping livestock. However, when considered in conjunction with the dairy and the nearby cowhouse/storage shed at Area C – which was also likely built by the Kirkes – all of these separate shreds of evidence combine to make a very strong argument that the residents at Area F kept cattle.

Plant cultivation is also obscure in its archaeological representation because the necessary tools of the trade, including picks, shovels and mattocks, could have been uti-

lized for other earthmoving duties in and around the colony. Thus, their presence could be indicative of any number of activities and not solely attributed to cultivation. Iron hoe and plough blades on the other hand, are excellent examples of farming implements and agricultural activities. One iron hoe blade was found in the midden deposits associated with the Kirke house, as were parts of three horse shoes and a pony shoe, possibly worn by animals used to clear and cultivate large tracts of land. Both types of artifacts suggest that someone in the house was involved in cultivation, a fact which is almost taken for granted considering that some form of agricultural endeavours were undertaken by all levels of early colonial society. No doubt the vegetables and herbs grown for the family were occasionally supplemented by various wild berries and plants noted by Captain Wynne in 1622 as “. . . very wholesome, medicinable and delectable; many fruit trees of sundry kinds, many sorts of Berries wholesome to eate, and in measure most abundant.” (Cell 1982:201). The presence of both horse and pony shoe fragments may also indicate that the family kept horses not simply for use in the fields or for hauling carts but equally likely, for the leisurely pursuits of riding and hunting. Whatever purpose(s) horses may have served, the discovery of several large bone fragments in the midden show that some eventually made it to the dinner table.

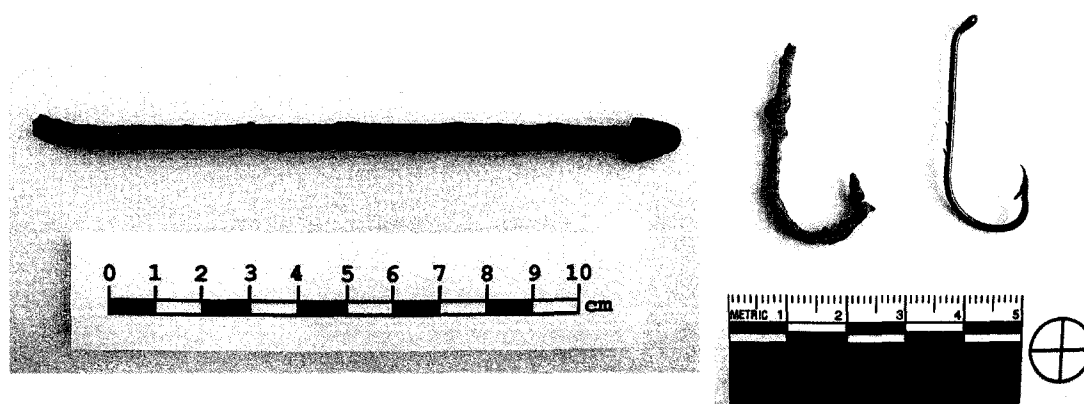
The cod fishery was the economic engine that allowed Europeans to colonize Newfoundland on a permanent basis by the early seventeenth century. Thus, the discovery of fishery-related artifacts in almost every occupation layer at Ferryland should



come as little surprise. Since these objects are more closely associated with prosecuting the cod fishery for economic gain, rather than the exclusive domain of foodways, the relative number of fish hooks, prongs and lead line weights does not necessarily equate solely with the dietary importance of codfish at Ferryland. However, there is little doubt that cod constituted a sizable proportion of the diet of all seventeenth-century residents. The sheer abundance of this resource ensured a steady and reliable food source which would keep throughout the year when salted and properly dried. In every instance where domestic deposits were conducive to faunal preservation, cod always numbered among the most prevalent species. The Kirke house is no exception. Here, codfish comprise the second most frequent taxa (n=80) behind that only of unidentified mammals (n=208). This is followed by a smattering of other salt water fish species such as flounder (n=1) and a sizable quantity of mussels (n= 61) (Hodgetts 2005). This food bone is not to be confused with the truly massive quantities of cod recovered from waterlogged deposits along the waterfront and which represent the processes of cleaning, splitting and boning.

The 15 fish hooks, 7 lead line weights and 1 fish prong found in, and within proximity to, the house do not really tell us anything more than we already know concerning the fishing operations of the Pool Plantation. Yet, the discovery of two very small fish hooks and two small iron spear points or harpoons suggest that the Kirkes' appetite for aquatic species was not reserved exclusively to cod. The spears or harpoons consist of a 12.7cm long shaft and squared tang at one end and a barbed tip at the other.

The business end is similar in form to an arrowhead and was clearly meant to stick into and hold whatever it pierced, as opposed to the rounded point of a fish prong (Figure 58a). The small size of these iron points would make them impractical for hunting marine mammals but ideal, when set on a long handle, to spear lobster, crab and flounder. It is also possible that several were mounted together and used to spear eels along estuaries and streams. The two small fish hooks are diminutive versions of the Early Modern Period fishhook with its single barb and flattened tang, yet their limited number and isolated provenience indicate that they had a very specialized purpose (Figure 58b).



**Figure 58a.** (left) Iron harpoon/spear point.

**Figure 58b.** (right) Small iron fish hook alongside modern (size 1/0) hook.

The fact that they are presently found only in domestic deposits from Area F – and not in association with waterfront contexts and fishery-related features – suggests that they were not related to the cod fishery but were associated instead with angling and/or fly fishing. Since the many lakes, ponds, streams and rivers in and around Ferryland were teeming with fish in the seventeenth century, it would be reasonable to suggest that,

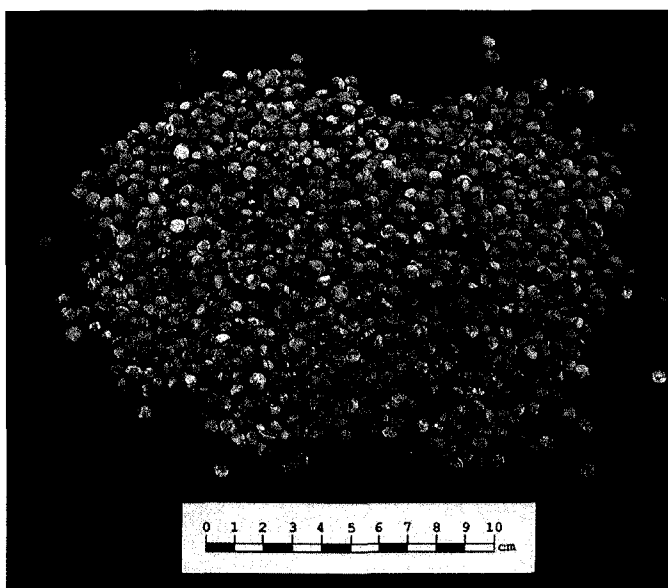
given the time, some individuals would take advantage of this abundance. In all likelihood, certain members of the Kirke family enjoyed this kind of leisurely pursuit, in the same manner as gentlemen in England had been doing since at least the sixteenth century (Bevan 1983:16).

Hunting as a general procurement activity is well represented in most seventeenth-century contexts at Ferryland. This is expected, considering the availability and dietary benefit of wild game and the fact that hunting was often forbidden in England for all but nobility and gentlemen. Of course, many of the same objects used for hunting also served other functions beside that of acquiring food and pelts. For the colony's defence and the protection of its inhabitants, most families saw fit to have firearms in their possession. However, on a practical and utilitarian level, they were used much more frequently as hunting and fowling pieces than for protecting one's home from marauding invaders or the occasional wolf that strayed too close to the settlement. The typical accoutrements one needed to operate any firearm, whether it is a musket or pistol, was ammunition in the form of a lead ball(s), some black powder and a flint to provide ignition. Other common accessories include a mold to make the shot, a horn to house the powder and a pouch to hold additional flints, ammunition and wadding. Another accessory not ordinarily utilized by a hunter but directly associated with firearms was a leather bandolier containing a dozen individual cylinders, each capped off with its own measured charge of powder. This type of specialized item was more

closely associated with professional soldiers or as part of the costume for a gentleman who could afford such unnecessary excess.

The firearms-related artifacts unearthed from the Kirke house deposits include parts from 4 flintlock firing mechanisms, 38 gunflints, 1 lead bandolier cap, 83 lead musket balls averaging around .75 caliber, thousands of smaller lead shot of varying sizes, 96 residual pieces of sprue and 78 bits of casting waste. The gun lock mechanisms alone indicate that over the course of occupation, the Kirkes were in possession of at least four muskets. This obviously does not include any pieces that may have been looted during both the Dutch and French raids. The number of gunflints, lead balls, shot and sprue all indicate that these firearms saw a substantial amount of use, and by extension, that hunting was a frequent activity for the Kirkes and/or their servants. The above number of lead shot excludes one large cache of “bird” shot weighing 1840 grams or exactly four pounds (approximately 3,300 pieces based upon the average weight of 100 randomly selected shot) found directly atop the cobblestone floor in the tavern room and no doubt contained within a pouch or small box which long since disintegrated (Figure 59).

What the residents at Area F were hunting may be hinted at by looking at the early documents, but the only concrete evidence for the Kirke’s predilection for wild game can be extrapolated from the archaeological record. As shown in Hodgetts’ (2005) analysis, the faunal assemblage was comprised of a diverse collection of mammal and



**Figure 59.** Sample of some 3,000 lead “bird” shot recovered from the west end of the Kirke house.

bird species native to Newfoundland (Table 2). Foremost among the mammalian assemblages was caribou, a wise choice considering it could be hunted with relative ease in return for a large amount of meat. This was followed by harbour seal, harp seal and fox. Avian species also figure prominently in the faunal assemblage. Even though the large quantity of small “bird” shot suggests as much, it is still unexpected to see that the Kirkes hunted such a varied range of birds. Nineteen different taxa were identified from the midden at the front of the house including: great auk, loons, murre, guillemots, ducks, scoter, oldsquaw, eider and several varieties of gull. It is almost as if they indiscriminately hunted anything that flew, for no one species stands out in particular. Even birds of prey were not safe from the hunting practices of the residents at Area F, for the remains of two bald eagles and a snowy or great horned owl were found in the refuse bone outside the stone building adjacent to the Kirke house (Ibid.). Not surprisingly, these fowling practices fit very well with Nicholas Hoskins’ 1622 statement about

**Table 2.** Faunal assemblage identified from the Kirke house.  
(Table courtesy of Dr. Lisa Hodgetts)

<u><i>Pisces</i></u>	<u><i>Aves</i></u>	<u><i>Mammalia</i></u>
Unidentified fish 23	Uni. bird 34	Uni. mammal 208
Cod family 80	Med-sized bird 13	Terrestrial mammal 28
Arctic flounder 1	Large bird 1	Med-sized terr. mammal 9
	R-throated loon 1	Large terrestrial Mammal 23
	Great auk 3	Fox 1
Mussel 61	Thick-billed murre 4	Domestic cat 1
	Common murre 2	Seal family 6
	Razorbill/Murre 3	Harbour seal 4
	Black guillemot 1	Harp seal 2
	Duck, Goose and Swan 1	Hoofed animals (Super-Order) 12
	Large duck 1	Horse 1
	Small duck 1	Pig 27
	Winged scoter 2	Caribou 14
	Oldsquaw 1	Cattle 20
	Eider 2	Cow-sized 1
	Common eider 3	Cow/Horse 3
	Scoter/Eider 1	Caribou/Cattle 2
	Gull subfamily 1	Sheep/Goat 13
	Large gulls 4	Sheep 1
	Herring gull 1	Unidentified 15
	Herring/ Ring-billed gull 1	
	Greater black-backed gull 6	

Newfoundland's native birds, wherein he claimed that they were "all very fat, sweet and wholesome. ...and of most of these sorts I haue killed many." (Cell 1982:206).

The practice of trapping animals for their furs and meat has been well documented since the formative years of European colonization in Newfoundland. These kinds of activities may have also occurred rather frequently, for certain animal pelts fetched a handsome price on the European marketplace and this could provide a source of supple-

mentary income for proprietary colonies or individual planter families. Indirect evidence for trapping activities at Ferryland may, in part, be manifested by faunal material from elusive mammals such as fox, lynx, marten and beaver. The remains of one fox in the Kirke house midden is far from convincing evidence that the family was involved in trapping, and the discovery of a possible spring trap fragment on the cobblestone courtyard outside the house is the only physical proof that such an apparatus may have even been in the possession of someone residing there.

#### Preparation and cooking/baking

To prepare many of the daily meals at the Kirke house, a variety of tasks had to be performed including fetching water and wood, washing and slicing vegetables, cutting meats, plucking herbs from the kitchen garden, lighting and tending the fire and heating the bread oven with coals from the hearth – all before any of the actual cooking/baking began. Because of the nature of some of these activities, archaeological evidence relating to food preparation is often poorly represented. Objects such as colanders for example, which served specifically for washing and straining, were not found at the Kirke house. However this does not necessarily indicate that these activities did not occur, but rather, those who performed these duties relied on other utilitarian vessels. So instead of washing and straining with a colander, vegetables could have been processed in a large ceramic bowl. Tasks relating to cutting, slicing and peeling, on the other hand, appear to be well-represented by the 21 iron blades and knife fragments identified in the

collection. In addition, the everyday necessity of starting a fire is manifested by dozens of tinder flints. Basically this is a large flint flake exhibiting numerous secondary flake scars along one or more edges from repeatedly hitting it off an iron strike-a-light, of which there are also several.

The architectural evidence further illustrates activities directly relating to food preparation. The location of a well alongside the east end of the principal dwelling for at least the first 20 years of the Kirke occupation would have made acquiring water a somewhat simple chore. The retention of the brewhouse/bakery fireplace and its two large clay ovens also shows that baking continued to be an important activity. Three concentrated areas of burning on the re-floored hearth of this same fireplace – one in the centre and two in the corners directly under the clay ovens – establishes one of two things with regards to the actual baking process. First, coals were either taken from the central fire and placed in the corner ovens, and residual embers were later pushed out to cause the telltale burning and discolouration, or smaller secondary fires may have been set in the corners of the large hearth area and these used to feed and heat the ovens. Both are plausible, yet the latter seems more likely as it would allow for simultaneous cooking and/or heating in the central hearth area. Also much of the heat from the embers in the ovens would have been greatly diminished by the time they were swept out and hence would have caused little damage.



With two fireplaces and two ovens operating in the principal house there would no doubt have been a substantial amount of wood required for both heating and cooking/baking. The primary tool used to acquire this raw material was the felling axe. Everything from cutting down and trimming trees, to splitting them into junks after they were reduced into smaller units with a saw were all tasks performed with the use of an axe. In light of the Kirke's wood consumption needs over an approximately 50 year period, the presence of a least six felling axes and one saw is certainly in keeping with what must have been a constant task for those serving the family.

As this was a household occupied by both the gentry and their subordinates, the archaeological record should illustrate two disparate material culture assemblages relating to the cooking practices of each group. The daily meals of servants, and the majority of Newfoundland's resident planters for that matter, primarily revolved around boiled dishes or pottage – meat, vegetables, herbs/spices and stock cooked together in a metal pot or ceramic fleshpot/pipkin and served in a porringer, trencher or similar vessel (Anderson 1971; Deetz 1977). There was little need for the variety of specialized fireplace hardware used for roasting and basting large sections of meat, braising vegetables or for prodigious amounts of baking associated with everyday cooking in a gentry household (Yentch 1991). Even though many of the same basic foods were eaten by both pauper and prince, those with the monetary means and resources often enjoyed a larger variety, quantity and quality of foodstuffs (Ibid.).

Looking at the ceramic and metal cookware from the Kirke house, the entire assemblage is akin to what one would expect from a middling planter's family. Besides the two large North Devon clay ovens, cooking vessels are represented by 17 pipkins and/or fleshpots, 4 pans, 2 iron pots/cauldrons and 3 copper kettles. These numbers are comparable to the small dwelling at Area B (ca. 1660s-1696) but even less than that tabulated for a slightly larger house at Area D occupied for only 25-30 years (Nixon 1999; Crompton 2001). The presence of 2 working fireplaces, 5 large and durable metal cooking pots/kettles and 2 North Devon clay ovens clearly demonstrate that cooking and baking activities took place in the Kirke house; yet the ceramic evidence does not even approach what one would expect from a household of this size, the length of occupation and the quantity and diversity of faunal material identified. The paucity of ceramic cooking vessels cannot be directly equated to a lack of cooking, but instead, might suggest that pottage and other boiled dishes did not figure prominently in the diet of the principal residents. Some of these pipkins and fleshpots may have once served to prepare gravies and other sauces to accompany the daily meals of the Kirke family, but the majority likely functioned for the meals of their servants and/or seasonal employees. Given that three of the large metal pots/kettles were found in the tavern room at the west end of the house and another inside the lodging/servants' quarters, it seems likely that they served primarily for servants and tavern patrons. This is also mirrored by the number of pipkins and fleshpots inside the house, 66% of which were located at its western extremity. By comparison, the eastern end contains fragments from a single copper ket-

tle and a few pipkins but also two large clay ovens and the majority of food service vessels, fancy wine glasses and Portuguese *terra sigillata* fragments, all of which indicate that this part of the house served as the dining and entertaining area.

The dearth of evidence for cooking methods preferred by the gentry suggests one of two things. Either the majority of cooking took place outside the house in a presently unknown location or an assortment of skewers, spits, roasting pans, ladles and other implements are still awaiting discovery amongst the collection of concreted iron objects currently being treated in sodium hydroxide solution. Until one or both of these possibilities can be fully addressed, the only logical recourse is to substitute one form of evidence for cooking by looking instead at the vessels upon which these meals were served. Indirectly, this should emphasize the relative proportion of meals cooked as stews or pottage and thus requiring a small bowl or porringer – as opposed to large cuts of meat, portions of vegetables, soups and sauces that were presented in a large bowl or served upon a dish, platter or plate. The results shown in Appendix B prove that the Kirkes dined upon foods that expressly required the use of flatware vessels and large bowls and therefore, much of the cooking activities had to have centred around roasting, braising, baking and preparing soups and sauces. Out of the 168 food service vessels identified, there were only 9 porringers and 2 small utilitarian bowls – as opposed to 36 dishes, 50 bowls and 71 plates and saucers, almost all of which were tin-glazed earthenware.

The archaeological record further demonstrates that around 1660 there were some important changes in food preparation and cooking activities. During this time, there was a major renovation episode at the east end of the house which saw the well filled in, the lateral fireplace partially dismantled, its opening walled up and the clay ovens decommissioned. This was replaced by a new gable-ended chimney and a but-tery/pantry and dairy. In no uncertain terms, this illustrates a decrease in the importance of baking activities to one which focussed instead on the storage of dairy products. Brewing and baking likely continued to some degree but the large number of milkpans (n=45) both in the midden outside and in the dairy clearly indicate a substantial involvement in the processing and storage of milk products. The point is not necessarily that there was a greater amount of dairy products consumed after 1660 but rather, more time was spent in preparing butter, cream and cheese compared to earlier food preparation activities. This may reflect an attempt to diversify the family's economic base in light of the changing household demographics brought about by Sir David's death in 1654.

#### 4.2.2 Consumption and preservation

##### Consumption

Culinary practices and dietary habits have been briefly described above and they demonstrate that the Kirke family dined upon a diversity of wild game and domesticated species served from an assortment of flatware and holloware vessels. The fact that they surrounded themselves with a very modern, cosmopolitan collection of items relating to

the presentation and consumption of food illustrates the social importance of fine dining, not only as a means to entertain guests but also to uphold their own views on the family's social and economic position. Beside the aforementioned plates, saucers and bowls from which meals were eaten, there was a much broader collection of ceramic and glass vessels put to use serving and displaying both food and drink. This included lobed dishes, chafing dishes, salt dishes, condiment dishes, sweetmeat dishes, posset pots, glass decanters and punch bowls, all of which conveyed an overall sense of the household's refined consumption habits.

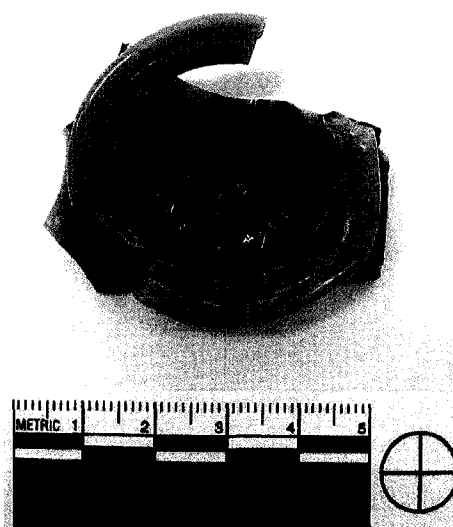
Both lobed dishes (n=15) and chafing dishes (n=6) figure prominently in this food service category. The majority of lobed dishes (13) are plain white tin-glazed earthenware, although two are adorned with highly decorative motifs (Figure 60). These kinds of vessels were normally used to serve soup or in many cases, hold scented water to rinse one's hands at the table (Stoddart 2000b:66). The latter function is especially relevant for it not only demonstrates the importance of table manners and hygiene but furthermore, that the Kirke family largely ate with their hands – a fact that also helps explain the scarcity of evidence for certain eating utensils at Area F. Chafing dishes, including three polychrome decorated vessels from the Saintonge region, were another common site during mealtime and once held coals to keep food warm during what oftentimes must have been a lengthy and sociable dining experience. Salt dishes (n=1) and condiment dishes (n=1) were likewise set at the table and filled with salt, pepper,



**Figure 60.** Decorative Portuguese lobed dish found in the Kirke house midden. Photo credit Eleanor Stoddart.

sugar or spices to enhance the flavour of meals (Figure 61a). These kinds of commodities were relatively expensive in the seventeenth century and in general were not used to a great extent by the majority of Englishmen (Shammas 1990; Weatherill 1996). Two large, multi-lobed, Border ware sweetmeat dishes may have been presented toward the end of the meal, topped up with candied fruit and other sweets. Finally, there was one other dish associated with food service at the Kirke house, a fine Venetian flecked glass bowl (Figure 61b) believed to have served as a salt or comfit and is a type common only to prosperous seventeenth-century European households (Henkes 1994:231).

The beverage assemblage largely consists of wine bottles (n=18), case bottles (n=34), stoneware jugs/bottles (n=36), earthenware jug/pitchers (n=21) and individual drinking vessels of glass (n=21), ceramic (n=48) and a lone pewter cup. There are also a few speciality items such as a tin-glazed punch bowl, a small amethyst glass decanter/tankard, a large glass decanting bottle, a polychrome barrel costrel, 2 figurine jugs, a



**Figure 61a.** Tin-glazed salt.

**Figure 61b.** Base of Venetian flecked glass salt or comfit.

puzzle jug and 2 posset pots. All of these containers demonstrate that a variety of different beverages such as punch, posset, sillabub, caudle, wine, aqua-vitae, other strong spirits and beer were consumed by the Kirkes, their servants and/or tavern patrons. Since the vast majority of these vessels were found in the midden outside the house, it cannot be stated with certainty which served for general consumption during mealtimes and which were reserved for special occasions or for express use at the tavern. However, in light of the concentration of wine and case bottles and ceramic beverage service vessels at the west end of the house, it would not be out of place to suggest that the 48 earthenware and stoneware cups and some of the more utilitarian jugs, bottles and pitchers more often found their way into the hands of servants and tavern goers; whereas the punch bowl, figurine jugs, posset pots, deep amethyst glass decanter/tankard and

Venetian, Dutch, English and possibly German wine glasses were likely used by members of the immediate family.

The utensils that accompanied many of the meals prepared for the Kirke family are represented by a paltry four spoons, no forks and a collection of 21 different iron knife fragments. At first glance such an assemblage seems very meagre and somewhat surprising in comparison to the diversity of food service vessels illustrated above; even more so if you consider that some of the knife and blade fragments likely served household functions other than that directly related to the consumption of food. However, this collection of cutlery is certainly in keeping with what we know about seventeenth-century consumption habits, wherein forks were almost nonexistent, spoons only periodically present and pointed knives comprising the only common serving and eating utensil (Deetz 1977:123-24; Faulkner and Faulkner 1987:239). After all, food was still largely ingested using one's hands and remained so even amongst the gentry and monarchs throughout most of the seventeenth century. The presence of so many expensive, and sometimes decorative, lobed dishes for rinsing the fingers are an excellent indication that the Kirkes ate in this same manner. The four spoons, one each of copper, pewter, lead alloy (possibly latten) and iron, further support this assumption for they demonstrate not only that very few spoons were present, but also that none appears to have been part of a matching set – something which would be expected if the Kirkes frequently partook in the consumption of soups served in holloware vessels. However, con-



sidering that this dwelling was essentially looted of all its valuables prior to its destruction in 1696, it is still possible that the Kirkes may have once been in possession of a large set of pewter or silver dinnerware complete with matching cutlery.

### Preservation

Daily sustenance not acquired from the garden, forest or sea came in the form of salted beef or pork, butter, cheese, flour and a variety of preserves and alcoholic beverages obtained from sources both overseas and in the American colonies. For the majority of Newfoundland's seventeenth-century residents these kinds of provisions incorporated a large part of their diet and are thus reflected in the archaeological record by large numbers of storage vessels. The reasons for the heavy reliance upon imported foodstuffs are varied. Grains, cereals or processed flour generally had to be shipped to Newfoundland because of the short growing season and overall damp climate which provided challenges to adequate drying and storage. Beer and ale were brewed locally to ensure freshness and palatability whereas wines and other fortified beverages were frequently obtained as a result of the triangular trade with Iberian and Mediterranean ports. Swine and poultry were kept by many planters but few had the time or resources to tend herds of cattle or goats/sheep and therefore, beef, cheese, butter and cream were purchased through migratory fishing fleets or sack ships largely originating from the West Country of England. In consideration of all these factors, it is not unusual to see the number of storage-related vessels in a seventeenth-century Newfoundland household

approach upwards of 42%; while evidence for dairying activity is as low as 0-4% (Nixon 1999; Mills 2000; Crompton 2001).

The ceramic quantities from the Kirke house are exceptional in this matter and demonstrate that this particular family may not have relied on imported foodstuffs to the same extent as other residents. Instead, they produced many of their own provisions and in some cases, likely distributed and sold them to nearby planters. The minimum number of storage vessels identified from the Kirke house is 110, representing only a moderate percentage (21.2%) of the overall ceramic assemblage. These vessels are comprised primarily of tallpots (n=39) and larger storage pots (n=19) from North Devon and lesser amounts of the same forms manufactured in Totnes (n=10), Somerset and Verwood (n=11), Exeter (n=5), the English Midlands (n=1), Normandy (n=4) and The Netherlands (n=1). A small number of storage jars from Spain and Portugal (n=16), several of tin-glazed earthenware (n=3) and one of uncertain provenance complete the assemblage. Viewed from a comparative standpoint, the various pots and storage jars from the Kirke house are well beyond that recorded from Area B (n=42) but do not even equal the number found at the other nearby planter's dwelling at Area D (n=122), which was only occupied half as long as the house at Area F.

Another possible reason for the diminished number of storage vessels could be explained by the Kirke family's requirement for larger quantities of provisions. This in

turn, may have necessitated that foodstuffs be purchased in barrels or other large wooden containers, instead of smaller ceramic units. However, considering the large number of milkpans found at Area F, another logical explanation begins to emerge. Forty-five milkpans were associated with the Kirke occupation, representing 8.7% of the household's total ceramic usage. This is more than double the percentage of any previously recorded domestic assemblage and between 4 and 11 times as many vessels compared to the houses at Area B and D, respectively. The direct implication is that the Kirkes relied to a much lesser extent upon imported dairy products compared to the majority of Newfoundland's other residents, since they possessed a sizable herd of cattle, had a dairy built onto the house after 1660 and may have even operated the nearby cowhouse at Area C. Processing a sizable quantity of cheese, butter and cream would not only contribute significantly to the family's overall dietary needs, but also provide other residents of Ferryland with an occasional source of fresh dairy products and also meat, reducing the need to import salt beef. This hints at another possibility as to why the Kirke house contained so few storage-related vessels, for many of the ceramic containers used by the family could have been refilled with butter, cream or milk and then sold and distributed to others in the community.

#### **4.3 Health, hygiene and refuse disposal practices**

Some of the Kirke house residents obviously enjoyed a diverse diet of fish, domestic species and wild game, but what do we know about their overall health and

hygiene practices? Historic records chronicle the fact that various members of the Kirke family lived relatively long lives by seventeenth-century colonial standards. Sara Kirke, already a woman of childbearing age upon her arrival in 1638, lived in Ferryland for an additional 40 years before passing away in the early 1680s. Sons George, David, Philip and Jarvase, were either very young or not yet born when Sir David took ownership of the colony. By 1648, they were listed in a business account as “George Kirke and brothers” suggesting that at least some of the boys still had not reached adulthood by this time (Pope 1993:43). All but Jarvase lived to see the day their childhood home was destroyed by the French in 1696, but none would survive their imprisonment long enough to see the following spring. Even though this helps paint some broad strokes as to the family’s comparative longevity, we have to turn to archaeology for specifics regarding their hygiene practices and whether or not they purchased and consumed much in the way of medicines, salves or other remedies.

Considering the length of occupation and possible number of residents, the refuse disposal patterns of these people should be quite obvious. By far, the vast majority of artifacts associated with the Kirke house were found immediately outside the front door, spread across the entire courtyard and beyond to actually cover over parts of the cobblestone street over 16 feet away. More than 62,000 artifacts were recovered from this thick and rich deposit, including everything from beads and gold rings to utilitarian ceramics and clay tobacco pipes. Such an impressive mass of rubbish certainly conjures

up images of filth and squalor, when in fact the reality was not really that bad.

Remember that much of this trash did not accumulate in a rapid manner but over the course of 50 years of cooking, cleaning, preparing food and reorganizing the household. Much of the organic remains would have been quickly scavenged by roaming pigs, pets, rodents or birds; whereas the broken fragments of glass, ceramic and pipes were trodden down, crushed or subsequently covered over by time or the next bucket of trash from the daily or weekly housecleaning. For better or worse, this was the common and accepted practice of refuse disposal in the seventeenth century and it was not until the middle of the next century that Englishmen on both sides of the Atlantic began to discard their garbage in purposefully dug pits away from public view (Deetz 1993:134-35).

A smaller, yet similarly rich, midden was also located directly behind the dwelling. Although its exact parameters cannot be stated as it is still largely unexcavated toward the south, it extends for some 26 feet along the back of the brewhouse/bakery fireplace. Cross-mends between this deposit, the living surface inside the house and the principal midden out front, demonstrate that all three are contemporaneous. It also shows that there was an area behind the Kirke house that was (previously) dug out from the hillside and which may have served a purpose other than simply to discard refuse. The datable artifacts found in both the front and back middens give no hint as to a change in disposal patterns over time, but instead, each appears to have been used throughout the entire period of ca. 1640s-1696. This is in contrast to a very localized

accumulation of milkpans and other refuse found in the 6 foot space between the but-tery/pantry and dairy, and representative of the activities occurring there after 1660.

General perceptions regarding the overall health and well-being of the Kirke family can be ascertained through the presence of a variety of objects including galley pots, chamber pots, razors, barber's bowls/bleeding bowls and small glass pharmaceutical bottles and phials. Some of these items, such as chamber pots, razors and barber's bowls, have as much to do with aspects of personal hygiene as they do health. In fact the two are interrelated, not only in the sense that cleanliness and personal grooming helped promote good health but also because the latter objects were part of the same shared material culture assemblage. In the same respect, galley pots and glass bottles/phials could have otherwise been used to hold cosmetics and perfume.

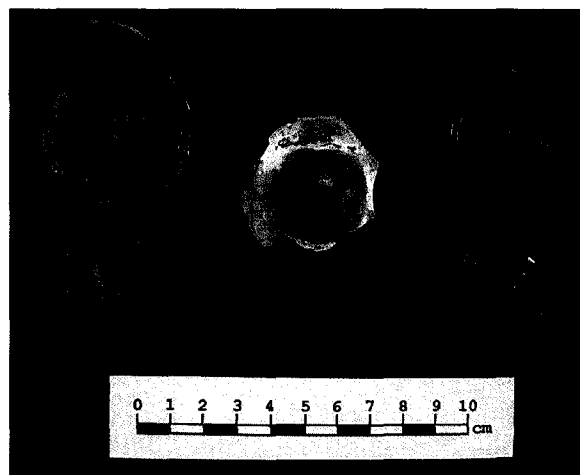
The most prevalent objects associated with the health and hygiene of the Kirkes are tin-glazed galley pots (Figure 62). These ceramic vessels were normally used to hold ground medicinal ingredients and some of the smaller varieties often contained an ointment or salve in semi-liquid form (Stoddart 2000a). In total, 29 vessels were identified along with an additional two Rhenish stoneware ointment bottles. At first glance, this number of medicinal vessels may seem trivial in light of the other 500 identified ceramic vessels. However, it is important to consider the frequency with which these medications/hygienic products were used and how these numbers compare with other contem-



**Figure 62.** Tin-glazed galley pots from the Kirke house.

poraneous domestic components at Ferryland. Notwithstanding the possibility of recurring health issues or even hypochondria in one or more family members, the discovery of 31 ceramic vessels is quite an exceptional number as these items would normally see use only for occasional ailments or injuries. In addition, the Kirke family would likely have enjoyed a much better quality of life in terms of their overall health compared to that of other resident planters, since they were not born into a life of servitude or strenuous labour, ate a much more varied diet and could afford any necessary medical attention if, and when, it was available. Even if we accept the possibility that a certain percentage of these ceramic vessels were utilized for cosmetics or even condiments, the quantities are still quite large. Just over 7% of the overall ceramic assemblage consists of hygiene-related vessels and this does not even take into account the 13 glass pharma-

ceutical bottles/phials found at the Kirke house (Figure 63). Combined, the overall hygiene assemblage is represented by 51 ceramic and glass vessels.



**Figure 63.** Selection of pharmaceutical bottle fragments from the Kirke house.

Such an abundance may be suggestive of several things. First of all, the Kirkes may have simply been well-stocked with a variety of medicines, ointments and elixirs for general household use. The length of occupation and the relatively large number of occupants residing within would certainly help explain some of these inflated numbers. However, considering that the percentage of hygiene-related vessels from Area F are between 2.3 and 7 times more than the planter's dwellings at Area's D and B respectively, this lends credence to the possibility that the plentitude from the Kirke house is not merely a representation of general household consumption. We already know that George Calvert's "mansion house" served as a hospital over the bitterly cold winter of 1628-29, so maybe the Kirkes' large, warm and comfortable dwelling served a similar function for those periodically in need of medical attention. Although it cannot be stated

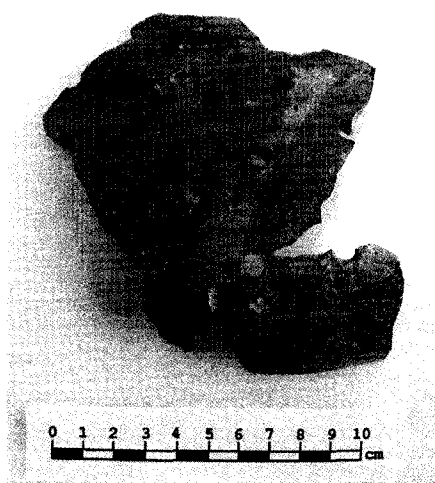


with certainty whether or not Lady Sara, her sons or any of the Kirkes' servants were skilled in the art of healing, the overall quantity and variability of health-related artifacts certainly seems to support this possibility. This suggestion is supported by the presence of the other multi-functional objects such as an iron straight razor and tin-glazed bleeding/barber's bowls. These kinds of containers were common to a surgeon's toolkit for use in bleeding patients, but also frequently employed by the better sort for shaving and personal grooming. Stoddart (2000a) identified the bleeding/barbor's bowls as manufactured after 1660 and if this is accurate, it helps push these artifacts toward a more medical rather than hygienic function. This is due to the fact that Sir David was long deceased and his sons had reached adulthood and were most likely living on their own; thus, there may have been no male gentlemen residing in the house to associate with these barber's bowls.

The same post-1660 date was placed upon 15 of the 29 tin-glazed galley pots (52%), indicating that they were likely purchased at a time when Lady Sara was the principal occupant of the house and not as part of the initial household goods sent over in 1638. Of the 12 datable vessels remaining, only six were manufactured before 1660, while the others date between 1640-70/80, indicating that the latter could just as easily have been imported during the 1650s-70s as brought over in the 1630s-40s. Archaeological evidence demonstrates that occupation at the Kirke house continued until 1696 but does not provide any hint as to who may have lived there after Lady Sara.

Considering that there was no sign of structural alterations or changes in the artifact assemblage during the last 15 or so years of occupation, it seems that another member of the immediate family simply took possession of the house and the goods within it.

Another artifact that further enhances the idea that the Kirke house once functioned as a place to treat those afflicted with serious ailments or other sickness is a fuming pot. Also known as a perfume jar or stink pot, this is a rare ceramic form that was filled with fragrant oils or herbs and when heated with charcoal, produced a sweet scent or pleasant aroma that could fill a chamber (Pearce 1992). Its ability to sweeten or freshen the air made it an ideal object in sickrooms or places where illness was prevalent (Noël Hume 2001:245). The single fragment located outside the Kirke house is a very close match in both form and fabric to another vessel found at Area G, although the two pieces cannot yet be physically joined (Figure 64). Comparable vessels can be found in both Pearce (1992) and Noël Hume and Noël Hume (2001:244-45), the latter being an exact match in both appearance and description to those from Ferryland.



**Figure 64.** Fuming pot fragment from Area G, Ferryland.

Completing this discussion on health and hygiene are issues regarding human waste. Four ceramic chamber pots were found at the Kirke house. The first three are plain white tin-glazed vessels and the other, a sgraffito-decorated form manufactured in North Devon. Whether or not there were similar vessels made of pewter or other material, the contents that frequently filled these ceramic pots would have likely been thrown out the door or carried down to the privy at Area C. As repulsive as the former activity sounds, it is certainly in keeping with the current understanding of disposal practices in Early Modern England. The discovery of many small fragments of fine and expensive textiles in the privy, less than 100 feet to the north of the Kirke house, also hints at the latter possibility. Even if the Kirke's night soil was only discarded here on an occasional basis, the matrix contained within the privy suggests that some of Ferryland's residents – and by extension, possibly some of the Kirke household – may have been plagued by poor health. Microscopic examination of samples taken from the privy revealed evidence for intestinal parasite eggs at a rate of 20,000 per gram of waste, included in which were examples of roundworm, whipworm and tapeworm (Horne and Tuck 1996).

#### **4.4 Leisure**

The countenance of a gentleman or family of gentry background was often displayed through leisurely pursuits. This could include everything from hunting, riding, angling, reading and writing, gaming, sewing and even enjoying a few glasses of wine,

strong spirits or a pipe of tobacco. Evidence for many of these activities can be found in the Kirke house assemblage.

#### 4.4.1 Smoking

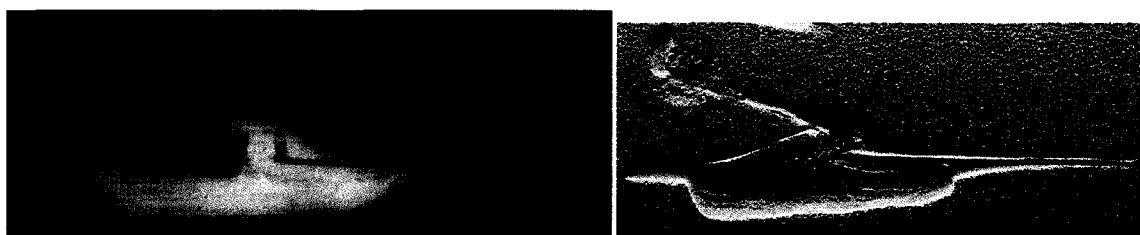
The most common archaeologically represented leisure activity at Area F is smoking. Over 1,600 clay tobacco pipes were smoked, broken and discarded by residents of the Kirke house and the countless visitors who passed across its threshold. For an occupation that spans only 50 years, such a number indicates activity well beyond simple everyday use. Even more impressive is the fact that there is still another partially unexcavated midden directly behind the Kirke house. By comparison, the planter's house at Area B, occupied for approximately 30 years (ca. 1660-1696), had only 83 clay pipe bowls associated with it.

Clearly, the evidence from the Kirke house indicates tobacco consumption on an enormous scale. Since the dwelling also seconded as a tavern or tippling house, it is not unexpected that the number of pipes are elevated compared to an exclusively residential occupation. The presence of both seasonal and year-round servants, who also likely smoked on a regular basis, would further increase the number of archaeological specimens, as would the fact that the Kirke house was the residence of Newfoundland's governor and thus a central meeting place to discuss local, judicial or fishery-related matters. Furthermore, historic records indicate that the Kirkes were trading with the

American colonies for alcohol, tobacco and other commodities in the 1640s and hence, this highly addictive “sotweed” would have been readily available at Ferryland (Pope 1992; 2004). Despite what must have been an active if not frequently chaotic scene in and around the Kirke house, Sir David certainly took the time to enjoy a leisurely smoke for at least seven pipe bowls were found bearing his own monogrammed initials.

The clay tobacco pipes found at the Kirke house, or anywhere else in Colonial America for that matter, should not be regarded as the only object associated with this leisurely activity but as part of a larger “tobacco consumption package,” which sometimes included a smoker’s companion or a pipe tamper, a flint and steel, a quantity of tobacco and a pouch or can to house these items (Cessford 2001:1). Because of the nature of the archaeological record, many of these items are never given adequate consideration. This is due to the fact that any organic objects have long since disintegrated, whereas iron smokers’ companions and strike-a-lights are typically covered with such extensive corrosion that they are indistinguishable or easily misidentified. Fortunately, this problem can sometimes be rectified. The practice of x-raying iron artifacts, though expensive and time-consuming, can produce some very worthwhile results. For example, in place of a nondescript lump of iron corrosion, x-rays have revealed several smokers’ companions from Area F (Figure 65a). These multi-functional tools comprise a set of small tongs with a spring grip at one end, somewhat resembling a heron’s beak, and the terminal end of the upper handle forming a disc used for a pipe tamper (Noël Hume

1969:308). The really fascinating part of this discovery took place when Roy Ficken, from Memorial's Biology Department, scanned the x-ray plate illustrated below and converted it into bas-relief with photo imaging software. The slight variations and iron concentrations were thus enhanced to produce a positive image of the actual iron object (Figure 65b).



**Figure 65a.** (left) X-ray of iron smoker's companion.

**Figure 65b.** (right) Bas-relief image of x-ray.

#### 4.4.2 Alcohol consumption

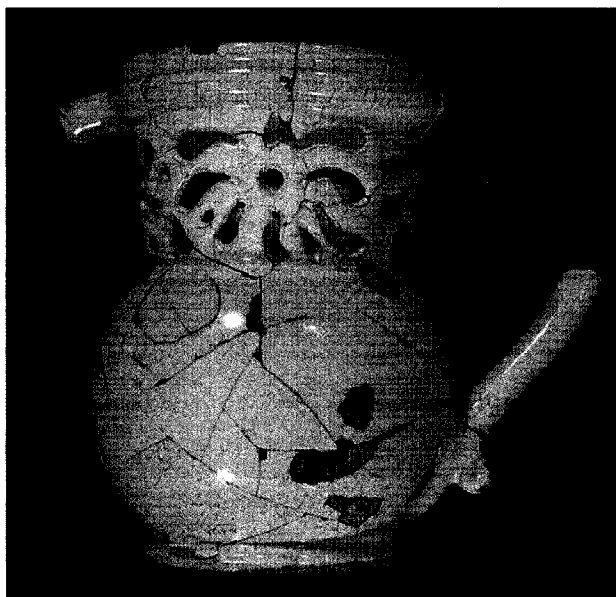
Imbibing alcoholic beverages during mealtimes was a ubiquitous activity for all members of seventeenth-century English society ostensibly because of poor water quality and the relative longevity, availability and affordability of brewed and distilled drinks. However, beer, wine and spirits were not just reserved for meals but were a common refreshment associated with socializing activities in colonial settings such as Newfoundland as well as in England, and evenings would often be spent around a warm fire discussing daily events, telling stories, playing music, singing and other entertainments. Such leisurely activities were an integral part of colonial life as these times not

only provided a means for much needed relaxation, but more important, personal interactions helped cement social relationships.

Indications of just how much the residents of the Kirke house and their tavern patrons partook in these refreshments – and thus demonstrating the value of alcoholic entertainment – can be illustrated by the 54 glass serving and decanting vessels, 21 glass drinking vessels and 114 ceramic cups, mugs, jugs and pitchers. The first of these groups contain 34 case bottles, 18 wine bottles, one large glass decanting bottle and a small amethyst decanter/tankard. Glass drinking vessels included 4 English wine glasses, 9 Venetian or *façon de Venice* glasses, 6 Dutch or German goblets/beakers and a single Dutch *roemer* and *vlecktwerkbeaker*. Ceramic vessels consisted of 6 Westerwald jugs, 25 Rhenish stoneware bottles, 4 French and English stoneware jugs/flasks and 69 assorted earthenware jugs/pitchers and cups/mugs. Those alcoholic beverages not shipped in small containers were normally housed in large barrels and dispensed using a brass spigot, of which one example was found.

The small number of spigots compared to the relatively large number of case bottles, wine bottles and other beverage service and consumption vessels may suggest that much of the decanting did not take place inside the house, and also that beer did not play prominently in the selection of beverages offered at the Kirke's tavern. This makes perfect sense because: 1) casks and kegs would have likely been housed in a cool loca-

tion nearby, possibly in the buttery/dairy or in a room located in the presently unexcavated area directly south of the tavern and; 2) beer was so easy and cheap to produce that it would not provide the same attraction or profits as imported wines and strong spirits. Chances are beer and ale were served during meals as part of the daily rations for the hired help or as a last resort for clients who could not afford the stronger beverages available at the tavern. For lighthearted occasions, vessels such as the puzzle jug illustrated in Figure 66 may have been brought out and presented to any unsuspecting or inebriated visitors, to the delight of all in the room.



**Figure 66.** Tin-glazed puzzle jug.

Such a large quantity of material culture relating to both drinking and smoking lead to questions of whether or not there was any way to demonstrate if these activities changed over the course of the century. It was hoped that by separating the number of pipes, glass and ceramic vessels into three distinct periods of occupation some obvious



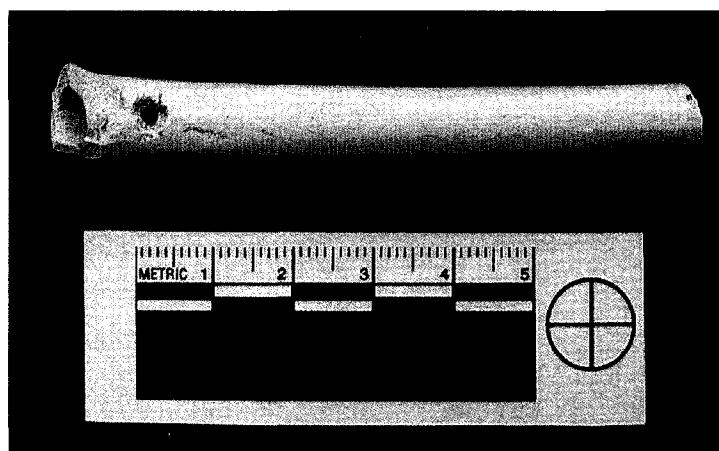
patterns would begin to emerge. Logically, the three periods chosen were that of Sir David Kirke's residency, represented by artifacts dating to 1650 and earlier; Lady Sara's tenure, bracketed between 1650-1680 and; the final sixteen years of occupation, represented by objects dating from 1680 onwards. Upon further reflection, it became clear that neither ceramics nor glass would provide the detailed information needed as their dates of manufacture are not often tight enough to allow for this kind of temporal comparison. All that remained were the more than 1,600 clay tobacco pipes. From the identifiable pipe bowls and makers' marks recorded in the Kirke house occupation layers approximately 33.9% dated from the first half of the seventeenth century, 46.8% from the period 1650-80 and the remaining 19.3% from the latter years of the century.

If these percentages were divided by the number of years from each of the three periods proposed above, then hypothetically 3.1% of all pipes were deposited during every year of David Kirke's residency based upon a ca.1640 house construction, 1.6% between the years of Lady Sara's occupancy and only 1.2% over the final sixteen years prior to the French raid. What this indicates in the very least is that activity in general, and the leisurely act of smoking in particular, was at its most intense during the period up to 1650. In some respects, this is obvious considering that it was the formative years of the Kirke occupation at Ferryland and a time when Sir David was very active in fishery-related and business activities. The period when Lady Sara had control over the Pool Plantation shows a relative decrease in the amount of smoking and use-related discard

compared to the first ten or eleven years of occupation. This can be accounted for by a number of factors, not the least of which may have included a diminished number of servants and hired fishing hands after Sir David's recall and eventual death, to the financial and administrative burdens encountered during the Interregnum period. The final years of occupation between Sara's death and the colony's destruction at the hands of the French in 1696 reflect the least amount of tobacco consumption, assuming of course that all the clay pipes from Area F underwent similar depositional and taphonomic processes. This in turn, not only suggests that there may have been fewer occupants residing within the house, but also that the Kirkes' tavern activities may have been slightly curtailed. The passing of the colony's matriarch may have left a void in the Pool Plantation's leadership that was not adequately fulfilled by one or more of her remaining sons, or it may have been related to poor catch rates and low market prices for cod toward the latter part of the century (Pope 2004:424).

#### 4.4.3 Other material culture

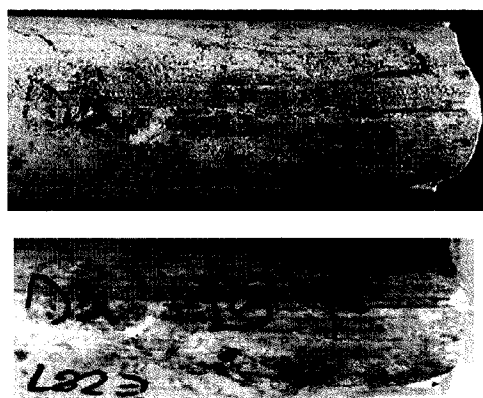
Other objects which enhance our knowledge of the Kirke family's leisure activities include clay pipe whistles, marbles, ceramic flowerpots, inkwells and sewing-related artifacts. The first two artifact types are often associated with the recreation and amusement of children. Pipestem whistles were made by grinding or drilling a series of holes through one side of a pipestem as far as the bore and then attaching a separate mouthpiece of wood or bone (Figure 67). Paul Huey first reported on these peculiar reworked



**Figure 67.** Pipestem modified to make a whistle.

pipestems in 1974, after a variety were found in mid-seventeenth-century Dutch contexts at Fort Orange (Huey 1974). At the time, these were the only examples found in North America. However, the presence of two clay pipe whistles from the Kirke house and several others from contemporaneous contexts at Ferryland, demonstrate that these objects are not restricted to the Dutch but also were made by English colonists in Newfoundland.

Although not modified to the same extent as a whistle, another clay pipe fragment discovered directly outside the house is indicative of youth and possibly even courtship. Written across this pipe was an inscription in ink that, amazingly, was preserved for over 300 years even though the exact lettering is somewhat difficult to discern (Figure 68). It appears to read *D[?]'s F[?]*. Only two known literate individuals with the first initial D who once resided in the house were Sir David Kirke and his youngest son, also named David. Considering that the elder David was married to Sara Kirke (nee Hopkins) it is more likely that the younger David penned his initials upon



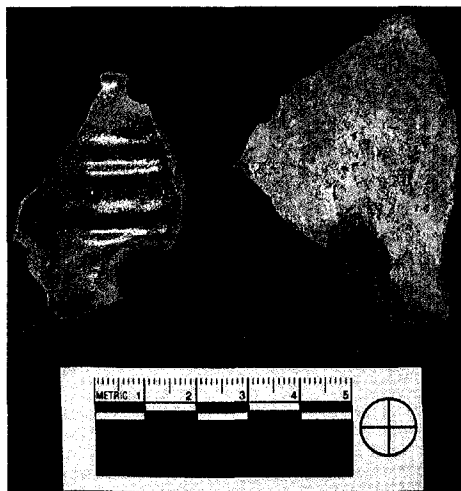
**Figure 68.** (top) Inscription on pipestem written in ink; (bottom) same pipestem with lettering highlighted in black.

this pipe as a sign of adolescent affection toward an unknown individual – maybe even that of his aunt Francis Hopkins.

Games involving clay marbles were another pastime enjoyed by one or more children residing at the Kirke house. A single marble found on the cobblestone courtyard north of the house may not indicate the extent of such recreational activities, only that it was part of their repertoire of activities when they were not busy learning to read, write and, in time, run a successful fishing plantation.

There is also archaeological evidence for potted plants, no doubt used to spruce things up around the house and possibly undertaken as a leisurely hobby by one of the occupants. Two North Devon earthenware vessels: a large gravel-tempered storage pot and a much smaller tallpot, both exhibit telltale holes drilled into their bottoms and/or sides. These openings were not part of the initial manufacturing process for none of the

interior glaze had seeped into the perforations. Instead, the holes were made after the original contents were consumed and they were then reused as flower pots (Figure 69). The base of the large storage pot has a single hole drilled in its centre, whereas portions of the tallpot body were repeatedly bored through in a similar manner. The same type of modification and reuse was recorded at a small seventeenth-century planter's house in the nearby community of Renew's (Mills 2000). Despite the constant and labourious work of fishing and processing cod, some early Newfoundland residents took the time to brighten up their abode. The identification of a possible flower holder (or an olive strainer) amongst the tin-glazed vessels from the Kirke house further suggests that even more expensive and decorative containers could have once adorned a table or nearby window sill (Stoddart 2000a).

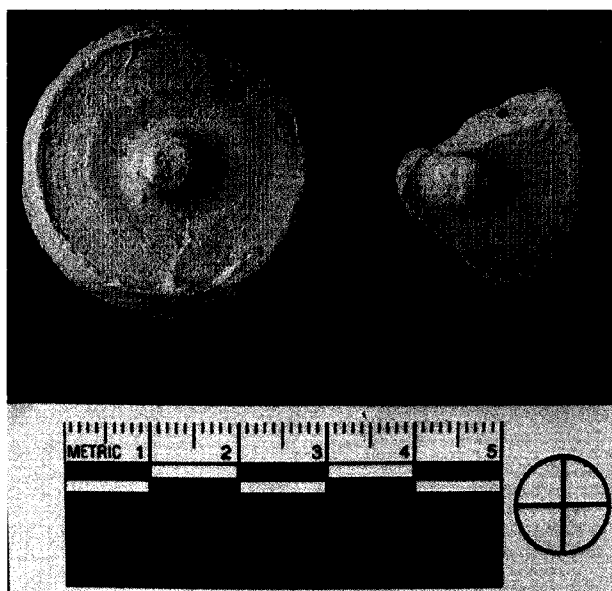


**Figure 69.** North Devon coarse earthenware vessels reused as flowerpots.

Correspondence between friends and family was assuredly a regular occurrence for those who were literate and had the free time to read and write. Letters were the most reliable and accurate means to keep abreast of news on either side of the Atlantic,

and surviving documents pertaining to seventeenth-century Ferryland illustrate that both Sir David and Lady Sara were very active in this matter. Thus, it is likely that there would be artifacts demonstrating the literacy of the Kirke family. Issues pertaining to literacy are probably the most difficult aspect of daily life to fit into a single category, for it has as much to do with leisure as it does business activities and matters of social differentiation. At this juncture, discussions will only cover basic writing necessities, whereas later sections will address how it relates to socio-economic status and commerce.

To write a letter one needed parchment, a number of quills and a container of ink, all of which were commonly held within a box or small chest. Ordinarily, all of these organic items have long since disappeared from the archaeological record. However, since inkwells functioned to contain ink and prevent it from being soaked up or drying out, many were made of a durable, non-porous material such as ceramic. To help further slow the drying process and to prevent spillage, these containers were likewise covered with some form of lid or top. Two very small unglazed Border ware lids, each topped with a small knop or finial, are all that remains of two earthenware inkwells or inkpots used by the Kirkes (Figure 70). The reasons they are attributed exclusively to inkwell covers and not galley pots are twofold. First, galley pots almost never had ceramic lids but were instead covered with cloth or parchment and tied at the narrowest

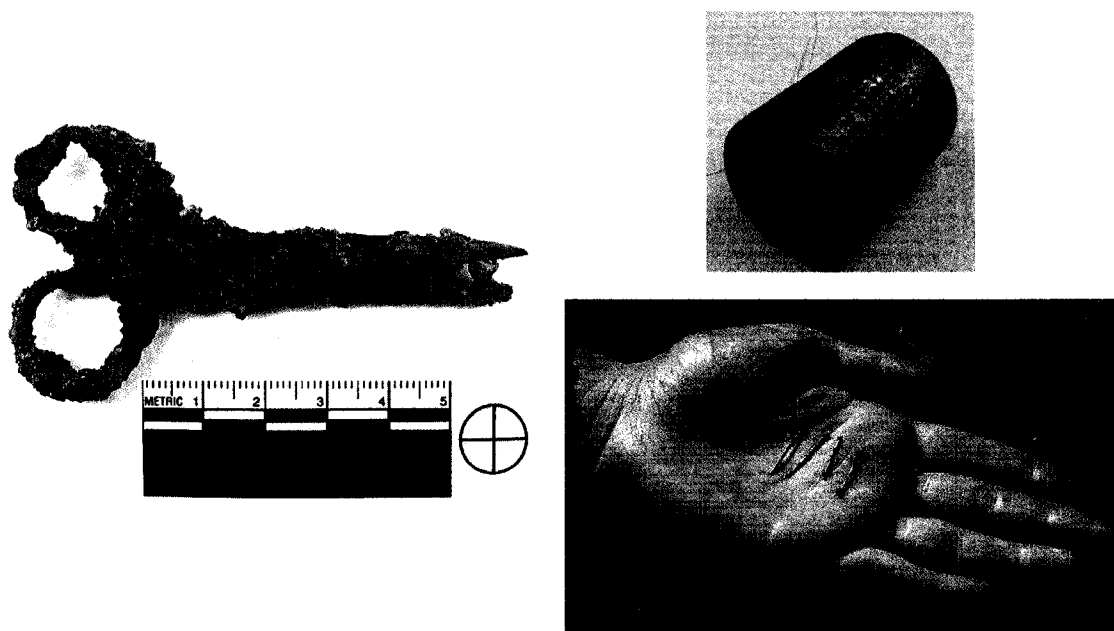


**Figure 70.** Two Border ware inkwell lids.

point just below the rim (Stoddart 2000b:74). Second, seventeenth-century English Border ware inkwell/inkpot rims average between 30-45mm in diameter, an excellent fit for the lids from the Kirke house, both of which measure 34mm (Pearce 1992:39).

Finally, a small assortment of sewing tools and implements including 3 thimbles (1 silver and 2 copper), 2 silver sewing bodkins, 19 tin-plated copper alloy pins and a small pair of iron scissors all demonstrate that sewing did take place (Figure 71). The fact that some of these items were made of silver further suggests that they were the possessions of an individual of some means, probably the lady of the house.

In concluding these discussions on leisure activities, we must first revisit aspects of riding, hunting and angling touched upon earlier. More so than any other Ferryland



**Figure 71.** Sewing items from the Kirke house. (left) Iron scissors, (top right) silver thimble, (bottom right) tin-plated straight pins.

residents, members of the Kirke family would have had the time, money and resources to partake in these sorts of interests – this being part and parcel of gentlemanly life.

Whereas horse and pony shoes unequivocally demonstrate the ownership of horses, the remains of two silver-plated iron boot spurs found in the same midden are not necessarily proof of their equine pursuits, for these items were also part of a gentleman's costume. However, when considered together both pieces of evidence are suggestive of riding activities. On a similar note, any hunting and fresh water angling conducted by the Kirkes cannot be viewed simply as a necessity stemming from the desire to obtain meat or fish for the table, but may have more to do with the sport and enjoyment derived from it. The discovery of small freshwater fish hooks only in the area around the Kirke house further suggests that this was not a frequent activity for resident planters but a

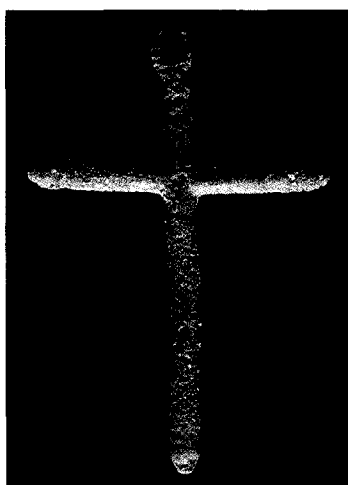


pleasurable excursion by a select few during periods of agreeable weather. Among English gentlemen, angling and fly-fishing was common by the sixteenth century and often included in their tackle were a variety of small hooks for both bait and artificial flies (Alcock and Cox 2000:Book III, Chapter 3, Item 42a).

#### **4.5 Religious ritual and the manifestation of folk beliefs**

Artifacts that communicate religious beliefs or ceremonies are poorly represented at the Kirke house. One would not expect these types of objects to be prevalent in the Pool Plantation, so far removed from any resident clergy, religious edifice or active involvement in the conversion of native peoples. However, when viewed in its entirety, the Ferryland colony is probably as rich in religious paraphernalia and iconography as any other seventeenth-century colonial site. To date, excavations at various locations and various time periods have revealed a large iron and gold gilt processional cross, rosary beads, a small silver cross, a tin-glazed vessel used to hold vials of holy water, a wax or laquer seal impression of a pierced and bleeding heart below a weeping eye and a gold seal bearing a similar religious motif of a burning heart upon a winged pedestal.

Of the 90,661 artifacts from the Kirke house, only one can be directly attributed to spiritual beliefs while another may have served as part of a religious ceremony. The first of these is a small (2cm high) silver cross found on the cobblestone hearth of the lateral fireplace (Figure 72). The upper loop of this piece was broken, causing it to sepa-



**Figure 72.** Small (2cm high) silver cross.

rate from the chain it was once attached to and thus resulting in its loss. There is nothing exceptional or decorative about this particular Christian symbol and given the fact that it was found inside the working area of the hearth, it might well have belonged to one of the servants who tended the fire or baked the bread. The second artifact is a rare Portuguese tin-glazed plate with a winged and pierced heart in its centre, and written across this heart is the word *Amors* (Figure 73). Similar vessels are known to have been ordered for weddings and were often used to carry rings to the altar (Stoddart 2000b:61). The plate from the Kirke house may have therefore been a wedding gift given to David and Sara and later transported to Ferryland along with their other possessions. Another possibility may be that religious ceremonies such as weddings were conducted in this same house. In the absence of any judicial official or minister, the legal and administrative authority of Sir David may have been called upon to wed the occasional resident – no doubt for a nominal fee.



**Figure 73.** Portuguese tin-glazed plate with central winged heart “Amors” motif.

The discovery of a large North Devon tallpot fragment buried in a very unusual manner inside the Kirke house is not really befitting a religious interpretation but rather, delves into the realm of folk beliefs. Estimated at roughly one third of the entire vessel, this pot base was found upside down in a small circular hole dug nearby the proposed location for the back door of the Kirke house (Figure 74). Its size, location and vertical orientation are suggestive of a folk magic practice documented in many parts of Britain to ward off evil spirits and witches. Typically, these “witch bottles” consisted of a ceramic or glass container buried either beneath a hearth, the threshold of a door or any other opening that allowed access into the house. This type of talisman was almost always found in an inverted position and usually contained a concoction of organic remains stoppered up with a cork or similar covering (Merrifield 1955). Although any



**Figure 74.** North Devon tallpot base fragment found inverted and buried in a hole near the back door of the Kirke house.

organic remains from the possible Kirke house example would have long since deteriorated, it was certainly large enough to hold any number of objects and could easily have been sealed with a cloth or parchment cover. Furthermore, this fragment is too big to have simply been left inside the house if it was broken prior to the French attack. A total lack of cross-mends makes very unlikely the probability that this lone object was merely discarded and somehow found its way into a small circular depression, standing completely upright and inverted. If in fact this was an example of preventive magic, it cannot be stated with certainty whether or not similar techniques were undertaken at the front of the house or beneath any of the hearths, for these archaeological features are presently intact and will remain so into the foreseeable future.

#### **4.6 Expressions of affluence**

Our quest to understand the lives of the Kirkes inexorably leads to their socio-economic status and how this is represented in the archaeological record. But before we delve into this subject it is important to discuss why David Kirke and his family built such a large house, stocked it with an assortment of decorative pottery and dressed in fine garments adorned with gold and silver accessories. The reasons behind such extravagance in architecture and material culture were not predicated upon imitation for the Kirkes were at the top rung of Newfoundland's socio-economic ladder. Instead, the archaeological remains from Area F must be viewed as a physical, social and ideological expression of their affluence mirrored by their own perception of themselves and of the society in which they lived.

David Kirke was cognizant of, and likely comfortable with, the lifestyle he grew up with as the son of a successful and wealthy London merchant – a lifestyle which was only enhanced after his successes against New France in 1628-29 and his eventual knighthood in 1633 (Kirke 1871). The family's move to Newfoundland five years later was not meant to be a temporary transition but a permanent relocation and the material possessions taken with them to Ferryland were a means to maintain their sense of identity and reaffirm their place in a new and unfamiliar colonial society. The construction of a large timber-framed house can thus be visualized not only in terms of practicality for an extended household membership but also their continuing awareness with regard to

social standing and basic domestic comfort. The decorative plates, fine drinking glasses and other goods can furthermore be looked upon as items that were acquired for the prestige that was attached to them by their purchasers, rather than for their own sake (Gutiérrez 2000:179). From this perspective, the Kirke occupation at Area F should be regarded as a conceptualization of their place in society, manifested by their house and its location *vis-à-vis* the natural and cultural landscape, the material goods contained within and their personal attire and physical appearance.

#### 4.6.1 The house and its surroundings

Even though detailed aspects of the Kirke house construction and layout have already been discussed previously, certain features deserve special attention with respect to how they can demonstrate the socio-economic status of its residents. In the context of seventeenth-century Newfoundland, the greatest differences in colonial housing (between families of different wealth and social position) were in their size, the number of rooms and fireplaces, and other structural or exterior embellishments. Present archaeological evidence suggests that small and middling planters lived in framed houses of one or two rooms and relied upon a lone hearth at one end of the building. These kinds of accommodations were sufficient for a single family unit and a few seasonal fishing hands and thus minimized the need for numerous internal partitions or segregated spaces.

Domestic quarters such as this would be grossly unsuitable for the Kirke family, not only in terms of basic space requirements but also in accordance with their ideas of comfort and privacy. The Kirke house was constructed in such a way that it was nucleated around the principal dwelling, a 21 by 53 foot structure, one and a half or two stories high and containing a fireplace at each end. Smaller ancillary structures/rooms were incorporated into – or later built on – different parts this main unit, with the result that there were five or more ground floor rooms in use at any given time. This included a small attached lodging/servants' quarters and a well house, the latter being dismantled around 1660 and the area redeveloped into a buttery/pantry and dairy. These service rooms were necessary additions since the Kirkes had to provide for a retinue of servants that well outnumbered immediate family members – the servants themselves being yet another status symbol. The increased number of specialized and separate rooms also afforded a higher standard of privacy and amenity for the family, as did the greater number of hearths. If we include the small lodging/servants' quarters, the entire Kirke house complex had at least three hearths in operation at any given time, providing additional warmth and light to a greater range of rooms. The presence of two or more hearths not only implied greater comfort, but also greater wealth, for additional costs had to be incurred during construction and extra wood cut to heat these spaces. The increased number of hearths in many prominent homes in England had become such a readily apparent, though rough, index for wealth that a hearth tax was implemented in 1662 as a means of tapping into discretionary income (Crowley 2001:6).

Another component of the Kirke house that distinguishes it from other dwellings in the Pool Plantation was its expansive cobblestone courtyard that leads up to the front door. This 16 by 23 foot pavement was a multi-functional space that not only provided a clearly visible, almost formal, access for visitors and residents alike, but may also have ensured that the clothing and footwear of the Kirke family were kept relatively clean and free of mud. During those infrequent periods of warm weather it could have served as a place where people could enjoy a leisurely smoke, drink or any number of outdoor activities and tasks. Since the same type of flooring forms a continuum inside both the north and west ends of the house, cobblestones seem to have been a very practical construction material utilized in response to the heavy traffic these areas were anticipated to receive.

The physical location and size of this house with regard to Ferryland's seventeenth-century cultural and natural landscape may also hint at deeper, subtle meanings of control and power. Even though the Kirke house is not atypical of a North American gentry dwelling from the first half of the seventeenth century, it is exceptionally large by Colonial Newfoundland standards. This would have served as an undisputable and very visible symbol of the Kirkes' power within the community, conveyed to both the resident planters and the migratory fishing fleet. Furthermore, it demonstrates their commitment to place and shows that they were not merely living off the remnants of Calvert's Avalon but forging ahead with a new plan for the future of the colony. From what



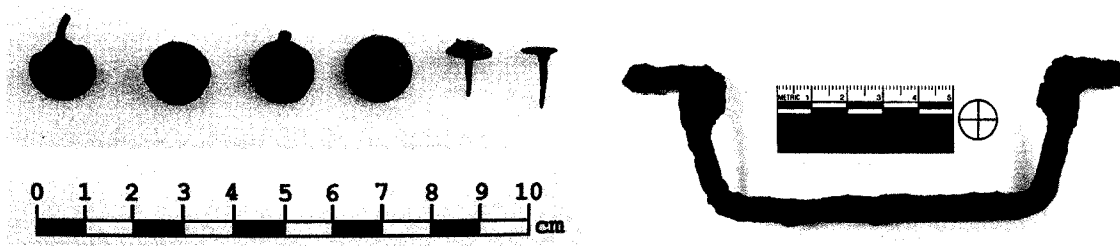
archaeology tells us about the layout of the Pool Plantation, the Kirke house was built in an ideal location back from the waterfront facilities, south of the cobblestone street and situated so as to provide a commanding view of the inner harbour. This setting ensured an adequate distance from many of the fishery-related activities, while still being situated in the middle of the busiest part of the village. The glass windows at the front of the house would have even provided for an unfettered view north to the storehouses, wharves and ships, allowing the family to monitor the very possessions that ensured their continued wealth and prosperity (Goodwin 1999:149).

#### 4.6.2 Furnishings

Furniture was one of the most expensive and heavily-invested items in the seventeenth century but unfortunately, it leaves little archaeological trace beside a few metal attachments such as tacks, small hinges, lock mechanisms, drawer pulls/knobs, lock escutcheons and curtain rings. Such a limited archaeological assemblage is silent on a plethora of furnishings manufactured without the use of metal fasteners or other embellishments. In some cases, we can infer the presence of certain types of furniture by looking at other artifacts such as expensive ceramics or decorative glassware. These particular items were often displayed on a sideboard, buffet or court cupboard along with a family's other prized possessions (Mercer 1969:79,105; St. George 1982:169). Considering that the Kirke family owned 218 tin-glazed vessels (including 71 plates and 15 lobed dishes), Chinese export porcelain and rare Portuguese *terra sigillata*, the own-

ership of such furnishings seems almost certain despite the absence of any physical remains in the ground.

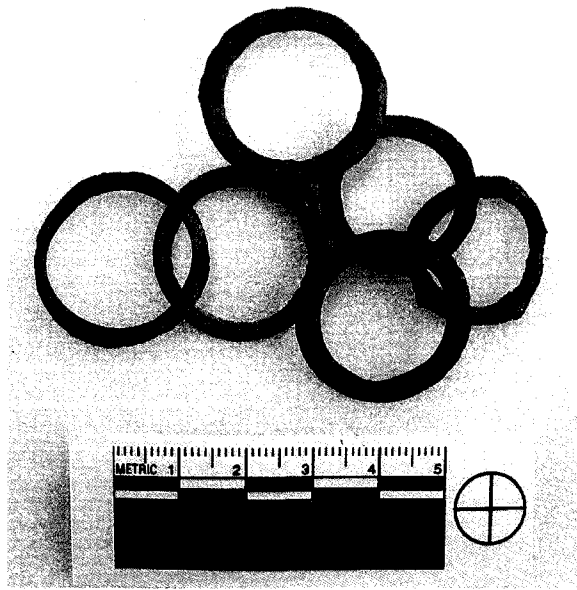
Nevertheless, without any detailed probate records to guide us, the scattered pieces of metal hardware are the only tangible source of information concerning the furnishings displayed inside the Kirke house. The composition of this entire furniture-related assemblage includes 6 brass, 13 iron and 1 white metal furniture tacks, 2 iron cupboard or drawer handles, an iron lock escutcheon/plate, 2 small brass/copper hinges, a padlock and 13 iron keys, 21 assorted iron hinges and 8 brass/copper curtain rings. The substantial number of tacks (Figure 75a) are an excellent indication that the Kirkes were once in possession of upholstered furniture, since both brass and iron tacks were commonly used to ornament and anchor the leather on pieces such as straight-backed side chairs (Noël Hume 1969:227). The two iron cupboard/drawer handles do not give us any real indication as to the types or number of cupboards, dressers or cabinets but they do compliment the ceramic evidence above and together demonstrate that these sorts of furnishings were present (Figure 75b). The brass/copper hinges could easily have come from a door on one of these cabinets/cupboards or equally from a small box/trunk. The same can be said for the lone escutcheon or lock plate. The various keys, iron hinges and padlock, on the other hand, probably have as much to do with interior/exterior doors as they do household furnishings, chests or large trunks.



**Figure 75a.** (left) Brass upholstery tacks.

**Figure 75b.** (right) Iron drawer handle.

Probably more so than any other single piece of furniture, beds were highly prized in the seventeenth century because they were the site of the most significant events in people's lives (Snodin and Styles 2001:48). It was the drapery around and above the bed – the curtains and tester – which were more highly regarded than the frame itself (Mercer 1969:75). Hence, the discovery of curtain rings on seventeenth-century sites are generally accepted as being suggestive of relative comfort and material wealth. Taken at face value, the eight brass/copper curtain rings are definitive proof that some of the Kirke family slept in curtained beds (Figure 76). This in fact may be true; however, it is also imperative to note that dozens of these “curtain” rings were found in various other contexts at Ferryland ranging from forge refuse to early waterfront facilities. The underlying implication is that some of these artifacts may have served a purpose other than curtain rings. Their presence along the waterfront suggests that *some* of these brass/copper artifacts once functioned as grommets, a small metal eyelet commonly sewn inside sails to prevent them from fraying. If such an identification is correct,



**Figure 76.** Selection of brass/copper “curtain” rings.

then arbitrarily identifying these small rings or hoops as part of domestic furnishings is more than a little misleading.

#### 4.6.3 Ceramics, glass, pipes and other material culture

The ceramic and glass vessels, clay tobacco pipes and other material culture associated with the Kirke house once held important meanings to those who owned and used it. These objects helped communicate what an individual and, by extension, a family thought about itself in relation to the larger community and is therefore emblematic of how they defined their social and economic station (Goodwin 1999:209). This sense of identity was achieved partly through the act of purchase and consumption and partly by investing things with purpose by placing them in a particular household context (Johnson 1996:189).

## Ceramics

One of the most common artifacts found in association with domestic structures are ceramics and as such, they vary from everyday functional wares to luxurious pieces used simply for display. On most seventeenth-century archaeological sites, ceramic forms consist mainly of plain, utilitarian earthenware vessels used for storage, dairying and cooking, along with smaller amounts of decorative earthenware and stoneware used in food and beverage service. While the cost of these utilitarian vessels was trifling, the price of tin-glazed earthenware and Chinese export porcelain could easily be upward of three to thirty times more, respectively (Baart 1987:2). The prohibitive cost of porcelain was not lost on the makers of tin-glazed wares and they soon began to incorporate oriental decoration and motifs into their repertoire. Its prepared white surface made tin-glazed earthenware a perfect medium for the adoption of rapidly changing styles and thus, an ideally suited status possession (Gaimster and Nenck 1997:175).

The decorative nature and differential pricing of ceramics lead archaeologists to compare the relative frequency of types as a means of gauging socio-economic status. This exercise is based on the simple, yet reasonable, premise that expensive ceramics were not often purchased by those who could not afford them. The proportion of expensive ceramics are tabulated and ranked next to other ceramic assemblages excavated from similar contexts; thus allowing for a crude, but somewhat effective, measure of the

amount of money that a household was able to allocate to the acquisition of nonessential wares.

Attributing differences in a ceramic assemblage to the socio-economic status of those who discarded it has both strengths and weaknesses. The analysis of numerous archaeological assemblages over the past several decades has shown that such a correlation does exist in some cases, although there is not always a clear-cut distinction. For example, the percentage of tin-glazed earthenware found on sites occupied by English planters during the seventeenth century is typically calculated at less than 20%, while gentry households can range from more than 30% to as low as 17% (Kelso 1984; Nixon 1999; Outlaw et al. 1976). Even though large amounts of expensive ceramics can indicate some measure of wealth and elevated social status, smaller numbers of these vessels are not necessarily indicative of lower status. This is because ownership of ceramic vessels was not universal for either the poor or the wealthy. A more common sight on the tables of many planters and laborers would be an assortment of pewter, wood or leather vessels, whereas pewter and particularly silver was often preferred by the wealthy (Horn 1988; Martin 1989).

In the case of the tin-glazed earthenware from the Kirke house, there is a total of 218 different vessels representing a diverse collection of plates, cups and mugs to dishes, bleeding bowls and galley pots. Quantitatively, this represents 41% of all the ceramic

vessels found – the highest recorded on any English site in Colonial North America. Such numbers are without a doubt a direct correlation of the wealth and purchasing power of its occupants. As shown in Appendix B, this breaks down into 135 food service vessels, 30 beverage service, 3 kitchen and dairy, 34 hygiene and 15 other. The heavy reliance upon tin-glazed wares for the presentation and serving of food (80%) not only suggests that earthenware may have comprised a large part of the household's entire food service assemblage but furthermore, it may have been preferred for daily use over pewter or silver. Of course, there is no archaeological or documentary evidence to indicate just how much pewter and/or silver the Kirke family possessed. The reason why the Kirkes may have chosen ceramics over metal vessels rests not only in appreciation of their beauty and aesthetic nature but also for perceived culinary differences and sanitary purposes. Gutiérrez states that seventeenth-century contemporaries often described how “food tasted better off pottery than off pewter and silver . . . ‘not picking up bad odours, and cleaner’ as Aldrovandi testified in 1618 . . . when describing how many European princes had abandoned silver plate in favour of porcelain” (2000:185). In the same manner, brightly coloured pottery was used to serve food and often affiliated with the domain of social enjoyment and entertainment at the table (Ibid., 186). Judging by the very high number of tin-glazed vessels utilized by the Kirkes, mealtime activities may have embodied these very same conventions.

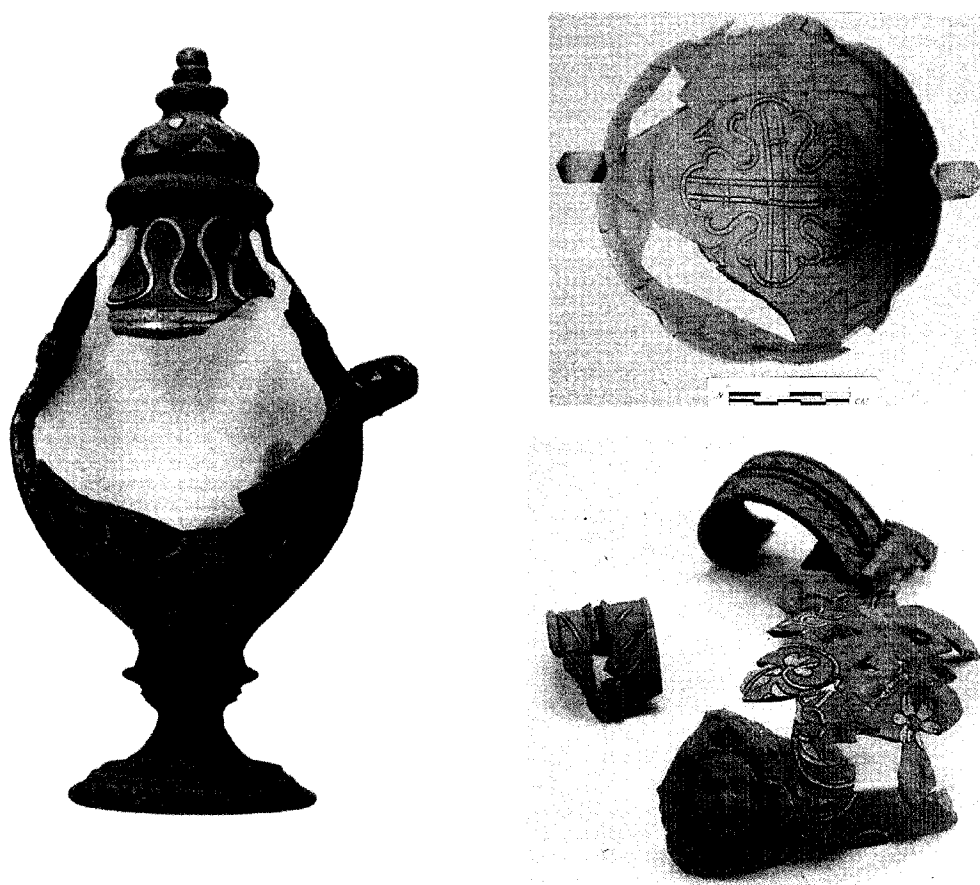
There are also specific status-laden ceramic forms that can be used as an effective indicator of socio-economic standing regardless of their quantity. Chafing dishes, posset pots, lobed dishes, salt dishes, sweetmeat dishes and other “formal” food service vessels attest to refined dining practices and the aesthetic sensibilities of its users (Yentsch 1990). Basically, they fulfilled a specific role in the social life of the household. The extent that this was important to the residents at Area F is demonstrated by the presence of 15 lobed dishes, 6 chafing dishes, 2 posset pots, 2 sweetmeat dishes, a salt dish, punch bowl, polychrome barrel costrel and a flecked glass salt or comfit. Viewed as part of a larger whole, the overall quantity, quality and variety of service vessels from the Kirke house signify that mealtimes were often large social affairs involving the complex preparation, presentation and serving of food – and just one of the means by which this family maintained its identity in the context of Newfoundland colonial society.

Chinese porcelain likewise falls within this formal food service category. Large quantities of porcelain were imported into The Netherlands by the Dutch East India Company during the seventeenth century, yet the European distribution of these vessels was so limited that sets of porcelain could only be found in the most exclusive homes in Europe (Baart 1987:3). They also appear infrequently on colonial sites from the seventeenth century, always in small numbers and often associated with periods of economic prosperity. The three Chinese porcelain vessels recorded from Area F are an excellent



case in point, for these nonessential wares comprise a meager 0.6% of the total ceramic assemblage (Miller 2005).

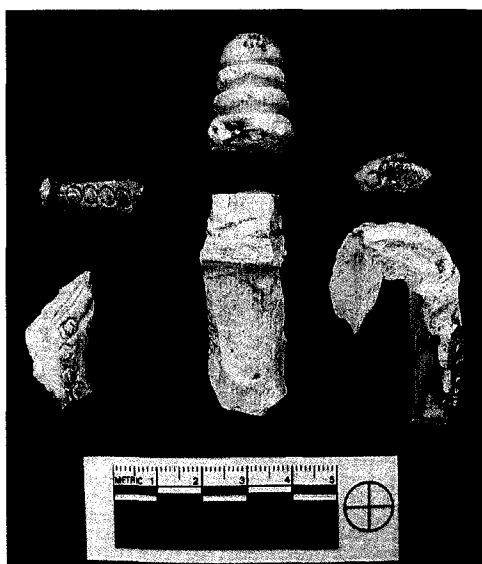
The most unusual of all the ceramics from Area F, and distinctive by its conspicuous design and limited practical utility, is Portuguese *terra sigillata* (Figure 77). These thin-bodied, redware vessels are clearly a status-sensitive object for their cost, social appeal and nonfunctional forms made them an item of ostentatious display. Such elegant



**Figure 77.** Portuguese *terra sigillata* vessels from the Kirke house. (left) Digital reconstruction of globe, height. 24cm; (top right) Bowl, diameter 12.7cm; (bottom right) Fragments of a handled pot.

Renaissance vessels became increasingly popular among the Portuguese and Spanish elite toward the end of the sixteenth century and had spread to the nobility and wealthy citizens in the Low Countries by the early seventeenth century (Baart 1992:274). Philip II of Spain gave them as presents to his daughters and England's Charles I numbered some among his collection of curiosities (Baart 1992; MacGregor 1996). Twelve Portuguese *terra sigillata* vessels have been unearthed at Ferryland, all dating from the Kirke period and 10 out of 12 were found in association with the house at Area F (Gaulton and Tuck 2006, in press). As the only collection of their kind yet found in Colonial North America, these vessels clearly point to the wealth and prominence of its owners and to their knowledge of fashionable Mannerist displays involving the collection of exotica, rarities and antiquities from distant lands (Trent 1982:377; Snodin and Styles 2001:85).

In keeping with the topic of unusual and extraordinary vessel forms, two anthropomorphic beverage service vessels were also found in the midden layers outside the Kirke house. One was a fairly large polychrome female figurine jug manufactured in the Saintonge region of France and the other, a tin-glazed bottle with a woman's face painted upon its neck (Figure 78a-b). Both are quite distinctive not only in terms of their decoration and elaborate moulding but also because they are clearly effeminate in nature. Considering that at least one, yet possibly both vessels were manufactured after 1650, they may have been purchased by Lady Sara Kirke or even her sister Francis Hopkins



**Figure 78a.** (left) Fragments of Saintonge polychrome figurine jug.

**Figure 78b.** (right) Rim and neck of tin-glazed bottle with painted face.

(Stoddart 2000b:79). If either of these two female entrepreneurs ordered and purchased such distinctive items then they may have conveyed a deeper underlying meaning as symbols of female autonomy in the male-dominated society of seventeenth-century Newfoundland.

#### Glass, pipes and other material culture

Other components of material culture that illustrate the social and economic standing of the Kirke family include glass vessels, clay pipes and objects pertaining to literacy. In general, the collection of wine bottles, case bottles and their accompanying embellishments, such as threaded pewter tops/lids (n=2) or bottle seals (n=1), are not dissimilar in quantity or quality to those found in other domestic contexts at Ferryland. Some pieces like the amethyst glass decanter/tankard and flecked glass salt or comfit are

quite distinctive and attractive. Yet, the greatest difference between the Kirke house glass and that from other contemporaneous sites in Newfoundland is in the preponderance of fine and decorative Continental glassware. Twenty-one glass beverage consumption vessels were identified from the Kirke house including: 4 English lead-crystal wine glasses, 1 Dutch *roemer* and a *vlechtwerkbeker* with spiral trailed or latticed decoration, 3 green goblets or beer glasses and 3 beakers or goblets – all of Dutch or German origin, a Venetian or *façon de Venice* wine glass with horizontal ridged bands across the bowl and 8 other fine glass vessels, 4 with “plain” stems and 4 molded in the “lion mask” style (Figure 79). Some of these glass vessels represent high status, conspicuous consumption objects, not only because they were finely decorated, fragile and expensive but in some contexts, were used as a means to help reinforce business, political and social relationships among the wealthy (Hurry 2001:32). The presence of *roemers*, gob-



**Figure 79.** Selection of glass vessels from the Kirke house.

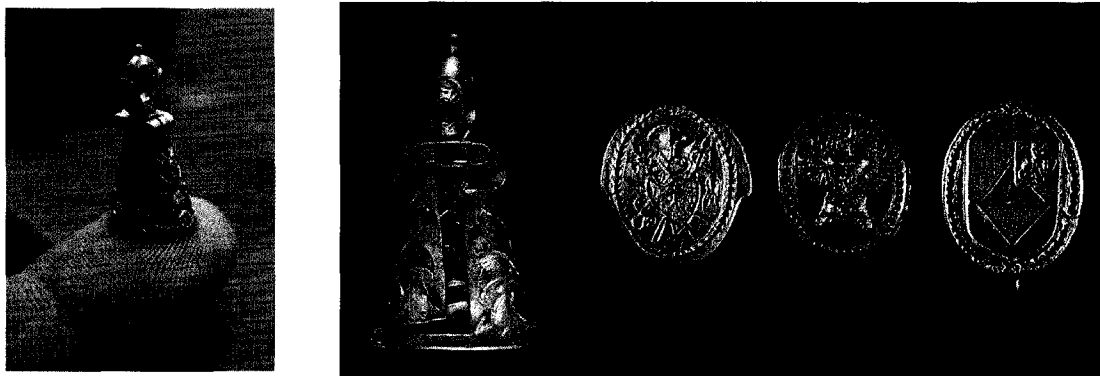
lets and beakers made in the Low Countries and Germany also indicates a certain measure of disposable income. These decorative vessels clearly cost more than an ordinary earthenware cup but were oftentimes within the budget of many middle-class European householders (Schama 1987:317).

Clay tobacco pipes likewise have proven to help establish socio-economic differentiation, despite the fact that their low cost made them available to all members of colonial society. On the most basic level, the sheer number of pipes from the Kirke house are suggestive of prodigious activity and a large household membership, both of which are indirectly correlated to the family's prestige and wealth. An obvious concentration of pipes made in the American colonies is another matter pertaining to the mercantile connections and influence of the Kirkes. Thirty of these pipes were found in the midden deposits at Area F and seven of them bear David Kirke's monogrammed initials. These pipes were almost exclusively associated with the Kirke occupation, and it is not until the latter part of the century that other American-made pipes, made in places like New England, begin to appear in other domestic assemblages at Ferryland. Only through Sir David's direct dealings with New England and Chesapeake merchants did specialized objects such as the DK monogrammed pipes arrive at the Pool Plantation. The fact that these decorative and distinct pipes had the owners initials facing away from the smoker, speaks of their use as objects of display.

Highly-decorated, relief-moulded pipes may also be suggestive of status, depending upon their relative quantity, quality and the specific archaeological context in which they are found. At the French fort in Pentagoet, Maine, Faulkner and Faulkner hypothesize that the majority of clay pipes, including several “Baroque” varieties, were reserved for officers and other important officials (1987:178). Although the archaeological evidence from Ferryland does not fully support the suggestion that smoking was necessarily more prevalent among prominent individuals, there are a larger quantity and variety of relief-moulded Dutch pipes from the Kirke house compared to any other domestic component presently analysed. These kinds of decorated pipes were not beyond the means of ordinary planters, but were likely considered an unnecessary expense for they served no practical function. The Kirkes may have purchased these pipes for the very same reason – the extra cost was not justified in the sense that it improved the smoking experience, but rather, was a function of aesthetics and their desire to enjoy some of the finer material goods available to them.

Monogrammed pipes, initialled tokens and other marked possessions symbolically denote literacy, and thus power, in a society composed primarily of transplanted Englishmen whose male populace was still over 70% illiterate by the mid-seventeenth century (Wrightson 1982:190). Literacy was stratified socially and was one of the ways that gentlemen – and increasingly the middling sort – could separate themselves from their average countrymen (Johnson 1996:197). Archaeological and historical records

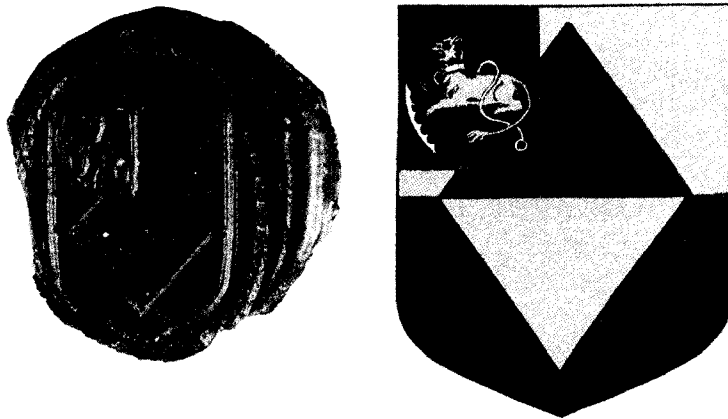
illustrate that some members of the Kirke family were literate and numerate, necessary skills in light of both their personal and business activities. Not only were the Kirkes able to purchase some of the more basic writing equipment such as inkwells, quills, paper and even sealing wax but recent discoveries have shown that Sir David possessed a very rare and expensive accoutrement in the form of a set of three hinged tripartite gold seals embellished with enamel (Figure 80). This extraordinary piece was unearthed



**Figure 80.** (left) Hinged gold seals set on a finger for scale; (right) side view of seals and the different impressions on the base of each stamp. The largest (at far right) is the Kirke family coat of arms.

to the northwest of Area F in 2003 (at a site designated Area G) but was not identified as belonging to David Kirke until the winter of 2005, when the J.R. Smallwood Centre for Newfoundland Studies provided funds to allow the seal impressions to be identified by the College of Arms in London, England. The results showed that the largest of the three seals bore the Kirke family coat of arms complete with an augmentation in the upper left hand corner which was awarded to David, Lewis, Thomas, John and James Kirke in 1631 for their bravery and service to the crown during their campaigns in New France

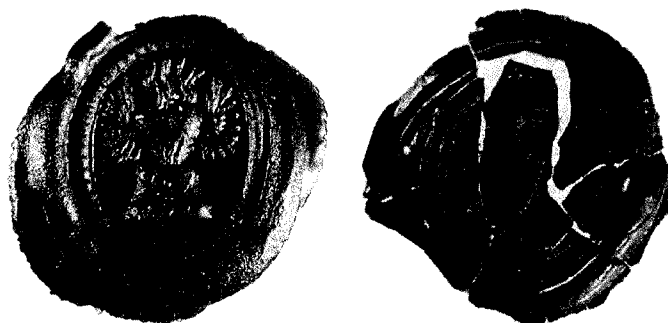
(Figure 81). The presence of these gold seals at Ferryland provides unequivocal proof that this very decorative and valuable object was once the personal possession of Sir David Kirke. Undoubtedly, it was used to mark his important correspondence but how it became lost will forever remain a mystery.



**Figure 81.** (left) Wax impression from the largest of the three gold seals; (right) Kirke family coat of arms modified and colored from original drawing shown in Howard and Chester 1883:33.

The two smaller seals illustrate a fanciful, yet figurative, trophy of arms and a religious motif in the form of a flaming heart upon a winged pedestal. The latter seal is especially relevant to this discussion of literacy for there was a very similar laquer seal impression found in the privy exhibiting a pierced and bleeding heart atop of which is a weeping eye (Figure 82; Tuck 1996:34). Not only is this similar in size, shape and decorative bordering to Sir David's seal, but the use of a heart as its central motif seems more than coincidental. Could it be that this seal impression is all that remains from a letter sent to Sir David by one of this siblings? If so, maybe one or more of the brothers





**Figure 82.** (left) Wax impression of the smallest of the three gold seals; (right) laquer seal impression found in the privy at Area C.

also had a set of personalized seals with a duplicate coat of arms but a different trophy of arms and religious motif for obvious reasons of identification. As intriguing as this possibility sounds we will never know for certain until a document written by one of the younger brothers, complete with an identical stamp, can be positively identified.

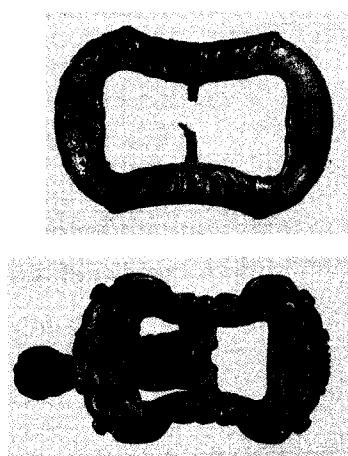
#### 4.6.4 Clothing/Costume

Clothing was one of the most important and visual measures of status in seventeenth-century society because what a man or woman wore reflected their worth in the eyes of their neighbours (Demos 1970:54). The variety of clothing seen at any given time could therefore be surprisingly diverse, not only in the types of articles but also the materials employed and methods of manufacture. The social value of these material trappings was certainly acknowledged, yet these garments likewise represented a sound cash investment. A good wardrobe could be the equivalent to a savings account, as articles of clothing were commonly used as a ready source of cash in emergencies (Gibb

1996:42). In the New England colonies, a fine suit for a man or a woman's petticoat tailored in Europe might cost as much as one pound, ten shillings in 1650; while the same sum would have bought ten bushels of wheat, a young steer, a half dozen goats, or a complete set of armour (Demos 1970:54-55). Such examples clearly demonstrate that despite their investment value, the decision to purchase expensive, fashionable apparel versus plain, functional attire was dictated by income and the needs and priorities of a household.

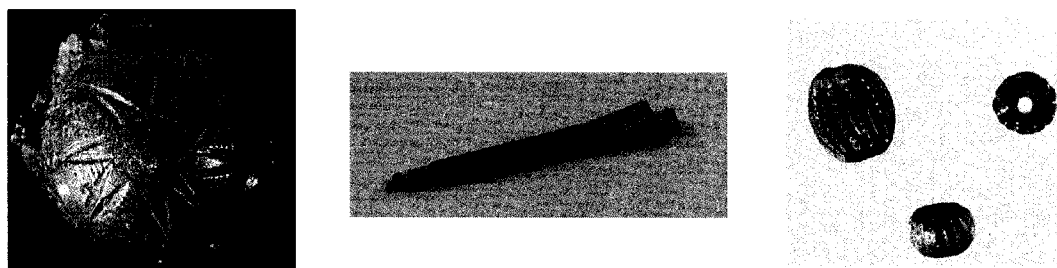
Since organic preservation is very poor on terrestrial sites, clothing is often inadequately represented in the archaeological record. Under ideal anaerobic burial conditions, textile fragments can sometimes be found but are often too few to allow for any definitive answers with regards to the variety of clothing worn by colonial settlers. Therefore clothing, like furniture, must be studied by looking at the more durable, associated materials such as buttons, buckles and beads. These items may not provide exact details as to the specific material composition of the Kirke family's clothing, but the quality and variety of these artifacts can paint an overall picture of personal appearance. As would be expected from a household occupied by both the gentry and their attendants, the six buckles, 22 buttons and 271 beads from the Kirke house range from highly-decorative pieces made from precious metals to plain objects of pewter or bone.

Determining who owned what is based upon basic notions of seventeenth-century attire, whereby adornments and fasteners of gold, silver, brass and glass were worn by the better and middling sort; while the less well-to-do donned outfits with fasteners of pewter, bone or wood. Some of these clothing accessories were of such high monetary value that they were even listed in inventories (St. George 1982:349). The most valuable and decorative pieces from the Kirke house include 2 silver-plated buckles, 2 silver buttons, a silver spangle and a small collection of gilt glass beads. The remaining buckles are of copper and iron, the buttons mostly of copper but with examples of glass, bone and pewter, and the glass beads comprised primarily of small seed beads followed by a few melon, cylindrical, amber and faceted jet varieties. Those artifacts made of silver or clad with gold clearly belonged to members of the immediate family and the same can probably be said for many of the decorative copper objects. This is probably best illustrated by the trapezoidal buckles – two of which are copper and the other two silver plate – that likely complimented a gentleman's shoes or breeches (Figure 83;



**Figure 83.** Two silver-plated buckles found at the Kirke house.

Mathias 2005: personal communication). In the same manner, two fancy silver buttons and a minute silver spangle no doubt once adorned a lady's petticoat or jacket (Figure 84). Many of the small seed beads found on the site may have served a similar purpose, for Mathias believes that they were a popular adornment on women's purses and jackets during the first half of the seventeenth century (Ibid.). The decorative oval beads covered with gilding, on the other hand, cannot necessarily be attributed exclusively to female attire, for very similar beads can be seen on a jacket worn by Charles I in a 1649 portrait painted by Daniel Mytens ([www.nmm.ac.uk](http://www.nmm.ac.uk)).



**Figure 84.** (left) Silver button, (centre) silver spangle, (right) gilt beads.

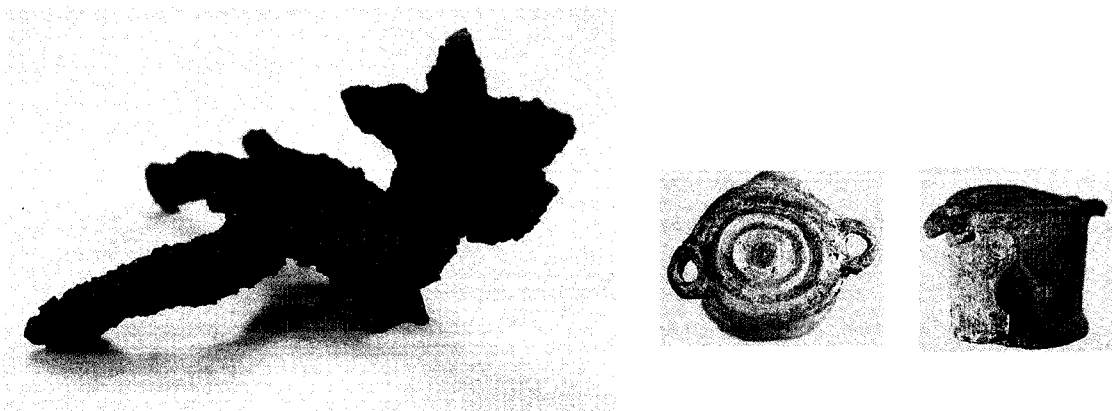
In consideration of the Kirke's attendants and many seasonal employees, all that can really be said of their clothing is that it was largely practical in nature and consequently, so were the accessories and fasteners. The bone, pewter and possibly even plain copper buttons could have come from an outfit worn by one or more of their subordinates, as could some of the 271 beads. A possibility which seems all the more likely after the discovery of over 70 small blue beads scattered between the cracks of the dairy

floor, hinting at some decorative enhancement in the clothing of a servant who once worked in this part of the house.

The functional, yet formal, accoutrements that completed the costume of a lady or gentleman were of equal importance as the clothing itself. For a man, this could include a sword, armour or other military accessories, boot spurs, walking sticks/canes and purely ceremonial articles like pole arms and maces – which were often carried in front of governors and other officials as a symbolic gesture of their status and importance (Trent 1982:53). As late as 1597, these items were still being restricted under English sumptuary laws stating that “. . . spurs, swords, rapiers, daggers, . . . buckles or studs of gilt could be worn only by the son of a baron, or higher” (Snodin and Styles 2001:112). Quite the opposite from the prominently-displayed accoutrements seen on a gentleman’s costume, that of a ladies was often embellished with many smaller objects like decorative beads, bodkins, finger rings, amulets, ear rings and other jewellery. These sorts of items were an unnecessary, if not impractical, expense for a fisherman’s family in Newfoundland or a small farming household in New England and thus, their presence on an archaeological site can be suggestive of a certain measure of wealth and status.

In keeping with their social and economic standing, the Kirke family bore these kind material trappings as part of their overall ensemble. At least one of the men in the

house wore silver-plated iron boot spurs and on occasion, donned a large leather strap or bandolier across his chest, complete with a set of pre-measured powder charges (Figure 85). Considering that the two boot spurs identified in the collection were of different

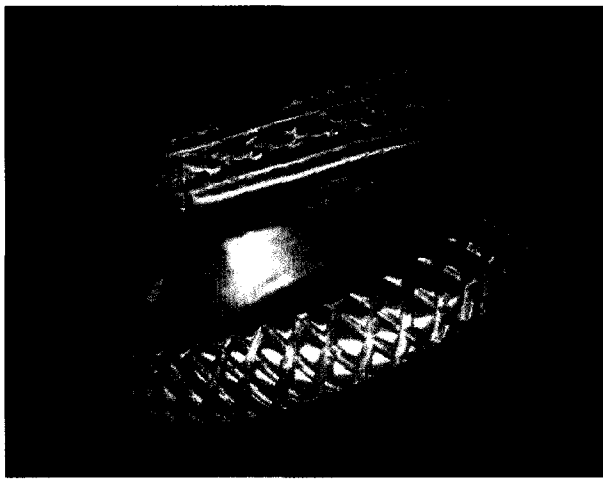


**Figure 85.** (left) Silver-plated iron boot spur, (right) top and side views of a lead bandolier cap.

styles, one having a rowel type spur and the other a prick-spur, this signifies that there were two different sets in use. Even though such items are more representative of gentlemanly attire than equine pursuits, their presence in the midden outside the Kirke house only enhances the possibility that the family used some of their horses for riding and hunting. It is even conceivable to imagine Sir David wearing boot spurs and a bandolier, sitting upon his horse in preparation for a hunting excursion inland, in the manner of a true English gentleman.

The lady(s) of the house was not only bedecked in clothing enhanced with colourful beads and buttons but someone was in the possession of two very decorative

and beautiful 18-carat gold finger rings (Figure 86). Both were found only a few feet apart at the top of the midden layer outside the house. The first was decorated with an incised, crosshatched pattern and the second manufactured using fine gold wire soldered into a filigree-work chain between two bands (Gaulton and Tuck 2003:220). It is tempting to speculate that these two rings were hidden, misplaced or lost during the French raid in 1696.



**Figure 86.** Two gold finger rings.

#### **4.7 The household economy, commerce and local production**

It is necessary to approach aspects of household economics with a broad and open perspective, not only because family members often contributed in a variety of different ways but also because some of the goods associated with the Kirke house have more to do with production than consumption. It is important to therefore consider differing income strategies and the overall household economy, including contributions made by women, servants and potentially children (Beaudry 1999:119). Over the course

of the Kirke occupation at Area F, there is archaeological evidence to demonstrate that the family was employed in a variety of endeavours that went well beyond fishing and trading. Tippling and later dairying both provided a more diversified economic base upon which to acquire the specie and/or in-kind services necessary to maintain their lifestyle and possibly even accrue a handsome profit in the process. Behind the scenes of these larger revenue-generating efforts, a plethora of lesser or more infrequent activities were also conducted including animal husbandry, cultivation and hunting. Furthermore, based upon the frequency and variety of hygiene-related artifacts, the Kirke house may have served as an occasional apothecary or hospital. Viewed in its entirety, all of these “other” tasks and services yielded a significant contribution to the overall household economy.

All facets of economics and trade in seventeenth-century Newfoundland revolved around the cod fishery. It was the *raison d’etre* for its resident planters, the merchant gentry and the many thousands of seasonal fishermen who plied its waters every year. The Kirkes, specifically Sir David, worked within the confines of the fishery to extract a tax on non-English fishing and sack ships, and charged to issue tavern licences and rental space to the Island’s permanent residents (Pope 1992). These authoritative powers served him well until the Interregnum government recalled David Kirke in 1651, after which they were never exercised again. Since their arrival at Ferryland in 1638, the Kirkes were also involved in prosecuting the cod fishery. They owned boats,



hired crews and were in possession of ample shore-based facilities, both of their own design and those formerly possessed by George Calvert. Because they were well-placed in terms of their personal and business connections, the family was also able to run an import and export trade in various commodities (Pope 1992, 2004). Many of these same goods were then resold to residents and seasonal fishermen at slightly elevated prices. This particular style of mercantile capitalism ensured the continuing success and prosperity of the Kirkes, a family who might well still be residing at Ferryland if it were not for the unfortunate events of 1696-97.

Since the Kirkes were clearly involved in the cod fishery, the presence of 15 fish hooks, 7 lead line weights, 1 fish prong and 5 whetstones from the various occupation layers comes as no real surprise. Nevertheless, such a substantial number of fishery-related items associated with the principal dwelling of one of Newfoundland's most prominent merchant-gentry families may imply that some seasonal fishing crews were housed under the same roof, rather than in separate quarters. It is also plausible that some of these same items could have once been stored inside the house for sale to resident planters or for distribution amongst hired crewmen at the beginning of each season. In either case, it was not the Kirkes themselves who used these items. Rather, they are a direct representation of income generated by way of the cod fishery and their seasonal employees.

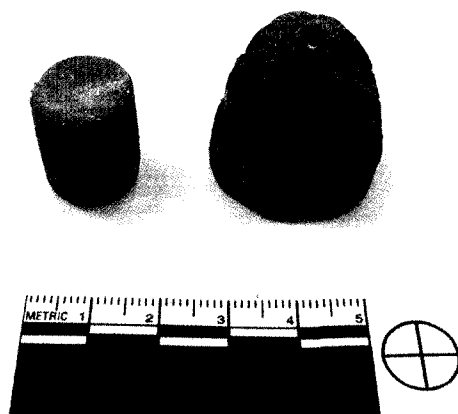
Artifacts such as axes, saw blades, iron hoes, cauldrons, kettles and ceramic pipkins/fleshpots can be viewed in a similar manner, for they were the tools and implements used by the Kirkes' servants to cut and saw wood, tend the gardens and prepare and cook meals. Such tasks were not befitting an individual of gentry status, so even though these items belonged to the Kirkes in the sense that they purchased them, it was their retinue of servants who were responsible for their operation. These objects helped produce the goods necessary for daily household consumption and thus represent part of the subsistence income or "direct labour input" contributed by these individuals (Wallerstein and Smith 1992:7). Duties relating to dairying and tippling likewise fell upon one or more of the family's servants. It would be hard to imagine Lady Sara milking cows and preparing butter and cheese, and later that evening serving up an assortment of alcoholic beverages to a group of boisterous fishermen. In consideration of the value placed upon alcoholic entertainment, dairying and various activities relating to the household's maintenance and operation, it is no wonder the Kirkes retained many servants.

With physical activity and menial labour reserved for attendants and seasonal employees, the complex and detailed operations of running the commercial and financial side of the Pool Plantation was placed squarely upon the shoulders of the Kirke family. Although not physically challenging, the ability to keep detailed financial and business records, organize and manage hired groups of fishermen, order and distribute purchased

goods in a profitable and timely manner, draw up bills of exchange, weigh and calculate the value of currency and maintain contacts with numerous individuals both overseas and in the colonies, would certainly have been taxing on the mind. Some of these matters pertaining to both local and international commerce are manifested by the presence of a personalized merchant's token, a large number of silver and copper coins, 2 lead scale weights and 6 bale seals.

The aforementioned DK lead token, in itself, is indicative of local commerce for this currency was struck in Ferryland and circulated by David Kirke in lieu of specie. Considering that it was found in the immediate area of the tavern room, the value of such a piece may have been commensurate to a glass of strong spirits or wine. Given the fact that David Kirke had to rely upon the manufacture of lead tokens and the occasional use of quartered coinage implies a shortage of hard currency. Despite this evidence for a monetary shortage, the discovery of 13 coins inside and outside the house certainly suggests that a great number of transactions were occurring on the premises – as do the additional 12 seventeenth-century coins found in nearby or mixed contexts at Area F. If the four silver and three copper coins in the midden outside were all lost over the course of daily activity, one can only imagine the amount of money that once passed through the Kirke house doors.

Determining the exact weight, and thus value, of metal coinage was an integral part of commerce in the Early Modern Period and a set of scales complete with a series of graduated weights was a necessary component of every merchant's toolkit. Evidence that the Kirkes' were in possession of such a device can be seen in the form of two small lead scale weights (Figure 87). One is a cylindrical form and the other almost bell-shaped, weighing 40.8g and 124.5g, respectively. Although somewhat crude in appearance, both pieces are complete and show evidence for having been trimmed down to achieve a desired weight. Converted into the English Troy pound measure for gold, silver or precious metals, these lead weights work out to be just slightly more than 1.25 ounces and 4 ounces. This poses an interesting question. Did David Kirke or someone else in the house have these pieces manufactured so that they weighed marginally more than standard Troy measurements? Such a practice appears to have been commonplace among many English traders who often used "... what suited them and what was available . . . with naughty intent . . . " until legislation was passed in 1878 to prevent such



**Figure 87.** Two lead scale weights found at the Kirke house.

occurrences (Graham 1987:5). If this did occur at Ferryland, then a transaction or debt paid in silver (however infrequently) and weighed out with the lead weights found at Area F, would yield the Kirkes just slightly more – and the unfortunate debtor would not be in any position to dispute it. Besides, who would have argued such a point, for in many cases it was the Kirkes who provisioned planters with the very goods they needed to survive. Although it cannot be stated with absolute certainty that these pieces were used on a balance (as opposed to a steelyard) scale, and discounting any possibility of scale imbalance or other unforeseen factors, it appears that this was just one more way for the Kirkes to make money, albeit on the backs of the resident population.

The discovery of six lead bale seals, one of them bearing an *EXON 78* stamp, shows that the Kirkes were likely involved in the importation, local trade and/or marketing of cloth. The fact that all these seals were broken open confirms that the contents they once secured were used at Ferryland or distributed for sale in Newfoundland, as opposed to being resold in other colonial markets, in which case the seals would have remained intact as an assurance of quantity and/or proof that excise was paid to the crown (Noël Hume 1969; Egan 1989). Several of the seals excavated from the Kirke house also exhibit a slight imprint from the cloth they were once affixed to, enough to determine that these fabrics once included tabby-woven wool, Holland linen and serge (Mathias 2005: personal communication). Some of this same material was presumably

utilized by one or more females in the house as there was ample evidence for sewing-related activities.

What can the archaeological assemblage from Area F tell us about overall patterns of trade and commerce in seventeenth-century Newfoundland, or more important, the connections between the Kirke family and other merchants and gentry in Colonial America and overseas? The first part of this question can be largely answered by looking at ceramics, which predicably illustrate the importance of Ferryland's connection to various ports in the West Country of England and the recurring pattern of triangular trade which saw Newfoundland salt cod sold for goods and specie in lucrative Iberian and French markets. Approximately 52.1% of all ceramic vessels from the Kirke house are attributed to English manufacture and 63.6% of these come directly from ports in the English West Country. The next most frequent categories include Iberian products, which comprise 22.3% of the total assemblage, German stoneware (8.3%), French (5.8%), Dutch (1.6%) and Italian (1.4%) ceramics, Chinese export porcelain (0.6%), other English/Dutch tin-glazed wares (7.2%) and redware of uncertain provenance (1.7%). The means by which many of these products eventually made their way to Newfoundland will not be elaborated on here, for they have already been thoroughly and effectively researched by Pope (1986), Crompton (2001) and Temple (2004). Instead, what warrants closer attention are details regarding certain vessel forms and speciality items recorded at the Kirke house, inasmuch as these goods are not commonly seen on

other domestic sites. These sorts of objects can sometimes imply a closer, more intimate, connection than the mechanisms of large-scale trade and economics, and may be able to enlighten us as to the extent of the Kirke family's contacts and influence.

Even more interesting is the fact that some of the unusual and/or expensive ceramics from the Kirke house have such a tightly-defined date of manufacture and/or associated archaeological context that it is possible to speculate on whether or not some of them came over as part of the initial move to Ferryland or if they were purchased later. Those vessels attributed to the family's existing possessions when they came over from England include a large collection of Iberian tin-glazed vessels and a much smaller quantity of Portuguese *terra sigillata*. Most of the Iberian vessels are blue on white painted plates and bowls made specifically in sets, and out of the 77 vessel forms identified, 57 or 74% were clearly datable to before 1650 (Stoddart 2000a). The Portuguese *terra sigillata* on the other hand, peaked in popularity during the early part of the seventeenth century. The only other Englishman known to have owned such elaborate and expensive forms was King Charles I – the same monarch who commissioned the Kirke brothers to sail to New France, granted David Kirke a knighthood and augmentation to the family's coat of arms, and who later wrote to Sir David in 1648 imploring him to care for Lady Francis Hopkins and so “take it as an especial service done to my self, and be ready to requite it.” (Pope 1993:45). These threads of evidence alone, do not necessarily demonstrate that such items were packed up and shipped from England to

Ferryland in 1638. However, some of these same fragments of Portuguese *terra sigillata* and blue on white Iberian plates were also found as part of a cache of broken, yet largely restorable, vessels originating from Area F but buried at Area C, along with a collection of pipe bowls from the 1630s-40s and a lead bale seal bearing the excise stamp of Charles I. Given the fact that both types of earthenware were present at Ferryland when this collection of items was discarded (ca. 1630s-40s), all evidence points to their being brought over from London as previous household possessions.

Even though many of these Iberian table wares could have been purchased through a merchant or shopkeeper in London, the *terra sigillata* vessels are suggestive of closer ties and connections with Portugal. Their rarity in England and uniqueness to Colonial America demonstrates that these socially-charged objects were not simply residual items acquired as part of a cargo of goods by way of the triangular trade, but instead, were specially-requested and manufactured items. This is clearly illustrated by both the closed globes and costrel found at Ferryland, for which no other duplicate has been found in any museum or archaeological collection. Could Sir David or Lady Sara have seen or heard about these exotic and unusual ceramic vessels and indirectly commissioned a potter from Estremoz to have a set made? If so, who would they have empowered to make such a purchase, considering that such vessels were manufactured for the courtiers, aristocrats and well-connected gentlemen of European high society? It is conceivable that an individual in Charles I's court may have made such an arrange-



ment in light of the fact that the King possessed a number of these vessels amongst his collection of curiosities. A lone tin-glazed vessel in the midden outside the Kirke house hints at another potential, even logical, connection (Figure 88). This rare and unusual Portuguese plate is decorated in its centre with a lion rampant surmounted by a closed helmet and surrounded by foliage – a painted armorial device which, in fact, is the coat of arms of the aristocratic dos Silva family of Portugal (Stoddart 2000b:61; Luckenbach 2002:206). We may never know to what extent the Kirkes were in contact with a member(s) of the dos Silva family but who better to arrange the manufacture of a collection of *terra sigillata* than well connected and wealthy Portuguese aristocrats. While these tin-glazed plates were purchased in some quantity by different members of the dos Silva family, the fact that only two other examples have been identified on colonial sites in North America, suggest some sort of familiarity, friendship or business connection (Luckenbach 2002).



**Figure 88.** dos Silva tin-glazed plate found at the Kirke house. Photo credit Eleanor Stoddart.

Direct contacts between the Kirkes and Chesapeake merchants can likewise be demonstrated through the archaeological record. This evidence is principally in the form of clay tobacco pipes manufactured in Virginia. Both DK monogrammed pipes and marbled varieties have already been described in Chapter 3, but what needs to be addressed here are what makes them indicative of direct trade as opposed to secondary goods acquired through American sack ships. The provenience of these pipes is the first indication of this connection, for they are found only in association with the Kirke occupation and not distributed for general use throughout the colony, as might be expected if they were sold as general cargo. Furthermore, the presence of at least 30 pipes dictates that there was a substantial quantity available for the family's personal use, as opposed to the discovery of a single isolated specimen, which could just as easily have been discarded by a visiting mariner. Finally, the fact that seven of these pipes were embellished with David Kirke's own initials strongly suggests that they were either specifically requested by him or equally likely, that they were commissioned by a Virginia merchant and sent as a gift to Sir David along with a shipment of tobacco. If the latter possibility is correct, then this represents a significant fellowship between merchant gentlemen and one which occasionally may have involved the reciprocal exchange and sharing of gifts. Additional evidence for a more generalized interaction and trade with the American colonies, specifically New England, can also be seen by the limited presence of crude red clay pipes and possibly even a small number of redware milkpans from a variety of domestic contexts dating from the second half of the seventeenth century.

#### **4.8 One roof, two lifestyles**

There were two sides to life at the Kirke house. On one side was Ferryland's premier gentry family, living in a comfortable house with upholstered furniture and curtained beds and enjoying an abundant and varied diet served upon decorative earthenware. At the other extreme were their retinue of servants, who lived under the same roof but likely slept in a straw bed, wore simple clothing, ate pottage or other boiled dishes and if they were fortunate, the occasional leftovers from the family's table. Both shared a symbiotic relationship for one could not function without the other. Servants were not kept simply as a marker of status but to perform the myriad duties relating to the daily operations of the household. They seeded and tended gardens, cut and hauled wood, cleaned and maintained the house, prepared and cooked food, served the family their meals and cleaned up after everything was finished. By their very nature, such tasks were unbecoming a gentleman or his family. Instead, their time was spent in running the day-to-day operations of a fishing plantation, hiring and provisioning crews, keeping their finances in order and enjoying a variety of leisurely activities such as hunting, riding, entertaining important visitors and partaking in the occasional pipe of tobacco and drink of wine or spirits. The extent to which life at the Kirke house compared to Newfoundland's other seventeenth-century residents and also that of other gentry families in Colonial North America is the topic of the next chapter.

## **Chapter 5**

### **Ferryland's Shores and Beyond:**

#### **A Comparison of Structural Components and Artifact Assemblages**

The preceding chapters have provided detailed evidence that the Kirke family resided in a comfortably-sized, timber-framed dwelling, dressed in fine clothing adorned with decorative embellishments and utilized a variety of fancy and expensive ceramics for serving, eating and display. Yet to assess truly the relative wealth and social standing of the Kirkes, they must first be placed within the larger colonial context of seventeenth-century Newfoundland. How does the Kirke house and its associated artifacts compare to other contemporaneous domestic structures in the Pool Plantation and also to those along other parts of Newfoundland's English Shore, particularly at Renew's and Cupids? A comparison at this regional and temporal level has the potential to produce some very keen insights, for all of these Newfoundland residents encountered the same social, economic and environmental conditions. The results of the Kirke house excavations will not only enhance our understanding of life in seventeenth-century Newfoundland but also provide a much more complete picture of the architectural and material diversity utilized by past residents of this province.

After the Newfoundland comparisons have been addressed, the latter half of this chapter will encompass a much broader geographical scope and include other seven-

teenth-century colonial sites in English North America. The main goal of this larger colonial comparison is to see if, how and to what extent, different colonial contexts influenced the lifestyle of the New World gentry. Are the structural and artifactual remains similar regardless of differences in colonial society, economy and environment – or are there obvious distinctions? Structural remains and quantitative data from sites in Virginia and Maryland will be compared with the results from the Kirke house in the hope that some broad, yet tentative, generalizations can be gleaned from the archaeological data.

### **5.1 Intra- and inter-site analyses in Newfoundland**

The focal point of any comparative analysis of seventeenth-century domestic occupation in Newfoundland obviously has to revolve around both architecture and artifacts. The reasons for this dual focus, as already discussed in Chapter 2, are that the house and the goods within it expressed a family's identity, aspirations and wealth. Architectural comparisons will therefore focus on the overall size of the dwelling, its internal divisions and layout, the presence/absence of connected outbuildings, number of fireplaces and evidence for glazed windows. Typically, Newfoundland's resident planter population consisted of small family units that only accommodated hired hands during the busy summer months and thus, they did not require an expansive abode with many internal divisions and multiple hearths. The domestic goods used by these planters likewise exhibit many similarities. Previous analysis has consistently demonstrated a heavy

dependence upon stored and imported provisions, large numbers of vessels relating to alcohol consumption and an almost total lack of evidence for dairying activities. As will be illustrated below, the findings from the Kirke house paints quite a different, though not totally unexpected, picture with regard to previous interpretations of life in seventeenth-century Newfoundland.

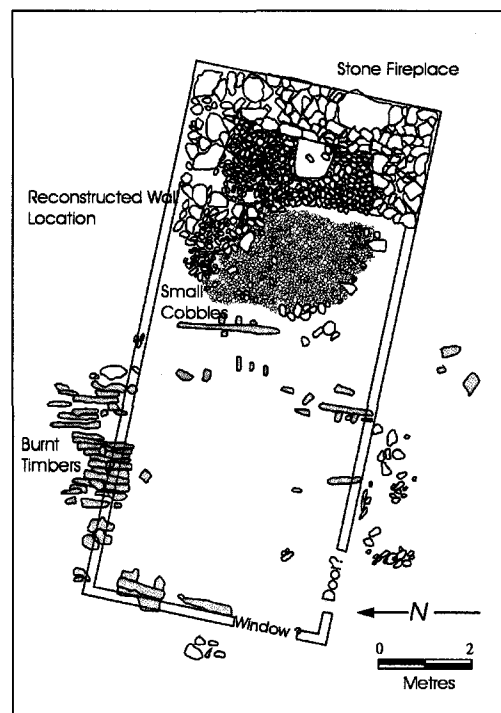
#### 5.1.1 Architecture

Let us first compare the dwellings and associated structural remains. Standing one and a half or two stories high and measuring approximately 1400 square feet on the main level, the first phase of the Kirke house is by far the single largest domestic structure excavated in seventeenth-century Newfoundland. After 1660, the addition of both the buttery/pantry and dairy elevates the total square footage to over 1700 square feet. Taking into consideration the possibility that the adjacent stone building was also utilized by the Kirke family, then what we see is not just an excellent example of the medieval “unit system” transplanted to the New World, but a truly expansive series of interconnected and adjoining domestic units.

Residents of the Kirke house were kept warm by and cooked at one of three fireplaces, two of which were in the main house and the other in the adjoining 12 by 22 foot lodging/servants’ quarters. The large number of window glass fragments (n=2,055) and lead caming (n=122) clearly dictate that the facade of the house had more than

ample fenestration and the cobblestone courtyard that lead from the main street added an extra air of importance to the dwelling's overall presentation and appearance. It is notable that the Kirkes choose to have their house built of timber, employing techniques and construction materials that were available to all other Newfoundland residents. Instead of erecting a more "modern" double pile house of stone or brick – which they could certainly afford – the Kirkes built within the confines of the existing physical and domestic landscape. It is possible that this may have been influenced as a matter of expedience, yet there is no archaeological evidence for later attempts by the Kirkes to build a more durable structure. It seems they were not only satisfied with the functional operations associated with a central service room house plan, but also with the structural materials utilized, this being the same as all other domestic buildings erected during the time of the Pool Plantation.

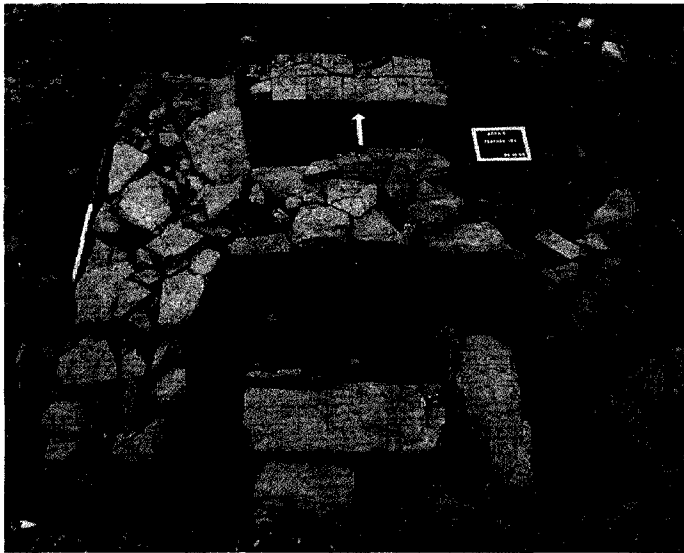
The closest comparable domestic structure in Ferryland was excavated at Area D (Crompton 2001). Built around 1670, this sill-on-grade, timber-framed dwelling of two rooms measures 17.5 by 39 feet and contains a large gable-ended stone fireplace and glazed windows (Figure 89). The Area D house was quite large and comfortable as far as Newfoundland planter's houses go but it still pales in comparison to the scale and scope of the Kirke house. The only other domestic unit at Ferryland for which there are complete dimensions is the 15 by 30 foot house uncovered at Area B (Nixon 1999). Although unexceptional in size and architectural makeup, this second seventeenth-centu-



**Figure 89.** Plan of architectural features from planter's house at Area D. Image courtesy of Amanda Crompton.

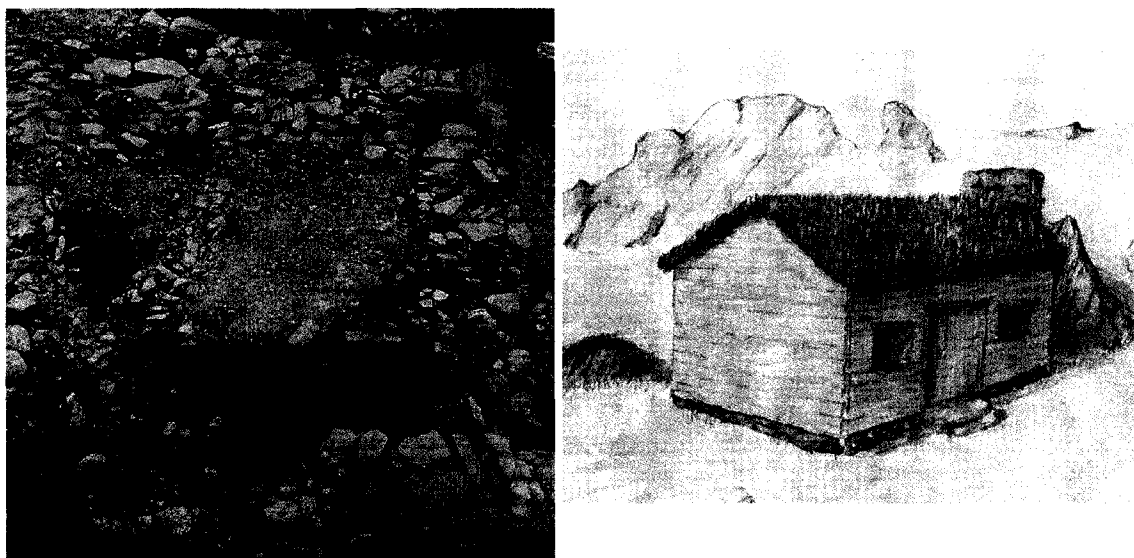
ry dwelling, built in the 1660s, helps to form the beginnings of what may be a recognizable pattern for planter's houses at Ferryland. With the exception of a partially-excavated lobby-entry house with a H-shaped fireplace at Area G (Figure 90), all domestic units dating from the time of the Pool Plantation have consistently proven to be two-roomed dwellings with gable-ended stone fireplaces. Future excavation may or may not reveal that a two-room house plan was a generally accepted standard amongst prosperous planters throughout the English Shore, but evidence from within the Ferryland colony certainly points in that direction. However, it is also possible that these examples from Ferryland may have been directly influenced by the social and economic sphere of the Kirkes' Pool Plantation and thus, are an inaccurate representation of middling planter lifestyle.





**Figure 90.** Overhead view of H-shaped fireplace at Area G.

There are only two other comparable seventeenth-century domestic structures outside of Ferryland. One is located in the nearby community of Renews and the other, in the Conception Bay town of Cupids. The first of these dwellings was a small 14 by 20 foot, one-room planter's house occupied from 1650-70 (Mills 2000; Figure 91). This compact, albeit functional structure once served as the abode for a planter and possibly his family, while also seconding as a tippling house. A lone hearth was set in the corner of one gable end and there appears to be no evidence for either interior partitions or glazed windows. This house may be a more accurate representation of the vernacular architecture utilized by most of Newfoundland's typical planter families. Yet this is only one component of seventeenth-century society, and to understand truly life in Colonial Newfoundland we must look at the broader picture.



**Figure 91.** (left) Architectual features revealed during the excavation of a small planter's house at Renews; (right) Artistic impression of Renews house (Note: door was later revealed to be at the southwest gable end). Images courtesy of Steve Mills.

Comparing the Renews house with that of the Kirke house at Ferryland helps to do just that, for it best illustrates the two extremes of what constitutes a habitable, year-round dwelling in seventeenth-century Newfoundland. The occupants of both houses owed their existence largely to the fishing industry; they required a hearth or fireplace for warmth and cooking, and relied upon overseas contacts and trade for the majority of their equipment, foodstuffs and other provisions. Yet, their architectural expressions were vastly different. In terms of its size, the total square footage of the planter's house at Renews is a mere 20% of that initially utilized by the residents at Area F. This does not mean that the Renews house was uncomfortable or inadequate in any sense, for it was likely best suited to the harsh winter climate and the daily needs of its occupants. The 12 by 36 foot dwelling at Cupids can be viewed in the same light, for it is believed

that this was one of the first houses erected in the officially-sanctioned, London and Bristol Company colony (Figure 92). The hall, with its large gable-ended stone chimney, served as the primary living space, while the much smaller partitioned units at the back of the house were most likely reserved for equipment and provisions (Gilbert 2003). Such a structure was well suited to the functional operations of this early communal colony because its “lower” half served for storage instead of additional sleeping quarters or private space, which one would often see in a single family dwelling of two rooms or more.



**Figure 92.** Early seventeenth-century dwelling excavated at Cupids. Image courtesy of Bill Gilbert, Baccalieu Trail Heritage Corporation.

The differences between the Kirke house and all other domestic structures excavated along the English Shore are largely the result of both the real and perceived needs of the Kirke family. The number of immediate family members and their retinue of ser-

vants would have encouraged the construction of a large one and a half or two-story dwelling, complete with partitioned rooms, multiple hearths, and a semi-attached lodging/sleeping quarters. The cobblestone courtyard and several glazed windows along the house's northern facade were additional embellishments befitting a family of their social and economic background. Accommodating a tavern into the household's daily operations was a sound business decision that helped supplement and diversify the family's income. The later addition of a buttery/pantry and dairy took place after Sir David's death and thus showed how the family continued to prosper, for it represents a physical need for additional space. This service wing functioned primarily for the storage of domestic goods and provisions, but in the case of the dairy some of these products may have also been redistributed and sold to the larger community. When viewed in this all-encompassing manner, the Kirke house was truly a multi-functional compound, more so than other dwelling yet discovered in Colonial Newfoundland.

### 5.1.2 Material culture

Considering its size, the number of rooms and various activities taking place within the Kirke house, one would expect the sheer quantity and variety of material culture to well exceed that of other contemporaneous dwellings. This is an accurate assessment simply from a quantitative standpoint, as there were 90,661 objects recorded in the undisturbed events associated with the Kirke occupation. After these artifacts were

analysed, the minimum number of vessels worked out to be 531 ceramic containers, 75 glass vessels and 1,623 clay tobacco pipes.

As impressive as this collection sounds, it is not extraordinary compared to the nearby planter's house at Area D, which was half the size, occupied for half as long and contained 291 ceramic and 60 glass vessels. Likewise, the number (n=114) and percentage (22%) of ceramic beverage service vessels from the Kirke house are befitting its function as both a residence and tippling house; yet are not unlike other contemporaneous dwellings at Ferryland (Table 3). As previously noted, the reasons for these quantitative similarities include differences in the Kirkes' cooking practices and the lesser need for ceramic storage vessels because they kept livestock. Another reasonable explanation

**Table 3.** A Comparison of POTS categories from selected sites in Newfoundland.

<b>POTS Category</b>	<b>Kirke House ca.1640-1696</b>	<b>Area D Dwelling 1670-1696</b>	<b>Area B Dwelling 1660-1696</b>	<b>Renews House 1640-70</b>
<b>Storage</b>	21	42	35	42
<b>Preparation</b>	2	3	6	0
<b>Dairy</b>	9	4	3	0
<b>Cooking</b>	4	12	7	16
<b>Food Service</b>	32	13	19	9
<b>Beverage Service</b>	22	24	29	27
<b>Hygiene</b>	7	3	1	7
<b>Other</b>	2	0	0	0

explored earlier was that the Kirkes were once in possession of a sizable quantity of silver and/or pewter tableware, and through a combination of looting and poor preservation, these artifacts were undetectable in the archaeological record. Finally, it is also possible that some of the Kirkes' provisions were acquired from other planters through taxation. For example, Thomas Cruse reported that part of his yearly rent to David Kirke included "...a fat hog or 20 shillings in lieu thereof" (Cruse 1667, in Pope 1993:103).

Clay pipes, on the other hand, greatly outnumber those found anywhere else in Newfoundland by a margin of well over ten to one, indicating prodigious amounts of tobacco consumption. The houses at Area B and Renew's contained a minimum number of 83 and 154 pipe bowls respectively, whereas the quantities from the Area D house and the early dwelling at Cupids have yet to be fully tabulated and are thus unavailable.

The greatest divergence between Area F's artifact assemblage and that of other domestic components in Newfoundland is in the overall variety and quality of material culture. This of course is a direct result of the Kirke's predilection for decorative ceramics, pipes and glass vessels, some of which were very specialized objects. DK initialled pipes, fine Venetian glassware, hundreds of tin-glazed vessels and close to a dozen vessels of Portuguese *terra sigillata* all demonstrate not only the wealth and influence of this family, but also their taste for colourful tableware and curiosity pieces. These kinds of exceptional luxuries were unnecessary and impractical for the majority of planter

society. Even if they desired such specialized and fanciful accessories, almost all had to live within certain monetary constraints and were likely unacquainted with the specific trading networks by which some of the more exotic goods could be acquired.

Food service vessels also figure prominently in the Kirke house assemblage (n=168; 32.4%), which is to be expected considering their gentry upbringing and “polite” dining practices. The presence of 15 lobed dishes are notable in this regard, for it demonstrates the importance of washing one’s hands prior to mealtime. Other objects, such as gold rings, silver-plated boot spurs, silver buckles and buttons are an additional indication of their social standing and personal beliefs with regards to how they appeared, and were thus perceived, in public. Furthermore, it is worthy to note that compared to other nearby planters, the Kirkes invested much more in dairy production (8.7%) and apparently relied to a lesser extent upon ceramic wares for the storage of provisions (21.2%). This of course, is in complete opposition to that seen in all other domestic assemblages in Newfoundland, the reasons for which have already been outlined in the previous chapter.

## **5.2 Perceptions of gentry dwellings in Colonial North America**

The Kirke house was not extraordinarily large nor well built compared to other colonial dwellings of the gentry, but is well within the norm for both the period and its North American setting. As early as the 1620s, Abraham Peirse had a 21 by 41 foot

hall and parlour dwelling and 8 by 10 foot attached porch built for him at the Flowerdew Hundred plantation (Deetz 1993:35). Only a few years before George Calvert's last representative was expelled from the Ferryland colony, his son Cecil was having an 18 by 50 foot timber-framed house built for his family at St. Mary's City, Maryland (named the Calvert House site) which was soon expanded to 40 by 67.5 feet (Miller 2003:232-33). Another early house in St. Mary's City was constructed in 1638 for the chief secretary and attorney general John Lewger, measuring 20.5 by 52 feet (Ibid., 234). A much more complex dwelling measuring 18 by 50 feet with an attached 18 by 30 foot kitchen, 10 by 20 foot buttery, 18 by 32 foot east wing and 18.5 by 15 foot cellar was established at Kingsmill, Virginia in the 1640s for Colonel Thomas Pettus, a wealthy member of the developing plantation aristocracy (Kelso 1984:76-78). Charles Calvert's house Mattapany, built in 1666, was a substantial 25 by 50 foot lobby-entry, brick dwelling set on a 2 foot wide foundation and contained a central-chimney that heated two rooms on each floor (King and Chaney 1999:55). The house constructed for Josiah Winslow, the thirteenth governor of Massachusetts' Plymouth Plantation, was a two story, 27 by 36 foot double-pile house with an accompanying 8 by 8 foot projecting porch (Beaudry et al. 2003:169).

Although these examples do not encompass the entire compilation of seventeenth-century gentry dwellings excavated in Colonial North America, there is enough to show a continual and recurring pattern. In almost all cases, the housing built for promi-



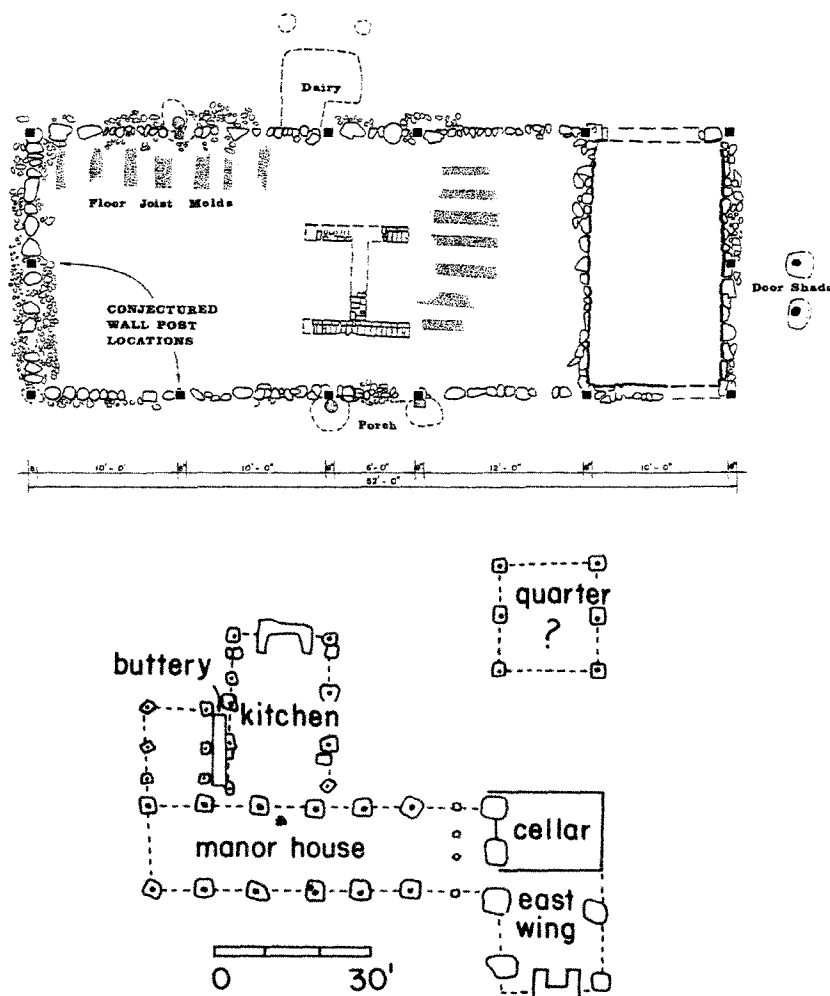
nent families is distinguished from other contemporaneous colonial houses by either their size/number of rooms, modern layout or use of expensive, and oftentimes, imported construction material. Unfortunately, the material culture assemblages from many of these same gentry dwellings in both the Chesapeake and New England are still being analysed or have yet to undergo the detailed quantitative research that would allow for meaningful comparison with the Kirke house findings. This lack of raw data prevents any broad comparisons at the present time; however, in the near future such an examination would surely reveal some intriguing results.

The two gentry dwellings for which there are definitive results are the Lewger house at St. Mary's City, Maryland and the Pettus manor at Kingsmill, Virginia. As it turns out, these domestic structures are probably the two best dwellings for comparative purposes, as their dates of occupation closely bracket that of the Kirke house. The Lewger house, also known as "St. John's," was built in 1638 and occupied until approximately 1695; whereas the buildings associated with the Pettus manor were constructed around 1640 and occupied until the turn of the century (King 1988; Kelso 1984). St. John's was a 20.5 by 52 foot timber-framed, one and a half story, hall and parlour dwelling with a central chimney, brick-lined cellar and prepared stone footing, and which also contained a small 10 by 10 foot dairy and 20 by 15 foot outbuilding added in 1640-50 (Stone 1982). The Pettus manor was a medieval-style collection of separate but attached rooms built using a post-in-ground construction technique and included a prin-

cipal dwelling of 18 by 50 feet, an 18 by 30 foot kitchen, 10 by 20 foot buttery, 18 by 32 foot east wing and 18.5 by 15 foot cellar (Kelso 1984).

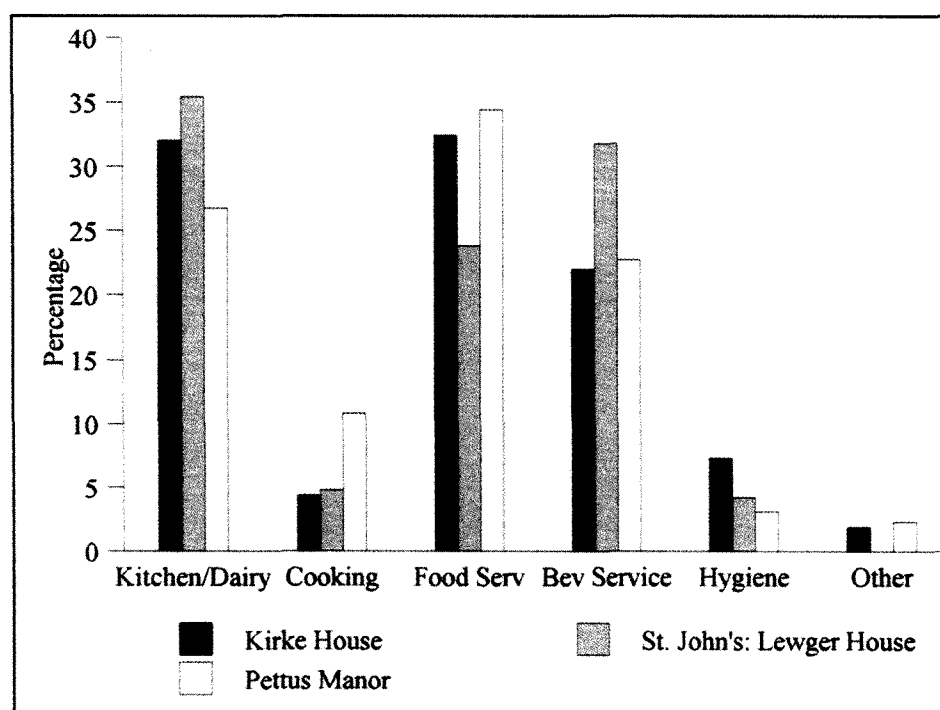
The initial impression when first looking at these two other domestic structures is how similar they are to the Kirke house (Figure 93). In fact, all three of the core or “principal” dwellings differ by only about a foot or two on a side. The Lewger house and the Kirke house dimensions are almost identical and both had dairies added on at a later date. The rambling appearance of the Pettus manor is akin to the Kirkes’ multi-unit compound, which included structures from the earlier Calvert era along with other subsequent additions. The present archaeological evidence for the Kirkes’ domestic utilization at Area F starts at around 1440 square feet on the main floor and later reaches over 1700 square feet (excluding the adjacent stone building). The square footage for St. John’s totals 1446, whereas the Pettus manor encompasses almost 2500 square feet.

As shown in Figure 94, the ceramic assemblages from all three households likewise demonstrate some very close parallels in terms of their overall functions. The Pettus manor does show a somewhat lower percentage of kitchen and dairy-related ceramics, but this is offset by a greater quantity of cooking vessels, especially the 31 pans. This point merits further discussion. The classification of a pan versus a milkpan – and its resulting categorical and functional separation – can be somewhat fuzzy at the best of times, especially when dealing with small rim or base fragments. In any case,



**Figure 93.** (top) Lewger house, (bottom) Pettus manor.  
Lewger and Pettus maps courtesy of Garry Wheeler Stone and Bill Kelso.

“pans” may well have been used for both kitchen and dairy-related functions, especially since the only formal distinction between a pan and a milkpan is simply that of overall diameter (Beaudry et al. 1988). If some of the pans from the Pettus manor served a function other than that related to cooking, then the percentage noted above would be much closer and in reality, likely much more accurate in terms of functional classification.



**Figure 94.** Comparison of POTS categories from Kirke house, Lewger house and Pettus manor.

All three occupations also show approximately 55% of their vessel totals relating to both food and beverage service. At St. John's, there is a somewhat larger percentage of beverage service (31.8%) and slightly lesser amount of food service (23.8%), which combined makes up 55.6%; whereas both the Kirke and Pettus households illustrate the opposite trend but with the same overall result of 54.4% and 57.1%, respectively. The preponderance of beverage service vessels at St. John's may, in part, be reflective of the fact that this building was converted into an ordinary in 1668 and served as such until about 1695 (King 1988). The Kirke and Pettus households, on the other hand, functioned primarily as domestic buildings with a lesser focus on other activities such as tippling.

There are also distinct similarities in the prevalence and function(s) of tin-glazed earthenware amongst the ceramic assemblages. Although there are no definitive numbers available for the Lewger house, both the Pettus and Kirke Plantation's assemblages contained over 30% tin-glazed earthenware. This translates into 111 vessels from the Pettus manor (31.5%) and 218 from the Kirke house (41.1%). Probably the most telling feature is the extent to which tin-glazed vessels, some of them in matching sets, comprised the total food service assemblage. Sixty percent of the vessels used to serve and present meals at the Pettus house were tin-glazed wares, while the Kirkes adorned their table with 80% of these same kinds of vessels. Clearly, a substantial investment was made toward the purchase of attractive and decorative food service vessels by both families.

Unfortunately, this quantitative comparison has to end at ceramics as there are no available data on either clay tobacco pipes or glass vessels, a fact which highlights the need for researchers to adopt a much broader-based approach that includes a quantitative and qualitative assessment of most artifact types. The only remaining components of material culture available for comparison are those specialized and expensive items oftentimes found in association with well-off inhabitants or those of a gentry upbringing. This can include things such as Chinese export porcelain, Portuguese *terra sigillata*, objects embellished with personalized marks or initials and other items that demonstrate either literacy, a ready supply of disposable income or social standing within the larger

community. Chinese export porcelain is poorly represented in all three gentry assemblages and is only found in small numbers at the Kirke house (n=3) and Pettus manor (n=2). However, it seems that the Kirkes had access to Portuguese *terra sigillata*, which as it turns out is a much rarer item among the colonial gentry. In terms of expensive and decorative tableware, jewellery or precious metal artifacts, at least one member of the Pettus household ate with a fancy enamelled knife and wore a bracelet with chalcedony stone links (Kelso 1984). The Kirke family was well in keeping with gentry appearances also, for family members were bedecked in a variety of costume-related accessories including silver-plated boot spurs, silver buckles, buttons and even gold rings.

In addition, the Pettus manor and the Kirke house both demonstrate that at least one of its residents smoked their own personalized, initialled pipes. TP pipes and bottle seals were found at the Pettus manor and are thought to have once been the personal possessions of Colonel Thomas Pettus or his son Captain Thomas Pettus (Kelso 1984). DK pipes were excavated in the midden outside the Kirke house at Area F, and in turn, are believed to have belonged to Sir David Kirke. The Kirkes also appear to have acquired and consumed a greater number of clay tobacco pipes manufactured in the American colonies compared to Ferryland's other residents. Whether this represents some aspect of social differentiation and distinction is uncertain; however, exactly the opposite pattern was discovered at the St. John's site in Maryland. Here archaeologists found that locally-made pipes were clustered around servants' quarters, whereas import-

ed white clay pipes were largely reserved for those occupying the main house (Keeler 1978, in Miller 2003:237). In the case of both the Kirke house and St. John's pipes, the important factor seems to hinge upon the ability to control and consume imported goods, rather than on the actual origin or physical composition of the material culture in question.

### **5.3 Discussion**

For all three of these colonial families, the size and layout of their dwellings and the variety of ceramic vessels found within are much more alike than they are different. Yet, there are some very important differences. The Kirke house, Lewger house and Pettus manor all demonstrate a very close temporal time frame and span of occupation – so why is it that the overall quantity of material culture from the Kirke house vastly exceeds that found in the other two houses? The minimum number of ceramic vessels alone is the first hint of some significant differences. The Kirkes discarded at least 531 ceramic vessels over the course of their occupation, whereas only 336 and 352 were found at St. John's and the Pettus manor, respectively, a difference of over one and a half times as many vessels.

Such a distinction is only magnified if one compares the sheer volume of material excavated from the Kirke house with that from other gentry occupations in Colonial America. For example, the artifact assemblage from the Calvert House, first occupied by

Leonard Calvert in the 1630s – and which later served as both the official statehouse and then an ordinary – contained what has been described as an exceptional number of pipes, glass and ceramic fragments (Miller 1994:2003). The 5,479 pieces of clay pipe, 2,267 ceramic fragments and 2,300 sherds of glass are a noteworthy collection, especially considering that there are several Chinese export porcelain vessels, a significant number of refined table glass vessels and tin-glazed earthenware. However, these quantities are still very meagre with regards to that recovered at Area F. Another good example is Charles Calvert's large brick mansion Mattapany, a site that contained over 358,000 artifacts, but over 98% of which consisted of brick and other structural debris (King and Chaney 2003). The remaining objects found in and around this house were so similar to that of nearby planters that investigators were prompted to suggest that Charles Calvert chose to invest much of his money into lands and labour rather than creature comforts (Ibid., 279-280). How is it that one domestic component from Ferryland, occupied for only about 50 years, resulted in an artifact assemblage that included 18,194 clay tobacco pipe fragments, 26,741 pieces of ceramic and 8,242 sherds of glass? Surely, the consumption and disposal habits of the Kirkes were not *that* different from other English gentry residing throughout Colonial America. Likewise, the dwelling's functions and the number of occupants appear to be in keeping with that of other prominent colonial households. Are there any other factors that can help explain this artifact differential?



First of all, there are any number of ways that an affluent gentry household might choose to display its wealth. Common among these is the acquisition of land, the construction of large and elaborate homes and the accumulation of material possessions. What may be the overriding factor in the context of North America is that the relative freedom of choice enjoyed by gentry, wealthy merchants and prosperous yeomen in England was partially curtailed by the social, economic and environmental factors encountered in the colonies.

For those living in seventeenth-century Virginia or Maryland, life revolved around tobacco cultivation. Tobacco was a highly labour-intensive crop requiring huge investments in both time and labour. If the work involved in preparing tobacco for market was not difficult enough, this was compounded by a constantly fluctuating European market that saw a series of “boom or bust” periods throughout the seventeenth century. Any fluctuation in the price of the crop reflected, in turn, the amount of buying power available to the planter (Henry 1979). Regardless of whether Chesapeake colonists lived during periods of prosperity or poverty, the tobacco economy was such that it not only demanded a planter’s time and energies for the entire year but also redirected any disposable income toward the purchase of labour or additional lands, instead of housing improvement or additional domestic goods. In the face of uncertain markets, this strategy was necessary for large landowners to turn a profit and for small families simply to survive. A substantial house or a dozen decorative earthenware plates would therefore

have a much lower priority than the labor and lands needed to produce a paying crop of tobacco. Housing improvements were also especially costly as a shortage of skilled labor put the price of erecting a timber-framed or brick house out of reach for the vast majority. Therefore, some planters in the Chesapeake could be rich in lands and employ many servants but live a frugal life in terms of their domestic environment.

Just as Chesapeake planters relied on the sole export of tobacco, so did colonists in Newfoundland depend upon codfish. Fortunately, European market prices for cod were relatively stable until the latter part of the seventeenth century, thus allowing large and small planters a proportionate measure of prosperity (Pope 2004). The yearly influx of hundreds of migratory fishing and sack ships afforded most colonists ample opportunity to acquire the goods necessary for survival, along with additional commodities such as alcohol and tobacco. Land may have been a sound investment in the Chesapeake but in Newfoundland the only space needed to prosecute the fishery was along the shoreline and unless already occupied, it was “free” for the taking. Shallow soils and a short growing season were not suitable for tobacco cultivation or grain production and therefore, land was essentially worthless in an agricultural sense. In the context of Colonial Newfoundland, disposable income would likely be reinvested back in the fishery, into marketable commodities or in the case of the Kirke house, on household improvements and domestic goods.

This broad overview does provide some insight into the larger social and economic processes occurring within the colonies, but it still doesn't answer adequately the question of why the Kirke house assemblage is so quantitatively, and to a lesser extent qualitatively, different. The examples of St. John's and the Pettus manor clearly demonstrate that some colonial gentry in the Chesapeake also had access to enough disposal income to allow for construction of large houses and a life of material comfort. St. John's, Country's House and Mattapany were important venues for administration and local authority in Maryland, whereas the Pettus manor was the home of a major landowner and member of the Virginia elite. Without a doubt, the Kirke house served many of these same functions. Yet, the archaeology conducted at the Kirke house is not just about one gentry family, but rather, is a larger window into the true nature and extent of activity taking place in seventeenth-century Ferryland. The Pool Plantation was clearly an entrepot for trade, commerce and social activity in seventeenth-century Newfoundland. The colony itself, was also tightly-clustered around the inner harbour and heavily-populated during the busy summer months. Probably more so than anything else, the archaeological evidence from Area F demonstrates that the Kirke residence was a focal point for the myriad activities taking place within the colony, and by extension, one of the busiest and most prosperous households in Colonial North America.

In conclusion, although the Kirke house is very large and well appointed by Colonial Newfoundland standards, it is unexceptional compared to the abodes of many

colonial gentry. Yet, what it lacks in architecture it more than makes up in material culture. The associated cultural layers contained more than 90,000 seventeenth-century artifacts – among which were gold rings, hundreds of tin-glazed vessels, a dozen Portuguese *terra sigillata* vessels, personalized pipes, silver-plated boot spurs and buckles and silver buttons and bodkins. This domestic assemblage is clearly one of the richest and most diverse in seventeenth-century Colonial North America.

## **Chapter 6**

### **Conclusions**

The archaeology of gentry life in seventeenth-century Ferryland illustrates how one English gentry family, the Kirkes, lived within the social, economic and environmental conditions unique to Colonial Newfoundland. The results of this analysis add to the picture of early colonial life in what is now Canada, for it details the day-to-day existence of wealthy colonial proprietors and how they compared to the much more numerous planter families. The experiences of the Kirke family at Ferryland must not be viewed in a historical vacuum but as part of a larger movement of gentlemen and wealthy merchants to the North American colonies during the seventeenth century. This was a time of opportunity and adventure, during which individuals with ingenuity and enterprise could prosper and grow wealthy beyond any opportunities normally available to them back in England. As it turns out, the Kirkes were adept at turning a profit from both the cod fishery and Newfoundland's resident population of fishermen.

Datable artifacts found both inside the Kirke house and the midden layers outside establish that this structure was built and first occupied in the 1640s. The stratigraphic and artifactual evidence likewise demonstrate that habitation continued until the latter years of the seventeenth century, and that this house was among those that fell at

the hands of French forces on September 21<sup>st</sup>, 1696. However, all was not lost on that fateful day, for there were enough traces of the remaining structure to determine how it was built, what it may have looked like and what structural modifications occurred. The use of stone for most of the chimneys and cobblestones for exterior and interior pavements helped to delineate the outline of the house. In conjunction with the deteriorated remains of the frame and floor joists, the archaeological evidence clearly shows that the main structural unit measured 21 by 53 feet. The builders of this large timber-framed house also incorporated two (and possibly three) Calvert-era buildings into the overall house plan. This included a small 12 by 22 foot dwelling (lodging/servants' quarters) at the northwest end and several features from a brewhouse/bakery at the east end.

Although the frame for the brewhouse/bakery was taken down, its gable-ended chimney was incorporated into the Kirke house as a lateral chimney, and its 12 foot deep wooden well was also retained for ease of obtaining water. A third Calvert-era building, this one constructed of stone and much more substantial than the others, is situated immediately to the west of the Kirke house. Not only did it abutt this part of the house but in fact, was used to support the stone backing for a smoke/fire hood located in the tavern room.

When viewed in its entirety, the Kirke's domestic space (excluding the large stone building) exceeded 1400 square feet on main floor. The principal dwelling was most likely divided into three rooms consisting of a 20 foot long, cobblestone-floored, tavern room with a smoke hood at the west end, a 15 foot central lobby/storage area and

an 18 foot hall/parlour with a boarded floor and lateral fireplace at the east end. An 8 by 8 foot well house was located outside the east end of the dwelling and the small 12 by 22 foot lodging/servants' quarters was accessible via the tavern.

Sometime after 1660, there was a fairly major reorganization. The well-shaft was filled-in and the lateral fireplace was partially dismantled and its opening walled up. In its place, a new gable-ended stone chimney was built and a two-unit service wing was erected immediately east and southeast of the Kirke house. This change may have been influenced, in part, by a desire for greater domestic comfort. However, the addition of the 14 by 14 foot buttery/pantry and 8 by 12 foot dairy may hint at something more than creature comforts. The substantial quantity of milkpans among the ceramic assemblage and the presence of a nearby cowhouse north of the cobblestone street, both indicate that some members of the Kirke family sought to diversify their economic operations during the Post-Restoration era by incorporating the sale of fresh meat and dairy products to resident planters and seasonal fishermen. With the structural additions of both buttery/pantry and dairy, the dwelling expanded to over 1700 square feet on the main floor.

Despite this increase in square footage, the Kirke house was still much smaller than contemporaneous English houses occupied by individuals of similar socio-economic standing. This does not necessarily indicate that the dwelling was of a lesser quality

or poorly regarded by its owners; rather, it was a conscious choice conditioned by the colonial contexts in which it was found. There is archaeological evidence to suggest that expedience may have been sought when building this house and the materials used in its construction were all locally available. In the context of seventeenth-century Newfoundland, the Kirke house is the single largest domestic building yet discovered and when considered as a multi-unit compound, the expanse of living and working space far exceeds that required by any resident planter family. In terms of its physical appearance, it stood one and a half or two stories high, was pierced by numerous windows along its northern facade and was fronted by a cobblestone courtyard that led directly to the town's cobblestone street. By all indications, this prominent and relatively-spacious dwelling seems to have accommodated various members of the Kirke family for approximately 50 years.

The range of activities and the diversity of material culture associated with the Kirke house likewise distinguish it from the rest of Newfoundland planter society. Everything from cooking, baking, fine dining, dairying and tippling to sewing, gaming, letter writing and enterprises relating to trade and commerce all occurred within this series of domestic buildings. It can even be surmised that people occasionally came to the Kirke house to be treated in times of illness or even to be married. Archaeology further indicates that the Kirkes arrived at Ferryland with many of their expensive and fragile household goods and personal possessions. This establishes that their move to



Newfoundland was never meant to be a temporary transition but a clear demonstration of commitment to this new venture. Some of these artifacts included an extensive collection of tin-glazed earthenware vessels (from lobed dishes to matching dinner plates), costume and jewellery-related objects such as gold rings, gilt beads, silver bodkins, buckles, buttons and silver-plated boot spurs and even a small collection of Portuguese *terra sigillata* – the only set of its kind in North America. Many of these same possessions were used by the Kirkes to uphold their ideals with regards to a life befitting their English gentility.

It was not just the diversity and quality of material culture but its sheer quantity that also sets the Kirke occupation apart. More than 90,000 objects were recorded in the undisturbed contexts associated with the dwelling. The breakdown of objects by artifact type and vessel count was tabulated at 531 ceramic vessels, 75 glass bottles, wine glasses and containers, and over 1,600 broken and discarded clay tobacco pipes. This demonstrates not just a long period of occupation but secondly, a large household contingent. The number of clay pipes, in particular, suggest that the Kirke house was a popular place to enjoy a leisurely smoke and/or purchase tobacco. In addition, such overwhelming quantities further indicate that this location was the focal point of the Pool Plantation and served as a place to congregate to discuss legal, administrative and fishery-related matters pertaining to the colony.

Irrespective of what we have learned about the life of the Kirke family at Ferryland, this research will also prove useful to the broader study of historical archaeology for several reasons. First of all, the variety of pipe bowls and makers' marks illustrated from the Kirke house encompasses the most extensive collection of seventeenth-century tobacco pipes found on a single domestic component in Newfoundland, if not all of British North America. This will undoubtedly serve as a worthwhile resource for archaeologists studying the Early Modern Period. Many of these pipes were also found in tightly-dated contexts, which allows for a better grasp on the varieties available and in use, during specific temporal periods. Secondly, patterns in the material culture assemblage utilized by the Kirkes can help us to recognize and identify other gentry occupations from this province's early colonial past. This is plainly visible in the preponderance of expensive ceramics often associated with food service, the use of fine Venetian, Dutch and English glassware and the desire for decorative, initialled or personalized items that demonstrate fashion consciousness, literacy or social position. Finally, a comparison of the Kirke house with contemporaneous gentry occupations in the Chesapeake has revealed some basic trends, but also some differences, with regards to generally adopted or accepted standards in colonial housing and material goods.

In many ways, the archaeology of the Kirke family at Ferryland has more to do with the colony's steadfast matriarch, Lady Sara Kirke, than it does her late husband Sir David. Although David Kirke was probably responsible for overseeing the construction

of their house and much of the daily business operations, it was Sara and her four sons who continued to keep the Pool Plantation afloat long after his demise. They did not shy away from the difficult and uncertain business of running a fishing plantation, while simultaneously partaking in the trade and merchandising of goods. Nor did they choose to return to England to what would certainly have been a comfortable existence in the Post-Restoration era. Ferryland was the place where Sara had raised her sons from childhood and some of the Kirke boys were arguably among the first native born merchant-gentry in Newfoundland. In this isolated and remote English outpost on Newfoundland's Southern Shore, the Kirkes called Ferryland home and their dwelling and personal attire was embellished with the material trappings to reflect as much.

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**Appendix A (Part I):  
English/Dutch Clay Tobacco Pipes by Event, Bowl Form and MNP**

Early Occupation/Initial Colonization (2 Events)

**EVENT 491** (stem fragments only, no bowls)

**EVENT 551**

Small belly bowl G with partial raised mark on heel (undecipherable): MNP 1

Small belly bowl J: MNP 1

Small belly bowl N: MNP 1

Small belly bowl P: MNP 2

TG mark: MNP 1

Dutch Tudor rose bowl: MNP 2

Dutch pipe bowl, same form as Rose mark bowl found in Gaulton 1999:29 with a star or sun on heel: MNP 1

Additional pipes based on heel fragments only: MNP 1

Total MNP for Event 551: **10**

Calvert Period Occupation (8 Events)

**EVENT 360**

Spur pipe 3: MNP 3

Spur pipe 3a: MNP 3

Large belly bowl 1: MNP 1

Large belly bowl 2: MNP 1

Dutch pipe bowl 2: MNP 1

Dutch pipe bowl 3: MNP 1

Dutch pipe bowl 6: MNP 1

Partial heelless "export" pipe bowl and stem: MNP 1

Small West Country bowl 3: MNP 1

Small West Country bowl 4: MNP 1

Small West Country bowl 5: MNP 1

Small West Country bowl 9: MNP 1

Small belly bowl C: MNP 1

Small belly bowl D: MNP 1

Small belly bowl F: MNP 1

Small belly bowl O: MNP 2

Chinned bowl 3: MNP 1

Chinned bowl 4: MNP 1

Late seventeenth-century bowl 3: MNP 1  
 Late seventeenth-century bowl 5: MNP 1  
 RC bowl 3 "unmarked": MNP 2  
 IS bowl: MNP 3

Total number of pipe bowls tabulated from additional bowl fragments (based on partial bowls with over half the heel or more): MNP 22  
 Overall MNP for Event 360: **52**

### **EVENT 367**

Early seventeenth-century bowl 2: MNP 1  
 Spur pipe 3: MNP 7  
 Spur pipe 3a: MNP 1  
 Spur pipe 4: MNP 1  
 Large belly bowl 1: MNP 1  
 Dutch pipe bowl 7: MNP 1  
 West Country bowl 2: MNP 3  
 Small belly bowl A: MNP 2  
 Small belly bowl F: MNP 2  
 Small belly bowl F2 & F3: MNP 3  
 Small belly bowl G: MNP 2  
 Small belly bowl H: MNP 4  
 Small belly bowl I: MNP 3  
 Small belly bowl J2: MNP 2  
 Small belly bowl L: MNP 2  
 Small belly bowl Q: MNP 1  
 Small West Country bowl 2: MNP 1  
 Small West Country bowl 4: MNP 1  
 Small West Country bowl 6: MNP 1  
 Small West Country bowl 10: MNP 1  
 Small West Country bowl 11: MNP 2  
 Belly bowl 5: MNP 1  
 Chinned bowl 2: MNP 1  
 IS bowl "unmarked": MNP 1  
 EL bowl "unmarked": MNP 2  
 RC bowl 3 "unmarked": MNP 2  
 RC bowl 4 "unmarked": MNP 1  
 IS bowl: MNP 5  
 RC bowl 1 (mark #1), 3 complete bowls with mark, 3 partial bowls with mark: MNP 6  
 RC bowl 2 (mark #2), 2 full bowls with mark, three additional heels and marks: MNP 5  
 RC bowl 3 (mark #3), 1 complete bowl with mark, one partial heel and mark: MNP 2

AR bowl 1: MNP 1

EL bowl 1: MNP 1

Fleur-de-lys bowl, 1 complete bowl and 1 partial bowl with heel mark: MNP 2

1 “Baroque” pipe stem with large and small fleur-de-lys on stem

2 stems with thick rouletted bands and well made fleur-de-lys stamps

Total number of pipe bowls tabulated from additional bowl fragments (based on partial bowls with over half the heel or more): MNP 52

Overall MNP for Event 367: **125**

#### **EVENT 480**

Spur pipe 2: MNP 1

Spur pipe 3a: MNP 3

Small West Country bowl 1: MNP 1

Small West Country bowl 3: MNP 1

Small West Country bowl 4: MNP 2

Small West Country bowl 11: MNP 1

Small belly bowl B: MNP 2

Small belly bowl C: MNP 1

Small belly bowl D: MNP 1

Small belly bowl E: MNP 1

Small belly bowl E2: MNP 1

Small belly bowl F: MNP 1

Small belly bowl J: MNP 3

Small belly bowl J2: MNP 1

Small belly bowl K: MNP 1

Small belly bowl L: MNP 1

Dutch pipe bowl 1: MNP 1

Chinned bowl 1: MNP 1

Late seventeenth-century bowl 3: MNP 1

Large belly bowl 1: MNP 1

RC bowl 3 “unmarked”: MNP 2

IH bowl: MNP 2

PS bowl: MNP 1

English Tudor rose bowl: MNP 1

Dutch “Baroque” bowl fragment with raised and decorated floral decoration: MNP 1

Four-on-diamond fleur-de-lys stem decoration between rouletted lines

Total number of pipe bowls tabulated from additional bowl fragments (based on partial bowls with over half the heel or more): MNP 27

Overall MNP for Event 480: **60**

**EVENT 492**

Small belly bowl N: MNP 1  
 Small West Country bowl 7: MNP 1  
 Partial Dutch bowl (1630-50): MNP 1  
 RC bowl 3 “unmarked”: MNP 1  
 RC bowl 1 (partial heel mark): MNP 1  
 Total MNP for Event 492: **5**

**EVENT 520/525** (also includes pipes from the Kirke house occupation)

Early seventeenth-century bowl 1: MNP 1  
 Early seventeenth-century bowl 3: MNP 1  
 Spur pipe 3: MNP 1  
 Spur pipe 3a: MNP 4  
 Small West Country bowl 3: MNP 1  
 Small West Country bowl 4: MNP 2  
 Small West Country bowl 5: MNP 3  
 Small West Country bowl 6: MNP 2  
 Small West Country bowl 11: MNP 1  
 Small West Country bowl 12: MNP 1  
 Small belly bowl A: MNP 3  
 Small belly bowl B: MNP 1  
 Small belly bowl D: MNP 1  
 Small belly bowl E: MNP 3  
 Small belly bowl E2: MNP 1  
 Small belly bowl F: MNP 8  
 Small belly bowl G: MNP 1  
 Small belly bowl H: MNP 3  
 Small belly bowl I: MNP 2  
 Small belly bowl J: MNP 3  
 Small belly bowl K: MNP 2  
 Small belly bowl L: MNP 5  
 Chinned bowl 3: MNP 5  
 West Country bowl 2: MNP 1  
 West Country bowl 5: MNP 1  
 Belly bowl 7: MNP 1  
 Belly bowl 10: MNP 3  
 Large belly bowl 2: MNP 1  
 Dutch pipe bowl 5: MNP 1  
 Late seventeenth-century bowl 2: MNP 1 (likely disturbed from Event 467)  
 IS bowl “unmarked”: MNP 1  
 RC bowl 3 “unmarked”: MNP 3



IS bowl: MNP 4  
 EL bowl 1: MNP 1  
 RC bowl 1 (mark #1): MNP 1  
 RC bowl 2 (mark #2): MNP 2  
 RC mark #2, bowl fragments only: MNP 5  
 RC bowl 3 (mark #3): MNP 4  
 RC mark #3, partial bowl and heel fragments only: MNP 4  
 Dutch CA bowl: MNP 1  
 1 "Baroque" stem with moulded flowers, stems and leaves  
 1 four-on-diamond fleur-de-lys stem  
 2 stems with several stamped fleur-de-lys  
 1 stem with several stamped fleur-de-lys between rouletted lines  
 1 single small fleur-de-lys stamp between 3 rouletted lines on either side of stamp

Total number of pipe bowls tabulated from additional bowl fragments (based on partial bowls with over half the heel or more): MNP 52  
 Overall MNP for Event 520-525: **142**

#### **EVENT 530**

Small belly bowl J: MNP 1  
 EL bowl 2: MNP 1  
 1 partial bowl and heel (uncertain provenance): MNP 1  
 Overall MNP for Event 530: **3**

#### **EVENTS 515 and 519** (associated with the well construction in the brewhouse/bakery)

Small belly bowl G: MNP 1  
 Small belly bowl J2: MNP 1  
 RC bowl 1: MNP 1  
 Total MNP for Events 515 and 519: **3**

#### Kirke House Construction/Occupation Layers (35 Events)

##### **EVENT 287**

Early seventeenth-century bowl 2: MNP 1  
 Early seventeenth-century bowl 3: MNP 1  
 Spur pipe 2: MNP 1  
 Spur pipe 3/3a: MNP 55  
 Spur pipe 4: MNP 3  
 Spur pipe 6: MNP 1  
 Small belly bowl A-D/G-H: MNP 43

Small belly bowl E-F: MNP 6  
 Small belly bowl H: MNP 1  
 Small West Country bowl 2: MNP 3  
 Small West Country bowl 3: MNP 2  
 Chinned bowl 3: MNP 7  
 Chinned bowl 4: MNP 3  
 Chinned bowl 5: MNP 1  
 Chinned bowl 7: MNP 1  
 Chinned bowl 8: MNP 1  
 North East England -Yorkshire/Hull pipe: MNP 3  
 Belly bowl 1-4: MNP 27  
 Belly bowl 3: MNP 1  
 Belly bowl 4: MNP 1  
 Straight-sided West Country/London 1: MNP 9  
 Large belly bowl 1: MNP 43  
 Late seventeenth-century bowl 1: MNP 5  
 Late seventeenth-century bowl 3: MNP 1  
 Late seventeenth-century bowls 3-4: MNP 14  
 Late seventeenth-century bowl 8: MNP 4  
 Late seventeenth-century bowl 9: MNP 5  
 Late seventeenth-century West Country bowl 2: MNP 8  
 Late seventeenth-century West Country bowl 3: MNP 3  
 Late seventeenth-century West Country bowls 4-8: MNP 10  
 Straight-sided 1: MNP 1  
 Straight-sided 2: MNP 1  
 Broseley/Wiltshire 1: MNP 1  
 Broseley/Wiltshire 2: MNP 1  
 Broseley/Wiltshire 3: MNP 1  
 West Country bowl 3: MNP 1  
 West Country bowl 8: MNP 1  
 West Country bowl 9: MNP 1  
 Heelless "export" pipe: MNP 3  
 Partial Dutch bowl (1660-80): MNP 1  
 Dutch pipe bowl 6: MNP 1  
 Dutch pipe bowl 8: MNP 2  
 Dutch pipe bowl 9: MNP 1  
 Dutch pipe bowl 11: MNP 1  
 Dutch bowl with fleur-de-lys stem: MNP 1  
 Dutch Rose mark bowl 2: MNP 2  
 Dutch Rose mark bowl 3: MNP 8  
 IS bowl: MNP 7  
 IH bowl: MNP 11

WT bowl: MNP 8  
 Wheel/8-spoked wheel bowl: MNP 14  
 PE heel marks (two different marks): MNP 4  
 Cross/X mark on heel: MNP 1  
 AR bowl 1: MNP 2  
 RC bowls 2-3: MNP 2 for RC mark #2 and MNP 6 for RC mark #3 = Total: MNP 8  
 Crude wheel or star bowl: MNP 1  
 NC mark: MNP 1  
 LE mark: MNP 1  
 RVB SIDNEY mark: MNP 1  
 Johah bowl fragments: 4 pipestems and 2 bowl fragments: MNP 4  
 Crowned IC: MNP 3  
 Raised dots/Tudor rose (not mulberry) just above the heel on two partial pipe bowls:  
 MNP 2  
 Four-on-diamond fleur-de-lys decoration: 10 stem fragments  
 Series of single fleur-de-lys: 12 stem fragments  
 Series of single fleur-de-lys (crude): 6 stem fragments  
  
 Total number of pipe bowls tabulated from additional bowl fragments: MNP 441  
 Overall MNP for Event 287: **788**

### **EVENT 333**

Spur pipe 3: MNP 8  
 Spur pipe 4: MNP 1  
 Small belly bowl A-D/G-H: MNP 3  
 Chinned bowl 3: MNP 2  
 Chinned bowl 4: MNP 1  
 Belly bowl 3: MNP 1  
 North East England -Yorkshire/Hull pipe: MNP 1  
 Large belly bowls 1-2: MNP 3  
 Late seventeenth-century West Country bowl 5: MNP 1  
 Late seventeenth-century West Country bowl 6: MNP 1  
 Late seventeenth-century West Country bowl 1: MNP 1  
 Late seventeenth-century bowl 3: MNP 1  
 IH bowl: MNP 1  
 IS bowl: MNP 1  
 AR bowl 1: MNP 1  
 Dutch Rose mark bowl 1, heel fragment only: MNP 1  
 Dutch pipe bowl 8: MNP 1  
 Four-on-diamond fleur-de-lys decoration: 2 stem fragments  
 Series of single fleur-de-lys (crude): 1 stem fragment

Total number of pipe bowls tabulated from additional bowl fragments: MNP 14  
 Overall MNP for Event 333: **43**

#### **EVENT 349**

Spur pipe 5: MNP 1  
 Large belly bowl 1: MNP 1  
 Late seventeenth-century West Country bowl 1: MNP 1  
 Late seventeenth-century West Country bowl 3: MNP 1  
 Late seventeenth-century West Country bowl 4: MNP 2  
 Late seventeenth-century West Country bowl 5: MNP 3  
 Late seventeenth-century West Country bowl 7: MNP 2  
 Wheel/8-spoked wheel bowl: MNP 1  
 Crude wheel or star bowl: MNP 1  
 WD mark on heel: MNP 1  
 Four-on-diamond fleur-de-lys decoration: 9 stem fragments  
 Series of single fleur-de-lys (crude): 3 stem fragments  
 1 whittled down pipestem (evidence for re-use)

Total number of pipe bowls tabulated from additional bowl fragments: MNP 44  
 (The majority of these pipe bowls, though fragmentary, appear to be the late seventeenth-century West Country variety)  
 Overall MNP for Event 349: **58**

#### **EVENT 352**

Late seventeenth-century West Country bowl 7: MNP 1  
 13 additional pipes based on heel fragments  
 Total pipes from Event 352: MNP **14**

#### **EVENT 353**

Spur pipe 3: MNP 2  
 Spur pipe 4: MNP 1  
 Small belly bowl B-C: MNP 3  
 Small belly bowl G: MNP 1  
 Small belly bowl J: MNP 1  
 Large belly bowl 2: MNP 1  
 North East England -Yorkshire/Hull pipe: MNP 1  
 Late seventeenth-century bowl 3A: MNP 2  
 Dutch pipe bowl 11: MNP 1  
 Dutch bowl with fleur-de-lys stem: MNP 1

Dutch Rose mark bowl 3: MNP 1

IH bowl: MNP 1

IS bowl: MNP 1

Wheel/8-spoked wheel bowl: MNP 2

RC bowl 2 (1 mark #1, 1 mark #3); 1 heel fragment with RC mark #3 = Total: MNP 3

Johah bowl fragments, one bowl joins with stem fragment 256358 (E287): MNP 2

Series of single fleur-de-lys: 5 stem fragments

Total number of pipe bowls tabulated from additional bowl fragments: MNP 24

Overall MNP for Event 353: **47**

### **EVENT 357**

Small belly bowl B: MNP 2

Spur pipe 3: MNP 1

Large belly bowl 1: MNP 2

West Country bowl 3: MNP 1

West Country bowl 7: MNP 1

Late seventeenth-century West Country bowl 7: MNP 2

Late seventeenth-century bowl 3: MNP 1

Wheel/ 8-spoked wheel bowl: MNP 1

IH bowl: MNP 1

Dutch Rose mark bowl 3: MNP 1

Series of single fleur-de-lys: 1 stem fragment

Total number of pipe bowls tabulated from additional bowl fragments: MNP 12

Overall MNP for Event 357: **25**

### **EVENT 358**

Spur pipe 3: MNP 5

Spur pipe3a: MNP 2

Spur pipe 4: MNP 2

Small belly bowl D: MNP 3

Small belly bowl E: MNP 2

Small belly bowl F: MNP 1

Small belly bowl J: MNP 2

Small West Country bowl 2: MNP 1

Belly bowl 9: MNP 1

Large belly bowl 1: MNP 2

Straight-sided West Country/London 1: MNP 1

West Country bowl 3: MNP 1

West Country bowl 4: MNP 1  
 West Country bowl 6: MNP 1  
 Late seventeenth-century bowl 7: MNP 1  
 Late seventeenth-century West Country bowl 5: MNP 1  
 Wheel/8-spoked wheel bowl: MNP 2  
 RC bowl 1 (mark #1): MNP 2  
 RC bowl 3 (mark #3): MNP 1  
 PS bowl 1: MNP 1  
 Series of single fleur-de-lys: 1 stem fragment  
 Series of single fleur-de-lys (crude): 2 stem fragments

Total number of pipe bowls tabulated from additional bowl fragments: MNP 44  
 Overall MNP for Event 358: 77

### **EVENT 359**

Spur pipe 3: MNP 13  
 Spur pipe 4: MNP 2  
 Small belly bowl A-D/G-H: MNP 4  
 Chinned bowl 3: MNP 2  
 Large belly bowls 1-2: MNP 7  
 West Country bowl 1: MNP 2  
 Small West Country bowl 2: MNP 1  
 Small West Country bowl 3: MNP 3  
 Straight-sided West Country/London 1: MNP 1  
 Belly bowl 4: MNP 1  
 Belly bowl 6: MNP 1  
 Late seventeenth-century bowl 3: MNP 2  
 Late seventeenth-century bowl 6: MNP 1  
 Late seventeenth-century bowl 9: MNP 2  
 Late seventeenth-century bowl 10: MNP 1  
 Late seventeenth-century West Country bowl 2: MNP 1  
 Late seventeenth-century West Country bowl 3: MNP 1  
 Late seventeenth-century West Country bowls 4-8: MNP 3  
 Two partial bowls, possibly West Country products (1670-90): MNP 2  
 Dutch pipe bowl 11: MNP 2  
 IS bowl: MNP 1  
 Wheel/8-spoked wheel bowl: MNP 3  
 WT bowl: MNP 1  
 RC bowl 2 (mark #2): MNP 2  
 RC bowl 3 (mark #3): MNP 3  
 Crowned IC: MNP 2

Johah bowl fragments (2): MNP 1  
 Four-on-diamond fleur-de-lys decoration: 5 stem fragments  
 Series of single fleur-de-lys: 2 stem fragments  
 Series of single fleur-de-lys (crude): 3 stem fragments  
 1 worn Dutch "Baroque" pipestem, cannot pick out decoration: MNP 1  
 2 Dutch "Baroque" pipestems, floral decoration and fleur-de-lys on edges: MNP 1  
 Dutch "Baroque" stem with well-moulded fleur-de-lys, may be part of Johah bowls.  
 One curved pipestem (bore size 6) undecorated

Total number of pipe bowls tabulated from additional bowl fragments: MNP 112

Overall MNP for Event 359: **179**

### **EVENT 361**

Spur pipe 3: MNP 10  
 Spur pipe 4: MNP 1  
 Small belly bowl E-F: MNP 2  
 Small belly bowl I: MNP 1  
 Small West Country bowl 11: MNP 2  
 Chinned bowl 3: MNP 6  
 Chinned bowl 4: MNP 2  
 North East England -Yorkshire/Hull pipe: MNP 2  
 West Country bowl 5: MNP 1  
 Straight-sided West Country/London 1: MNP 1  
 Large belly bowl 2: MNP 1  
 Belly bowl 5: MNP 2  
 Belly bowl 6: MNP 1  
 Late seventeenth-century bowl 2: MNP 1  
 Late seventeenth-century bowl 3: MNP 1  
 Late seventeenth-century bowl 6: MNP 1  
 Late seventeenth-century bowl 7: MNP 1  
 Late seventeenth-century bowl 8: MNP 1  
 Late seventeenth-century West Country bowl 1: MNP 1  
 Late seventeenth-century West Country bowl 2: MNP 1  
 Late seventeenth-century West Country bowls 4-5: MNP 1  
 IS bowl: MNP 1  
 Wheel/8-spoked wheel bowl: MNP 1  
 RC bowl 2 (mark #3): MNP 2  
 English star/wheel bowl: MNP 1  
 Johah bowl fragments (2): MNP 1  
 Series of single fleur-de-lys: 1 stem fragment  
 Series of single fleur-de-lys (crude): 2 stem fragments

Total number of pipe bowls tabulated from additional bowl fragments: MNP 36  
 Overall MNP for Event 361: **81**

#### **EVENT 366**

Small West Country bowl 11: MNP 1  
 Late seventeenth-century West Country bowl 6: MNP 1  
 RC (mark #3) on partial bowl: MNP 1  
 Additional bowls based on fragments: MNP 3  
 Total MNP for Event 366: **6**

#### **EVENT 368**

Small belly bowl E: MNP 1  
 Four-on-diamond fleur-de-lys: 2 stem fragments  
 Additional bowls based on fragments: MNP 6  
 Total MNP for Event 368: **7**

#### **EVENT 369**

Spur pipe 4: MNP 1  
 Series of fleur-de-lys: 1 stem fragment  
 Additional bowls based on fragments: MNP 8  
 Total MNP for Event 369: **9**

#### **EVENT 370**

Small belly bowl B: MNP 1  
 Small belly bowl D: MNP 1  
 Small belly bowl E: MNP 2  
 Small belly bowl E2: MNP 1  
 Small belly bowl I: MNP 1  
 Small belly bowl J: MNP 1  
 Spur pipe 3: MNP 3  
 Large belly bowls 1-2: MNP 2  
 West Country bowl 6: MNP 2  
 Chinned bowl 4: MNP 1  
 North-East England -Yorkshire bulbous: MNP 1  
 Belly bowl 3: MNP 1  
 Belly bowl 6: MNP 2  
 Late seventeenth-century bowl 2: MNP 1  
 Late seventeenth-century West Country bowl 2: MNP 1



Late seventeenth-century West Country bowl 4: MNP 1  
 Dutch pipe bowl 10: MNP 1  
 IS bowl: MNP 2  
 RC bowls 2 and 3, heel fragments only: 1 RC mark #2, 1 RC mark #3 = MNP 2  
 RC bowl 4 (mark #1): MNP 1  
 Dutch TIP bowl: MNP 1  
 Dutch Thistle bowl: MNP 1  
 Dutch Tudor rose bowl: MNP 1  
 PH/RH bowl: MNP 1  
 Series of single fleur-de-lys: 1 stem fragment  
 Series of single fleur-de-lys (crude): single fragment joins with 221755 (E287)  
 1 "chain and dentate" type (Faulkner and Faulkner 1987:176) stem fragment, Dutch  
 1 stem with bands of rouletting, no other marks, no bowl  
 1 "Baroque" pipe stem, partially decorated with foliate motif  
  
 Total number of pipe bowls tabulated from additional bowl fragments: MNP 41  
 Overall MNP for Event 370: **73**

#### **EVENT 376**

1 MNP based on heel fragment

#### **EVENT 384**

Small belly bowl C: MNP 1  
 RC bowl 1 (mark #1): MNP 1  
 EF bowl: MNP 1  
 Wheel/8-spoked wheel bowl: MNP 1  
 Additional bowls based on fragments: MNP 1  
 Total MNP for Event 384: **5**

#### **EVENT 407**

1 MNP based on heel fragment

#### **EVENT 458**

Small belly bowl A: MNP 1  
 Additional bowls based on fragments: MNP 2  
 Total MNP for Event 458: **3**

**EVENT 462**

Large belly bowl 1: MNP 2  
 West Country bowl 2: MNP 1  
 Chinned bowl 6: MNP 2  
 Late seventeenth-century West Country bowl 5: MNP 1  
 Late seventeenth-century West Country bowl 8: MNP 1  
 English bowl form (1680-1720/30): MNP 1  
 Cross or star mark: MNP 1  
 Crude wheel or star bowl 2: MNP 1

Total number of pipe bowls tabulated from additional bowl fragments: MNP 21  
 Overall MNP for Event 462: **31**

**EVENT 463**

Small belly bowl B: MNP 1  
 Small belly bowl G: MNP 1  
 Straight-sided West Country/London 2: MNP 1  
 Late seventeenth-century West Country bowl 2: MNP 1  
 Late seventeenth-century West Country bowl 7: MNP 1  
 Late seventeenth-century West Country bowls 5-8: MNP 2  
 RC bowl, heel mark only (mark #3): MNP 1  
 1 partial stem with rouletted bands and diamond bordering similar to Llewellyn Evans pipes from Bristol

Total number of pipe bowls tabulated from additional bowl fragments: MNP 19  
 Overall MNP for Event 463: **27**

**EVENT 464**

Small belly bowl D: MNP 1  
 Small belly bowl F: MNP 1  
 Small belly bowl N: MNP 1  
 Spur pipe 3: MNP 2  
 Large belly bowl 1: MNP 2  
 Large belly bowl 2: MNP 3  
 Straight-sided West Country/London 1: MNP 1  
 West Country bowl 4: MNP 1  
 Chinned bowl 3: MNP 1  
 Chinned bowl 6: MNP 1  
 IS bowl "unmarked": MNP 1  
 Belly bowl 8: MNP 1

Straight-sided bowl 2: MNP 1  
 Late seventeenth-century West Country bowl 5: MNP 3  
 Late seventeenth-century West Country bowl 7: MNP 1  
 Late seventeenth-century West Country bowls 4-8: MNP 6  
 Late seventeenth-century West Country bowl 8: MNP 1  
 Late seventeenth-century West Country (Exeter) bowl: MNP 1  
 RC bowl 2 (mark #2); one heel fragment (mark #3), no bowl = Total: MNP 2  
 BARUM makers' marks: MNP 3  
 PE makers' mark: MNP 1  
 1 partial fleur-de-lys stem with rouletting

Total number of pipe bowls tabulated from additional bowl fragments: MNP 38  
 Overall MNP for Event 464: **73**

#### **EVENT 465**

Small belly bowl E: MNP 1  
 Late seventeenth-century West Country bowl 5: MNP 2  
 Additional bowls based on fragments: MNP 1  
 Total MNP for Event 465: **4**

#### **EVENT 467**

Spur pipe 3a: MNP 2  
 Large belly bowl 1: MNP 1  
 Late seventeenth-century West Country bowl 5: MNP 1  
 Belly bowl 3: MNP 1  
 Late seventeenth-century bowl 3: MNP 1  
 Late seventeenth-century Poole bowl: MNP 1  
 Very large late seventeenth- to early eighteenth-century bowl: MNP 2  
 RC bowl 3 "unmarked": MNP 2  
 Dutch pipe bowl 5: MNP 1  
 Wheel/8-spoked wheel bowl: MNP 1  
 Total number of pipe bowls tabulated from additional bowl fragments: MNP 11  
 Overall MNP for Event 467: **24**

#### **EVENT 468**

stem fragments only, no bowls

**EVENT 469**

Small belly bowl A: MNP 1  
 Small belly bowl C: MNP 1  
 Small belly bowl G: MNP 3  
 Small belly bowl M: MNP 1  
 Spur bowl 2: MNP 1  
 Large belly bowl 1: MNP 2  
 Large belly bowl 2: MNP 3  
 Straight-sided West Country/London 1: MNP 1  
 Belly bowl 4: MNP 1  
 Dutch bowl with fleur-de-lys stem: MNP 1  
 Late seventeenth-century bowl 3: MNP 2  
 Late seventeenth-century West Country bowl 2: MNP 1  
 RC bowl 1 "unmarked": MNP 2  
 RC bowl 1 (mark #1): MNP 1  
 Johah bowl fragment: MNP 0

Total number of pipe bowls tabulated from additional bowl fragments: MNP 28  
 Overall MNP for Event 469: **49**

**EVENT 470**

Small belly bowl F3: MNP 1  
 Small West Country bowl 8: MNP 1  
 Fleur-de-lys stem with rouletting, 1 stem fragment  
 Total MNP for Event 470: **2**

**EVENT 473**

Eglantine mark on heel: MNP 1

**EVENT 474**

Spur pipe 2: MNP 3  
 Spur pipe 3: MNP 4  
 Small belly bowl D: MNP 2  
 Small belly bowl F: MNP 1  
 Small belly bowl H: MNP 1  
 Chinned bowl 3: MNP 1  
 West Country bowl 5: MNP 1  
 Late seventeenth-century bowl 2: MNP 1  
 Late seventeenth-century bowl 2a: MNP 1

Late seventeenth-century bowl 3: MNP 1  
 Late seventeenth-century West Country bowl 5: MNP 1  
 Wheel/8-spoked wheel bowl: MNP 1  
 EF bowl: MNP 2  
 PS bowl: MNP 1  
 RC bowl (mark #2), heel only: MNP 1

Total number of pipe bowls tabulated from additional bowl fragments: MNP 11  
 Overall MNP for Event 474: **33**

#### **EVENT 478**

Late seventeenth-century West Country bowl 3: MNP 1  
 Late seventeenth-century West Country bowls 6/8: MNP 1  
 1 decorated stem fragment, rouletted bands and chain pattern  
 Additional bowls based on fragments: MNP 5  
 Total MNP for Event 478: **7**

#### **EVENT 482**

Small belly bowl D: MNP 1  
 Spur pipe 2: MNP 1  
 Straight-sided West Country/London 1: MNP 1  
 Dutch pipe bowl 4: MNP 1  
 Dutch pipe bowl 8: MNP 1  
 Additional bowls based on fragments: MNP 2  
 Total MNP for Event 482: **7**

#### **EVENT 483**

Small West Country bowl 2: MNP 1  
 Chinned bowl 3: MNP 1  
 Late seventeenth-century West Country bowl 2: MNP 1  
 Total MNP for Event 483: **3**

#### **EVENT 494**

Late seventeenth-century West Country bowl 6: MNP 1  
 Additional bowls based on fragments: MNP 1  
 Total MNP for Event 494: **2**

**EVENT 518**

Belly bowl 3: MNP 1

1 partial bowl 1650-80: MNP 1

Additional bowls based on fragments: MNP 4

Total MNP for Event 518: **6**

**EVENT 532**

Spur pipe 3: MNP 1

Additional bowls based on fragments: MNP 2

Total MNP for Event 532: **3**

**EVENT 536**

2 MNP based on heel and stem fragments

Lodging/Servants' Quarters (4 Events)**EVENT 379**

Number of bowls based on heel fragments: MNP **6**

**EVENT 380**

1 MNP based on bowl fragment

**EVENT 381**

Late seventeenth-century West Country bowl 7: MNP 3

Additional bowls based on fragments: MNP 5

Total MNP for Event 381: **8**

**EVENT 475**

Small belly bowl C: MNP 1

Small belly bowl E2: MNP 1

Small belly bowl F: MNP 1

Small belly bowl H: MNP 1

Small belly bowl J2: MNP 2

Small West Country bowl 3: MNP 1

Spur pipe 1: MNP 1

Spur pipe 4: MNP 1

Spur pipe 6: MNP 1

Partial heelless "export" bowl fragment (1660-90): MNP 1  
 Straight-sided West Country/London 2: MNP 1  
 Chinned bowl 3: MNP 1  
 Belly bowl 2: MNP 1  
 West Country bowl 5: MNP 1  
 Late seventeenth-century bowl 3: MNP 1  
 Late seventeenth-century bowl 4: MNP 1  
 Late seventeenth-century bowl 8: MNP 1  
 Late seventeenth-century West Country bowl 2: MNP 2  
 Late seventeenth-century West Country bowl 3: MNP 2  
 Late seventeenth-century West Country bowl 4: MNP 6  
 Late seventeenth-century West Country bowl 5: MNP 3  
 Late seventeenth-century West Country bowl 7: MNP 4  
 Late seventeenth-century West Country bowl 8: MNP 2  
 Dutch pipe bowl 12: MNP 1  
 Dutch pipe bowl 11 with very faint and small Tudor rose on heel: MNP 1  
 RC bowl 1 (mark #1): MNP 1  
 PS bowl: MNP 1  
 English pipe bowl (1640-60) with small rose mark on heel: MNP 1  
 Four-on-diamond fleur-de-lys: 1 stem fragment  
 1 stem with diamond/triangular bands on stem

Total number of pipe bowls tabulated from additional bowl fragments: MNP 63  
 Overall MNP for Event 475: **105**

Adjacent stone building (3 Events)

**EVENT 506**

Small belly bowl B: MNP 1  
 Small belly bowl C: MNP 1  
 Small belly bowl G: MNP 1  
 Chinned bowl 1: MNP 1  
 Spur pipe 3: MNP 1  
 Late seventeenth-century bowl 3: MNP 1  
 Late seventeenth-century West Country bowl 2: MNP 1  
 Wheel/8-spoked wheel mark, no bowl: MNP 1

Total number of pipe bowls tabulated from additional bowl fragments: MNP 7  
 Overall MNP for Event 506: **15**

**EVENT 508**

Small belly bowl F: MNP 1  
Spur pipe 3: MNP 1  
Small West Country bowl 5: MNP 1  
Total MNP for Event 508: **3**

**EVENT 509**

Small belly bowl B: MNP 1  
Small belly bowl F2: MNP 2  
Small West Country bowl 10: MNP 1  
Small West Country bowl 11: MNP 1  
Spur pipe 2: MNP 1  
Spur pipe 3: MNP 3  
Belly bowl 2: MNP 1  
Belly bowl 5: MNP 1  
Straight-sided West Country/London 1: MNP 1  
Straight-sided West Country/London 2: MNP 1  
Late seventeenth-century West Country bowl 4: MNP 1  
AR bowl 2: MNP 1  
RC bowl 2 (mark #3): MNP 1  
1 four-on-diamond stem, no bowl  
Large belly bowl fragment with a crude star/X stamp on back of bowl: MNP 1  
  
Total number of pipe bowls tabulated from additional bowl fragments: MNP 14  
Overall MNP for Event 509: **31**



**Appendix A (Part II)**  
**American-made Clay Tobacco Pipes at Area F (by event and catalogue number)**

Initialled Virginia pipes (DK monogrammed): **MNP 7**

Event 287, complete pipe bowl (catalogue # missing)  
 Event 287, bowl fragment (302245)  
 Event 287, bowl fragment (236359)  
 Event 359, bowl fragment (297540)  
 Event 287, bowl fragment (319683)  
 Event 287, bowl fragment (249012)  
 Event 287, bowl fragment (235520)  
 Event 333, stem fragment (223378) joins with Event 287 stem fragment (236247)  
 Event 287, 4 stem fragments, no joins (239044, 236248, 245006, 236692)  
 Event 287, stem fragment (no catalogue #)  
 Event 287, stem fragment (236032) joins with stem (271816)  
 Event 353, stem fragment (313866)  
 Event 333, 2 stem fragments, no joins (215453, 225006)  
 Event 361, stem fragment (277890)  
 Event 360, stem fragment (284747)  
 Event 358, stem fragment (310879)

Virginia marbled pipes: **MNP 19**

Event 287, almost complete pipe bowl (242118) joins with: Event 379 bowl fragment (284338); Event 279, stem (237267); Event 287 stem (237313) and Event 267 stems (259782 and 258140).  
 Event 287, bowl (251321) joins with stem (231709)  
 Event 333, bowl (215182) joins with Event 359 stem (259461)  
 Event 333, bowl fragments (15130 and 189934) join  
 Event 287, bowl (236867)  
 Event 287, bowl and stem fragment (235297)  
 Event 287, bowl and heel fragments (294738, 306604 and 208057) join with Event 267 stem (277861)  
 Event 287, stem fragment (261031) joins with bowl from Event 166, Area D (105571)  
 Event 287, heel (237305) joins with stem (237565)  
 Event 333, heel and stem fragment (221696)  
 Event 287, heel and stem fragment (202510)  
 Event 287, heel and bowl fragment (221179)  
 Event 287, bowl fragment (235691)  
 Event 287, bowl fragment (319814)

Event 287, bowl fragment (322691)

Event 287, 24 stem fragments, no joins (313266, 313264, 218423, 284649, 215189, 324340, 313265, 231499, 306534, 299645, 271873, 195554, 233822, 236273, 231941, 223081, 227036, 229675, 202606, 192938, 286188, 236872, 239234, 288103)

Event 287, stem fragment (catalogue # missing)

Event 360, 6 stem fragments, no joins (261091, 271402, 284317, 271277, 324853, 319810).

Event 359, 3 stem fragments, no joins (286057, 235684, 249617)

Event 333, stem fragment (223724) joins with Event 267 stem (251442)

Event 361, 4 stem fragments, no joins (282987, 277504, 302146, 316152)

Event 361, stem fragment (277848) joins with Event 267 stem (279071)

Event 364, stem fragment (251659)

Event 367, stem fragment (289559)

Event 353, 2 stem fragments, no joins (282065, 282182)

Event 467, stem fragment (481701) joins with stem fragment (477472)

#### New England red clay pipes: MNP 2

Event 349, bowl and stem fragment (242850)

Event 287, 3 stem fragments, no joins (225736, 218220, 239369)

Event 287, stem fragments (187023 and 192773) join

Event 359, stem fragment (300437)

Event 359, stem fragment, bore size 11 (257186)

#### Red clay octagonal bowl fragments: MNP 2

Event 359, bowl fragment (327038)

Event 287, bowl fragment (308944)

### **Notes on Appendix A (Part III)**

This section of Appendix A is divided into 3 parts:

- 1) pipe bowls
- 2) marked and decorated pipes
- 3) stem decorations

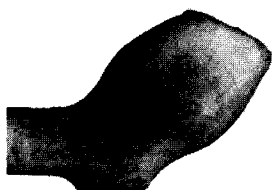
All illustrated pipe bowls are 1:1 scale; however, the scale of makers' marks and stem decorations vary for reasons of visibility.

The majority of clay tobacco pipes illustrated in this appendix are of a general form that is often difficult to attribute to any one city or town. In many cases, regional attributions were given and specific centres only mentioned if that form and/or mark is particularly prevalent at that place.

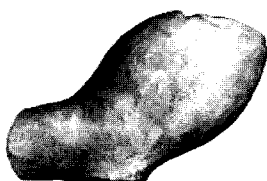
Dr. David Higgins at the University of York was kind enough to examine images of the pipe bowls and makers' marks from Area F and many of his suggestions regarding attributions and dating have been incorporated herein.

**Appendix A (Part III)**  
**Pipe Bowl Forms, Makers' Marks and Decorated Stems**

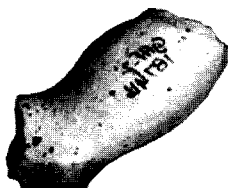
Pipe bowls



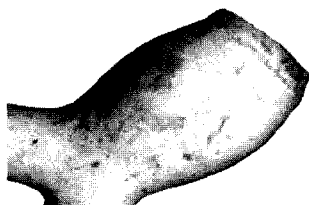
**Early seventeenth-century bowl 1 (1610-30)**  
 General form, possibly London



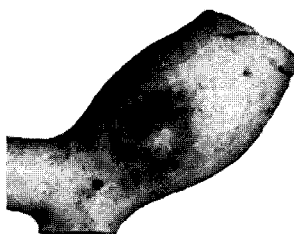
**Early seventeenth-century bowl 2 (1610-30)**  
 Possible West Country form



**Early seventeenth-century bowl 3 (1610-30)**  
 General form, possibly London

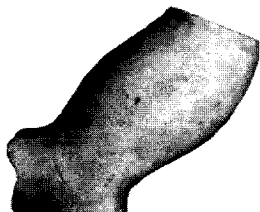


**Small belly bowls A-C (1630-55)**  
 General bowl forms, English

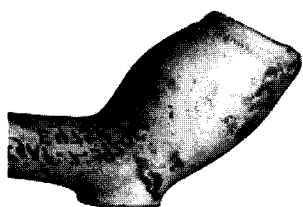




**Small belly bowl D (1640-60)**  
London/South-East England



**Small belly bowl E (1620-40)**  
London/South-East England



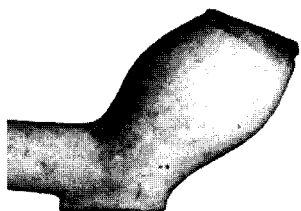
**Small belly bowl E2 (1620-50)**  
Similar to E but rounded heel, not tear-drop shaped



**Small belly bowl F (1630-50)**  
General bowl form



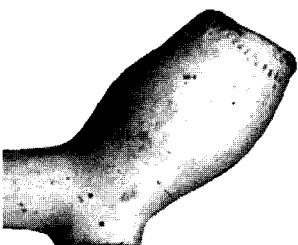
**Small belly bowl F2 (1620-40)**  
General form, possibly London manufacture  
Slightly smaller bowl than F



**Small belly bowl F3 (1620-50)**  
General bowl form, possibly London



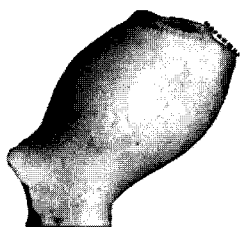
**Small belly bowl G (1620-50)**  
General bowl form, possibly London



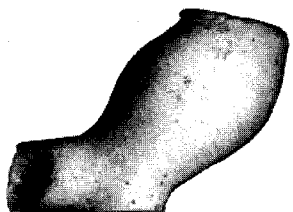
**Small belly bowl H (1630-60)**  
General bowl form, possibly London



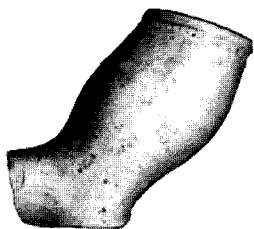
**Small belly bowl I (1630-50)**  
General form, possibly London or Bristol  
Very similar to RC bowl 3 (See below)



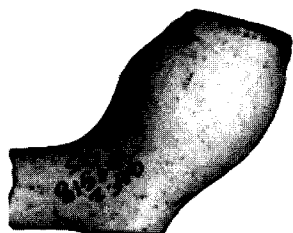
**Small belly bowl J (1620-50)**  
Possible Bristol or London product  
Incomplete profile



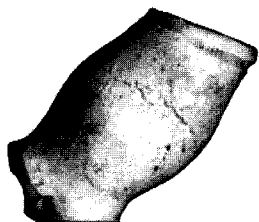
**Small belly bowl J2 (1620-50)**  
General form, possibly London/Bristol



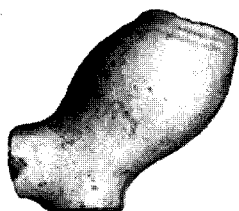
**Small belly bowl K (1620-50)**  
General form, possibly London



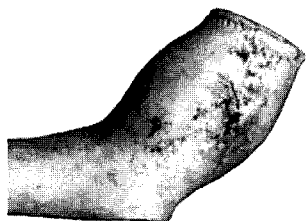
**Small belly bowl L (1640-60)**  
Exact shape as RC bowl 2, but no makers' mark  
General form, possibly London or Southern Ireland



**Small belly bowl M (1620-50)**  
Bristol or South-West England bowl form



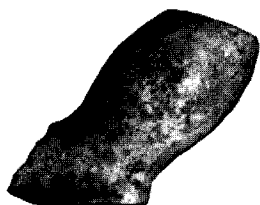
**Small belly bowl N (1620-40)**  
Possibly London or Bristol  
Similar forms dated 1620-30 in Atkinson 1965:250



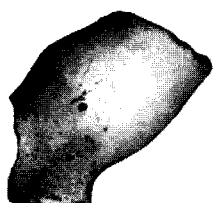
**Small belly bowl O (1620-50)**  
General form, possibly London



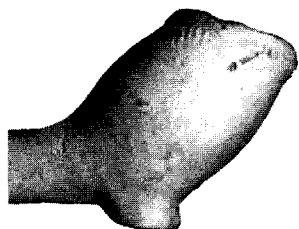
**Small belly bowl P (1620-40)**  
English or Dutch bowl form  
Similar to London forms in Davey 1985:171  
Dutch forms in Duco 1981:243



**Small belly bowl Q (1620-40)**  
General form, possibly London

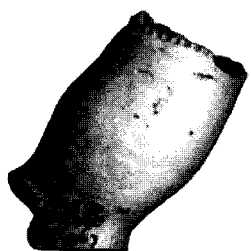


**Small West Country bowl 1 (1610-30)**  
Similar forms from Plymouth



**Small West Country bowl 2 (1620-40)**

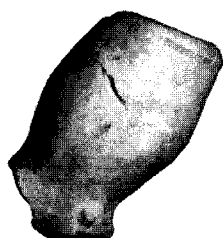




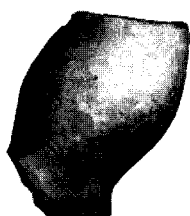
**Small West Country bowl 3 (1630-50)**



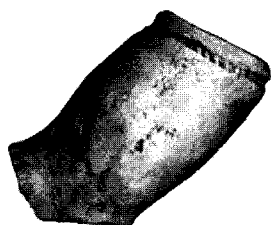
**Small West Country bowl 4 (1620-50)**



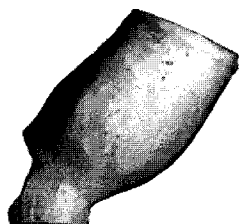
**Small West Country bowl 5 (1620-40)**



**Small West Country bowl 6 (1620-40)**



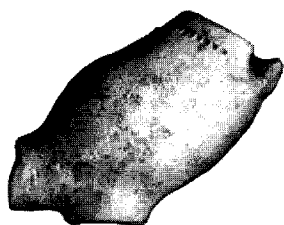
**Small West Country bowl 7 (1620-50)**



**Small West Country bowl 8 (1620-50)**

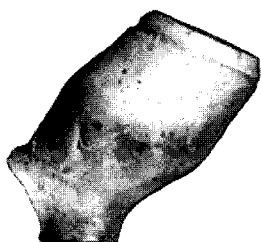
Common bowl form

See Grant and Jemmett 1985:504 for similar pipebowls



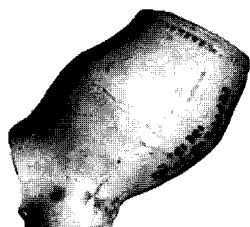
**Small West Country bowl 9 (1630-50)**

Similar forms found in Plymouth and Barnstaple



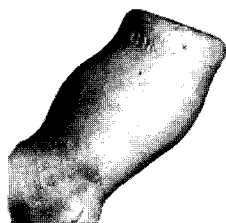
**Small West Country bowl 10 (1630-60)**

Similar forms found in Devon

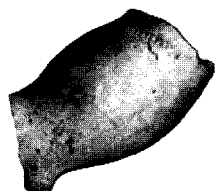


**Small West Country bowl 11 (1630-60)**

Similar forms found in Barnstaple and Plymouth



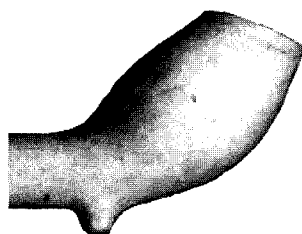
**Small West Country bowl 12 (1620-40)**



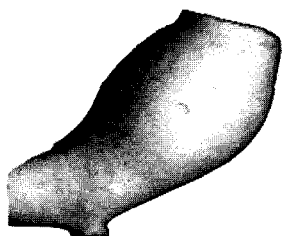
**Spur pipe 1 (1610-30)**  
General form, possibly London



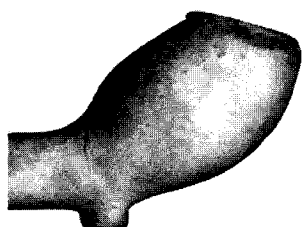
**Spur pipe 2 (1610-40)**  
General form, possibly London



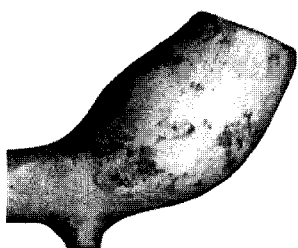
**Spur pipe 3 (1630-60)**  
General English bowl form, possibly London



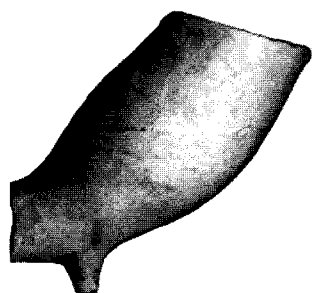
**Spur pipe 3a (1630-60)**  
General form, possibly London



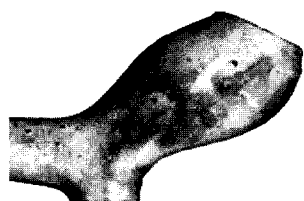
**Spur pipe 4 (1630-60)**  
General form



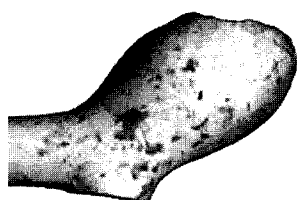
**Spur pipe 5 (1650-70)**  
General form, possibly London



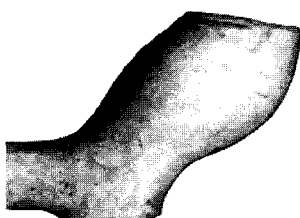
**Spur pipe 6 (1660-90)**  
General English spur bowl



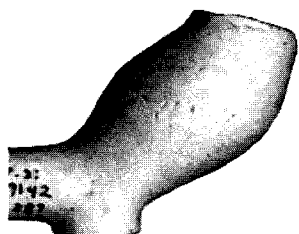
**Chinned bowl 1 (1630-50)**  
Central Southern or South-West England  
(Bristol/Somerset/Wiltshire) "chinned" bowl



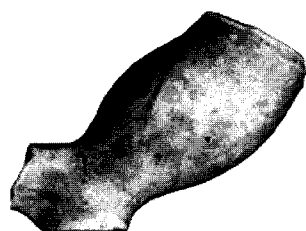
**Chinned bowl 2 (1630-50)**  
Central Southern or South-West England



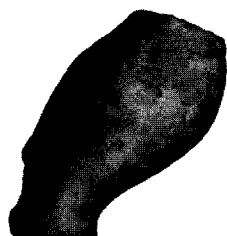
**Chinned bowl 3 (1640-70)**  
South-West England "chinned" bowl



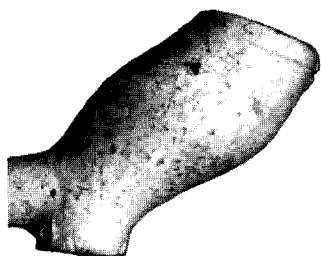
**Chinned bowl 4 (1650-70)**  
South-West England/London "chinned" bowl



**Chinned bowl 5 (1650-80)**  
South-West England/London "chinned" bowl



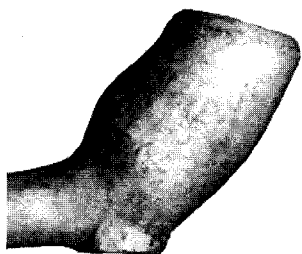
**Chinned bowl 6 (1650-70)**  
Central Southern England/Bristol "chinned"



**Chinned bowl 7 (1660-80)**  
South-West England/London "chinned" bowl



**Chinned bowl 8 (1660-80)**  
Central Southern England



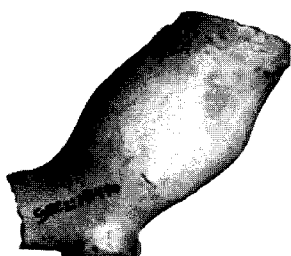
**West Country bowl 1 (1640-70)**

Similar forms found in Plymouth and Barnstaple  
Similar to AR marked pipes (see below)



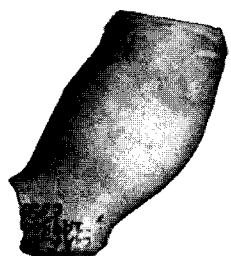
**West Country bowl 2 (1640-70)**

Similar forms found in Plymouth and Barnstaple



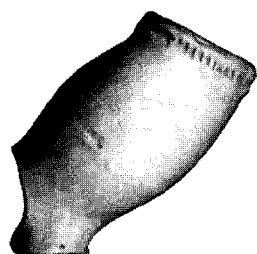
**West Country bowl 3 (1640-60)**

Similar forms found in Plymouth



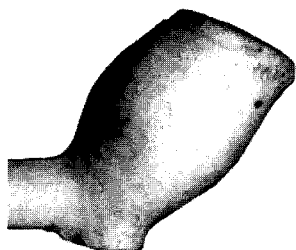
**West Country bowl 4 (1640-70)**

Similar forms found in Barnstaple



**West Country bowl 5 (1650-70)**

Very similar to West Country bowl 4,  
slightly larger and more forward projecting



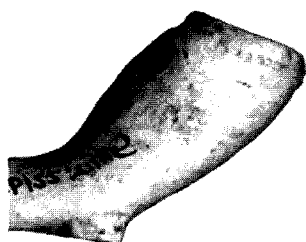
**West Country bowl 6 (1640-60)**  
Similar bulbous bowl forms in Grant and Jemmett  
1985:546



**West Country bowl 7 (1650-80)**  
Large bulbous, possibly Devon manufacture  
(partial heel only in this scan)



**West Country bowl 8 (1650-80)**



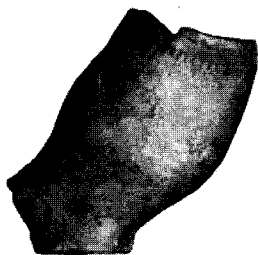
**West Country bowl 9 (1650-70)**  
Similar forms found throughout Devon



**Belly bowl 1 (1660-80)**  
Common English form, hard to attribute



**Belly bowl 7 (1650-75)**  
Possibly West Country



**Belly bowl 8 (1640-60)**  
West Country



**Belly bowl 9 (1650-80)**  
English bowl form, possibly London  
Similar in form to RC bowls 2-4

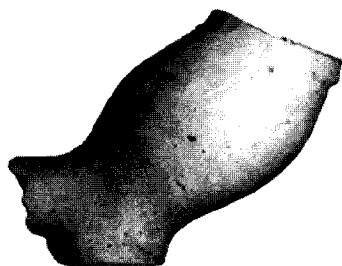


**Belly bowl 10 (1660-80)**  
General form



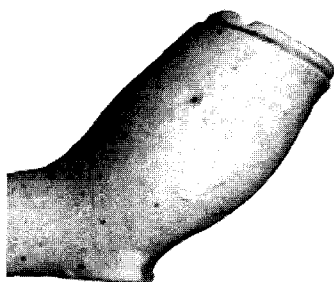
**Large belly bowl 1 (1660-80)**  
General English bulbous bowl form





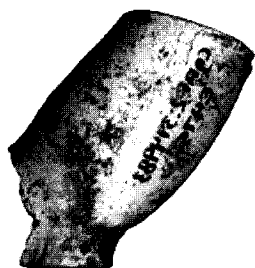
**Large belly bowl 2 (1660-80)**

Some slight differences from Large belly bowl 1



**Straight-sided West Country/London 1 (1660-90)**

West Country/London bowl form



**Straight-sided West Country/London 2 (1650-70)**

Similar to Straight-sided West Country/London 1



**Late seventeenth-century bowl 1 (1680-1710)**

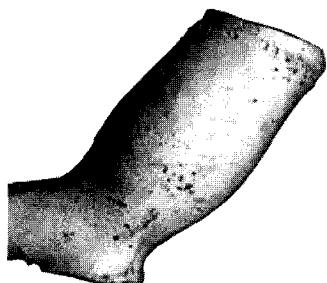
West Country



**Late seventeenth-century bowl 2 (1670-1700)**

West Country origin, similar forms found in Bristol

Late seventeenth-century bowl 2A: same form, smaller bowl



**Late seventeenth-century bowl 3 (1670-1700)**

West Country bowl form

Very similar to PS and 8-spoked wheel bowl forms

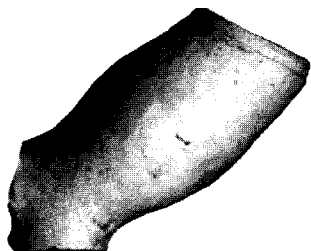
Late seventeenth-century bowl 3A:

Same bowl form as 3 but slightly larger, more prominent, heel



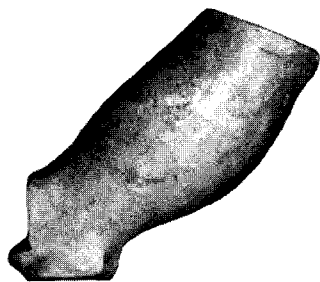
**Late seventeenth-century bowl 4 (1670-1700)**

West Country form (possibly Barnstaple or Exeter)



**Late seventeenth-century bowl 5 (1670-90)**

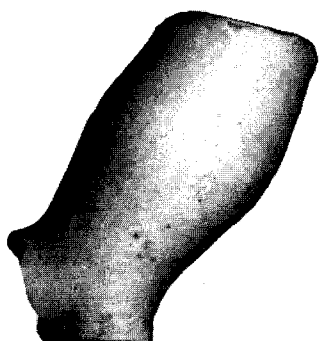
Common form, possibly West Country



**Late seventeenth-century bowl 6 (1670-1700)**  
Possible West Country form



**Late seventeenth-century bowl 7 (1670-1700)**  
Possible West Country form  
Incomplete profile



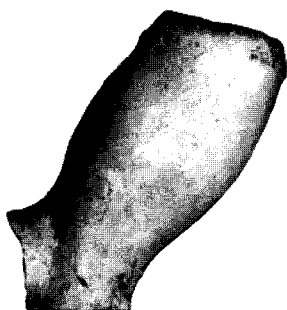
**Late seventeenth-century bowl 8 (1680-1710)**  
West Country form  
Similar forms in Grant and Jemmett 1985:546



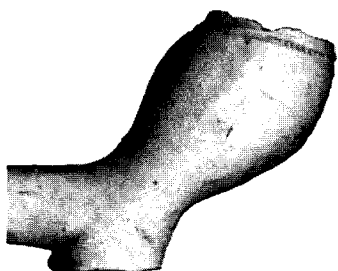
**Late seventeenth-century bowl 9 (1670-1700)**  
West Country form



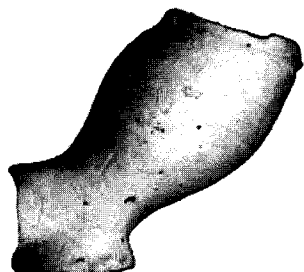
**Late seventeenth-century bowl 10 (1670-1700)**  
Possible West Country manufacture  
Similar to marked EF bowls



**Late seventeenth-century bowl 11 (1670-1700)**  
Likely West Country origin, but also similar to  
late seventeenth-century Scottish forms



**Broseley/Wiltshire 1 (1670-90)**  
Possibly Broseley or Wiltshire manufacture



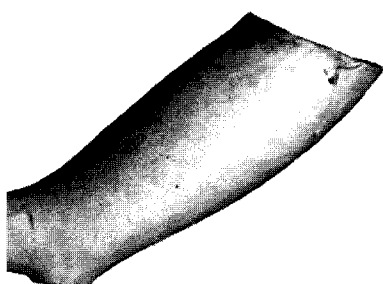
**Broseley/Wiltshire 2 (1670-90)**  
Possibly Broseley or Wiltshire manufacture  
Large, prominent, almost heart-shaped heel



**Broseley/Wiltshire 3 (1670-1700)**

Broseley or Wiltshire form

Faint trace of a makers' mark (undecipherable) on heel



**Straight-sided 1 (1680-1710)**

English, possibly London



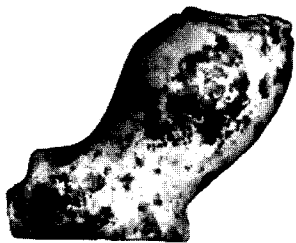
**Straight-sided 2 (1680-1710)**

English, possibly London



**North East England-Yorkshire/Hull pipe (1660-90)**

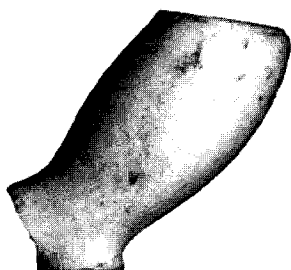
Probably North-East England:Yorkshire/Hull bulbous variety. See Watkins 1979; Lawrence 1979



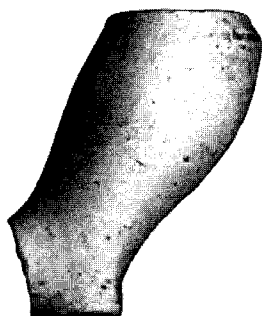
**North-East England-Yorkshire bulbous (1640-60)**  
Possible Yorkshire or North-East England bowl form



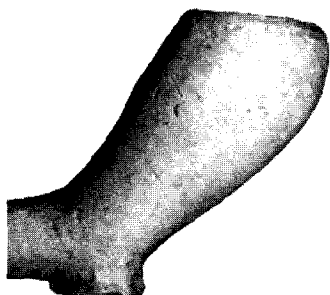
**Late seventeenth-century Poole bowl (1680-1710)**  
Manufactured in Poole  
Similar forms in Cooksey 1980:18-19; Markell 1992:165



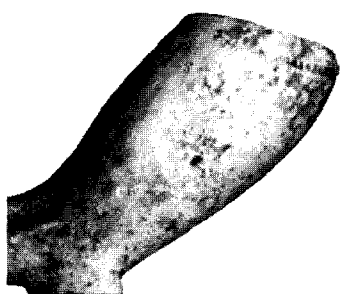
**Late seventeenth-century West Country bowl 1 (1680-1710)**



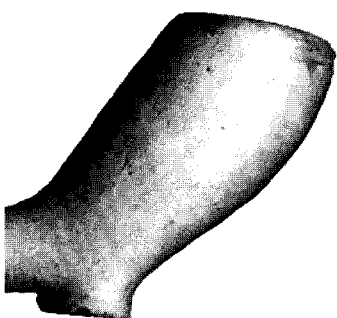
**Late seventeenth-century West Country bowl 2 (1680-1720)**  
Similar forms in Grant and Jemmett 1985



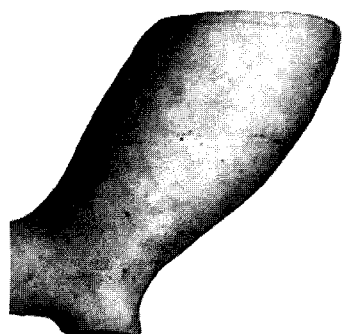
**Late seventeenth-century West Country bowl 3**  
(1680-1720)



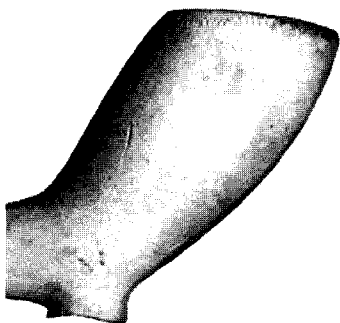
**Late seventeenth-century West Country bowl 4**  
(1680-1720)



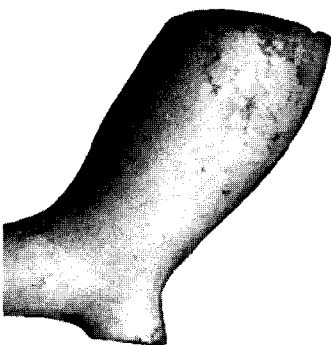
**Late seventeenth-century West Country bowl 5**  
(1680-1720)



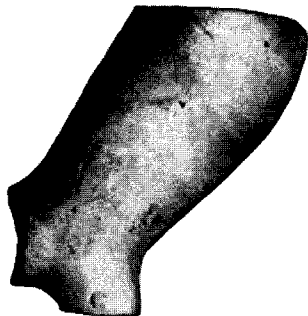
**Late seventeenth-century West Country bowl 6**  
(1680-1720)



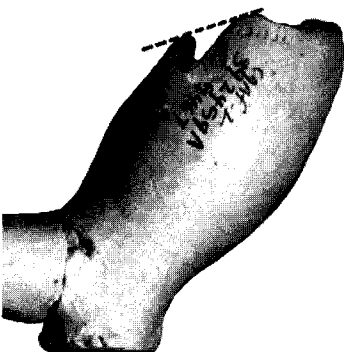
**Late seventeenth-century West Country bowl 7**  
(1680-1720)



**Late seventeenth-century West Country bowl 8**  
(1680-1720)



**Late seventeenth-century West Country (Exeter) bowl** (1680-1720)  
Raised dots on sides of heel attributed to Exeter manufacture (Oswald et al. 1984)

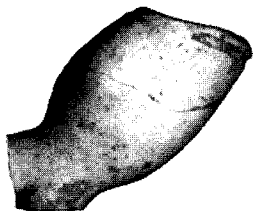


**Very large late seventeenth- to early eighteenth-century bowl** (1680-1710)  
English manufacture, incomplete profile  
Similar to forms from Panama dating 1698-1700  
Horton et al. 1987:243

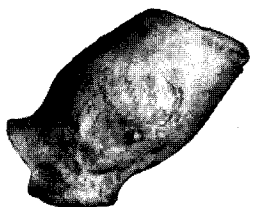




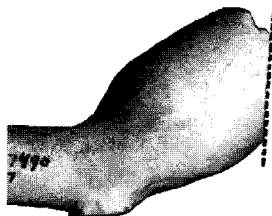
**Dutch pipe bowl 1 (1620-40)**  
Amsterdam bowl form



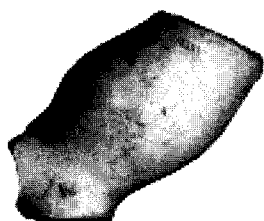
**Dutch pipe bowl 2 (1625-40)**  
Amsterdam bowl form



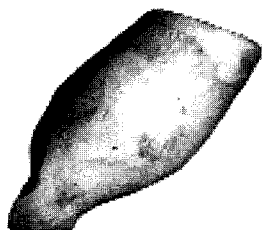
**Dutch pipe bowl 3 (1625-50)**  
Amsterdam?



**Dutch pipe bowl 4 (1630-50)**  
Possibly Amsterdam  
Incomplete profile  
Almost exact form in Friederich 1964:8 dated 1632



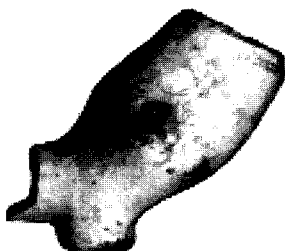
**Dutch pipe bowl 5 (1630-60)**  
Possible Leiden bowl form



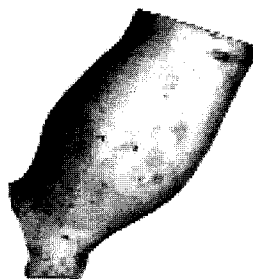
**Dutch pipe bowl 6 (1640-60)**  
General form



**Dutch pipe bowl 7 (1640-65)**  
Likely made in Leiden  
Incomplete profile



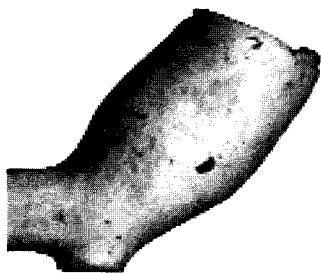
**Dutch pipe bowl 8 (1640-70)**  
Possible Gouda or Leiden manufacture



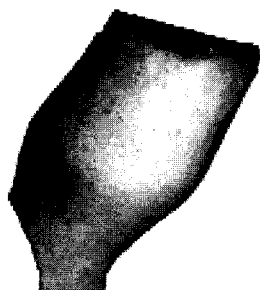
**Dutch pipe bowl 9 (1650-80)**  
General form



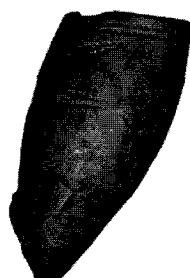
**Dutch pipe bowl 10 (1650-80)**  
Possible Gouda manufacture



**Dutch pipe bowl 11 (1660-90)**  
General form

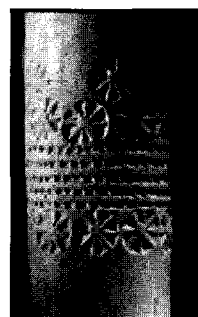
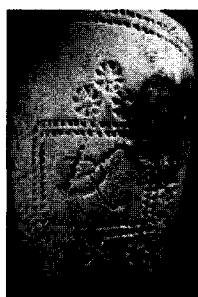
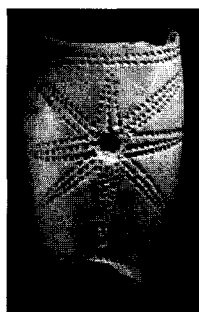


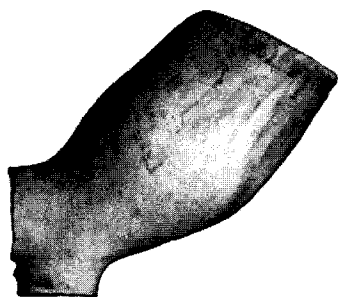
**Dutch pipe bowl 12 (1670-1700)**



**Initialled Virginia pipe (1640-60)**  
Virginia, U.S.A  
DK pipes (1638-1651)  
Double rouletting around rim  
Eight-pointed star with a centre-stamped circlet on back of bowl

DK monogrammed initials on front of bowl

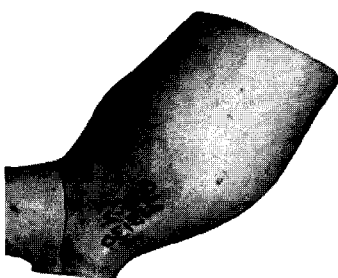




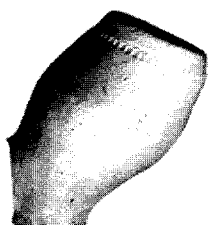
**Virginia marbled pipes 1 and 2 (1640-70)**

Virginia, U.S.A.

Decorative rouletted band of alternating triangles  
around rim



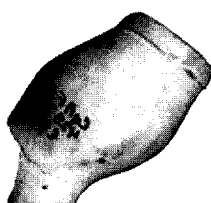
**New England red clay pipe (1650-1720)**

Marked and decorated pipes**EL bowl 1 (1620-40)**

English bowl form, Bristol manufacture

EL mark on heel, incuse

Attributed to Bristol pipe maker Edward Lewis (1631-40/1)

**EL bowl 2 (1620-40)**

English bowl form, Bristol manufacture

EL mark on heel, incuse

Attributed to Bristol pipe maker Edward Lewis (1631-40/1)

**Eglantine (1580-1730)**

Mark on heel, in relief, no bowl fragments  
Eglantine mark likely a Plymouth, Devon product

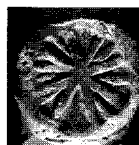
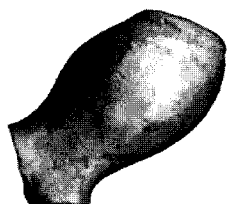
(Higgins 1992:241-42)

**TG (1620-40)**

Mark on heel, incuse

Partial bowl and heel fragment

Attributed to Devon manufacture (Higgins 2000, personal communication)



**English Star/wheel bowl (1620-40)**  
 English bowl form, possibly London or  
 Bristol origin  
 Star/wheel mark on heel, in relief



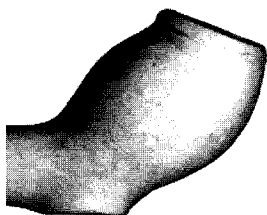
**PH/RH bowl (1620-40)**  
 London bowl form  
 PH/RH mark on heel, in relief  
 Decorative style of mark attributed to  
 London  
 (Higgins 2001, personal communication)



**IS bowl (1630-50)**  
 London bowl form  
 IS mark, in relief, on heel surrounded by  
 wreath-like border  
 Stylized tobacco plant between initials  
 Possible pipe makers John Smith (1634) or  
 John Stevens (1644)



**RC bowl 1 (1630-50)**  
 Uncertain provenance (possibly a London  
 export variety or Southern Ireland product)  
 RC mark#1 on heel, in relief  
 Bowl forms also similar to Yorkshire pipes  
 (See Lawrence 1979:69)

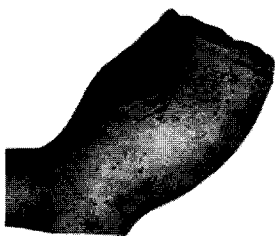


**RC bowl 1A (1630/40-50)**

General form (London/ S. Ireland?)

Same mark as RC bowl 2

Rutter and Davey (1980:108) attribute this bowl form to London



**RC bowl 2 (1640-60)**

Uncertain provenance (London/S. Ireland?)

RC mark#2 on heel, in relief

RC makers' marks #2 and #3 can be found on both RC bowl 2 and RC bowl 3



**RC bowl 3 (1640-60)**

Uncertain provenance (London/S. Ireland)

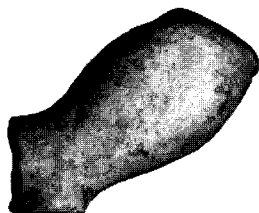
RC mark#3 on heel, in relief



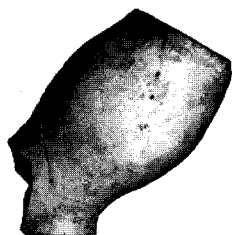
**RC bowl 4 (1640-60)**

General bowl form (London/S. Ireland?)

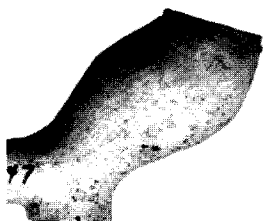
Same makers' mark as on RC bowl 1



**English Tudor rose bowl** (1640-60)  
 Cental/Southern England or London form  
 Tudor rose stamp on heel, in relief



**English Rose mark/clover bowl** (1640-60)  
 Common English bulbous bowl form  
 Small and faint rose mark on heel, in relief  
 Similar forms found in Plymouth, Devon  
 (Oswald 1969:129)

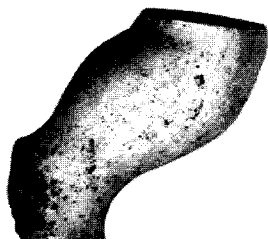


**WT bowl** (1640-60)  
 Cental/Southern England "chinned" bowl form  
 WT mark on heel, in relief  
 Possibly William Tyler (1644) of  
 Southampton, Hampshire



**PE**  
 Only heel marks and partial bowls found.  
 Attributed to Bristol pipe makers Philip  
 Edwards I (1649/50-1668-9) or II (1680/1-  
 96)



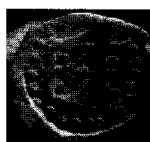
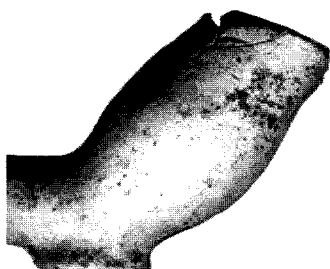


**IH bowl (1650-80)**

South-West England "chinned bowl"

IH mark stamped on heel, incuse

Attributed to pipe maker John Hunt of Bristol (1651-53)

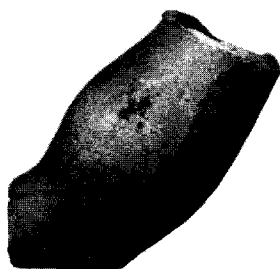


**EF bowl (1650-80)**

Uncertain provenance, attributes of both West Country and Dutch pipes

EF mark on heel, in relief, surrounded by circle of dots

Based upon the decorative border, Cornwall could be another possible provenance (Higgins 2001, personal communication)



**Crude wheel or star bowl (1650-80)**

West Country, similar forms found in Barnstaple

Wheel or star on heel, incuse

Mark is off centre and much smaller than heel

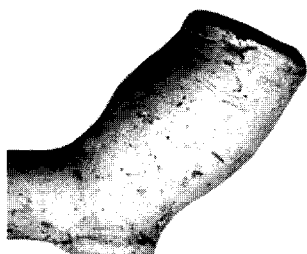


**Crude wheel or star 2 (1640-60)**

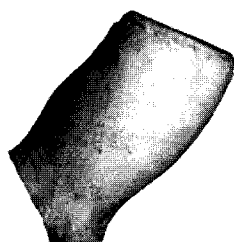
Partial bowl only

Wheel or star on heel, incuse

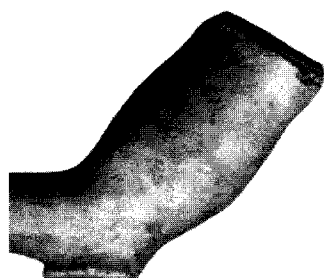
Mark is fairly small and off centre



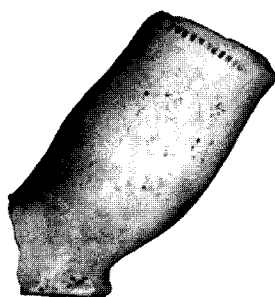
**AR bowl 1 (1660-80)**  
 West Country bowl form  
 AR mark on heel, in relief  
 Possibly Barnstaple pipe maker Anthony Roulstone, 1630s-70  
 (Grant and Jemmett 1985-472)



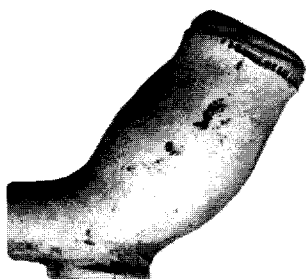
**AR bowl 2 (1630-50)**  
 West Country bowl form  
 Smaller bowl compared to AR bowl 1  
 AR mark on heel, in relief  
 Possibly Barnstaple pipe maker Anthony Roulstone, 1630s-70  
 (Grant and Jemmett 1985-472)



**PS bowl 1 (1660-1680)**  
 West Country bowl form  
 PS mark on heel, in relief  
 Mark identified as Peter Stephens, Barnstaple pipe maker who took an apprentice in 1646, d. 1670  
 (Grant and Jemmett 1985)



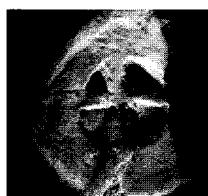
**PS bowl 2 (1660-1680)**  
 West Country bowl form  
 Same mark and general shape to PS bowl 1, but slightly larger  
 Peter Stephens, Barnstaple pipe maker who took an apprentice in 1646, d. 1670



**Wheel / 8-spoked wheel bowl (1660-1680)**

West Country bowl form, similar forms found in Barnstaple and Exeter

Wheel/spoked wheel mark on heel, in relief



**Cross/X (1660-1680)**

English provenance, possibly West Country. Partial bowl only.

Cross or X on heel, in relief



**LE (1661-1686)**

Mark on stem only- incuse, no bowl fragments

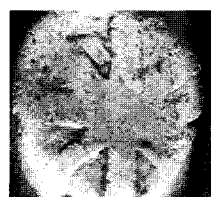
Mark attributed to Bristol pipe maker Llewellyn Evans 1661-1686



**Cross/X-mark (1660-90)**

West Country manufacture, common in Barnstaple and Exeter

Mark on heel only, in relief, no bowls



**Cross or Star mark (17th century)**

Exact provenance uncertain, but possibly SW England (Higgins 2006, pers. com.)

Mark on heel only, in relief, no bowl



**Barum (1680-1720)**

Mark on heel, incuse

Makers' mark and bowl forms attributed to Barnstaple in Devon



**RVB Sidney**

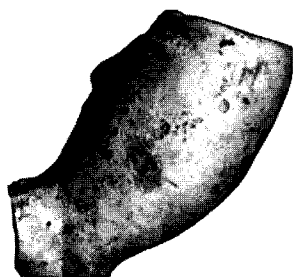
Mark on stem only, incuse, no bowl fragment

Attributed to Reuben Sidney, Southampton pipe maker (1687-1748)



**Large star/spoked wheel (17th century)**

Large star/wheel on heel, in relief, no bowl fragments

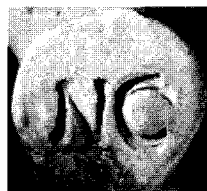


**Jonah bowl stitched (1660-80)**

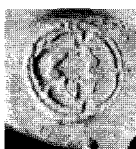
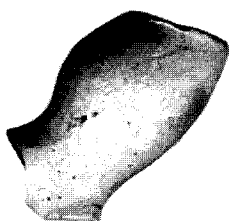
Moulded face on bowl likely depicting the biblical character Johah

Stem decorated in "fruit and vine" motif, attributed to Dutch manufacture

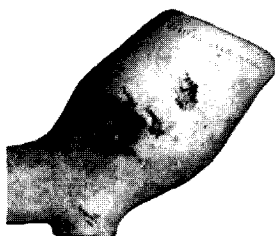
Image shows two partial pipe bowls stitched together



**NC** (first half of 17th century)  
 Mark on heel, incuse, partial bowl only  
 Possibly Nicholass Claverlij, an English  
 pipe maker working in Amsterdam in 1629  
 (Duco 1981:307)



**Dutch Tudor rose bowl** (1620-40)  
 Dutch pipe bowl  
 Tudor rose on heel, in relief  
 Atkinson and Oswald (1972:182) date this  
 mark from 1615-40



**Dutch CA bowl** (1630-50)  
 Dutch bowl form, likely Gouda  
 CA mark on heel, in relief  
 Possibly Cornelis Ariensz apprenticed in  
 1626 (Duco 1981)



**WD**  
 Dutch provenance  
 Mark on heel, in relief, no bowl  
 Possibly Amsterdam pipe maker Willem  
 Dirckss (1633); or Gouda pipe maker  
 Willem Duijff (1693-95)



**Crowned IC (17th century)**

Dutch "Baroque" pipe. Mark moulded on stem, in relief, no bowl fragments

Crowned IC initials on either side of stem

Above crowned initials is another crowned symbol/letter/number. Undecipherable on most examples but may be a fish

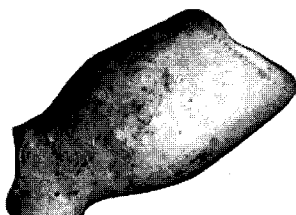
May be Amsterdam pipe makers' John Coenen (1631) or Jan Classs (1636)



**Dutch Rose mark bowl 1 (1640-70)**

Dutch pipe bowl, possibly Leiden

Rose mark on heel, in relief



**Dutch Rose mark bowl 2 (1640-60)**

Dutch pipe bowl, possibly Amsterdam

Rose mark on heel, in relief

See Frederich 1964:8

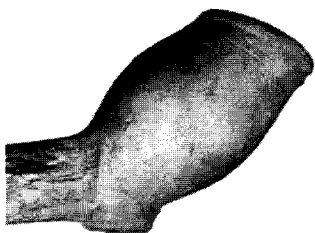


**Dutch Rose mark bowl 3 (1670-90)**

Dutch pipe bowl, manufactured in Gouda

Rose mark on heel, in relief

Possibly the same pipe form bearing the four-on-diamond fleur-de-lys stem decoration (see below)

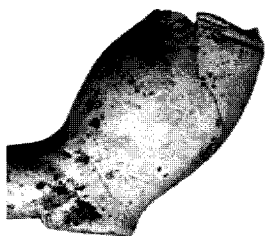


**Dutch Thistle bowl (1640-60)**

Dutch pipe bowl

Thistle mark on heel, in relief

McCashion 1979:79 illustrates a very similar thistle mark dating 1635-45

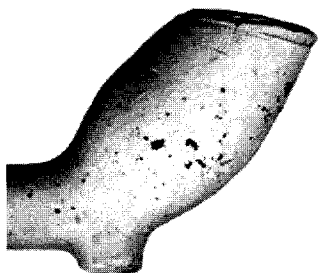


**Fleur-de-lys bowl (1640-60)**

No distinguishing attributes but likely a

Dutch product

Fleur-de-lys mark on heel, in relief



**Dutch TIP bowl (1640-70)**

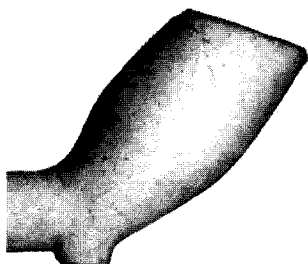
Dutch pipe bowl, Gouda manufacture

TIP initials on heel, in relief

Attributed to Gouda pipe maker Thiel

Jansz Proost 1652-1665

(Duco 1981:325; 1982:93)



**Dutch bowl with fleur-de-lys stem  
(1670-90)**

Dutch pipe bowl, likely Gouda manufacture. Top of stem stamped with series of single fleur-de-lys (crude) decorations, in relief

Stem decorations**Four-on-diamond fleur-de-lys**

Common seventeenth-century Dutch motif  
Four fleur-de-lys and a single rouletted  
band on either side of the decoration

**Series of single fleur-de-lys**

Each fleur-de-lys enclosed within a dia-  
mond shaped border  
Typically 5 or 6 fleur-de-lys stamped on  
each stem

**Series of single fleur-de-lys (crude)**

Cruder stamp used; typically 5 or 6 fleur-  
de-lys stamped on stem  
Found on Dutch bowl with fleur-de-lys  
stem illustrated above



**Appendix B (Part I)**  
**Ceramics from the Kirke House**

**COARSE EARTHENWARE** (excluding tin-glazed earthenware)

North Devon (smooth)

**Cup**, Event 462. Interior/exterior slip and yellow/green glaze: MNV 1

**Cup/Drinking pot/Porringer**, Event 352. Rim fragments with interior slip and glaze: MNV 1

**Bottle/Flask**, Event 287. Rim fragment, interior green glaze: MNV 1

**Bottle/Flask**, Event 287. Base, body and rim fragment, light green/brown interior glaze: MNV 1

**Bowl**, Event 458. Base and body fragments, interior white slip and green glaze: MNV 1

**Bowl**, Event 361. Rim and base fragments, interior brownish glaze: MNV 1

**Bowl**, Event 287: MNV 1

**Jar**, Event 464. Rim/mouth fragment, interior green glaze, North Devon smooth or Merida: MNV 1

**Chafing dish**, Events 463 and 287. Rim and base fragment: MNV 1

**Pan/Milkpan**, Event 462. Rim fragment, some gravel temper: MNV 1

**Pot/Storage pot**, Events 470 and 287. Rim and base fragment: MNV 1

**Pot/Storage pot**, Event 461: MNV 1

**Tallpots**, all Kirke house events. 39 MNV based on rim fragments (only 21 MNV based on base fragments): MNV 39

Tallpot, Event 469. Body fragment with drilled holes, reused as flowerpot MNV 0

**Total: 51 MNV** (Cup= 2; Bottle/Flask= 2; Bowl= 3; Jar= 1; Chafing dish= 1; Pan/Milk pan= 1; Pot/Storage pot= 2; Tallpot=39)

North Devon (smooth, sgraffito decorated)

**Cup**, Event 475. Sgraffito decorated on exterior: MNV 1

**Jug/Pitcher**, Event 475. Body and handle attachment: MNV 1

**Jug/Pitcher**, Event 475: MNV 1

**Jug/Pitcher**, Event 475: MNV 1

**Jug/Pitcher**, Event 287: MNV 1

**Dish**, Events 475 and 462. Flower and tulip decoration: MNV 1

**Dish**, Event 475. Tulip and flower around marley, floral decoration inside: MNV 1

**Dish**, Events 475, 464, 463. Swirls around marley, propeller & circles on body: MNV 1

**Dish**, Event 475. Hatched lines decorating vessel interior: MNV 1

**Dish**, Event 287. Widely-spaced hatched lines on marley: MNV 1

**Dish**, with cross-hatching on marley, closely spaced: MNV 1  
**Dish/Plate**, Event 287. Closely-spaced hatched lines on marley: MNV 1  
**Small Dish/Plate**, Event 462. Pattern of wavy lines between vertical dots on body: MNV 1  
**Dish**, Event 287: MNV 1  
**Chamber Pot**, Events 359 and 287: MNV 1

**Total: 15 MNV** (Cup= 1; Jug/Pitcher= 4; Dish/Plate= 9; Chamber Pot= 1)

North Devon (gravel-tempered)

**Bowl**, Event 287 (or equivalent event). Rim fragments: MNV 1  
**Porringers**, Event 287 (or equivalent event). Two different horizontal handles from separate vessels, also two different rim fragments: MNV 2  
**Chafing Dish**, Events 475 and 357. Handle, lug and rim fragments: MNV 1  
**Shallow Pan/Straight-sided Dish**, Event 287: MNV 1  
**Pipkin**, Event 463. Handle fragment: MNV 1  
**Pipkin**, Event 357. Handle fragment: MNV 1  
**Pipkin**, Event 474. Full handle: MNV 1  
**Pipkins**, Event 287 (or equivalent event). Three handles (two examples with 2/3rds of a handle and one end piece) and two small pipkin feet: MNV 3  
**Fleshpot**, Event 464. Full handle and rim fragments: MNV 1  
**Fleshpots**, Event 287 (or equivalent event). Four large straight handles (two complete with body fragments, one almost complete, one end piece), eight rim fragments and five large feet: MNV 4  
**Lid**, Event 464: MNV 1  
**Lids**, Event 287 (or equivalent event). One almost complete, one top/finial and one additional rim with a distinct profile and thin body: MNV 3  
**Pot/Storage pot**, Event 287 (or equivalent event). Rim and handle fragment and two possible handle fragments: MNV 1  
**Pot/Storage pot**, Event 287 (or equivalent event). Rim and body fragments: MNV 1  
**Pot/Storage pot**, Events 357 and 359. Rim fragments: MNV 1  
**Pot/Storage pot**, Event 474. Rim fragment: MNV 1  
**Pot/Storage pot**, Event 475. Rim fragment: MNV 1  
**Pot/Storage pot**, Event 369. Rim fragment: MNV 1  
**Pot/Storage pot**, Events 369 and 287. Rim fragments: MNV 1  
**Storage pot**, Event 287 (or equivalent event). Large heavy rim: MNV 1  
**Storage pot**, Event 474. Large, two handled, restored vessel: MNV 1  
**Storage pot**, Events 464, 469, 368 and 287. Large pot with reinforced rim, thumb-impressed reinforcements outside and under rim, and two large strap handles: MNV 1  
**Storage pot**, Event 475. Rim, handle attachment and thumb impressions: MNV 1  
**Storage pot**, Event 462. Rim fragment: MNV 1

**Storage pots**, Event 287 (or equivalent event): MNV 4

Storage pot, Event 287. Base fragment with hole drilled in centre of base, reused as a flowerpot: MNV 0

**Milkpan**, Events 469 and 287. Rim fragments with thick wavy clay reinforcements underneath rim: MNV 1 (Same rim fragments found in Event 520, most likely the same vessel)

**Milkpan**, Event 474. Rim and base fragments: MNV 1

**Milkpan**, Event 368. Rim fragments: MNV 1

**Milkpan**, Events 462, 464 and 369. Rim and body fragments: MNV 1

**Milkpan**, Events 357 and 469. Rim fragments: MNV 1

**Milkpans**, Event 536: MNV 2

**Milkpans**, Events 287, 467 and 458. Various rim forms: MNV 12

**Ovens**, Two North Devon clay ovens in the corners of lateral fireplace. Re-used/incorporated into Kirke house for approximately 20 years: MNV 2

**Total: 53 MNV (excluding 4 lids)** (Bowl= 1; Porringer= 2; Chafing dish= 1; Shallow pan= 1; Pipkin= 6; Fleshpot= 5; Pot/Storage pot= 16; Milkpan= 19; ; Ovens= 2)

#### South Somerset and Verwood

**Cup/Mug**, Event 287. Verwood body and base fragments, interior/exterior green glaze: MNV 1

**Porringer/Cup**, Event 287. South Somerset handle fragments: MNV 1

**Bowl/Pot**, Event 370. Interior greenish/olive glaze: MNV 1

**Dish/Bowl**, Event 287. South Somerset sgraffito fragments: MNV 1

**Dish/Bowl**, Event 287 (or equivalent event). South Somerset body fragments, green interior glaze, white slip and some sgraffito decoration: MNV 1

**Pan/Dish**, Event 483. Possible Somerset rim fragment, interior green glaze: MNV 1

**Pan/Dish**, Events 287 and 359. South Somerset rim and base fragments: MNV 1

**Fleshpot**, Event 536. South Somerset base and foot attachment: MNV 1

**Pot**, Events 361 and 359. South Somerset rim fragment: MNV 1

**Pot/Storage pot**, Events 473, 349, 464 and 370. Verwood rim/body fragments: MNV 1

**Pot/Storage pot**, Events 463, 349 and E464. Verwood rim, base and body fragments: MNV 1

**Pot/Storage Pot**, Event 462. South Somerset rim fragment: MNV 1

**Pot/Storage Pot**, Event 462. South Somerset base fragment, brown glaze: MNV 1

**Pot/Tallpot**, Events 361, 287 and 359. South Somerset base fragments, with interior green glaze: MNV 1

**Pot/Storage Pot**, Event 287. Large horizontal handle from South Somerset storage pot, green glaze: MNV 1

**Pots/Storage pots**, Event 287. Two different rim fragments, possible Somerset origin: MNV 2

**Tallpot**, Event 287. South Somerset, interior glaze: MNV 1

**Milkpan**, Event 536. South Somerset rim and body fragments: MNV 1

**Milkpans**, Event 287 (or equivalent event). Two different South Somerset rim fragments: MNV 2

**Total: 21 MNV** (Cup/Porringer= 2; Dish/Bowl= 3; Fleshpot= 1; Pot= 10; Milkpan/Pan= 5)

#### Border ware

**Holloware vessel** (possibly a drinking jug or costrel), Event 462. Base fragment with exterior yellow glaze: MNV 1

**Porringer/Cup**, Events 359 and 370. Body and handle attachment fragments, interior yellow glaze: MNV 1

**Sweetmeat dish**, Event 287. Yellow interior glaze and incised upper rim: MNV 1

**Sweetmeat dish**, Events 287, 333, 359 and 467. Yellow interior glaze and no incised rim: MNV 1

**Pipkin**, Event 287. Rim, body and handle fragments, interior yellow/green: MNV 1

**Pipkin**, Event 287. Rim and body fragments, green interior: MNV 1

**Lid**, Event 287. Lug/top from Border ware pipkin lid: MNV 1

**Lid**, Event 359. Thin body, likely from small pipkin: MNV 1

**Fuming pot**, Event 359. Very similar in form and fabric to fragments found at Area G: MNV 1

**Inkpots (2 lids)**, Event 287. Two inkpot lids, one complete and one partial: MNV 2

**Total: 9 MNV (excluding 2 pipkin lids)** (Holloware vessel=1; Porringer/Cup=1; Sweetmeat dish= 2; Pipkin=2; Fuming pot=1; Inkpot=2)

#### Exeter Coarse Sandy

**Cup/Drinking pot**, Event 287. Rim, base and body fragments: MNV 1

**Cup/Drinking pot**, Event 287. Body fragment with interior/exterior green/brown glaze: MNV 1

**Holloware vessel** (cup/small bowl/dish), Event 358. Interior glaze: MNV 1

**Holloware vessel** (possibly a jar/bottle), Event 464. Glazed inside and out: MNV 1

**Holloware vessel** (possibly pot or pan), Events 370 and 353. Base fragments: MNV 1

**Pot**, Event 359: MNV 1

**Pot**, Events 287 and 361. Rim and base fragments: MNV 1

**Tallpot**, Event 353. Rim fragment: MNV 1

**Tallpot**, Event 349. Rim fragment: MNV 1

**Pot/Pan**, Event 359. Four thumb-impressed reinforcements for pan/pot: MNV 1

**Pan/Milkpan**, Events 370 and 361. Large body and base fragments, interior slip and yellowish glaze: MNV 1

**Milkpan**, Event 359. Three rim and base fragments: MNV 1

**Milkpan**, Event 287. Rim fragment: MNV 1

**Milkpan**, Event 536. Base fragments: MNV 1

**Condiment dish or possible saucer candlestick**, Events 359 and 287. Rim, body and base fragments: MNV 1

**Total: 15 MNV** (Cup/Drinking pot= 2; Holloware= 3; Pot/storage pot= 5; Milkpan/Pan= 4; Condiment dish/candlestick= 1)

#### Totnes

**Holloware vessel** (unidentified), Event 349: MNV 1

**Bowl**, Event 287. Rim fragment: MNV 1

**Bowl/Pan**, Event 536. Rim and body fragments: MNV 1

**Bowl/Pan**, Event 357. Rim fragment: MNV 1

**Pipkin/Fleshpot**, Event 475. Rim and pouring lip: MNV 1

**Pot/Storage pot**, Event 464. Rim and body fragments, horizontal bands of exterior slip below rim: MNV 1

**Pot/Storage pot**, Event 470. Rim fragment, interior greenish glaze: MNV 1

**Pot/Storage pot**, Events 359 and 370. Rim fragments, with horizontal band of slip on exterior below rim, interior pale green/yellow glaze: MNV 1

**Tallpot**, Event 470. Rim fragment, interior yellow glaze: MNV 1

**Pots/Tallpots**, Event 287. Five different rim forms: MNV 5

**Total: 14 MNV** (Holloware vessel= 1; Bowl= 1; Pipkin/Fleshpot= 1; Bowl/Pan= 2; Storage Pot/Tallpot= 9)

#### Staffordshire/Bristol

**Cup**, Event 464. Slip dotted: MNV 1

**Mug**, Events 475, 349 and 352. Combed slipware rim and body fragments: MNV 1

Other assorted mug fragments from Events 357, 463 and 469 (no joins)

**Mug**, Event 464. Manganese mottled base fragment: MNV 1

**Mug**, Event 468. Rim and body fragments: MNV 1

**Mug**, Event 287. Rim and body fragments: MNV 1

**Total: 5 MNV**

Merida

**Bottle/Jug**, Event 287. Base fragment: MNV 1

**Costrel**, Events 475 and 462. Top of costrel: MNV 1

**Small Bowl**, Events 359, 467, 353 and 370. Fifteen rim and body fragments: MNV 1

**Small Bowl**, Event 287. Base fragments, different fabric than above example: MNV 1

**Bowl**, Event 359. Rim from large bowl: MNV 1

**Bowl**, Events 287 and 349. Thicker rim than other bowls: MNV 1

**Jar**, Events 475 and 379. Rim fragments, small opening and relatively thin top/lip.

Interior yellowish/greenish glaze: MNV 1

**Jar**, Events 464 and 461. Rim fragments, small opening and relatively thin top: MNV 1

**Jar/Olive Jar**, Event 536. Complete rim: MNV 1

**Jar/Olive Jar**, Events 357 and 463. Rim fragments: MNV 1

**Jar/Olive Jar**, Events 369 and 349. Rim fragments: MNV 1

**Jar/Olive Jar**, Event 358. Complete rim: MNV 1

**Jar/Olive Jar**, Event 359. Complete rim, interior green glaze: MNV 1

**Jars/Olive Jars**, Event 287. Three rim fragments from different vessels, all unglazed but with exterior white slip: MNV 3

**Pan/Milkpan** Event 349: MNV 1

**Total: 17 MNV** (Bottle/Jug= 1; Costrel= 1; Bowl/Small Bowl= 4; Jar/Olive Jar= 10; Milkpan=1)

Spanish Heavy

**Jar/Olive Jar**, Event 357. Complete rim, interior green glaze: MNV 1

**Jar/Olive Jar**, Event 468. Rim fragments, unglazed: MNV 1

**Jar/Olive Jar**, Events 380 and 381. Partial rim, int/ext green glaze: MNV 1

**Jar/Olive Jar**, Event 287. Rim fragments, unglazed interior: MNV 3

**Total: 6 MNV**

Portuguese *terra sigillata*

**Bowls**, Event 287 (or equivalent events): MNV 3

**Jug/Pitcher**, Event 287 (or equivalent events): MNV 1

**Closed Globes**, Event 287 (or equivalent events): MNV 5

**Handled Pots**, Event 287 (or equivalent events): MNV 2

**Total: 11 MNV**

Redware (Possible Merida or American Redware)**Milkpan**, Event 474. Rim, body and base fragments: MNV 1**Milkpan**, Event 464: MNV 1**Milkpan**, Event 368. Rim fragments: MNV 1**Milkpan**, Event 361. Rim fragments: MNV 1**Milkpan**, Event 358. Rim fragments: MNV 1**Milkpan**, Event 287. Large rim fragments: MNV 1**Milkpans**, Event 536. Body, rim and base fragments from three vessels. Possibly American Redware or Exeter Coarse Sandy: MNV 3**Total: 9 MNV**Saintonge**Cup**, Event 287. Interior green glaze: MNV 1**Cup**, Event 287. Interior green glaze: MNV 1**Small Bottle**, Event 287. Full base and body fragments. Small enough to be a medicinal bottle or for vinegar, oil or strong liquor: MNV 1**Figurine Jug**, Event 287. Shoulder and spout fragments from polychrome jug. Distinctive decorative pattern on shoulders identifies this piece as a figurine jug: MNV 1**Barrel Costrel**, Event 287. Spout, rim and handle attachment from polychrome barrel costrel. Blue, green and manganese on exterior: MNV 1**Bowl/Drinking pot**, Event 464. Rim fragment with interior green glaze: MNV 1**Bowl/Pan**, Event 462. Rim fragment with pouring lip and interior green glaze: MNV 1**Small Bowl/Drinking pot**, Event 475. Rim fragment with interior green glaze: MNV 1**Chafing dish**, Events 462, 388, 359, 287 and 358. Looped handle and lug fragments, interior green glaze: MNV 1**Chafing dishes**, Events 359, 361, 370 and 287. Polychrome decorated, at least 2 different vessels based on fragments: MNV 2**Milkpan/Pan**, Events 287 and 359. Interior green glaze: MNV 1**Milkpan**, Events 458, 462, 467 and 464. Interior yellowish/brown glaze: MNV 1**Milkpan**, Event 368. Rim fragment: MNV 1**Milkpan**, Event 368. Rim fragment joins with fragment from Event 370: MNV 1**Milkpan**, Event 287. Large rim fragment: MNV 1**Milkpan**, Event 353. Rim fragments with splashes of green exterior glaze, yellowish/brown on inside: MNV 1**Milkpan**, Event 358. Base and body fragment with interior green glaze: MNV 1**Milkpan**, Events 361 and 363. Rim/base fragments with interior brown glaze: MNV 1**Milkpan**, Events 536 and 358. Rim fragments: MNV 1**Total: 20 MNV** (Cup= 2; Small Bottle= 1; Figurine Jug= 1; Barrel Costrel= 1; Bowl/Drinking pot= 2; Chafing dish= 3; Milkpan/Pan= 10)

North Italian Marbled/Sgraffito Slipware

**Small Bowl**, Events 361 and 287. Marbled polychrome slipware body and rim fragments, mix of interior brown and yellow slip covered with clear lead glaze: MNV 1

**Small Bowl**, Event 287. Marbled polychrome slipware rim fragments. Green, brown and white slip inside; brown, white, and black outside, clear lead glaze: MNV 1

**Bowl**, Events 287, 359, 357, 349 and 379. Sgraffito slipware rim and body fragments: MNV 1

**Total: 3 MNV**

Dutch Redware

**Pipkins**, Events 287 and 368. Two different rim fragments, three legs (one much larger) and one handle attachment. Interior brown/cinnamon glaze: MNV 2

**Pot/Storage pot**, Event 287. Interior/exterior cinnamon brown glaze. Incised vertical decoration around rim: MNV 1

**Total: 3 MNV**

Miscellaneous

**Holloware**, Event 287 (or equivalent event). German Weser ware, likely a cup or pipkin. Indented horizontal bands along body fragment: MNV 1

**Bottle/Jar/Jug**, Event 463. Uncertain provenance, large body fragment with red fabric and exterior green glaze: MNV 1

**Chafing dish or Pot**, Event 469. Provenance uncertain, sandy brown fabric, blackened on exterior: MNV 1

**Pot/Storage pot**, Event 370. Midlands purple rim fragment: MNV 1

**Pot/Storage pot**, Event 287. Unidentified redware base fragments with interior green glaze: MNV 1



**TIN-GLAZED EARTHENWARE** (from all Kirke house events)

Tabulated from Stoddart's 2000 analysis and including additional vessels excavated between 2001-04. Listed by vessel form.

Plates: 55  
 Saucers: 13  
 Plates/Saucers: 1  
 Bowls: 42  
 Lobed Dishes: 15  
 Porringers: 5  
 Possett Pots: 2  
 Salt Dish: 1  
 Flat dish: 1  
 Mugs: 10  
 Cups: 5  
 Cups/Mugs: 4  
 Bottle/Pitcher: 1  
 Punch bowl: 1  
 Jugs: 9  
 Storage Jars: 3  
 Galley Pots: 29  
 Chamber Pots: 3  
 Shaving Basins: 2  
 Unknown/uncertain vessel forms: 11  
 Puzzle Jug: 1  
 Olive Strainer/Flower Holder: 1  
 Tiles: 3  
 Anthropomorphic Bottle: 1  
 "Amors" Plate: 1  
 Lids: 2  
 Rectangular lid from box/container: 1

TGEW percentages by provenance

English: 37%  
 English or Dutch: 17.1%  
 Iberian: 38.1% (includes general Iberian category =14.4%; Portuguese =21.8%; Spanish= 1.9%)  
 Dutch: 2.3%  
 Italian: 1.9%  
 Unknown: 4.2%

**COARSE STONEWARE** (from all Kirke house events)

Numbers provided by Nicole Brandon's ongoing MA research on Ferryland stoneware and includes additional vessels excavated between 2001-04. Listed by provenance and vessel form.

Rhenish (Frechen) Bartmann Bottles: MNV 23  
 Rhenish (Frechen) Bottles/Jugs: MNV 2  
 Rhenish (Frechen) Drinking pot: MNV 1  
 Rhenish (Frechen) Ointment bottles: MNV 2  
 Rhenish (Westerwald) Mugs: MNV 7  
 Rhenish (Westerwald) Biconic Jugs: MNV 3  
 Rhenish (Westerwald) Jugs: MNV 2  
 Rhenish (Westerwald) undetermined: MNV 2  
 French (Normandy/Martincamp) Flasks: MNV 2  
 French (Normandy) Pot: MNV 1  
 French (Normandy) Holloware, possibly a Storage pot: MNV 4  
 French (Normandy) Cup or Ointment pot: MNV 1  
 French (Beauvais/Loire) Jug/Pitcher: MNV 1  
 French (Beauvais/Loire) Small Jug or Cup: MNV 1  
 English Brown Bottle: MNV 1

**CHINESE EXPORT PORCELAIN** (from all Kirke house events)

Porcelain numbers from Miller 2005:113-114.

Plate, Event 370: MNV 1  
 Cups/Teabowls, Events 464 and 467: MNV 2

**OVERALL CERAMIC TOTALS** (from all Kirke house events)

Total MNV for CEW: 257  
 Total MNV for TGEW: 218  
 Total MNV for CSW: 53 + (3 porcelain) = 56

**TOTAL MNV FOR ALL KIRKE HOUSE CERAMICS: 531**

## **BREAKDOWN OF VESSEL QUANTITIES BY PROVENANCE**

(excluding 15 vessels of unknown origin)

### England

North Devon CEW: 118

South Somerset CEW: 18

Verwood CEW: 3

Exeter Coarse Sandy CEW: 15

Totnes CEW: 14

English TGEW: 80

Midlands Purple CEW: 1

Staffordshire/Bristol CEW: 5

Border ware CEW: 9

English stoneware: 1

Total: 264

**Percentage: 51.2%**

Percentage of English West Country ceramics: **63.6%** of all English ceramics and **32.6%** of overall ceramic total.

### Iberian

Merida CEW: 17

Spanish Heavy CEW: 6

Portuguese *terra sigillata* CEW: 11

Iberian TGEW: 31

Portuguese TGEW: 46

Spanish TGEW: 4

Total: 115

**Percentage: 22.3%**

### French

Saintonge CEW: 20

French stoneware (Normandy, Martincamp and Beauvais/Loire): 10

Total: 30

**Percentage: 5.8%**

### Germany

Weser ware CEW: 1

Rhenish CSW (Frechen and Westerwald): 42

Total: 43

**Percentage: 8.3%**

The Netherlands

Dutch Redware CEW: 3

Dutch TGEW: 5

Total: 8

**Percentage: 1.6%**Italian

North Italian Marbled/Sgraffito CEW: 3

Italian TGEW: 4

Total: 7

**Percentage: 1.4%**American Redware? Or Iberian?

Total: 9

**Percentage: 1.7%**Chinese Export Porcelain: 3**Percentage: 0.6%**English/Dutch TGEW: 37

Total: 37

**Percentage: 7.2%**

## Appendix B (Part II)

### Breakdown of Kirke House Ceramics by POTS category

(excluding 12 unidentified vessels that could not be attributed to a POTS category)

#### Food service

Porringer, TGEW: 5  
 Porringer, North Devon CEW: 2  
 Porringer, Saintonge CEW: 1  
 Porringer/Cup, Border ware CEW: 1  
 Bowl, TGEW: 42  
 Bowl, North Italian sgraffito CEW: 1  
 Bowl, North Italian marbled polychrome CEW: 2  
 Bowl, Portuguese *terra sigillata* CEW: 3  
 Small Bowl, Merida CEW: 2  
 Plate, TGEW: 55  
 Plate, Chinese export porcelain: 1  
 "Amors" Plate, TGEW: 1  
 Plate/Saucer, TGEW: 1  
 Saucer, TGEW: 13  
 Chafing Dish, North Devon CEW: 2  
 Chafing Dish, unidentified provenance CEW: 1  
 Chafing Dish, Saintonge CEW: 3  
 Dish/Plate, North Devon sgraffito CEW: 2  
 Dish/Plate, North Devon sgraffito CEW: 2  
 Dish/Bowl, South Somerset CEW: 2  
 Lobed Dish, TGEW: 15  
 Sweetmeat Dish, Border ware CEW: 2  
 Salt Dish, TGEW: 1  
 Flat Dish, TGEW: 1  
 Dish, North Devon sgraffito CEW: 6  
 Condiment Dish, Exeter Coarse Sandy CEW: 1

Total Food Service: **168 MNV**

Percentage of total: **32.4%**

#### Beverage service

Cup/Mug, TGEW: 4  
 Cup/Mug, Verwood CEW: 1  
 Cup, TGEW: 5  
 Cup, Normandy CSW: 1

Cup, Staffordshire/Bristol CEW: 1  
 Cup, North Devon sgraffito CEW: 1  
 Cup, North Devon CEW: 1  
 Cup, Weser ware CEW: 1  
 Cup, Saintonge CEW: 2  
 Cup/Drinking pot, North Devon CEW: 1  
 Cup/Porringer, South Somerset CEW: 1  
 Cup/Drinking Pot, Exeter Coarse Sandy CEW: 2  
 Cup/Teabowl, Chinese export porcelain: 2  
 Drinking Pot, Saintonge CEW: 1  
 Drinking Pot, Rhenish CSW: 1  
 Mug, TGEW: 10  
 Mug, Westerwald CSW: 6  
 Mug, Staffordshire CEW: 2  
 Mug, Staffordshire/Bristol CEW: 2  
 Bottle/Jug, Rhenish CSW: 2  
 Bottle/Pitcher, TGEW: 1  
 Bottle, Rhenish Bartmann CSW: 23  
 Bottle, English Brown CSW: 1  
 Bottle/Flask, North Devon CEW: 2  
 Bottle, Saintonge CEW: 1  
 Bottle/Jug, unidentified provenance CEW: 1  
 Bottle/Jug, Merida CEW: 1  
 Flask, Normandy/Martincamp CSW: 2  
 Jug, Westerwald CSW: 3  
 Jug, TGEW: 9  
 Biconic Jug, Westerwald CSW: 3  
 Jug/Pitcher, Beauvais/Loire CSW: 1  
 Jug/Pitcher, Normandy CSW: 1  
 Jug or Mug, Westerwald CSW: 2  
 Jug/Pitcher, North Devon sgraffito CEW: 4  
 Small Jug or Cup, Beauvais/Loire CSW: 1  
 Drinking Jug or Costrel, Border ware CEW: 1  
 Costrel, Merida CEW: 1  
 Barrel Costrel, Saintonge CEW: 1  
 Punch Bowl, TGEW: 1  
 Possett Pot, TGEW: 2  
 Jug/Pitcher, Portuguese *terra sigillata* CEW: 1  
 Puzzle Jug, TGEW: 1  
 Anthropomorphic Bottle TGEW: 1  
 Figurine Jug, Saintonge CEW: 1

Total Beverage Service: **114 MNV**  
 Percentage of total: **22%**

### Kitchen and Dairy

Bowl/Pan, Totnes CEW: 3  
 Bowl, Merida CEW: 2  
 Bowl, Saintonge CEW: 1  
 Bowl, North Devon CEW: 4  
 Jar, North Devon CEW: 1  
 Jar/Olive Jar, Spanish Heavy CEW: 6  
 Jar, Merida CEW: 10  
 Storage Jar, TGEW: 3  
 Tallpot, North Devon CEW: 39  
 Tallpot, Exeter Coarse Sandy CEW: 2  
 Tallpot, Totnes CEW: 2  
 Pot/Tallpot, South Somerset CEW: 3  
 Pot/Tallpot, Totnes CEW: 5  
 Pot, Normandy CSW: 1  
 Pot, Exeter Coarse Sandy CEW: 3  
 Pot, Totnes CEW: 3  
 Pot, Dutch Redware CEW: 1  
 Pot or Bowl, South Somerset CEW: 1  
 Pot/Storage pot, North Devon CEW: 9  
 Pot/Storage pot, Normandy CSW: 3  
 Pot/Storage pot, Verwood CEW: 2  
 Pot/Storage pot, South Somerset CEW: 5  
 Pot/Storage pot, unidentified provenance CEW: 1  
 Pot/Storage pot, Midlands purple CEW: 1  
 Storage pot, North Devon CEW: 9  
 Milkpan, North Devon CEW: 1  
 Milkpan, North Devon CEW: 19  
 Milkpan, South Somerset CEW: 2  
 Milkpan, Saintonge CEW: 9  
 Milkpan, Redware CEW: 9  
 Milkpan, Merida CEW: 1  
 Milkpan, Exeter Coarse Sandy CEW: 4  
 Olive Strainer/Flower Holder, TGEW: 1

Total Kitchen and Dairy: **166 MNV**  
 Percentage of total: **32%**  
 Total dairying vessels: 45 (8.7%)

Total food preparation vessels: 11 (2.1%)

Total storage vessels: 110 (21.2%)

### Cooking

Pipkin, North Devon CEW: 6

Pipkin, Border ware CEW: 2

Pipkin/Fleshpot, Totnes CEW: 1

Pipkin/Fleshpot, Dutch Redware CEW: 2

Fleshpot, North Devon CEW: 5

Fleshpot, South Somerset CEW: 1

Pan/Dish, South Somerset CEW: 3

Shallow Pan/Straight-sided dish, North Devon CEW: 1

Oven, North Devon CEW: 2

Total Cooking: **23 MNV**

Percentage of total: **4.4%**

### Health/Hygiene

Galley Pot, TGEW: 29

Chamber Pot, TGEW: 3

Chamber Pot, North Devon sgraffito CEW: 1

Shaving Basin/Bleeding Bowl, TGEW: 2

Ointment Bottle, Rhenish CSW: 2

Fuming Pot, Border ware CEW: 1

Total Health/Hygiene: **38 MNV**

Percentage of total: **7.3%**

### Other

Inkpot, Border ware CEW: 2

Closed Globe, Portuguese *terra sigillata* CEW: 5

Handled Pot, Portuguese *terra sigillata* CEW: 2

Box/Container (rectangular lid) TGEW: 1

Total Other: **10 MNV**

Percentage of total: **1.9%**

**TOTAL IDENTIFIED POTS VESSELS: 519**



## Appendix C

### Glass analysis

Total MNV tabulated using rims/bases and any other distinguishing features

#### **CASE BOTTLES (MNV 34)**

All case bottles are Type I variety unless otherwise stated

##### MNV based on rims/finish: 30

- Vessel 1: Events 463 and 370, rim/finish from case bottle
- Vessel 2: Event 359, rim/finish from case bottle
- Vessel 3: Event 359, almost complete finish and shoulder from case bottle
- Vessel 4: Event 287, partial finish and neck of case bottle
- Vessel 5: Event 358, partial finish and neck of case bottle
- Vessel 6: Event 287, partial finish and neck of case bottle. Light coloured glass compared to most case bottles
- Vessel 7: Event 358, partial finish and neck of case bottle
- Vessel 8: Event 287, partial finish and neck of case bottle
- Vessel 9: Event 287, partial finish from a small case bottle
- Vessel 10: Event 287, partial finish from a small case bottle
- Vessel 11: Event 464, partial finish from a case bottle
- Vessel 12: Events 287 and 361, partial finish and shoulder of case bottle
- Vessel 13: Event 357, partial finish from dark green case bottle, likely Type II variety
- Vessel 14: Event 464, partial finish and neck from a case bottle
- Vessel 15: Event 333, partial finish and neck from a case bottle
- Vessel 16: Event 287, almost complete finish and neck from a case bottle
- Vessel 17: Event 287, partial finish and neck from a case bottle
- Vessel 18: Event 287, partial finish and neck from a case bottle
- Vessel 19: Event 287, partial finish, neck and shoulder from a case bottle
- Vessel 20: Event 369, complete finish, neck and partial shoulder from a case bottle
- Vessel 21: Event 478, complete finish and neck from a case bottle
- Vessel 22: Event 368, complete finish and neck from a case bottle
- Vessel 23: Event 359, complete finish and neck from a case bottle
- Vessel 24: Event 478, complete finish and neck from a case bottle
- Vessel 25: Event 361, complete finish and neck from a case bottle. Rim is small compared to other case bottles, likely a smaller capacity bottle
- Vessel 26: Event 287, complete finish and neck from a case bottle
- Vessel 27: Event 359, complete finish and neck from a case bottle
- Vessel 28: Event 464, complete finish, neck and partial shoulder from a case bottle
- Vessel 29: Event 333, complete finish and neck from a case bottle

Vessel 30: Event 287, partial finish and neck from a small case bottle. Fragment is burned and somewhat distorted

MNV based on case bottle bases: 34

- Vessel 1: Event 464, Type II case bottle base
- Vessel 2: Event 287, case bottle base
- Vessel 3: Event 475, case bottle base
- Vessel 4: Event 352, case bottle base
- Vessel 5: Event 368, partial case bottle base
- Vessel 6: Event 464, case bottle base
- Vessel 7: Event 361, partial case bottle base
- Vessel 8: Event 361, partial case bottle base
- Vessel 9: Event 370, partial case bottle base
- Vessel 10: Event 463, partial case bottle base
- Vessel 11: Event 359, partial case bottle base
- Vessel 12: Events 353 and 287, case bottle base
- Vessel 13: Event 361, partial case bottle base
- Vessel 14: Event 467, partial case bottle base
- Vessel 15: Event 352, partial case bottle base
- Vessel 16: Event 287, partial case bottle base
- Vessel 17: Event 287, partial case bottle base
- Vessel 18: Event 469, partial case bottle base
- Vessel 19: Event 469, partial case bottle base
- Vessel 20: Event 361, partial case bottle base
- Vessel 21: Event 287, partial case bottle base
- Vessel 22: Event 287, partial case bottle base
- Vessel 23: Event 359, partial case bottle base
- Vessel 24: Event 368, partial case bottle or small wine bottle base, bluish-green glass
- Vessel 25: Event 370, partial case bottle base, bluish-green glass
- Vessel 26: Event 370, partial case bottle base
- Vessel 27: Event 359, partial case bottle base, very pale green glass and thick base compared to most bases
- Vessel 28: Event 464, partial case bottle base
- Vessel 29: Event 361, partial case bottle base
- Vessel 30: Event 287, partial case bottle base
- Vessel 31: Event 464, partial case bottle base
- Vessel 32: Event 333, partial case bottle base
- Vessel 33: Event 287, partial case bottle base
- Vessel 34: Event 287, almost complete case bottle base

## WINE BOTTLES (MNV 18)

### MNV based on rims/finish: 10

Vessel 1: Event 464, neck and body fragments from a Type A/B shaft and globe wine bottle. One body fragment (cat# 397443) has the initial **P** scratched on it. The **P** looks like the second initial for there seems to be the remnants of another initial before it (possibly an I, H, M, N or W).

Vessel 2: Event 463, neck and finish from a Type A/B shaft and globe wine bottle

Vessel 3: Event 349, neck and finish from Type C-E wine bottle

Vessel 4: Event 462, neck and finish from Type C-E wine bottle

Vessel 5: Event 287, neck and partial string rim from wine bottle. Unsure of bottle type

Vessel 6: Events 287 and 467, Type E/F bottle

Vessel 7: Event 369, Type A/B shaft and globe bottle

Vessel 8: Event 287, partial rim and finish from Type E/F wine bottle

Vessel 9: Event 287, partial rim and finish from Type A/B shaft and globe bottle

Vessel 10: Event 287, finish, neck and partial body from a small (half-sized) shaft and globe style wine bottle. Belgian forms date from 1630-80 and French forms 1660-1710 (Barker 1997; Lapointe 1998).

### MNV based on wine bottle bases: 18

Vessel 1: Event 464, base and body fragments from Type A/B shaft and globe bottle

Vessel 2: Event 467, partial Type A/B shaft and globe wine bottle base

Vessel 3: Event 469, partial base from Type E/F wine bottle

Vessel 4: Event 469, partial base from small, thin, shaft and globe style bottle. Light green glass. Maybe half-sized wine bottle or large pharmaceutical vessel.

Vessel 5: Event 464, partial base from Type E/F wine bottle

Vessel 6: Event 462, partial base from Type E/F wine bottle

Vessel 7: Event 462, partial base from Type C-F wine bottle

Vessel 8: Event 462, partial base from Type C-F wine bottle

Vessel 9: Event 462, partial base from Type C-F wine bottle

Vessel 10: Event 349, two base fragments from Type C-F wine bottle. Likely the same bottle as rim fragments found in Event 349.

Vessel 11: Event 349, wine bottle Type C-F

Vessel 12: Event 475, wine bottle Type D-F

Vessel 13: Event 478, partial base from Type D-F wine bottle

Vessel 14: Event 352, partial base from Type A/B shaft and globe bottle

Vessel 15: Event 349, partial base from Type D-F wine bottle

Vessel 16: Event 287, partial base from Type A/B shaft and globe bottle

Vessel 17: Event 361, partial base from Type A/B shaft and globe bottle

Vessel 18: Event 349, partial base, body and neck fragments from Type A/B shaft and globe bottle

## PHARMACEUTICAL BOTTLES AND FLASKS (MNV 13)

### MNV based on rims/finish: 9

Vessel 1: Event 287, rim fragment from wide-lipped pharmaceutical bottle.

Vessel 2: Event 469, two finish fragments of a broad-lipped pharmaceutical bottle. Very light green color.

Vessel 3: Event 287, three fragments from a greenish-blue pharmaceutical bottle rim, no comparable base form to match. Add 1 to overall MNV.

Vessel 4: Event 384, rim, neck and body fragments from a very small pharmaceutical bottle.

Vessel 5: Event 361, neck fragment from pharmaceutical flask or small bottle, (designated as a flask based on shape and thickness - glass is much thinner than regular wine bottle glass).

Vessel 6: Event 287, three neck fragments (all join) from pharmaceutical flask or small bottle.

Vessel 7: Event 464, two neck fragments from pharmaceutical flask or small bottle.

Vessel 8: Event 287, finish, neck and partial shoulder of case bottle. This bottle finish is much smaller than the majority of other case bottles, as is the opening. This form likely has a much smaller capacity (for dispensing strong spirits/medicine).

Vessel 9: Event 359, finish and partial shoulder from a small pale green case bottle or pharmaceutical bottle.

### MNV based on bottle/flask bases: 12

Vessel 1: Events 370 and 333, round pharmaceutical bottle base

Vessel 2: Event 358, round pharmaceutical bottle base

Vessel 3: Event 287, partial base from small bluish-green pharmaceutical bottle

Vessel 4: Event 287, three base pieces from small green pharmaceutical bottle

Vessel 5: Event 287, partial base from small green (cloudy) pharmaceutical bottle

Vessel 6: Event 359, partial base and side of flask based on the shape of the base and angle of the sides

Vessel 7: Event 349, partial base from pharmaceutical bottle

Vessel 8: Event 370, partial base from pharmaceutical bottle

Vessel 9: Event 361, partial base from pharmaceutical bottle

Vessel 10: Event 458, complete base from cloudy green pharmaceutical bottle

Vessel 11: Event 465, small square (case) bottle base. Vessel likely used for medicinal purposes or for storing small amounts of other liquids (strong spirits, vinegar, oil, acid, etc...).

Vessel 12: Event 464, small square (case) bottle base. Vessel likely used for medicinal purposes or for storing small amounts of other liquids (strong spirits, vinegar, oil, acid, etc...).

## WINE GLASSES AND OTHER GLASS VESSELS (MNV 24)

Vessel 1: Event 287, three *roemer* base fragments (no joins). One glass raspberry prunt (Event 475) which may or may not be part of the same vessel. Two additional *roemer* rim fragments (Event 287) possibly from the same vessel.

Vessel 2: Event 361, English lead crystal wine glass stem fragment.

Vessel 3: Event 287, English lead crystal wine glass bowl fragment.

Vessel 4: Event 287, English lead crystal wine glass stem and bowl fragment. Inverted baluster similar in form to Number V in Noël Hume 1969:191 and dating 1675-85.

Vessel 5: Event 462, English lead crystal wine glass stem and bowl fragment. Late seventeenth-century form, inverted baluster. Seven additional foot ring fragments, three rim fragments and eight bowl fragments from Event 462 likely represent parts of this same vessel or one of the English wine glasses above.

Vessel 6: Events 474 and 463, Venetian wine glass stem, clear glass with an almost greyish tint.

Vessel 7: Event 361, everted rim of thin, wide-lipped beaker or goblet. Pale green glass. See Museum of London glass vessels for similar beaker forms. Also refer to Henkes 1994:127. These forms date to the first half of the seventeenth century.

Vessel 8: Events 474 and 463, Venetian wine glass stem and base fragment. Clear glass with greyish tint.

Vessel 9: Events 353 and 287, partial bowl, collar and neck from clear wine glass (Venetian or *façon de Venice*) with applied horizontal ridged band(s) of glass running across the bowl. Two additional bowl and ridged band fragments (Events 361 and 287) are likely from the same vessel.

Vessel 10: Event 287, Venetian, English or Dutch “lion mask” wine glass fragment. Partial stem and step, cloudy greyish glass.

Vessel 11: Event 333, step (or basal knob) from wine glass. The form and size of the knob is exactly the same form as Vessel 10, suggesting that this may be another “lion mask” glass. Greyish tint to glass.

Vessel 12: Event 287, step (or basal knop) from wine glass. The form and size of the knop is exactly the same as Vessels 10 and 11, suggesting that this is another “lion mask” vessel. Yellow/green tint to glass.

Vessel 13: Events 361, 353 and 287, collar/stem fragment and two other stem fragments from a clear wine glass (no joins). All three fragments are of the same color and appearance. The decorative form of these fragments indicate a “lion mask” style wine glass.

Vessel 14: Event 467, base from a large green goblet or beer glass. Pedestal foot, green glass, domed kick and folded edge. A very similar base from a large beaker was found during the St. Andrews street excavations at Plymouth and is attributed to ca.1590-1615 (Fairclough et al. 1979).

Vessel 15: Event 361, base fragment from green goblet or beer glass. Pedestal foot and domed kick.

Vessel 16: Event 359, rim fragment from cloudy green goblet or beer glass.

Vessel 17: Events 359, 370 and 359, collar or step fragment from wine glass and two pieces of a wine glass stem. English/Dutch?

Vessel 18: Event 287, base fragment/foot ring from wine goblet or beaker. Clear glass with slight greyish-green tinge.

Vessel 19: Event 287, two fragments from straight-sided beaker or wine glass. Glass is decorated with slightly raised cross-hatching. Greenish tinge to glass. Dutch or German?

Vessel 20: Event 287, one bowl fragment from a thin, clear glass beaker or goblet, decorated with checkered patterns of horizontal ribbing similar to seventeenth-century *Vlechtwerkbekers*, a Dutch spiral-trailed or latticed-decorated beaker. See Henkes 1994:132, 135-36.

Vessel 21: Events 287 and 361, foot ring fragments from a light green wine glass. Thin, fine glass with a folded foot ring, possibly Venetian or Dutch.

Vessel 22: Event 333, partial finish, neck and shoulder from a large, wide-mouthed decanting bottle. A large case bottle base (Event 287) may be from the same vessel.

Vessel 23: Events 463, 369, 463 and 349, several fragments of a Venetian flecked glass bowl dating from the beginning of the seventeenth century. Often used in prosperous households as comfits or salts (Henkes 1994:231, 236).

Vessel 24: Events 349, 464, 461 and 463, rim, body and handle fragments of a purple (or deep amethyst) decanter/tankard, possibly of English or Dutch origin.









