

**The Seventeenth-Century English Cod Fisheries of Newfoundland and New  
England, circa 1600-1713: An Archaeological and Historical Comparison**

By

© Arthur R. Clausnitzer Jr.

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## **ABSTRACT**

This dissertation presents the results of a comparative study of English colonial-period fisheries sites from the Gulf of Maine and the English Shore of Newfoundland. Through a combination of archaeological and historical analysis, this dissertation sought to answer questions about the role of early resource-extraction industries in colonial societies, especially regarding the transition from a migratory to a permanent European presence in North America, and the construction of new social structures and identities.

The expansion of Europeans into North America was motivated by a desire for new sources of wealth; the Atlantic Cod was one of the most important of these resources. The lightly salted and dried flesh of the codfish possessed not only economic, but also social, political, and strategic value. European exploitation of North American cod began at the start of the 16th century in Newfoundland; within the century it expanded southward to the Gulf of Maine and the adjacent New England territories of Massachusetts Bay and Maine. European exploitation in both regions originated with the cod fishery, yet by the end of the 17th century, differences had appeared in the social structures of English settlements in each region. Newfoundland remained largely dependent on the health and success of the cod fisheries to maintain its social structures. Maine was similar, yet with enough differences to be considered a distinct culture in its own right; Massachusetts Bay was an aberration in colonial history, quickly developing a relatively stable social, political, and economic structure which earned the colony a degree of independence not seen elsewhere in the English colonial world.

This dissertation examines archaeological collections from six colonial fishing sites, three each from Newfoundland and New England, in an attempt to understand how the inhabitants lived and worked within the confines of the fisheries and the attendant socio-economic structures. Combined with a critical reevaluation of the existing historiography, this answered not only the research objectives of this dissertation but also allowed the construction of a novel research framework intended to help create a new and unified way of looking at all early resource-extraction industries.

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## List of Abbreviations

<i>AGR</i>	<i>Agriculture and Agri-Food Canada</i>
<i>CCCL</i>	<i>Collections and Commentary on the Constitutional Laws of Newfoundland in the 17th Century</i>
<i>DNH</i>	<i>Documents and Records Related to the Province of New Hampshire</i>
<i>ENL</i>	<i>Encyclopedia of Newfoundland and Labrador</i>
<i>GNLC</i>	<i>Government of Newfoundland and Labrador, Canada</i>
<i>MHS</i>	<i>Massachusetts Historical Society</i>
<i>NHP</i>	<i>New Hampshire Provincial and State Papers</i>
<i>NOAA</i>	<i>National Oceanographic and Atmospheric Administration</i>
<i>PCRM</i>	<i>Provincial and Court Records of Maine</i>
<i>PNH</i>	<i>Provincial and State Papers of New Hampshire</i>
<i>RMB</i>	<i>Records of the Colony of Massachusetts Bay in New England</i>
<i>RQC</i>	<i>Records and Files of the Quarterly Courts of Essex County, Massachusetts</i>
<i>USDA</i>	<i>United States Department of Agriculture</i>
<i>WDRO</i>	<i>West Devon Record Office</i>



## Chapter 1: Introduction

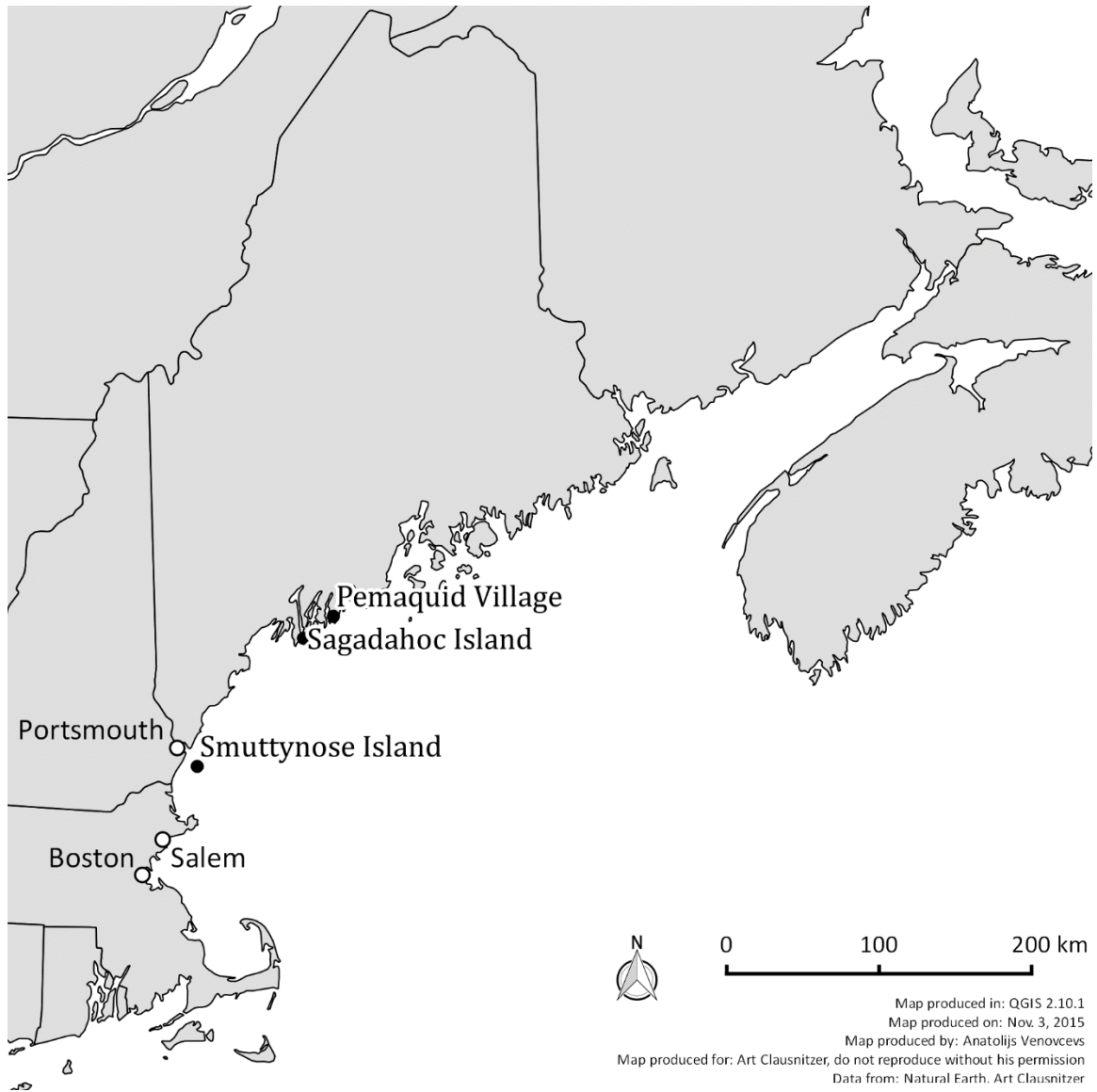
### Section 1. I. Project Background

This dissertation is an exploration of early resource-extraction industries using the English and colonial English cod fisheries of the period 1600 to 1713. The English cod fisheries were chosen for several reasons. First, there is a relatively large body of historical and archaeological literature available for reference. Second, it was an established topic of interest for the author, who had previously worked on the excavations on Smuttynose Island, Isles of Shoals, Maine. Third, there was a perceived need to bridge the gap between the Canadian and American literature on the topic, as well as a need for a critical review and reinterpretation of the latter. Finally, the cod fisheries were the first English industry in the New World and played an important role in the establishment and development of colonial societies in the northeast.

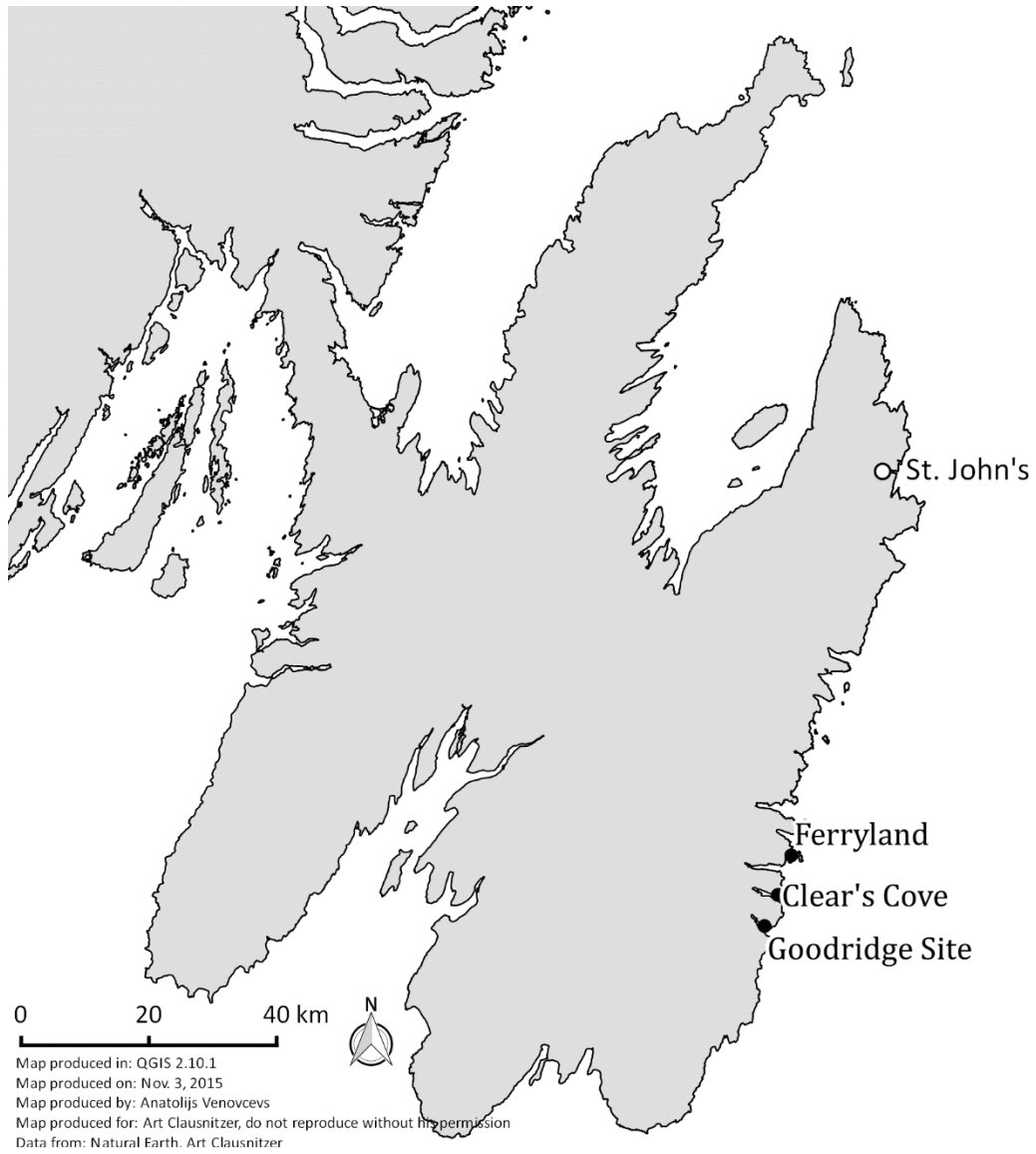
In order to fully explore the development of the English fisheries, it was necessary to include sites from both the English Shore of Newfoundland and from the Gulf of Maine. Doing so greatly expanded the scope of the project and allowed for greater depth in the analysis. At the same time, however, it greatly increased the amount of material to be covered. As a result, the temporal parameters of the study changed from 1600-1763 to 1600-1713. The selection of 1600 for the *terminus post-quem* date was largely due to convenience. The *terminus ante-quem* dates were selected due to their notability in the historical record; 1763 marked the end of the French colonial presence in North America, while 1713 was the end of Queen Anne's War, the final phase of a period of warfare which started in the 1660s.

The research objectives involved questions of the transition from a migratory to a residential industry and the resulting changes in social and economic structures and the differences in the regional evolution of the industry during the 17th century. An additional research goal was developed following a review of potential theoretic approaches to this project. It was discovered that there was no explicit theoretical framework for the study of early resource industries. It was felt that existing theories, such as world-systems theory, the staples thesis, and Marxist analyses were in many ways inappropriate or limited in addressing the research questions. It was decided to attempt the development of a hybrid theoretical framework for this purpose as the third research objective. The resulting research framework is underpinned with hermeneutic concepts from older theoretical approaches.

Six sites were chosen for this study, three each from the Gulf of Maine and Newfoundland's English Shore (Figure 1.1.; Figure 1.2.). Site selection for this study proved to be complicated, in large part due to the greatly varying size, condition, and contexts of the available collections; in the end, the sites were selected because they dated to the proper time period and were associated in some fashion with the fishery. Availability was also a large contributing factor. Smuttynose Island, Sagadahoc Island, and Pemaquid were chosen from the Gulf of Maine; Ferryland, the Goodridge Site in Renews, and Clear's Cove in Fermeuse were the sites from Newfoundland.



**Figure 1.1.** New England study sites in the Gulf of Maine.



**Figure 1.2.** Newfoundland study sites on the Avalon Peninsula.

## Section 1. II. Chapter Overviews

Chapter 2 presents the research questions and framework used for this dissertation. The chapter includes a discussion of the various theoretical approaches initially considered, and why they were considered inappropriate. It then goes on to discuss the hermeneutic concepts borrowed from each theory and how these were blended with other established approaches. This created an eclectic but holistic approach to the study of resource-extraction industries. Other theoretical underpinnings of this dissertation, including consumption, agency, and identity, and the roles these play in the analyses which follow are discussed.

Chapter 3 reviews the historical background of the cod fisheries and their development. Largely focused on the English fisheries of the 1600 to 1713 period, it also addresses the pre-1600 development of local and overseas fisheries as well as the development of the fisheries of other nations. The chapter has elements of a critical historiography, particularly when addressing the under-studied New England fisheries. Chapter 4 discusses the history of the six study sites, as well as reviewing their respective historiography and archaeography.

Chapter 5 contains the analysis of the material culture from each of the study sites, specifically the architecture, ceramics, glass, smoking pipes, and small finds. The goal of these analyses is to identify the differences between the sites at local and regional scales. These sections also include some discussion of the economic activities which would have led to the formation of each assemblage. Chapter 6 makes the final interpretations and contains the discussions from both the archaeological and historical

analyses. Chapter 7 concludes the dissertation by readdressing the research objectives. This includes a discussion of Newfoundland's supposed lag in colonial development. The chapter further presents a refinement of the research framework based on the results of the archaeological and historical discussions. Finally, it presents a summation of the dissertation's findings and some final thoughts.

### Section 1. III. Importance of Research

Study of the cod fishery is not a new topic, nor has its importance to the settlement of North America been ignored. Charles L. Woodbury's *The Relation of the Fisheries to the Discovery and Settlement of North America* (1880) makes this explicit, and Charles Knowles Bolton's *The Real Founders of New England* (1929) acknowledges that it was fishermen who were the earliest European visitors and residents along the New England shores. Raymond McFarland's *A History of the New England Fisheries* (1911) acknowledges the antiquity of the fisheries as an industry and its importance in American history. Despite these early works, however, the fisheries remain relatively understudied in the United States. Many researchers there continue to rely on older, out-of-date references, particularly Harold Innis's *The Cod Fisheries: The History of An International Economy* (1954), and on less scholarly sources such as Mark Kurlansky's *Cod: A Biography of the Fish that Changed the World* (1997). These same researchers generally remain unaware of the research conducted in Newfoundland and elsewhere. One exception is Daniel Vickers' *Farmers and Fishermen: Two Centuries of Work in Essex County, Massachusetts, 1630-1850* (1994); even then, some of his information is

now out-of-date and needs revisiting; two decades of research has added considerably to the knowledge of life in 17th-century Newfoundland. The most recent work on the fisheries is W. Jeffery Bolster's *The Mortal Sea: Fishing the Atlantic in the Age of Sail* (2012), which traces the ecological impact of centuries of human interactions with the sea and both the ecological and social changes that occurred as a result of those interactions. Bolster's primary focus is on those ecological changes, and he does not address the influence of the fisheries on the social development in the North American colonies beyond their role in the colonial economy. Furthermore, his focus largely remains on the Gulf of Maine and the New England region. Although Newfoundland is tangentially touched upon, it is not included as a major part of the discussion.

This dissertation is intended to bridge the research gap between the Newfoundland and New England fisheries and to bring the scholarship from the Gulf of Maine fisheries into alignment with that from other regions and provide a starting point for further research. Additionally, this dissertation presents a research framework for the study of early resource-extraction industries. Besides presenting a new way of looking at industries ranging from the cod fisheries to the fur trade to iron manufacturing, it will provide a starting point for further theoretical development in this field of study.

## Chapter 2: Theoretical Considerations and Research Framework

### Section 2. I. Research Goals

As stated in the introduction, this project was inspired by an interest in the perceived differences between the English New England and English Newfoundland cod fisheries, and the role of these industries in the development of different colonial societies. In order to pursue this interest, the following research goals were established:

- 1) To construct a comprehensive image of the development of the English North American cod fisheries in the colonial period at regional and international scales, and to identify and interpret the differences in the development of the Newfoundland and New England fisheries.
- 2) To examine the fisheries as a locus of interaction between different social and economic groups, with a focus on the new and developing labor systems that arose as a result of participation in the fishery, influences on the social, economic, and political development of each region, and the development of new North American identities.
- 3) To develop a framework for the study of early resource-extraction industries and the role of such industries in the development of English North America at local, regional, and international scales.



## Section 2. II. Theoretical Approaches to a New Research Framework

The background research for this project has suggested that there is no extant theoretical framework tying together early resource industries and their role in developing societies. The only attempt at building a framework for the study of an industry was Alaric Faulkner's work on the fishery at Damariscove Island, Maine (Faulkner 1985, 1986). However, Faulkner is explicit in that he intends to offer a historical framework, as opposed to a theoretical or analytical one (Faulkner 1985:57). A historical framework is important for the interpretation of a single site or single type of site, but Faulkner's single-industry and non-theoretical approach sharply limits its utility in a broader study of resource industries.

The goal of this section is to address this lack of theoretical development and to construct a research framework for the study of early resource industries in North America in order to guide the following analyses. Since, as Wallerstein states, "theorizing is not an activity separate from the analysis of empirical data", this framework is based on critical readings of case studies from a number of resource industries in the colonial period, as well as established theoretical and analytical approaches (Wallerstein 2011:347).

To construct this framework it is first necessary to establish a starting point from which to build, preferably an already-established theoretical approach. Based on the first two research goals, there are two theories which immediately stand out: Immanuel Wallerstein's world-system theory and Harold Innis's staples thesis. Both of these

theories address the relationship between the colonizers and colonized, and how this relationship is established and changes over time (Innis 1970; Wallerstein 2011).

World-systems theory “maintains that commercial, profit-oriented economic activity is one of the strongest forces of development and change in the modern world” (Groover 2008:18). It posits that the development of the modern world-system is the result of imbalanced relationships between two loci known as the *periphery* and *core*. This relationship is based on the ability of the core group to dominate and exploit the labors of the periphery group for economic gain. Situated between these groups is the *semi-periphery*, a locus which has the ability to exploit the periphery but is in turn exploited by the core (Wallerstein 2011:349). Such a world-system has defined boundaries, structures, member groups, and rules of legitimization and coherence. The world-system is held together by conflict and tension and falls apart as groups seek to break away from it (Wallerstein 2011:347).

Innis developed the staples thesis to explain his view of Canadian economic history. The staples thesis was then adapted and expanded by John J. McCusker and Russell R. Menard in order to apply it to the entirety of the British colonial enterprise in North America. In Innis’s original concept, the staple trades developed to provide “goods [that] were produced as rapidly as possible to be sold at the most advantageous price in the home market” so that the colonists could purchase manufactured goods to maintain a familiar standard of living (Innis 1970:384). He saw the economic history of Canada as a direct result of a focus on staple production, linking westward expansion with a continuous need for both new staples and new supplies of already-established ones. This

focus on staple production was explicitly linked to the demands of industrialized centers, initially Great Britain and later the United States (Innis 1970:385). McCusker and Menard's expanded argument takes the position that the whole of colonial development was the result of a desire for staple commodities by the British metropolis, with a staple commodity defined as a resource harvested primarily for export. Colonization was the process of moving labor, capital, and management from the metropolis to the colony in order to exploit these resources (McCusker and Menard 1985:20-21). They further identify two broad categories of staple commodities. The *plantation staple* is a single product that dominates the economy of a region; the *farm staple* generates an elaborate network of economic linkages and serves as the base for a diversified economy. The growth and development of a colony are explicitly linked to the type of staple that is being produced (McCusker and Menard 1985:26).

The staples thesis and world-systems theory are implicitly compatible. In both theories, there is a basic assumption that a dialectic relationship exists between two interrelated entities; the core and periphery in world-systems theory, and the metropolis and colony in the staples thesis. The primary explanatory mechanism for the development of the periphery/colony is the movement of goods, people, and capital from the core/metropolis in exchange for staple commodities. This could be a raw material for manufacturing or a finished good for immediate consumption. The staples thesis is focused on the continuing growth, development, and expansion of the colony following its initial establishment. In world-systems theory the concern is the way that this

relationship grows, changes, and eventual breaks, leading to the formation of new relationships and a new world-system.

While both of these theories have heuristic value in addressing the development of colonial societies, they are predominantly large-scale theories. As Randall McGuire points out, such large-scale and totalizing theories reduce history to a series of categories, processes, and a high-order scale. He further criticizes the ranking of societies as core and periphery and notes that these theories ignore the internal social organizations of the core and periphery and the effect that each has on the other (McGuire 2002:136-138). This argument resonates particularly strong when studying the cod fishery, as its history is “the history of an international economy”, but also contains an inherent paradox in that the cod fishery experienced considerable local, vernacular development (Innis 1954; Pope 1997:15). A critical review of case studies reveals a similar inherent paradox in most early resource industries. Thus, while both theories have heuristic value, relying upon them as the sole theoretical approach would be limiting.

There are other issues with McCusker and Menard’s interpretation of the staples thesis. First is their delineation of the farm staple versus the plantation staple. The problem is not in the definitions of these concepts; indeed, they are a useful hermeneutic tool. The problem is in the rather strict interpretation of those definitions that McCusker and Menard use when categorizing various staples. A staple is either a farm staple or a plantation staple in their analysis. Critical examination of case studies, however, shows that this is not always the case.

The best example of this is the cod fishery. In the history of Newfoundland, the cod fishery is arguably a plantation economy since “everything in Newfoundland and its historical development has depended on fish and fisheries” (Rose 2007:216). By contrast, in the history of New England, the cod fishery is a farm economy. The fisheries stimulated shipbuilding, shipping, and lumbering industries; and it supported and in turn was supported by an inland farming economy (Bolster 2012:64; Leavenworth 1999:24, 111; Vickers 1994:47). Even then the Newfoundland economy, although largely dependent on the export of dried codfish and foreign trade, had seen diversification into fur-trapping, small-scale boatbuilding, and other subsistence industries by the end of the 17th century (Pope 2004: 338-342). In another example, Jamaican sugar plantations devoted about a fourth of its acreage to sugar cane production, a prime example of a plantation staple; the remaining acreage was used for diversified subsistence production (Armstrong 1990:21; Woodward 2006:59). As in Newfoundland, however, these plantations required considerable foreign trade, particularly in lumber and food, to remain viable (Vickers 1994:99).

The staples thesis also argues for the separation of labor from production. Specifically, McCusker and Menard state that “a more serious challenge to the staples approach stems from the difficulty in separating the impact of a given staple from that of the organization of labor” (McCusker and Menard 1985:27). To the authors, the argument that plantation staples shaped the demand for slavery, and that the properties of certain staples made slave labor more efficient, is not a satisfying response to the question of slavery. They instead argue that separating the impact of labor arrangements from the

impact of a crop is more important (McCusker and Menard 1985:27). That this argument is fundamentally flawed will be addressed later in this chapter.

World-systems theory and the staples thesis provide a strong heuristic framework for understanding the development of a resource-extraction industry at regional and international scales and provide some excellent hermeneutic concepts for use at smaller scales. This is not enough, however, to fully understand the development and impact of a resource-extraction industry at smaller scales. Further theoretical and analytical development is needed.

Building from the theories of exchange embodied in world-systems theory and the staples thesis, the core of the proposed framework is the *chaîne opératoire*. An analytical framework which is used to trace the life history of an object from the collection of raw materials to when it is discarded into the archaeological record, the *chaîne opératoire* is unique for different objects (Moussette 1983). This permits an archaeologist to explore the different levels of change that an object undergoes as it travels along its *chaîne opératoire*, enabling a more detailed analysis of the meanings and values attributed to the object over time as the function, use, and perception of the object changes. In its most basic form, the *chaîne opératoire* can be broken into four major stages: *acquisition*, *transformation*, *exchange*, and *consumption*. It is important to note that these stages are not necessarily linear but to understand that a resource or object can move through these stages multiple times and at different points throughout its *chaîne opératoire*. Regardless, it is the process of traveling through these stages which moves a staple commodity from the colony to the metropolis.

Onto this foundation, Ian Hodder's concept of the *domus*, *agrios*, and *foris*, or the domesticated, cultivated, and foreign (or wilderness) can be added. This is a dialectic model which places the *domus* and the *foris* into a binary relationship, with the *agrios* serving as an intermediate buffer zone (Hodder 1990). Initially proposed to explain the symbolic role of agriculture in the Neolithic period, Canadian archaeologists such as Marcel Moussette and Peter Pope have applied these concepts to colonial Canada, effectively proposing a "Laurentian Neolithic" (Moussette 2008, 2009; Pope 2013a:42). In the early colonial period, the colonies were the *foris*, perceived as a "desert wilderness" which had to be domesticated (Bowden 1992; Johnson 1996:92). Resource extraction industries serve to domesticate the *foris* and bring it into the *domus* for consumption. As such resource-extraction industries, or more specifically their transformative effect on natural resources, serve as a *de facto agrios* between the European *domus* and the New World *foris* (Pope 2013a:42-43). The consumption of these commodities gave Europeans a taste of the exotic from the comfort of their own home (Turgeon 2009). It transformed something wild and untamed into a useful domestic object and gave it exchange value. This encouraged further movement from the metropolis to the colonies, establishing a colonial *domus* and leading to changes in the structure of existing industries and the development of new ones.

The next layer to add to this structure is the Tragedy of the Commons model, as defined by Irene Spry, to provide an explanatory mechanism for changes in the prosecution of an industry with the establishment of a colonial *domus*. Spry's particular model establishes a continuum of resource access which consists of three broad phases:

common-use, open-access, and private property. *Common-use* resources are ones that, like the description suggests, are held in common for all people to use. A system of tradition and self-restraint meant that no person or group took more than they needed at a given time (Spry 1983:204-205). Such an acquisition strategy requires a large area from which to take resources and assure a steady supply of the resource (Klein 1983:216).

As the demand for resources intensifies, whether it is through internal or external influences, the acquisition model shifts from common-use to *open-access*. In an open-access system, the traditional restraints are broken, and pressure on natural resources is intensified. This leads to a degradation and increasing scarcity of the resource. A system of private property develops in response in order to maintain control of and regulate access to the resource, which serves to ensure an adequate supply of the resource; furthermore, a system of private property takes advantage of rising prices caused by the scarcity of the resource (Spry 1983:224). Open-access brings people into a colonial resource-extraction industry; the shift to private property encourages people to settle there on a permanent basis, reinforcing and expanding the colonial *domus*.

Interrelated with the tragedy of the commons are the concepts of *enclosure* and *commodification*. Enclosure, as defined by Matthew Johnson, refers to the transition of a formerly open landscape to one divided by fences, hedges, and other physical and mental barriers, which he links to the development of a rural capitalism and Deetz's Georgian Order (Deetz 1996:62-64; Johnson 1996:15-16). Commodification refers to the changing roles of objects as loci of social, cultural, and economic relationships, placing them in a secular as opposed to a spiritual domain (Appadurai 1986:3-5; Johnson 1996:2, 200).



Taken together these concepts provide the mechanism for the shift between the different modes of acquisition. Commodification increases the demand for, and by extension the value of, a product; enclosure is the shift from open-access to private property as participants in the trade seek to improve their position within it. Furthermore, to link back to the *chaîne opératoire* and Hodder's binary relationship, the commodification of the *foris* through acquisition and transformation moves an object from the spiritual realm (the undefined wilderness of the New World), via exchange through the *agrios*, to the secular realm of the *domus* for consumption.

To summarize: colonial resource-extraction industries are established and developed as part of a system in which the peripheral colonies provide commodities and resources to a core metropolis by transforming the wilderness into a product suitable for exchange to and consumption by the domestic realm. In return, there is a movement of labor, capital, and management to the colonies which leads to the development of a new domesticated sphere. This results in and is the result of the enclosure of resources, and the expansion of resource industries as the demand for both new and established commodities expands.

### Section 2. III. Case Studies of Early Resource Industries

Several common factors affecting the development of early resource industries were identified during the research for this project; these are enumerated below with examples from the case studies. These factors are important in understanding the how and

why of the transition along the open-access/private-property continuum, the importation of the *domus* from Europe to North America, and the way these industries helped to structure the social, economic, and political organization of colonial North America.

At the most basic level, the successful development of a resource industry is largely determined by the local environment and landscape. This is reflected in the regionalized characteristics of resource production. For example, the Lords Baltimore had colonial possessions in Ireland, Newfoundland, and Maryland. At all three of the Calvert's possessions, a different staple resource was exploited to maximize profits—timber in Ireland, fish in Newfoundland, and tobacco in Maryland (Lyttleton 2013:266).

That environmental factors played a role in the development of resource industries is clear from the case studies. In Massachusetts Bay, for example, an initial attempt at setting up an ironworks failed in part because the location chosen lacked sufficient ore and water power. The continuing effort resulted in the construction of Hammersmith in Saugus, situated on a 600-acre site which either provided or was ideally situated for access to the necessary resources (Regan and White 2010:32). The Quebec tar industry required a steady supply of resinous trees, which required the periodic relocation of kilns and a willingness by the population to turn the cleared land over to agriculture (Loewen 2003). Red Bay, Labrador emerged as a center of whaling for the Basque due to its strategic location for exploiting the summer and autumn whale herds and the relative predictability of ice closures in the area (Loewen 2009). Favorable ecological and environmental conditions were a necessity in the early trade in beaver fur (Innis 1970:9-10, 387-388). The most successful fishing plantations were situated in

places where ecological factors favored the presence of cod and bait species (Rose 2007:224). In Newfoundland, these requirements, along with Newfoundland's particular geography and other factors, created a distinct settlement pattern which persisted well into the 20th century (Head 1976).

Another factor in the development of a resource industry is that there has to be a market for the resource, and in order for the industry to succeed it has to be profitable. This simplistic statement downplays and disguises the numerous variables that affect marketability and profitability. In fact, most early staple industries went through at least one boom and decline cycle, and these cycles had an effect on the organization of the specific industry and its role in society.

Most of the earliest colonies planted on the shores of North America were established as either corporate colonies, financed by joint-stock companies, or proprietary colonies, financed by wealthy patrons. Examples of the former include Jamestown, Virginia, Fort Orange, New Netherlands (New York), and Cupers Cove, Newfoundland, which were founded by the Virginia, Dutch West Indies, and Newfoundland Companies respectively. A prime example of the latter is the settlement at Ferryland, Newfoundland, which was financed by George Calvert, the first Baron Baltimore. They all also share another feature in that, from the view of investors and many early historians, all failed. Not that they failed as colonies in the strictest sense, as all of them left a residual population on North American shores, but rather they failed as economic ventures. Quite simply, corporate and propriety colonies rarely made enough profit to satisfy investors, even with lucrative trades such as dried cod, and were precariously dependent on the

financial health and assistance of investors and proprietors (De Paoli 2001:94; Pope 2004:47).

The infrastructure of a failed colony, however, often provided a foundation for further development, as the history of Ferryland demonstrates. When initially founded, the Ferryland settlement took the shape of a manorial estate centered on the large Mansion House complex and its supporting infrastructure; including a brewhouse and forge (Clausnitzer 2011; Gaulton 2013; Tuck and Gaulton 2013). When Sir David Kirke assumed control of the settlement in 1638 he immediately began making changes, including the removal of the brewhouse and forge. He introduced a socio-economic model based on the collection of rent and taxes on fishing rooms and shipping, the import/export and sale of commodities, and economic diversification. He also built a tavern and minted his own currency. This profit-driven commercial model was continued by his wife and sons, and as the archaeological record shows the Kirke family thrived. These activities “allowed for the transition from precarious investor-based colonization schemes to thriving, economically-viable towns” (Gaulton 2013:285).

The case study of the Saugus ironworks demonstrates this phenomenon at the industry level. Iron was seen both as marketable and profitable, as made clear by John Winthrop: “We acknowledge with yow, y<sup>t</sup> such a staple comodity as iron is a great meanes to inrich y<sup>e</sup> place where it is, both by furnishing this place with y<sup>t</sup> comodity at reasonable rates, & by bringing in other necessary comodityes in exchange of iron exported...” (Quoted in Regan and White 2010:30). Yet despite producing nearly 300 tons of iron products at its peak, the ironworks had failed by the end of the 1660s (Regan

and White 2010:50-52). The failure of the ironworks lay in the fact that it did not make enough money to support its own operation; combined with mismanagement of the facility, this was enough reason for the joint-stock company which funded and oversaw the project to divest themselves of it (Regan and White 2010:52). The legacy of the Saugus works, however, is in the accumulation and dispersal of skilled labor, which formed the foundation for an industry that by the eve of the American Revolution was producing 30,000 tons of ironware annually (Regan and White 2010:54).

Not all industries survived in the colonies, as the abortive attempts to develop a salt industry in Newfoundland and in New England illustrate. Salt was readily available from Portugal and other sources, but given its importance in the dry codfish industry, it was seen as desirable to have a native supply. In Newfoundland, Edward Wynne reported that he had constructed a salt work and had successfully manufactured salt. Wynne's later work, *The Brittish India or A Compendious Discourse tending to Advancement*, written after he left Ferryland, is revealing on the fate of the Ferryland salt industry. In this work Wynne is explicit that "the salt used in the Fishing affaire, might still be carried thither, the yeare before it is to be used, in suche shippes as goe thither yearely for their loading of dry fish" (Gaulton and Miller 2009:117, 130). Wynne clearly had decided it was more efficient to acquire salt supplies from the European mainland, indicating that the experiment in salt making at Ferryland was a failure (Gaulton and Miller 2009:117). A similar attempt was carried out in New England; this also failed, in part due to the incompetence of the hired salt maker (Bradford 1952:146-147). The only location in North America where there appears to have been a successful salt industry in the colonial

period is in the Caribbean at the Turks and Caicos Islands, where natural salt ponds were exploited, first on a seasonal and opportunistic basis and later as part of a formal industry (Kennedy 2013).

Many early export-led industries experienced an early boom as high demand and high prices led to a rapid increase in the production of a staple, with fish, tobacco, and sugar being amongst the most notable of those commodities. This boom phase is followed by stabilization or, more often, a sharp, sudden decline of prices (McCusker and Menard 1985:22; Pope 2004:33). The specific causes of this phenomenon vary from industry to industry and are often debatable. The decline of staple prices often marks the beginning of a reorganization of the industry. In the case of the sugar and tobacco industries, for example, this decline marks the beginning of the process which led to the development and institutionalization of slave-based agriculture (Deetz 1993:74). In the Newfoundland fishery, the stabilization and fall of prices marked the beginning of the vernacular development of a planter fishery.

A direct link between the decline in prices and the reorganization of an industry is difficult to argue; indeed, the decline in the price of a commodity is only one of several factors contributing to the reorganization of the associated industry. Recognizing the relationship between the decline in prices and the reorganization of an industry is important since this reorganization shifts the social and economic relationships amongst participants. In the broadest sense, the reorganization represents the enclosure of an industry. Tobacco and sugar plantations grew larger and began to rely on slave labor, which allowed the proprietors of these plantations to maintain profits by reducing the per-

capita outlay per production unit (Armstrong 1990: 44; Deetz 1993:9-10; McCusker and Menard 1985:22-23; Woodward 2006:4). Fishing plantations, built from the residual population left by the earlier failed proprietary colonies, developed on the shores of Newfoundland. These plantations occupied space once used by the migratory trade and increased the efficiency of production (Pope 2004:40-42, 205).

Similar booms and declines do not appear to have affected the whaling, iron and naval stores industries. This could be for several reasons. For example, the whaling industry centered on Red Bay collapsed while it was still entirely migratory, and perhaps for political as much for economic and environmental reasons. These same factors prevented its recovery (Loewen 2009:9-10). The Basques continued to visit North American waters, however, as participants in the French cod fisheries (Loewen and Delmas 2011; 2012). Large-scale iron and naval stores industries, on the other hand, developed later in the colonial period and can be seen as second-stage industries; in other words, they had no open-access phase which may have led to a boom and decline cycle, but instead began as private property industries within an already-established society.

The third factor is that the continuous expansion of early resource industries was limited by the space available in the industry. Peter Pope is explicit about this in regards to the Newfoundland planter fishery when he states that “planters were part of a long-established resource industry: their numbers were effectively determined by the economic space open for them within that industry” (Pope 2004:205). The same is true for other early resource industries.

The space available in a given industry is determined by two variables. The first is physical space in the landscape, which is determined in part by the resource requirements of the industry and in part by the type and extent of enclosure the industry has undergone. In the early period of open-access industries land was often free or cheap, making it possible to enter the industry profitably. As long as this remained true, the industry could expand. As these industries were enclosed, less land was available and it was more expensive. Residential fishermen permanently occupy fishing rooms, plantation owners acquire larger plots of land to cultivate, etc. As prime land is enclosed, new participants are necessarily pushed to marginal areas, making their participation more difficult and less profitable. The second variable is the economic space available in the industry. Resource industries are naturally constrained by market forces (i.e. demand), and this places a limit on the number of participants that an industry can support. Greater participation than the demand for an industry's product can support leads to surplus supply and a glut on the market, decreasing the profitability of that industry.

The fourth factor in the development of a resource industry is the influence of politics, which can be seen at several scales. Many of the early resource industries had a vernacular beginning, developing outside of a formal, directed plan. It was not long until local and national governments would become involved in the regulation, control and eventually development of new resource industries. Very often these are second-stage industries, developed after the initial open-access phase in North America. Government attempts at the control and regulation of resource industries would eventually develop into mercantilism. More of a set of shared beliefs and perspectives than a formal



economic strategy, mercantilism holds that foreign trade should serve the interests of the government and that the government should take steps to protect its trade (McCusker and Menard 1985:35).

The fishing industry in Newfoundland was one of the open-access industries which drew considerable government interest, particularly once it began the largely vernacular transition to a private property-based industry. This is in part a reflection on the importance that dried cod had as both a strategic commodity and its role in balancing imports from England (Fagan 2006:254; Pope 2004:91). Casimiro's study of Portuguese imports and exports highlights this. Portugal was exporting salt, wine and spirits, vinegar, assorted foodstuffs, and cloth products to England and Newfoundland. In contrast, Portugal imported only two commodities: salt cod and cod liver oil (Casimiro 2013:224-229). Interestingly, the English attempts at regulating the Newfoundland cod fishery were largely meant to maintain it as an open-access resource (Pope 2004:194).

Political factors also played a role in the mid-17th-century development of the French Newfoundland residential fishery. The French attempted to enclose part of the Newfoundland shoreline for their own fishing interests with the establishment of a state-sponsored colony and military garrison at Plaisance, at least partly in response to the English settlements on the southwestern Avalon Peninsula. This attempt proved short-lived, as the English gained control of Plaisance, renamed Placentia, with the signing of the Treaty of Utrecht in 1713 (Crompton 2013:245). More importantly, this treaty limited the French to an open-access, first-come, first-served and seasonal occupation only,

forcing the French fishery in Newfoundland to remain a migratory industry and preventing the establishment of a permanent French *domus* in Newfoundland.

The 16th-century Basque whaling industry in Labrador collapsed in large part due to political factors. The collapse was precipitated by a sudden closure of English ports to Basque whale oil as a result of the growing Spanish-English rivalry. This closure was timed to occur after the whalers had already returned to Europe and their product was on its way to England, causing financial problems in the Basque ports and triggering an economic crisis in the industry. This crisis combined with other political and economic problems to ensure that the Basque whaling industry in Labrador never recovered (Loewen 2009:9-10).

The final factor influencing success or failure of an industry is the availability and source of labor for an industry. As mentioned previously, McCusker's and Menard's interpretation of the staples thesis argues for the separation of labor from production. While perhaps acceptable, perhaps even necessary, in a purely economic analysis, such a separation by design will fail to take into account the influence labor relationships has on an industry and its role in the development of colonial societies. Staple trades become established and flourish in areas where there is a small domestic market for that product, abundant natural resources, and shortages of both capital and labor, as this gives those areas a comparative advantage in the production of commodities for export (McCusker and Menard 1985:20). This required the development of new forms of labor organization to minimize the cost and maximize the efficiency of the labor that was available.

Labor strategies can be loosely divided into two categories: free and unfree. These categorical headings refer to the legal and social status of an individual, not the relative cost of his/her labor. Free laborers are wage-earners, working with the promise of reimbursement for their labor. Unfree laborers are those who are legally bound to another person, whether it was temporary (indentured servitude) or permanent (slavery). Estimates suggest that about half to two-thirds of all European immigrants to British North America came under indentures, with ratios rising to approximately 80 to 90 percent in the Chesapeake region (McCusker and Menard 1985:242). Most early African immigrants arrived as slaves. Indigenous participants may be enslaved, coerced or free participants, depending on the industry they participate in and a range of other social, political and economic factors (Armstrong 1990; Bradley 2007; Chaves 2014; Turgeon 1998; Woodward 2006).

This distinction is important for the study of early resource industries since it affects the way that the relationships amongst and within the different social and cultural groups develop, which in turn has an effect on the larger society as well as the shape that the industry takes. For example, although it is debatable which came first, it is an inescapable conclusion that the institutionalization of race-based slavery in the Caribbean and Chesapeake and the development of large agricultural plantations are linked. This system replaced the earlier system of small farms operated by a planter and a number of indentured servants, which had broken down due to the downturn in tobacco prices and growing problems with recruiting and controlling servants. This shift, in turn, laid the

foundation for the development of a local aristocracy based on ownership of slave-operated plantations (Deetz 1993:74).

Most of the other industries, in contrast, relied primarily on free labor. This hypothetically gave people greater bargaining power when selling their labor, particularly given the labor shortages common to early-modern North America. At the Trelawny fishing station on Richmond Island, for example, manager John Winter frequently complained about the quality of the labor force and noted several times that he had lost employees, including the station's shipwright, to promises of better wages elsewhere in New England (Leavenworth 1999:77; Vickers 1994:93-94). This required the development of new methods of recruiting and controlling labor.

The Saugus ironworks made use of both indentured and free labor. Many of these ironworkers originated from England's woodland regions, where deforestation had decreased the number of jobs available (Regan and White 2010:30). A small group, however, were Scottish prisoners of war who had been captured by Cromwellian forces at Dunbar and sold as indentured servants (Regan and White 2010:38). This case study also reveals another issue with labor, particularly one in a closed society like Massachusetts Bay; namely, these workers were outsiders in Puritan society. They were looked upon with distrust and appear in court records on a fairly regular basis, with charges ranging from breaking the Sabbath to the violation of sumptuary laws, and murder (Regan and White 2010:36). Similar complaints appear in relation to a largely Anglican fishermen population in Massachusetts Bay (Vickers 1994:96-97).

In short, the conditions and requirements of each industry led to the development of different labor systems to meet their needs. The choice between unfree and free labor was dependent largely on scale. Generally, larger production units such as agricultural plantations used unfree labor as it was cheaper and more readily acquired, especially following the institutionalization of race-based slavery. Industries that operated on a smaller scale or required specialized knowledge, such as the fisheries, tar industry, and iron works, tended towards free labor but developed new social and economic structures to manage and control this labor.

#### Section 2. IV. Agency, Identity, and Consumption

The previous section focused primarily on the large-scale processes which shaped the development of resource industries in the colonial period. That section did not, however, address the people whose lives were affected by resource industries. The reorganization of a formerly open industry into one based on the enclosure of private property has effects on the participating social and cultural systems. This reorganization creates a feedback loop wherein changes in the organization of an industry changes the social-cultural and political organization of the participating groups, which in turn has further effects on the organization of the industry. Furthermore, as Loren and Beaudry note, the European colonization of North America brought new social, sexual, and political interactions between culturally distinct groups (European, African, and Indigenous peoples) that had once been separated by great distances (Loren and Beaudry 2006:254). These new interactions, combined with the physical distance between the

European metropolis and the new colonial societies, led to the creation of new North American identities as actors sought to assert their agency within the new socio-cultural system.

In the broadest terms, agency refers to the ability of individuals to act within a larger social structure, with their actions and decisions informed and constrained by the larger socio-cultural and environmental settings they inhabit (Brumfiel 2000:249; Dornan 2002:304, 314). Agency is historically contextual, with the time, place and status of an individual or group being a major influence on their ability to negotiate their position within a larger society and culture (Dornan 2002:324). This negotiation is expressed through the creation, maintenance, and gradual transformation of identity, which is expressed externally through the consumption of material culture (Loren and Beaudry 2006:254-256; McCracken 1990:24). By situating this negotiation within its historical and socio-cultural context it is possible to build an image of the way people in the past viewed themselves and their position in the world (White and Beaudry 2009:210).

In looking at a resource-extraction industry, one of the major foci of identity negotiation has to be labor relationships (Silliman 2006:147-149). Laborers were constrained by their position in a labor-intensive, extractive enterprise which was simultaneously international and regionalized. The shift from an open-access to private property mode of production changed the ways in which people participated in the industries and the relationships between the laborers and the capitalists. Administrators, overseers, capitalists, managers, and supervisors developed new ways of structuring and imposing labor discipline, while the laborers accommodated, resisted, exploited, and

lived under these new relationships, actively negotiating the rules, resources, constraints, and opportunities available to them (Silliman 2006:149, 153). By understanding labor relationships in the context of the regional vernacular developments, and how such relationships both influenced and changed as a result of the process of constraint and resistance, a clearer image of the development of an industry and its impact on the socio-cultural systems can be created.

Related to the concepts of agency and identity is the concept of *gender*. Gender refers to the ways in which the expected behavior and roles of the biological sexes are perceived, and how this is reflected in the archaeological record (Voss 2006:107). Like identity, gender is contextual to time and place; it is also flexible and somewhat fluid. What is considered masculine at one point in history could be considered feminine in later centuries (Johnson 2010:129). On 17th-century archaeological sites a feminine presence is suggested by artifacts which are considered “female”, such as thimbles, sewing needles, and certain clothing articles and accessories. This interpretation, however, is complicated by the fact that female activities are performed by men in all-male occupations (Beaudry 2006:175-176). Gender archaeology was not a major focus of this dissertation, however, and is only tangentially touched upon in the chapters that follow.

Tied to both agency and identity is consumption theory, which is the body of knowledge which deals with consumer behavior; in other words, consumption theory informs us of the what, when, why, and how people consume and the factors which influence those choices (Henry 1991). Much like agency, consumption and choice are not

unlimited. They are constrained by a number of factors, including socio-economic status and the availability of goods, particularly in a colonial setting (Horn 1994:295). This being said, the late 16th and early 17th centuries witnessed a consumer revolution, with a number of new and inexpensive goods and services becoming widely available (Thirsk 1978). This glut of new objects gave the consumer in the early-modern period more choices, and by extension greater agency, in fashioning a new identity (McCracken 1990:135). The widespread availability of these objects also contributed to the development of the new North American societies. This was by providing new tools and technologies to allow European settlers to survive in the colonial wilderness, and by providing a means with which to create a new society where status and identity was expressed as much through material culture as other, more traditional forms of status markers (Pope 2013a).

Agency, identity, and consumption theory also serve to link the archaeological record to the resource-acquisition framework through the final stage of the *chaîne opératoire*, consumption. The archaeological record is formed by the discarded remains of consumed goods. With the assumption that the goods discarded are representative of what was consumed, an archaeologist can use that evidence to construct an image of the identity ambitions of the person or people who discarded those items. Historical archaeologists also have the advantage of being able to use the historical record as an additional line of evidence. Examining both the archaeological and historical record for congruities and discrepancies highlights any ambiguities in the data and allows for better and more complete interpretations (Leone and Crosby 1987:401-402).



## Chapter 3: Historical Background

### Section 3. I. Introduction

To fully explore the historiography of the cod fishery would require an undertaking greater than this dissertation. While the following section aims to provide a solid historical foundation for the discussions that follow, it is by design and indeed necessity simplified and in some areas incomplete. This is necessary in order to avoid getting lost in the historical minutia.

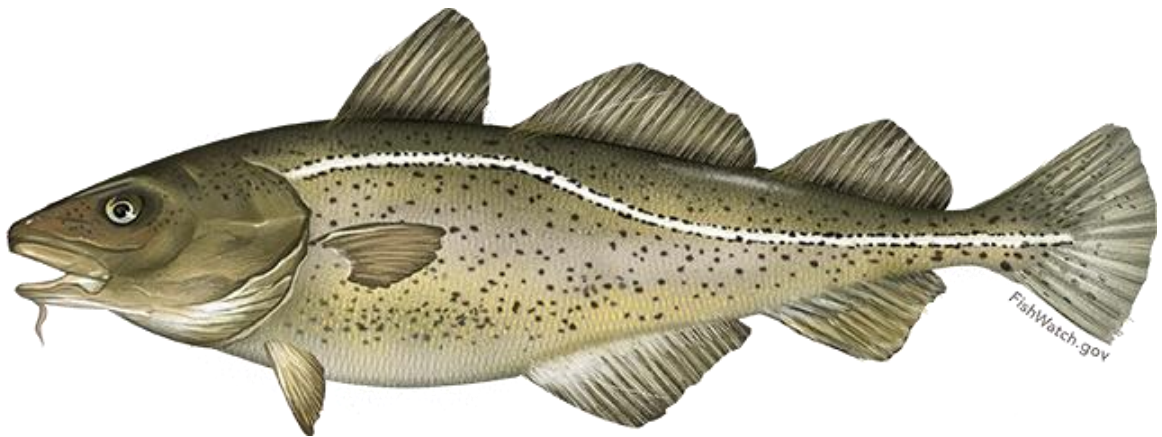
The history of the cod fisheries, to once again use Harold Innis's description, is the history of an international industry, perhaps more so than even Innis understood it (Innis 1954). At the same time, however, it is important to remember that cod is not the "the fish that changed the world" (Grafe 2004:5; Kurlansky 1997). Instead, the cod fishery was just one part of a larger European social and economic expansion which began over a century before the first early-modern Europeans settled North America's shores (Anderson 1984). Understanding the full developmental trajectory of the cod fisheries requires starting with the developments in coastal European waters before the era of the long-distance fisheries, and the nature of international participation and competition as the long-distance fisheries developed.

This chapter is divided into three sections. The first section is a brief description of the ecology of the codfish and the environmental factors which influenced the cod fishery. The second section is an account of the development of the cod fisheries, starting with the local fisheries of late-medieval and early modern Europe, and tracing the

expansion across the Atlantic Ocean and further development in the New World until about 1713. The goal is not a complete accounting of the development of the fisheries; rather, it is intended as a survey of the rich history of the industry itself, key developments at local, regional, and international scales, and of the individual sites. The final section addresses the differences in the environmental, economic, and socio-political conditions between Newfoundland and New England.

### Section 3. II. The Cod Fish

The Atlantic Cod (*Gadus morhua*) was, prior to the late 20th century, perhaps the most important commercial fish stock in the northern Atlantic (Figure 3.1.). This importance is particularly true for the early modern period between 1500 and 1763. The cod rose to this position of commercial importance in part due to its behavioral traits, and in part due to the characteristics of its flesh. It is a large predatory fish, notorious for its voracious appetite and its opportunistic eating habits, sometimes even striking at non-baited hooks. They tend to spawn in large congregations, and during and following spawning move inshore in pursuit of bait species such as capelin, herring, alewives, and squid. As the cod moved inshore, they could be captured from small boats operating in relatively shallow waters close to land. Major cod stocks were located in the waters of the Gulf of Maine and around Newfoundland and Labrador, in such numbers that they amazed early explorers to these regions (Fagan 2006:62, 259-260; Harrington 1994:194; Rose 2007:181).



**Figure 3.1.** *Gadus morhua*, the Atlantic Cod. [www.fishwatch.gov/profiles/atlantic-cod](http://www.fishwatch.gov/profiles/atlantic-cod).

The white flesh of the cod is almost free of fat, which makes it easy to preserve using a variety of methods (Fagan 2006:62; Innis 1954:6). In Norway and Iceland cod was left to dry in the sun and cold winter winds, creating a product known as stockfish (Fagan 2006:62, 66; Jones 2000:109; Nielsson 2009:83; Thór 1996:125; 2009:327). In North America both the French and English used a lightly salted dry cure, and the French in particular also manufactured a heavily salted wet or “green” fish (Pope 2004:11, 14, 27-29). This versatility made it easier to adapt the final product to the demands and tastes of different markets, ensuring a widespread distribution (Candow 2009b:418). Taken together, these characteristics of the cod served to make it the “king of salt fish” in the 17th century (Turgeon 2005:28).

### Section 3. III. The History of the Fisheries

For the most part the expansion into and across the Atlantic was a conquering and colonizing process, which naturally attracted adventurers with a mind to loot, tribute and land, whereas the eastward expansion was essentially a trading enterprise (Anderson 1984:6).

Kenneth R. Andrews’ observation, in *Trade, Plunder, and Settlement: Maritime Enterprise and the Genesis of the British Empire, 1480-1630*, nicely captures the essence of European expansion across the Atlantic Ocean. European powers sought new sources of wealth and resources in those far-distant lands and inevitably came into conflict as they struggled to control them. This expansion, particularly of the English, was a major factor in the shaping of the modern world (Anderson 1984:3). Cod was a predominate

motivation in this expansion, as the English and others sought to secure and dominate the supply of this valuable commodity (Harrington 1985:2).

### Section 3. III.1. Introduction

Every region of the early-modern colonial Atlantic world has its own founding mythology, usually based on major events or notable personalities which have been elevated to legendary status. The West Indies has Christopher Columbus; Central and South America have Montezuma and the Aztecs, the Inca Empire, and the Spanish conquistadors. Farther north, the disappearance of the Roanoke colonists and the Starving Time of the Jamestown settlement are well known. In New England, the piety and highly structured societies of Plymouth and Massachusetts Bay dominate the histories of the founding decades of that region (Bolster 2012:16). Atlantic Canada has its tales of fur traders and power struggles between the French and English over who would control colonial Canada and its vast resources (Innis 1954:1; Pope 2004:v). Only in Newfoundland, however, does the codfish factor into the popular version of the past.

The Atlantic Cod was an important part of the early North Atlantic world; in all areas where it was available, the capture and preservation of cod was a major economic activity (Grafe 2004:5; Innis 1954:1; Starkey 2009:1). Daniel Vickers, in his study of Essex County, Massachusetts, noted that codfish was the most immediately profitable commodity available to Puritan colonists and as such quickly became one of the staple exports of the Massachusetts Bay trade, along with lumbering and shipbuilding (Vickers

1994:10, 85). Keith Matthews readily acknowledged that the Newfoundland cod trade was the base for all of Newfoundland's trades (Matthews 1968:16). That cod formed the basis for the exploitation and settlement of Newfoundland has never been disputed, but aside from that region, the cod has rarely received popular recognition as the basis for economic development in the North Atlantic world (Innis 1954:1).

Many narratives of the North American cod fisheries begin, justifiably, with the European discovery of Newfoundland by John Cabot; this, however, ignores centuries of development and expansion along the coast of Europe prior to the overseas expansion, as well as the environmental, social, and political factors which led Europeans to risk the Atlantic crossing in their quest for codfish. As Harold Innis rightfully points out, the discoveries made by Cabot, Cartier, and their successors did open Newfoundland and the Gulf of St. Lawrence to further exploration and exploitation, but the expansion of the fisheries started at a much earlier date with local and regional developments (Fagan 2006:57; Innis 1954:25; Kowaleski 2000).

That the North Atlantic cod fishery was important to the early modern world is well documented (Barros 2015). To quote Faith Harrington: the "drive to harvest the sea played an important part in discovery, in the mastery of the ocean and in the initial phase of colonization" (Harrington 1985:4). Of the early-modern European maritime industries, the cod fishery was amongst the most important, and it contributed to the further exploration and domination of maritime spaces (Barros 2015). Since the initial wealth of North America resided in the sea instead of on land, fishing began before colonization in the usual sense, but at the same time laid the groundwork for later claims to and

occupation of the land (Briere 1997:47; Turgeon 2009:34). In some regions, notably Newfoundland, this also meant that although the fishery provided the earliest stimulus for settlement, it simultaneously proved to be its greatest obstacle, influencing the course of development in the region for centuries (Rogers 1911:ix). Perhaps most significantly, the fisheries became an important part of the European nation-building process, but the disruption of the European trade by warfare, economic recessions, and other factors led to the development and growth of residential fisheries, which in turn contributed to the eventual development of new North American nation-states (Candow 2009b:416).

Cod has been given the appellation “king of the salt fish” and the demand for this product affected colonial development through roughly two centuries, circa 1550 to 1763 (Turgeon 2005:28; 2009:34). The role it played in colonial development is attested to in period documents. For example, the cod fishery quickly became one of the core industries of Essex County, laying the foundations for further capitalistic development in the region (Vickers 1994:10, 85). In scale, the cod fisheries of Atlantic Canada exceeded that of the Spanish treasure fleets in the Gulf of Mexico, requiring approximately twice the tonnage of ships and number of men, and, although gold and silver had greater value, the cod fisheries had greater influence on the economy in the north-west Atlantic (Turgeon 2009:38).

### Section 3. III. 2. Early English Maritime Expansion

Fish has been consumed for the whole of human history, but prior to the 10th century, limited preservation and transportation technology meant that consumption was largely confined to coastal areas (Fagan 2006:57). It was not until increased population growth, the spread of religious dietary practices, and climate change combined to put increased pressure on agricultural food sources that the expansion and further development of local and overseas fisheries took place (Anderson 1984:3-4; Fagan 2006:57). The development of the fisheries, particularly the overseas fisheries, would eventually receive support in the form of government regulations, additional government-mandated and enforced fast days, and other institutional developments emphasizing the commercial and strategic value of these resources (Fagan 2006:242-243).

The first steps into the world of maritime resources naturally took place in inshore and offshore fishing. The continental shelf of northwest Europe was particularly suited for this, being a rich environment containing an unusual density and diversity of fish species, many of which had already been exploited at a subsistence level for centuries (Kowaleski 2000:429; Robinson 2009:127, 133). Starting about the 12th century the population of Europe began to expand rapidly, as did urbanization, agriculture, manufacturing, and consumption (Robinson 2009:132; Thór 1996:131-132; Turgeon 2005:3). This coincided with a period of cooler global temperatures known today as the Little Ice Age, which put pressure on subsistence activities by shortening growing seasons and reducing the yield of agricultural crops (Fagan 2006:176; Thór 1996:127). Revitalization and expansion of coastal and offshore fisheries, including herring,



pilchard, hake, and whale was the result of this increased pressure (Gray 1988; Kowaleski 2000; Robinson 2009; Turgeon 2005).

The expansion of the fisheries had positive economic effects in several areas of England, particularly the southwest regions of Devon and Cornwall (Kowaleski 2000:429). These early fisheries, particularly the pilchard fishery which continued to expand from the 14th to 16th centuries, supported additional economic expansion and diversification (Gray 1998:102-103; Kowaleski 2000:432-433; Robinson 2009:134). The development of the coastal fisheries led to an accumulation of fishermen and capital which would later assist these regions, particularly Devon, in becoming major players in the overseas fisheries (Gray 1988:94; Kowaleski 2000:449, 452).

The first step stage in the development of the English overseas fisheries was an expansion into Icelandic waters (Jones 2000:105). The expansion of the local fisheries and the Dutch herring trade had led to a number of technological advancements and innovations which had made long-distance voyages more practical, enabling the English to reach Iceland around 1412 (Fagan 2006:107-125, 159-173; Pope 2004:11; Robinson 2009:134; Thór 1996:125, 128). One of the first overtly capitalistic trades, the initial interactions between Iceland and England involved the exchange of grain and iron tools for stockfish, although the English would quickly begin to fish on their own account (Fagan 2006:177, 183; Jones 2000:106; Robinson 2009:134; Thór 1996:125). Experience gained from this trade would be disseminated to other English ports, contributing to the development of the Newfoundland trade in the 16th century.

### Section 3. III. 3. Development and International Character of the Cod Fishery

One of the defining features of the early modern cod fishery is its international character. Not only was the fishery pursued by several European powers, but it was pursued throughout the North Atlantic world, from Norway and Iceland, and from there to Newfoundland and New England. An understanding of this international character is essential to the understanding of how the fishery helped shape North America.

As mentioned before, the voyage of John Cabot in 1497 opened up the North Atlantic to further exploration. A Venetian, Cabot had sailed under a patent from King Henry VII of England and with the support of a consortium of Bristol merchants. Even if claims of pre-Cabot visits to Newfoundland are true, and there is considerable debate about that, the account of Cabot's voyage was the first to be circulated widely and thus made the "new land" widely known to his contemporaries (Pope 2004:13). Follow-up voyages by Cabot, the Corte-Reals, and others added significantly to the knowledge of the area and, more importantly, made it clear that they had found a new land of abundant natural resources (Harrington 1985:42, Pope 2004:13). The first known cargo of Newfoundland fish was soon to follow, arriving in Bristol in 1502 (Pope 2004:15). A multinational seasonal migratory industry developed over the next several decades.

At its most basic level, the multinational character of the fisheries was expressed through localized international interaction. Throughout most of the 16th century, it was not uncommon to find fishermen from different nations sharing shore space and cooperating in the Newfoundland fisheries. It was not until late in the 16th century that international rivalries heated up, and cooperation became the exception rather than the

norm (Anderson 1984:304). As late as 1583 Sir Humphrey Gilbert found 36 vessels of various nationalities working out of St. John's harbor under an English fishing admiral (Anderson 1984:195). Even following permanent settlement in the 17th century, localized interaction between different nationalities was not unknown. Places such as Pemaquid, Maine, and Trepassy, Newfoundland served as points of contact for French and British inhabitants, while in the 18th century merchants from the French colony at Isle Royale traded not only with French ports, but Canada, the West Indies, Acadia, and New England (Balcom 1984:7-8; De Paoli 2001:xv; Pope 2004:309).

The earliest cod fisheries to gain international prominence were the Icelandic and Norwegian fisheries. Norway had begun exporting stockfish around 1100 and Iceland around 1350 (Pope 2004:11). In both cases the English were originally the primary market for stockfish; England would eventually start fishing the Icelandic stocks directly and the Norwegian market gradually shifted to the German states and the Netherlands as the Hanseatic League took control of the carrying trade (Thór 1996:125; 2009:344-345; Nielsson 2009:83). A seasonal inshore fishery, the Norwegian industry was reliant on Hanseatic merchants until the 17th century, when local merchants took control (Nielsson 2009:84, 88). Suffering from the same ups and downs as other fisheries, the stockfish trade variously expanded and contracted over the centuries and it was not until the introduction of *kelpfish*, or salt cod, that Norway was able to break into the Iberian markets in the late 18th century (Nielsson 2009:90). The early Norway trade is important because it helped expose a larger number of people to codfish as a commodity, priming the market for the later expansion of the trade.

The North American cod fisheries were the focus of much international competition. The nature of this competition was fierce enough that while several nations entered into the fishery at an early date, only two would persist and only one could dominate. Unfortunately for modern scholars several of these nations have been the subject of much speculation and nationalistic myth-building. In many cases, this speculation had been accepted as fact and it is only recently that a reassessment of the history of these nations in relation to the North American fishery has changed the understanding of their place in the wider history of the trade.

The Portuguese fishery is one of the most affected by this phenomenon. Although it is recognized that the Portuguese were one of the developers of the North American industry, there is little evidence on the scale of the early Portuguese fishing industry (Pope 1997:15; Abreu-Ferreira 1997:31; 1998:103). It is true that many place names on the Avalon Peninsula in Newfoundland have Portuguese roots, but this should not be seen as evidence for a sustained interest in the migratory fishery, as has been claimed in the past (Innis 1954:15; Rogers 1911:16; Rose 2007:128). Other historians, particularly those working from a nationalistic position, have invoked a “conspiracy of silence” to explain the lack of evidence for the presumed dominance and intensive exploitation of the Newfoundland fisheries by the Portuguese fishers (Abreu-Ferreira 1998:100). As a result, it has become difficult to gauge the actual impact that the Portuguese had in Newfoundland, and the Portuguese-Newfoundland connection needs careful analysis (Abreu-Ferreira 1998:100-101; Amorin 2009:290).

Despite claims by many older sources of a large and well-equipped fleet operating in Newfoundland waters, there is still considerable debate over the numbers and scale of the Portuguese cod fishery; modern scholars are divided on the topic of the scale of Portuguese participation in the 16th-century Newfoundland trade (Abreu-Ferreira 1998:103; Barros 2015). Many of the claims for a large Portuguese fleet are based on a handful of eyewitness accounts, for which there is no independent confirmation (Abreu-Ferreira 1998:106; Barros 2015). What evidence is available can be interpreted in different ways; Darlene Abreu-Ferreira suggests that the Portuguese involvement in the fishery was actually minor when compared to other nations (Abreu-Ferreira 1998). Amândio Barros, on the other side of the argument, does not speculate on the size of the fishing fleet but states that several Portuguese ports made significant investments in the cod trade (Barros 2015).

Past estimations of the Portuguese fishing fleet range from a high of 150 ships to a conservative 50 ships, though these estimates are often based on hearsay evidence and conjecture, and not personal accounts or primary documents (Abreu-Ferreira 1998:105-106). Assessment of the size of the fishing fleet is complicated by the lack of primary sources on shipping and fishing. Only one dispatch book from the 16th and 17th centuries has survived, which lists just six ships from Porto engaged in the cod fisheries in 1558 and 1559, while another source lists five expeditions sailing from Viana between 1566 and 1567 (Abreu-Ferreira 1998:107, 111; Barros 2015). Other archival sources mention 11 fishing ships lost to pirates in 1585, and Bernard Drake boasted of raiding 20 Portuguese vessels (including fishing and treasure ships) off of Newfoundland that same

year (Abreu-Ferreira 1998:106; Barros 2015). Other mentions of cod fishing include a 1557 order, reinstated in 1571, which stated that all fishing ships from Averios and Viana be armed (Abreu-Ferreira 1998:105).

As is often the case, using absolute numbers may be misleading; percentage-wise, the numbers indicate that the cod fishery was an important industry in at least a few Portuguese port cities. In the afore-mentioned dispatch book for Porto, for example, six ships were listed as Newfoundland-bound, out of a total of nineteen vessels sailing from that port. With nearly a third of its shipping engaged in the Newfoundland trade, the cod fishery would have been a significant part of Porto's maritime industry during the mid-16th century (Barros 2015). At the same time, in Averio, whose mention in the 1571 directive would indicate that the port was particularly associated with the cod fisheries, only three percent of the mid-16th century fleet was engaged in the fishing trade, illustrating the need for caution when making generalizations about the early-modern period (Abreu-Ferreira 1998:105; Amorin 2009:281).

No matter the scale or relative importance of the Portuguese cod fishing fleet to a port's maritime industries, historians agree that direct involvement by the Portuguese in the fishery was over by 1590 (Abreu-Ferreira 1998:108; Amorin 2009:281; Barros 2015). Portuguese ports remained a primary source of salt and other commodities, and Portugal remained a key market for English salt cod, making it an important part of the multi-lateral trades which would develop in the 17th century, and ensuring Portugal a significant role far beyond its direct involvement in the trade (Amorin 2009:281; Barros 2015; Rose 2007:183).

The Basques were another early and sustained participant in the trans-Atlantic fishery. Described as the most skillful of the French fishers, the French Basque dominated much of that nation's early trans-Atlantic industries (Balcom 1984:11; Pope 2003:124). This was due to the advantages that the Basque possessed in prosecuting maritime industries, which included being situated in a strategic location and controlling domestic supplies of oak and iron for shipbuilding, as well as having an internal source of victuals (Barkham 2009; Loewen and Delmas 2011). Similar to the pattern that the English would follow, Basques expanded from inshore to offshore to overseas fisheries, eventually making it to Newfoundland and Labrador (Loewen and Delmas 2011). Despite claims of pre-Columbian exploitation of the North American cod stocks, the earliest record of Basque involvement in the fishery was the 1517 sale of green cod by a group of Basque fishermen in France (Balcom 1984:11; Turgeon 2009:35). Most sources agree that Basque presence in the trans-Atlantic fishery grew steadily from that date until the 1550s, with Spanish Basques joining their French brethren in the 1540s (Innis 1954:23; Pope 1997:15; 2003:124).

The combination of the geography, ecology, and climate of the Iberian Peninsula meant that the region was susceptible to the introduction of a long-lasting, shelf-stable food product, explaining the early interest that the Portuguese had in the dried fishery (Grafe 2004:6). It was not until the middle of the 16th century, however, that the Spanish got involved in the North American fisheries (Innis 1954:30). If anything, their tenure in the fishery is remarkable if only for its brevity, beginning around 1530 and substantially ending in the early 17th century; after this time the Spanish relied largely on the English

for salt cod (Innis 1954:38-39; Pope 1997:15). The scale of the Spanish fisheries in this short time span may have been impressive. In 1578 Anthony Parkhurst counted 100 Spanish vessels amongst a total of approximately 200 vessels operating in Newfoundland waters (Turgeon 2009:37). These numbers must be viewed with some discretion; at least one author has argued that Parkhurst was trying to emphasize the danger that the English fishing industry was facing from foreign competition, and therefore inflated his numbers (Abreu-Ferreira 1998:105-106). Still, if Parkhurst's numbers are representative of the scale of the Spanish in the Newfoundland fishery, then the Spanish had an intense interest in the trade.

The early exit of the Spanish from the fisheries is usually said to be the result of two events. The first is Bernard Drake's 1585 privateering raid against the Spanish-controlled Portuguese fleet (Abreu-Ferreira 1998:106; Candow 2009b:419; Matthews 1968:49). The second and likely more important reason was the need for, and resulting loss of, ships for the Spanish Armada in 1588 (Matthews 1968:49; Rogers 1911:41). The case for this second reason is strengthened by the fact that the demands of the Armada also proved fatal for the Basque whaling industry in Red Bay and the Strait of Belle Isle (Loewen 2009:10). Following the end of hostilities, and the resulting reopening of the Iberian markets to foreign trade, the Spanish, like the Portuguese, may have found it safer and more convenient to import fish from the newly ascendant English fisheries (Barros 2015). Thus from the 17th century onward the English would be the primary supplier of dried cod to the Spanish, mostly from Newfoundland but also from New England (Grafe 2004:7; Matthews 1968:26).



Spanish Basques continued to operate in the Newfoundland fishery for a century after other Spanish ports had left the trade (Loewen and Delmas 2011; Pope 1997:15). Until the Treaty of Utrecht in 1713, the primary source of ships, supplies, and personnel for the Basque fishery was the Spanish Basque province of Guipuzcoa, often capitalized through the French port, Bordeaux. Under the terms of the treaty, Guipuzcoa was banned from the fisheries, and afterwards, the Spanish Basques served as crewmembers of ships operating in the Gulf of St. Lawrence before the Basque presence completely disappeared following the 1763 Treaty of Paris (Loewen and Delmas 2011).

The most important participants in the early North American fisheries were the French who, alongside the Basque, were quick and early in exploiting the vast resources of the North Atlantic (Candow 2009b:416). First arriving off of Newfoundland as early as 1504, by 1509 there was a definite French presence in North American waters (Innis 1954:15; Pope 1997:15; Briere 1997:47; Turgeon 2005:4). The French fleet expanded rapidly, increasing to about 100 ships by the 1520s (Matthews 1968:38; Turgeon 2009:36). In St. John's Harbour alone twelve to fourteen French ships were counted in 1527 (Innis 1954:12-13; Turgeon 2005:5). Expansion continued throughout the century, picking up again approximately mid-century so that by 1550 the French had come to dominate Newfoundland (Matthews 1968:34; Turgeon 2005:5; 2009:36). In Bordeaux alone, the number of ships increased from about 10 ships a year in the early 1540s to 50 in the late 1550s, while in Rouen 73 ships sailed in 1549, which increased to 94 by 1555 (Turgeon 2005:5; 2009:36). Over 150 ships set sail to Newfoundland from just 3 French ports during the 1550s, a number which does not include ships from smaller or less

documented ports (Turgeon 2009:36-37). Robert Hitchcock, an English observer, estimated an astonishing 500 ships sailing from French ports in 1580 (Turgeon 2005:6; 2009:37).

As discussed in the previous chapter, colonial products had an inherent exoticism due to their origins in a far-distant *foris*, or wilderness, and as one of the first mass-marketed North American consumables in France, codfish quickly displaced herring and hake as the most-consumed fish during the 16th century (Turgeon 2005:28; 2009:34, 38-39, 46-47). This was in part because French fishermen produced a variety of cod products, including heavily salted green fish and lightly salted dry fish, the latter of which was available in several grades of different quality and price (Briere 1997:47; Turgeon 2005:30). Some, like “pink” cod, was expensive and destined for the tables of the aristocracy, while the lesser grades were destined for the poorer sorts, ensuring widespread consumption (Turgeon 2005:30; 2009:41-42).

Starting in the 1540s, and becoming significant by 1575, the French expanded their fishery off of Newfoundland’s shore onto the banks in what is known as the “wet” or “green” fishery (Candow 2009b:418). Unlike the inshore industry, the green fishery rarely, if ever, put ashore. Participants fished from and processed their catch onboard their larger fishing ships, and the fish was preserved in heavy layers of salt instead of being salted and laid out to dry. Green preservation techniques were also used in the inshore fishery when confronted with fish which was too large or caught too late in the year to preserve with the dry cure (Candow 2009b:418; Fagan 2006:250). The green cure was more akin to pickling instead of the hard, shelf-stable product of the inshore fishery,

and found a market in areas which favored the salty taste and was not concerned as much with long-term preservation (Fagan 2006:250; Innis 1954:25; Turgeon 2005:7, 28).

#### Section 3. III. 4. English Overseas Expansion 1565-1600

English participation in the Newfoundland fishery prior to 1565 was small and intermittent, in large part due to a lack of interest in the Newfoundland trade and recurring periods of hostilities with France and Spain (Harrington 1985:43; Pope 1997:15; 2004:15). Expansion only started after 1565, with rapid growth occurring in the 1570s (Matthews 1968:46; Pope 2003:124). The English quickly displaced Iberian powers from the industry and became a dominant power in the region. The North American fisheries were the final stage in a period of expansion which started along the coasts of the British Isles, as the English took advantage of prior forms of organization, production, and marketing to rapidly establish a foothold in the cod trade (Candow 2009a:387).

Iceland was England's primary source of cod throughout the 16th century (Innis 1954:14). The scale of the fishery in this period was on par with what would later be seen in Newfoundland, with up to 100 vessels sailing to Iceland in the 1460s (Thór 2009:343). However, the Hanseatic League began exerting more control over Iceland, which included placing restrictions on English merchants (Fagan 2006:186). This, combined with the European discovery of Newfoundland, had long been assumed to have destroyed the Anglo-Icelandic trade (Jones 2000:105; Matthews 1968:35). This is inaccurate and

overstates the effects that Hanseatic control had over the Anglo-Iceland trade (Candow 2009b:417). While trade licenses and customs fees were imposed on the English in 1490, the relatively low cost of these did not hinder trade in any meaningful way. In fact, the imposition of licensing signaled the beginning of a period of growth in the English-Icelandic trade (Jones 2000:105; Robinson 2009:144). By 1528 the Icelandic fleet peaked at nearly 150 vessels, but by 1530 the trade began to decline (Fagan 2006:187; Jones 2000:106; Thór 2009:344). Reasons for this are unclear, though it is likely that tightening restrictions from both Hanseatic and English sources contributed (Fagan 2006:188; Jones 2000: 106-107; Thór 1996:125).

This decline was only temporary, for congruent with the growth of the Newfoundland fisheries in the 1590s the Icelandic trade again expanded (Jones 2000:107). By 1628 the Icelandic cod fleet matched the one sailing to Newfoundland, and four years later it was referred to as the “greatest fishery in the kingdom” (Jones 2007:107; Robinson 2009:145; Thór 2009:344). Another decline began in the 1640s, and by the 1700s the English were gone from Iceland (Jones 2000:107, Thór 2009:344). Even though the Anglo-Icelandic fishery was over, it had fulfilled an important role; the English trade with Iceland was a precursor to the exploration and exploitation of North America, stimulating exploration and training seamen in sailing over the horizon (Thór 1996:129)

Simultaneously with the development of the Icelandic fishery was the development of an Irish fishery. Starting in the 14th century, crews from the English West Country had begun exploiting herring stocks in the Irish Sea and hake stocks on the

Irish Atlantic coast, and by 1500 Devon was heavily involved in this trade (Gray 1988:123; Kowaleski 2000:442-443; Robinson 2009:149; Pope 2004:12). Similar to their descendants who would exploit the Newfoundland cod stocks, hake fishermen in Ireland established a shore station where they would split, salt, and dry their catch for export (Kowaleski 2000:443). Like Iceland, the Irish fisheries contributed to the accumulation of knowledge and skills necessary for the expansion into North America (Pope 2004:19).

The traditional explanation for the rise of the English overseas fishery in Newfoundland was the collapse of the Spanish and Portuguese fisheries in the 1570s. This opened markets for the English on the Iberian Peninsula and fortuitously coincided with the closing of the Icelandic fishery by the Hanseatic League (Candow 2009b:417; Innis 1954:30; Matthews 1968:44). As is usually the case when looking at causality in historical events, the actuality is more complex (Candow 2009b:417; Matthews 1968:44). The end of the alliance with Spain in 1559 and the ambitions of the English under Elizabeth I led to an expansion of English maritime trades (Andrew 1984:9; Candow 2009b:417; Matthews 1968:42; Pope 2004:19). The French were engaged in a period of civil war known as the Wars of Religion, which hampered their ability to prosecute the overseas fishery and created a deficit in the trade which the English were ideally situated to fill (Candow 2009b:417; Pope 2004:19). The sacking of the Portuguese fleet by Bernard Drake occurred at the same time that an embargo against Basque whale oil caused a financial crisis for the Spanish Basque. This crisis was exacerbated by demands from the Spanish crown for campaigns against Portugal and the destruction of the

Spanish Armada, which prevented a speedy recovery (Candow 2009b:419; Loewen 2009:9-10; Rogers 1911:41).

These events combined to create a situation where new markets opened on the Iberian Peninsula just at the English maritime industry, particularly the fishery, was coming into its own. Furthermore, the English were strategically placed to take advantage of these new markets (Candow 2009b:417; Gray 1988:114; Pope 2004:19). Prior to the opening of the Iberian markets, there was a small market for English fish. The Icelandic, Irish, and local fisheries were sufficient for domestic demand, and the English had no foreign market in the mid-16th century (Matthews 1968:39-40). The opening of the Iberian markets also had the added benefit of providing a new source of Mediterranean goods after the traditional source, Antwerp, had been closed following the Dutch revolt against Spain (Candow 2009b:418).

Domestically, the Elizabethan government had its own reasons for encouraging the growth of the salt cod trade and took steps to promote its development and expansion. Elizabethan planners viewed cod as much as a strategic resource as a commercial one. Salt cod fed armies in Ireland and on the continent, supplied voyages of discovery, and was a key provision for both merchant ships and warships (Fagan 2006:242; Matthews 1968:44-45; Rogers 1911:31). For example, a recent DNA analysis of cod bones from the 1545 wreck of the Tudor warship *Mary Rose* showed that much of its store of dried cod originated from Icelandic waters, while a smaller percentage originated from Newfoundland (Hutchinson et al 2015). Perhaps more important, judging from its persistent appearance not only in English works but even in late 18th-century and 19th-

century documents from the United States, is the idea that the fisheries were a “nursery of seamen” (Sabine 1853; Pope 2004:181, 237). This was the conceit that the migratory fishery was valuable not only for the trade and goods it brought to England but for the fact that it created a ready reserve of trained seamen who could easily be impressed into naval service during times of open conflict (Pope 2004:237). To encourage both the growth of the Newfoundland fishing trade and the expansion of this nursery, the Elizabethan government passed laws enforcing the observation of fast days in order to increase the consumption of fish (Fagan 2006:242-243; Matthews 1968:45-46; Robinson 2009:143). During the 17th century, the English took further steps, including the passing of the Western Charters, to preserve the nursery and regulate the industry (Matthews 1968:134-135, 168, 210-219, 253-254; Pope 2004:32, 237; Rogers 1911:68).

Environment and location also played a role in the English expansion. Of the primary participants in the cod trade, England has the shortest and most direct route to Newfoundland. This proximity may have allowed the English to overwhelm the remaining Spanish, Portuguese, and French on the Avalon Peninsula (Innis 1954:52; Pope 2006:1-3; Rogers 1911:30). The Avalon Peninsula had its own advantages as a fishing base, located near the intersection of coastal waters and the Labrador Current which created a rich habitat for cod; it was also part of the migration routes of three different cod stocks (Pope 2003:124; Rose 2007:186). These environmental factors combined with the political and economic factors to allow the English to establish control over the Avalon Peninsula and ensure a strong English growth once this control was finalized (Pope 2003; Matthews 1968:45).

The net result of these changes and shifts in the Newfoundland fishery was the development of a multilateral trade, often described in broad economic terms as a “triangular” trade regardless of the actual shape of the voyage (Pope 2004:91; 2013:131-132). The development of these voyages was important to the development of the English fishery. The original triangular trade consisted of Newfoundland to the Iberian/Mediterranean and then England before returning to Newfoundland (Pope 2004:91). Essentially, Newfoundland fish was carried to market, where it was exchanged for wine, fruits, specie, and other goods, which were then carried to England, where these goods were sold or traded. Depending on the ship, another fishing voyage was readied, or the ships were laden with supplies and goods for sale in Newfoundland, starting the process again. The development of this trade linked the seasonality of the fishery with not only consumption cycles, but also with other seasonal products such as wine and wool (Grafe 2004:8). The success of the fishery at a port was largely dependent on the characteristics of the supply region. In Porto, for example, the heavy reliance on the wine trade meant that Newfoundland fish was preferred, while Bilbao preferred to trade wool for New England fish, which was available earlier in the season (Grafe 2004:8-9).

The triangular trade in codfish was important since it was a way for the English to achieve a balance of trade, with salt cod balancing the imports of continental luxuries (Pope 2004:91). Other markets were developed, including the Atlantic Islands, and another triangular trade in cod would eventually develop between New England, Newfoundland, and the West Indies (Pope 2004:96, 97). By the third quarter of the 17th century, however, the development of sack ships in the Newfoundland trade and coasting



voyages in the New England trade had blurred and distorted this triangle, with Bernard Bailyn referring to the New England trade as polygons rather than triangles (Bailyn 1955:86; Pope 2013b:129-132). Regardless of the shape, the trade in salt cod took, however, it continued to perform the vital act of bringing European goods into the North Atlantic colonies, allowing the residents in those colonies to survive and develop their new societies.

### Section 3. III. 5. First Settlements: Newfoundland 1600-1638

Regardless of the nation participating, the 16th-century Newfoundland fishery was a migratory industry, wherein ships were on the coast of Newfoundland during the spring and summer and were based in European ports the rest of the year. While the details varied from country to country and likely even from port to port, a broad description of the conduct of the migratory fishery is as follows.

Preparations for a migratory fishing voyage began well in advance, as early as December in some places. These preparations involved the acquisition of financing, a ship, a captain, crew, and supplies necessary for the prosecution of the fishery (Candow 2009a:387-388; Barkham 2009:232; Pope 1997). This was accomplished through a number of different sources and according to local traditions. For example, in 16th-century France a fishing voyage was often legally divided into thirds amongst the *bourgeois*, who was the primary shareholder in the voyage, the captain, who represented the crew; and the *armateur* or *armador*, who provisioned the ship (Pope 1997:16). Crews

and provisions could be acquired from a number of sources. In England, new recruits for the fishery were gathered not only from port cities but also from their hinterland countryside, and the crewmen on fishing ships were not necessarily “sailors” or “fishermen” and could be from any number of trades (Gray 1988:133-141; Pope 2004:169). Once the ship was outfitted and a crew hired the fishing ship set sail, usually during March or April, though earlier departures were not unheard of (Candow 2009a:392; Pope 1997:17; 2004: 21). Arriving in Newfoundland by mid-May, the crew would have June through August to catch and make as much fish as possible prior to departing Newfoundland’s shores so as to arrive in European ports around the beginning of October (Pope 1997:17).

The timing at all stages of a fishing voyage was tight, and getting it right was often critical to the success and profitability of a voyage. The September departure from Newfoundland was particularly critical. To stay too late in the season was to court disaster. An early winter could strand a ship and crew on Newfoundland’s shores for many months, a fate most crews were not prepared for. More pressing was the fact that the margin of error to turn a profit on a voyage was small. As mentioned previously, the fishery was tied into the seasonality not only of the fish but also of other commodities such as wine and fruit (Candow 2009a:392; Grafe 2004:7, 9). To miss this window might mean the failure to secure a return cargo. Even more important, the end of the fishing season signaled a glut of salt fish on the market. The first ships to arrive would find their product in high demand and receive higher prices for it; the last ships would have

difficulty offloading their catch and received a significantly lower price (Candow 2009a:392).

Being the first to arrive at a particular harbor in Newfoundland was also important to fishing crews, but for a different reason. The migratory fishery was an open-access, first-come-first-served industry. The first crew in a harbor got the best fishing rooms, with better access to the fishing grounds and other necessities of the trade. The captain of the first ship in a harbor furthermore became the fishing admiral there for that season. A vernacular development of the fishery, the admiral system gave a harbor's fishing admiral extra responsibilities. These include the enforcement of rules and regulations related to the fisheries, mediate disputes, and dealing with petty crimes (*CCCL*:71-75; Whitbourne 1620). While this may seem like an egalitarian system, like all forms of government it could be abused and used for personal gain. As early as 1620 Richard Whitbourne observed that it was not uncommon for fishing admirals to engross fishing rooms, or occupy more than their crew could work, and to harass and chase away later-arriving crews (Whitbourne 1620). There is also evidence to suggest that the actual ability of a fishing admiral to enforce his will depended on the size and strength of his crew. For example, during Christopher Levett's exploration and trading voyage along the New England coast from 1623-1624 he had issues with the captain of a well-armed fishing ship and his crew of fifty who disregarded Levett's claims to a harbor and its resources (Levett 1628: 90). For the most part, however, encounters such as Levett's were the exception to the rule, and the admiral system was effective except when periods of warfare brought instability and conflict to the fisheries (Pope 2015).

In 1583, Sir Humphrey Gilbert arrived in St. John's Harbour for repair and resupply (Anderson 1984:194). Gilbert's destination was to the south, but this did not prevent him from laying claim to the harbor and all land within a 200-mile radius around it (Anderson 1984:195; Rogers 1911:38). Never intending to stay, Gilbert departed St. John's only to perish during the loss of the *Squirrel* a few weeks after his departure (Pope 2004:48; Rogers 1911:39-40). While this is often construed as an early attempt at colonization in Newfoundland, the truth of the matter was that Gilbert's claim was largely ceremonial and should not be given any more significance than as the grandiose gesture of imperialism that it was (Pope 2004:48).

The earliest year-round occupation of Newfoundland was in the form of winter crews left to maintain infrastructure and look after supplies left behind. This was necessary due in part due to scavenging by Newfoundland's native Beothuk, who would dismantle and burn fishing stages and rooms in search of iron (Pope 2004:73). Another advantage winter crews had was that, in a first-come, first-served open fishery, they were able to claim a strategic fishing room and maintain the structures used in the fishery, reducing the start-up time needed at the beginning of each season (Matthews 1968:120; Pope 2004:70).

The early history of European settlement in Newfoundland was the subject of nationalistic myth-building, which has continued to cloud this vital period in myth in the popular perception. The source of this myth was Daniel Prowse and his influential *History of Newfoundland* in 1895. Not content to be merely one of the first English settlements in North America, Prowse had to make Newfoundland the earliest English

settlement in North America. To do so he claimed that small bands of settlers had inhabited the St. John's area for years before the first formal colony was established (Gilbert 2013:216). This is a complete fabrication on the part of Prowse. Permanent settlement in Newfoundland only started in the first decade of the 17th century as part of the first wave of English settlement into the New World begun primarily by proprietary and joint-stock interests (Gilbert 2013:216).

Permanent English settlement in Newfoundland began with the arrival of colonists in 1610 under John Guy, who proceeded to construct Cupers Cove Plantation in what is now Cupids in Conception Bay. Guy, a Bristol merchant, was there as the on-site governor and representative of the Newfoundland Company, a consortium of London and Bristol merchants. The purpose of this joint-stock company was to fund a permanent settlement in Newfoundland, from which they could reap profits from the fisheries. This was to be accomplished in several ways, most notably by the colonists fishing for the company's account, trading supplies to fishing crews, and engaging the Beothuk in the fur trade (Gilbert 2013:218; Matthews 1968:104; Pope 2004:50-51).

Other colonies soon followed. In 1614 John Guy and the other Bristol investors had broken away from the London contingent of the Newfoundland Company and established their own settlement at Harbour Grace (Matthews 1968:105; Pope 2004: 51). In 1617 Sir William Vaughan sent colonists to Aquaforte, where they lived miserably for a year before being relocated to Renews. The colony still struggled and was abandoned by 1619 (Pope 2004:52). This was followed by an attempt at settlement by Sir Francis Tanfield at nearby Fermeuse in 1623, of which little is known (Pope 2004:53). St. John's

was established as a fishing plantation by the 1620s if not earlier, but again little is known about it (Pope 2004:53).

The best documented and understood of the so-called successor colonies was established by Sir George Calvert in Ferryland in 1621 (Tuck and Gaulton 2013:41-42; Pope 2004:53-54). Calvert's colony is unique in several ways. First is the fact that while making money was the primary purpose of Calvert's colony, it was also seen as a safe haven for English Catholics and a place of religious tolerance (Tuck and Gaulton 2013:41-42). From the historian's perspective, there is a relatively large body of primary documents which have survived, particularly from the period of 1621 to 1651. The extensive and long-term archaeological investigations have done much to fill in the blank spaces there, not only contributing to the knowledge of Ferryland but also to 17th-century life in Newfoundland generally.

The archaeology at Ferryland has shown that Calvert's colony had a different organization from those established by joint-stock companies and other proprietors in that it was not so much a corporate enterprise, but more closely resembled a feudal manor (Clausnitzer 2011:117-120; Clausnitzer and Gaulton 2012:13-14; Tuck and Gaulton 2013:52). Everything about the physical layout of the colony, from the extensive Mansion House complex with its attached kitchen, buttery, private yard, and other domestic structures to the layout of the brewhouse, and the physical placement of outbuildings such as the brewhouse and forge, supports this interpretation (Tuck and Gaulton 2013:52).

Ferryland is also unique in that it is the only early Newfoundland proprietary colony in which the proprietor spent time in residency. A combination of political and economic concerns had led Calvert to relocate himself and most of his household to Ferryland in 1628; a year later a combination of the Newfoundland climate, issues with fishermen and French privateers, and problems with other colonists led Calvert to quit Ferryland and seek landholdings in the Chesapeake (Cell 1969:94; Miller et al 2011). While it has been said that Calvert abandoned the colony, this is an overstatement, for he and, later, his sons maintained a representative at Ferryland until they were dispossessed of the settlement in 1638 (Cell 1969:95; Gaulton and Tuck 2003: 211; Tuck and Gaulton 2013:42).

These early attempts at proprietary colonization were important to the development of the fishing industry for two reasons. First, colonization signaled the beginnings of a shift from a migratory industry to one based on residential fishers. This would trigger further changes in the organization and conduct of the industry as its participants adapted to new forms of labor relationships and social structures. Second, these early settlements brought the first permanent European inhabitants to northeastern North America.

Proprietary colonies failed as money-making operations, but they did not necessarily fail at planting Europeans in North America (Matthews 1968:120; Pope 2004:47). Proprietary and joint-stock company-funded plantations such as Cupids and Ferryland were never as profitable as investors desired, which led to the proprietors to lose interest and pull funds from their development. The Newfoundland Company first

splintered into two different factions and then dissolved insolvent. Calvert spent a dismal winter at Ferryland in part as an attempt to set his plantation into “better order than it is, or else give it over and lose Charges I have been at hitherto” before deciding that someplace warmer would be a better place for a plantation (Calvert 1627; Pope 2004:51, 54). Despite the withdrawal of proprietary support, however, each attempt left a few more permanent inhabitants on the coast of Newfoundland. Following the departure of the Calverts, between 30 and 35 people remained in Ferryland under an appointed governor (Pope 2004:56, 411). Archaeology has shown that the Cupers Cove plantation remained occupied until the French raid in 1696-1697, and a document discovered in 2007 provides evidence for an unbroken chain of occupation by a person, or persons of the same family name, inhabiting Cupids from at least 1616 to 1674 (Gilbert 2013). Even the less-understood plantations in Renewes, Fermeuse, and St. John’s appear to have been continuously occupied from their 1620s founding until the destruction of the English Shore by the French in 1696 (Pope 2004:53). Between these residual populations and the overwintering crews left by fishing ships, the settlement of Newfoundland was linked from the beginning with the cod fisheries.

The establishment of these colonies also led to the passage of the first Western Charter in 1635 (Rogers 1911:68; Pope 2004:32). The Charter codified the admiral system and addressed abuses in the fishery including wasteful timbering practices, spoilage of anchorages, theft, and vandalism. It also forbade the selling of tobacco and alcohol and the engrossment of fishing rooms and supplies (Matthews 1968:134). Further



clauses address the use of land and fishing rooms by the residential fishery (Matthews 1968:135).

The French also remained active in Newfoundland during this period. The strong growth of the 16th century did not persist into the 17th century, however. Starting in the 1570s, the French expansion was disrupted and slowed considerably due to the period of internal strife known as the Wars of Religion (Candow 2009b:417; Turgeon 1998:593; 2005:2). The great port city of Bordeaux, a center of fishing activity for France, saw the number of ships outfitted fall from 45 in 1585 to 12 in 1589, and a further slump to just 6 in 1600 (Turgeon 1998:593). Still, the French fishery never ceased, and in fact remained significantly larger than the English fishery in both terms of ships and men involved, and in economic importance. One estimate placed the scale of the French inshore fishery at twice that of the English effort, in terms of live catch taken, and evidence suggests that the French migratory dry fishery at the Petit Nord, on Newfoundland's Northern Peninsula, was larger than the English migratory and resident fisheries combined (Pope 2006:5-6).

In contrast to their English counterparts, there does not seem to have been any great interest in permanent settlement in Newfoundland on the part of the French in the first half of the 17th century. While the English were planting their first tenuous proprietary colonies on Newfoundland's shores the French fishermen and merchants continued to prosecute their sizable inshore fishery on a completely seasonal basis. It would not be until increased English competition on traditional French fishing grounds after 1650 that formal colonization would begin (Candow 2009b:421).

### Section 3. III. 6. Southern Expansion: New England 1600-1640

English Atlantic expansion did not end at Newfoundland, for to the south was another rich cod fishery that was practically unknown to merchants even at the relatively late date of 1623 (Gray 1988:33). This region, which was named New England in 1614, had been known to the English since the 16th century, but it was not until the 17th century that serious attempts to explore and appraise its economic potential were undertaken (Gray 1988:19; Harrington 1985:44). Ten voyages of discovery were sent into the Gulf of Maine between 1602 and 1608 with the objectives of locating sites suitable for colonization and finding new commodities for export, and all emphasized the potential of its fisheries (De Paoli 2001:26; Gray 1988:19-20). Once again, however, the English were late to the party. The French had already been fishing in the Gulf since at least the 1560s, with a 1545 reference to the “Land of Norumbega” almost certainly referring to northern Maine (Fagan 2006:257; Pope 1997:15).

While a few accounts link the beginnings of the English exploitation of the New England cod stocks to piracy, competition between different interest groups, or due to a depression in the Newfoundland fishery, these are likely overstatements (Gray 1988:128; Innis 1954:72-73). Instead, the New England fisheries were a natural extension of the Newfoundland fisheries in the same way that those were an extension of the Irish and Icelandic fisheries: part of the continued English expansion westward to acquire and dominate a strategic resource (Fagan 2006:268; Gray 1988:132). In New England, the early explorers found environmental conditions which were vastly different from

Newfoundland, being more accommodating and encouraging a winter fishery as opposed to a summer one (Harrington 1994:194-195). As a result, the early New England fisheries share several features with the Newfoundland fisheries, yet significantly diverged from Newfoundland's path by the 1650s. If the French reports of English ships fishing in New England between 1607 and 1612 are true, then the English had almost a century to develop the Newfoundland fisheries, with major developments occurring in the 40 years prior to the major expansion into New England waters (Gray 1988:29).

The later start of European exploitation in the Gulf of Maine was in the favor of the New England fisheries, as several of the early promoters of New England had experience in Newfoundland. These men were, therefore, able to apply lessons learnt in the northern fishery to the southern one (Matthews 1968:121; Vickers 1994:97). New England also possessed two key advantages in the fishery over the Avalon Peninsula. First, its milder climate and more diverse ecosystem was more conducive to permanent settlement and would allow for greater economic diversity (Harrington 1985:56; Leavenworth 1999; 2008). Second, it would be discovered that the best time for the inshore fishery was during the winter months (Harrington 1994:194; Vickers 1994:116). This meant that in New England it was possible for planters to combine fishing with agricultural activities at a scale which, due to the environment and different seasonality of the cod, was difficult in Newfoundland (Pope 2004:342-344; Vickers 1994:136-137). Another consideration was the larger average size of the New England cod stock, which meant that a quintal could be made from just six or seven fish instead of the fifteen required in Newfoundland (Wood 1634:53). Furthermore, the winter seasonality of the

New England cod fishery allowed for a high-quality product which quickly found favor in some Spanish markets (Grafe 2003:14-17; 2004:7-8). A potential drawback was that the larger fish did not cure as well using the dry method, potentially making them less suited for markets in the Mediterranean and southern Spain (Matthews 1968:123). Since the major New England markets were Bilbao, the Atlantic Islands, and the West Indies, however, this was not much of a disadvantage (Grafe 1004:8-9; Innis 1954:118; Matthews 1968:195).

The expansion into New England waters was slow for the first two decades of the 17th century. Besides the scattering of ships reported by the French, it appears that the only Englishmen utilizing these resources were the Virginian colonists (De Paoli 2001:27-28; Gray 1988:29; Harrington 1985:53). By the 1610s there was fishing activity on Monhegan Island, which by 1620 was being referred to as a “colony” (Gray 1988:29). An early attempt at settlement resulted in the disastrous experience of George Popham’s colony at Sagadahoc in 1608, which was blamed in part on a cold and inhospitable nature of the environment considered unfit for English occupation (Thayer 1892:213-214). Such dismal accounts likely contributed to the lack of interest in New England, until John Smith’s enthusiastic account of his 1614 voyage altered English perspectives on the region (Gray 1988:25; Matthews 1968:123). It is also likely that with the relatively recent entry of England into the international cod trade, there was no pressing need for further expansion until market demands surpassed what Iceland and Newfoundland could support. No matter the reason, between 1608 and 1620 the migratory fishery in New England waters grew slowly, with only one or two vessels reported most years and

peaking at eight vessels in 1616 (Gray 1988:31; Harrington 1985:66; Matthews 1968:123).

A formerly popular explanation for the lack of development in the New England migratory fishery is the attempt at its monopolization by a power bloc headed by Sir Ferdinando Gorges, which began with the chartering of the Council for New England in 1621 (Gray 1988; Woodbury 1880). Charles Woodbury's jingoistic, anti-monopoly, and pro-capitalist comments are perhaps some of the best in this regard; he writes that "the despotic rule and monopoly of the chartered companies killed individuality in enterprise", that without free markets settlers were "forced to rely on the fixed rates or wages of the company... rather than on profits of individualized energy and industry", and most bluntly "there can be no growth without liberty" (Woodbury 1880:18).

The Council for New England, insomuch as it has been vilified and marginalized, played a significant role in the development of New England. The great irony is that this role is largely realized through its failures both as an administrative and political body. Its beginnings lie in the organization of a joint-stock company known as the North Virginia Company, which had been the financial backing for the failed Sagadahoc colony. Despite the complete failure of that colony, a number of investors had remained interested in New England, most notably Sir Ferdinando Gorges. The Council for New England was in part a response to what was perceived as the failings in the North Virginia Company; namely, that with profit as the primary motivation, there was little or no emphasis on governance and other societal issues, dooming the project from the start. A group of 40 nobility and gentry, the most significant of whom after Gorges was John Mason, petitioned the king

for a charter establishing proprietary rights over New England. The most distinctive aspect of this charter, which was granted November 3, 1620, was not the number of nobility and gentry who subscribed to it, but rather that there was a lack of a general council; the 40 patentees were the whole corporation (Preston 1953:174). The charter of the Council for New England enabled the 40 investors to undertake planting, ruling, ordering, and governing of the territory between the 40th and 48th latitudes by granting them palatinate powers within that territory. And from the beginning fishing was meant to be a key element of this rule as the primary source of income for the Council.

The initial plan of the Council for New England, which is generally ascribed to Gorges himself, was to divide New England into thirds. Two-thirds would be granted to Council members for their own private plantations, and the final third would be held in common as a general plantation, which was to be the centerpiece of their efforts in the area (Bailyn 1955:6; Gorges 1622:236). Gorges claims that each member had agreed to invest the relatively paltry sum of £100 into the plantation scheme, would mean that only £4,000 would be available for general plantation (Gorges 1622:222-223). In contrast, Cecil Calvert claimed that his father had spent between £20,000 and £30,000 on their plantation at Ferryland (Calvert 1651). While this is most likely an exaggeration, it still shows the significant costs associated with such plantations (Pope 2004:124-129). With the council members, Gorges included, unlikely to contribute more funds due to their commitments to private ventures, funding would have to come from elsewhere. Gorges believed this could be accomplished by “an easy ransoming of the freedoms of those that had a will to partake onely of the present profits, arising by the trade, and fishing

upon the coast” (Gorges 1622:222). In other words, funds could be raised through the selling of trading and fishing licenses for New England. This would be accomplished by the establishment of joint-stock companies in West Country ports, through which these licenses could be issued in addition to regulating trade and supporting the plantation scheme (Gorges 1622).

Opposition to this plan started even before the Council’s charter was ratified. Sir Edwin Sandys introduced a bill for free fishing in the House of Commons in early 1621. This bill was in direct response to the articles in the Council for New England’s charter which would grant it a total monopoly on fishing rights, which had sparked heated objections from other fishing interests on the grounds that it unduly restricted their trade (Gray 1988:199-201). The debate was started by the Virginia Company who believed that the need for licenses to fish in New England waters would be detrimental to their own colony, which had, since around 1611, been sending annual fishing expeditions to New England (Gray 1988:199-200; Harrington 1985:53). Although negotiations ended with the charter issued in 1621 containing a clause which allowed the Virginians to fish for the support of their colony, the debate persisted due to the continued imposition of license fees for fishing ships by the Council for New England, which Dartmouth claimed cost the industry £100,000 to £120,000 annually (Gray 1988:204; Matthews 1968:125). The surviving records for the Council end in 1623, so it unknown how long licensing actually continued, but the bill was re-introduced in 1624, 1625, and 1628 (Gray 1988:203-24; Harrington 1985:97). It is worth noting that while the free fishing bill was targeting the Council for New England’s monopoly, it was equally, if not more so, applicable to the

Newfoundland fisheries, and at least one author believes that the protection of the Newfoundland trade was the chief concern all along (Preston 1953:178).

Interestingly, despite the objections of opponents to the Council for New England's fishing monopoly and in direct contrast to Woodbury's claims about growth and liberty, the number of migratory ships heading to New England only started increasing after the Council imposed its fishing licenses. Eleven ships returned from New England in 1621; a year later, with council licensing in effect, 40 ships sailed to New England waters (De Paoli 2001:31; Gray 1988:31; Harrington 1985:70). While this number is unremarkable when compared to the 250 ships which returned from Newfoundland in 1621, it is still an impressive increase (Harrington 1985:70). The migratory fishery in New England appears to have peaked at this point, as up to at least 1630, only 40 to 50 ships were known to fish annually in New England waters (Candow 2009b:422). These low numbers have been advanced as evidence for the disruptive influence of the Council for New England's fishing monopoly (Gray 1988:199-204). However, there is another issue to address in order to understand the early development of the New England fisheries.

All of the discussion on the New England fisheries thus far have focused on the migratory fishery, which has been the focus of much of the New England fisheries historiography as well. This singular focus is underestimating the scale of English expansion in the Gulf of Maine. Peter Pope has noted that quantifying the inshore fishery, including the New England fishery, by the number of fishing ships is misleading since the fishery was prosecuted from smaller, shore-based shallops (Pope 2004:22). While the



migratory fishery was obviously important, particularly to West Country merchants, the Council for New England's licensing may have spurred the development of proprietary fishing stations in lieu of a large migratory fishery (Matthews 1968:127-128). As early as 1620 the fishing station at Monhegan Island was being called a colony. Two years later it was observed that Sir Ferdinando Gorges kept thirteen men and two shallops at Monhegan Island, implying the presence of a permanent fishing station (Gray 1988: 29-30; Harrington 1985:119-121).

At least ten fishing stations were established under the aegis of the Council's charter (Gray 1988:40-41; Harrington 1985:73). The first of these was Pannaway Plantation, established by David Thompson in 1623 at Odiorne's Point in modern Rye, New Hampshire (Baker 2007:128; Harrington 1985:131). The best documented is undoubtedly Robert Trelawny's station on Richmond Island, which was established in 1631 (Gray 1988:41). The well-known fishing plantation at Pemaquid, Maine was first settled around 1626 and issued a patent in 1632 (De Paoli 2001:62, 90). These stations have the potential of adding considerably to the scale of English expansion into the Gulf of Maine during the 1620s and 1630s. That the scale of fishing activity was greater than that suggested by the number of migratory ships is supported by Spanish records. Regina Grafe has found that, based on those records, New England was an important source of cod as early as the 1630s, which suggests an industry of much greater scale than the migratory fleet could support (Grafe 2004:12). Other stations were founded along the coast of Massachusetts, including Dorchester, Mount Wolaston, and Wessagussett. All were established in the early 1620s and all failed within two years (Vickers 1994:90).

While many of these fishing stations failed while under proprietary control, they had the same effect as proprietary colonies in Newfoundland, leaving a scattering of European settlers along the coast (Adams 1905). Pemaquid is one of the more prominent examples, occupied from its founding in 1626 until a final abandonment in the 18th century (De Paoli 2001). The Gorges and Mason grants also brought settlers to New England, with at least a few of them there specifically to fish. Both had been granted land by the Council for New England in 1622, with Mason holding all of the lands between the Naumkeag River (in modern Salem, Massachusetts) and the Merrimack River, and Gorges and Mason jointly holding the land between the Merrimack and Kennebec Rivers, which they named the Province of Maine. Their first attempt to utilize these lands was a failed attempt at a plantation at Wessagussett, in modern Weymouth, Massachusetts, in 1623, near the site of a short-lived fishing plantation set up by Thomas Weston the previous year (Pratt 1662; Adams 1905:29-30). This may have been intended as the center of their power in New England, for the settlement was placed under the control of Sir Ferdinando's son, newly-appointed Governor-General Robert Gorges (Baker 2007:128). Facing financial difficulties, the younger Gorges abandoned the settlement the following year, which combined with the outbreak of hostilities with Spain and France to end Gorges' and Mason's initial attempts in New England (Baker 2007:128; Bradford 1952:127-128). However, both attempts at planting colonies left residual populations along the coast, who would later be absorbed into the later colonial ventures (Adams 1905).

Following the conclusion of hostilities with France, both Gorges and Mason sought to continue their colonial ventures. In 1629 they reorganized their holdings, splitting the territory at the Piscataqua River, taking care to extend the boundary far enough to include the fishing station at the Isles of Shoals. Gorges was granted control of the northern Province of Maine and Mason the southern Province of New Hampshire. Mason's claim was reduced, however, when the Massachusetts Bay charter, also ratified in 1629, established its northern boundary as being three miles north of the mouth of the Merrimack River. Two years later Gorges and Mason, along with six other investors, took out a patent for the Laconia Company to exploit the lands along the Piscataqua River. They established the Strawberry Banke plantation, which would become the core of Portsmouth, New Hampshire. While Gorges seems to have occupied much of his attention with building a neo-feudal society in Maine, Mason took a more pragmatic, commercial approach to New Hampshire. He had inherited the former Thomson plantation at Odiorne's Point and another established by the Hilton brothers at Dover Point. Mason reorganized these plantations, placing agents at each to oversee the stewards or managers. These stewards were, in turn, to supervise the various business aspects of the plantations, including the fisheries (Adams 1825:18-20; Clark 1970:18).

This commercial approach betrays Mason's prior experience with the New World. Unlike Ferdinando Gorges, whose experience was largely as an investor and advocate and whom therefore had largely a theoretical knowledge of how colonization should proceed, Mason had practical experience in North America. He had served as the governor of the Newfoundland Company's plantation at Cupids (Pope 2004:51). Mason

apparently neglected the business aspect of the plantation in favor of exploration and cartography; indeed, he produced one of the first detailed maps of Newfoundland (Pope 2004:51). The organization of his New Hampshire plantations, along with the inventory of the Piscataway Plantation after his death, suggests that he had learnt his lessons from this Newfoundland venture (Gibbons and Warnerton 1635). For example, one of the stewards he sent over was Edward Godfrey, whose job was to oversee the fishermen working for Mason as well as a small fleet of six shallops and eighteen other craft (Adams 1825:18-19; Banks 1887:10). Mason also invested in the first water-powered sawmill in New England, located at Newichawannack (modern South Berwick, Maine) (Baker 2007:130). Even as Mason and Gorges developed their new patents and plantations, however, they began to experience competition from a developing colony to the south of Mason's claim. This was the Puritan-controlled Massachusetts Bay colony, established in 1628 when the Council for New England granted the Massachusetts Bay Company a charter for the territory three miles south of the Charles River to three miles north of the Merrimack River.

The "Great Migration" of Puritans to Massachusetts Bay would prove to be a turning point for the development of New England and the fisheries within the region (Baker 2007:33, 160; Harrington 1985:5; Taylor 2001:165; Vickers 1994:1). Between 1630 and 1642 thousands of Puritans crossed the Atlantic to found a new society where they could establish themselves and their heirs in a comfortable independence, with God's grace (Vickers 1994:1). This expansion is substantially different than that seen in Newfoundland and northern New England. These settlers largely arrived as family units,

had a clear vision of how society was to be run and developed a structured society based on common religious beliefs. Unlike many other colonial ventures, Massachusetts Bay developed a diversified economy, institutional infrastructure and efficient internal markets in labor and capital by the end of the 17th century (Vickers 1994:9). Other areas of British North America took longer to reach the same level of development (Candow 2009a:388; Pope 2004:282-283; Vickers 1994:144, 157).

For the first ten or so years of its existence, however, the economic health of the Massachusetts Bay colony was largely dependent on the continuous arrival of new colonists, who brought significant fresh capital into the burgeoning colony (Bailyn 1955:46-47; McCusker and Menard 1985:94). Indeed, neither Massachusetts Bay nor the ideologically similar Brownist-separatist Plymouth Colony situated to their south had any great success in the fisheries. There are several reasons for this, the foremost being that neither group was particularly inclined to fish on their own account. Both colonies were comprised largely of people with agrarian backgrounds who would rather work their own farmsteads than labor in a fishery. The Plymouth colonists eventually turned to the fur trade to make up the imbalance in trade, while the Massachusetts Bay Company hired seasonal fishing servants who operated a station at Marblehead, on Cape Anne (Cramner 1990:17-32; Vickers 1994:91-92).

This servant fishery, however, was fraught with difficulties, not the least of which was caused by the Puritan leadership, who looked upon the rough, rowdy, and (perhaps most unforgivable) Anglican fishing servants with a mixture of disgust, pity, and fear (Vickers 1994:92-93, 96-97). Quite simply, neither the Plymouth nor Massachusetts Bay

colonies, both strongly isolationist and possessing a fairly closed and highly structured society, were willing to accept the kind of people that the fisheries attracted. An attempt to attract Puritans to the fisheries through the use of land grants in coastal communities proved unsuccessful, for the new arrivals simply engrossed as much land as possible and turned away from the sea (Vickers 1994:92-95). Attempts to combat this by limiting the amount of land fishermen could receive also failed since land was too easy to acquire in the early days of colonization (Vickers 1994:95-97).

The Council for New England was still operating at this time but had consistently failed in its goals. The initial plan to tax the fisheries through local joint-stock companies had long failed, and directly issuing licenses had not solved the Council's financial problems. The Council had resorted to selling patents of land, but typical of the Stuart government these grants were often confusing, overlapping, and contradictory (Baker 2007:128; Pope 2004:129). Strong political and economic opposition, financial difficulties, and haphazard record keeping also contributed to its general failure. The end of the Council for New England came about in 1635, when the council members relinquished their charter as part of a strategy which was intended to get Gorges appointed the royal governor of all of New England, including the recalcitrant and expansionist Massachusetts Bay colony (Gray 1988:37-38; Harrington 1985:98).

While having the desired effect of technically nullifying all of the patents the Council had issued, it backfired on Gorges and Mason when Mason died before reestablishing his patent for New Hampshire and Charles I became preoccupied with the internal power struggles of the English Civil Wars and was unable to confirm Gorge's

claim to New England (Baker 2007:131). The loss of the ship intended to carry Gorges to New England, apparently moments after launching, stranded Gorges in England for several more years (Baker 2007:131). This opened the doors for the Massachusetts Bay Colony, whose leaders had brought their charter with them to North America. Doing so effectively allowed them to ignore the Council's orders and attempts to control the colony, and the terms of their charter would be used to justify their political and economic expansion in the following decades (Leavenworth 1999:178-196).

As with Newfoundland, the French were earlier in their expansion into and exploitation of New England. Giovanni da Verrazano had explored the coast under a commission from Francis I in 1524, and French migratory fishermen were exploiting the cod stocks by the 1560s (Turgeon 1998:596). The first European plantation in New England appears to have been at St. Croix Island. This plantation was established by Pierre Dugua who was looking for a base of operations to from which to enforce his monopoly on the fur trade in the region (Thierry 2012:13). The miserable experience of the settlers at St. Croix in the winter of 1604 to 1605 was documented by Samuel de Champlain, who was amongst the inhabitants of the plantation. With the arrival of reinforcements and relief supplies, the colony was dismantled and moved to Port Royal, a more habitable location (Champlain 1878; Thierry 2012:24). Port Royal, the remaining buildings at St. Croix Island, and the recently established Jesuit mission on Mount Desert Island would fall victim to Samuel Argall, who destroyed all three settlements under orders from the Virginia Company in 1613 (Faulkner and Faulkner 1987:14; Thierry 2012:26-27). Unfortunately, the extent of the French fishery in the Gulf of Maine during

this period appears to be unknown. Most of the known French occupations in Maine and other parts of Acadia are more strongly associated with the fur trade; the prominent Maine example being Fort Pentagoet, which replaced a Plymouth Colony fur-trading station in 1635 (Faulkner and Faulkner 1987:16). Nicolas Denys operated a small plantation at Le Héve, in Nova Scotia, which focused on fishing and timbering, but otherwise, it seems that any French fishing which took place in the Gulf of Maine remained seasonal and migratory (Faulkner and Faulkner 1987:18).

### Section 3. III. 7. The Last Proprietor: Newfoundland 1638-1650

The year 1638 was a turning point in Newfoundland's history. The proprietary colonies of the previous decades had failed as money-making ventures and had been, for all practical purposes, abandoned by their proprietors. The residual population had experienced little growth, although in summer the influx of seasonal migratory fishermen meant that Newfoundland could temporarily boast of a population similar to those seen in southern colonies like Virginia (Pope 2004:200). The arrival of Sir David Kirke at Ferryland in the summer of 1638 heralded change. It would be overstating things to say that Kirke was the sole cause for this change, but it cannot be argued that Newfoundland would only start to see growth in the 1640s and beyond as Kirke, his sons, and others took a new and different approach to the Newfoundland trade (Pope 2004:123).

Sir David Kirke is an interesting historical character with a mixed, and somewhat controversial, record both before and after arriving in Newfoundland. The son of a



London wine merchant, Kirke first gained prominence when he and his brothers led a successful privateering campaign which had captured Quebec and French Canada in 1629 (Pope 2004:81-82). The Kirkes were forced to return their prize to France by the Treaty of Saint-Germain-en-Laye in 1632, but David had already been knighted for his achievements the previous year (Pope 2004:82-83). Along with his father's old partner William Barkeley, Kirke continued to be involved in the New World fur trade, as well as the family's established wine trade (Pope 2004:82). A more direct connection came in 1637 when Kirke, along with three other court favorites, was issued a "Grant for Newfoundland", which in effect granted them a commercial monopoly in Newfoundland (CCCL:77-116; Pope 2004:133).

The Grant of Newfoundland is interesting since it highlights the competing, and contradictory, needs of migratory and residential interests. It preserved the rights of the migratory fishing industry as laid out in the Western Charter of 1635, but went even further to protect that trade. Planters in Newfoundland were explicitly banned from settling within six miles of the coastline, in theory preventing them from engrossing the best fishing rooms and cluttering the harbors. To further reinforce this restriction, the planters were explicitly forbidden from choosing a fishing room until after the migratory fishermen had arrived and from destroying or looting stages and other infrastructure left by the migratory crews. At the same time, however, residents were permitted to fish and dry their catches on the shores, which seems to contradict the six-mile ban on settlement. The patentees were granted the right to issue rules and regulations to the planters who inhabited their grant; however, migratory fishermen were specifically excluded. Finally,

in part to encourage the growth of the English trade the proprietors were empowered to tax foreign fishers and shipping to the sum of five percent of the fish and oil made or transported. As a final measure, the patent holders were granted a *de facto* monopoly on the importation of goods and commodities (CCCL:77-116).

Keith Matthews asserts that Kirke and his associates likely never intended to follow the more restrictive clauses in their charter; Peter Pope further identifies Kirke as one of a new type of colonial merchant, one who was willing to accept greater risks, lower profit margins, and new methods of operation (Matthews 1975:79; Pope 2004:123). Kirke's behavior upon arriving in Newfoundland as the company's on-site manager strongly supports both of these notions. Choosing Calvert's settlement at Ferryland as his base of operation, Kirke evicted the Calvert's governor and took possession of the Mansion House and all of its chattels and proceeded to reorganize the settlement to suit a more commercial mindset (Pope 2004:137). Archaeology has revealed the extent of Kirke's activities: the brewhouse and forge were dismantled, with the former's fireplace reused in the construction of a new dwelling for Kirke and his family; Calvert's stable was remodeled into a tavern where Kirke retailed wine and other goods; and he made substantial investment into boats, stages, and other infrastructure (Carter 1997; Clausnitzer 2011; Clausnitzer and Gaulton 2013; Gaulton 2006; Ingram 2015; Pope 2004: 137-138).

This mercantile reorganization of the Newfoundland trade at Ferryland proved to be extremely successful. Kirke's investments into fishing infrastructure, including boats, stages, crews, and stores, paid handsomely. He was able to successfully make use of his

right to tax foreign bottoms; for example, in 1638 Kirke's brother, Lewis, collected the five percent tax and a shallop from a 260 ton Basque ship in Trinity and collected £50 in taxes from a Dutch ship at Bay Bulls (Pope 2004:101). Kirke also profited from practices not mentioned in the Grant of Newfoundland. He charged rents on fishing rooms and stages, sold licenses for taverns, and apparently held a virtual monopoly on commodities such as wine and salt, from which he profited as well. These innovations in local trade were complemented by improvements in both inter-colonial and trans-Atlantic trade, as Kirke was able to use his business contacts to tap into and co-opt pre-existing trade networks (Pope 2004:412).

Unfortunately for Sir David Kirke, his success in the Newfoundland trade, his appropriation of the Ferryland plantation, and his unwavering Royalist support during the English Civil War of 1642 to 1651 would work against him. Very few of his business records survive, but Kirke appears to have made a significant profit in the Newfoundland trade, but there is little evidence that this was shared amongst his aristocratic partners or that Kirke paid the ten percent due to the Crown. Rather, it seems that his activities profited only himself and a select group of merchant associates, for Kirke was able to post a £40,000 bond in 1652 (Pope 1998:65). On the political side, Kirke's support for the overthrown and executed Charles I immediately put him at odds with the Cromwellian Interregnum government and permitted Cecil Calvert, Second Lord Baltimore, to press his family's claim to Ferryland (Cell 1969:121-123; Pope 1998:65). Kirke was recalled to London as a result of this lawsuit in 1651, arriving there in 1652. Sir David Kirke died, still in London, in 1654, leaving his widow Sarah and sons David

II, Phillip, George, and Jarvis to become successful planters in their own right (Gaulton 2006:28).

### Section 3. III. 8. Planters and Bye-Boat Men: Newfoundland 1650-1696

Sir David Kirke's arrival marks the turning point in the history of the Newfoundland fisheries, and in the history of Newfoundland in general, because he was simultaneously the last proprietor of the island (the Calvert family's claims notwithstanding) and its first resident merchant (Pope 2004:78). Indeed, the true significance of the Kirke proprietorship may be that he demonstrated that there was profit to be had in Newfoundland, and the tenacity and stubbornness of his family in operating their Newfoundland plantations could be seen as a model and inspiration for the planters who followed him.

The remainder of the 17th century in Newfoundland would see the development of a number of vernacular modes of production, with the most prominent being the planter and bye-boat fisheries. At the same, however, these new modes would experience periods of increased hostility as English merchants, and eventually the English government, sought to restore the status quo of the late 16th and early 17th century, despite ever-increasing awareness that the migratory fishery was no longer the most viable or efficient means to exploit the cod stocks of North America (Matthews 1968:171, 206, 263-267). Other factors contributing to the changes (and in many ways, continuity) in 17th century Newfoundland included environmental factors (decreased cod

stocks, degraded local environments), internal and external politics, and the expansion of the European world-system which opened up both new markets and new sources of goods and commodities.

It is worthwhile to note that the term “mode of production” is, in this context, being used in the Marxist sense to refer to a specific set of social, political, and economic relationships rather than the way the product (i.e. salt cod) was produced (McGuire 2002:42). Indeed, one of the main agents of continuity in the English Newfoundland fishery of the 17th century is that it remained an inshore, small-boat, shore-based dry industry, making use of the same cure that had been used for at least a century in Newfoundland. Despite this continuity in the manufacturing process, planters and bye-boat men operated under a different set of socio-economic relationships than their predecessors, who arrived in Newfoundland as employees on a proprietary station, which itself was different from the predominant migratory mode of production which had first brought Europeans to Newfoundland.

Once again, it would be folly to ascribe the entire development of the planter fishery to Sir David Kirke’s influence. Information is scant, unfortunately, but it seems reasonable that the vestigial population left at St. John’s, Cupids, Ferryland, Renewes, and Fermeuse had already developed a planter-style fishery on their own initiative. Kirke, or rather his commercial developments, made the planter fishery viable in the long-term by increasing the carrying trade to Newfoundland, making access to commodities and other goods from England and the rest of Europe more readily available, and by serving as the

prototype for a class of merchant-gentry which could offer credit and other means of financing to smaller planters.

Based on its usage in period documents, in Newfoundland historiography, the term “planter” is used to refer to the head of a household who operates waterside premises from which the fisheries is prosecuted. By extension, the term “plantation” is used to describe these waterside premises, whether it be the entirety of English Newfoundland; a larger production unit such as the corporate/proprietary colonies at Cupids and Ferryland, which have already been referred to as plantations; or the smaller properties which might consist of a single dwelling and associated fishing room more typical of the late 17th century (Pope 2004:1). To prosecute the fishery, planters would hire fishing servants from England, commonly on an impermanent basis, who lived and worked with them for the duration of a fishing season and would return to England or, especially later in the century, migrate onward to New England or elsewhere to look for work. At the end of the fishing season, planters sold their catch to sack ships for transport to market, receiving credit towards or directly receiving goods and commodities such as foodstuffs, wine, tobacco, and fishing equipment for the approaching winter and the next fishing season.

The bye-boat fishery originated in the late 1640s or early 1650s and steadily grew throughout the second half of the century. Most likely a vernacular response to a slump in the Newfoundland fishing trade caused by a widespread lack of fish inshore, the bye-boat fishery combined elements of both the migratory and planter fisheries in that it was a seasonal, migratory trade, but the boatkeepers and their fishing servants operated

independently of the migratory ships which carried them to Newfoundland, and relied on sack ships to market their catch. They were also intertwined with the resident planters since it was the planters who often supplied and maintained the bye-boat keeper's equipment during the winter offseason. Cartographic evidence from St. John's, the center of the bye-boat trade, suggests that boatkeepers were lumped geographically with the migratory ship crews, which would place them socially with those men, and marking them as a distinct group from the planters (Mercer 2002:34).

The growth of the planter and especially the bye-boat fishery was the focus of periodic, and occasionally quite vitriolic, opposition from West Country merchant interests. The primary weapon that the West Country interests wielded was the Western Charter. With the demise of the primary patentees of the Grant of Newfoundland, the Charter was for all practical purposes the only governing document for Newfoundland. The upheavals of the Civil War had affected the ability of Parliament to function, however, and in 1653, as a temporary measure, they issued a set of laws, rules, and ordinances with which Parliament's commissioner in Newfoundland, John Treworgie, was to govern. The 1653 "Rules and Ordinances" repeated most of the clauses of the Western Charter, but at the same time was the first document to explicitly confirm the rights of planters in Newfoundland. The impractical six-mile buffer zone for settlement was removed, and the rights of planters to own fishing rooms were confirmed, so as long as they were not wasted (*CCCL*:119-121). Other restrictions on planters remained, however, including a ban on the establishment of taverns for the entertainment of fishermen and forbidding the keeping of livestock near fishing rooms (*CCCL*:123-125).

The evidence suggests that Treworgie found it more prudent to not enforce most of the rules and laws (*CCCL*:120-121).

A revised Western Charter was not issued until 1661, following the Restoration of Charles II, and signaled the first official salvo in the West Country's campaign against the bye-boat fishery. A clause forbidding the carrying of passengers except for ship's crews and those who "are to plant and do intend to settle there [Newfoundland]" was added to the Charter (Matthews 1968:168; 1975:131; Pope 2004:194). The Western Adventurers, as the West Country merchants were often referred to, had previously come into conflict with the Newfoundland Company in 1617 over fishing rights; and their opposition had led to the more restrictive clauses in the 1637 Grant of Newfoundland. They also opposed the Council for New England's fishing monopoly. Despite these periods of antagonism, the Western Adventurers were generally indifferent to permanent settlement and other competition in Newfoundland until the 1661 charter (Matthews 1968:99, 168-170).

The opposition to bye-boat fishermen in 1661, however, was a direct result of a slump in the Newfoundland fishing trade. While previous slumps in the trade, such as that experienced in 1621, had slowed expansion of the trade, the slump which occurred in the third quarter of the century was much more prolonged and witnessed a contraction of the Newfoundland fleet from a peak of 250 ships to somewhere between 150 to 200 ships (Mercer 2002:2-3). The reason for this contraction, and the associated slump in the trade seems to have been a lack of fish. Modern scholars tend to look at environmental causes to explain fluctuations in fish availability: a climate shift altering the water temperature,



causing the cod to stay offshore; crashes in cod stocks caused by localized overfishing; environmental degradation caused by human activity such as bait seining; or similar reasons (Bolster 2012:65; Leavenworth 1999:128; Pope 2004:43-44). To the Western Adventurers, however, the cause was quite simple: interlopers such as the bye-boat men (Matthews 1968:168; Mercer 2002:24).

These independent contractors were accused of taking up space on fishing ships that should have been spent on ship's crews, competing with ships for the best fishing rooms, damaging the market for fish since their product was more expensive to make and therefore cut into profits or unreasonably drove the price of fish up, and assorted other offenses (Mercer 2002:24, 26-27, 33-35). The Western Adventurers also emphasized that, as passengers on the ship instead of crew, the bye-boat men and their servants contributed little, if anything, to the nursery of seamen (Mercer 2002:17, 26; Pope 2004:238).

Despite the inclusion of a clause designed to kill the bye-boat trade in the 1661 charter, it expanded over the next decade as shipmasters ignored the terms of the charter (Mercer 2002:17, 23). For most of these men, the bye-boat trade may have become a form of insurance during the continued slump; carrying additional passengers and their freight would help to offset any potential losses if a fishing season went poorly (Mercer 2002:12). The Western Adventurers, however, saw the continued slump as proof of the bye-boat men's culpability, and eventually extended their ire to the planters already residing in Newfoundland (Matthews 1968:170; Mercer 2002:32-33).

This led to a revision of the Western Charter in 1671, which was explicitly designed to revive the faltering migratory trade. The carrying of passengers, including

planters and servants, was strictly forbidden, and the six-mile ban on settlement was revived (Pope 2004:194). In order to revive the nursery of seamen, all ships were required to include a set percentage of green hands, and to further stimulate the English economy all goods, excepting salt, had to be procured through English sources (*CCCL*:151-157). This last clause was just as likely meant to curb the trade of New England, who had become a major supplier of foodstuffs and other goods, but (from the English perspective) contributed little to the wealth of England (Matthews 1968:196). At the same time, an amendment was made to the Charter encouraging planters already in Newfoundland to relocate to the West Indies (*CCCL*:151-157).

Enforcement of the Western Charter was taken further when, in 1675, the commander of the naval convoy, John Berry, to Newfoundland was authorized to expel settlers from the six-mile zone (Matthews 1968:210-219; Pope 2004:66). Upon arriving in Newfoundland and surveying the situation in person Berry chose not to comply with his orders and instead wrote a series of letters expressing his views that the Newfoundland trade could not survive without planters to support it (Berry 1675, 1676; Pope 2004:66). Berry's views were supported by testimony from St. John's planter John Downing, who travelled to England from Newfoundland to present the case for the planters (Pope 2004:285). Combined with the corroborating reports of the naval commodores, his testimony led to the rescinding of the anti-settlement clauses of the Western Charter and the formal protection of planter's rights. Furthermore, Parliament decided to send a governor to Newfoundland in 1681. Typical of the English approach to

Newfoundland, this decision was never acted upon even though a formal order was issued on May 18, 1689 (*CCCL*:193-195; Matthews 1968:233).

The role that the planters and planter fishery played in the Newfoundland trade is worth examining in some detail. Unlike New England, Newfoundland's social and economic development was largely based on, and in many cases limited by, participation in the fishery. The most notable aspect of Newfoundland's residential population was its perpetual small size and its limited growth. At the heart of the matter is the fact that there was only limited economic diversification in Newfoundland, unlike the New England colonies. Newfoundland remained largely reliant on a seasonally exploited and unstable resource extraction industry; the population was determined in largely by the space available in the cod fishery (Pope 2004:205).

This is not to say that the Newfoundland planters were simply a bunch of ragtag fishermen clinging to the shores of a barren, inhospitable place. Though lacking formal government, the planters had developed vernacular institutions which gave them some semblance of the societal structures and government they knew in England. At the top of this slowly developing society were the merchant-gentry, a group of planters consisting of "a small class of relatively wealthy and literate persons who dominated transatlantic economic connections and monopolized political power" (Pope 2004:413). Sir David Kirke can be seen as the archetype for this group, and his wife, sister-in-law, and sons are also counted amongst the merchant-gentry. If George Kirke and David Kirke II are used as benchmarks for merchant-gentry, in 1677 other members of this class included Robert Dench of Bay Bulls, John Downing of St. Johns, Thomas Butler of Port de Grave,

Jeremiah Fortune of Harbour Main, James Welchman of Old Perlican, Thomas Pettin of Silly Cove, and James Shambler of Bonavista (Poole 1677).

The importance of this provincial gentry can be seen in the historical record. The most obvious example is that of John Downing, who went to England to argue for the planters in Newfoundland. Testimony from the suit between Cecil Calvert and Sir David Kirke suggests that although the majority of those interviewed were at best ambivalent in their feelings towards the two proprietors, there existed some form of loyalty to Sir David Kirke, or at least an unwillingness to speak against him (Pope 1998:69-70). In a legal dispute involving the theft and destruction of property belonging to a French planter by English fishing servants on a “furrier” expedition, George Kirke was involved as a representative of the English planters in Newfoundland (Pope 2004:309-311). And finally, when the question of governorship of Newfoundland was raised in 1665 following the Dutch raid on St. John’s, George Kirke was put forward as a potential candidate (Matthews 1968:198-199). Obviously, these men were entrusted with positions of great power and importance.

The relationship between the merchant-gentry and planters of more modest means often took the form of clientage; in other words, the merchant-gentry were able to extend credit to these lesser planters, with which they could purchase necessary goods and commodities. The expectation was that the merchant-gentry would be repaid in fish or specie at the end of the fishing season. Specifics of the patron-client economic relationship will be discussed in more detail in the following section, as it is better documented in the New England fishery. It is important to note that clientage was, in the

17th century at least, not seen as a creditor-debtor relationship per se. Rather it was an economic partnership, albeit an asymmetrical one, wherein both parties were dependent on the other to remain solvent. The provincial gentry extended credit to their clients, but at the same time, they were dependent on those clients succeeding in order to pay off their own debts. While some of the merchant-gentry, the Kirkes again being the best-known example, were independently wealthy and/or exploited pre-existing trade relationships and networks, others would have had to develop these networks from scratch and were functionally clients of an English merchant, and therefore needed to be able to balance their own accounts as well.

The final major economic class on the English Shore were fishing servants. Fishing servants were the fishermen who labored under the planters in exchange for some form of remuneration, be it wages, shares, or some combination of the same. The best data on fishing servants comes not from Newfoundland, but from the Trelawny fishing station in Maine. While the Trelawny station was a proprietary station and thus likely operated on a different set of economic relationships from the planter fishing of Newfoundland, they are similar enough that this data can be used with confidence. At the Trelawny station, fishing servants were hired onto three-year terms with remuneration varying depending on the skill and trade of the employee. For example, for the 1633-1634 season, eight fishermen are listed in the invoices and accounts. Of these eight men, five were granted a full share, amounting to £11.9.6 each, plus a flat wage ranging from £0 to £4. Two more received half shares and wages between £2.10.0 to £3.5.0, while the

final man, John Hoskin, was to receive a flat £5 (Winter 1634).<sup>1</sup> The men paid full shares were likely to be experienced fishermen, with wages granted based on seniority, while John Hoskin was very likely a green man on his first fishing voyage. Remuneration in the Newfoundland planter fishery was probably similar in organization, though obviously, the exact amounts varied.

The exact terms of service also varied. Migratory crews and bye-boat men hired servants on a seasonal basis, while planters were probably more inclined to hire servants for multiple-year terms. In theory, at least, these servants were to return to England at the end of their terms; in fact, most likely did. However, some would stay on in Newfoundland to try their hands as planters, while a larger number migrated elsewhere in the English colonial world, particularly to New England where better job opportunities and better wages were available (Pope 2004:241-244; Vickers 1994:109, 131). This was true even for migratory and bye-boat crews. One of the charges the Western Adventurers laid against the planters was that they would seduce migratory crews into staying in Newfoundland when their ship sailed, whereby which a large number would be further induced into moving onward to Massachusetts Bay (Pope 2004:241-248). Either way, the net result was a reduction in manpower for the migratory fishery and a weakening of nursery of seamen. In actuality, it was the boatkeepers and fishing captains who were the culprits. In order to save on freight costs at the end of the season, boatkeepers and fishing

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<sup>1</sup> The payment of a flat wage in addition the shares to some employees represented a replacement of the traditional portage, or personal shipping space, received by migratory fishing crews. As this space was often used to ship goods to be traded on the crewman's own account, the flat wage was a way of compensating for the lack of trade opportunities at a residential fishing station (Pope 2004:178-179, 181, 190-191).

captains would strand excess crewmen to find their own way home (Mercer 2002:40; Pope 2004:238).

As previously noted, most authors stress the importance of the cod fishery to the existence and continuance of Newfoundland settlement. While this is very much true, it does often lead one to overlook the different economic activities in which Newfoundland planters participated in addition to the fisheries. Nor does it really explain the degree to which the migratory and planter fisheries were interconnected and dependent on each other. To fully understand the development of the Newfoundland fishery and its role in Newfoundland's society it is necessary to take a closer look at both of these aspects.

John Berry's 1675 report on the situation in Newfoundland and the reasons for ignoring his order to remove the planters from Newfoundland provide the best look at the roles of the planters in the migratory fishery. First and foremost, the planters acted as a check against the growing French settlement based around the fortifications at Plaisance (Placentia). It was felt that without the English planters the French would be able to easily move into and dominate the Avalon Peninsula, thereby destroying the industry completely. The planters were known to provide shelter and aid to boat crews which had become lost or otherwise separated from their ships, as well as providing fresh provisions which counteracted the effects of scurvy that some ship crews developed. This hospitality was also extended to the crews of other trade and merchant vessels which had ended up in Newfoundland for repair and replenishment. Berry also took care to note that the planters were large consumers of manufactures from England, such as ceramics, clothing, and other products, while from New England they received only small quantities of

provisions, which in turn was traded for English manufactures. Furthermore, the planters purchased these goods, as well as wine, brandy, salt, and the like from West Country merchants, who shipped them with the migratory fishing fleet (Berry 1675, 1676).

Berry's report provides information on the additional economic activities of the planters. He reports that again contrary to the claims of Western Adventurers, planters were engaged in the timber industry during the winter instead of spending it in debauchery. He specifically mentions the manufacture of boards and oars, which were then sold to the Merchant Adventurers at a cheap rate (Berry 1675, 1676). Captain Poole's report adds to this by explaining that the planters also constructed many of the boats used in the fishery, both by the planters themselves and by migratory fishing crews, who appear to have taken it for granted that they would be able to acquire boats in Newfoundland (Poole 1677). Both Berry's and Poole's census, as well as those taken later in the century, also show that at least a few planters were able to take up animal husbandry as well as limited agriculture. The ability of a planter to engage in these activities was largely dependent on his wealth and marital status; however, most households were able to keep a handful of swine, and those planters who maintained cattle herds managed a median of eight cattle, with larger herds appearing around St. John's and in Conception Bay (Pope 2004:344-346). A large number of planters also kept at least one garden, which provided the vegetables and other agricultural products which



could not be reliably shipped. These vegetables provided the antiscorbutic properties necessary to combat scurvy (Pope 2004:344).<sup>2</sup>

Another large part of the planter economy, notable because it was one of the few parts to receive attention by the Western Adventurers, is an informal hospitality industry based on the retailing of liquor and tobacco. This industry has been documented in both the historiography and archaeography, and its prevalence in the latter suggests that it was a particularly widespread economic activity (Crompton 2001; Gaulton 2006; Ingram 2015; Mills 2000; Nixon 1999; Pope 2004:46-47; see also Chapter 5 of this dissertation). The Western Adventurers often used reports such as that given by Christopher Selman, who stated that “by keepinge of tipling houses and selling of brandy and other strong waters, wine, beere, and tobacco, deboist the fishermen sent thither on fishing voyages and thereby hinder them and detaine them from their employments” as evidence against the Newfoundland planters (Selman 1667). John Berry’s report contradicts these claims of debauchery and goes further by noting that the planters acquire these goods from the fishing captains and West Country merchants, therefore making it well within their power to rectify this problem had it actually existed (Berry 1675). Regardless, the hospitality industry was the most important sector of the planter economy aside from the fishery (Pope 2004:346).

The planter economy, however, existed primarily to support the cod fishery. Its rhythm was dictated by the seasonality of the fishery, and the labor demands of the

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<sup>2</sup> For a more in-depth discussion of the planter economy see Peter E. Pope (2004), *Fish into Wine: The Newfoundland Plantation in the Seventeenth Century*, pp. 306-348.

fishery limited the ability of planters to diversify and expanded their economic activities. Furthermore, the fishery itself served as a constraint on economic growth. As Peter Pope observes, the planter's "numbers were effectively determined by the economic space open for them... [they] were dependent on a resource industry subject to crises in both production and price" (Pope 2004:205). Major depressions in the cod fishery, such as that which struck all of the fisheries in the 1680s, led to a slowdown and eventual retrenchment in population growth (Pope 2004:205).

Demographic factors also limited the ability of the Newfoundland planter fishery to expand. The fishery was a male-dominated industry; as a result, few women were inclined to immigrate to Newfoundland, creating a notable gender imbalance. As Francis Wheler noted in 1684, "soe longe as there comes no women they are not fixed" (Wheler 1684). It has been noted that married planters were more likely to be successful than unmarried ones, and unmarried women and widows rarely stayed that way for long (Pope 2004:216). Many fishing servants and smaller planters also found themselves in chronic debt, be it to a merchant-gentry in Newfoundland or a merchant in England, further limiting their economic opportunities (Innis 1954:154-155; Pope 2004:282-285). Limited economic opportunity, the largely male demographic, and chronic indebtedness is what convinced many fishing servants to push onward to the New England colonies (Pope 2004:205, 214).

Despite the adverse political and economic climate of the 1650s through the 1680s, Newfoundland had an established local economy, complete with a resident merchant class, and could be seen as on its way to developing a local government, largely

shaped by its position in a transatlantic economy based on the trade in salt cod. These developments were cut short by the French raid of 1696-1697, which was nothing less than a catastrophe for the burgeoning Newfoundland society. This event and its effects will be discussed in greater detail below.

The French were not idle during this period; indeed, their activities in and around Placentia and St. Mary's Bays were one of the reasons for the survival of permanent English settlement in Newfoundland. Still, prior to 1650, France's presence in Newfoundland, while larger than the English one, remained almost entirely a seasonal one. Large numbers of ships and men traversed the Atlantic each year to traditional French fishing grounds such as the Petit Nord on the Northern Peninsula and the productive waters of Placentia Bay (Pope 2006:4-8). The rising English population in Newfoundland was cause for concern; these concerns were seemingly confirmed with reports of English ships intruding into St. Mary's and Placentia Bays in the 1650s. In response to these intrusions, the French government decided that a fortified colony for both the defense and encouragement of the fishery was needed, and Plaisance in Placentia Bay was chosen to be the site of this new settlement (Cromwell 2011:38; Pope 2004:201).

Plaisance was not chosen arbitrarily. In fact, Placentia Bay had several advantages over the Avalon Peninsula as a place for settlement, in addition to being a known place for the fishery. First, its more southerly location resulted in a milder climate, which in turn allowed for a winter fishery once a residential fishing population was established. Plaisance's excellent harbor provided a protected anchorage for both fishing ships and

warships, and from this harbor, the French could potentially control the southern access to the Gulf of St. Lawrence and their Canadian possessions (Candow 2011:13; Crompton 2012:71; Cromwell 2011:36-38). The colony was officially planted in 1661, but the first group of colonists disappeared, likely victims of Newfoundland's winter and the poorly-organized nature of the attempt. This was followed by a series of controversial, ineffective, and unpopular governors, a cycle that didn't truly end until the 1691 arrival of de Brouillon, who greatly improved the harbor's defenses and who was the co-leader of the devastating 1696 raid which destroyed the settlements on the English Shore (Cromwell 2011:39-53; Crompton 2012:73-77; Matthews 1968:193-194).

Despite the rather ignoble history of governance of the colony, Plaisance (today Placentia) played an important role in the history of the fisheries. Beyond protecting and promoting a French residential fishery, the colony provided additional justification for the English to ensure the survival of their plantations and planter fishery. Its role as the launching-off point for the French raid of 1696 and its place in the conflicts of the early 18th century also had a tremendous effect on the development of Newfoundland and the English fisheries, which will be discussed in a later section.

### Section 3. III. 9. Bay Merchants and the Eastern Frontier: New England 1640-1696

Into the 1640s, the New England fishery was still relatively small and underdeveloped. Fishing plantations and small settlements of independent fishermen dotted the coast of Maine from Pemaquid to the Isles of Shoals; New Hampshire had a

least one station operating on its half of the Isles of Shoals, and possibly others at Odiorne's Point and Hilton Point (Harrington 1985:111-138; 1994:207-216). In Massachusetts Bay, there was also a handful of fishermen operating out of local ports, but Puritan values and an underdeveloped economy meant that this local fishery was small and not very profitable (Vickers 1994:86, 91-98). For the most part, the fish trade continued to reside in the hands of English merchants, who were still dispatching 40 to 50 fishing ships a year and who were the primary purchasers of the fish produced at the Maine stations (Harrington 1994:204-207). The event that heralded the development of a local fishery, predominately controlled by Massachusetts Bay, was the English Civil War. In Newfoundland, this war caused a decline in the number of ships being outfitted as the West Country was wracked by conflict; the smaller New England fishery simply disappeared (Candow 2009b:420; Vickers 1994:98).

The disappearance of the migratory fishery from the Gulf of Maine coincided with an economic crisis in Massachusetts Bay. This was triggered by the Civil War as well, which ended the flow of new settlers into the colony (Bailyn 1955:46; Matthews 1968:156). With the end of the Great Migration came an end to the influx of fresh capital that the colony had heretofore depended on, a change which gave cause to the Puritan theocracy to actively seek out new industries, to both balance their imports and make their colony self-sufficient (Bailyn 1955:46-47, 49, 61-62; McCusker and Menard 1985:94; Vickers 1994:98). Prominent attempts included the Hammersmith Ironworks in Saugus, established in 1646, and a rather ham-fisted attempt at woolen cloth and draperies manufacture (Bailyn 1955:62-74; Regan and White 2010). The cod fishery,

however, remained the single most immediately exploitable and profitable enterprise available to the Massachusetts Bay colony, and it is not surprising that merchants would turn to this staple as a means of gaining economic independence (Vickers 1994:86). Before this could happen, however, there were several problems that had to be overcome.

The first of these was financing. Fishermen required supplies of salt, tackle, provisions, boats, and other necessities which required a significant amount of capital to acquire. In Newfoundland in 1684, for example, outfitting two fully-crewed shallops was estimated to cost upwards of £52.15.0, or almost £27 per boat and five-man crew, not counting the cost of the shallop itself (Wheler 1684). In the beginning, the Massachusetts Bay merchants did not have the on-hand capital to finance such voyages. The other major problem was the recruitment and control of labor for the fisheries. If the problems experienced by John Winter at the Trelawny fishing station at Richmond Island were typical, difficult-to-supervise fishermen could be a source of constant problems with productivity (Vickers 1994:94). Simply put, fishermen required a fair amount of freedom of movement in order to prosecute their industry, and as a result, it was difficult, if not outright impossible, to supervise their labor in any close detail (Vickers 1994:5). While shares and wages were one method of labor control, the Richmond's Island example shows that they were not completely foolproof. Winter often complains about the quality and lack of subservience in much of his labor force, going so far as to ask Trelawny to

send more pliable and agreeable servants than those sent previously (Winter 1634; 1638; 1639a, 1642).<sup>3</sup> An additional form of labor control was needed.

The issue with the lack of capital was resolved in a manner very similar to what was seen in Newfoundland; merchants from London, Bristol, and other English ports provided capital, shipping, and the necessary trade contracts with which to enter the fisheries. Bernard Bailyn states that these trade links were actively sought by the London merchants, who, as part of their competition with West Country merchants were seeking a way to gain a share of the fishing trade. With Newfoundland securely under the influence of the West Country, the Londoners turned to the relatively virgin ground of New England (Bailyn 1955:78-79). Bailyn appears to have based his argument on the work of Charles Judah. Judah was one of the several authors who promoted the conflict thesis in Newfoundland historiography. Under this paradigm, the history of Newfoundland, particularly in regards to permanent settlement, was seen as a series of conflicts between different interest groups (Matthews 2001). The participants and victor vary by interpretation, but Judah argued that the conflict was between a bloc consisting of a London-Bristol alliance, who controlled the sack trade, and the West Country migratory interests (Judah 1933; Matthews 2001). The conflict thesis, however, has been largely discarded in Newfoundland studies as historians have reevaluated the actual effects of paper legislation (Pope 2004:iii). In fact, there seems to be little, if any, historical

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<sup>3</sup> These are just a few examples of the letters where Winter reports labor problems. See Vickers (1994):94 for a more complete list and Baxter, *Documentary History of the State of Maine, Volume 3* (1884), for reprints of the original letters.

documentation supporting a conflict or rivalry between London and West Country interests in the 17th century (Matthews 2001:157-158).

Aside from the lack of historical documentation, there is no reason to presume that it was competition between ports that led London merchants to enter into the carrying trade with New England. London had already entered the Newfoundland carrying trade due to the pre-existing mercantile connections of Sir David Kirke; the extension of that carrying trade to New England was also the result of familial, economic, and political connections. In the world of 17th-century commerce, such connections were significant. The first generation of Massachusetts Bay merchants already had connections to the London merchant community (Bailyn 1955:35, 79). Many of the earliest settlers in Massachusetts Bay originated in Lincolnshire and East Anglia; for example, John Winthrop was born in Suffolk to a prominent lawyer and textile merchant (Bailyn 1955:18; Bremer 2003:67). It should be no surprise therefore that many of the first commercial connections were with London-based merchants.

The solution to the labor problem was debt-clientage, or what Daniel Vickers has identified as a merchant-client relationship model (Vickers 1994:103-107). Clientage was also at work in Newfoundland; but it is better documented in New England, especially Massachusetts Bay, due to the survival of a greater number of account books, legal documents, and other period sources which aptly illustrate its role in the development of a Massachusetts Bay-controlled fishery. A merchant-client relationship in the fisheries is one where the merchant would extend a fisherman credit, with which he could purchase both supplies for the fishery and goods for personal consumption with the understanding,



either formally or informally, that he would sell his catch back to the same merchant at the end of the season. Anything over and above the debts owed was the fisherman's to keep or spend as he pleased (Vickers 1994:103-104, 109).

This system helped with the recruitment and control of labor. Fishermen from Newfoundland and the former proprietary stations in Maine soon heard that easy credit and better wages were to be found in Massachusetts Bay, and the number of immigrant fishermen began to slowly but steadily grow (Vickers 1994:109, 129-131, 144-145). Meanwhile, these fishermen were motivated to be as industrious as possible, to work as efficiently as possible in order to get their fish to market on time, and to maintain a sort of loyalty to their merchant creditor so that they would profit from their labors and be able to balance their accounts (Vickers 1994:104-107, 110-112). Fishermen of demonstrated loyalty would often be allowed to carry debt between seasons; but both the merchant and the fisherman had to be careful when extending and accepting credit, for it could easily lead to one or the other party (or both) being ruined (Vickers 1994:109-115).

As in Newfoundland, clientage created an asymmetrical but interdependent relationship between merchants and their clients. Many fishermen arrived in Massachusetts Bay with little to no capital and were more likely than not to already be carrying some debt (Pope 2004:173-174; Vickers 1994:108). Without the credit offered them by the merchants it would have been almost impossible to enter the fishery. At the same time, however, the merchant needed to use prudence when extending credit. To give it too freely was to invite disaster if multiple accounts defaulted, but to be too quick to demand that accounts be balanced and paid in full would be to drive clients away.

Thus, the merchant needed to strike a balance between the amount and leniency with which he gave credit and how often he would call in those debts. Data from surviving account books show that merchants, at least initially, would allow fishermen to carry debts over from year to year. In the period of 1630 to 1665, for example, mean debts for fishermen ranged from £14.2.0 to £38.2.0, with established fishermen generally carrying greater debt (Vickers 1994:113).

The best-documented cases of debt-clientage in New England is for fishermen based out of Essex County, Massachusetts Bay ports such as Salem, Marblehead, and Gloucester, with the merchants outfitting them based primarily in Salem and Ipswich (Vickers 1994:108). These fishermen were distinctive, in one sense, in that they were generally outsiders in the Puritan society of Massachusetts Bay. Finding a niche as workers in the fishery, they congregated in a few seaside towns and developed a localized sub-culture (Vickers 1994:129-141). Unlike many inhabitants of Massachusetts Bay, they owned little property, often only an acre or two with a house and some outbuildings, and were (by the Puritan ideal at least) a coarse, drunken, and profane lot. Fishing was the only economic activity they had the ability to pursue with any regularity and profitability. Such relationships were not confined to the cod fisheries of Massachusetts Bay; account books also survive that show Indigenous whalers on Nantucket Island engaged in debt-clientage as part of their socio-economic relationships with Massachusetts Bay merchants, a situation much resembling the cod fishermen of Essex County (Chaves 2014).

The axis of the fisheries in Massachusetts Bay, running from Salem to Ipswich, is a small fraction of the New England coastline. Furthermore, a combination of environmental degradation caused by waterfront improvements along the Boston-Salem axis and the specifics of the ecology in that area had caused the local cod stocks to crash by the 1640s, which may have played a role in the failure of the earliest attempts at the development of a domestic fishery (Bolster 2012:67; Leavenworth 1999:150, 153-156). As a result of this environmental degradation, Essex County fishermen were increasingly compelled to fish “to the eastward”, or in Maine, with the former transatlantic stations at Monhegan and Damariscove Islands being popular destinations (De Paoli 2001:80). It is also important to remember, however, that there already existed a small, scattered population of fishermen along the coast of Maine, along with the important fishing station at the Isles of Shoals. With fewer extant documentary resources to draw upon, previous studies of the fisheries along this long stretch of coastline have often drawn upon the biased, and occasionally sensationalist, accounts of visitors to the region. Yet these accounts are usually concerned with the behavior and alleged debauched and debased nature of the inhabitants, and references to the fishery are often couched in complaints about drunken fishermen neglecting their trades or wasting their hard-won earnings in drunken revelry (Churchill 1984:195-197; Josselyn 1675:161).

The political histories of New Hampshire and Maine are convoluted, consisting of a series of takeovers, claims, counter-claims, restorations, and royal decrees. New Hampshire, for example, was left to the grandsons of John Mason following his death. However, both grandsons were minors, and Mason’s widow lacked the political

connections and will to maintain their claim in the absence of her late husband. As a result, Mason's former divided the deceased proprietor's assets amongst themselves and went into business privately (Baker 2007:132-133; Clark 1970:18). When disputes and other legal matters arose they turned to the one stable government in the region; namely Massachusetts Bay. These developing connections would eventually lead to the annexation of New Hampshire into Massachusetts Bay in 1643, largely by popular consensus (Baker 2007:133-134). The Restoration of Charles II gave Robert Tufton Mason, John Mason's surviving heir, the opportunity he needed to assert his claims, beginning in 1662 (Baker 2007:137). A royal commission dispatched in 1664 found numerous allies amongst the Old Planters of New Hampshire and other anti-Puritan elements, but the case would drag out for another decade and would end with New Hampshire being proclaimed a royal colony in 1679, though Mason technically regained ownership of his grandfather's lands to no real effect (Baker 2007:137-142).

Sir Ferdinando Gorges, though distracted from his New England holdings, had never fully lost control of his proprietorship. Sir Ferdinando had, in fact, sent his cousin Thomas to Maine to serve as governor in 1640, though he left after three years in order to serve in the English Civil War (Baker 1994:261, 281). Under Thomas' tenure, the fishing town of Agamenticus became Gorgeana, the formal capital of the feudal society that Sir Ferdinando had hoped to build in Maine (Baker 1994:264).<sup>4</sup> The English Civil War interrupted these plans, and Sir Ferdinando's death in 1647 finished them (Baker

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<sup>4</sup> Gorgeana is described by Charles E. Clark as a "pathetic little fishing village", though this is in keeping with his generally dismissive view of the Gorges proprietorship (Clark 1970:20).

1994:281). In 1652 Maine was formally annexed by Massachusetts Bay as well (Baker 1994:263, 281; Clark 1970:50; Churchill 1995:64). This move was justified by the Massachusetts Bay government by claiming that their patent gave them jurisdiction to three miles above the source (as opposed to the mouth, which is at modern Newburyport, Massachusetts) of the Merrimack River, which they fixed at 43° 43' 12" North (Clark 1970:50; Churchill 1995:64). When a line is drawn directly east from this location it comes out into the middle of Casco Bay, thus providing the support Massachusetts needed for their takeover. A 1660 attempt by Sir Ferdinando's nephew, also named Ferdinando, to reclaim the province was even less successful than the Mason family's, and Maine would continue as part of Massachusetts even after the Dominion of New England period (1686-1689) until it was granted statehood as part of the 1820 Missouri Compromise (Churchill 1995:64-65; 190-191).

The political takeovers of Maine and New Hampshire by Massachusetts Bay were in part motivated by economic concerns as Massachusetts Bay sought control of the fish, timber, and fur resources in the region to supplement and replace the dwindling local supplies (Leavenworth 1999:180-207). However, none of these political maneuvers likely had a major impact on the organization and conduct of the fishery between the Isles of Shoals and Pemaquid, Maine, which was the northern-most point of English control along the coast. The socio-economic organization of the fishermen themselves, however, is not well understood. The fishermen at Pemaquid, for example, started out as employees of a proprietary station, but by the 1640s the original proprietors had died, and their heirs had none of the capital, connections, or skills to manage the station, leading them to sell

it to Massachusetts Bay interests (De Paoli 2001:92-94, 106). In contrast, fishermen on the Isles of Shoals have traditionally been portrayed as a group of financially, politically, and economically independent men who controlled the market in their own little niche of the transatlantic world and thus operated outside of the traditional English trade networks (Jenness 1873; Rutledge 1965; Victor 2012). What of the settlements in between these two extremes?

William Leavenworth states that fishermen in Maine were able to combine fishing, agriculture, and lumbering to a degree that their land-poor counterparts in Massachusetts Bay were unable to, and thus “remained nearly autonomous and self-capitalized” (Leavenworth 2008:50). While it is undoubtedly true that fishermen in Maine were more successful at combining fishing and farming, Leavenworth is simultaneously overstating and oversimplifying matters. At the core of this oversimplification is the fact that he seems to have failed to take into account both the labor demands and seasonality of the fishing and lumber industries. In New England, both logging and fishing were largely winter activities, while agriculture was faced with its own set of problems. The growing season in Maine is no longer than the one in Newfoundland and is short compared to England or the Chesapeake colonies. Additionally, New England soil (particularly in coastal Maine) is notoriously thin and rocky. This meant that both the type and quantity of crops that could be grown was restricted to a subsistence level of production.

Demographics also do not support Leavenworth’s assertion. Fishing, lumbering, and agriculture all require significant amounts of labor, which was a commodity scarce

on the colonial frontier (Gordon 1996:5; Vickers 1994:6). While servants could be hired on a seasonal basis for the fishery and probably for logging, success in agriculture was more often depended on the marital and familial status of a planter. In Newfoundland, married planters generally had more economic success in livestock and agriculture, and the farming economy that developed in the interior towns of Essex County were largely family-based (Pope 2004:217, 300; Vickers 1994:35). In Pemaquid, Maine, however, only 26 of the 66 heads of households were listed as married, and only 17 had children in the period from 1650 to 1676, while the same figure for the period of 1677-1689 is 26 and 16 of 66, respectively (De Paoli 2001:438-443).<sup>5</sup> Falmouth, Maine, was by contrast more demographically stable but is distinct from Pemaquid in that it was largely founded as a farming community instead of a fishing community (Churchill 1979:1, 341, 345-346).

Leavenworth also overlooks one of the most important aspects of the 17th-century Maine economy. Maine, much like Newfoundland, was almost entirely dependent on non-local shipping both to send its goods to market and to acquire non-domestically produced items. As Edwin Churchill notes in his study of Falmouth, inhabitants of the Maine frontier were overwhelmingly dependent on merchants from Massachusetts Bay and New Hampshire for essential commodities (Churchill 1979:342-343). Although describing it as a parasitic relationship is inflammatory, it is true that these commercial relationships were asymmetrical as the merchants would often have the better bargaining

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<sup>5</sup> The figure for 1677 to 1689 does not include officers, soldiers, or inhabitants with occupations other than planter or fisherman.

position (Churchill 1979:343; 1994:253). This asymmetrical relationship extended even into infrastructure improvements. While residents of Maine towns and plantations could harvest timber easily enough, processing it into marketable goods required sawmills. Sawmills were capital-intensive to startup and operate, and with a few exceptions, such as the Chadbournes of Berwick, few Maine residents possessed the capital needed (Baker 2012). This meant that most sawmills were controlled by merchants from outside of Maine, and any profits from such were also redirected away from the local area (Churchill 1994:253).

On the 17th-century Maine frontier, therefore, there existed scattered plantations and communities over a long stretch of coastline. In most of these communities, different economic pursuits such as agriculture, fishing, and lumbering were pursued. The extent to which these pursuits were integrated into a single family unit is unknown, however. It is likely that most households combined subsistence agriculture with either lumbering or fishing, but the combination of the latter two activities would have been restricted due to similar seasonality and competing demands for labor. For example, when Christopher Collins' estate was probated in 1666 the inventory listed a variety of furs, cloth and/or clothing, provisions, and tools as well as £40 "in debts" (Watts and Browne 1666). Noticeably absent are supplies and equipment for the fisheries. Yet the year before Collins had engaged himself to deliver £10.19.9 in "good Merchantable fish or provision" to Captain John Davis (*PCRM*(1):234). Leavenworth took this contract, and the presence of eight oxen in Collins's probate, as evidence that Collins was a fisherman as well as being engaged in farming, trading, and lumbering (Leavenworth 2008:50). It



seems more likely, considering the lack of fishery-related goods in his probate, that Collins was a local merchant-planter who would have acquired the fish from his fishing neighbors in exchange for goods or services.

Overall, the socio-economic development of 17th-century Maine greatly resembles that of Newfoundland. Staples production dominated the planter's economic lives, with fishing, lumbering, and fur trading being the predominant pursuits. Many combined these pursuits with agriculture, mostly at the subsistence level due to the environmental constraints of the Maine climate, but a few, including the afore-mentioned Christopher Collins, may have been able to practice agriculture on a larger scale. These planters, in turn, were dependent on outside merchants to ship (and in the case of lumber, process) their products and to provide the commodities that they were unable to produce for themselves. During the 1640s these outside merchants would have originated primarily from the West Country, but with the disruptions of the English Civil War and the growing economic strength of Massachusetts Bay merchants, the carrying trade slowly shifted into the control of their neighbors from the south (Churchill 1995:67; De Paoli 2001:94, 108). Maine did differ from Newfoundland, however, in that in Maine, a number of demographically stable and agriculturally-based communities were able to take hold, even if they cannot be said to have particularly prospered. Studies of Falmouth and Pemaquid suggest that Maine's economy largely remained in this state throughout the remainder of the 17th century (Churchill 1979; De Paoli 2001).

The Massachusetts Bay economy, including the fisheries sector, proved to be more dynamic. While the fisheries of Maine and Newfoundland remained an inshore

industry prosecuted by small boats, the Massachusetts Bay fisheries would begin its evolution into a larger-scale banks fishery during the final quarter of the 17th century, motivated by a crisis in the fisheries and enabled by changes in technology, including the now-iconic schooner (Vickers 1994:145-147). Before that can be discussed, however, it is necessary to examine the development of the larger Massachusetts Bay economy and the fishery's role in it.

By and large, the keystone of the Massachusetts Bay economy in the 17th century was its shipbuilding industry (Bailyn 1955:86; Leavenworth 1999:65). This industry did not itself produce significant profits for the colony, but rather enabled the expansion of a Massachusetts Bay-centered trade network. This in turn allowed for the development of an independent, though interconnected, economy within the larger English colonial economic system (Bailyn 1955:86; McCusker and Menard 1985:92). The shipbuilding industry formed at the intersection of Massachusetts Bay's main staple trades, fishing, and lumbering, and was further enabled by its (relatively) diverse agriculture. Boat- and shipbuilding were part of the fisheries from the beginning, but assigning cause-effect values oversimplifies things; the fisheries provided the first stimulus and impetus for a shipbuilding industry, but shipbuilding required numerous other things to fall into place before the industry could reach the scale it did (Leavenworth 1999:24, 33-34, 111). New England in general, and particularly Massachusetts Bay, happened to be ideally situated for shipbuilding, possessing a large reserve of timber for ship construction. The economic activities of Massachusetts Bay merchants led to the accumulation of necessary skills and labor

in local ports, along with supplies of naval stores that were not, at least in the 17th century, produced locally (Leavenworth 1999:33-34, 65, 69). In turn, the development of native ship designs would assist in the reorganization of the Massachusetts Bay fishery in the last quarter of the 17th and first years of the 18th century (Vickers 1994:145-146).

Shipbuilding, with its roots in the fishing and lumbering trade, provided the means with which to establish a shipping-based economy; economic developments elsewhere in the English colonial world provided the necessary markets. The London merchants who initially provided the transatlantic transport for Massachusetts Bay merchants were predominantly interested only in merchantable cod, which was sent to Bilbao and the Atlantic Islands. Refuse cod could only be sold at the lowest prices in European markets and brought little or no profit if it sold at all (Vickers 1994:99). The expansion of sugar monoculture on English-controlled Caribbean Islands created a market for this product; as John Winthrop learnt from Richard Vines, planters in the Caribbean “were so intent on planting sugar that they rather buy foode at very deare rates than produce it by labour” (Taylor 2001:210; Vines 1647). Shipments of refuse fish were soon heading to the sugar plantations, usually as part of a mixed cargo carrying fish, timber products, agricultural goods, and livestock, all on a locally-built ship. In return, these ships would acquire cargoes of sugar, molasses, tobacco (picked up from the Chesapeake plantations on the return leg), and other goods (Bailyn 1955:100; McCusker and Menard 1985:92). By the second half of the century Massachusetts Bay merchants also made inroads into the Newfoundland trade, again supplying agricultural and timber products not easily produced in Newfoundland. By the 1660s, rum distilled from

Caribbean molasses was also part of these cargoes (Matthews 1968:11, 369; Pope 2004:242). In exchange, they received fish, English manufactured goods, bills of credit, or specie (Pope 2004:155). New England shipping also engrossed part of the transatlantic carrying trade during the 17th century, but when and to what extent is not well known.

That the Massachusetts Bay merchants were successful in the carrying trade is beyond dispute; indeed, complaints against Bay merchants were included in the reasoning of the Western Adventurers in their anti-settlement campaign in Newfoundland during the 1670s (Matthews 1968:4, 196). Also telling is the passage of the Navigations Acts. The first Navigation Act of 1651 actually targeted the Dutch carrying trade in Newfoundland, by banning foreign vessels from the carrying trade (McCusker and Menard 1985:46-47). The Act of 1660 added the caveat that crews also had to be 3/4ths English and that enumerated colonial goods could only be shipped to England or her colonies (McCusker and Menard 1985:47). Neither of these Acts had a great effect on the Massachusetts Bay trade; in fact, the trade likely benefited from it by eliminating competitors. The 1663 Act, however, required that all trade pass through England so that cargoes could be accounted for and taxed. This would increase both the cost and travel time of the Massachusetts Bay-based trade, and opposition to it was immediate and widespread. Further Acts in 1673 served to close loopholes and increase enforcement (McCusker and Menard 1985:47).

Saying that the later Navigation Acts specifically targeted Massachusetts Bay and other New England merchants (such as those based out of Portsmouth, New Hampshire) is an overstatement; the Navigation Acts were in actuality the first formalization of

England's developing mercantile policies (McCusker and Menard 1985:46). In England's view, the colonies existed to support the homeland, and the Navigation Acts reflected this view. Furthermore, the financial effect of the Acts on trade was minimal, with one analysis suggesting a total cost of £4 per £1000 of income per year (Thomas 1965). Still, if the alarmist language in some period accounts is any indication, there was concern over a perceived lack of contribution from New England to the larger British economy, which probably influenced the passing of the Acts.

The organization and conduct of the fisheries were not affected by the Navigation Acts. Rather, the transition seen in the Massachusetts Bay fisheries in the last quarter of the 17th century was the result of three other intersecting developments. First is the continuing development of the shipbuilding industry in Massachusetts Bay. Fishermen in both New England and Newfoundland had long constructed shallops and similar small vessels for their own use, but the greater development in Massachusetts Bay allowed for the construction of larger and more efficient craft such as ketches and schooners (Leavenworth 1999:23, 65-107; Vickers 1994:145). Building from this first development, the second development was the accumulation of capital and labor in the Massachusetts Bay ports. Firstly, this allowed merchants to invest in larger vessels; secondly, it meant that Massachusetts merchants could gradually replace debt-clientage with wages and shares (Vickers 1994:144, 161). This second factor combined with a fishing population in Massachusetts Bay ports which had reached demographic maturity. While immigrant fishermen continued to be a large part of the labor force, a self-reproducing population of fishermen now steadily increased in numbers. Merchants no longer had to use credit to

entice and control labor, and the larger workforce was now able to shop its skills and services around to find the most beneficial arrangement. (Vickers 1994:162-163).

The final development was a combination environmental/economic one. The New England fishery had not been affected as badly as the Newfoundland fisheries had been by the slump of the 1650s and 1660s; indeed, it seems to have been largely unaffected, further supporting the notion that the Newfoundland slump was the result of local environmental factors. The New England fisheries even appear to have weathered the mid-century general depression in the colonial staple trades quite well (Vickers 1994:155). They were not spared, however, by the collapse of the fisheries in the 1680s which had caused the decline and retraction of growth in the Newfoundland planter fishery. A decline in fish stocks, likely due to an environmental shift reducing the number of fish coming inshore, was compounded by an extended period of warfare closing market ports to the trade as well as socio-cultural shifts which reduced the demand for, and by extension the price of, salt cod. In capital-poor regions like Newfoundland and Maine, this created a massive economic hardship, which the colonial conflicts of 1675 to 1696 did nothing to ameliorate. Massachusetts Bay merchants responded by drastically reducing the amount of credit they extended and reinvesting their profits into both larger, more labor-efficient fishing ships, and into shipping in general (Vickers 1994:155, 203).

The industry that developed as a result of this transition was a hybrid of sorts, taking on characteristics of both the inshore and green fisheries. The fish were caught and processed onboard ship and packed in layers of salt (Balcom 1984:37-41; Vickers 1994:150). When the hold was full the ship returned to a shore base where the fish was

rinsed off and dried according to the traditions of the inshore fishery (Balcom 1984:37). The resulting product was not considered to be particularly high in quality, with the best grades roughly equivalent to the middling grades produced by the inshore fisheries. Traditionally-produced dry cod from Newfoundland and specialty products such as dunfish from the Isles of Shoals was preferred by more affluent customers (Balcom 1984:37; Jenness 1873:58-59; Matthews 1968:312). The fish from the banks fishery was, however, cheaper and more efficient to produce, thus substituting quantity for quality to maintain profits. The transition to a banks fishery was not complete by the end of the 17th century. While there are records of fishing expeditions of this offshore type starting as early as 1681, it would not be until the end of Queen Anne's War in 1713 and the general recovery of the salt cod trade that this transition would be completed in Massachusetts ports, and later still for areas such as Maine, Nova Scotia, and Newfoundland.

### Section 3. III. 10. An End and a Renewal: Warfare 1675-1713

Starting in 1675, the English colonies of Maine and Newfoundland were wracked by a series of conflicts between the colonial powers of France and England and their Indigenous allies. Although these conflicts would have lasting political, social, and economic repercussions in Massachusetts towns, the effects on Maine and Newfoundland were nothing short of devastating (Baker 1986; 2015; Pope 2004). As Peter Pope states, at the end of the century "Maine lay bleeding, scarred and desolate, and Newfoundland was not better off" (Pope 2004:409). Unfortunately, fully exploring the socio-political

and economic causes of these conflicts is beyond the scope of this dissertation. Instead, this section will present an overview of the three conflicts and campaigns which had the most effect on each region and the immediate aftermath of each. Two of these conflicts played out largely in Maine; the third had both Newfoundland and Maine theatres but had the greatest consequence for Newfoundland.

The first of these conflicts was the First Abenaki War, the northern theatre of King Phillips' war, which lasted from 1675 to 1678. The result of increasing tensions between English colonists and the Abenaki, the result was the destruction of all but four of English towns in Maine (Saco, Wells, Kittery, and York) by the Abenaki (Baker 1986:179, 205). Not only was this a traumatic event for the survivors, but it was also ruinous financially. Planters in Maine lost everything they had managed to build in the previous five or more decades, with no easy way to recoup their losses. Still, resettlement began within a year of the end of the conflict, with plantations such as the one at Pemaquid once again being occupied. However, they did so under the aegis of the Dominion of New England and the restrictive policies of Edmund Andros, which hindered rebuilding (De Paoli 2001:173, 205-208).

Unresolved tensions, compounded by the ill-considered actions of Andros and other new English participants in the region, led to the breakout of King William's War in 1689, often considered to be a North American theatre of the Nine Years' War. If anything, this war was even more devastating than the previous war to the English society and population in Maine. Everything north of Wells was abandoned and destroyed, including several places spared from the First Abenaki War (Baker 1986:228;



De Paoli 2001:210). The emotional trauma of this second war can be seen in the case of Mercy Short, who was taken captive during the conflict, redeemed, and returned to Massachusetts, where during the Salem Witch Trials of 1692 she described the devil who tempted her as an Abenaki warrior (Baker 2015:104). The financial trauma can be seen through the fate of Humphrey Chadbourne, a sawmill owner and one of the wealthiest planters in Maine, who lost both his home and his mill and died insolvent (Baker 2012:1). King William's War lasted ten years and was the first of six colonial conflicts in the region between 1689 and 1763, each of which hindered resettlement. The case of Pemaquid illustrates this. Destroyed in 1676, it was resettled by 1678 to accompany a small fortification, which was to be the administrative and economic center of the region. Destroyed again in the opening salvoes of King William's War, it was abandoned by civilians, and a second fort built in 1692 was captured and razed by the French in 1696. It would be nearly 30 years before the English returned to the area (Bradley and Camp 1994:12-13; Churchill 1975:xv).

The French forces which destroyed the fort at Pemaquid in 1696 were led by Pierre Le Moyne d'Iberville, who is more infamous in English-Newfoundland historiography. He followed up his victory at Pemaquid with the utter devastation of the settlements of Newfoundland's English Shore. Combining his forces with privateers under the command of Plaisance's governor, led by his nephew Saint-Ovide de Brouillon, d'Iberville captured and burnt almost every settlement from Trepassey to Conception Bay. All of the residents were deported, with the most eminent being held as hostages. As with the wars in Maine, the French raid on Newfoundland was emotionally and

financially traumatic. Most families lost everything of value, and the surviving members of the Sir David Kirke's family (his sons David II, George, and Phillip) died while in French custody during the winter of 1696-1697. The raid also destroyed the burgeoning planter-gentry, undoing 50 years of social and cultural development on the English Shore (Pope 2004:408).

### Section 3. III. 11. Final Thoughts: To 1713 and Beyond

The Newfoundland population proved more resilient than its Maine counterpart, and, by the end of the 17th century, the southern Avalon Peninsula again hosted a population of 370 people. The issue of settlement and local government was again raised, which led to a series of debates and events culminating in the Statute of 1699, which restated the original Western Charter and added new clauses designed to support the migratory fishery and revive the "nursery of seamen", while simultaneously protecting existing planters and their property (Matthews 1968:210-219, 253-254; Rogers 1911:96). A compromise piece of legislation, the Statute of 1699 attempted to establish "settlement without government" and was meant to help resuscitate the dying migratory trade (Matthews 1968:255, 263).

Further French attacks during Queen Anne's War of 1702 to 1713 and another slump in the fisheries meant that a promising recovery was cut short (Matthew 1968: 283; Pope 2004:409). Queen Anne's War, however, also signaled the beginning of the end for the permanent French presence in Newfoundland. As part of the Treaty of Utrecht, which

ended the war in 1713, the French had to surrender their fort and fishing plantation at Placentia (Balcom 1984:3; Matthews 1968:306). English planters proved slow to take advantage of these new fishing grounds on the southern coast, despite the advantages of a winter fishery there and the reputed superiority of the fishing in comparison with the old English Shore (Matthews 1968:305-306; Rose 2007:187). This was in part due to a series of corrupt military governors and reluctance on the part of British merchants to invest in what was to them the relatively unknown fisheries there. Nevertheless, by the 1720s Placentia was finally expanding (Matthews 1968:331-334). The depressed state of cod fishing in Newfoundland ended around 1730 and by the 1740s the population and economy had stabilized (Matthews 1968:336-367). Along with an influx of Irish settlers, this led to a faster expansion of the population in the 1750s, so that by the end of the 18th century Newfoundland finally possessed a self-sustaining population (Matthews 1968:384-385; Pope 2004:77).

The society which developed, however, was very different from what had existed in the 17th century. Gone were the residential merchants, the planter-gentry who formed the upper level of society. Capital was almost entirely in the hands of absentee merchants in England, whose representatives (often family members) operated merchant houses in the widely scattered outport communities. Often one merchant controlled all of the trade for an outport, the residents of whom were then completely dependent on him for provisions and commodities. This system, known locally as the truck system, was an intensified version of the merchant-client model seen in Essex County ports during the 17th century, and it persisted well into the 20th century (Antler 1979; Candow 1997:142;

*ENL*(5):428; Hiller 1990; Pope 2004:282; Rose 2007:271). The migratory fishery also persisted until the middle of 18th century, though it rapidly took on a different form than the fishery of the 16th and 17th centuries (Matthew 1968:265-267, 307-312).

New England was not static during this period either. Maine was resettled over the course of the 18th century, though it remained under Massachusetts jurisdiction until 1820. Its economy would remain focused on agriculture and resource extraction throughout the 18th and 19th centuries (Judd et al 1995:9-10). Meanwhile, Massachusetts ports continued to transition to a banks fishery using schooners, and a continuous demand for cheap protein would lead to the establishment of a fishing station at Canso in Nova Scotia. A combination of economic and political factors, including a destructive French raid in 1744, would see this station abandoned after a couple of decades (Tulloch 1997). The New England banks fishery still thrived, however, and by 1750 was exporting one-third of the English catch (Vickers 1994:152).

The Treaty of Utrecht was a heavy blow to the French residential cod fishery in Newfoundland. Under the terms of the treaty, the French lost Plaisance, though they retained the Cape Breton, Cape Bonavista, and Point Riche fisheries, a concession which was unpopular amongst many English merchants and fishermen (Matthews 1968:305). By this point, many larger French ports had abandoned the Newfoundland cod trade for the West Indies, a potentially more lucrative economic area (Briere 1988:131; Turgeon 2005:13). The ports that remained involved in the trade, such as St. Malo, relied on the cod fishery to help them withstand the effects of changing social, political, and economic environments (Briere 1988:131). In the case of St. Malo, its share of the fishery grew due

to the abandonment of the trade by other ports, and for most of the 18th century, it was outfitting one-third of all ships fishing in North American waters (Briere 1988:132).

The loss of the inshore fisheries around Placentia led the French to establish another colony at Isle Royale in Nova Scotia. Until this point, the residential fishery had never played a large role in the French industry, but Isle Royale was set up specifically to favor residents over migratory interests (Balcom 1983:3, 20). Not well situated for the inshore fishery, Isle Royale was well-suited for the banks schooner fishery that had been pioneered by Massachusetts Bay merchants (Balcom 1984:31). With a steady demand for its product, particularly in the French West Indies, and a high per-capita export trade, Isle Royale would prove more stable than its predecessors (Balcom 1984:5-6; Turgeon 2005:35). Its capture by the British in 1745 ended this stability, and Isle Royale would be permanently handed to the British in 1763 (Balcom 1984:3).

### Section 3. IV. Different Regions, Different Developments

It should be clear that despite the common thread in their founding, Newfoundland, Maine, and Massachusetts are all different places with different local conditions and circumstances. The largest difference is in the New England regions and Newfoundland, but there are notable differences between the two New England regions as well. The following section identifies and examines these differences in three broad categories: environment and ecology; economic development and organization; and socio-political developments.

### Section 3. IV. 1. Environment and Ecology

The environment and ecology of New England and Newfoundland played a significant role in the development of the fisheries, economic strategies, and, in an indirect fashion, society in each region. The following section will explore the differences in New England's and Newfoundland's ecologies, and explore the larger climatic epoch known as the Little Ice Age. The Little Ice Age was a significant part of the ecological background in the 17th century, not only affecting the local climate but playing a role in the development of the long-distance fisheries of the 16th and 17th centuries. As such it is appropriate to start the discussion there.

#### Section 3. IV. 1a. The Little Ice Age

Between approximately 950 and 1300 A.D., the global climate was warm and humid, a climatic epoch now known as the Medieval Warm Period (Fagan 2000:47; 2006:127). During this period global temperatures were similar to what is seen in the modern era. Translated into practical terms, this meant longer growing seasons, which led to an increase in food production and a concurrent increase in population. Beginning around 1300 in Europe, however, temperatures began to cool and the weather became more unpredictable. This resulted in a decrease in food stability, as evidenced by the great famine of 1315 to 1316, as well as greater population pressures on existing resources (Fagan 2000:49). This period of cooler temperatures, which lasted until approximately 1850, is known as the Little Ice Age (Fagan 2000). Unlike the Great Ice

Ages, the Little Ice Age is not characterized by advanced glaciation. It is instead marked (in the Northern Hemisphere, at least) by temperatures which averaged several degrees cooler than those from previous and later periods, as well as an unpredictable and irregular cyclical pattern of shifts in climate and weather patterns, lasting anywhere from several years to several decades (Fagan 2000:xiii, 48). While it is disingenuous to claim that the Little Ice Age was the only cause of the changes in human societies between the 14th and 19th centuries, it was a major background influence (Fagan 2000:xiv, 58-59). The climatic conditions of the Little Ice Age was a factor in determining and constraining human agency while stimulating the development of new crops, technologies, and ways of thinking (Fagan 2000:xiv-xv). The cooling of the planet and, particularly for the purposes of this dissertation, the ocean, had an effect on the ecology of different species and the environments that they inhabited (Rose 2007:38; 284).

### Section 3. IV. 1b. Environment: Newfoundland

Newfoundland's environment is its most notable feature; the stark bedrock, wind-swept barrens, and rugged coastline all speak to the harshness of the climate in Newfoundland and its environment. Newfoundland largely possesses a sub-arctic island ecology; in other words, it possesses long, cold winters and short, mild summers (Pope 2004:45, 205). This came as much of a surprise to the earliest settlers, for Newfoundland sits on the same latitudes as England and France. However, the climate of those countries is moderated by the Gulf Stream, the current of warm water which travels up the eastern seaboard of the United States before branching across the Atlantic (Rose 2007:25-29;

Seager et al 2002). Newfoundland misses out on the warming effects of this current; instead, it is subjected to the cooling effect of the Labrador Current, which brings cold water south around the eastern edge of the island (Pope 2004:45; Rose 2007:25-29). While this creates an almost perfect habitat for cod and related species, it significantly cools the average temperatures of Newfoundland (Rose 2007:26). In the current period, these average temperatures are 16 degrees Celsius (61 degrees Fahrenheit) in the summer and zero degrees Celsius (32 degrees Fahrenheit) in the winter (*GNLC* 2015). As a result of these temperatures the length of the growing season in Newfoundland is relatively short; according to data from Agriculture and Agri-Food Canada, the average growing season for the years 1971 to 2000 was 150 to 160 days for most of the Avalon Peninsula (*AGR* 2015). These figures may have been even lower during the 17th century, as a result of the Little Ice Age. George Calvert's description of his experience in Newfoundland in the abnormally cold winter of 1628 to 1629 is probably the most poignant:

I have found by too dear bought experience, which other men for their private interests always concealed from me, that from the middest of October to the middest of May there is a sad face of winter upon all this land, both sea and land so frozen for the greatest part of the time as they are not penetrable, no plant or vegetable thing appearing out of the earth until it be about the beginning of May, nor fish in the sea, besides the air so intolerable cold as it is hardly to be endured (Calvert 1629).

Compounding the cool temperatures and short growing season in Newfoundland is the condition of its soils. During the retreat of the glaciers in the last Great Ice Age, the island was stripped of soils. Barring the few areas where glacial soils were redeposited,



soil formation has been largely constrained by the climate. This means that the majority of Newfoundland's soils are young and underdeveloped, and are incapable of supporting a complex ecosystem or traditional English-style agriculture (Pope 2004:45). Prior to the arrival of Europeans, Newfoundland hosted only fourteen mammal species, nine of which were predators (Bergerud 1983:130). Furthermore, a century of economic activity by European fishermen had already started to degrade the local environment; clauses against the wasting of timber and spoilage of anchorages along the English Shore were included in the Western Charters, and such wasteful practices were noted by contemporary observers (*CCCL*:71-75; Whitbourne 1620). Seventeenth-century inhabitants of the island often kept vegetable gardens, but grains were imported from England where they could be acquired readily and cheaply (Pope 2004:344). This being said, most traditional English crops and livestock could be raised on Newfoundland's shores with some effort; most of the time it simply was not worth the time and energy (Pope 2004:343).

The reason for this is evident throughout the historical record; namely, the cod fisheries completely dominated the lives of the planters, and few had the resources needed to invest in agriculture or livestock rearing beyond subsistence level. The predominantly summer fishery, a largely migratory servant population, high wages for the same, and the lack of demographic development meant that most planters could not afford to invest time into agriculture (Pope 2004:343). It was far easier to purchase imported food and supplement this with a garden patch or two, a handful of hogs, and fall foraging. Indeed, for a few brief weeks in late summer Newfoundland is a surprisingly bountiful place, and a number of different berry species are available for harvest (Pope

2004:338). Collection and preservation of these fruits provided a necessary antiscorbutic for the winter. Berry collection can be seen as part of a diversification of economic strategies by Newfoundland planters, which will be discussed in more detail in Section 3. IV. 2.

### Section 3. IV. 1c. Environment: New England

As is often the case when discussing New England, it is necessary to remember that within the larger region there are several distinct colonies; largely similar in environment and ecology, there are still significant differences between Maine and Massachusetts, which influenced the development of those colonies. Unlike sub-arctic Newfoundland, the New England colonies possess a humid continental climate, characterized by hot summers and cold winters (Belda et al 2014; Peel et al 2007). This meant that New England supported a more diverse ecosystem than Newfoundland; this, in turn, enabled greater economic diversification amongst the colonists there, particularly in Massachusetts Bay and her spin-off colonies.

Of the two New England colonies of most concern in this dissertation, Maine is by far the more rugged and environmentally disadvantageous. Part of this is due to geography; the coastal plain is narrow, and from the Penobscot region and eastward the plain practically disappears (Clark 1970:8). Temperature also plays a role; the mean high temperature for Newcastle, Maine in the months of December, January, and February is 0 degrees Celsius (32 degrees Fahrenheit). The same measurement for the months of June,

July, and August is 24.6 degrees Celsius (76.2 degrees Fahrenheit) (NOAA 2015). The average length of the growing season in Portland, Maine from 1941 to 2010 was 151 days.<sup>6</sup> The climate of coastal Maine and Newfoundland are not significantly different. Sir Ferdinando Gorges' comments on the weather conditions that contributed to the failure of the Popham Colony are as revealing as George Calvert's comments on conditions in Newfoundland; namely, that the planters found the country "over cold, and in respect of that, not habitable by our nation" (Gorges 1658:17).

Average temperatures in Massachusetts are a few degrees warmer. In Essex County, the center of the fishing industry in the state, the average high temperature for December, January, and February is 3.6 degrees Celsius (38.4 degrees Fahrenheit), while the same measurement for June, July, and August is 26.1 degrees Celsius (79 degrees Fahrenheit) (Homefacts 2015). The growing season, on the other hand, is still only about 150 to 160 days (USDA 1984). Furthermore, the soils in northern New England, while of better quality than those in Newfoundland, were still thin and only barely fertile; additionally, they tended to be acidic and full of rocks. Planting each year required the removal of each winter's crop of rocks, and many English crops preferred a neutral or basic soil PH level (Churchill 1995:61). As a result farming in Maine and Massachusetts never reached beyond a comfortable subsistence level; still, small family farms were a viable economic strategy and what surplus was produced was integrated into the wider economy, particularly in Massachusetts Bay (Vickers 1994:47).

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<sup>6</sup> Data from NOAA, PWM\_Growing\_Season.xls, [http://www.erh.noaa.gov/er/gyx/climate\\_f6.shtml](http://www.erh.noaa.gov/er/gyx/climate_f6.shtml). Accessed 16 November 2015.

In addition to the climatic advantages, however slight, New England as a whole offered another advantage in terms of a far more robust and diversified ecology. In contrast to Newfoundland's 14 mammal species, New England was home to over 60 species, with a much more favorable ratio of carnivores. There was a greater diversity of both landscapes and trees, including many hardwoods, as well as lesser plant species (Clark 1970:4; Cronon 1983:26-30). South of the Saco River, the landscape had been shaped by anthropogenic activity. In this area early settlers found a landscape which resembled parks in England, consisting of large old-growth hardwoods with cleared forest floors, punctuated by clearings devoid of woods, swamps, bogs, and stands of evergreens (Cronon 1983:25). This was a direct result of Indigenous agricultural and game management practices; the cleared fields were former cornfields, abandoned by tribes decimated during the first great epidemic of European diseases, and the lack of undergrowth was the result of frequent burnings designed to increase the habitat preferred by game animals such as white-tailed deer (Cronon 1983:49-50). North of the Saco, however, Indigenous agriculture disappeared along with the forestry management practices of the southern populations (Cronon 1983:26, 50). The result was a landscape which was initially less accommodating, requiring a greater initial expenditure of energy to make habitable. Still, overall New England could support agriculture, timbering, and fur-trapping at a scale not possible in Newfoundland. This led to an increase in economic diversification, particularly notable in Massachusetts Bay but also in Maine.

### Section 3. IV. 1d. Ecology: The Codfish and Maritime Environments

Perhaps the most significant difference between New England and Newfoundland codfish ecology is the seasonality of the codfish. It has already been noted that the fishery was largely a spring-summer economic activity for most of Newfoundland, as the cod moved inshore in pursuit of capelin and other prey species (Rose 2007:68). The best fishing in New England proved to be during the winter and early spring, when cooling ocean temperatures encouraged the cod to come into shallower waters, and fish was readily available year-round (Fagan 2006:260; Vickers 1994:116). This had two immediate effects; first, it encouraged the establishment of a residential fishery from a very early date, assisted by the concurrent development of proprietary fishing plantations in Newfoundland. Second, the winter fishery allowed planters in Maine to combine agriculture with fishing to a degree which could not be achieved in Newfoundland. The combination of Newfoundland's thin and unfertile soils and the coinciding of the peak fishing season with the planting season meant that agriculture beyond a kitchen garden and a handful of swine was beyond the capacity of most planter households (Pope 2004:342-346). In Maine, the slightly warmer temperatures, more demographically stable population, and the winter timing of the peak fishing season meant that planters there were better able to manage a small farm even in the face of Maine's environmental restrictions, and combine it with fishing or other winter activities such as lumbering (Judd et al 1995:10; Leavenworth 2008:27, 43, 48-50).

Fisheries biologist George Rose stated, in his ecological history of cod in Newfoundland, that prior to the 19th century there was in effect "fish for all" (Rose

2007:250). Yet the historical record suggests that there were at least three periods of general scarcity during the 1600-1713 period, not counting localized scarcities that were occasionally reported. The largest slump by far was during the last decades of the 17th century, beginning in the 1660s in Newfoundland and, after a brief respite in the 1670s, spreading to New England in the 1680s. This slump persisted through to the end of Queen Anne's War and into the 1720s (Matthews 1968:307). The Western Adventurers blamed this slump first on the bye-boat men and then later expanded their ire to include planters. Newfoundland would see a contraction of the fishing trade as a result of this slump; Massachusetts Bay merchants began the process of reorganizing of their fishery, which would eventually lead to the offshore schooner fishery. There is less data available for the Maine planters, but with a more diversified economic base, they may have been better able to weather the fisheries slump had not the outbreak of warfare destroyed most settlements in Maine during the 1670s and 1680s (Clark 1970:65).

Many modern scholars believe that this slump was caused by a climatic shift affecting the cod's environment; indeed, it is likely that the sudden scarcity of cod was caused by one of the Little Ice Age's irregular climatic changes. The duration of the slump suggests that it was a particularly prolonged and severe shift; evidence from the wine industry records suggests that the 1690s, in particular, were one of the coldest decades of the Little Ice Age (Fagan 2000:52; Kupperman 1984:33). Codfish are known to be sensitive to changes in water temperature; temperatures which are too cold or too warm result in the cod remaining offshore or moving to deeper waters (Bolster 2012:47; Fagan 2000:70; Rose 2007:68). With the irregular oscillation of climate and temperature

during the Little Ice Age, codfish habitat would become irregular as well. The general cooling of the period resulted in water temperatures which brought the cod closer to the surface, therefore making them easier to capture; at the same time, a shift towards the warmer or colder caused the cod to retreat to more comfortable waters, making them less accessible to fishermen working inshore in small boats.

It is also important to take into account the fact that cod were part of a larger, intertwined ecosystem and did not exist independently, even if that was the common perception of nature at the time; nor was the sea immortal, impervious to the passage of time and the impact of human economic activity (Bolster 2012:x, 16, 265-267; Cronon 1983:21). The arrival of Europeans in North America, particularly their economic activities, had far-reaching effects on the local ecosystem. Cod had, ironically, disappeared from Cape Cod and the surrounding environs as early as the 1640s (Bolster 2012:68; Leavenworth 1999:127-130). While localized overfishing undoubtedly played a role, other economic activities were just as, if not more so, significant. Settlers along the Boston-Salem axis dammed rivers, constructed fish weirs, dug out and filled in salt marshes, and otherwise altered the coastal landscape (Bolster 2012:67-68; Leavenworth 1999:128). This had a pronounced effect on the availability of prey species, for as early as 1660 fishermen and other locals were noting declining catches of species such as shad and alewives (Bolster 2012:59-62). The combination of a real decline in the availability of prey and localized depletion of the cod stocks often led to a collapse in the local fisheries. At the Trelawny fishing station on Richmond Island, for example, such localized depletions meant that John Winter had to send men to the Isles of Shoals and

Cape Anne to procure baitfish such as mackerel and herring (Winter 1638; 1639a; 1640). The cod disappeared along with the bait species, as Winter was forced to intensify his efforts in order to sustain catches (Churchill 1984:50; Winter 1639b). These factors contributed to the failure of the Richmond Island station by 1642, as it had simply become unsustainable by that time.

Cod is an r-selected species; in other words, they tend to reproduce in large numbers and are capable of rebuilding populations in relatively short periods of time (Brooke 2003:52). Given favorable climatic conditions, an availability of prey species, and a drop in population pressures, cod stocks were able to rebound relatively quickly until industrialized fishing in the 19th century inflicted severe and possibly permanent, demographic damage by removing large numbers of older, and more reproductively successful, specimens from the ecosystem (Brooke 2003:52; Hutchings and Myers 1995, Rose 2007:67-68). Thus, the localized slumps in the fisheries experienced by many 17th-century participants were only temporary, and the outbreaks of colonial warfare between 1675 and 1713, while disastrous to the participants and their developing societies, assisted in the rebound of the cod populations. This in turn aided in the resettlement and economic recovery in both Newfoundland and Maine, although environmental constraints and political, social, and economic factors combined to define the form of this recovery and the development of society in each region.



### Section 3. IV. 2. Economic Strategies and Development

The previous historical discussions focused on the development of social and economic structures designed to generate control over and profit from the fisheries, as well as highlighting the commonalities and differences between Newfoundland, Maine, and Massachusetts Bay. To briefly summarize, following initial periods of an exclusively migratory, and later mixed proprietary plantation and migratory economic models, both Maine and Newfoundland developed a planter fishery. Residents, known as planters, kept waterfront premises, boats and other fisheries infrastructure, and hired servants to work with them in the fisheries. Massachusetts Bay, on the other hand, developed a local fishery based on the outfitting of individual fishermen and crews for short-duration fishing expeditions to the Gulf of Maine. This was done by local merchants, usually on credit, and with the understanding that all fish and oil made was to be turned over to the merchant at the end of the voyage. The 1660s saw the rise of another mode of production in Newfoundland, the bye-boat keeper. Bye-boat keepers were migratory fishing masters who worked independently of the larger fishing ships, usually operating only one or two boats. An adaptation to the fisheries slump of the 1660s, bye-boat keeping was a cheaper mode of production when compared to outfitting a fishing ship; considerable capital was needed for a ship, shallops, crew, and other equipment. A bye-boat keeper, on the other hand, needed only enough capital for a shallop, two to four additional crew, supplies for a season, and passage to Newfoundland. Bye-boat keeping, in turn, suffered lower profit margins than either the planter fishery or the migratory fishing ships. However, it also functioned as a form of insurance against bad catches; a fishing captain freighting bye-

boatmen could balance losses caused by low catches or bad prices with the passage fees paid by the bye-boat men. Regardless of region or production unit, economic relationships were built on credit. Fishing servants drew supplies from their masters on credit, who in turn engaged in debt-clientage with another partner. This could be a wealthier planter, such as the merchant-gentry in Newfoundland, or with merchants from abroad, such as England or Massachusetts Bay. Merchant-client fishermen in Massachusetts Bay were often economically limited to the fisheries, but planters in both Maine and Newfoundland were able to diversify.

Much has been said about the ability of Maine planters to combine different economic strategies, such as subsistence agriculture and fishing or lumbering, to a scale not available in Newfoundland (Clark 1970:9-10; Leavenworth 1999). Such a claim may, however, obscure the ways in which Newfoundland planters were able to diversify their economic activities. The informal hospitality industry has already been discussed, and most planters kept at least a couple of swine and a vegetable garden or two (Pope 2004:344-345). Newfoundland planters also engaged in winter activities such as lumbering, fur-trapping, and boatbuilding, as well as hunting and foraging what could be found in Newfoundland's austere environment. In fact, Newfoundlanders would, by the 19th century, develop a surprisingly sophisticated cycle of seasonal employment; activities included not only the cod fisheries and timber industries, but also fur-trapping, the salmon fishery, seal hunt, potato farming, and the use of winter transhumance in order to maximize their economic success (Pope 2004:340-342, 427-428; P. Smith 1987a; 1987b).

The ability of the inhabitants of the different regions to adjust to the 1680s fisheries slump, caused not only by local environmental factors but also by economic and political factors abroad, illustrate the constraints of each region's economic structures. Newfoundland's planters found themselves suffering from a credit crunch, and the merchant-gentry declined in both wealth and numbers, and most of the smaller planters became further indebted to English merchants (Pope 2004:423). With local cod stocks depleted, Massachusetts Bay merchants had long turned to outfitting long-distance fishing voyages; also hit with a credit crisis, these same merchants began collecting on and closing down their credit accounts and reinvesting their capital into larger production units, culminating in the schooner fishery by the second decade of the 18th century (Bolster 2012:67; Vickers 1994:148-152). Merchant-clients became potential employees who hired on to these larger vessels for trips to the Grand Banks (Vickers 1994:153-163). Many of Maine's planters were displaced by warfare before they could be affected by the fisheries slump, so we cannot say how they would have been able to handle it. If the Newfoundland case is any indication, there would have been an intensification of other economic activities; whether Maine's environment would have permitted intensification is open to debate.

Another significant factor in the history of the fisheries in Newfoundland and Maine is the influence of outside agents in internal development. Throughout the 17th century, and extending to the second quarter of the 19th century, Newfoundland and Maine were largely controlled, economically and politically, by outside agents; directly from English in the case of Newfoundland, and Massachusetts Bay/Massachusetts in the

case of Maine. The economic repercussions of this control have already been discussed, but to summarize briefly: both Maine and Newfoundland were heavily reliant on capital from outside sources, which resulted in a high level of chronic debt amongst residents and prevented the accumulation of capital in local hands. Even so, both regions developed a provincial merchant-gentry who, through social, political, or familial ties, had access to the level of capital necessary to invest in economic infrastructure. The Kirke family in Newfoundland is one of the best-documented examples; the Chadbourne family of Berwick, Maine, who by the 1680s was one of the wealthiest families on the Maine frontier and who had familial ties to leading merchants in Devon, England, is one of the more prominent examples from 17th-century Maine (Baker 2012:3; Gaulton 2006; Pope 2004).

This provincial merchant-gentry, however, was more vulnerable to economic disruptions than merchants from England or the more stable colony of Massachusetts Bay. The Kirkes were affected by the 1680s slump in the fishery, and then lost everything, including the lives of the remaining male family members, in the aftermath of the 1696 raid. The Chadbourne's house, farm, goods, and sawmill were burnt during the opening salvos of King William's War in the spring of 1690, and Humphrey Chadbourne would die insolvent a few years later (Baker 2012:1). In contrast, while they often, and loudly, cried foul, many West Country merchants survived the slump reasonably well-off, lost little in terms of investments in Newfoundland, and once they adjusted to changing modes of production and economic relationships continued to prosper from the Newfoundland fishery (Matthews 1968:311). Massachusetts Bay

merchants, on the other hand, did take losses in the conflicts of the late 17th century in Maine; Boston merchant Thomas Lake, for example, was killed during the destruction of his trading post at Arrowsic, while his partner Thomas Clarke suffered significant financial losses as a result of the post's destruction. Yet three years later he was still able to bequeath more than £2,500 of lands, possessions, and specie to various parties. Even Lake's heirs were not hurt in the long-term; his son Thomas returned to England where he continued to build his fortune, while his daughter Ann married consecutively into the prominent Cotton and Mather families (Baker 1985:14-16).

The survival of the Boston merchants' fortunes even after the disastrous outcome of the First Abenaki and King William's Wars speaks to the resilience granted to them by their diversified, trade-based business interests. Clarke and Lake lost a primary source of fish and timber products as well as income from an asymmetrical trade with the Abenaki, but both retained wealth from other economic activities, including the shipping trade. Thomas Lake's estate included shares in several merchant vessels, the investments valued at £600 alone. At a time when £500 was considered a moderate estate, this was a significant capital investment (Baker 1985:16). This speaks to the ability of Massachusetts Bay merchants to concentrate capital in local ports and cities, which is what allowed them to survive the 1680s slump in the fishery and later to reorganize their fishery around larger, and more efficient, production units.

For the majority of planters in late 17th-century Maine and Newfoundland, however, the lack of capital and the near-complete destruction of what had been built in the previous decades meant that the planters were, in effect, starting from scratch. As a

result planters in both Newfoundland and Maine became even more reliant on outside capital in order to rebuild, putting both regions into a cycle of chronic debt. This cycle persisted into the 20th century in Newfoundland, as exemplified by the truck system. Maine remained a part of Massachusetts until granted statehood in 1820, yet despite an increasingly diverse economy, it remained reliant both on labor-intensive extraction industries and capital from the Boston metropolis. As a result, both regions were left vulnerable to the rapid economic changes which characterized the late 19th and early 20th centuries, as mechanization and industrial efficiency replaced traditional methods of fishing and other resource extraction industries.

### Section 3. IV. 3. Political Factors

Larger political events, such as the Indigenous conflicts in Maine and the larger European wars, have already been seen to have had tremendous, and often deleterious, effects on the colonial fishery and its participants. Even internal political struggles, such as the English Civil War, had significant effects. Yet this is really only the tip of the iceberg, as it were, of political influences not merely on the cod fisheries, but on resource-extraction industries. Some of these have been briefly addressed in Chapter 3. What political factors were at play during the development of the 17th-century fisheries?

It is perhaps appropriate to start at the international scale, as the cod fishery is an international industry. At various times Spain, Portugal, France, and England were engaged in direct competition over the fisheries, and the Dutch also participated through

the carrying trade. With the codfish seen as both an economic and strategic resource such widespread participation is not surprising. When international rivalries heated up in the last quarter of the 16th century the Spanish and Portuguese were largely removed from direct participation in the fisheries; the Dutch were eventually forced from the carrying trade by the middle of the 17th century, and the French were relegated to a migratory-only presence in Newfoundland in 1713.

Colonization is inherently as much a political activity as it is an economic one; territorial expansion not only served to gain access to new resources but also to deny the same to opponents, thereby changing the relative balance of power (Brisbane 2013:16). Underlying much of the conflict over the fisheries is sea tenure, which Faith Harrington defines as “the diverse ways in which maritime people perceive, use, partition, own, occupy, and defend their fishing waters” (Harrington 1985:1). In the 17th century both the English and French had considerable interest in the fishing grounds of North America and, despite economic objections by the West Country Adventurers, the settlement was the means by which permanent control over these resources could be enacted. This is because of the impracticality of enclosing the actual resource, being spread over several thousand square miles of open water, and the need for shore space on which to manufacture the final product (Cell 1982:17; Pope 2004:71). The sequence of European settlement in Newfoundland serves to highlight this. The first settlement at Cupids and its successor colonies, including Ferryland, were founded in part to generate profits from the fisheries for their proprietors; the growing size and strength of these settlements spurred the French to establish their settlements at Placentia and in St. Mary’s Bay; this, in turn,

was offered as a reason for the continued existence of the English plantations in Newfoundland.

So long as the European powers maintained the peace and European-Indigenous relationships remained relatively calm, the fisheries, in particular, the triangular trade of fish for wine and other continental goods, remained in good health. The second half of the 17th century, however, was marked by a series of conflicts, beginning with the Anglo-Dutch Wars of 1652 to 1674. In 1665, Dutch admiral Michiel De Ruyter became the first commander to capture St. John's from the English, and in September of 1673 the Dutch sacked Ferryland, destroying much of what was there, including Calvert's original warehouse (Candow 2011:15; Gaulton and Tuck 2003:209-210). More devastating was the series of Anglo-French wars which began in 1666 and would only end in 1763. In particular, the Nine Years War of 1688 to 1697 resulted in the devastation of Maine during King William's War and the destruction of the English Shore by the 1696 French campaign. The economic downturn in the early 1680s had done considerable damage to the Newfoundland plantations; the war prevented recovery by closing European ports, thereby reducing the demand for, and price of, salt cod. The raid set back colonial development by several decades, and despite early promises during the 1697 to 1701 period the outbreak of Queen Anne's War in 1702 again prevented recovery (Matthews 1968:283, 307). That same war, however, finally ended France's permanent presence in Newfoundland. St. John's, Newfoundland, was the setting for one of the final battles of the Seven Year's War in 1762, which permanently ended the French sphere of control in



North America, but this is beyond the temporal parameters of this dissertation (Candow 2011:42-56).

Not only were settlements destroyed and markets closed, but fishing and sack ships became targets for privateers and other naval forces of the belligerents. Bernard Drake's capture of Spanish/Portuguese fishing ships in the 1580s is often cited as a reason for those nations' exit from the Newfoundland fishery. On the other side of the coin, John Smith's second attempt at a fishing voyage to New England was disrupted when he was captured along with his ship by a French privateer (J. Smith 1620). The threat of privateers and pirates would lead the English to establish a convoy system to protect the fishing fleet on its trips to and from Newfoundland, eventually leading to the "Rule of the Admirals", wherein the convoy commander acted as the *de facto* governor of Newfoundland while in Newfoundland waters (Bannister 2003).

While international politics had the largest effects on the development of the fisheries and related colonial ventures, politics at the national and local scales also played a role. The settlement clauses in the Grant of Newfoundland and the assorted Western Charters were political attempts by the West Country to protect their trade; the Council for New England was a political body intended to ensure control by and enrich its patentees. Both Elizabeth I and the Stuart monarchs issued charters as political favors and rewards, with the latter monarchs particularly prone to issuing overlapping grants as political allies came into and went out of favor. As previously mentioned, the development of the Massachusetts Bay-based fishery and carrying trade was as much political as it was economic; the senior church members who formed the presiding

theocracy in that colony sought economic independence as a means to ensure political independence for their envisioned utopia. The English Civil War, fought between the generally Anglican Royalists and the largely Puritan Parliamentarians, damaged English trade enough to allow Massachusetts Bay to establish itself in both the fisheries and carrying trades; at the same time, it proved fatal to the plans, finances, and occasionally lives of many of the competing claimants for New England, notably Sir Ferdinando Gorges.

Political conflict can also be seen at the local scales, in particular in the codification of the admiral system and the regulations concerning access to fishing rooms. This links back to the problem previously noted; that is, controlling access to the codfish was impossible in the 17th century, so the only way to control the fishing industry was to control the shore space required to make the final product. Under the admiral system the fishing admiral could lay claim to the best rooms; although this power appears to have been rarely abused, the fishing admiral could easily claim more than he could use, thereby forcing competitors to either fish from less-strategically located rooms or forcing them to seek another harbor, particularly if he also had a relatively large, well-armed ship such as the one encountered by Christopher Levett in 1622. At the same time, however, the admiral system was an internationally-recognized practice; in the 16th and early 17th centuries, the admiral system helped avoid political conflicts by giving each participating nation an equal opportunity at access to the cod fishery.

Local politics affected the development of the fisheries of Massachusetts Bay as well. In brief, the Massachusetts Bay theocrats needed a local fishery as part of their

economic development; however, the nature of the people most attracted to the fishery was not especially welcomed by the theocracy. After attempts to recruit the right sort of people failed the Puritan leadership enacted a series of legislation designed to limit the potential of the coarser sort of person to gain the property and church membership needed to have an influence in local politics. For the most part these were successful; in the long run, however, this legislation and the already-restrictive nature of church membership meant the Puritan church would undergo a series of internal crises and conflicts by the end of the 17th century, one effect of which would be the waning of the old theocracy and the rise to prominence of a class of merchant elite who came to dominate local politics.

Thus, it can be seen how politics at international, national/regional, and local scales affected the development of the fisheries. International tensions, expressed in the outbreak of warfare, were the most visible as they disrupted the trade as a whole as market ports were closed, resulting in poor profits, and fishing and sack ships became targets for naval captains and privateers. Regional politics influenced developments as different power blocs, interest groups, and other parties sought to gain dominance over a trade or, in the case of the English Civil War, the government. Local politics, as expressed through vernacular and formal channels, never affected the industry as a whole, but did exert influence in individual harbors and towns as individual groups again sought an advantage over each other. Together with environmental and economic factors, these political factors led to the diversification of the development of the fisheries in

North America and ultimately the differential development seen in each fishing region's socio-economic structure.

### Section 3. V. Conclusion

Some broad trends emerged throughout the course of this chapter, which necessarily leaves many aspects of the French fishery and Dutch shipping unexplored. First, there was the long-standing dependence on debt-clientage in the fisheries. Almost every group involved in the industry, from migratory outfitters to the lowliest servants on New World fishing plantations, was engaged in a debt-clientage relationship at some point in the evolution of the industry. What makes the Massachusetts Bay fishery unique is the degree to which it was able to escape from this cycle. Individual fishermen were often still in debt to merchants, but they were far more likely to be able to balance their accounts than their fellows in Maine and Newfoundland. The primary reason for this disparity is that unlike those regions, Massachusetts Bay ports were able to accumulate both capital and a skilled residential labor force, and they also had the benefit of a diversified local economy to supply the needs of the fishery and/or provide a means to acquire what could not be manufactured locally. In contrast, in both Newfoundland and Maine the capital accumulated by the fisheries tended to end up in distant hands; namely Massachusetts Bay for Maine and England for Newfoundland. This made it difficult for residents in those regions to truly balance their accounts.

Newfoundland and, to a lesser extent, Maine also had environmental disadvantages. Agriculture in both regions rarely reached more than subsistence levels, particularly in Newfoundland, when the fishing season coincided with the growing season; the largely male demographic meant that many planters lacked the type of family labor that could be called upon in the New England plantations. Newfoundland planters, therefore, were dependent on provisions from abroad, and while Maine planters probably produced enough agricultural products to support themselves they were, like the Newfoundland planters, almost entirely dependent on non-local merchants for commodities which could not be produced locally. Both groups were also dependent on these same merchants to bring their products to market, resulting in an asymmetrical economic relationship.

Still, both regions had a developing colonial gentry, such as the Kirkes at Ferryland, Newfoundland and the Chadbournes in Berwick, Maine. Both were still developing by the end of the century, but given enough time they may have been able to accumulate enough capital to create some form of independence for their respective regions. Environmental, economic, and political factors conspired to ensure this did not happen. The depression/recession of the 1680s, caused by local environmental and foreign economic and political factors, damaged the Newfoundland planter economy greatly as the merchant-gentry were not in a position to adapt to the new conditions, unlike the Massachusetts Bay merchants. Thus, while the Massachusetts Bay fishery was able to switch to a more efficient mode of production and open new markets, the Newfoundland fishery suffered. Still, it did not kill the Newfoundland planter fishery,

and recovery was possible- until the French raid in 1696 destroyed everything that had been built, in many ways setting Newfoundland's societal development back 50-plus years. The same period of warfare also shattered the developing society in Maine, literally burning Maine's society to the foundations. Continuing warfare made recovery in both regions difficult so that it was not until the end of the 18th century that Maine and Newfoundland began to catch up to the rest of European North America.

The preceding historical discussion was structured to address the broader questions posed by the first two research objects; namely the international and regional development of the English North Atlantic fisheries and its role in developing colonial societies. The discussion did not, nor could it have hoped to, address questions about identity and agency without additional information. Historical documents such as probates and wills can provide information on the net worth of people in the past and what they own at the time of death; they cannot, however, fully inform the modern researcher as to what the people of the past consumed while living. Chapter 5 will analyse, and interpret the archaeological evidence from six study sites in an attempt to answer these questions, as well as to see what, if any, differences exist between sites in Newfoundland and New England and how those reflect the differences in each region. Before that can happen, however, it is necessary to examine the individual histories of each site so that a meaningful, historically-rooted interpretation of the archaeology can be undertaken.

## Chapter 4: Research Site Background

### Section 4. I. Introduction

This chapter is intended to provide historical and archaeological background for each of the six sites being studied for this dissertation. These summaries will discuss the history of occupation for each site during the study period (approximately 1600-1713), briefly discuss the social and economic structures at work within the site, and critically examine the archaeological and research background to identify possible. It is necessary to note that the existing historiographies varying greatly between the six sites. For example, there are significant primary and secondary historiographies for the Isles of Shoals, Pemaquid, and Ferryland. At the same time, the historiographies for the Goodridge Site and Clear's Cove are slim, and the one for Sagadahoc Island falls on the thinner side of the scale. There are also areas where local folklore has entered the accepted historiography as fact and has been repeated as such even in scholarly works, an issue particularly notable with the Isles of Shoals, in which case a summary required careful and critical examination.

### Section 4. II. Smuttynose Island, Isles of Shoals, Maine (1620 to 1700)

One of the most cited works in the historiography of the Isles of Shoals is Lyman B. Rutledge's *The Isles of Shoals in Lore and Legend* (1965). This title is appropriate, as the book itself seems to have been the codifier for several persistent folkloric elements of the history of the Isles of Shoals. These pieces of folklore include stories of dunfish and

the superiority, and therefore higher value, of cod from the Isles of Shoals. Stories such as these permeate the historiography of the Shoals. As a result, the Isles are often presented as an independent center of economic activity where apostates gathered to make a fortune. As with many myths, there is a kernel of truth embedded at the core of this folklore.

Of the earliest recorded sightings of the Isles was by Samuel de Champlain during his 1605-1606 voyage up the New England coastline. On July 15, 1605, he reported that “We saw a cape, bearing south, a quarter east from us, distant some eighteen miles; on the east two leagues distant we saw three or four prominent islands, and on the west a large bay” (Champlain 1878:69). Lyman Rutledge identifies the cape as Cape Anne and the large bay as Ipswich Bay, an identification which Faith Harrington corroborates (Harrington 1985:126; Rutledge 1965:4). The first European to name the islands was Captain John Smith (of Virginia fame), who named them Smith’s Isles in his 1616 “A Description of New England”, and he later provided a brief description of the islands in “Advertisements for the Unexperienced Planters of New England”, published the same year as his death in 1631 (J. Smith 1616; 1631). Rutledge, whether accidentally or intentionally, conflates the two sources. Along with a good deal of quote mining, Rutledge suggests that Captain Smith was enamored of the Isles of Shoals, and intended to set a colony there (Rutledge 1965:7). Placing Smith’s description of the Isles of Shoals back into its original context, it reads more as a bitter statement of things denied to him rather than a fond description of the islands (J. Smith 1631:39).



Phineas Pratt, a survivor of the ill-fated Wessagusset colony, used the Isles as a waypoint when travelling from Damariscove Island to the Plymouth colony in 1622, and later observed that ships arrived there to fish about March (Pratt 1662). The next published description of the Isles of Shoals is Captain Christopher Levett's visit to the island in 1623. By this time, based on Levett's casual familiarity with the name "Isles of Shoals", the Isles must have been a known destination for migratory fishermen. Levett reported that "the place is found to be a good fishing place for six ships, but more cannot well be there, for want of convenient stage room, as this year's experience hath proved" (Levett 1628:79). This rather straightforward comment, however, has also led to another persistent myth about the Isles of Shoals; namely that they must have been the most important fishing station in New England waters because they hosted 300 fishermen (Rutledge 1965:9).

The actual source of this particular bit of island lore appears to be John Schribner Jenness, whose 1873 book *The Isles of Shoals: A Historical Sketch* is one of the earliest attempts at a comprehensive history of the Isles. Jenness writes that the six ships fishing at the Isles of Shoals "carried at least fifty men, as he [Levett] informs us was the custom..." (Jenness 1873:55). However, what Levett actually stated was that "a ship of two hundred ton doth carry in those voyages fifty men" (Levett 1628:105-106). Research on the Newfoundland fisheries by Peter Pope found that merchant shipping in the 1620s displaced an average of 55 tons (Pope 2004:106). John Smith's accounting of fishing voyages for the years 1614 to 1620 lists 25 or 26 ships making fishing voyages to New England waters, of which one is of 50 tons, another is of 80 tons, five are of 200 tons or

more, and the remaining 19 have no tonnages listed (J. Smith 1620). Historical data on the fishing fleet in Newfoundland gives an average of 4.56 crewmen per ten tons burden, suggesting that a more accurate figure for the seasonal population in 1623 is closer to 150.<sup>1</sup>

All that can be said with certainty of the Isles of Shoals in the first decades of the 17th century, therefore, is that by 1623 they were a known destination for migratory fishermen, joining Monhegan Island, Damariscove Island, and others in the Gulf of Maine (Faulkner 1985:70-71; Harrington 1985:119-123; Levett 1628; J. Smith 1616). Based on Levett's accounting of fishing ships along the coast, it does appear to have been a relatively large station, for its six ships (regardless of crew size) compared favorably with the other locations noted. Of the other fishing harbors Levett describes, only Capemanwagen is specifically noted as having more ships fishing there (Levett 1628:86). The origins of permanent settlement on the islands are unclear, unfortunately. Unlike its near-sister stations on Monhegan and Damariscove Islands, there is no documentary evidence for a proprietary station being established on the Shoals. This is despite an assertion by Jenness that the Shoals had been conferred to the Laconia Company in 1633,

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<sup>1</sup> This is based on data from Berry, "A list of ships making fishing voyages" (1675; CO 1/35 Nos 17 17 I-III); Poole, "Account of Fishing and Sack Ships from Trepassey to Cape Broyle" and "Account of Fishing and Sack Ships from St. John's to Bonavista in Newfoundland" (1677; CO 1/41 Nos 61, 61 I); and Wheler, "An account of the fishing shippes" (1684; CO 1/55 Nos 56. 56 I-VII). From each data set ships which were marked as "sack" or "freight", or fit the criteria established by Peter Pope for a sack-like voyage (Pope 2004:111, Table 7) were excluded, as well as ships with unlisted burden or crew. Average crew per ten tons was derived by dividing the total crew by the total tonnage, multiplying the result by ten and rounded normally to two decimal places. The figure given is based on the average of 55 tons burden for a fishing ship.

an assertion not supported by the cited document (Jenness 1873:61).<sup>2</sup> However, when Sir Ferdinando Gorges and John Mason split their holdings into the former's Maine and the latter's New Hampshire the islands were specifically mentioned and split between the two provinces (a situation which persists today), suggesting that their commercial importance was well-recognized and that neither party was willing to completely give them up (*PCRM*(1):2-29; *PNH*(29):62-64).

Some hint of the origins of the 17th-century permanent occupation on the Isles of Shoals may lie in a legal statute forbidding women from living on the island. Passed sometimes prior to 1650, the origin of this statute is unknown (Cutt and Culling 1647; Jenness 1873:131-132; *PCRM*(1):146; Rutledge 1965:15). It is possible that it was passed by Sir Ferdinando Gorges' Province of Maine, which is supported by the fact that it was repealed by a ruling of the court of Gorgeana, Gorges' erstwhile capital, modern-day York, Maine (Baker 1994:281; *PCRM*(1):144-154). Rutledge concludes that this law was passed as a result of early residential fishermen protesting the arrival of new colonists from England, basing his argument on the supposed superstition that women were bad luck on sailing voyages and as such fishermen did not want women on their fishing stations (Rutledge 1965:14). This does not hold up under critical scrutiny because women were part of other fishing stations from their inception. A local example is the station at Richmond Island, Maine, which hosted John Winter's wife, daughter, and the wife of employee Arthur Gill, and several female servants; in Newfoundland Edward Wynne

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<sup>2</sup> Jenness cites the 3 November 1631 Grant of Pascataway, which is not associated with the Laconia Company. He seems to have assumed that because there were several persons involved in both enterprises they were interchangeable.

specifically requested women for George Calvert's nascent manorial possession at Ferryland (Winter 1637, 1639a, 1639b; Wynne 1622b). Furthermore, this assertion is based on Rutledge's persistent belief that there were fishermen living full-time on the Shoals by Levett's visit in 1623, a claim that is not supported by any other available account or primary document.

Another interpretation of the intent of this law is suggested by Francis Wheler's simple statement of the state of colonization in 1684 Newfoundland: "But soe longe as there comes no women they are not fixed" (Wheler 1684). This statement, made in response to an inquiry about the overwintering of fishing crews in Newfoundland, suggests that in the 17th century women were seen as a requirement for permanent settlement, which is supported by recent research (Pope 2013a). Given the absence of an early proprietorship at the Shoals, it may be that Gorges and Mason were content to leave it as a destination for migratory fishing crews, a seasonal station for independent fishermen from whom they could purchase fish, or most likely a fishing station for their own employees who otherwise lived on the mainland. The statute would have therefore been intended to discourage long-term settlement on the islands. The wording of Richard Cutt's and John Cutting's petition, stating that "John Reynolds has brought his wife hither, with an intention to live here and abide" (Cutt and Cutting 1647).<sup>3</sup>

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<sup>3</sup> Emerson Baker suggests a different, though not inconsistent, interpretation of the statute. He suggests that women were seen as disruptive and counterproductive on a fishing station, resulting in both the statute and with the acquisition of property on the mainland by many Shoals fishermen (Baker 2007:70-72).

This interpretation of the statute's intent still does not provide any more information on the beginnings of permanent settlement on the Isles of Shoals except that it probably did not begin until approximately 1640 (Harrington 1992:263). This date is supported by a presentation to the General Court of the Province of Maine, where William Seavey and Stephen Crafford are indicted for pulling down and otherwise ruining stages, flakes, and other fisheries infrastructure, which mentions "diverse fishermen and others resideing and abideing at the Iles of Shoales and the River of Pascattaway" (Wannerton 1640). Edward Godfrey mentioned in a 1645 letter to John Winthrop that he would "follow your [Winthrop's] directions & aduise, for exercising jurisdiction att the Iles Sholes... for the regulation of disorders there" (Godfrey 1645). The earliest dates for deed transactions on the Isles of Shoals are in 1647. On June 7 of that year John Treworgy mortgaged his property on the Isles to Robert Sedgewick in payment of debts owed, and on October 15 Antipas Maverick sold his property on Hog Island to Henry Sherbourne (Treworgy 1647; Maverick 1647). The inventory of Stephen Crafford's estate, submitted October 18, 1647, lists "his part of howses on the Ile of Sholes", valued at £3.15.0 along with a "howse and ground at Oyster river" valued at £18.0.0 (Seavy 1647).

Regardless of the first date of settlement on the Isles or the reasons for it, there was a large enough population by 1653 that twenty inhabitants of the Isles petitioned the Massachusetts General Court (Maine having been absorbed into Massachusetts Bay the previous year) to be allowed to establish their own township and to select a clerk of the writs to hear cases related to debts amongst the fishermen there (Jenness 1873: 94-96).

The petition also provides some information on the population of the islands, as it requests that the “upwards of a hundred men at this time” living on the islands be allowed to form their own militia company under local commanders (Jenness 1873:95-96). These 100 men likely represent the able-bodied full-time male population on the islands, including both fishing masters and fishing servants. The 1653 petition for township was rejected, though a clerk of the writs was approved. The petition was repeated again in 1659 before being approved in 1661, after which all of the islands were incorporated as the township of Appledore (*RMB*(IV/1):375; *DNH*(1):240). Despite this, they remained divided between the counties of York (in Maine) and Dover (in New Hampshire) until 1672, when the Maine islands were transferred to the control of New Hampshire (*RMB*(IV/2):520). They remained united under New Hampshire’s jurisdiction until 1679, when New Hampshire was formally recreated as a royal colony, and by 1682 the township of Appledore had been dissolved and the Isles were once again split between Maine and New Hampshire (Jenness 1873:99).

Shoals folklore holds that the majority of the inhabitants of the islands, consisting of up to 40 families, lived on Hog Island until 1679 when they migrated *en masse* to Star Island (*MHS* 1801:254-255; Jenness 1873:101; Rutledge 1965:26). Reasons given for this migration range from a fear of Indigenous attack and a belief that Star Island was more secure (due to the presence of a small fort), to a desire to escape Massachusetts Bay control, to economic advantages offered by Star Island, and the recent opening of Star Island to further development (Rutledge 1965:26). It has generally been believed that Star Island, despite the overall lack of proprietary control on the Shoals as a whole, had been

under the sole proprietorship of Richard Cutt, whose brother John Cutt became the first Royal Governor of New Hampshire in 1679. The evidence for this is in Richard's will, in which he leaves his son-in-law William Vaughn "all my houseing at the Isle of Shoals, on Star Island; together with that estate both in stock and debts that is in partnership with him there" (Cutt 1675). This statement, while certainly showing ownership of property on Star Island, does not support sole ownership of the island.

Ownership of multiple houses on the Isles of Shoals was not uncommon. Deed transactions for Antipas Maverick, John Treworgy, Miles Pyles, William Ham, and William Sealy, for example, all either explicitly include or are implied to include multiple dwellings (Ham 1667; Maverick 1647; Pyles 1665; Sealy 1669; Treworgy 1647). Furthermore, there is evidence for other people owning property on Star Island. Richard's brother John mentioned a warehouse on Star in his 1680 will (Cutt 1680). Hercules Hunking's property on Star Island was probated after his death in 1659 and included a house and stage which he had owned for the previous ten years (Hunking 1659). John Moore of Star Island purchased Digory Jeffries' and John Symonds' properties in Kittery in 1669 and sold his own property on Star Island in 1681 (Jefferies 1669; Moore 1681; Symonds 1669). Therefore, it seems unlikely that it was a lack of access which kept people from living on Star Island, and Cutt explicitly leaves what property he does own there to Vaughn. Even if Cutt had been the sole proprietor of the island, that situation would not have changed upon his death except for the person the rent was owed to.

Of the remaining three explanations for the migration from Hog Island to Star Island, none can be said to have primacy over the others. All English settlements in

Maine north of Saco were destroyed during King Philips War (1675-1678), and although the Treaty of Casco Bay ended hostilities there were considerable tensions, and the Isles of Shoals were now much closer to the frontier (Baker 1986:228). A small fort had been constructed on Star Island, perhaps offering at least the illusion of protection (Harrington 1992:258). For the second explanation, there may have already been disagreements with the Massachusetts Bay government over taxation, which supposedly resulted in a minor uprising by the Isles of Shoals fishermen in 1677 (Williams 2006:19).<sup>4</sup> Furthermore, by 1679 the Shoals had been part of Dover County for seven years, and the residents of the islands may have wanted to maintain that connection even if it meant relocating from one island to another. As for the final explanation, it cannot be said that the topography of one or the other of the islands favored the fishing industry; landscaping activities related to the 19th-century hotels has permanently altered the appearance of the three largest islands. The close proximity of the islands to each other also suggests that there would be no real advantage of one island over the other in terms of access to fishing grounds.

More importantly, there is no evidence in the historical record to support this supposed migration; there may have been a decline in population on Appledore Island, and Star Island did become the political center of New Hampshire islands. There were up to twelve families still residing on Smuttynose Island, possibly along with one other on Malaga Island.<sup>5</sup> The inhabitants of Star Island were incorporated into the township of

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<sup>4</sup> This widely-cited tale appears in a number of secondary accounts, but no corroborating primary document has been located.

<sup>5</sup> This number is based on a study of deed records for York County, Maine, which identified up to 13 different properties being traded on Smuttynose Island, of which four can be confirmed as changing hands after 1679. Furthermore, a deed map included with the 1839 sale of the island to the Loughton family shows



Gosport in 1715 (*DNH*(3):620). The Maine islands, on the other hand, were attached to the town of Kittery, though deferring to “a former Costome and privildge at the Isles of shoales, Mr. Roger Kelly and Mr. Andrew Dyamont are hereby Impoured, with any one of the Magestrates of this province, to keepe the Courts at the Ysles of shoales... for Tryall of Actions there as high as tenn pounds” (*PCRM*(3):6). This same order appointed Roger Kelly as magistrate for the islands. It seems, however, that this action did little to resolve disputes between the inhabitants, as there are repeated orders for officers of the court to proceed to Smuttynose Island to settle conflicts and impose some form of government there (*PCRM*(3):25, 46-47, 51, 72).

This brings the history of the Isles of Shoals to approximately 1713, the *terminus ante quem* for this study. What it does not do, however, is address the social and economic relationships that were at work on the Isles of Shoals. Much as with the historical background, there is a considerable amount of folklore and legend mixed in with the historiography. The most persistent, and popular, piece of folklore is that the Isles of Shoals developed a wonder-product in the form of *dunfish*, a slow-cured, slightly fermented dried cod which commanded high prices in domestic and international markets. The tale goes that due to this product the Isles of Shoals had *de facto* control over the fisheries market, and the inhabitants were able to leverage this into great wealth and independence for themselves (Rutledge 1965:9-10; Victor 2012:2, 27-28).

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seven or eight divisions along its western edge. These seem to represent five owners at the time the map was drawn up, based on the numbers assigned to each lot.

That dunfish was an actual product is beyond dispute. It was described in loving detail by the island's resident poet laureate, Celia Thaxter, as "handsome, cut in transparent strips, the color of brown sherry wine" (Thaxter 1873:83). No less a luminary than Thomas Jefferson ordered it for his own table (Jefferson 1825). The crux of the folktale, however, is that it was developed very early in the Shoals history, with Rutledge claiming it was shortly after Europeans had arrived there (Rutledge 1965:9). A closer study of historical and secondary documents places an early date for the development of dunfish to the second quarter of the 18th century, with the earliest specified date being 1745 (Drake 1875:174). Celia Thaxter, writing in 1873, states that dunfish had made the islands famous a century prior (Thaxter 1873:83). There is only one mention of dunfish found in a 17th-century record, but it is in reference to a lower-quality product, not the high-quality one most commonly associated with the term (Wainwright 1667).<sup>6</sup> Nor is there any evidence that codfish from the Isles of Shoals was prized or valued any higher than elsewhere in New England, or that it was of higher value than fish from Newfoundland (Table 4.1.).<sup>7</sup>

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<sup>6</sup> Francis Wainwright received "23 quintals of cod fish at 30 ryals pr. quintal and 5 quintals of "dumbe fish" at 12s. per quintal". At this time a ryal (modern spelling real) was equivalent to six pence, so that the "cod fish" was worth 15 shillings per quintal. This suggests that the referred-to dumbe fish, which is an accepted variation of dunfish, was a lesser-quality product (see Rutledge 1965, pp. 9). This is further supported by linguistic data from Newfoundland, where dunfish/dumbfish is a term used to describe fish that had been left on the flakes or pile for too long and as a result had become discolored/acquired a "dun" color. (Story et al 1990; pp. 159-160). It is also worth noting that the price for the dumbe fish is quoted in shillings, as opposed to reals, suggests that it was intended for a domestic or English market, such as the West Indies.

<sup>7</sup> The traditional claim is based on an 1822 price index that valued Labrador cod at \$2.40 a quintal and the finest grade of cod from the Isles of Shoals at \$8.00 per quintal (Rutledge 1965:10).

**Table 4.1: Price Comparison of Salt Cod from Newfoundland; Essex County, Massachusetts; and the Isles of Shoals, in Shillings.**

<i>Year</i>	<i>Newfoundland</i>	<i>Essex County</i>	<i>Isles of Shoals</i>
1663	14.0	13.9	-
1666	-	-	10.4
1667	-	-	12.0
1668	-	-	14.4
1669	-	-	13.2
1670	-	-	12.8
1672	12.9	12.4	-
1675	16.3	-	-
1676	13.6	11.6	-
1677	11.8	12.5	-
1679	13.5	11.7	-
1680	11.9	-	-
1681	11.5	11.0	-
1684	10.9	10.4	-
1689	11.1	-	-
1691	12.0	-	-
1693	10.8	9.6	-
1699	13.5	-	-
1701	9.0	-	-
1702	7.8	-	-

Notes: The figures for Newfoundland and Essex County are from Peter E. Pope, *Fish into Wine* (2004), page 38, and Daniel Vickers "'A Knowen and Staple Commodity': Cod Fish Prices in Essex County, Massachusetts, 1640-1775" (1988). The prices for the Isles of Shoals are drawn from legal cases involving Shoals fishermen (Wade 1672; Wainwright 1667). All monetary values have been converted to pounds sterling using the guidelines found in John J. McCusker, *Money and Exchange in Europe and America, 1600-1775* (1978); all values are expressed as shillings and decimal parts of shillings sterling.

The question now becomes who were the fishermen at the Isles of Shoals, and what was their socio-economic relationship with the rest of the colonial economy. Were they independent operators who “leveraged their position at a key node in the international cod-fishing trade for their own political and economic gain” as one researcher has asserted or were they “a most ordinary lot of men”, to borrow the description applied to the fishermen at Richmond Island (Churchill 1984; Victor 2012:2)? In the traditional Shoals historiography, the tendency has been to lean towards the first description, but a critical review of the available historical documents is warranted.

As mentioned previously, despite the lack of historical documentation, the 1635 statute and the appointment of Edward Godfrey as fishing steward by John Mason both suggest that the first resident fishermen on the Isles of Shoals were in fact employees of some combination of Mason and Sir Ferdinando Gorges (Adams 1825:18-19; Banks 1887:10). That Thomas Gorges was involved in the probate of Stephen Crafford’s estate supports this interpretation. If the Crafford probate and the will of Hercules Hunking are any indications, these employees were either granted or purchased property on the mainland with which to support their families, while the Shoals were meant to remain a seasonally-occupied fishing station. This changed with the death of Mason and the dissolution of his proprietorship. While Godfrey’s initial willingness to submit to Massachusetts Bay authority suggests that he initially tried to maintain the previous arrangement at the Shoals, his relocation and change of allegiance to Maine and the Gorges suggests he found the royally-appointed authority there a better option (Banks 1887:11; Godfrey 1645). Afterwards, fishermen began occupying the Shoals full-time,

becoming independent planters and developing debt-clientage relationships with Massachusetts Bay merchants.

This can be seen as early as 1654 when George Corwin, whose record books provide the best example of merchant-client relationships, brought Richard Endell of Smuttynose Island to court for debts owed (*RQC*(1):363). Nearly two decades later Richard Endell is again in court with a merchant, having sued Jonathan Wade “for fish and oil delivered to him” and being counter-sued by Wade, a prominent merchant from Ipswich in Massachusetts Bay, for debts owed, with the court finding in favor of Wade in both cases (*RQC*(5):7-12). The case is notable, as it is one of the few from the Shoals in which both the account of debt and the account of fish and oil are recorded. Furthermore, it is recorded for a period of six years. Over the course of those six years Endell delivered £229.3.3 worth of fish and oil to Wade, and in exchange received £307.8.10 in goods on his account. These items included fishing gear such as two dozen cod hooks for £1.12.0 and three cod lines for £0.12.0, as well as supplies of food, liquor, and other domestic goods (*RQC* (5):7-12).

Another example of a merchant-client relationship on the Isles of Shoals was between Hugh Allard and Francis Wainwright. Allard apparently had a problem staying out of debt, as he twice mortgaged his property on Smuttynose Island to Wainwright (Allard 1671; 1677). A case involving the two was brought before the court in Portsmouth, New Hampshire in 1674. According to the documents, Allard had taken a bond of £200 from Wainwright in exchange for all of the fish and oil he made in the following season. In violation of this bond, however, Allard sold the fish to Nehemiah

Partridge of Portsmouth, leading Wainwright to sue both Allard for violating the bond and Partridge to recover the fish owed to him (Allard 1673; Partridge 1674; Twisden 1674; Wainwright 1674). Allard would also be brought to court for debts owed to the estate of Thomas Bishop in 1673, for which he would be ordered to jail in Ipswich in 1677; he would again be jailed in 1690 (*PCRM*(3):292-293; *RQC* (5):246, 265).

There are other instances of fishermen from the Isles of Shoals being sued for debt by merchants from both Massachusetts Bay and New Hampshire (*RQC* (3):439; (4):283, 284; (5):11; (6):48). Despite this, several of the fishing masters at the Shoals did manage to accumulate fairly significant estates by the time of their deaths (Victor 2012:33). Even Hugh Allard and Richard Endell had decent holdings. The plantation Allard mortgaged twice to Francis Wainwright included a dwelling house and other housing, a stage, a flakeroom with four flakes, and a train vat along with a fully outfitted shallop and mooring places for the same (Allard 1671; 1677). Richard Endell started out owning a stage in common on Smuttynose Island with Stephen Ford by 1660. The next year Endell bought out Ford's share of the stage along with Ford's other property on the island, including a shallop with all of its equipment and mooring place, a dwelling house, flakeroom with six flakes, and a canoe, for the sum of £75 (Ford 1661). Sometime before 1686 he sold his property to Francis Wainwright and moved to Kittery, where he died in 1694 (*PCRM*(3):291; Stackpole 1903:63, 371-372; Wainwright 1686).

The surviving probate records from the Isles of Shoals show that several fishermen there managed to accumulate quite a bit of wealth. Stephen Crafford had probated possessions worth £160.14.3 at the time of his death, although he owed his

partner William Seavy £35.10.0 for use of Seavy's shallop and servant (Seavy 1647). James Weymouth of Star Island and Walter Mathews of Smuttynose Island, both of whom died in 1678, had estates respectively valued at £597.17.6 and £310.18.6 (Belcher and Deamont 1678; Matthews 1678; Twisden and Fabes 1678; Weymouth 1678). In contrast, of the ten fishermen lost in the storm of 30 January 1678 only William Broad and Roger Holland had estates of moderate value (£161.1.0 and £57.9.3 respectively, although Broad also had £39.1.0 in liabilities attached to his estate); the remaining eight victims had estates ranging from £21.13.6 to £2.1.0 (Blagdon et al 1678a; Blagdon et al 1678b; Blagdon et al 1678c; Blagdon and Fabes 1678a; Blagdon and Fabes 1678b; Fabes and Moore 1678; Fabes et al 1678; Hunking and Fabes 1678a; Hunking and Fabes 1678b; Stileman and Elliot 1678).

The victims of the 1678 storm also provide insight into the organization of the fishery at the Isles of Shoals. Accepting that a shallop usually sailed with a crew of three, the ten deceased represent the crews of three to four shallops (Balcom 1984:37; Churchill 1984:186; Mercer 2002:46). It seems likely that William Broad and Roger Holland were sailing in vessels they had at least partial ownership of, while the remaining eight were employed as fishing servants. It is interesting that of the remaining eight estates, administration of three each were granted to Roger Kelly and Richard Wilcomb, while Henry Main was granted two (Blagdon et al 1678a; Blagdon et al 1678b; Blagdon et al 1678c; Blagdon and Fabes 1678a; Fabes and Moore 1678; Fabes et al 1678; Hunking and Fabes 1678a; Hunking and Fabes 1678b). The suggestion is that the estates of the fishing servants were granted to their masters. Such an arrangement would make sense as

servants would have likely drawn supplies and equipment from their masters against their share of the catch; with the majority of the masters themselves engaged in debt-clientage with merchants, claiming the estate of a deceased servant may have been a way in which to recoup losses.

Between Weymouth and Mathews, and the unfortunate fishing servants who drowned in 1678, it is possible to see the probated wealth attached to fishermen at the Isles of Shoals. Yet the question remains: do these represent the extremes, with William Broad and Roger Holland representing the typical fisherman? Or does 'typical' lie closer to one or the other extreme? Of the seven other probates located for residents of the Isles of Shoals which give estate values, to the list of luminaries such as Weymouth and Walter Mathews we must add Thomas Diamond (£1308.17.11), John Frost (£470.4.6), John Lines (£729.13.0), and William Urin (£433.12.8) (Atkinson 1707; Diamond 1707; Fabes and Joce 1675; Frost 1713; Hunking et al 1664; Lines 1674; Lord and Moody 1719). Walter Boaden (£14.1.2) and Godfrey Brooking (whose estate is so small it cannot cover even half his debts) are on the lower end of the scale (Boaden 1676; Follet 1682; Shepard and Alcock 1690). The ten storm victims appear to fall closer to the middle of the range, then.

Full probate inventories in the collections from colonial New England are rare, so it is not possible to compare the contents of each estate. Wills, which are printed in full where they exist, indicate that most of the Shoals inhabitants whose estates were valued at £400 and above owned what were likely fairly significant fishing plantations. In fact, with the exception of William Urin, the more wealthy Star Island residents likely



operated fairly substantial operations.<sup>8</sup> Even Walter Mathews of Smuttynose Island, with his two dwelling houses, two boats, garden and other fishing infrastructure, easily fits the definition of “planter” given by Peter Pope (Pope 2004:1; Matthews 1678). The contemporary observer John Jossylen states that of the residents of the Province of Maine, “some be fishers and planters both, others meer fishers” (Jossylen 1675:158).

From the evidence presented above, it can safely be said that the fishing masters at the Isles of Shoals operated as planters, owning a waterfront property with the necessary infrastructure for the prosecution of the fisheries. While a number of them, perhaps even the majority, engaged in a merchant-client relationship with merchants from Massachusetts Bay and Portsmouth, at least a few were able to establish their properties independently or gain freedom from debt-clientage by the end of the 17th century. There is also evidence for merchants owning property on the Isles, most notably John and Richard Cutt, Nathaniel Fryer, and Francis Wainwright (Cutt 1680; Cutt 1675; Fryer 1683; Wainwright 1686). These merchants most likely either rented out these rooms or hired fishermen to operate from them.

One last component of the socio-economic structures and relationships which needs to be addressed: the position of the Isles of Shoals in the larger trans-Atlantic economy. In her pilot study of the socio-economic relationships of the Shoals, Megan Victor asserts that:

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<sup>8</sup> Court records related to Urin’s estate suggest that at least some of his probated wealth was in cod fish, as the four administrators of his estate, merchants all, were brought to court for illegally taking fish belonging to the estate.

As a collection of independent fishermen, the men on the Isles of Shoals were structurally distanced somewhat from this triangle [*the triangular trade of Newfoundland*] just as they were geographically distanced from the larger fishing plantations of St. John's in Newfoundland or Pemaquid, Maine and from the larger port cities such as Portsmouth, New Hampshire. The Shoalers were not 'planted' colonists funded by a European merchant, but still produced enough fish (and that of a fine enough quality) to be able to compete with the fishing plantations and to export to the Mediterranean (Victor 2012:35).

Unfortunately, Victor's argument appears to be based on a misunderstanding of what Peter Pope means by "planter" and "fishing plantation" and on the folkloric elements persistent in the history of the Shoals. While it is true that the Isles of Shoals were not part of the same multi-lateral trade as the Newfoundland plantations, they were still part of such a trade network established between New England, England, Spain, and the West Indies. Claiming that the ten miles that separate the Isles of Shoals from Portsmouth to be an insurmountable geographic barrier is a gross exaggeration, as the careers of George Walton, John and Richard Cutt, Nathaniel Fryer, Nehemiah Partridge, and others prove. Even larger distances separated the Isles of Shoals from the Ipswich homes of Jonathan Wade, Francis Wainwright, and Thomas Bishop, and further still to the Salem home of George Corwin, yet all of these men had dealings with fishermen on the Shoals.

There are several records which illustrate the integration of the Isles of Shoals into the Massachusetts Bay economy. In 1649 the *Swallow* of London arrived at Cape Anne to acquire 1600 quintals of codfish on the account of William Bartholomew. Unable to make a full load at Cape Anne, the *Swallow* proceeded first to Marblehead and

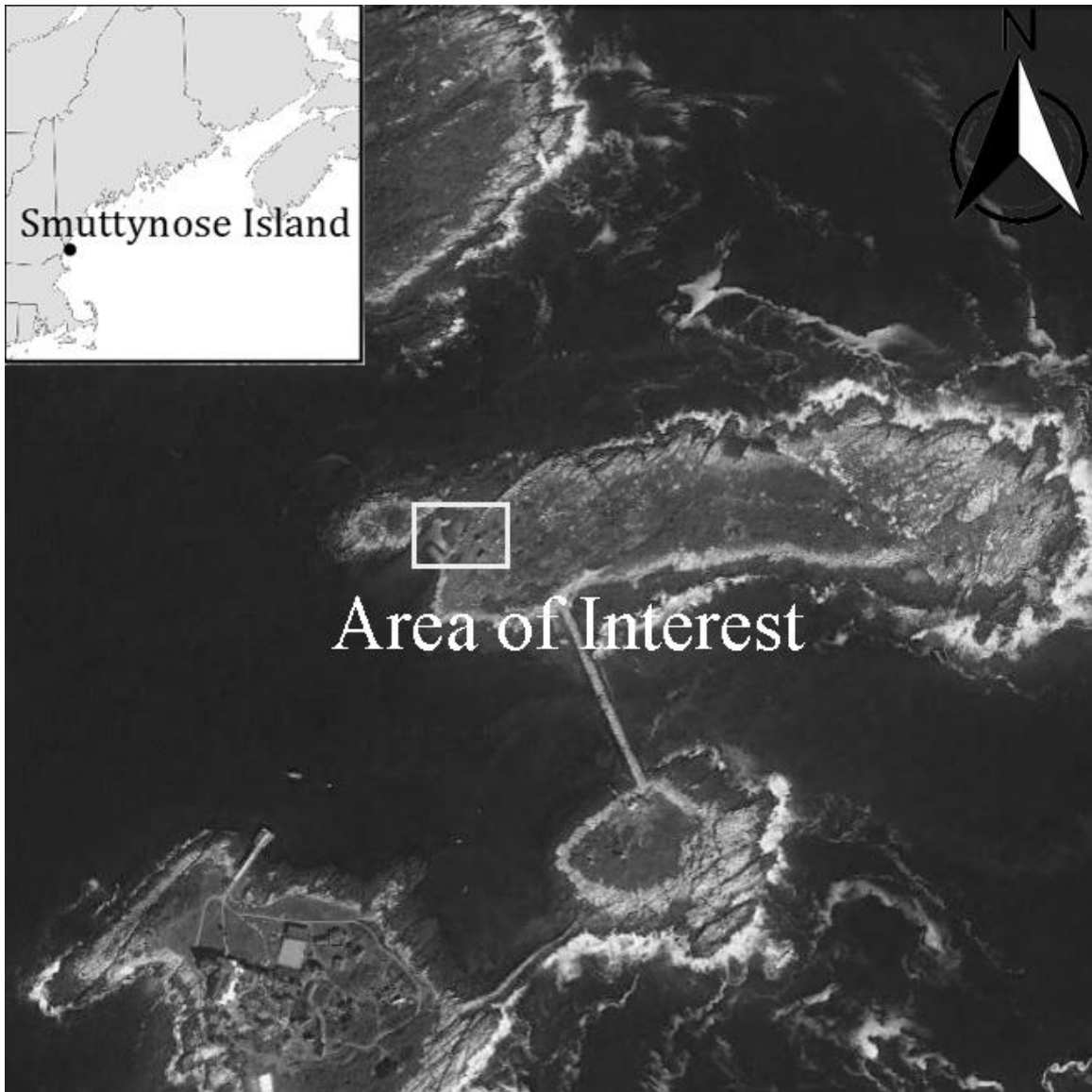
then to the Isles of Shoals to make up the difference (Bartholomew and Eldridge 1649; Vickers 1994:101). What is most significant about the details of this voyage is that William Bartholomew, a merchant out of Ipswich in Massachusetts Bay, was partnered with Nathaniel Eldridge, a London-based merchant, and the *Swallow* belonged to a consortium of other merchants and captained by a man also from London (Bartholomew and Eldridge 1649). In another instance, James Grollier, master of the ship *Mary* of London, signed an agreement with merchants William Paine, William Bartholomew, and James Neale to lade his ship with merchantable cod from Boston and the Isles of Shoals and deliver it to their factor in Lisbon (Grollier 1650). On July 2, 1666, a group of merchants whom “were concerned with receiving merchantable fish at the Isle of Shoules” met with the fishing masters there to discuss the price of fish that season (Lidgett 1667). The fishermen insisted on a price of 32 reals, but the merchants told them that they would pay the price that was quoted at Marblehead and Salem as the “Marblehead Fish is generally accounted the best” (Lidgett 1667). The fishermen responded by offering to lower their demanded price by a small amount, to which the merchants responded that they would not accept the fish for any more than 26 reals, or whatever the price was at Marblehead (Lidgett 1667; Vickers 1994:107). One can only assume that the fishermen, however grudgingly, accepted this price and sold their fish to the Massachusetts Bay merchants (Vickers 1994:107). To not do so risked defaulting on debts and not having supplies for the following season.

Archaeological work on the Isles of Shoals had been limited. There was a small-scale survey of Appledore Island which turned up a fragment of prehistoric pottery in the

summer of 1984, and from 1988 to 1992 Faith Harrington excavated three foundations on Appledore Island, including the presumed home of the Pepperell family from 1676 to circa 1680, and conducted test excavations on Smuttynose and Malaga Islands (Harrington 1985:129-130; 1992:257; 1994:212). Compared to the historiography, the archaeography for the Isles of Shoals is limited. This dissertation represents one of the first major analyses of material recovered from the Isles of Shoals, making use of archaeological material recovered from Smuttynose Island between 2008 and 2012 (Figure 4.1.).<sup>9</sup> These excavations were part of the Island Archaeology Field School through the Shoals Marine Laboratory, a joint Cornell University and University of New Hampshire satellite facility. Specific details of the excavations, including methodology, extent, and artifacts recovered will be discussed in Chapter 5.

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<sup>9</sup> The author had the great pleasure of serving as field supervisor and teaching assistant on this dig from 2008 to 2011.



**Figure 4.1.** Study area on Smuttynose Island, Isles of Shoals, Maine.

From these excavations have come two honors dissertations, a master's thesis, and a small publication and larger report on smoking pipes. Lauren Silverstein produced an honor's dissertation on socio-politics and origins of glass vessels (Silverstein 2012). Megan Victor's honors dissertation looked at the socio-economic structures of Smuttynose Island, which she later expanded into a master's degree which not only looked at the socio-economic structures but also attempted to place Smuttynose Island into the larger English colonial world (Victor 2010; 2012). Arthur R. Clausnitzer Jr. has undertaken and written up a comprehensive analysis and interpretation of the white clay smoking pipes from Smuttynose Island and has published a small article on stem-bore pipe dating based on this data (Clausnitzer 2011; 2014). These researchers and several others have also given many presentations and posters at a number of conferences. Finally, in addition to the academic publications, the archaeology of Smuttynose Island served as the basis for an exhibit hosted by the Discover Portsmouth Center entitled "Underneath the Isles of Shoals" and an accompanying book by the same title (Robinson 2012). Together, these form a substantial body of literature on the archaeology of the Isles of Shoals, but much of it is written within the framework of the old historiographic tradition, and thus many of the conclusions reached must be treated with critical caution. Still, they provide excellent information and a starting point for the analysis of the material culture undertaken in this dissertation.

#### Section 4. III. Sagadahoc Island, Georgetown, Maine (1648 to 1689)

Compared to the Isles of Shoals and Pemaquid, the history of the fishing station on Sagadahoc Island (now called Stage Island) is less well-known. In large part, however, this is a reflection of the relative dearth of surviving historical documents which relate to the island or its inhabitants, as well as a notable lack of an established folklore. What little history is known is available in a report written by Emerson W. Baker and Robert L. Bradley following the initial archaeological survey and testing in 1983 and 1984 (Baker and Bradley 1985). Baker would later follow up this report with additional testing in 1993 and 1995, along with a discussion of the island's 18th- and 19th-century history (Baker 1995). The historical background which follows is a summary of Baker's and Bradley's work.

The first documentary reference to Sagadahoc Island is in 1648 when it was purchased from the local sachem known as Robinhood by a man named John Parker. A fisherman, Parker, and his family used the island as a fishing station for the next few decades until it was abandoned during the period of King Phillip's War. In 1679 a group of 60 refugees from this conflict returned to the island and constructed a small fort, though they quickly moved on to settle a new township nearby at Arrowsic. The island remained in use as a fishing station, however, as John Parker's great-grandson, John Phillips, deposed that in 1686 he visited the island with his father, who kept a warehouse and stage there, and further stated that there was a number of houses and stages on the island as well (Baker and Bradley 1985:1-2). The single most important piece of historical documentation for Sagadahoc Island is a circa 1685 map of the region made by

a French agent, which clearly show Sagadahoc Island, the small fort, and several other features on the island (Baker and Bradley 1985). Its fortuitous discovery just as the 1985 report was being written aided greatly with the interpretation of the island's archaeology, and it helped to guide the 1993 and 1995 field seasons as well.

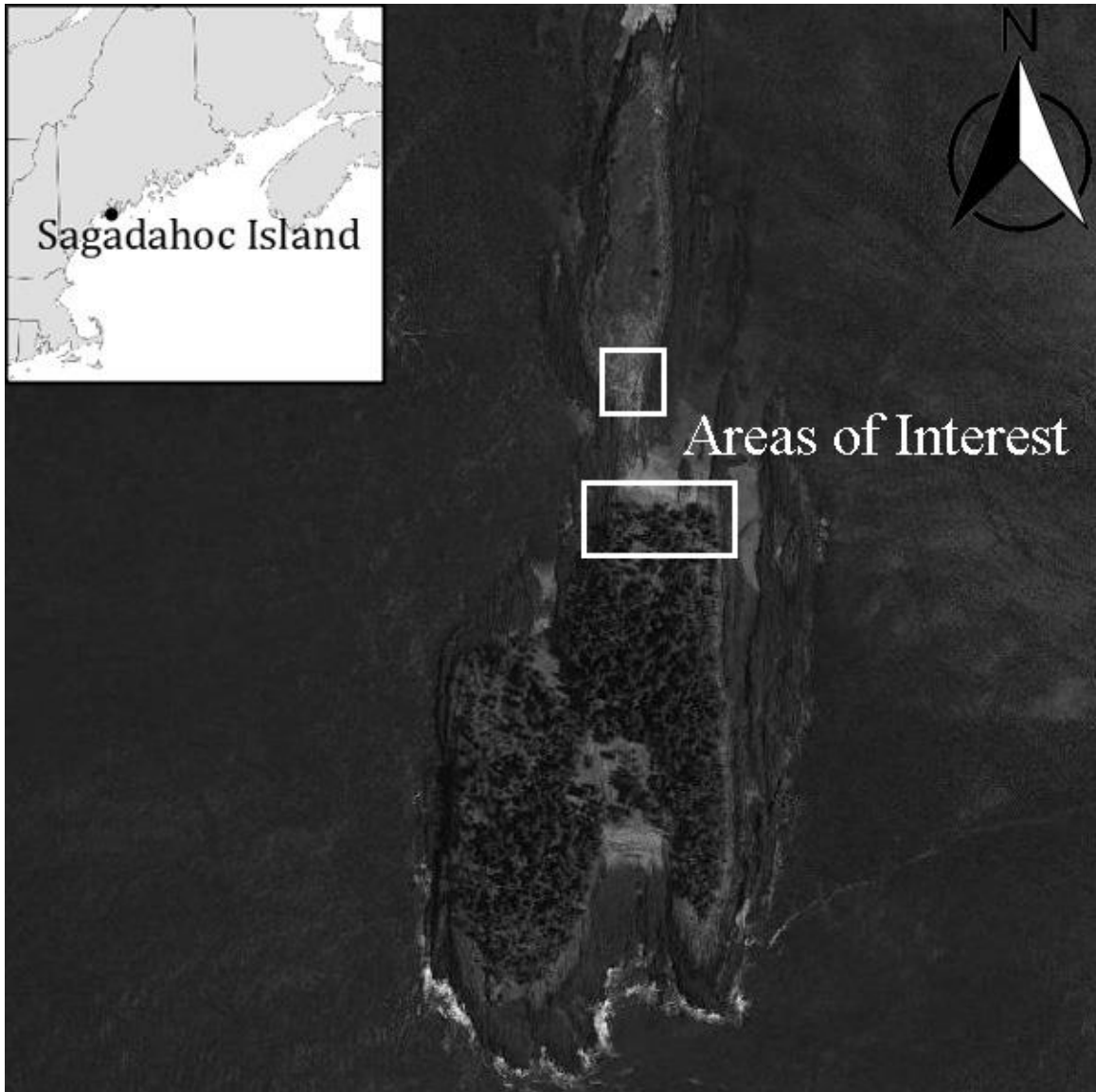
King William's War broke out in 1688, leading the planters at Arrowsic to abandon their homes for the relative safety of Fort Sagadahoc and its nine-man garrison. The soldiers and refugees were hampered by an order from Governor Edmund Andros not to leave the Kennebec region, but faced with shortages of supplies and unable to work for fear of attack, the fort and island were abandoned by August of 1689 (Baker and Bradley 1985:2; Baker 1995:4). It would not be until the Treaty of Utrecht in 1713 that settlers would again venture into the region, placing the next phase of occupation beyond the chronological parameters of this dissertation (Baker 1995:4).

Unfortunately, information is slim for socio-economic relationships at Sagadahoc Island. There is no paper trail that can be followed as at the Isles of Shoals, nor does Sagadahoc Island appear to have ever been a proprietary station like Pemaquid. Based on previous research into this region of Maine, however, some broad statements can be made. It is likely that the Parkers and later residents of the island practiced a mixed fishing and farming economy, granting them a degree of self-sufficiency (Leavenworth 2008:37-39). At the same time, however, they were probably dependent on merchants from elsewhere, with Massachusetts Bay or Portsmouth being the likely candidates, to whom to sell their fish and from whom they acquired goods that they could not produce



themselves. In this way, they would have resembled the planters of Newfoundland who were dependent on sack ships for supplies and to which to sell fish (Pope 2004:378-381).

The same two publications which comprise the historiography for Sagadahoc Island serve also as the archaeography. Excavations on the island have been limited, and largely intended to mitigate the damage done by coastal erosion and winter storms. As a result, most of the work done has focused on the fortified compound, which has proven the most vulnerable area of the island. Work in 1983 was focused entirely on that location, while the 1993 and 1995 season worked both on the fort location and a 17th- and 19th-century dwelling site on the southern half of the island Figure 4.2. The 17th-century component from the southern locus has been tentatively identified as the site of a dwelling house used by John Parker or, more likely, his son Thomas (Baker 1995).



**Figure 4.2.** Study areas on Stage (Sagadahoc) Island, Maine.

#### Section 4. IV. Colonial Pemaquid, Bristol, Maine (1626 to 1676/1689)

As with the historiography of the Isles of Shoals, there is a considerable amount of folklore and legend surrounding the colonial settlement at Pemaquid Point in Bristol, Maine (Churchill 1975:ix). Fortunately, unlike the Isles of Shoals, most of that folklore has not become part of the accepted history of Colonial Pemaquid. Furthermore, the historical research undertaken by Neill De Paoli has provided a detailed account of the Pemaquid settlement from its early days as a migratory destination to its final destruction as a result of King William's War in 1689 (De Paoli 2001). The discussion that follows is essentially a distillation of his work.

While there is limited material evidence to suggest that there was a European presence at Pemaquid as early as 1610, the first recorded English exploitation of the region is in 1617 when Captain John Smith led a successful fishing expedition to Monhegan Island (De Paoli 2001:26-27; J. Smith 1620). Within a decade permanent fishing stations appeared on both Monhegan Island and nearby Damariscove Island, under the auspices of Sir Ferdinando Gorges (De Paoli 2001:35; Faulkner 1985). The history of the Pemaquid Point settlement begins circa 1626, when Abraham Shurt, acting as an agent for Bristol-based merchants Robert Aldworth and Gyles Elbridge, purchased Monhegan Island and a tract on the Pemaquid mainland, where a fishing and trading plantation was soon established (De Paoli 2001:62). This plantation was most likely organized in a very similar manner to the contemporaneous Trelawny station (1632-1647) located on nearby Richmond's Island (Baxter 1884).

The plantation prospered for a little more than a decade, gradually expanding out from the core village up the Pemaquid Peninsula (De Paoli 2001:80). Things began to change starting in the early 1640s with the onset of the English Civil War. First, migratory fishermen returned to Monhegan and Damariscove Islands. However, instead of the West Countrymen of the previous decades, these new arrivals were from Massachusetts Bay (De Paoli 2001:81). Second, the Bristol-based proprietors fell victim to the fratricidal violence of the English Civil War. The Elbridge family lost its patriarch and his two older sons between 1643 and 1646, along with most of their fortune, leaving the inexperienced youngest son Thomas in control of the remaining assets (De Paoli 2001:93). Deeply in debt, Thomas Elbridge emigrated to Pemaquid around 1648, though did not ease his problems as he ended up in a Boston jail for non-payment of debts just a few years later (De Paoli 2001:92-93). As a result, the youngest Elbridge sold his assets in the Pemaquid region to Nicholas Davison, Richard Russell, and Paul White of Massachusetts Bay (De Paoli 2001:113-118, 126-127).

While the Pemaquid plantation continued to expand under the Massachusetts Bay proprietors, external events conspired to cut short its growth. Anglo-Indigenous warfare broke out in 1675, a conflict that is now known as King Philip's War (Baker 1986; De Paoli 2001:150). In August of 1676, the Abenaki launched a series of raids on English settlements in the Sagadahoc region. Warned by a survivor of nearby Sheepscot, the residents of Pemaquid abandoned their homes and most of their goods for the safety of the offshore islands, before moving onward to the Piscataqua and Massachusetts Bay

(Baker 1986:199-200; De Paoli 2001:152-153). The Abenaki put the plantation to the torch, destroying nearly 50 years of development in the area.

The resettlement of Pemaquid Point began less than a year after the Abenaki raid, initially as a military venture, and was under the jurisdiction of New York governor Edmund Andros (De Paoli 2001:154). The rebuilt community, now known as Jamestown after James II, was largely identical in location and organization as the previous settlement, though now it was in the proverbial shadow of Fort Charles, built to both safeguard the frontier and to control trade in the region (De Paoli 2001:163, 176, 186-188). The settlement suffered under this arrangement, due in part to restrictive regulations on trade and in part due to the corrupt and abusive nature of the garrison government (Churchill 1975:xii-xiii; De Paoli 2001:177-180). The rebuilt settlement also met a fiery end at the hands of the Abenaki. On August 2, 1689, following several years of increasing tensions and hostilities, a large war party descended on the settlement (De Paoli 2001:210). The village at Pemaquid Point, Fort Charles, and the smaller settlement at Pemaquid Falls all fell within the next 24 hours, and a number of the inhabitants and military garrison were killed (De Paoli 2001:212). Following this raid, the only attempt to maintain an English presence at Pemaquid in the 17th century was Fort William Henry, built in 1692 and destroyed by a joint French-Indigenous force in 1696 (Churchill 1975:xiv-xv). The next attempt at an English occupation of the region did not occur until the 1720s (Churchill 1975:xv).

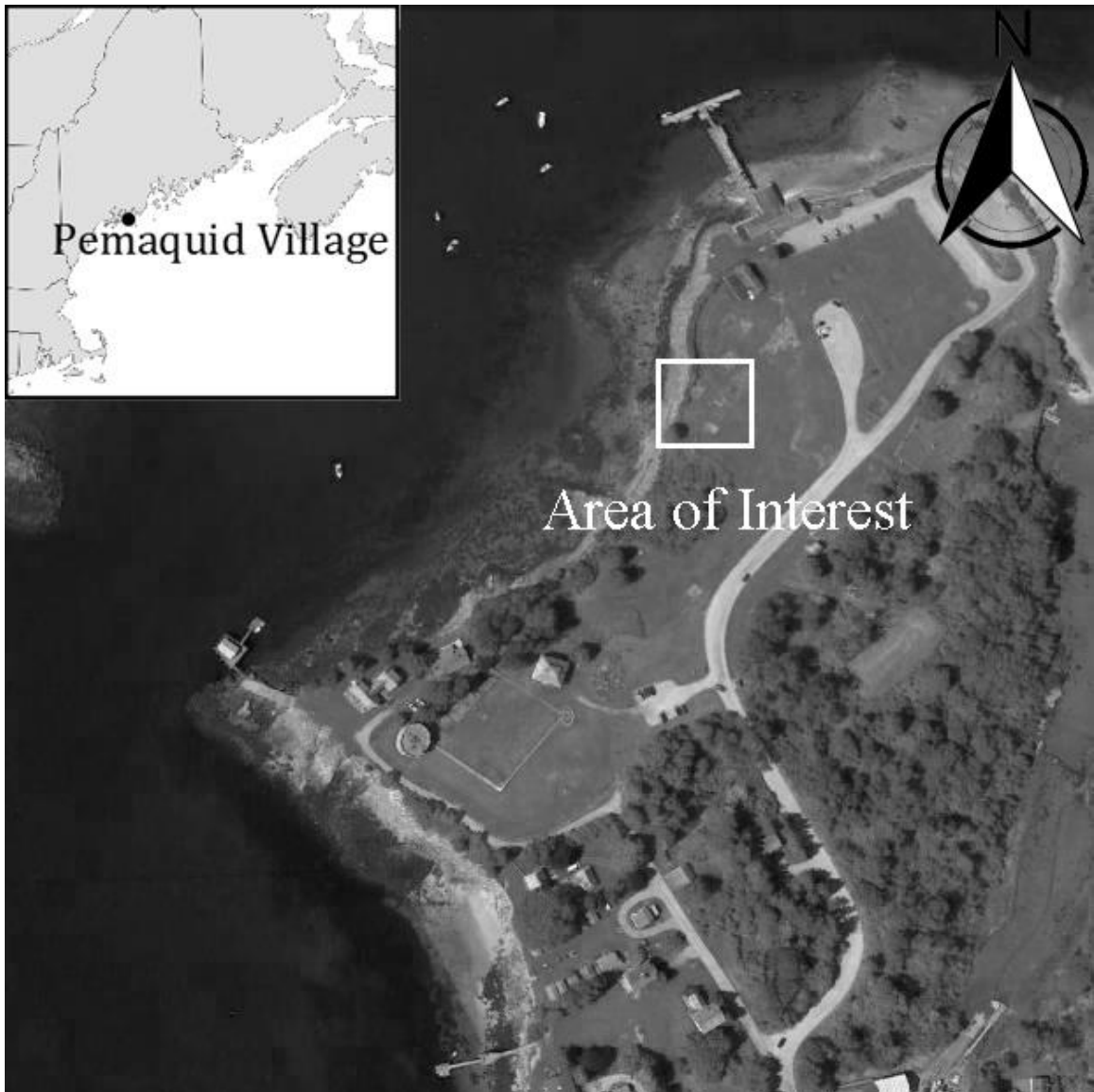
Information on the social and economic organization of the Pemaquid plantation and how it evolved throughout the 17th century is based on proxy data from other sites.

The best source of this type of data is the Trelawny Papers, the most extensive set of primary documents related to the 17th-century fishery in New England known to exist. The parallels between the Trelawny and Aldworth/Elbridge plantations are numerous, which makes the Richmond Station a good proxy for the period of the Bristol proprietorship. On the other hand, the social and economic relationships and organization for the periods of Massachusetts Bay- and New York-based control have to be constructed using a diverse array of sources, ranging from the surviving government documents to personal accounts of the area. Under the Aldworth/Elbridge proprietorship, the inhabitants of the Pemaquid plantation were employees of the proprietors who labored under the supervision of the local manager. For Pemaquid, this was Abraham Shurt, whose counterpart at the Trelawny station was John Winter. Winter's fishermen were initially paid either a flat wage or for some combination of shares and wages, with flat wages becoming more common during the later years of the station (Churchill 1984:185). It is probable that similar arrangements were maintained throughout the Aldworth/Elbridge proprietorship.

Did this form of socio-economic relationship survive the transition from Bristol proprietorship to Massachusetts Bay control? The answer seems to be no. The expansion of settlement out from the original village at Pemaquid Beach and an increasing number of settlers from Massachusetts Bay is indicative of an increased freedom of settlement, even with the three Massachusetts Bay merchants owning large tracts of land in the region. De Paoli's analysis identified 48 fishermen who were active in the Pemaquid region between 1650 and 1676, of which 10 lived at Pemaquid for a decade or more; the

tenancy of most of the short-timers (4 to 6 years average residency) was cut short by King Phillip's War (De Paoli 2001:133). Six of these fishermen also owned considerable property, though the average fishermen probably owned only the house and stage that he worked from, rented from one of the larger landowners and worked independently, or worked directly for one of the Massachusetts merchants (De Paoli 2001:135-137). In this way, Pemaquid strongly resembles Ferryland during the Kirke proprietorship, with one or more prominent merchants exercising control over a mixed collection of independent contractors and employees. The period of New York control would have been similar, though with the added complications of the military garrison at Fort Charles and the restrictive legislation enacted by Governor Edmund Andros (De Paoli 2001:172-173, 176, 186, 203-204).

Unfortunately, compared to the historiography, the archaeography is considerably less-well developed, and the archaeology itself has several disadvantages. The excavations at the village on Pemaquid Point, undertaken between 1965 and 1973, were pioneering in many ways (Figure 4.3.) (Baker pers. com.; De Paoli pers. com.). Historical archaeology was in its infancy, and Helen Camp was not formally trained as an archaeologist. As a result, there was little spatial control over the excavations, with vertical control particularly lacking. In addition, little was known about 17th-century building techniques and, although earthfast construction was being recognized in the Chesapeake, it was considered a regional phenomenon (Baker et al 1992; Carson et al 1981). As a result, Camp's work, while important both for its pioneering nature and the information recovered, requires careful and critical analysis to be useful.



**Figure 4.3.** Study area at Colonial Pemaquid, Maine.



Compounding these problems is the paucity of literature related to the archaeology at the village at Pemaquid. For all practical purposes, the only definitive reference is Camp's 1975 book, which unfortunately reflects the undeveloped state of the field at that time. The only other major publication on the archaeology at Pemaquid is focused on the later forts (William Henry and Frederick) (Bradley and Camp 1994). As a result of this focus and other factors, reevaluation of the archaeology of the village has been limited. These issues will be discussed further in the analyses of the material culture from Pemaquid (see Chapter 5).

#### Section 4. V. The Goodridge Site, Renews, Newfoundland (~1650 to 1696)

Addressing historiography in Newfoundland presents a paradox in that the historiography of 17th-century Newfoundland itself is fairly broad and well-developed, but the historiography of individual places in 17th-century Newfoundland (with the notable exception of Ferryland) is not. There are two primary reasons for this. The first is that history of settlement in Newfoundland occurred in two phases. The first phase was the initial spurt of proprietary settlement which planted colonies such as Cupers Cove in Cupids and the Calvert plantation in Ferryland. This type of colony typically failed to satisfy the proprietors and other investors, who gradually lost interest and moved on to other projects (De Paoli 2001:94). These projects can be presumed to have generated a substantial paper trail, though in most cases only scattered documents survive. The second phase was one of small-scale, steady, but irregular vernacular settlement through a number of avenues. As an informal process, this second phase often left little in the way

of a paper trail, and it was not until settlement in Newfoundland was made an issue in Parliament that formal census reports were taken.

The second reason is largely derived from the first; namely, as a series of informal, vernacular settlements, Newfoundland for the large part lacked a formal local government and all of the appurtenances that accompany it. The admiral system, discussed previously, was a vernacular development amongst the migratory fishermen of the 16th century, and although it was codified by the Western Charters the admiral system retained its vernacular characteristics. Such an institutionalized, but informal, government does not create the type of paper trails that one sees in places like Massachusetts Bay, which possesses both a well-developed system of governance and an impressively litigious society. This is best illustrated by probate documents. While there are hundreds of probate records available for Massachusetts Bay, New Hampshire, and Maine, significantly fewer have survived in Newfoundland (Pope 2004:368). As a result of these limitations, it is often difficult, if not impossible, to write the cohesive, single-site histories such as De Paoli's work on Pemaquid. At the same time, there exists a large body of works which address the history of Newfoundland at larger scales, of which Peter Pope's *Fish into Wine* (2004) and Jerry Bannister's *Rule of the Admirals* (2003) are the most comprehensive. The historiography for the Goodridge site itself is essentially non-existent, but there are some good references for the broader history of Renewes. In a reflection of the issues discussed in the preceding paragraphs, however, these references provide snapshots, rather than a narrative, of Renewes in the 17th century. As this is adequate for the purposes of this dissertation, the following history largely follows the

brief accounts presented in Stephen Mills' 2000 master's thesis and 2008 report on the archaeological investigations he conducted in the harbor.

A known destination for migratory fishermen in the 16th century, the first venture to plant permanent inhabitants in Renew's Harbour was in the summer of 1612 when a group of colonists from Cupids under Henry Crout arrived to establish a companion colony. Their timing was exceedingly poor, for the pirate Peter Easton was ranging the coast at the time and the colonists soon returned to the relative safety of Cupids (Cell 1982:8, 81). The second attempt at colonization took place in 1618 when Sir William Vaughan planted a colony there, but this venture also failed due to organizational problems and other issues (Cell 1969:84; 1982:13, 23-25). A final attempt at proprietary colonization may have occurred in 1623 when Sir Henry Cary's colony was established. It too failed, though this failure took three years and likely left the first permanent English planters in the harbor.

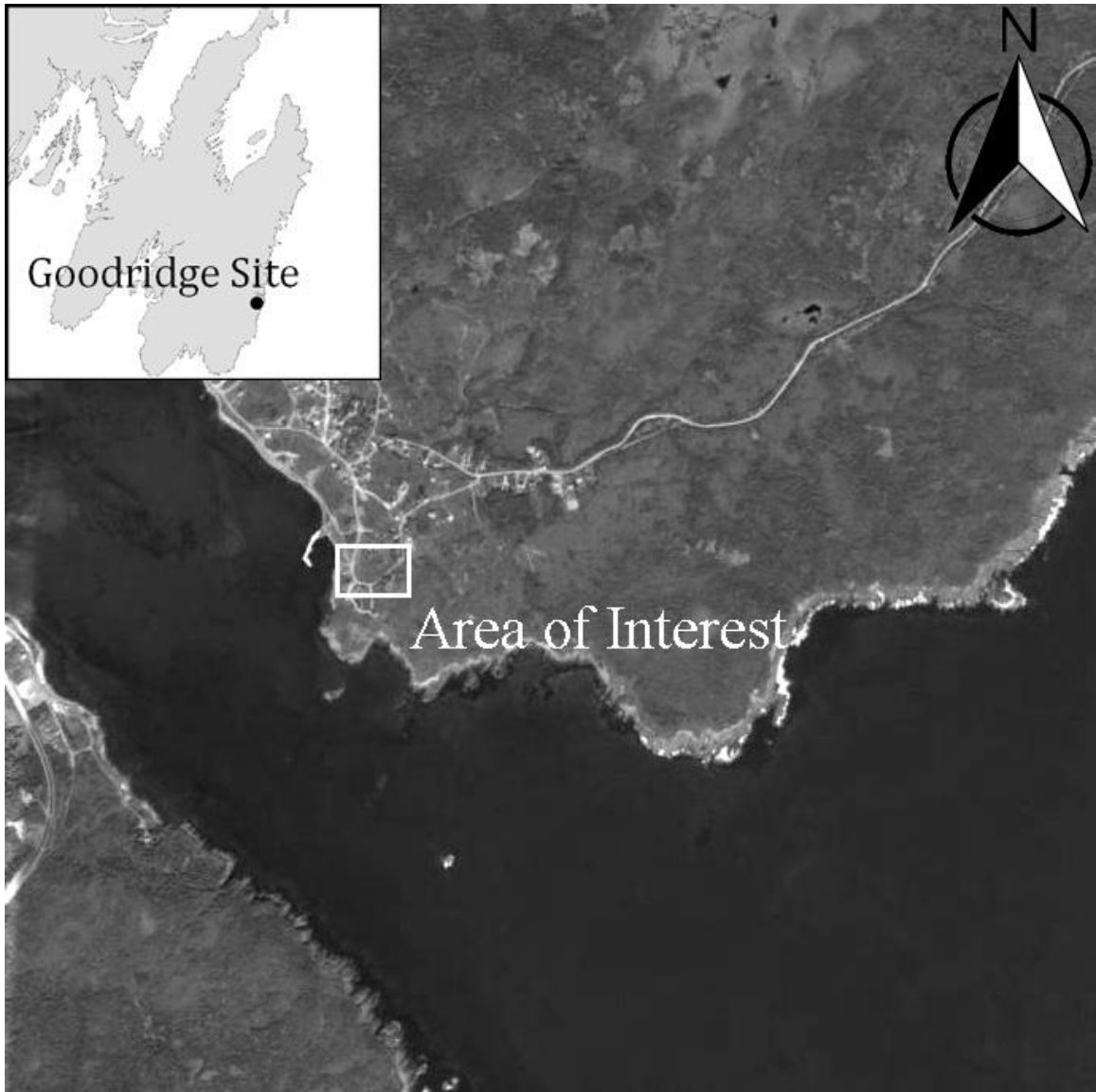
The rest of Renew's 17th-century history is seen primarily in snapshots provided by James Yonge's 1663 journal and the Newfoundland censuses taken in 1675, 1677, 1681, and 1684 (Yonge 1963; Berry 1675; Poole 1677; Story 1681; Wheler 1684). These sources show a bustling harbor that, while not a political or economic center such as Ferryland or St. John's, had an average population for English Shore outposts and a fair amount of economic activity by resident and transient fishermen. In 1677, for example, Renew was the home of six planters, three of whom were married and who between them had four sons and six daughters. In addition to their families, these planters employed 39 fishing servants. They also had a combined herd of 14 cattle, 7 sheep, and

35 hogs, suggesting some economic investment outside of the fisheries. In comparison, south of St. John's only Fermeuse, Bay Bulls, and Ferryland had larger populations (Poole 1677). Interestingly, the location of the Goodridge Site coincides with the area that Yonge labeled the "Amharal's Place"; a term that suggests that it was considered the best place in the harbor for the prosecution of the fisheries (Mills 2008:18). Like the rest of the English settlements in Newfoundland, the inhabitants of Renew were victims of the 1696 French raid, losing everything they had owned and built up in the previous decades (Pope 2004:407-409). It is likely that Renew was resettled within the next year or so, but as the archaeological evidence shows that the Goodridge site was a casualty of the 1696 raid this is a good point to stop and turn to the socio-economic relationships at play in Renew during the 17th century.

Fortunately, much of the Newfoundland historiography has been focused on socio-economic structures related to the fisheries, with three main forms at work following the failure of the initial proprietorships. These three models are the trans-Atlantic migratory fishery, the planter model, and the bye-boat model. The archaeological assemblage is consistent with other planter assemblages from Newfoundland; it is, therefore, safe to say that the Goodridge site occupants were themselves planters.

The archaeography for the Goodridge site is much smaller than the historiography, but at the same time much narrower in scope. There are just two sources in the archaeography, Stephen Mills' 2008 excavation report for the Provincial Archaeology Office of Newfoundland and Labrador, and David Fry's 2004 honors dissertation on the eighteenth-century tavern and white salt-glazed English stoneware

also uncovered at the site. As the latter work is outside of the temporal parameters of this dissertation it is not necessary to explore it in any great detail. Mills' report, on the other hand, is a concise but detailed overview of the archaeology of the site. The excavations at the Goodridge Site were undertaken in 2002 and 2003 with the intent of testing the area for archaeological potential. The site was selected in part due to Yonge's map and its identification of the general area as the "Amharal's Place" (Figure 4.4.). Only a relatively small area of the site was tested, but a significant amount of material was recovered.



**Figure 4.4.** Goodridge Site, Renews, Newfoundland (CfAf-19).

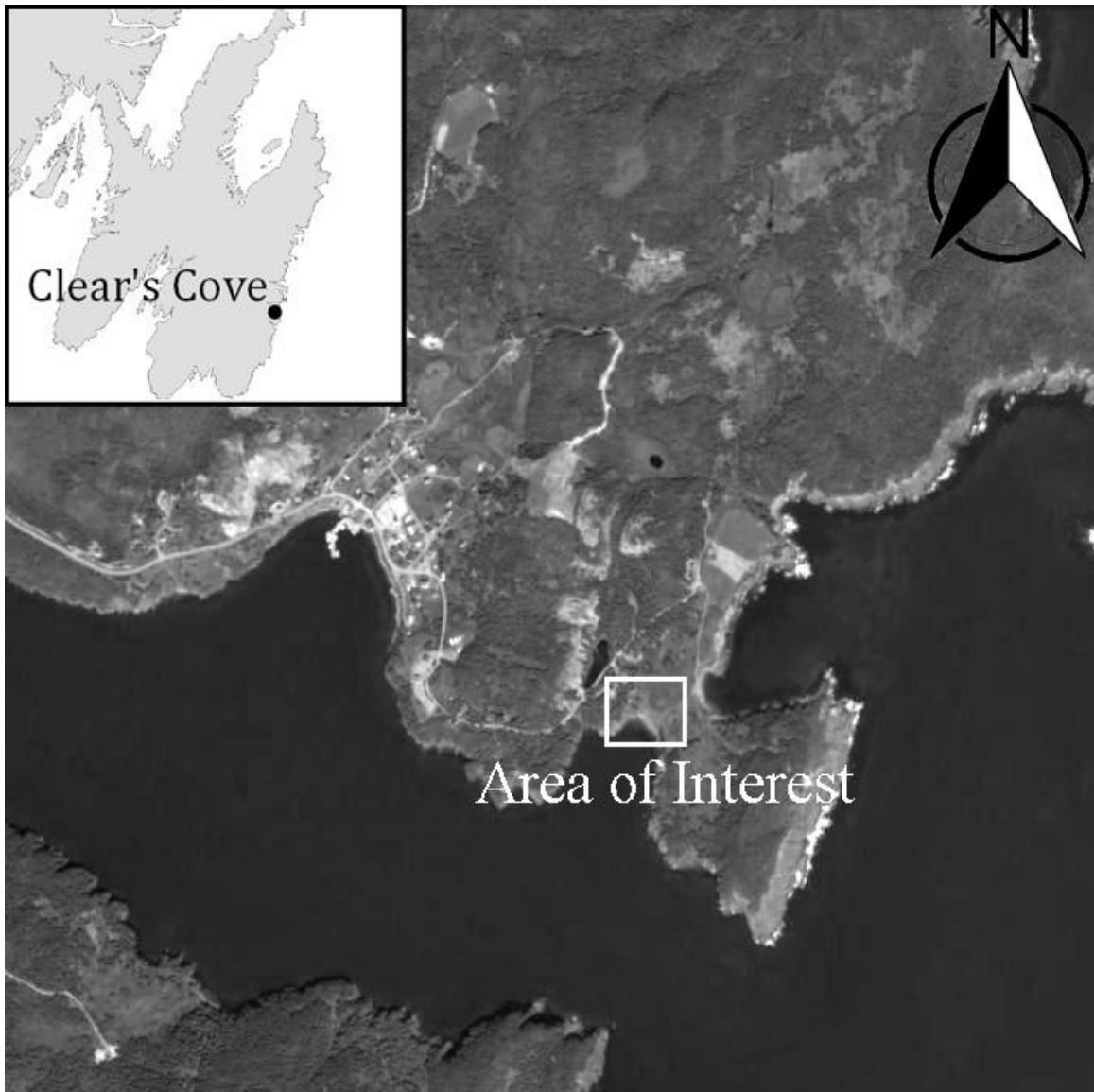
#### Section 4. VI. Clear's Cove, Port Kirwan, Newfoundland (~1640 to 1696)

Clear's Cove, situated in Fermeuse Harbour, suffers from much of the same historiographical problems as Renew's. The result is a thin historiography which provides some contradictory information. Most notably, there is some debate on whether Sir Henry Cary's 1623 colony was planted in Renew's Harbour, as stated above, or Fermeuse Harbour. Gillian Cell's 1969 *English Enterprise in Newfoundland 1577-1660* implies that it was Renew's Harbour which was settled, in part due to the enthusiasm of Richard Whitbourne, a tireless promoter of Newfoundland colonization, for that harbor (Cell 1969:89-91). Peter Pope, drawing from Sir William Vaughan's *Newlanders Cure*, states instead that Fermeuse Harbour was the site of this colony. (Pope 2004:53; Vaughn 1630).

Ultimately the site of Cary's settlement is immaterial, as its importance is in the residual population it left on Newfoundland's shores. From this nucleus permanent settlement slowly expanded. James Yonge mentions Fermeuse in his journal, stating that seven Barnstaple men fished there and that each agreed to pay two shillings for Yonge and fellow surgeon Edward Cutt to visit twice a week (Yonge 1963:56). It is also found in 1675, 1677, 1681, and 1684 censuses, with 1677 providing the most detail. At the time of that census, there were nine planters, five of whom were married. Between them, they had two sons and a daughter and employed a further 44 men in eleven boats (Poole 1677). Unlike their neighbors at Renew's and Ferryland, however, there was a general lack of livestock, with only hogs listed in the census. Like the rest of the English Shore, the settlement at Fermeuse met its end during the French raid of 1696.

As a Newfoundland planter site, there is little need to go into a detailed discussion of the socio-economic relationships which the residents of Clear's Cove would have had, as these have already been explored. The archaeography for Clear's Clove is small, consisting of just two works. The first work is Peter Pope's 2005 report to the Provincial Archaeology Office of Newfoundland and Labrador. Aside from providing a day-by-day description of the excavation in progress along with preliminary interpretations, the report also provides descriptions of the site, the way in which the two components related to each other, and of the architectural remains (Figure 4.5.). The second is a 2009 honors dissertation by Janine Williams, who analysed and interpreted the ceramic assemblage from the site. Her work is excellent, and even though a re-analysis of the material by the author produced results which differed in details, the overall conclusions reached were for all practical purposes identical.





**Figure 4.5.** Study area at Clear's Cove, Port Kirwan, Newfoundland (CfAf-23).

#### Section 4. VII. Ferryland, Newfoundland (Early 1620s)

In contrast to the slim historiographies for the Goodridge Site/Renews and Clear's Cove, the historiography for Ferryland is quite robust. This can be attributed to several factors. First, Ferryland was one of the first proprietary colonies settled in Newfoundland and remained an important political, cultural, and commercial center throughout the 17th century. This can be largely attributed to the Kirke family, who made Ferryland their base of operations starting in the late 1630s. Sir David Kirke himself is a figure of some notoriety in Canadian history, due to his role in the capture of Quebec in 1629 (Kirke 1871:72, 89; Pope 2004:81-82). This has made his later activities in Newfoundland of interest to generations of historians. The second reason is that there is an extant documentary record, albeit a slim one, for the first years of the colony from the arrival of the first colonists under Edward Wynne to George Calvert's brief stays in 1627-1628 and 1628-1629. A second, slightly more substantial paper trail appears in the 1650s as Calvert's heirs attempted to reclaim their father's colony from Sir David and his family. Combined with assorted other documents, these make Ferryland one of the better-documented settlements in 17th-century Newfoundland. Finally, the colonial settlement at Ferryland has been the subject of a multi-decade and continuing archaeological investigation, which has contributed significantly to the understanding of life in 17th-century Newfoundland. While the historical background sections of the multitude of dissertations and theses to come from the Ferryland archaeology tends to rehash the same material, each individual study adds to the cumulative understanding of the site itself and of colonial Newfoundland as a whole. Fortunately, due to the specifics of the collection

analysed for this dissertation a critique of this entire historiography is not necessary and as a basic overview of the Kirke family's activities has already been seen in Section 3.

III. 7 of the preceding chapter.<sup>10</sup>

As with most sites on Newfoundland's English Shore, the history of Ferryland begins in the 16th century. Archaeological evidence suggests that it was fishermen from Portugal and Brittany who first made use of Ferryland's shores, though by the 1580s it had become a destination for English fishermen such as William Sayer, who was recorded as serving as fishing admiral there in 1597 (Gaulton and Tuck 2003:188). Permanent settlement began in 1621 with the arrival of Edward Wynne and eleven others. Wynne had been dispatched to Ferryland by George Calvert, who later became the first Baron Baltimore, to begin construction of a colony from which Calvert could control a share of the fishing industry, establish a claim for England over Newfoundland, and provide a place where English Catholics could escape persecution (Tuck and Gaulton 2013:41-42). Wynne provides descriptions of his activities in a series of letters to Calvert, and archaeological investigations have since shown that his account of his plans and accomplishments are accurate. Wynne, had, in the span of about four years, completely changed the landscape of Ferryland. He and his men had dug out and leveled the hillside into two or three terraces, filled in part of the Pool, or inner harbor of Ferryland, to create

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<sup>10</sup> For a more detailed account of the history and archaeology of Ferryland, see Barry C. Gaulton and James Tuck (2013) and Peter E. Pope (2004). A detailed bibliography can be found on the Colony of Avalon Foundation's web page, [www.colonyofavalon.ca](http://www.colonyofavalon.ca).

a warehouse and quay, and constructed an Old World manor for Calvert on the shores of Newfoundland (Gaulton and Tuck 2003; Tuck and Gaulton 2013:52).

Wynne left Ferryland under unclear circumstances in 1625, and the colony was briefly governed by Sir Arthur Aston until George Calvert, after a visit in 1627, moved there with most of his family and household in 1628. The following winter proved to be particularly harsh and trying for Calvert, and he and his household quit the colony in 1629. Calvert would turn his eyes towards the warmer climate of the Chesapeake, eventually leading to his sons founding the colony of Maryland (Tuck and Gaulton 2013:42; Lyttleton 2013:260-261). Despite the change in focus, Calvert maintained a governor at Ferryland, and his family would press claims of ownership into the 18th century. For all practical purposes, however, Calvert had abandoned Ferryland and the settlement there stagnated.

Sir David Kirke changed that with his arrival in the spring of 1638. Removing Calvert's agent from the plantation, Kirke began a program of reorganization and rebuilding in order to turn Ferryland into a profitable commercial entrepôt for Newfoundland. Gone were the brewhouse and forge of the Calvert era; the latter was abandoned completely, and the former was recycled to provide a hearth for Kirke's own dwelling (Carter 1997; Clausnitzer 2011; Gaulton 2006). Calvert's stable, a symbol of his wealth and status, was renovated to serve as a tavern where Kirke retailed wine, tobacco, and other goods to planters and fishermen alike (Gaulton 2006; Ingram 2015). He charged fees for fishing rooms, taxed shipping, and expanded the fisheries infrastructure. Sir David was recalled to England in 1651 to answer to a number of charges related to his

mercantile activities as well as his takeover of Ferryland, where he died in 1652. His wife Lady Sarah, her sister Lady Francis Hopkins, and his sons remained in Newfoundland and became leading planters until the French raid of 1696 destroyed Ferryland along with the rest of the English Shore. Lady Sarah and Lady Francis were already deceased by this time, and the three remaining Kirke sons would all die while in French custody (Pope 2004:408, 437).

The collection examined in this dissertation pre-dates Ferryland's settlement, however. All of the artifacts in this collection were recovered from Event 326, which represents either a migratory fishery occupation at Ferryland or the years of initial colonization, beginning in 1621 (Figure 4.6.). This conclusion was based on the stratigraphic location of the deposit; Event 326 was identified underneath Event 323, a fill layer dating to Wynne's land reclamation projects of 1622-1623, and on top of Event 328, the original beach surface. Furthermore, it seems that this deposit was created within a relatively short time period, likely a couple of months to a year at the most.



**Figure 4.6.** Study area at Ferryland, Newfoundland (CgAf-02).

With the assemblage representing such a brief occupation, there is little need for detailed discussions on either the socio-economic relationships of the depositors or of the expansive archaeography of Ferryland as a whole. The men who carried, used, and broke these objects were either migratory fishermen working seasonally for shares of a fishing voyage or employees of George Calvert working for wages as they built his colony. The archaeography has primarily focused on the Calvert and Kirke periods. Given the transient and vestigial nature of the archaeology of the migratory fishery this is not surprising, nor is it a criticism of the state of archaeology in Ferryland. The collection itself, and its importance in this study will be discussed in the following chapter.

## Chapter 5: Material Culture Analysis

### Section 5. I. Introduction

The analysis of material culture is central to the practice of historical archaeology; indeed, archaeology, as a discipline, is the study of past peoples through the objects they left behind. Though a significant body of historical documentation exists on the cod fisheries, there are many gaps in the narrative due to incomplete and biased reporting. This is particularly a problem in areas with underdeveloped or informal governmental structures, such as northern New England and Newfoundland. Data derived from archaeological investigations can fill the gaps in the historical record, and in many cases provide a more holistic image of past lives than written documents alone. Furthermore, in a world of changing and expanding consumer goods, and an increasing reliance on material goods as status markers, archaeology provides insight into the agency and identity of past peoples. This is particularly true for those people who are silent in the historical record. It is one thing to claim that fishermen in Maine were coarse and profane people who would “share a woman as they share a boat”, but those same fishermen might own objects which present a different story completely (Clark 1970:35). Integrating these two lines of evidence is the core of historic archaeological interpretation (Leone and Crosby 1987:401-402; Trigger 1996:510)

The following chapter is divided into five main sections, corresponding to the five classes of material culture being analysed. These are, in order: architecture and structural remains; ceramics; glass; smoking pipes; and small finds. The specifics of each analysis varies from category to category, but the primary concern with each is the expression of



agency and of identity within the relevant socio-economic contexts. Small finds are usually considered the most important class of artifact in this regard; unfortunately, none of the sites produced significant numbers of small finds. As a result, ceramics ultimately proved to be the most informative class of artifacts in this study. All of the artifact classes, however, contribute to the overall goal here of constructing an image of past lives.

This analysis does contain an inherent limitation. Six sites were selected for this project, but all were not created equally. The size, condition, and preservation of the collections vary greatly between the sites, which may introduce biases. Adding to this are the biases present in the field collection techniques. It is known that on Smuttynose Island effort was made to recover every artifact, no matter how small; in contrast, the collection from Pemaquid suggests that only the largest fragments were collected and that certain artifact classes were overlooked. Therefore, while confidence in the results and conclusions of this dissertation is strong, there will remain some ambiguity in the interpretation of these results.

## Section 5. II. Architecture

### Section 5. II. 1. Overview

The study of architectural remains has been a part of archaeological research since its earliest practice; many early studies were concerned with the identification and excavation of houses associated with famous people (Orser 2004:6, 28-30). Other studies

focused on sites which were seen as historically significant, such as the Hammersmith Iron Works in Saugus, Massachusetts. This excavation was sponsored in the 1940s by the First Iron Works Association and funded by the American Iron and Steel Institute, who were interested in what they perceived as the founding of their trade (Griswold and Linebaugh 2010). As historical archaeology developed into its own field of study there was a shift away from studies of the rich and famous to studies of space. Archaeologists and others became interested in how people perceived, shaped, and used space and how these changed over time. James Deetz's structuralist approach, for example, saw the rise of the Georgian worldview as the shift from the vernacular to the formal, embodied in the changes in architecture; namely, the development and propagation of the Georgian house plan with its formal layout and specialized rooms (Deetz 1996:64-67; Matthews 1996:202-203). More recent studies have looked at architecture and buildings as artifacts capable of being manipulated, like other forms of material culture, in order to express agency and identity (Buchli 2002; Johnson 1996:2; Weatherhill 1996:8).

Unfortunately, none of the sites included in this study produced the scale of architectural remains required for such in-depth studies. The only site where the architecture was a focus of the archaeological investigation, Pemaquid, suffers from several methodological issues arising from the underdeveloped state of historical archaeology at the time of its excavation. The excavation and recording methods at Pemaquid probably overlooked features which today would be considered important to the interpretation of the remains. Two of the assemblages, Ferryland Event 326 and the Goodridge site, lack any architectural remains that can be associated with the occupations

being studied. The remaining three sites have clear architectural remains, but the small scale of excavations (Sagadahoc Island and Clear's Cove) or poor preservation (Smuttynose Island) limit what can be extrapolated from them. Still, it is worthwhile to review the evidence available and make what interpretations are possible.

## Section 5. II. 2. Smuttynose Island

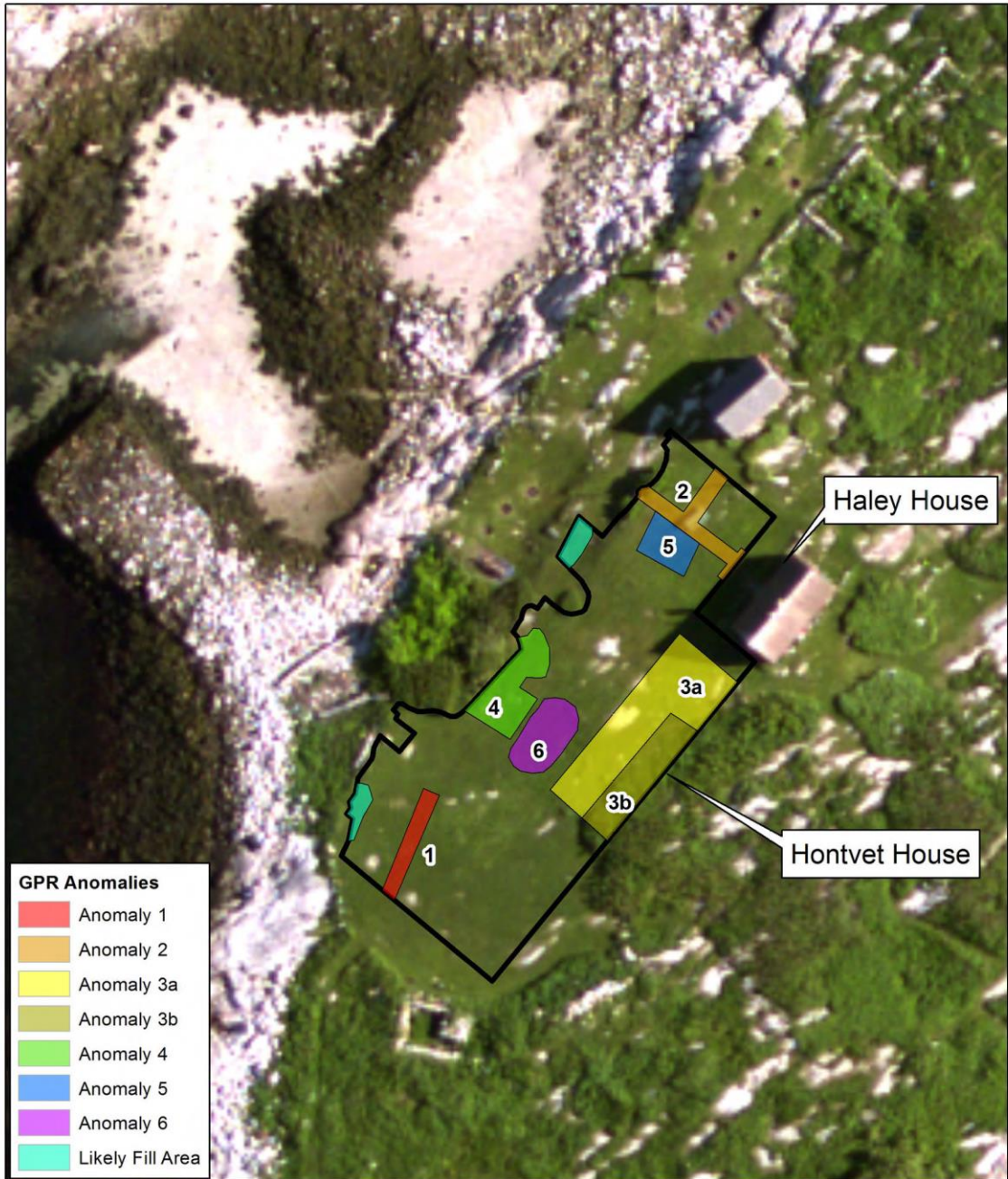
Architectural evidence for the structure identified on Smuttynose Island is limited, consisting mostly of crushed brick, several pieces of window glass, and other architectural elements. No evidence of a foundation was located, nor were any postholes identified during excavation. The evidence available does indicate that there was a structure located in the study area, in the vicinity of the 116 trench. This structure, enigmatic as is in the archaeological record, has previously been identified as a 17th-century tavern by Megan Victor (Victor 2012:3, 48-49). There are problems with this interpretation, however, and a review of the available evidence is warranted.

Evidence for the structure in the archaeological record consists of a fragment of window glass and coming (Figure 5.1.), two pieces of iron believed to be door pintles, two iron padlocks, and an abundance of crushed brick in the soil matrix, all located in the area between the 113/114 and 116 trenches. Furthermore, a layer of crushed shell in the 116 trench has been interpreted as infilling and leveling of the bedrock to support the structure; a patch of worn stones uncovered in the same trench may have represented the remains of a floor paving (Clausnitzer 2014:34; Victor 2012). No evidence of a footing

was found; as a result, the size of the building cannot be established with any certainty. It was initially believed that the rear gable of the structure had fallen victim to coastal erosion, but the results of a GPR survey undertaken in 2012 suggested that the structure is oriented more to the north-northwest than northeast as originally believed and that the south-southeast gable end may be preserved (Figure 5.2.) (Leach 2013).



**Figure 5.1.** Smuttynose Island, Maine: Window glass and lead coming from Meetinghouse locus. Artifact Number 7300.1 Image by the author.



**Figure 5.2.** Smuttynose Island, Maine: GPR Survey Results. Anomaly 4 represents the likely location of the 17th-century structure discussed in this dissertation. From Leach 2013, used with permission.

Despite the limited architectural evidence, it is worthwhile to attempt to identify this structure and its function within the larger Shoals community, as this can influence the interpretation of the material culture. As mentioned previously, Megan Victor interpreted the structure as a tavern in her 2012 master's thesis (Victor 2012). Under closer scrutiny, this interpretation does not seem to be supported by the historical evidence. First, there is no explicit mention of a tavern on Smuttynose Island in the primary documents. The absence of evidence does not necessarily mean that there was not a tavern on Smuttynose Island; given the relatively large documentary record associated with the Isles of Shoals, the lack of evidence certainly does not help the argument in favor of a tavern. Neither does a ruling of the July 18, 1665, court session held at Wells, which forbade the retailing of "any small quantities to any person whatsoever... Wine or strong lyquors" (*PCRM*(1):220-229). Two years later the court reaffirmed this statute, forbidding the retail of any quantity of less than one-quarter cask of wine or strong spirits except for a period of one month or "longer as necessity shall require" during the spring and fall, and specifically revoked any existing licenses (*PCRM*(1):287).

The second candidate for the identity of this structure is the meetinghouse reported to have been constructed around 1640 (Harrington 1985:129). There is some immediate support for this identification, as Jenness states that the meetinghouse was made of brick, however, he situates it on Hog (Appledore) Island, with a courthouse on

Haley's (Smuttynose) Island (Jenness 1873:77-78).<sup>11</sup> These claims appear to have originated in *A Description and History of the Isles of Shoals*, yet that tract offered no references to support this claim (Morse 1801:242-261). That a meetinghouse existed on Smuttynose Island, however, is supported by Edmund Pickeard's 1661 deed to Nathaniel Fryer, where he states that his flakeroom is "against the Meeteing house, at the Ysland of Smuttinose" (Pickeard 1661). Not only does this place the meetinghouse on Smuttynose Island, it also suggests that the structure was close to the water as the wording of the deed indicates that Pickeard's stage and flakeroom were in close proximity to one another. With this evidence it seems possible that the ethereal structure uncovered during the excavations was the 17th-century meetinghouse, although the analysis of the associated archaeological material suggests that it served other, informal functions as well (see Section 5. III. 2).

Unfortunately, even with this identification not much is known about the structure. As stated previously, it is traditionally claimed that the meetinghouse was built around 1640, or shortly after a year-round occupation was established on the island. The archaeology cannot confirm or deny this date; the almost total lack of discernable structural remains make the direct association of artifacts with the structure impossible. The *terminus ante quem* date is slightly less enigmatic, as pipe-bore dating suggests that use of the study area dropped off dramatically around 1680, and the residents of Smuttynose Island were summoned to court to answer for the lack of a proper

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<sup>11</sup> Jenness may have been the source for Victor's tavern, for he claims that one was kept on Smuttynose. Unfortunately, his reference for this claim is simply "York County Records, *passim*" (Jenness 1873:78).



meetinghouse in 1685 (Clausnitzer 2014; Williams 2006:20). Further evidence is provided in a 1700 suit launched by residents of Star Island against Roger Kelly, who they claimed was in the possession of the bell from the Smuttynose meetinghouse (Williams 2006:23). Taken together with the construction of a new meetinghouse on Star Island in 1685, this indicates that the Smuttynose structure was abandoned by that point.

As for the appearance of the meetinghouse, little can be said. It likely possessed at least one brick architectural element, at least one leaded glass window, and one or more doors which may have been secured via padlocks. With the lack of evidence for a proper foundation and the evidence for infilling of the bedrock, the meeting house was likely built with sill-on-grade construction. Brick was probably reserved for more important elements such as a chimney base or support pillars. It is also likely that a fair amount of material from the meetinghouse was pilfered for reuse by other island occupants which has, combined with the presumed losses to erosion, reduced its archaeological signature.

### Section 5. II. 3. Sagadahoc Island

With the discovery of the 1685 French map of the Sagadahoc region, the layout of the fort and location of at least one other dwelling structure on Sagadahoc Island are known with some degree of certainty; fortuitously, the 1984 test excavations coincided with the location of the fort. A small number of architectural artifacts were recovered from the site, but more importantly, a linear feature tentatively identified as the base of a palisade wall and a hearth were uncovered (Figure 5.3.). The 1993 and 1995 field seasons

not only continued work on the fortified compound but also located a structure at the approximate location of the dwelling indicated by the French map.

While the 1993 excavations did not find anything to delineate the outlines of the three structures located in the fortified compound, the 1995 season located burnt floorboards in the area of Structure 2, in the north-west corner of the compound (Figure 5.4.). Based on the archaeological evidence, Structure 2 was built using sill-on-ground techniques with a wattle-and-daub infilling. Additional burnt floorboards, along with a stone footing or pier, were uncovered in units generally associated with Structure 1; however, the extreme southerly location of these finds led Baker to posit that they may belong to a fisherman's stage or shack located just south of the fortified compound rather than Structure 1, possibly related to the flakes marked on the French map (Baker 1995). The area around the fortified compound was designated Area A; to the south of the fort is Area B, which was also tested in 1995 following a walkover and auger tests in 1993 (Baker 1995). No walls were identified, but a thick layer of daub was found, which covered a living floor rich in artifacts. The lack of Bristol earthenwares and the distribution of stem-bore measurements led to the interpretation that this structure may pre-date the fort by a decade or more, making it a victim of King Phillip's War rather than King William's War, but there was no conclusive evidence one way or another (Baker 1995). Based on what evidence there is, Baker tentatively identified the Area B dwelling as belonging to John Parker and his son Thomas, a part of the fishing plantation they maintained on the island (Baker 1995).



**Figure 5.3.** Sagadahoc Island, Maine: Hearth feature. Image courtesy of Emerson W. Baker.



**Figure 5.4.** Sagadahoc Island: Maine: Burnt floorboards. Image courtesy of Emerson W. Baker.

What limited architectural evidence there is does reveal that both the fortified compound and the Area B dwelling were rather modest constructions. Both made exclusive use of earthfast construction techniques, with sill-on-grade probably being the specific method used. Not only was this method cheap, quick, and easy, but the thin soils and rocky nature of the island precluded the use of dug cellars and sub-surface foundations. This emphasizes the relative isolation and lower economic status of the fishermen who made use of the island.

#### 5. II. 4. Colonial Pemaquid

The excavations at Pemaquid were initially designed to locate and excavate the structures which existed there in the 17th and 18th centuries (Camp 1975:6). This has created a peculiar situation; architectural remnants were one of the primary focuses of an excavation, yet due to the then-underdeveloped status of historic archaeological knowledge and the pioneering nature of the Pemaquid excavations, a lot of data was overlooked. This is clearly seen in the structure which has been selected for this study, Structure 5/Structure 10. Camp's 1975 report on the digs assumes that the cellar hole designated as Structure 10 is the foundation for a building, while an incomplete, single-course stone formation was interpreted as Structure 5 (Camp 1975:7-8). Camp interpreted Structure 10 as an earlier structure, dating to the first years of the Shurt plantation, which survived until burnt during the 1676 raid. Structure 5 was then built slightly to the south and slightly overlapping the ruins of the older structure. Camp also presumes that the

layer of sun-dried, mud-and-straw “brick” in the bottom of the Structure 10 “foundation” dates to this rebuilding (Camp 1975:6).

Reevaluation of the archaeological evidence, including the remaining architectural features and the material culture, does not support this interpretation. At the same time, however, giving the limited understanding of colonial construction in the 17th century during the period when Camp was conducting the excavations at Pemaquid, her interpretations were reasonable. Specifically, not knowing the prevalence of earthfast construction in Maine during the 17th century, it is not surprising that Camp did not recognize evidence for those techniques. Earthfast architecture was recognized in the Chesapeake in the 1970s, but was only recognized as a widespread practice in New England during the 1980s; and later still until it was recognized to have persisted for much longer than initially thought (Baker et al 1992; Carson 1981:160-161; Deetz 1996:20-24).

There have already been two reinterpretations of the architecture of Structure 5/Structure 10. The first is indicated by a series of interpretive images commissioned in 1988. The image for Structure 10 depicts a structure which, based on Camp’s foundation plan, is approximately 7.9 m long by 4.3 m wide (26 x 14 ft.) with a gable-end fireplace set on the single-course foundation (Camp 1975:7; De Paoli 2001:77). Unfortunately, there appears to be no published reference which explains this reinterpretation, and no unpublished report has been located either. The second reinterpretation is presented in the 1995 Colonial Pemaquid Walking Tour booklet, written by Neill De Paoli, which suggests that not only are Structure 5 and Structure 10 part of the same structure, so is

Structure 11, another cellar hole located approximately 4 m (12 ft.) southeast of the Structure 5 foundation. The combined structure would have been at least 17 x 5.5 m (54 x 18 ft.) and incorporated a well into one gable end.

If this is accurate, then the S5/10/11 structure would bear a remarkable resemblance to both the great house on Richmond Island, which was reported to measure 12.2 x 5.5 m (40 x 18 ft.), and the first house constructed for George Calvert's colony at Ferryland, which measured 13.4 x 4.6 m (44 x 15 ft.) (Winter 1634; Wynne 1622a).

Edward Wynne took great care to describe the layout of the first house as follows:

It was Alhallontide before our first range of building was fitted for an habitable being. The which being 44. foot of length, and 15. foot of bredth; containing a hall 18. foot long, an entry of 6. foot, and a cellar of 20. foot in length, and of the height, betweene the ground floore and that ouer head, about 8. foote, being diuided aboue, that thorowout into foure chambers, and foure foot high to the roofe or a halfe storie. The roofe ouer the hall I couered with Deale boords, and the rest with such thatch as I found growing here about the Harbour as sedge, flagges and rushes - a farre better couering than boords, both for warmth and titenesse (Wynne 1622a).

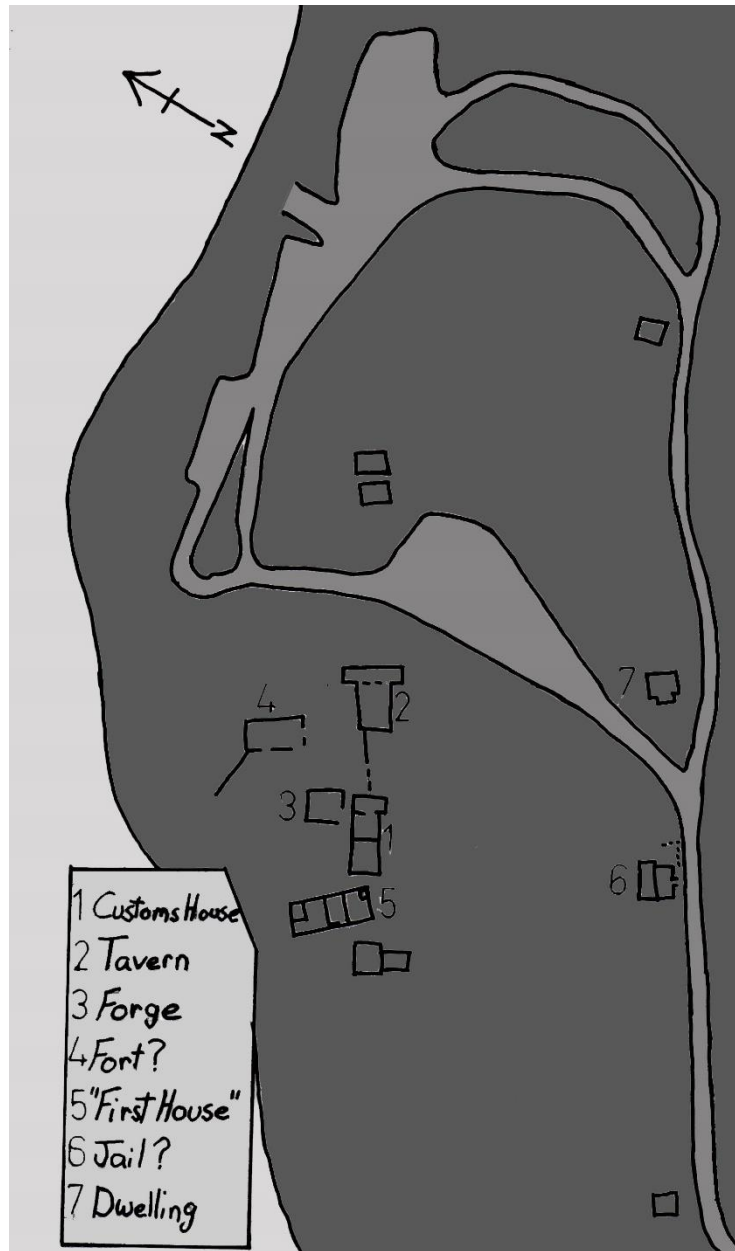
Archaeological investigations at Ferryland have uncovered the remains of this first house, and have shown that it possessed a central chimney, with a single hearth heating the hall (Tuck and Gaulton 2013:45-46). John Winter also described his house on Richmond Island, writing to Trelawny that:

I haue built a house heare on Richmon Iland that 40 foote in length & 18 foot broad within the sides, besides the Chimnay, & the Chimnay is large

with an oven in each end of him... I haue 2 Chambers in him, and all our men lies in on of them, ... in the other Chamber I haue Rome Inough to put the ships sailes into and all our dry goods with is in Caske... (Winter 1634).

The strong similarities between the three structures all suggest that they served the same purpose- that of a common living and storage area for the first inhabitants of each site. In the case of Pemaquid's first house, Camp's Structure 11 would have served as the hall, or communal dining/entertaining/sleeping area. The full foundation underneath this section of the structure probably served to lift a wooden floor, the remains of were recovered during Camp's excavations, off of the underlying soil; Camp described this soil as clay, and there was evidence that the builders were concerned with the walls sinking and collapsing due to the wetness of the clay (Camp 1975:9). The presence of shallow well (a feature unique to the Pemaquid structure) supports the theory that the location was fairly wet. The Structure 5 foundation likely served as a sleeper to support this floor, as well as the central dividing wall. The arms of the "Z" shape may represent the locations of doorways; the larger 3.7 m arm (12-foot) was probably for a set of doors for provisions and other bulk goods, and the smaller 1.2 m arm (4-foot) supported the front entrance (Figure 5.5.).





**Figure 5.5.** Colonial Pemaquid, Maine: Pemaquid Village. Image by the author, based on Camp 1975:4. Structure labeled 5 is the proposed “First House”.

Structure 10 would have served as the cellar, to use Wynne's terminology, which was an unheated storage space similar to the one described by John Winter in his house at Richmond Island. The foundation/cellar hole found by Camp's crew served as a root cellar, possibly concealed by wooden floorboards and accessed via a hatchway. Earthfast construction techniques were probably used for the walls not supported by stone foundations.

Unfortunately, the archaeology is rather silent on the evolution of the Pemaquid structure, in both physical layout and purpose. Based on the ceramic evidence, discussed in Section 5. III. 4, the Pemaquid structure transitioned to a private residence before being destroyed in the 1676 raid; in contrast, the Richmond Island structure retained its original function until the abandonment of the site, and archaeological evidence from Ferryland shows that the first house was incorporated into the larger Mansion House compound within a few years of its construction (Tuck and Gaulton 2013:45). From what is known about Structure 5/10/11, it is clear that it was a large earthfast building constructed in the early days of the plantation. The lack of a discernable hearth or fireplace feature suggests that the structure also possessed a wattle and daub fireplace; unfortunately, with the general lack of structural information from Camp's excavations only a new excavation and archaeological reassessment can answer the questions that have arisen since Camp's pioneering work and reveal the life story of the structure.

## Section 5. II. 5. Clear's Cove

Despite the small scale of the excavations at Clear's Cove, in-situ structural remains for both the migratory and planter contexts were uncovered. This makes it one of a few amongst known 17th-century fishing sites; unfortunately, the limited scale of the excavations there means that only a small part of each structure was uncovered. Even this limited excavation is revealing in the differences between planter and migratory architecture.

The most important architectural feature at Clear's Cove is Feature 432, a pole-constructed structure associated with the migratory context (Figure 5.6.). One of only a few surviving structures associated with the migratory fishery, Feature 432 likely served as a cookroom (Pope 2005; Williams 2009). It is constructed of roughly hewn and undressed timbers and may have been covered with a layer of boughs, suggesting that expediency was a primary concern in its construction. In contrast, the planter structure located at Clear's Cove shows more effort was expended on the shaping and dressing of the timbers. Unfortunately, with the limited excavation that was undertaken it is impossible to discuss these structures in any more detail; fortunately, James Yonge provides a description of the typical construction of a migratory structure, stating that such structures as being "made of a frythe of boughs, sealed inside with rinds, which look like planed deal, and covered with the same, and turfs of earth upon, to keep the sun from raning them" (Yonge 1963:56). This description certainly fits the archaeological evidence for the Clear's Cove structure, strengthening the argument that Feature 423 is related to migratory fishing activities at that site.



Figure 5.6. Clear's Cove, Newfoundland (CfAf-23): Cookroom Feature. Image Courtesy of Peter E. Pope.

## Section 5. III. Ceramics

### Section 5. III. 1. Overview

Due to the general lack of personal goods and objects of adornment from the study sites, it is the ceramics which have the greatest potential in examining the agency and identity of those who lived and worked at those places. Every site produced a sizable quantity of ceramics, which were separated into vessel lots based on diagnostic features. The tendency while doing this was to err on the side of caution, which means that the number of vessels identified is an absolute minimum. Ware type and vessel form were identified for each lot, if possible, with the latter using the Potomac Typological System (POTS) as a standard in order to maintain consistency in terminology (Beaudry et al 1983). Identifying the ware types and vessel forms is revealing for the archaeologist, providing insight on socio-economic conditions and activities at a particular site, including changes in trade connections between the site being studied and the larger Atlantic world over time.

In total, the study sites produced 236 vessels, with Smuttynose Island having the largest (88 vessels) and most diverse (18 ware types) collection. In contrast, the smallest and least diverse collection came from the Ferryland context, with 18 vessels and 5 ware types identified. The remaining sites ranged from 26 to 43 vessels, and 7 to 14 ware types. The number of vessels was determined using Minimal Vessel Count, sorting out diagnostic elements and determining the smallest number of vessels that were present in the collection (Sussman 2000). The diversity of wares generally correlated with the number of vessels identified from each site. The number of vessels identified from each

site appears to largely be a function of the archaeological richness of each site; this being a function of excavation size and length and intensity of occupation. The large sample from Smuttynose Island, for example, was produced from 35 1 x 1 m test pits, yielding 2.5 vessels per square meter excavated. By contrast, the Goodridge site produced 43 vessels in 58 excavation units (0.7 vessels/m<sup>2</sup>); Sagadahoc Island, 26 vessels in 33 units (0.8 vessels/ m<sup>2</sup>); and Ferryland Event 326, 18 vessels in 26 units (0.7 vessels/ m<sup>2</sup>).

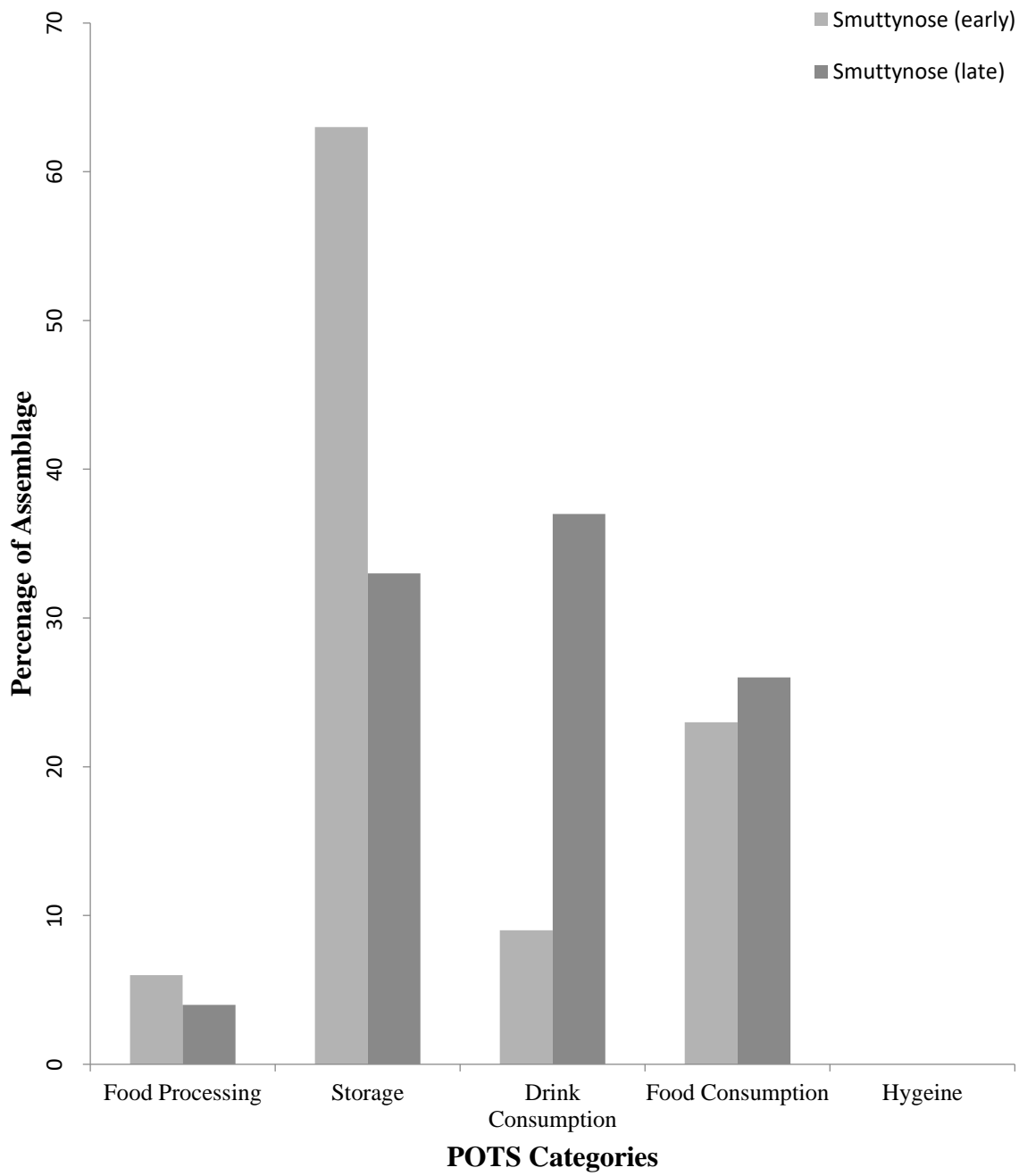
In order to conduct a proper analysis, it is necessary to start by examining the collections from each site individually. The goal is to identify the vessel forms and ware types present at each site and, in the case of the multi-component sites, to highlight the changes which occurred during the transition from one component to another. To lend structure to this analysis, the sites will be presented in order from the southern-most to the northern-most site. In doing so differences between sites as one moved further from the metropolis of Massachusetts Bay will be highlighted for the New England sites, and the differences, if any, between the New England and Newfoundland sites, are more likely to become evident.

### Section 5. III. 2. Smuttynose Island

In total Smuttynose Island produced 88 vessels; these vessels occurred in 13 different forms and 18 different ware types, making Smuttynose the richest and most diverse site, archaeologically speaking. More importantly, Smuttynose Island is a multi-component site. The excavation method used on Smuttynose Island resulted in some

ambiguity in the separation of the migratory/early residential period (defined as being from circa 1620 to circa 1640, hereafter referred to as the early period) from the late residential period (or late period), which has undoubtedly introduced some errors into the vessel count for each period. Specifically, Smuttynose Island was excavated using 10 cm arbitrary levels, measured from local datums; the result was that excavation layers often cut through two or more cultural strata, and not necessarily at a consistent depth below datum. Separating the early and later material, therefore, relied largely on pipe mean-bore dates (checked with makers' marks and bowl morphology) and stratigraphic data acquired after excavation. The consistency of the results from Smuttynose Island with the other sites in this study suggests that this coarse separation did not introduce any significant errors into the analysis.

In total there are 36 vessels assigned to the early period and 48 assigned to the later period. The remaining four vessels could not be assigned to a period with any degree of confidence. Figure 5.7 shows the distribution of vessel forms between the two. There are major differences noticeable immediately; namely that the early period has a significantly higher proportion of storage vessels and the late period has a significantly higher percentage of drink consumption vessels. This in and of itself is interesting, but before making any serious conclusions it is necessary to break down the collections of the individual eras and look at each in detail. Table 5.1 contains information on the vessel forms and ware types from each period, both in raw numbers and as a percentage of the assemblage. It is best to start by examining the vessel forms and how they change during the transition from one period to the other.



**Figure 5.7.** Smuttynose Island, Maine. Potomac Typological System Category Distribution.



**Table 5.1a.** Smuttynose Island, Maine: Ceramic Vessel Forms.

<i>Vessel Form</i>	<i>Migratory Period</i>		<i>Residential Period</i>	
	<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>
Bottle	2	6%	3	7%
Bowl	-	-	2	4%
Cup	1	3%	9	20%
Dish	2	6%	3	8%
Flask	1	3%	-	-
Jar	3	9%	1	2%
Lid	1	-	-	-
Mug	2	6%	8	17%
Pipkin	1	3%	-	-
Plate	4	11%	6	13%
Platter	-	-	1	2%
Pot	8	23%	8	17%
Basin	2	6%	2	4%
Tallpot	9	26%	3	7%
Unknown	-	-	2	-
TOTAL	36	101%	48	101%

Note: Percentage totals of greater than 100% reflect rounding errors.

**Table 5.1b.** Smuttynose Island, Maine: Ceramic Ware Types.

<i>Ware Type</i>	<i>Migratory Period</i>		<i>Residential Period</i>	
	<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>
Rhenish Brown CSW	2	6%	3	7%
Borderware CEW	-	-	1	2%
Bristol CEW	-	-	5	11%
Porcelain RSW	-	-	4	9%
Chesapeake CEW	-	-	1	2%
Manganese Mottled CEW	-	-	1	2%
North Italian Marbled CEW	-	-	1	2%
North Italian Sgraffito CEW	1	3%	-	-
North Devon Gravel CEW	3	9%	-	-
North Devon Smooth CEW	11	31%	3	7%
North Devon Sgraffito CEW	1	3%	1	2%
New England Redware CEW	-	-	6	13%
Portuguese Redware CEW	1	3%	-	-
Unidentified Redware CEW	8	23%	7	15%
Spanish Heavy CEW	1	3%	-	-
TGEW	6	17%	10	22%
Totnes CEW	1	3%	-	-
Westerwald CSW	-	-	3	7%
Unknown	1	-	2	-
<b>TOTAL</b>	<b>36</b>	<b>101%</b>	<b>48</b>	<b>101%</b>

Note: Percentage totals of greater than 100% reflect rounding errors.

The early period vessels demonstrate a strong bias towards the food storage vessels. In fact, the most common vessel form encountered is the tallpot, with 9 vessels (26 percent of the assemblage). This vessel form, also known as baluster jars, were commonly used for the storage and shipping of foodstuffs (Grant 1983:98; Pope 1987:129). For a seasonal enterprise which required sailing across the Atlantic Ocean, such storage vessels would be invaluable. This is reinforced by the presence of a large number of larger storage pots (8 vessels or 23 percent of the collection) and a smaller number of storage jars (3 vessels, 9 percent of the collection).

Interestingly, the third most common vessel form in the early period is the plate, with 4 vessels (11 percent) being identified. The presence of these vessels, along with 2 dishes (6 percent of the assemblage), initially seemed unusual as it was presumed that migratory fishermen would have relied on cheaper and potentially more durable treen vessels, as seen on Richmond Island when Thomas Cammock requested “one dozen of wooden platters” from Robert Trelawny (Cammock 1632). Furthermore, plates and dishes are usually associated with more courtly foodways rather than the vernacular preparations, such as stews and pottages, consumed by fishermen (Yentsch 1990; 1991). The presence of a pipkin (Figure 5.8.) in the assemblage supports this presumption. Initial assessments the assemblage assumed that the presence of these six vessels in the early period assemblage was a result of the ambiguity in separating the different contexts. However, the early period assemblage also includes the earliest settlement on the island, and it could be that these vessels belonged to one of those early inhabitants.



**Figure 5.8.** Smuttynose Island, Maine: Redware CEW Tripod Pipkin. Artifact Numbers 8093, 3219, et al. Image by the author.

The early period ware types support this interpretation. The storage vessels are predominantly North Devon wares with a small percentage of assorted other coarse earthenwares (including Portuguese redware and Spanish Heavy); even the cups and mugs are earthenwares. The plates and dishes, however, are wares which required a greater monetary investment. North Devon Sgraffito and tin-glazed earthenware were represented by a dish each, while three of the plates were also tin-glazed earthenware. Neither tin-glazed earthenware nor North Devon Sgraffito would have been prohibitively expensive, rather representing what could be termed a “middle-class” ware (Baker 2012:7; Mills 2000:108).

The final plate, however, was identified as North Italian Sgraffito (Figure 5.9.). Only one of two North Italian ceramics identified from 17th-century Smuttynose, it is most notable for its exotic origins compared to the rest of the assemblage. Originating in the Pisa region of Italy and manufactured since the 16th century, it was widely traded; the decorative style was adopted by North Devon potters in the early 17th century (Grant 1983; Hurst et al 1986:30). While not an uncommon ware on North American sites, its exoticism would have made it an object of value for its owner as a statement of his ability to purchase what was a relatively expensive piece. For him, it may have possessed a symbolism similar to the Aucilla polychrome wares own by the Chadbourne family of Maine. Aucilla wares were made in Mexico and were difficult, expensive, and illegal to acquire; the ownership of these dishes spoke to the Chadbourne’s wealth and connections (Baker 2012: 7-8). For a fisherman living and working at the edge of society North Italian wares would have served the same purpose.



**Figure 5.9.** Smuttynose Island, Maine: North Italian Sgraffito CEW Plate. Artifact Number 1877. Image by the author.

In the transition to the late period on Smuttynose Island there are several distinct and interesting changes in both vessel forms and ware types (refer to Figure 5.7 and Table 5.1). Most striking is the drastic decrease in the percentage of storage vessels and a corresponding increase in the percentage of drink consumption vessels. The number of tallpots falls off particularly sharply, with only 3 vessels (7 percent of the collection) present. The number of storage pots remains the same, though now only represents 17 percent of the assemblage. This can be linked directly to the development of the Massachusetts Bay entrepôt during and following the English Civil War. It was during this time period that the migratory fishery in the Gulf of Maine essentially disappeared and Massachusetts Bay had developed its other industries to an extent where it could support the fishery locally. Without the migratory fisheries or a need for food from England, there is a lesser need for shipping containers. Storage pots remain common because Smuttynose Island is still an offshore island, ten miles from the nearest major port, and because these smaller pots had a use as intermediate storage vessels within the home and kitchen (Mills 2000:108).

The decrease in storage vessels was accompanied by an increase in drink consumption vessels; notably, cups and mugs become the first and second most common vessel form in the late period assemblage, with 9 (20 percent) and 8 (17 percent) examples recovered. This in and of itself is interesting, for it suggests an increase in individualized consumption of beverages and/or the replacement of wood and other alternative materials with ceramics. More importantly, it has implications for the identification of the structure located in the excavation area. As mentioned previously,

these remains have been identified either as a tavern or as the circa 1640 meetinghouse, with the historical evidence supporting the latter identification. The presence of a large number of drink consumption vessels would seem to support the former identification, yet there may be a way to reconcile the two.

In Newfoundland, as will be seen on the Goodridge site, many planter houses also possess a high percentage of drink consumption vessels (Crompton 2001:146, 147; Mills 2000; Nixon 1999:101). This has been interpreted as part of a vernacular hospitality industry where planters operated tippling houses, providing alcohol and tobacco for migratory crews and seasonal employees (Pope 2004:346-347). This may be the case with the structure on Smuttynose Island; indeed, combining the meetinghouse with a tippling house would appear to be an attractive option. Based on the limited evidence which was recovered it appears that the meetinghouse was constructed with brick elements and had at least one glazed window, and one can presume that it had a sizable fireplace. This would mean that the meetinghouse was likely the single most weather-tight and warm structure on any of the Isles of Shoals. To have such a structure be used for limited purposes (community meetings and religious services are the two most likely uses) would waste much of the building's potential. Operating it as a tippling house when it was not being used in an official manner makes sense, and would supplement the local's incomes. Indeed, there are multiple records of Shoals fishermen and others being fined for the retailing of wine, beer, and other spirits contrary to Maine legislation, and the Shoalers were authorized to retail liquors for one month in each the spring and fall, likely to coincide with the arrival of merchants to purchase fish from the preceding



season (*PCRM*(1):273, 287, 289). It would make sense that the meetinghouse would be used for this purpose.

Interestingly, the percentage of food consumption remains relatively unchanged. Despite the number of plates and dishes increasing by a third, the relative percentage only increases by three points; this suggests that ceramic vessels for individual servings remained relatively unimportant to the fishermen of Smuttynose Island. This again suggests the use of treen vessels and vernacular foodways by a majority of the population. The relative percentage of food processing vessels remains low, with the relative percentage also decreasing in the late period. Significantly, one of the two vessel forms which disappear in the late period is pipkins, indicating that a different type of vessel was being used in the late period. Assuming the continued use of vernacular foodways such as pottages and stews, a likely candidate is iron. In fact, an iron kettle fragment was recovered from a late-period deposit, and several more may have been recovered which are listed in the catalogue under “Other” or “Miscellaneous”. It is tempting to link this change to the establishment of the Hammersmith Ironworks in Saugus, Massachusetts in 1646, however without a metallurgical comparison between the Smuttynose fragments and known examples from Hammersmith this cannot be stated with certainty. This does not eliminate the possibility that a permanently settled population may be more inclined to invest in iron cookware than a seasonal one, however.

Greater changes are present in the ware types in the late period. The most notable is the near-disappearance of the North Devon wares. In the early period, there were 15

North Devon wares of various descriptions, just under half of the assemblage. In the late period, the number drops sharply to just 4 vessels, comprising only 9 percent of the collection. This is accompanied by the total absence of North Devon Gravel. Its role in the collection has been subsumed by generic redware, possibly local products traded by Massachusetts Bay merchants. The only three North Devon Smooth vessels are the three tall pots mentioned before. The remaining vessel is a North Devon Sgraffito dish, the presence of which is not surprising and speaks to the decorative and social function of such a vessel.

Four other ware types also disappear in the transition from the early period to the late period. For three of these this disappearance can be cautiously linked to the disappearance of the migratory fishery from the Gulf of Maine. Totnes is a product of the English West Country with a limited home distribution, and its presence on North American sites can be seen as a result of trade with ports in the Dartmouth area (Allen and Pope 1990:58). As Massachusetts Bay merchants took control of the New England fisheries they established trade connections with other English ports, breaking or displacing trade connections to south Devon and leading to the disappearance of Totnes wares from New England. Portuguese redware and Spanish Heavy are also likely victims of this restructuring in the fisheries and the corresponding shift to local sources of supply. It is entirely plausible that a local product, such as butter, replaced imported olive oil in the diets of fishermen. This would mean that these wares would no longer be needed, as olive oil was one of the main contents of these ware types (Newstead 2013:146). The final ware type to disappear during the transition between the two periods is North Italian

Sgraffito. This is less surprising than the previous three, being a less common and more expensive ware type. However, North Italian wares still make an appearance in the form of a Marbleized Slipware piece (Figure 5.10.). Much like the sgraffito piece, this was an uncommon and relatively expensive ware for 17th-century North America, and therefore likely had much the same social and economic connotations as attributed to the sgraffito vessel. Including the North Italian Marbleized Slipware vessel, eight new ware types appear in the late period assemblage. The most distinctive of these are 4 Porcelain vessels (9 percent of the assemblage), of which 3 are cups and the last was not assigned a vessel form. The most expensive ware type of the 17th century, the presence of Porcelain on Smuttynose is possibly attributed to the increasing affluence of its inhabitants during the late period as well as an increased access to the ware due to the trading activities of Massachusetts Bay merchants.



**Figure 5.10.** Smuttynose Island, Maine: North Italian Marbled CEW Bowl. Artifact Numbers 9150, 11510, 9045.2. Image by the author.

Five of the new wares are common earthenwares, three of which are readily-identifiable English types. The most numerous of these are the classic yellow- and brown-glazed, buff-bodied Staffordshire or Bristol wares. The five examples from Smuttynose Island consist of three cups, a mug, and a platter. Related to these is the single example of Manganese Mottled ware, also a Staffordshire product and introduced in the 1670s. The Smuttynose specimen is a mug, one of the more common vessel forms for this ware. Inexpensive and widely distributed, the presence of these two wares on Smuttynose Island is not surprising, and speaks to the increasing diversification of consumer goods throughout the 17th century.

The final English earthenware which appears in the late period is Borderware, represented on Smuttynose Island by a single bowl or porringer. A whitish-buff utilitarian earthenware, Borderware is one of the most common ceramics found on 17th-century London sites, and it is found in some number on various North American sites as well, notably Ferryland, Newfoundland, St. Mary's City, Maryland, and Jamestown, Virginia (Hawkins 2012; Pearce 1992:102). What is interesting about the piece from Smuttynose is that it is the only such vessel identified in the New England sites, and Borderware is found only at Ferryland amongst the Newfoundland sites. In her 2012 honors dissertation, Catherine Hawkins identified 38 Borderware vessels in the Ferryland collection, noting that while there was little change in quantity between the early and late periods of that settlement's history, there was a significant change in vessel forms (Hawkins 2012:48). Specifically, there is an increase in the number of specialized vessels such as skillets and strainers while other forms, such as costrels and jugs, disappear (Hawkins 2012:58).

Unfortunately, this explanation cannot be applied to Smuttynose Island. Not only is the vessel form one that is found in contexts throughout the 17th century, but it is a form that was used by the migratory fishery as well as planters (Hawkins 2012:48)

The final two earthenwares are American in origin. The first ware type is New England redware, of which there are six examples in the collection. Two are undecorated examples, while the remaining vessels demonstrate trailed-slip decoration (Figure 5.11.). In terms of vessel forms, there are four cups/mugs, one dish, and the final vessel is of an undetermined form. Pottery manufacture in New England began at an early date, with three potters arriving in Charlestown and Salem in 1635, establishing kilns in Charlestown, Salem, and Gloucester (Watkins 1968:16-17). By the beginning of the 18th century, Charlestown had established itself as the pottery center of New England, with its wares being widely exported throughout the colonies (Pendery 1985:68). With the geographic proximity of Smuttynose Island and the inhabitant's economic ties to these early ceramic centers, it is not surprising that these wares have a significant presence on Smuttynose Island (13 percent of the assemblage). Notably, this is the only site in this study in which New England redwares were positively identified, though it is possible that some of the generic redware vessels from the other sites are New England in origin.



**Figure 5.11.** Smuttynose Island, Maine: New England Slipware CEW Punch Bowl.  
Artifact Number 9352.1. Image by the author.

The final earthenware type is more ambiguous in its origin. The piece itself is a fragment of a dish, made of a thin-walled red fabric with a marbled slip in white, light brown, and dark brown with a clear lead glaze (Figure 5.12.). No known New England-made vessels match this piece; in fact, the closest match that was found comes from the circa 1710-1745 "Poor Potter" site in Yorktown, VA (Barka 2004:42). The fabric of the Smuttynose specimen is a much deeper red than the examples from Yorktown, which suggests that this particular kiln is not the place of its origin. It does, however, suggest that the Smuttynose piece may have originated in the Chesapeake, perhaps as part of a yet-unrecognized vernacular ceramic tradition. If this is indeed the case, then its presence on Smuttynose attests to a trade link between the Chesapeake and New England, with fish and lumber-for-tobacco being the most likely candidate. Furthermore, the purchase of a Chesapeake ceramic piece by a New England fisherman is almost certainly due to personal preference; the marbled decoration would have stood out from the New England-made vessels and bears a close resemblance to North Italian Marbled Slipwares, perhaps acting as a poor man's substitute for the more expensive ware.





**Figure 5.12.** Smuttynose Island, Maine: Possible Chesapeake Redware CEW Dish.  
Artifact Number 9271. Image by the author.

The final new ware type to appear in the late period on Smuttynose Island is Westerwald stoneware (Figure 5.13.). Three Westerwald mugs, comprising seven percent of the late-period assemblage, were identified in the collection. Westerwald can occur in early 17th-century contexts, but both the decorative elements and excavation contexts of the three identified vessels place them in the latter half of the century. This is in contrast to the other common stoneware of the 17th century, Rhenish Brown or Bellarmine, which is found in both periods in almost equal proportions (Figure 5.14.). The absence of Westerwald in the early period, and its presence in the late period is most likely a function of the increase in demand for beverage consumption vessels rather than any change in availability or other large-scale processes.



**Figure 5.13.** Smuttynose Island, Maine: Westerwald CSW Mug. Artifact Numbers

9271.1, 12025.7, 11498, 11495. Image by the author.

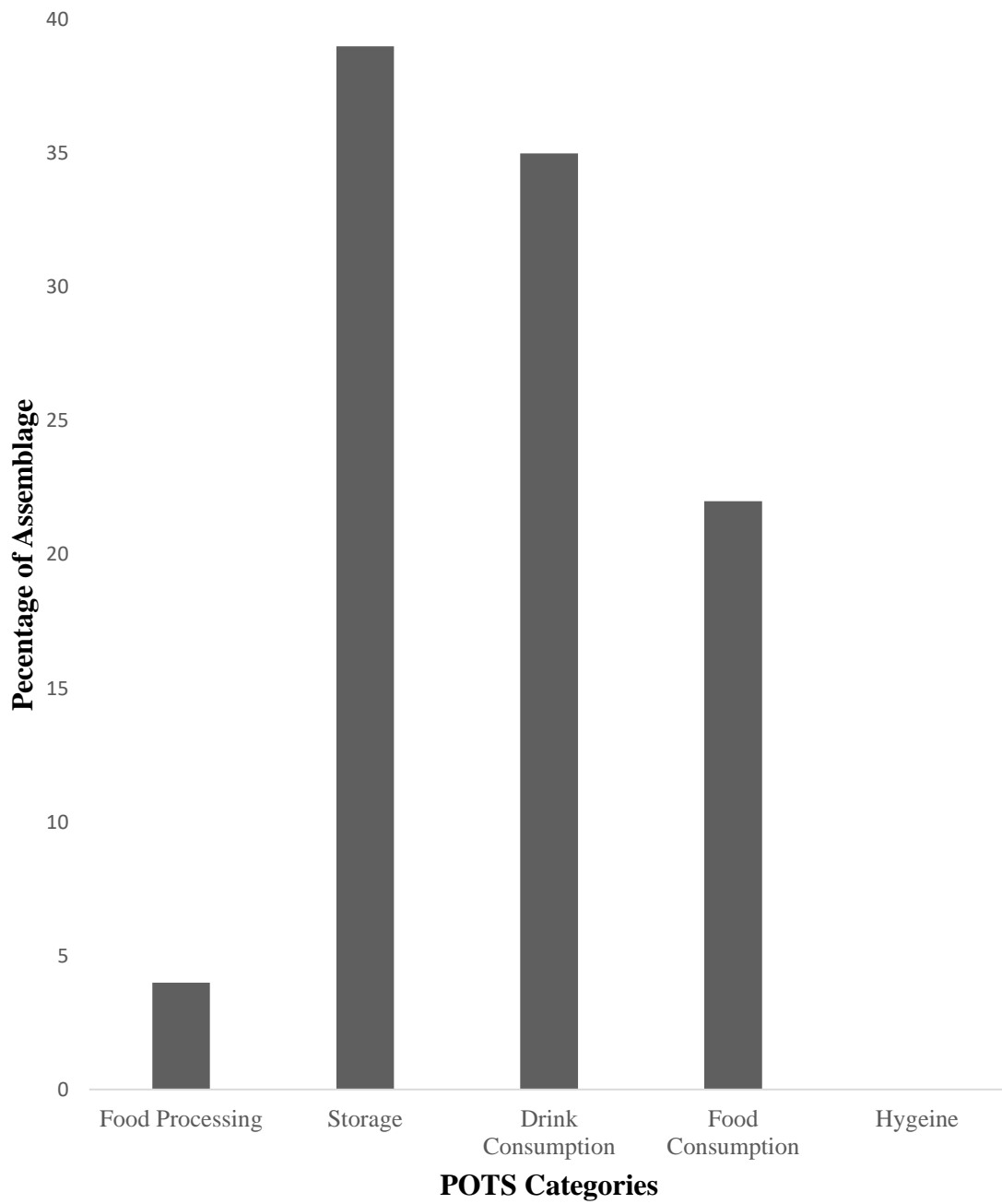


**Figure 5.14.** Smuttynose Island, Maine: Rhenish Brown CSW Bottle. Artifact Numbers 1838.1, 1838.2, 7777, 11462, 9108. Image by the author.

### Section 5. III. 3. Sagadahoc Island

The Sagadahoc Island collection consists of 26 vessels; this is divided into 6 different ware forms and 8 ware types (Table 5.2.). The relatively small number of ware forms and types speaks volumes about the differential access to consumer goods between Smuttynose Island, with its geographic proximity and economic ties to Massachusetts Bay, and the comparatively remote, frontier location of Sagadahoc Island. At the same time, however, the historical and archaeological evidence indicates that Smuttynose Island was more intensely occupied, and for a longer period of time. Sagadahoc Island, therefore, is probably more typical of a fisheries site, a notion supported by the remaining four sites in this study.

The distribution of vessel use is presented in Figure 5.15. It shows a distribution similar to that from the late period on Smuttynose Island, with an emphasis on storage and drink consumption vessels and smaller quantities of food consumption and processing vessels. On Smuttynose Island and on Newfoundland sites, the large percentage of drink consumption vessels has been attributed to a vernacular hospitality industry. On Sagadahoc Island, however, this interpretation does not fit the excavation context. Of the seven mugs identified in the collection, six are known to have come from fort-related contexts while the last one is a surface find which likely originated from the fort as well; these are probably related to the recreational activities of the nine-man garrison.



**Figure 5.15.** Sagadahoc Island, Maine: Potomac Typological System Category Distribution.

**Table 5.2a.** Sagadahoc Island, Maine: Ceramic Vessel Forms

<i>Vessel Form</i>	<i>Number</i>	<i>Percentage</i>
Dish	5	22%
Jar	1	4%
Milk Pan	1	4%
Mug	8	35%
Pot	8	35%
Unknown	3	-
TOTAL	26	100%

**Table 5.2b.** Sagadahoc Island, Maine: Ceramic Ware Types.

<i>Ware Type</i>	<i>Number</i>	<i>Percentage</i>
Bristol CEW	4	16%
North Devon Gravel CEW	1	4%
North Devon Smooth CEW	2	8%
North Devon Sgraffito CEW	1	4%
Portuguese Redware CEW	1	4%
Unidentified Redware CEW	13	52%
TGEW	3	12%
Unknown	1	-
TOTAL	26	100%

Besides the seven mugs, the Sagadahoc Island assemblage includes eight pots, five dishes, and one each jar, milkpan, and bottle; as well as three vessels with an unidentified form. Overall this represents a very generic and utilitarian assemblage, with a large number of storage vessels attesting to the remote location of Sagadahoc Island and the need to store food through the Maine winter. The milkpan is an interesting element of the assemblage, however. Within the study sample, milkpans are also found only on two other sites, namely Pemaquid and Clear's Cove. As its name suggests, the form is traditionally associated with dairying activities, such as the scalding and cooling of milk (Beaudry et al 1983:35). At Pemaquid and Clear's Cove, this is very likely the reason for the form's presence.

While it is possible that the Sagadahoc specimen was also used for dairying, the context from which the milkpan was recovered (from a midden located in the middle of the fortified compound) would suggest that it was being used for a different purpose. Use of milkpans for non-dairy activities has been noted on other sites, such as the circa-1624 brewhouse in Ferryland, Newfoundland (Clausnitzer 2011:81; Clausnitzer and Gaulton 2013:10). In that structure, the presence of milkpans was interpreted as the result of their use in the brewing process, which required periods of cooling and fermentation. Milkpans, while not ideal, would have served adequately in the lack of more specialized equipment (Clausnitzer 2011:81). It is very likely, therefore, that the Sagadahoc milkpan served a function other than the one it was designed for, such as washing or general food preparation.



The generic and utilitarian nature of the ceramic assemblage is reinforced by the limited number of ware types. The highest-status ware type from the Sagadahoc assemblage is tin-glazed earthenware, with three vessels (twelve percent) identified in the collection. The only other higher-status ware type, which still represents at best a middling status, is a single example of North Devon Sgraffito. Four vessels are of the Bristol slipware type, and there is also a single Rhenish Brown CSW bottle in the assemblage.<sup>12</sup> The remaining vessels are coarse red earthenwares, including two North Devon Gravel pots, a North Devon Smooth vessel of unknown form, a Portuguese Redware jar, and thirteen redware vessels of unknown origin. Taken as a whole, it is obvious that the primary considerations behind this assemblage were cost and utility, and possibly reflect a limited access to consumer goods. The higher-status items, such as the tin-glazed and sgraffito vessels, may represent the personal belongings of the commander of the fortified compound from which they were recovered, or one-time purchases by the island's fishermen. Baker also notes that the Bristol slipware, generally seen as a fairly utilitarian ware, was new to the Maine frontier in the 1680s and would have been seen as stylish at that time (Baker 2012:12).

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<sup>12</sup> It should be noted that it is likely that more than one Bellarmine as well as a couple of Westerwald vessels were recovered during excavation as numerous fragments are listed in the artifact catalogue. The author does not recall seeing these fragments during his examination of the collection. Whether this is because the fragments were overlooked or were not stored with the main part of the collection is unknown, and unfortunately at the time of writing the author did not have access to the collection in order to reexamine it. However, it is unlikely that the addition of any vessels from those fragments would significantly alter the interpretation given here.

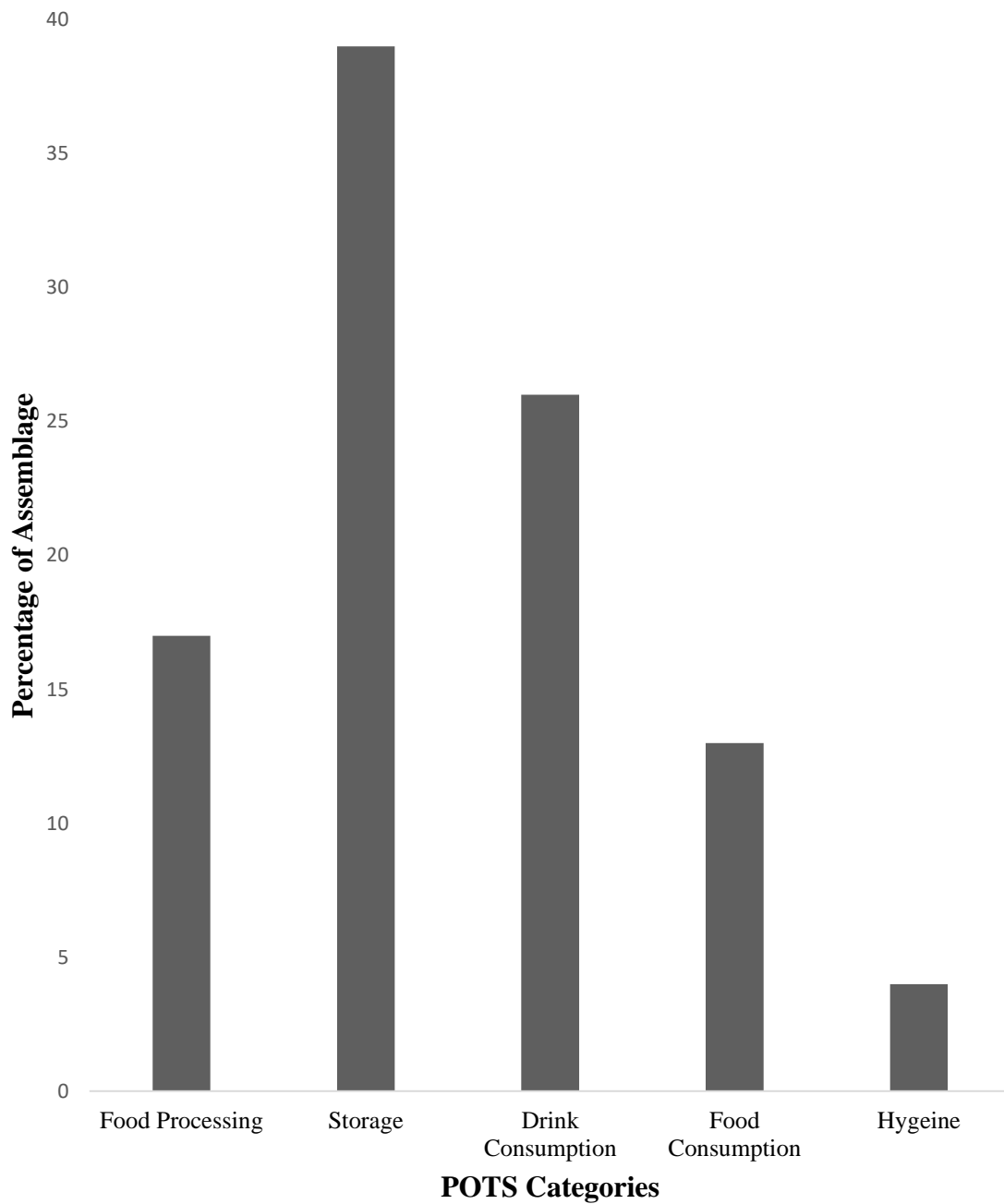
#### Section 5. III. 4. Colonial Pemaquid

Slightly larger and more diverse than the Sagadahoc Island assemblage, the Pemaquid assemblage contains twenty-seven vessels, in ten forms and eight ware types. The distribution of these vessels via POTS categories is presented in Figure 5.16, while the distribution of vessel forms and ware types are in Table 5.3. By and large, the Pemaquid assemblage is similar to the one from Sagadahoc Island in terms of ware types, but differs from both Sagadahoc and Smuttynose Island in terms of vessel distribution. This suggests that the planters had a different economic strategy than the occupants of Smuttynose and Sagadahoc Islands.

Before going deeper into the ceramic analysis, it is necessary to reiterate the biases and shortcomings of this collection. As mentioned previously, the excavations at Colonial Pemaquid were pioneering in many ways for Maine historical archaeology. The discipline itself was still in its infancy, and the excavations were supervised by a geologist with no formal archaeological training, using unskilled, if enthusiastic, local labor. As a result, there was less control over the excavation and data recording was not to the standards expected in more recent excavations. The collection chosen came from what was interpreted by Camp as two separate structures, with Structure 5 replacing Structure 10 following a fire or other destructive event (Camp 1975:7-8). The following interpretation of the ceramics, on the other hand, uses the interpretation discussed previously, namely that Structure 5 and Structure 10 are in fact the same structure.<sup>13</sup>

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<sup>13</sup> The interpretation of the architecture presented in Section 5.II.4 adds a third structure to this building, namely Structure 11; however, the possible connection between Structure 5/Structure 10 and Structure 11



**Figure 5.16.** Colonial Pemaquid, Maine: Distribution by Potomac Typological System Category.

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were not realized at the time of the analysis of the material culture assemblage, and the collection was not available for further analysis at the time this dissertation was being written.

**Table 5.3a.** Colonial Pemaquid, Maine: Ceramic Vessel Forms

<i>Vessel Form</i>	<i>Number</i>	<i>Percentage</i>
Cook Pot	1	4%
Cup	3	11%
Dish	3	11%
Galley Pot	1	4%
Jar	4	15%
Milk Pan	4	15%
Mug	2	7%
Pot	4	15%
Punch Bowl/Basin	1	4%
Tall Port	4	15%
TOTAL	27	101%

**Table 5.3b.** Colonial Pemaquid, Maine: Ceramic Ware Types.

<i>Ware Type</i>	<i>Number</i>	<i>Percentage</i>
Bristol CEW	3	12%
North Devon Gravel CEW	3	12%
North Devon Sgraffito CEW	1	4%
North Devon Smooth CEW	5	20%
Unidentified Redware CEW	7	28%
Spanish Heavy CEW	2	8%
TGEW	3	12%
Westerwald CSW	1	4%
Unknown	2	-
TOTAL	27	100%

Note: Percentage totals of greater than 100% reflect rounding errors.

While the overall distribution pattern is similar to the late period on Smuttynose Island and at Sagadahoc Island, there are several differences. Notably, the percentage of food processing vessels is four times greater than that of either of the other two New England sites; in fact, the only other site to reach similar proportions is Clear's Cove in Newfoundland. The proportion of storage vessels is similar to the other two New England sites; compared to those sites, however, the percentage of both drink and food consumption vessels is smaller. Pemaquid is also one of two sites (the other being the Goodridge site) from which hygiene vessels were identified. In the case of Pemaquid, it is a single small galley pot, which once contained an ointment or similar product. Food processing vessels from the site consist entirely of milkpans, with 4 (17 percent) identified in the assemblage. In contrast, on Smuttynose Island, the food processing vessels consist of two bowls, which are just as likely consumption vessels, and Sagadahoc Island has a single milkpan, which due to its excavation context is likely to have been serving a non-dairying purpose. At Pemaquid, however, there is no reason to interpret the milkpans serving as anything other than their traditional function. The indication, therefore, is that the inhabitants of the structure at Pemaquid were engaged in dairying activities as well as fishing.

This interpretation is supported by both the location of Pemaquid and by the historical record. It was previously discussed that the inhabitants of Pemaquid had begun to diversify their economic base during the 17th century, with farming, livestock rearing, and lumber industries appearing throughout the Sagadahoc region (De Paoli 2001:108-125). Several of the more prominent fishermen, such as John Dollen, also owned

livestock in addition to their fishing activities (De Paoli 2001:136). Pemaquid is also situated on the mainland, at the tip of a narrow peninsula which offered greater access to land and water resources. This is in stark contrast to the relatively small and rugged offshore islands of Smuttynose and Sagadahoc. In addition, while there is deed evidence that fishermen from both islands own properties on the mainland, there is no indication that their island properties were used for anything other than fishing. The meetinghouse on Smuttynose Island, which was likely used as a tavern during the fishing season, was a communal structure. Thus it should not be surprising that the inhabitants of Pemaquid adopted a mixed economic strategy more aggressively, which could have included the processing of dairy products. The stone-lined cellar of Structure 10 may have even been particularly useful for such activity, providing a cool and relatively secure storage area for milk, cheese, and butter.

Aside from the milkpans, the collection is similar to the patterns established on Smuttynose Island and Sagadahoc Island. Storage vessels dominate, with 4 each tallpots, pots, and jars (15 percent each) present. Again, this attests to the relatively remote location of Pemaquid and the resulting need to store food for extended periods. With the local dairy industry, being able to store the resulting products would be an acute need. The presence of the tall pots also has another connotation in the interpretation of the building, which will be discussed in conjunction with the ware type analysis. Food consumption vessels are more limited in number, consisting only of three dishes and a large hollowware vessel that could be either a basin or punch bowl (or served both functions depending on the needs at the time). This suggests that alternative materials

were preferred for this purpose and that the inhabitants of this structure made use of vernacular foodways requiring few individualized serving vessels. In the same vein, drink consumption vessels are similarly constrained in numbers, with the Pemaquid assemblage having the second-lowest percentage (25 percent) of any of the planter sites being studied. While a low percentage compared to the other sites in this study, it should be noted that it is a percentage comparable to several Newfoundland dwellings and is significantly higher than contemporary sites from the Chesapeake (Crompton 2001:149). This suggests that the Pemaquid structure may also have served as a tippling house.

In terms of ware types, the Pemaquid collection is remarkably similar to the collection from Sagadahoc Island. Common ware types include redware, all three varieties of North Devon earthenware, Bristol slipware, and tin-glazed earthenware. The Pemaquid assemblage contains Spanish Heavy earthenware and Westerwald CSW instead of the Portuguese Redware and the Rhenish Brown CSW bottle from Sagadahoc. It has already been noted that there was Westerwald reported from Sagadahoc and was either missing or overlooked in the collection; similarly, a Rhenish Brown CSW sherd was reportedly found mixed in with the daub layer in Structure 10 (Camp 1975:7).<sup>14</sup>

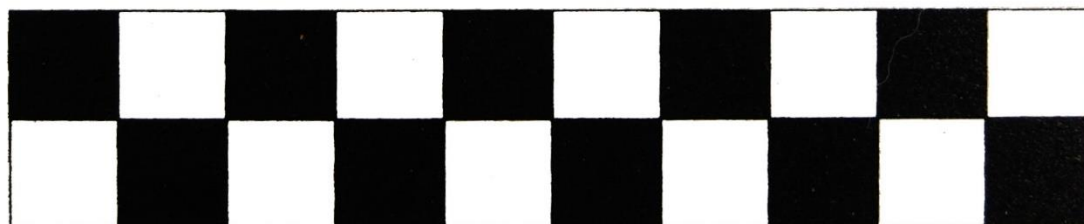
As has come to be expected on these sites, the greatest percentage of vessels recovered from Structure 5/Structure 10 are generic redwares, with seven identified in the collection. This represents 28 percent of the assemblage. While none of these can be definitively linked to a particular source it is not unreasonable to assume that at least a

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<sup>14</sup> Considering the disheveled organization of the Pemaquid collection it is not surprising that this fragment was overlooked during analysis.

couple of these vessels are of domestic manufacture from elsewhere in New England or the English colonies, considering the trade links that Pemaquid had with both Massachusetts Bay and New York. In particular, the redware dish identified in the collection, which shows traces of slip decoration (Figure 5.17.), is very likely a New England-made piece. Aside from the dish, redwares are found as milkpans and storage pots, including one which has molded and impressed decorative elements (Figure 5.18.).





**Figure 5.17.** Colonial Pemaquid, Maine: New England Redware, unknown form. Image by the author.



**Figure 5.18.** Colonial Pemaquid, Maine: Decorated Redware CEW Storage Pot. Image by the author.

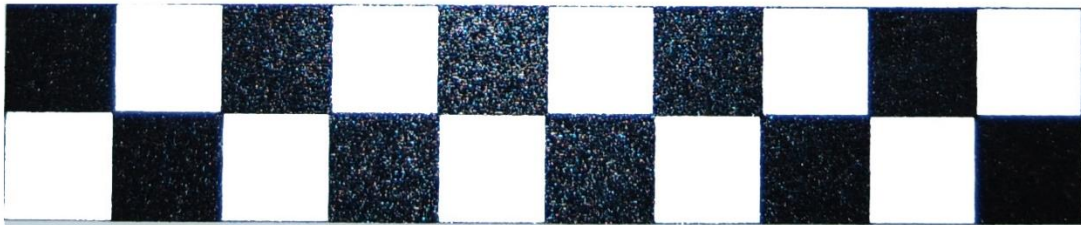
The next most common ware type is North Devon Smooth, with 5 vessels (20 percent) identified within the collection. Four of these vessels are tallpots, which itself is not surprising. However, as mentioned above these have implications for the overall interpretation of the structure. In Camp's initial analysis she posited that Structure 10 was one of the earliest structures from the site, which was burnt in the third quarter of the 17th century, and was replaced by Structure 5, which in turn was burnt in 1689 (Camp 1975:7-8). The presence of the tall pots, three of which are directly associated with Structure 5 and the fourth with Structure 10, suggests a slightly different history. As noted for the Smuttynose Island assemblage, utilitarian North Devon vessels disappear once New England merchants assume control of the local trade and fishing industry, circa 1640. This interpretation is reinforced by the small numbers of these vessels from Sagadahoc Island. It would therefore not be unreasonable to assume that a similar phenomenon occurs at Pemaquid.

Neill De Paoli places the transition from English to Massachusetts Bay control as happening circa 1650 (De Paoli 2001:94). If this is the case, and the association of the tall pots with Structure 5 is correct, then Structure 5 was constructed prior to 1650. If the combined structure is, in fact, Pemaquid's first house, it would have been constructed during or shortly before 1626, and tall pots would have been included as part of the provisions stored there. As the century progressed and the first house transitioned to a private dwelling, the tall pots would have fallen out of use through breakage or for other reasons. Replacement vessels would have originated from places other than the West Country, as the source of supply had shifted to Massachusetts Bay; therefore, the

presence of tallpots in the Structure 5 assemblage is a relic of the original role of the structure and the time lag between acquisition and deposition into the archaeological record.

As for the *terminus ante quem* date, the presence of three Staffordshire Slipware cups or mugs complicates interpretation. As mentioned previously, this ceramic type was a late arrival to the Maine frontier, appearing only after King Philip's War (Baker 2012:12). This immediately creates a contradiction, as King Philip's War began in 1675 and Pemaquid was one of its victims, burning in 1676. That raid surely claimed the Structure 5/Structure 10 dwelling, yet it contains ceramics which did not appear in Maine until after the end of the war in 1678. That the Bristol slipware was present for a fire is clear by the burnt condition of one of the vessels (Figure 5.19.). This could have occurred in 1676 or 1689, however.

There are three possible interpretations for the presence of Staffordshire ceramics and the *terminus ante quem* for Structure 5/Structure 10. The first is that the Bristol material is intrusive to the structure, and instead belongs to one of the later structures. This is a strong possibility, as 18th-century wares, including English White salt-glazed vessels, were identified in the assemblage as well. The second is that for some reason Pemaquid had access to Staffordshire ceramics at an earlier date than the rest of Maine. This seems very unlikely, as this ware does not begin to appear in North American contexts elsewhere until the mid-to-late 1670s (Noël Hume 1969:135).



**Figure 5.19.** Colonial Pemaquid, Maine: Burnt Bristol CEW Slipware Cup. Image by the author.

The third option is that the Structure 5/Structure 10 collection does represent two different occupations of the same structure. If this is the case, however, there is little break in the continuity of the site in terms of artifact types. Furthermore, with the lack of contextual and stratigraphic information for the artifacts, it is impossible to determine which of the ceramic vessels come from the earlier structure (excepting, perhaps, the North Devon material) and which come from the later structure (excepting, of course, the Bristol slipwares). Regardless, it seems likely that the pre-1676 and circa 1677/1680-1689 occupation, if one existed, were related, possibly even being the same family, as several former inhabitants returned to Pemaquid to try and rebuild (De Paoli 2001:156).

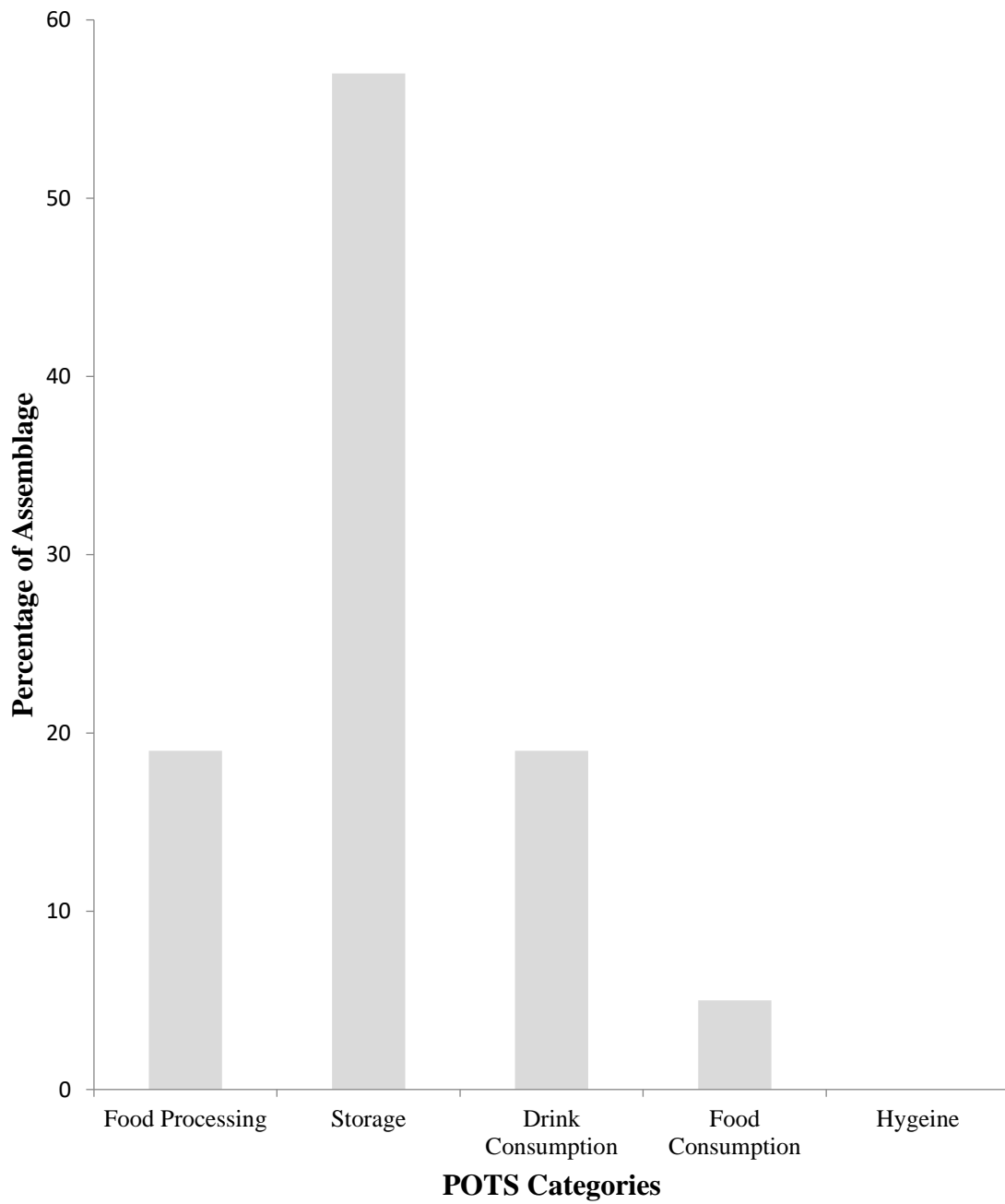
The question of the Bristol slipwares also helps to address whether or not the structure served as a tippling house. Of the vessels in the Pemaquid assemblage, 5 (19 percent) are cups or mugs. Of these, however, three are the Staffordshire Slipware vessels, meaning they are related to the hypothetical second occupation of 1677/1680 to 1689. Again, the lack of contextual information complicates any interpretation, but this would suggest that while the first occupation was concerned with a mixed economic strategy of fishing and dairying and not on tippling. In the same vein, it cannot be said for certain that the second occupation ran a tippling house, but they potentially owned more individual ceramic drinking vessels, and with the presence of Fort Charles and its garrison there may have been more of a demand for such an industry.

Of the remaining ware types, the Spanish Heavy (8 percent) and North Devon Gravel (9 percent) are utilitarian wares which are also indicative of an early occupation date for Structure 5/Structure 10. Interestingly, while on the other sites in this study North

Devon Gravel vessels tend to take the form of storage pots, the three identified from the structure are a jar, a milkpan, and a cookpot. Higher-status wares include 3 (12 percent) tin-glazed vessels and 1 (4 percent) North Devon Sgraffito vessel, which, while not indicating a particularly high status for the inhabitants, does show they were well-off enough to own a couple of nice pieces. The final ware type is Westerwald stoneware, which is more-or-less ubiquitous on sites dating to the same time period.

### Section 5. III. 5. Clear's Cove

The Clear's Cove site, located near Port Kirwan in Fermuese Harbour, is the second multi-component site to be included in this study, following Smuttynose Island. However, unlike Smuttynose Island with its mixed migratory-early settlement context and ambiguities in separating the early and late periods, Clear's Cove has well-defined migratory and planter contexts. The migratory assemblage has a significantly different pattern than that seen in the early period of Smuttynose Island and for the Event 326 assemblage from Ferryland, discussed in Section 5. III. 7. It is split exactly between the food processing and storage categories. This is not surprising, as this component of the collection has been identified as a migratory cookroom since its original excavation (Pope 2005). The distribution by POTS of the ceramic vessels from the planter context at Clear's Cove is presented in Figure 5.20.



**Figure 5.20.** Clear’s Cove, Newfoundland (CfAf-23) Planter Occupation: Distribution of Potomac Typological System Category.



A breakdown of vessel forms and ware types for both components is shown in Table 5.4. Two things quickly become apparent during the migratory period. First, the entire assemblage is composed of North Devon wares, with a high percentage of North Devon Gravel. In a harbor which maintained vernacular connections to Bideford and Barnstaple in Devon, the dominance of these vessels is not surprising (Pope 2004:146-147). Second, just three vessel forms make up the assemblage. These forms are large pipkins/cookpots, tallpots, and storage pots (Figure 5.21.). This particular distribution of wares makes perfect sense, as the primary function of a cookroom is to prepare meals for the crew, which would require larger cookpots and provisions from the ship. Once the food was prepared it was likely served via smaller ceramic vessels such as pipkins and porringers, or in wooden vessels such as trenchers.

**Table 5.4a.** Clear's Cove, Newfoundland, CfAf-23: Vessel Forms

<i>Vessel Form</i>	<i>Residential</i>		<i>Migratory</i>	
	<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>
Bottle	2	10%	-	-
Bowl	1	5%	-	-
Cook Pot	1	5%	4	50%
Costrel	1	5%	-	-
Cup	2	10%	-	-
Jar	2	10%	-	-
Milk Pan	2	10%	-	-
Mug	1	5%	-	-
Plate	1	5%	-	-
Pot	2	10%	1	13%
Tallpot	6	29%	3	38%
Other	1	-	1	-
Unknown	3	-	-	-
TOTAL	25	99%	9	101%

**Table 5.4b.** Clear's Cove, Newfoundland, CfAf-23: Ware Types

<i>Ware Type</i>	<i>Residential</i>		<i>Migratory</i>	
	<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>
Rhenish Brown CSW	2	8%	-	-
Bristol CEW	2	8%	-	-
North Devon Gravel CEW	7	28%	6	67%
North Devon Sgraffito CEW	3	12%	-	-
North Devon Smooth CEW	5	20%	3	33%
North Italian Marble CEW	1	4%	-	-
Portuguese Redware CEW	1	4%	-	-
Unidentified Redware CEW	1	4%	-	-
Spanish Heavy CEW	1	4%	-	-
TGEW	1	4%	-	-
Totnes CEW	1	4%	-	-
TOTAL	25	100%	9	100%

Note: Percentage totals of less or greater than 100% reflect rounding errors.



**Figure 5.21.** Clear's Cove, Newfoundland (CfAf-23): North Devon CEW Fleshpot.  
Artifact Numbers 417e974, 422e1224, et al. Image by the author.

The distribution of POTS categories for the planter context at Clear's Cove is the most distinctive of the residential/planter sites, possessing the largest percentages of food processing and storage vessels and the lowest percentages of drink and food consumption vessels. This suggests that there were differences in the lifeways of the occupants of this site compared to others in Newfoundland. Breaking the categories down to individual vessels may help to clarify what these are. The food processing category is comprised of a bowl, a large pipkin/cook pot, and two milkpans. This is the third site in this study to include milkpans in the assemblage, but as previously discussed there is ambiguity in their interpretation. The single milkpan at Sagadahoc Island was interpreted as being used for a non-dairy activity due to its context, while the four milkpans identified at Pemaquid were interpreted as evidence of a mixed economic strategy which combined fishing with animal husbandry/dairying. The 1677 census of Newfoundland compiled by Sir William Poole includes counts of livestock owned by planters, however, it does not show any cattle in the Fermeuse Harbour at that time. There were cattle in both Renew's and Ferryland (14 and 22 heads respectively), and it not inconceivable that in the 19 years between the census and the destruction of the plantation in 1696 a herd was established in Fermeuse as well (Poole 1677).

Regardless of whether or not the inhabitants of the Clear's Cove site were involved in cattle rearing, the large number of storage vessels shows that, like most 17th-century Newfoundland planters, they were dependent in large part on imported supplies of food. The storage category includes two bottles, two jars, two storage pots, and six tallpots. As all of these are common vessel forms on the sites in this study, not much is

left to be said about them, though the relatively greater percentage of tallpots on Newfoundland planter sites will be addressed in more detail with the Goodridge Site assemblage.

Clear's Cove is the only site in this study to have less than 20 percent of its ceramic assemblage in drink consumption vessels. Of all the other residential/planter sites in this study, the closest is Pemaquid, with 26 percent drink consumption vessels. The Clear's Cove drink consumption assemblage contains a costrel, two cups, and a mug. The small size of the assemblage, due to the limited excavations that were undertaken at the site, adds ambiguity to the data; however, what is available does not lend itself to the tippling house interpretation. Rather, it seems to be the result of the purchase of a few individual consumption vessels for a household.

Placing the Clear's Cove distribution of ceramic use alongside data compiled by Amanda Crompton for a household in Ferryland is also revealing (Table 5.5.). Its proportion of drink service vessels is more similar to dwelling sites in the Chesapeake than it is to sites in Newfoundland. This supports the interpretation that the Clear's Cove inhabitants did not participate to any great extent in tippling, focusing their energy and resources on other activities.

**Table 5.5:** Use of Ceramic Vessels at from Selected Sites, by Percentage Distribution at each Site

<i>Site</i>	<i>Food Processing</i>	<i>Storage</i>	<i>Drink Consumption</i>	<i>Food Consumption</i>	<i>Hygiene</i>	<i>Total</i>
Clear's Cove (n=25)	19%	57%	19%	5%	0%	100%
Ferryland Area B (n=188)	16%	35%	29%	19%	1%	100%
Ferryland Area D (n=292)	17%	43%	23%	13%	3%	99%
Kirke Tavern (n=62)	23%	40%	7%	26%	5%	101%
Renews Dwelling (n=44)	16%	42%	27%	9%	7%	101%
Compton Homelot (n=54)	60%	2%	15%	24%	0%	101%
St. Mary's City ST1-23 (n=90)	37%	10%	7%	42%	3%	99%
St. Mary's City ST1-13 (n=245)	19%	13%	34%	33%	1%	100%
Martin's Hundred H (n=95)	31%	23%	16%	26%	4%	100%
Martin's Hundred B (n=194)	34%	12%	13%	34%	7%	100%
Martin's Hundred A (n=126)	42%	13%	15%	22%	7%	99%

Note: Percentage totals of less or greater than 100% reflect rounding errors.

The only food consumption vessel identified in the Clear's Cove collection is a plate, although a bowl (counted as food preparation for POTS) may have also been used in food consumption. It also is likely that the North Italian Marbled Slipware fragment, which could not be identified as a specific vessel form, represents either a dish or a plate as well. The rarity of ceramic food service vessels lends itself to two interpretations. The first is that alternate materials were preferred for this category, such as wood or pewter, neither of which readily survives in the archaeological record. The second interpretation is that the inhabitants of the Clear's Cove dwelling continued to use vernacular foodways based on pottages, stews, and similar dishes and common consumption vessels instead of more courtly foodways which emphasized individual servings (Deetz 1996:170; Yentsch 1990; 1991). These interpretations are not mutually exclusive, as the consumption of pottages and the like could have made use of wooden trenchers or even loaves of stale bread.

The ware types of these vessels support the last interpretation. The bowl, the plate, and interestingly the mug are all North Devon Sgraffito vessels (Figure 5.22.). Although too badly fragmented to determine if they share decorative motifs, and even if they do not, it is possible that all three were purchased at the same time as a set, perhaps for the head of a household to use while the rest of the household ate from common vessels. In a similar vein, if the North Italian Marbled Slipware vessel was a dish or plate, it probably was seen as a prestige piece, an investment in something exotic and expensive, and proof of the owner's ability to make such an investment.



**Figure 5.22.** Clear's Cove, Newfoundland (CfAf-23): North Devon Sgraffito CEW Plate. Artifact Numbers 422e1407, 422e1404, 417e1354. Image by the author.



The remainder of the assemblage, with the exception of a single tin-glazed cup, is composed of the same sorts of low-cost, utilitarian wares seen on most 17th-century sites. North Devon CEW wares, including seven Gravel and five Smooth vessels, make up the majority of the assemblage. Single examples of Totnes CEW, Portuguese Redware, Spanish Heavy CEW, and generic redware are present, and there are two Rhenish Brown stoneware bottles. The final ware type in the assemblage is the ubiquitous Bristol slipware. Thus, while the presence of a (potentially matched) set of Sgraffito vessels, a North Italian Marble vessel and a tin-glazed cup shows that the inhabitants of Clear's Cove had income to spend on nicer ceramics, they preferred to invest it elsewhere, perhaps in livestock; at the same time, however, they were willing to invest in some of the new and trendy wares of the late 17th-century as well.

#### Section 5. III. 6. The Goodridge Site

The final Newfoundland planter site included in this project is the Goodridge Site in Renews. In total, the 17th-century component of the site produced 43 ceramic vessels. This assemblage included twelve vessel forms and thirteen ware types (Table 5.6.). This makes the Goodridge collection the largest and most diverse of the Newfoundland sites in this study, and the second overall after Smuttynose Island. As the site appears to be the same as the Admiral's Room indicated on James Yonge's 1663 map of the harbor, one may expect an artifact assemblage which suggests a higher-than-average economic status when compared to other planter occupations in Newfoundland.

**Table 5.6a.** Renewals, Newfoundland, Goodridge Site (CfAf-19) Vessel Forms

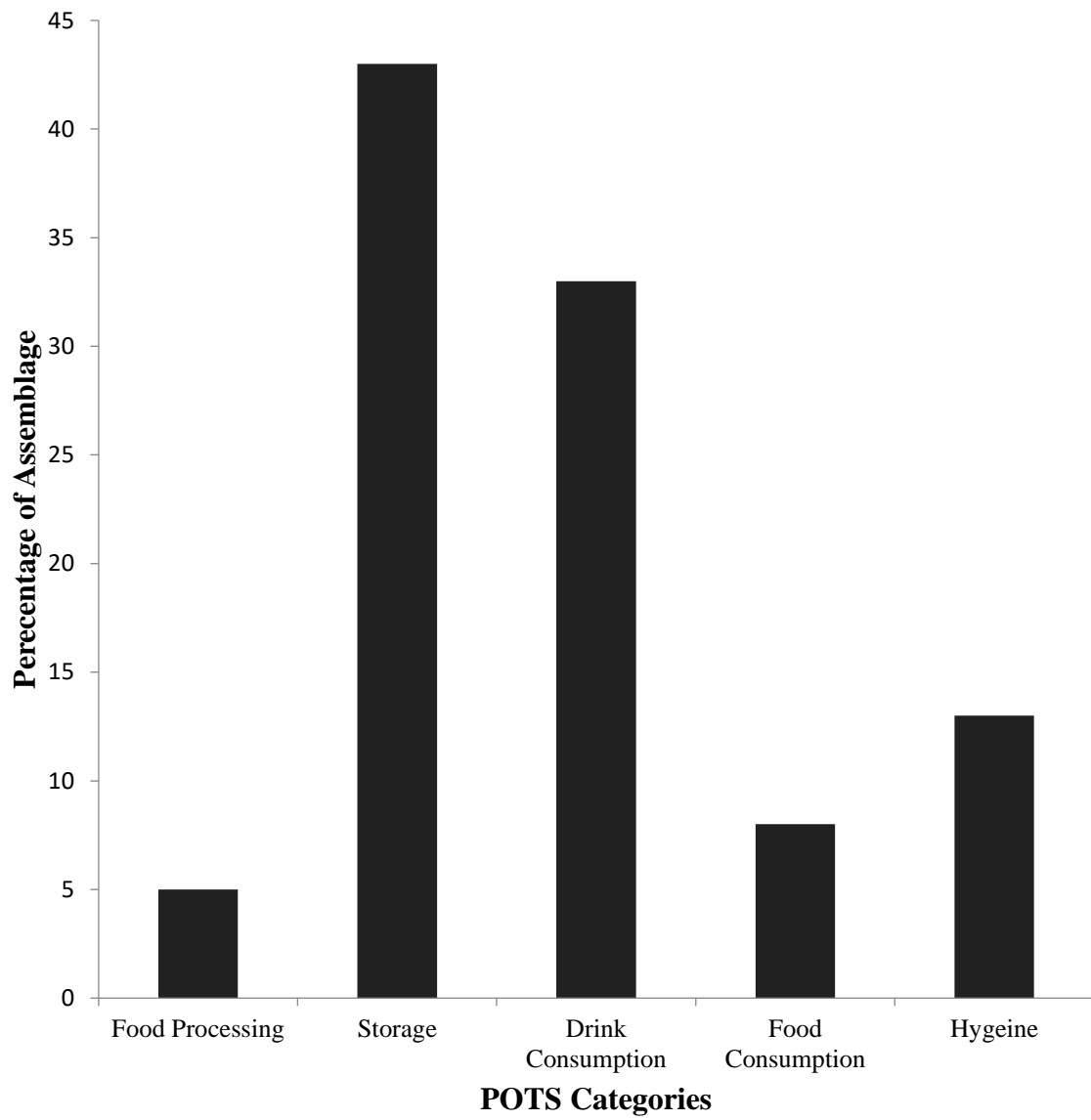
<i>Vessel Form</i>	<i>Number</i>	<i>Percentage</i>
Bottle	1	3%
Bowl	1	3%
Cook Pot	1	3%
Cup	6	15%
Dish	2	5%
Galley Pot	5	13%
Jar	3	8%
Jug	1	3%
Mug	6	15%
Plate	1	3%
Pot	6	15%
Tall Port	7	18%
Other	2	-
Unknown	1	-
TOTAL	43	104%

**Table 5.6b.** Renewals, Newfoundland, Goodridge Site (CfAf-19) Ware Types

<i>Ware Type</i>	<i>Number</i>	<i>Percentage</i>
Rhenish Brown CSW	1	2%
Bristol CEW	3	7%
Donyatt CEW	2	5%
North Devon Gravel CEW	6	14%
North Devon Sgraffito CEW	2	5%
North Devon Smooth CEW	6	14%
North Italian Marble CEW	1	2%
Porcelain RSW	3	7%
Portuguese Redware CEW	3	7%
Spanish Heavy CEW	1	2%
TGEW	6	14%
Totnes CEW	2	5%
Verwood-type CEW	1	2%
Westerwald CSW	6	14%
TOTAL	43	100%

Note: Percentage totals of less or greater than 100% reflect rounding errors.

Vessel distribution by use at the Goodridge site is presented in Figure 5.23, and it follows the pattern so far established on the planter sites in New England, with two notable exceptions. Once again, storage vessels dominate the assemblage, with 43 percent of the identified vessels falling into this category. Drink consumption vessels are the second most common with 33 percent of the assemblage. Of the other three categories, the Goodridge site possesses a similar proportion of food processing vessels as Smuttynose Island and Sagadahoc Island (5 percent at the Goodridge Site and 4 percent at the two New England sites), but less food consumption (8 percent) and a significantly larger proportion of hygiene vessels (13 percent).



**Figure 5.23.** Goodridge Site, Newfoundland (CfAf-19): Distribution of Potomac Typological System Categories.

The storage category contains seventeen vessels, including seven tallpots, six storage pots, three jars, and one bottle. Immediately, a major difference between this sample and the New England samples stands out; namely, a greater number of tallpots. The late period of Smuttynose Island had only three such vessels, while Pemaquid had four and Sagadahoc lacked any at all. The only comparable collection is the early period of Smuttynose Island, which included nine tall pots. In New England, the lack of these vessels on the later-period sites has been attributed to the shift from overseas to local sources of supply following the transition to a Massachusetts Bay-controlled fishery in the 1640s. Conversely, the continued presence of large numbers of tallpots on Newfoundland sites has been interpreted as the result of the continued need for food imported from England and other European sources throughout the 17th century (Crompton 2001:148-151; Pope 2004). It is also safe to say that the presence of these specific vessels, which are predominantly of the North Devon Smooth ware type, also speaks to the continuing trade connection between Newfoundland and the North Devon ports throughout the 17th century.

Drink consumption vessels from the Goodridge site at Renews include six cups, six mugs, and a single jug. It has been mentioned before that the elevated percentage of beverage service vessels on Newfoundland sites has been seen as evidence of a vernacular hospitality industry. The evidence from the Goodridge site certainly supports this, with the large number of individual serving vessels clearly showing that individualized consumption took precedence over communal consumption. While certainly a possibility for a domestic household, the large number of vessels and small

size of most Newfoundland households suggests individual retail as the primary factor in creating this type of assemblage.

The Goodridge site has the largest percentage of hygiene vessels of all the sites in this study; in fact, only two (Pemaquid being the other) of the six sites have any hygiene vessels in their assemblage. While this could be used to say that the occupants of these sites were not very concerned with hygiene, the specific vessel forms do not support such an interpretation. All of the vessels (n=5) in the hygiene category are galley pots, which are vessels of varying sizes used to hold medicinal products, cosmetics, and possibly condiments, and are often found in tin-glazed earthenware (Beaudry et al 1983:37). While a specific interpretation of these vessels is difficult, there are at least two different sizes within the assemblage. This could be interpreted as evidence for different products, perhaps cosmetics or condiments in the smaller containers, and medicinal products in the larger ones.

The remaining two categories of use include just five vessels between them: a bowl and a cookpot in the food processing category, and two dishes and a plate in the food consumption category. Furthermore, stratigraphic evidence and physical attributes of the vessel suggests that the cookpot may relate to earlier (possibly 16th-century) migratory fishing activities in Renew's Harbour rather than the Goodridge site occupation (Mills 2008:67). The small numbers of vessels from these categories can be interpreted in several different ways.

The simplest interpretation is that alternative materials were used for food processing and consumption. The likely candidates are iron, pewter, and (less likely)

silver. In fact, archaeological excavations at another site in Renew's Harbour, a planter's house on the Mount, recovered fragments of two pewter spoons and a pewter goblet (Mills 2000:92-93). While the presence of pewter objects in one structure does not necessarily mean that pewter was being used in another, it is certainly a possibility. Furthermore, pewter itself often does not survive in the archaeological record, rotting away in most burial environments (Martin 2000). There is also the possibility the pewter, as a material with intrinsic value, may have been looted during the French raids of 1696 and therefore never made it into the archaeological record.

Earthenwares in the assemblage attest to the continued dominance of West Country ports and the importance of the migratory fishery in the Newfoundland trade. Both North Devon Gravel and North Devon Smooth wares are amongst the most numerous on this site, with 6 vessels (14 percent) of each type appearing in the assemblage. Interestingly, there are also equal numbers of tin-glazed earthenwares and Westerwald stonewares, suggesting that the inhabitants of the site invested significantly in these wares. The presence of Totnes, Donyatt, and Verwood-type ceramics, the latter two unique to this site in this study, reveal continuing trade connections with ports in south Devon, Somerset, and Dorset (Allan and Pope 1990; Temple 2004). This is supported by John Berry's 1675 census of Newfoundland, which shows ships from Plymouth, Bideford, and Barnstaple fishing out of Renew's (Pope 2004:146-147). Portuguese redware and Spanish Heavy earthenware were also identified in the assemblage, showing that these wares, and their implicit connection to the migratory

fishery, and later the sack trade, continued to arrive in Newfoundland after they disappeared from the New England sites.

Besides the tin-glazed earthenwares mentioned previously, other ceramic types suggestive of an upper-middling class occupation include two examples of North Devon Sgraffito, a North Italian Marble slipware dish, and three porcelain cups. These ceramics are very similar in numbers to the late period assemblage from Smuttynose Island. This suggests that physical proximity to a trade port was not the sole factor in accessibility to consumer goods. While Smuttynose Island may have had an advantage in terms of access due to its proximity to Ipswich, Salem, and Boston, the evidence from the Goodridge site (and other Newfoundland sites) is indicative that the amount of trade to and from Newfoundland as a result of the migratory fishery and sack trade made these wares and other goods equally available to Newfoundland planters who could afford them.

#### Section 5. III. 7. Ferryland Event 326

The collection from Event 326 is unique in this study, as it is the only one which represents a migratory-only assemblage. The other two sites which have migratory assemblages, Smuttynose Island and Clear's Cove, also have extensive residential assemblages. This, combined with indications that the assemblage represents at most one season's occupation of a small area of beach, gives the Event 326 assemblage a significance which belies its small size.



The Event 326 collection consists of eighteen vessels, in seven vessel forms and five ware types, listed in Table 5.7. The distribution of these vessels by use is presented in Figure 5.24. As the graph shows the Event 326 assemblage is overwhelmingly dominated by storage vessels (53 percent), similar to the early period on Smuttynose Island, and for much the same reasons. Also similar to Smuttynose Island, food consumption vessels are the next most populous category, with 24 percent of the collection. Event 326 possesses slightly higher percentages of food processing and drink consumption vessels, but with the small size of the assemblage, this is as likely a result of the mathematics as it is a result of functional differences in the collection.

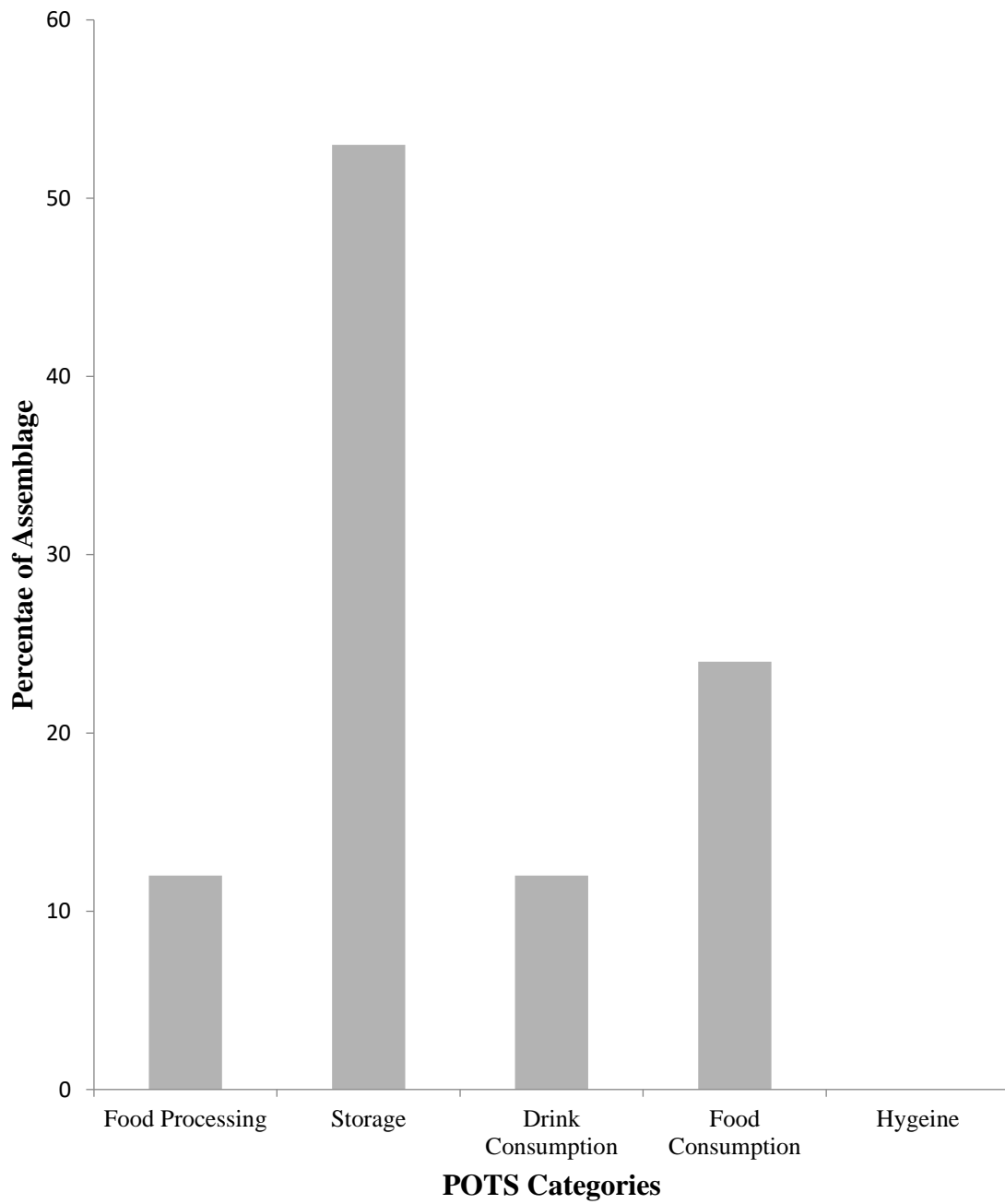
**Table 5.7a.** Ferryland, Newfoundland, CgAf-02, Event 326 Vessel Forms

<i>Vessel Form</i>	<i>Number</i>	<i>Percentage</i>
Bowl	1	6%
Lid (Pipkin)	2	12%
Jug	1	6%
Mug	1	6%
Porringer	3	18%
Pot	1	6%
Tall Pot	8	47%
Unknown	1	-
TOTAL	18	101%

**Table 5.7b.** Ferryland, Newfoundland, CgAf-02, Event 326 Ware Types

<i>Ware Type</i>	<i>Number</i>	<i>Percentage</i>
Rhenish Brown CSW	1	6%
Borderware CEW	6	33%
North Devon Gravel CEW	2	11%
North Devon Smooth CEW	8	44%
Westerwald CSW	1	6%
TOTAL	18	100%

Note: Percentage totals of less or greater than 100% reflect rounding errors.



**Figure 5.24.** Ferryland Event 326, Newfoundland (CgAf-02): Distributions of Potomac Typological System Categories.

Reflecting the predominance of storage vessels within the assemblage, the most common vessel form is the tallpot with eight vessels, which is slightly less than half the assemblage. There is also one other storage pot in addition to the tallpots. The disparity in the numbers of these two forms, particularly when considering that the latter tends to appear in equal, if not larger, numbers on the other sites, is interesting in and of itself. This disparity likely has to do with the vessel forms themselves. As mentioned previously, tallpots possess a baluster shape, meaning that they have a relatively small base and bulge out at the top before coming to a narrow mouth. This form maximized internal volume while minimizing the size of the opening to be sealed. This sealing was done with a combination of a lid and a fat, usually butter, in order to create an air-tight seal (Grant 1983:54). Furthermore, the baluster form was easier to store; due to the shape of the vessel, more could be fit into the same volume as the conventionally-shaped storage pots. On a fishing ship, where space was a premium, this ability would have been greatly appreciated. It is therefore likely that tallpots were the primary ceramic storage vessels. The other storage pot form, meanwhile, served different functions, such as an intermediate container for goods shipped in larger containers, including grains and flour (Mills 2000:108).

It is appropriate to examine the food processing and food consumption together, as more so than on any other site in this study they are explicitly linked. The two processing vessels are represented by lids for tripod pipkins, while food consumption vessels include three porringers and a small bowl. These are clear evidence for the use of vernacular foodways based around pottages, porridges, and stews. These specific vessels

further suggest that at least some of the food preparation was done by individual boat crews, perhaps by reheating pipkins of pottage taken from the main cookroom, and served in porringers and bowls to individuals as they went about their work.

The remaining two identified vessels are a small jug and a mug. The small Rhenish CSW jug is particularly interesting for its unique decorative motifs in this study. The bulbous-bodied vessel has a heraldic crest on the body, and molded lion masks on the neck (Figure 5.25.). These motifs are similar to published vessels dated circa 1580 to 1590, although it is doubtful that this particular vessel is that old (Gaimster 1997:214). The mug is an early Westerwald vessel. Given that these two vessels are executed in decorated stoneware, and represent individualized consumption in a situation where common-use consumption was the standard, it is entirely likely that they are actually representative of personal ownership as opposed to a standard issue for a fishing ship. It is not hard to imagine that members of a ship's crew would invest in personal drinking vessels, be it for personal (hygiene, personal preference, etc.) or social (as a sign of higher status, using a personal stoneware mug instead of a communal wood or horn vessel) reasons. In the case of Frechen jugs, it may have even suggested political or economic allegiances, with the medallion representing a particular family, merchant house, or other entity (Noël Hume 1969:57). The medallion on the Ferryland Event 326 example, however, resembles the Arms of Amsterdam, a relatively common symbol for the time period and therefore not necessarily a sign of allegiance or sympathy for the Dutch.



**Figure 5.25.** Ferryland Event 326, Newfoundland (CgAf-02): Crested Rhenish CSW Mug. Artifact Number 312722. Image courtesy of Barry Gaulton.

Aside from these stonewares, the ware types from Event 326 are remarkable if only for their utilitarian nature. In order of decreasing prevalence, the collection is composed of North Devon Smooth (44 percent), Borderware (33 percent), and North Devon Gravel (11 percent) wares. For a seasonal, industrial occupation this is not surprising, and it shares strong similarities with the early Smuttynose Island assemblage. Interestingly, the collection shows that different ware types were used for specific purposes. The North Devon wares are all storage vessels, while the Borderware vessels are all related to food preparation and consumption. While this is mostly the result of the differences in the industries themselves, it is worth noting that pipkins and porringers were also produced by the North Devon potteries, suggesting some level of consumer choice by the outfitters of this particular fishing crew (Grant 1983:136).

#### Section 5. IV. Glassware

##### Section 5. IV. 1. Overview

Compared to the large and diverse number of wares and forms in the ceramic assemblage for this study, the glass assemblage is significantly more constrained in numbers and forms. In total, the collection contains just 39 identified vessels, and 2 of the study collections (Ferryland and Sagadahoc Island) did not produce any diagnostic glass sherds. At first glance, this appears to limit the interpretive utility of the glass assemblage; however, in this case, what is not present is just as informative as what is. Glasswares in the 17th century were often a sign of conspicuous consumption or

consumption for consumption sake (Burke 1993:149; Willmot 2002:32). With the lack of gas kilns, mechanical blowers, and other elements of the modern glass industry sets of matched glassware could be expensive, and changing tastes could render a once-fashionable set of glassware outmoded in short order, thus necessitating its replacement (Willmot 2002:32).

The sites for which glass vessel lots could be defined produced between four and thirteen vessels each. The New England sites produced more overall (22 of the 39), but the Goodridge site and Smuttynose Island both produced 13, so the distribution of these vessels is more even than the ceramic vessels. In large part, the glass vessels were sorted into lots and identified to form only. No dating was attempted on the glass vessels, as there was not enough of each vessel to use dating typologies such as that developed by Wicks (1999a; 1999b). With chronological markers from the historical record, ceramic assemblages, and smoking pipes, this is not detrimental to the study, nor is it necessary to answer the research questions. The methodology used for assigning vessel lots is similar to that used for the ceramic assemblages. Diagnostic fragments (rims, necks, bases, etc.) were separated from the primary assemblage, cross-mends found, and their form identified. Rims/neck and bases from the same bottle types were paired as possible; although it is unlikely that these pairings are in fact from the same bottle, the presumption is that since each bottle would have produced one of each anyway this would prevent an artificially inflated total, and therefore be a conservative estimate of the MNV for glass bottles. Any other interesting or interpretively useful glass was also separated for analysis as well.



When describing the assorted vessels, three general terms were used to describe bottles. *Wine bottle* is used to describe both shaft-and-globe bottles, which are bottles with a bulbous, globular body and an elongated neck of varying length, and onion bottles, which share the bulbous body form but which have flatter bases and shorter necks. *Case bottles* are square in footprint, tall in relation to their depth, and come in various capacities. The final category of bottle is *pharmaceutical*, which are small bottles of various shapes, which contained tinctures, ointments, and other medicinal mixtures. This category proved rare on the study sites, possibly due to the smaller and more fragile nature of these bottles. Other vessel forms were identified as necessary, based on published studies.

#### Section 5. IV. 2. Smuttynose Island

From the fairly large glass assemblage from Smuttynose Island, thirteen vessel lots were identified. Compared to the ceramic assemblage from the same site, this is a very small number, but it is more in keeping with the remaining sites in both number and form. Whether this is a function of preservation or excavation bias, a result of the conservative methodology in assigning vessel lots, or reflective of other variables is unknown. It does suggest, however, that the Smuttynose Island residents invested more heavily in ceramic vessels, possibly due to the relative fragility of glasswares versus ceramics.

As with the ceramics, it is necessary to divide the glass assemblage between the migratory and residential periods, as well as identify them by form and function. Using the same methodology as with the ceramic assemblage, a total of three vessels were assigned to the migratory period, eight to the residential period, and there were two whose context is too ambiguous to assign to a specific period. In terms of vessel forms, eight were identified as case bottles (six from the residential period and two from the migratory period), four are wine bottles (three and one respectively), and the last vessel is tentatively identified as a goblet or wine glass from the residential period (Figure 5.26.). The much greater percentage of glass in the residential period, and in particular the presence of a glass drinking vessel, is not surprising, for as with the ceramics the permanent occupation of the islands permitted the acquisition of more numerous and less durable goods. The low percentage of drinking vessels indicates that the residents were still more likely to invest in more durable goods, including ceramics (as has been seen in the previous section), wood, horn, and possibly pewter, though no examples of the last three were recovered archaeologically.



**Figure 5.26.** Smuttynose Island, Maine: Wine Glass Stem. Artifact Number 7953. Image by the author.

The remaining twelve vessels, though of two different forms variously described as gin and wine bottles, serve the same storage function. Like ceramic storage containers such as tall pots, glass vessels were often recycled for another purpose or use, with examples, recovered that contained residues from products as varied as milk and cherries (Kelso 1984:157). Additionally, as with the ceramic storage vessels, it is likely that these bottles, once emptied of their original contents, were reused as kitchen storage and possibly serving vessels, with bulk storage being handled by casks or hogsheads. Indeed, it is difficult to imagine that merchants such as George Walton, a Portsmouth merchant who was fined in 1650 for selling excessive amounts of alcohol to the inhabitants of Star Island, transported his goods in small, relatively fragile glass vessels, when a wooden cask would be a more efficient and more durable means of transportation (*NHP* (40):83).

As mentioned previously, Lauren Silverstein's 2012 honors dissertation used the glass assemblage to examine the socio-politics of trade patterns on Smuttynose Island. Unfortunately, but unavoidably, her conclusions are strongly influenced by the traditional Shoals historiography, which presents the inhabitants of the Isles as apostates who controlled their own trade, creating significant doubts in the validity of some of her conclusions. The core of her work, which was the exposure of clear glass to ultraviolet light in order to identify impurities in the metal, and therefore their country of origin, is solid and quite useful and indicates that the wine glass fragment is not of English origin (Silverstein 2012:188).<sup>1</sup> She does not attempt to identify its country of origin beyond that,

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<sup>1</sup> While the specific piece in question is not singled out, the overall lack of lead (the marker for English manufacture, according to her research) in the sample from its context leads to the conclusion that the piece is not English in origin.

but visual attributes suggest that it may be a Dutch *à la façon de Venise* piece. Once again, this speaks to the wide-ranging, multinational trading networks of the 17th-century fisheries, of which the Isles of Shoals was but one small part.

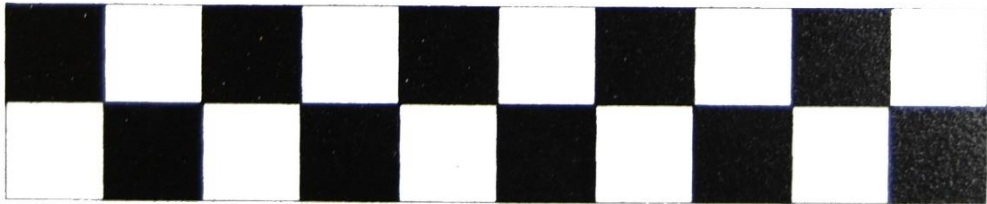
#### Section 5. IV. 3. Sagadahoc Island

Unfortunately, the artifact assemblage from Sagadahoc Island lacked any diagnostic glass fragments, though body sherds from wine bottles, case bottles, and pharmaceutical bottles were noted. As a result of the lack of diagnostic fragments, no vessels were formally identified and numbered. It is likely that the small scale and limited scope of the excavation on the site is the reason for this lack of diagnostic material. The excavations also recovered small quantities of window glass, suggesting that at least one of the structures on the island had glazed windows.

#### Section 5. IV. 4. Colonial Pemaquid

The excavation of Structures 5 and 10 at Pemaquid produced a total of eight glass vessels, which is neither an extraordinarily high or low number when compared with other sites in this dissertation. Pemaquid's assemblage is unique in other ways. First, of the eight vessels, three are pharmaceutical types. Of the remaining five vessels four are wine bottles, one is a case bottle, and one appears to be the base of a small drinking vessel. Both this last vessel and one of the wine bottles warrant further examination.

The presumed drinking vessel is represented by a mostly-intact base approximately 6 cm in diameter (Figure 5.27.). The metal is a grayish color, though there are swirls of a darker, almost purple, color within it. It seems likely that this is the result of impurities in the glass and manufacturing process, rather than intentional decoration. Much as with the Smuttynose Island specimen, this piece is most likely Dutch in origin. Its significance is not in its origin; rather, it is in the fact that on a site where the ceramic collection suggests a preference for plain, inexpensive utilitarian ceramic wares someone decided to invest in a relatively fragile glass drinking vessel. This may have been the head of a household who invested in a nice glass for his use, or someone of some standing in the Pemaquid community looking to demonstrate his status through the use of such a fragile and relatively expensive object.



**Figure 5.27.** Colonial Pemaquid, Maine: Glass Drinking Vessel base. Image by the author.

One of the wine bottles is unique in that it appears to be made from a dark blue glass instead of the more typical dark green (Figure 5.28.). If this is indeed the case and not a result of weathering, it is possible evidence for the documented trade between Pemaquid and French planters. Pemaquid served as the *de facto* border between the English and French spheres of influence in northern New England, and Abraham Shurt amongst others carried on an active trade with his French neighbors. Blue glass bottles, particularly case bottles, are not uncommon on French colonial sites dates from the latter half of the 18th century (Noël Hume 1969:69). However, the bottle from Pemaquid is clearly a 17th-century wine bottle of the onion bottle type. There are known examples of 17th-century wine bottles which tend towards a dark blue rather than a dark green color, however; furthermore, there are examples of glass that has been exposed to high temperatures (such as in a building destroyed by fire) taking on a blueish color (Gaulton pers. com.; Lindsey 2015). This, combined with the relative weakness of the French glass industry in the 17th century, suggests this bottle is of English or, less likely, Dutch origin, and was present when the Pemaquid structure burnt.





**Figure 5.28.** Colonial Pemaquid, Maine: Blue Glass Wine Bottle Fragment. Image by the author.

#### Section 5. IV. 5. Clear's Cove

Clear's Cove, like Smuttynose Island, is a multi-component site. Unlike Smuttynose Island, however, the two components are distinct and readily separated, without the ambiguity seen in the Smuttynose Island assemblage. At first glance, the glass assemblage seems, for lack of a better word, lackluster in both size and diversity. The assemblage for Clear's Cove numbers just four vessels, two each of case bottles and wine bottles. Both wine bottles and one of the case bottles are from the planter component, and the second case bottle was found in association with the migratory cookroom. All are associated with the transportation, storage, and consumption of alcohol, and all were likely reused following the consumption of their original contents.

The small number of bottles and the lack of identified glass drinking vessels does lend support to the interpretation that the inhabitants of the Clear's Cove site were not strongly engaged in the vernacular hospitality industry common in Newfoundland. The bottles show that they purchased and consumed alcohol, but not at the scale that a household engaged with the hospitality industry would have. Furthermore, the lack of glass drinking vessels supports the notion that the occupants preferred to invest their money into other activities, such as fishing and possibly dairying. Their North Devon Sgraffito ceramics were their prestige pieces- there was no need to invest in more expensive, less durable glassware.

#### Section 5. IV. 6. Goodridge Site

The Goodridge site assemblage contained thirteen identifiable glass vessels, all of which are wine bottles. Other than the absence of case bottles, which may be a result of preservation bias or evidence of a preference for wine to the exclusion of other liquors, there is not much outstanding about this particular assemblage. The large number of wine bottles certainly supports the interpretation that the Goodridge Site inhabitants operated a tippling house as part of their economic strategy, while the lack of glass drinking vessels can almost certainly be attributed to the high percentage of ceramic examples, which include several high-status objects. These were likely supplemented by cheaper vessels of wood and horn for tippling house customers.

#### Section 5. IV. 7. Ferryland Event 326

The migratory assemblage recovered from Event 326 at Ferryland included just nine fragments of glass and had no diagnostic fragments. While it is possible that this material does represent at least one case bottle and one wine bottle in use by the migratory crew, there is also the possibility that it is intrusive from the fill layer which capped the deposit.

## Section 5. V. Smoking Pipes

### Section 5. V. 1. Overview

Clay smoking pipe fragments are one of the most common artifacts recovered from 17th-century archaeological sites. This is a result of the near-universal consumption of tobacco in the early-modern Atlantic world and the fragile, cheap, and disposable nature of the pipes themselves. The 6 sites being studied are no exception, producing nearly 3,700 diagnostic stem fragments (i.e. stems with a measurable bore), and numerous other diagnostic elements (maker's marks, bowls, decorative elements, etc.). In terms of raw numbers, the total is even greater; Smuttynose Island alone produced 11,290 smoking pipe fragments in total, with 8,399 of those fragments coming from the study area. For the purposes of this paper, however, only diagnostic fragments will be considered.

The organization of this section will deviate from previous sections. Instead of an individual analysis and interpretation of each site, all six sites will be considered together. The first part will address stem-bore and other mean dating methods. The discussion will seek to avoid a debate on the pros and cons of such methods, which are readily available in other publications (Alexander 1979; Deetz 1987; Noël Hume 1963; Oswald 1975; Walker 1965). Rather, it will compare the mean dates in the broadest possible relative terms, identify some of the biases which affected the dates, and what conclusions can be drawn from these. The second part will briefly discuss maker's marks and trade

connections, and the final part will examine a class of pipe unique (for this study) to Smuttynose Island and Sagadahoc Island; namely, red clay New England and Chesapeake pipes.

## Section 5. V. 2. Mean Dating

Table 5.8 presents the mean bore measurement, standard deviation, the mean bore date, the date range established by the standard deviation, and the mean bowl date wherever possible. The mean bore date was calculated using Lewis Binford's formula, which was chosen over other available formulas due to its ubiquity in archaeological literature (Binford 1962). The mean bowl date was calculated using the formula developed by Seth Mallios (Mallios 2005). The decision to use the mean bowl dating as the secondary methodology was prompted by two factors. First, it uses a different set of data, namely *terminus post quem* and *terminus ante quem* dates for pipe bowl forms. In contrast, the other mean-bore formulas are either also derived from Harrington's original 1954 histogram, or were created using a similar set of data (Harrington 1954; Hanson 1968; Heighton and Deagan 1971). Second, the dating of pipe bowls is considered more accurate than mean-bore dating (Mallios 2005). As such, mean bowl dating can be perceived as being more accurate and therefore a potential check on the reliability of the Binford dates (Mallios 2005:89). Standard deviations for the Binford formula results are also included as a check on the dates; in theory, a standard deviation of one or less indicates a tightly clustered set of bore sizes, which increases confidence in the mean date established by the Binford formula.

**Table 5.8: Mean Bore Dating Results for Study Sites**

	<i>Mean Bore</i>	<i>Standard Deviation</i>	<i>Mean Bore Date</i>	<i>Date Range</i>	<i>Mean Bowl Date</i>
<i>Smuttynose Island (Early)</i>	7.22	0.65	1652	1620s - 1670s	1655
<i>Smuttynose Island (Late)</i>	6.88	1.15	1669	1620s - 1710s	1656
<i>Sagadahoc Island</i>	6.9	0.99	1668	1630s - 1700s	1686
<i>Pemaquid Village</i>	6.48	1.22	1684	1640s - 1720s	1690
<i>Clear's Cover (Migratory)</i>	7.13	0.46	1659	1640s - 1670s	-
<i>Clear's Cove (Planter)</i>	6.43	0.64	1686	1660s - 1710s	1697
<i>Goodridge Site</i>	6.19	1.02	1695	1650s - 1730s	1700
<i>Ferryland Event 326</i>	7.3	0.71	1653	1620s - 1680s	1632

Eight Binford dates were calculated, one each for Sagadahoc Island, Pemaquid, the Goodridge Site, and Ferryland Event 326; and one each for the migratory and planter components on Smuttynose Island and at Clear's Cove. While all eight dates fall in the 17th century, as they should, there are immediately obvious issues with almost all of them. To start, the dates for the migratory assemblages from Ferryland and Smuttynose Island are much too late, particular for the former; the date for the migratory component at Clear's Cove is more reasonable, especially considering its low standard deviation of .46. By comparison, calculating mean and standard deviation for Harrington's original histogram gives results of 7.07 and .43 respectively. This strengthens the interpretation of the Clear's Cove migratory component dating to the middle decades of the 17th century.

The standard deviation for the other two migratory components are higher, .65 for Smuttynose Island and .71 for Ferryland. On Smuttynose Island, this could be attributed to the coarse separation of the migratory and residential components, but for the Ferryland collection, this explanation is less plausible, considering the isolated nature of the deposit and its short depositional period. Rather, both the later mean date and higher standard deviation is more likely the result of previously-identified problems with mean-bore dating on both Newfoundland and New England sites; these are likely to be contributing to the skewed dates for Smuttynose as well (Camp and Bradley 1994:104, Gaulton 2006:42).

The results for four of the five planter components also do little to inspire confidence in the calculated dates. Smuttynose Island, Sagadahoc Island, Pemaquid, and the Goodridge Site all have standard deviations close to or exceeding 1, with Sagadahoc

being the lowest at .99 and Pemaquid the highest at 1.22. The cause of these large standard deviations is readily apparent: at all four sites it is known or strongly suspected that 18th- and 19th-century material was included in the mean-bore calculations, due to the near-impossibility in distinguishing between unmarked pipestems from each century. This influence is especially strong at Pemaquid and the Goodridge Site. The former produced at a mean date which is after its 1675 destruction, possibly influenced by the hypothetical second, 1677-1689 occupation of the site; the latter's calculated mean-bore date is the year before it was destroyed. The large sample size from Smuttynose Island appears to have counteracted the inclusion of later material, but at the same time, it has to be remembered that unlike the other sites, Smuttynose Island was never destroyed nor completely abandoned prior to this study's *terminus post quem*. Therefore, the best that can be said is that the date given is an approximate mean occupation date for the 17th-century inhabitants or the mean date for the peak period of residency on the island; neither of these statements inspires much confidence. On Sagadahoc Island, the focus on the fortified station probably had a moderating influence on the mean-bore date and limited the impact of later material. This once again leaves the Clear's Cove mean-bore date with the highest level of confidence. Yet even then all this says is that the Clear's Cove planter context likely dates to the last quarter of the 17th century; this was already known without the mean-bore date.

Perhaps a bit surprising, given the amount of confidence placed on it by its developer, the mean-bore dates are, to put it quite bluntly, faulty. The two generated for the Smuttynose Island contexts are nearly identical, again likely the result of the coarse



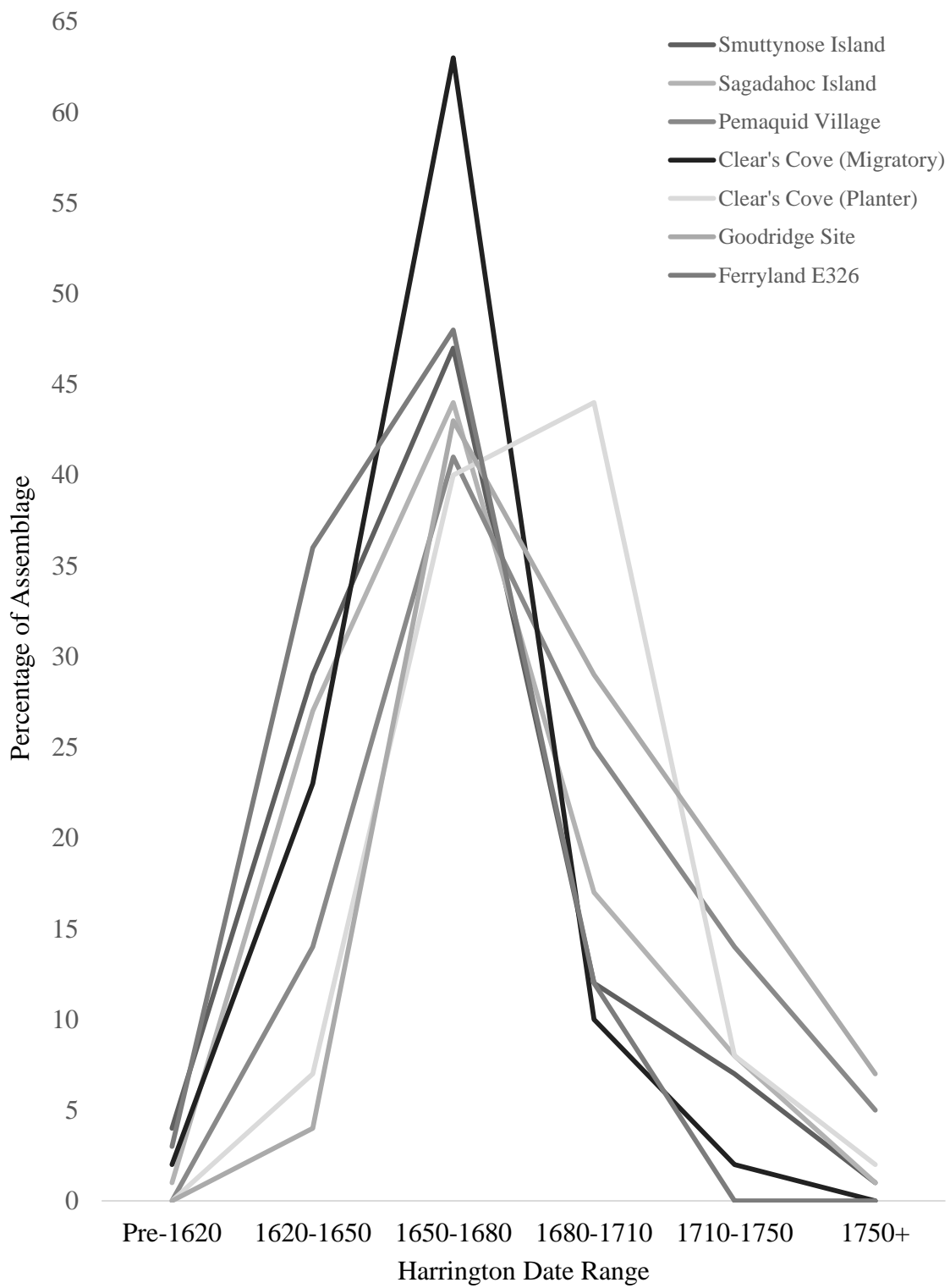
separation of contexts on the site. In fact, a previous study of the Smuttynose Island pipes found that mean-bowl dates were even more susceptible to errors caused by mixed contexts than mean-bore dates (Clausnitzer 2014:36). Mixed contexts are found in several excavation levels, and the problem is only magnified in the shallower trenches located to the eastern end of the study area, where stratigraphic development was limited. The later-than-expected mean bowl dates on the remaining planter sites, on the other hand, are caused by the small sample sizes from each, which are dominated by pipes which have *terminus post quem* dates in the 1660s and 1680s and *terminus ante quem* dates in the 1700s. These bowls were manufactured for at least sixteen years before those sites were destroyed, but as they were manufactured for another twenty-plus years afterwards, their mean date is skewed towards a later date. Similar phenomenon affected the dates calculated for the remaining two New England sites. The migratory context at Clear's Cove only produced one bowl; the Ferryland Event 326 assemblage produced three bowls from which a date was calculated, but there is a strong possibility that one of those bowls is intrusive from the fill layer capping the migratory deposit, and the other two bowls suffer from the same problems with *terminus post quem* and *terminus ante quem* dates as the ones from the planter sites.

There is another method for using stem-bore measurements, which sees little use in archaeological literature but which may provide additional insights into the occupation span of the different sites. Discovered accidentally by James Deetz and his crew during the Flowerdew Hundred Project, it involves overlaying graphs of stem-bore distribution on top of each other and tracking the changes in peaks. At Flowerdew Hundred this

allowed the archaeologists to refine their occupational sequence of the various components (Deetz 1993:79). By doing the same with the six sites for this study, it may be possible to determine peak periods of occupation and a rough time frame for those periods. For this purpose, the Smuttynose Island contexts are combined into one line, as there was no appreciable break in the use of the island between the migratory and residential periods.

Figure 5.29 indicates that the peak period of pipe stem deposition, and by association occupation for most of the sites in this study is the period of 1650 to 1680, which is not surprising and confirms the contemporaneous nature of the sites. The planter occupation at Clear's Cove, however, peaks during the 1680 to 1710 time period. There is continuity into the 1650 to 1680 time period, and the migratory assemblage there peaks strongly during that same period. This suggests that the migratory cookroom at Clear's Cove may have been built and used in the 1650s or 1660s, and co-existed with the planter occupation.

The data for the Ferryland Event 326 assemblage, in particular, seems to contradict the interpretation of it as being a single season's worth of material from a migratory occupation, as Figure 5.29 suggests a temporal span of 1620 to 1680. Once again, the problems with *terminus post quem* and *terminus ante quem* dates are affecting the interpretation. It is documented that many early pipes, particularly those manufactured in the West Country of England will often possess smaller average bore sizes than Harrington's histogram would indicate (Gaulton 2006:42).



**Figure 5.29.** Distribution of Stem-Bore Diameters from Study Sites.

### 5. V. 3. Commonalities and Differences

Stem-bore, and other forms of mean dating using clay tobacco smoking pipes, have contributed little to the discussion of the development of the fisheries; clay pipe maker's marks and bowls forms, however, which are usually attributable to a specific geographic region, if not city, can be useful in tracing the shifts in trade patterns. Smuttynose Island is particularly useful in this regard, due to its long occupation span and the contiguous state of occupation between the migratory and residential components. Table 5.9 lists the dated maker's marks found in the study area on Smuttynose Island. Generally speaking, the maker's marks from the migratory period (pre-1640) are from West Country ports and Dutch sources. Starting by 1650 these are replaced by pipes from Bristol, particularly the Llewelin Evans and William Evans pipes. This suggests that the integration of the Isles of Shoals into the Massachusetts Bay economy, with its predominantly London and Bristol connections, led to a shift in the source of smoking pipes. Maker's mark data from both Sagadahoc Island and Pemaquid also support this, for those assemblages are dominated by LE and WE marks.

**Table 5.9.** Smuttynose Island, Maine: Clay Tobacco Pipe Makers' Marks

<i>Maker's Mark</i>	<i>Migratory Period Maker and Origin</i>	<i>Dates of Manufacture</i>
'Oakleaf'	Unknown, Plymouth	1600-1630
Double 'Oakleaf'	Unknown, Plymouth	1600-1630
Crude 'W'	Unknown, West Country	1610-1640
RB	Richard Berryman, Bristol	1919-1652
EB	Edward Bird, Dutch	1630-1665
	<i>Residential Period</i>	
PE	Phillip Evans I and II, Bristol	1649-1669 or 1680-1696
IC	Unknown	1659 or 1668
LE	Llewelin Edwards, Bristol	1659-1686
WE	William Edwards, Bristol	1660-1697
RS	Robert Sheppard or Richard Saunders	1669-1690 or 1685-1715
RT Cartouche	Robert Tippet II, Bristol	1678-1720
IOHN STEPHENS	John Stephens, Isle of Wright	1700-1750
'Poosthorn'	Unknown, Dutch	Unknown
Dutch Lion/Horseshoe	Unknown, Dutch	Unknown

Neither the Ferryland Event 326 nor the migratory assemblage from Clear's Cove produced a datable maker's mark, though one of the Event 326 bowls is recognizably Dutch in origin (Figure 5.30.). Interesting, the two Newfoundland planter assemblages did not produce any LE or WE marks. This is probably the result of the small scale of excavations at both sites, as Clear's Cove only produced one maker's mark and the Goodridge Site produced three, while later 17th-century contexts at Ferryland produced a number of LE and WE marks (Gaulton 1999:39-40). Despite this, both sites (and the later Ferryland contexts) produced the same BARVM mark. This mark, dated 1660 to 1740, was used by a consortium of pipemakers working out of Barnstaple, Devon, in the English West Country (Gaulton 1999:40; Grant and Jemmett 1985:451). This immediately indicates that trade with the West Country ports remained common in Newfoundland in the second half of the century, which has already been seen in the ceramic assemblage. Census data from 1675 on the origins of migratory fishing ships and boatkeepers shows strong vernacular links between Bideford and Barnstaple and the harbors of Fermeuse, Renewes, and Ferryland, which is likely how the planters at Clear's Clove and the Goodridge site acquired these pipes (Pope 2004:147).



**Figure 5.30.** Ferryland Event 326, Newfoundland (CgAf-02): Dutch Smoking Pipe Bowl, 1620-1640. Artifact Number 305911. Image by the author.

#### 5. V. 4. Red Clay Tobacco Pipes

The presence of red clay pipes in the Smuttynose Island and Sagadahoc assemblage warrants further analysis. Pipes of this sort are not uncommon on New England sites, though there has been a debate in the past as to their origins, significance, and dating (Baker 1985:27; Capone and Downs 2004:307). The large sample from Smuttynose Island, which represents an MNI of 43 red clay pipes, including 12 nearly complete bowls and numerous other diagnostic pieces, provides an excellent case study with which to address these questions and reveal what these pipes can tell us about trade patterns and local industries.

Red clay pipes are broadly distributed across the eastern seaboard of North America. Concentrations appear in New England, the Chesapeake, and the Caribbean. It has long been held that these pipes were the products of local manufacture and were, for the most part, intended for limited distribution (Capone and Downs 2004). It is also claimed that these pipes were intended primarily for the common people and slaves, as one 17th-century document attests to (Chan 2007:183-184; Heidtke 1992:82). Manufacturing centers have traditionally been identified as the area around Charleston, Massachusetts; Virginia; and Jamaica (Capone and Downs 2004:307; Heidtke 1992; Luckenbach and Kiser 2006). Indeed, at least six manufacturing sites for red clay/terracotta pipes have been identified in Virginia, and petrochemical analysis of red clay pipes from Port Royal, Jamaica reveals that they were most likely manufactured from clays found nearby at Liguanea (Heidtke 1992:93-94; Luckenbach and Kiser 2006). In order to resolve the question of the New England redware pipes, several specimens



were sacrificed in order to conduct trace element and mineralogical analysis (Otterson et al 2012).

The results were surprising, for they indicated that the pipes from Smuttynose Island contained elements not found in New England clays; rather, they seemed to have been manufactured from clays that originated in the Chesapeake and Caribbean (Otterson et al 2012). Comparison of the results from Smuttynose Island with those from pipes recovered from Port Royal, Jamaica, and analysis of raw clay samples from the Liguanea area of Jamaica show that percentages of aluminum and silicon are exceptionally similar (Table 5.10.); percentages of other elements were also remarkably similar (Heidtke 1992:97; Otterson et al 2012). The different morphology of the Jamaican pipes and the New England pipes suggests that the New England samples were not being manufactured in Jamaica, but the clay originated from a similar source. Mineralogical analysis suggests three different points of origin for the redware pipes; one of these is unquestionably from the Chesapeake, as examples of the Star Maker and Nomini Maker pipes have been identified in the assemblage (Figure 5.31a. and 5.31b.) (Luckenbach and Kiser 2006). This is in direct contrast to a pilot petrographic analysis which stated that the red clay pipes were likely of local New England manufacture; however, this study simply found that red clay pipe production was likely localized, not centralized, and implicitly assumed the pipes were of local manufacture (Capone and Downs 2004). The actuality, based on the trace element analysis, is that so-called New England redware pipes were the result of *localized* manufacture, but not *local* manufacture. Sources included sites in the Chesapeake and very likely the Caribbean.

**Table 5.10.** Percentage of Aluminum and Silicon in Red Clay Tobacco Pipes from Port Royal, Jamaica, and Smuttynose Island, Maine.

	<i>Port Royal, Jamaica</i>	<i>Smuttynose Island, Maine</i>	<i>Jamaican Clay</i>
<i>Aluminum</i>	10.86%	11.57%	10.01%
<i>Silicon</i>	27.35%	30.98%	27.50%



**Figure 5.31a.** Smuttynose Island, Maine: Nomini-Tradition Pipe Bowl fragments.  
Artifact Numbers 9054, 9207. Image by the author.



**Figure 5.31b.** Smuttynose Island, Maine: Star Maker Tradition Pipe Bowl fragment.  
Artifact Number 7972.1. Image by the author.

Besides Smuttynose Island and Sagadahoc Island, red clay pipes have been found on several New England sites, including Pemaquid, the Clarke and Lake Site, Damariscove Island, the James Garrett Site, and Fort Pentagoet. Chesapeake pipes have also been identified at Ferryland and Renews in Newfoundland (Baker 1985:25-26; Capone and Downs 2004; Faulkner 1985; Faulkner and Faulkner 1987:63; Luckenbach and Kiser 2006:167-169). Notably, Sir David Kirke commissioned monogrammed pipes from a pipemaker working in the Star Maker tradition, and octagonal pipes resembling the Carver tradition were also uncovered at Ferryland (Figure 5.32.) (Gaulton 2006:130-131; Luckenbach and Kiser 2006:169, 173). A Bookbinder pipe, also from the Chesapeake, was uncovered from a planter's house in Renews (Luckenbach and Kiser:167; Mills 2000:159). The question is how did these pipes, generally seen to have had a limited distribution, travel hundreds of miles to such disparate places? Obviously, Sir David Kirke had trade connections to the Chesapeake, which allowed him to commission personalized pipes; they also may have been presented to him as a gift included with a shipment of tobacco. It is unknown if Lady Sarah or his sons maintained these contacts, and even if they did it does not explain how the pipes ended up in such numbers on Maine sites, including the French fort at Pentagoet.



**Figure 5.32.** Ferryland, Newfoundland (CgAf-02): Possible Carver Tradition Pipe Bowl fragments. Artifact Numbers 308944, 227038, 310335. Image courtesy of Barry Gaulton.

One potential mechanism for red clay pipe distribution is the trading activities of Massachusetts Bay merchants. In fact, all of the New England sites known to have red clay pipes are also known to have trading connections to Massachusetts Bay. The fishing masters at the Isles of Shoals dealt directly with Massachusetts Bay merchants; Pemaquid, the Clarke and Lake Site, Damariscove Island, and Sagadahoc Island all were under the control of Massachusetts Bay merchants during the second half of the 17th century. Fort Pentagoet was under Massachusetts Bay control for a brief period between 1654 and 1667, and before and after that period maintained a trade connection with Massachusetts Bay as a source of supplies when shipments from France fell short (Faulkner and Faulkner 1987:18, 21-23, 172). James Garrett, whose house site was once considered to be a potential manufacturing source for the red clay pipes in New England, was a merchant and shipmaster who participated in the West Indies trade (Pendery 1992:64). Massachusetts Bay merchants had made inroads into the Newfoundland trade during the second half of the 17th century; by the 1670s West Country merchants had included the New England trade in their arguments against settlement in Newfoundland (Bailyn 1955:129-130; Matthews 1968:196). In carrying shipments of tobacco, rum, and other provisions to plantations in Maine and Newfoundland the Massachusetts Bay merchants could have spread red clay pipes up and down the northeastern seaboard. An interpretation of the mechanics of this distribution will be presented in the next chapter; for now, it is enough to note how the far-reaching trade of Massachusetts Bay affected the material culture of the fisheries.

## Section 5. VI. Small Finds

### Section 5. VI. 1. Overview

The artifact class generally referred to as small finds, made famous by James Deetz's "small things forgotten", is a broad category covering anything which does not fit into one of the larger categories, such as articles of adornment, religious artifacts, and leisure items (Deetz 1996; Loren and Beaudry 2006:253). These artifacts are important in the archaeological investigation of agency and identity, for they can often be used to express personal, socio-political, or religious beliefs. For example, excavations at the home of Humphrey Chadbourne, a 17th-century Maine sawmill owner, turned up brass horse tack, including a highly decorated spur and a harness boss cast in a Tudor Rose pattern, and a set of Mexican-made Aucilla polychrome plates, a ceramic type which was rare in English colonial possessions and unique on the Maine frontier. The latter items would have impressed dinner guests with evidence of the Chadbourne's wealth and trade connections; the former items, which fit the classification of small finds, spoke to the family's wealth as well, for a horse with fine brass tack was a rarity on the Maine frontier. These items also spoke to the Chadbourne's support of the Royalist cause in England (Baker 2012:7-8). At a time when Maine was under the political control of Puritan Massachusetts Bay, this would have been a grand political statement, and upon seeing Humphrey Chadbourne riding his finely-kitted horse in his finery some may have seen him as a New England cavalier, flaunting both his wealth and his political beliefs through his clothing and adornments.



Unfortunately, small finds have proven to be the least common category of artifacts recovered from the fisheries sites in this study. The Goodridge site produced no small finds, while the Ferryland Event 326 assemblage, Smuttynose Island, and Clear's Cove produced only a small number of objects in this class, none of which are particularly revealing in terms of status, identity, or agency. Sagadahoc Island and Pemaquid produced more small finds, but again nothing of significant interpretive value. The following discussions will, therefore, be brief but may provide additional information for the interpretation of each site.

#### Section 5. VI. 2. Smuttynose Island

The study area from Smuttynose Island produced five small finds, namely a copper spoon, two bale seals, a lead token, and a small six-sided die. The copper spoon (Figure 5.33.) and die (Figure 5.34.), while in and of themselves interesting objects, unfortunately, do not speak much about their owners. One of the bale seals is illegible, once again limiting its interpretive value. The second bale seal, however, is a bit more informative.



**Figure 5.33.** Smuttynose Island, Maine: Copper Spoon. Artifact Number 7218. Image by the author.



**Figure 5.34.** Smuttynose Island, Maine: Bone Six-Sided die. Artifact Number 9005.  
Image by the author.

Bale seals are lead objects of various forms which were used to tag bundles (“bales”) of cloth which had passed inspection. The cloth industry was one of England’s few domestic export industries, and there was a desire to maintain a high level of quality in those products so that demand for them would continue (Egan 1978:178; 1995:1-2; Thirsk 1978:135). These seals were often marked with the name of the product, the port of origin, or the symbol of the inspector or inspection house, which often allows them to be dated and traced to the place of manufacture with a reasonable amount of certainty (Egan 1995:3-4). The bale seal from Smuttynose Island is stamped “CARSAY 1669” (Figure 5.35.). Carsay is an alternative spelling for kersey, which is a type of heavy woolen cloth noted for its durability and warmth (Egan 1978:178). Richard Endell’s account with Jonathan Wade lists two purchases of “kersie”, one of 1-3/4 yards for a total of £1.1.0 and another for two yards for £1.0.0 (Wade 1672).



**Figure 5.35.** Smuttynose Island, Maine: CARSAY 1669 Lead Bale Seal. Artifact Number 9028. Image by the author.

The kersey bale seal leads to an interesting question. By 1651 Massachusetts Bay had passed several sumptuary laws, with the 1651 version expressly limiting certain styles and articles of clothing to those whose possessions were valued at £200 or more, with exceptions for holders of political offices, militia officers, and those who once held such estates but who had suffered financial loss. Laws such as these had been part of the English legal tradition since the 14th century and were often used as a way to reinforce the social hierarchy (Schulman 2007). Elizabeth I was particularly skilled in the manipulation of fashion as a social identifier, issuing a royal proclamation which forbade the wearing of purple and gold except for the monarchy and select others, and even they were limited on the amount they could wear. At the same time, Elizabeth used her own power and position to set fashion at the height of extravagance, forcing her subjects to spend time, effort, and money to keep up with her (McCracken 1990:11-12).

In Massachusetts Bay and other colonial settings, the use of clothing and personal adornments took on even more importance in establishing the social hierarchy. This was due to the virtual explosion of consumer goods in the period, as well as the lack of more traditional status markers (Pope 2013a). Sumptuary laws were to prevent those of a lower status from aspiring to a higher one through the purchase of extravagant clothing; for example, several former Scottish prisoners of war, sold as indentured servants to the proprietors of the Hammersmith Iron Works in Saugus, were brought before the courts as being in violation of sumptuary laws (Regan and White 2010:36; Schulman 2007). Because of these laws, and considering the distances involved and the apparent difficulty in maintaining civil control at the Shoals, is it possible that fishermen there used clothing

as a way to develop the appearance of equality with the merchants whom they traded with?

Other clothing items listed in Richard Endell's account includes a pair of stockings, assorted lengths of canvas, cotton, "galume" (an unidentified type of fabric), dowlas, and leather, along with silk and a "rugg" (likely meaning a heavy blanket). Kersey is the most expensive cloth that Richard Endell regularly invested in, costing 10 to 12 shillings a yard; cotton, in contrast, cost between 2 shillings, 6 pence and 4 shillings a yard, dowlas was 2 shillings, 6 pence a yard, and galume was a mere 5 pence a yard. Almost all of his cloth purchases were for utilitarian fabrics, perhaps as expected for a fisherman. The one exception is the 5 pence worth of silk, which suggests a relatively small piece. Making any form of large assumption based on just one lead bale seal and a single debit account would be to court whimsy, but at the same time, it seems that Richard Endell and many, if not most, of his fellows invested primarily in simple, utilitarian clothing, with only small swathes of other fabrics. Status, either real or perceived, was expressed through another medium, such as the higher-status ceramics discussed previously. It is a possibility that these fabrics were preferred, as high-status clothing made from silk and other finer fabrics would have been impractical for a fisherman in the North Atlantic, but a ceramic bowl, even a higher-priced type such as the North Italian wares, is a functional object no matter what the circumstances are.

The final small find is a lead token stamped in an XXX motif (Figure 5.36.). While this token does not necessarily speak to agency and identity, it does speak to another problem common on the colonial frontier; namely, a lack of specie (Nettels

1931). As a result, economic exchanges often involved credit, reciprocal exchange, and bartering, or other alternative methods; some enterprising individuals minted their own currency for their patron's use (Berry 2002:3-4, 21-23). Sir David Kirke, for example, also fashioned tokens from lead, stamped with his DK monogram. Several of these tokens have been recovered archaeologically, and in at least three different sizes, likely representing different values (Gaulton 2006:238; 2013:280-282). The token from Smuttynose Island served much the same purpose and was likely linked to the tipping activities held in the meetinghouse.





**Figure 5.36.** Smuttynose Island, Maine: Stamped Lead Token. Artifact Number 9078.  
Image by the author.

### Section 5. VI. 3. Sagadahoc Island

Sagadahoc Island produced a number of small finds including buttons and other clothing fasteners, and bale seals. Unfortunately, both of the recovered bale seals are illegible, so aside from indicating the purchase of bulk cloth, they do not provide much interpretive value. It is notable that most of the recovered buttons are plain loopshank buttons made from base metals such as copper and lead (Figure 5.37.). The one exception is a glass button which has a sunburst-like appearance, but this piece is believed to be intrusive from a later time period. Other clothing objects include a copper clasp, iron buckle (Figure 5.38.), and a glass bead. All of these objects are plain and utilitarian in form and appearance, appropriate for a fortified fishing station on the Maine frontier. The remaining small finds, which include a clay marble, a primer horn cap, and a brass furniture tack, can all be viewed as typical objects that one would expect to find on a site where people lived and worked, and unfortunately, do not provide much insight into the lives of the inhabitants.



**Figure 5.37.** Sagadahoc Island, Maine: Assorted Buttons. Artifact Numbers 413, 414, 415, 1485, 1203, 675, 1357. Image by the author.



**Figure 5.38.** Sagadahoc Island, Maine: Iron Buckle. Artifact Number 2320. Image by the author.

#### Section 5. VI. 4. Colonial Pemaquid

Like Sagadahoc Island, the structure at Pemaquid produced a number of small finds related to clothing, recreation, and leisure activities. Much like that site, the items from Pemaquid speak to a relatively low-to-middling economic status. The six recovered buttons are all copper and plain in their design, while iron objects include a buckle fragment, a key, a mouth harp, and the remains of a two-prong fork (Figure 5.39.). The only small find which suggests an extra investment is the bowl of a pewter spoon. Pewter, while common on the tables of English yeomen during the 17th century, possessed greater intrinsic worth than ceramic, wood, and horn, and may have been used as a status symbol within the household (Anderson 1971: 238-240; Martin 2000:254). In this case, the head of the household may have purchased one for personal use in order to reinforce his domestic status. It is not hard to picture him using it in conjunction with his Sgraffito or tin-glazed dish, while the rest of the household (including family and fishing servants) made use of cheaper, and possibly communal, wooden vessels.



**Figure 5.39.** Colonial Pemaquid, Maine: Assorted Metal Artifacts. Image by the author.

## Section 5. VI. 5 Clear's Cove

Between the two contexts at Clear's Cove, only one small find was recorded, this being a copper thimble found in association with the planter occupation (Figure 5.40.). While thimbles are traditionally seen as an indication of the presence of women on a site, this is not necessarily the case (Deetz 1993:40). In all-male occupations, traditionally women's activities are taken up by men, for clothing, sails, and other cloth items still need to be mended and replacements made (Beaudry 2006:175-176). This is not to say that Clear's Cove was an all-male occupation; however, according to the 1677 census, four of the five planter households at Fermeuse were male-only, and this was typical of Newfoundland harbors at the time (Poole 1677). Therefore, it cannot be said that the thimble is a sign of women on the site; it does, however, show that the occupants of the Clear's Cove site sewed/mended their own clothing.



**Figure 5.40.** Clear's Cove, Newfoundland (CfAf-23): Copper Thimble. Artifact Number 423e2126. Image by the author.



## Section 5. VI. 6. Ferryland Event 326

The Event 326 assemblage from Ferryland produced three small blue beads as its only small finds. These items could have been used as decoration on a fisherman's clothing, or have been intended as trade items should the Beothuk been encountered. Beads were common trade items in the 17th century, and enterprising migratory fishermen may have transported such items as part of their portage, or personal freight, in hopes of engaging the Beothuk in trade (Bradley 2007:42, 44; Faulkner and Faulkner 1987:262-263; Pope 2004:178-179). Exchanging beads for furs would have been a way to earn extra income on a fishing voyage, assuming that the Beothuk could be located, were amicable to trade, and desired blue beads.

## Chapter 6: Discussion and Interpretation

### Section 6. I. Introduction

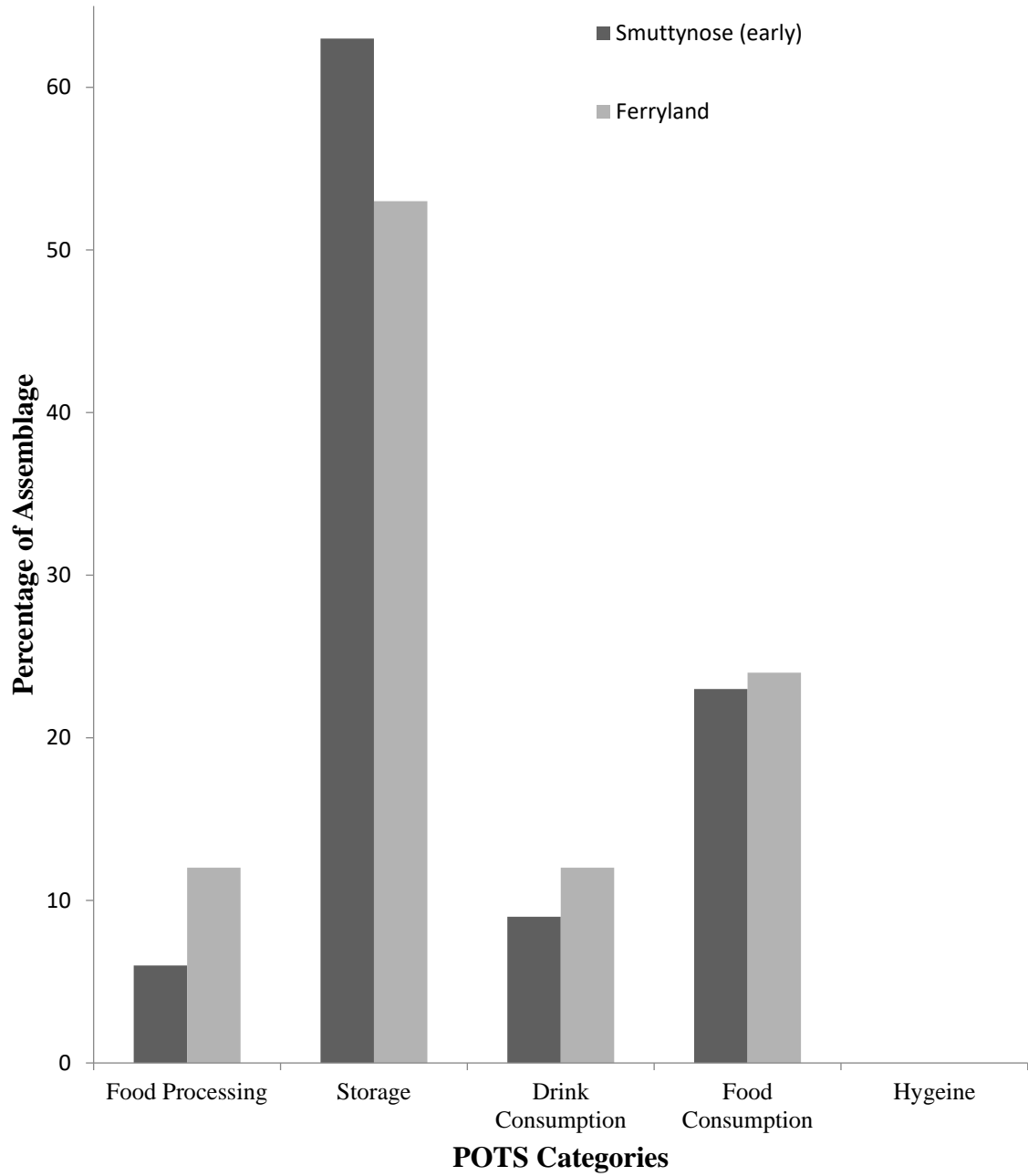
The previous two chapters have examined the history and archaeology of the fisheries of Newfoundland and New England; the following chapter seeks to integrate these two different lines of discussion within the research framework proposed in Chapter 2. The intent is to address the first two research objectives. In brief, these were to identify and interpret the differences between the Newfoundland and New England fisheries; and to examine the roles that the fisheries played in the developing societies and in the negotiation of identity in the British colonial world. Both of these research objectives have been tangentially addressed in the previous chapters; this chapter seeks to consolidate and elaborate upon these previous discussions in order to fully address the research objectives.

### Section 6. II. Archaeological Findings

#### Section 6. II. 1. Transitioning from Transience to Permanence

Identifying the transition from a seasonal, transient occupation to a permanent one within the archaeological record has proved a difficult challenge. In large part, this is due to the lack of archaeological data from migratory fishery occupations, which often only leave vestigial and difficult-to-identify remains. Three such occupations were identified within the six sites chosen for this study. Two of these occupations are part of multi-component sites; unfortunately, the migratory occupation from Clear's Cove proved to be

the remains of a cookroom, a specialized structure which biases its data towards its specific purpose and limits its interpretive utility in discussing the broader trends in the migratory period. The migratory occupations from Smuttynose Island and Ferryland Event 326, both of which possess a more diverse assemblage of vessel forms, appear to be more representative of a general English migratory assemblage. Both sites are remarkably similar in the ceramic distribution implied by the POTS categories, despite the Smuttynose assemblage appearing to represent two different modes of migration; specifically, a trans-Atlantic and a localized transhumance (Figure 6.1.).



**Figure 6.1.** Potomac Typological System Category Distributions, Migratory Contexts.

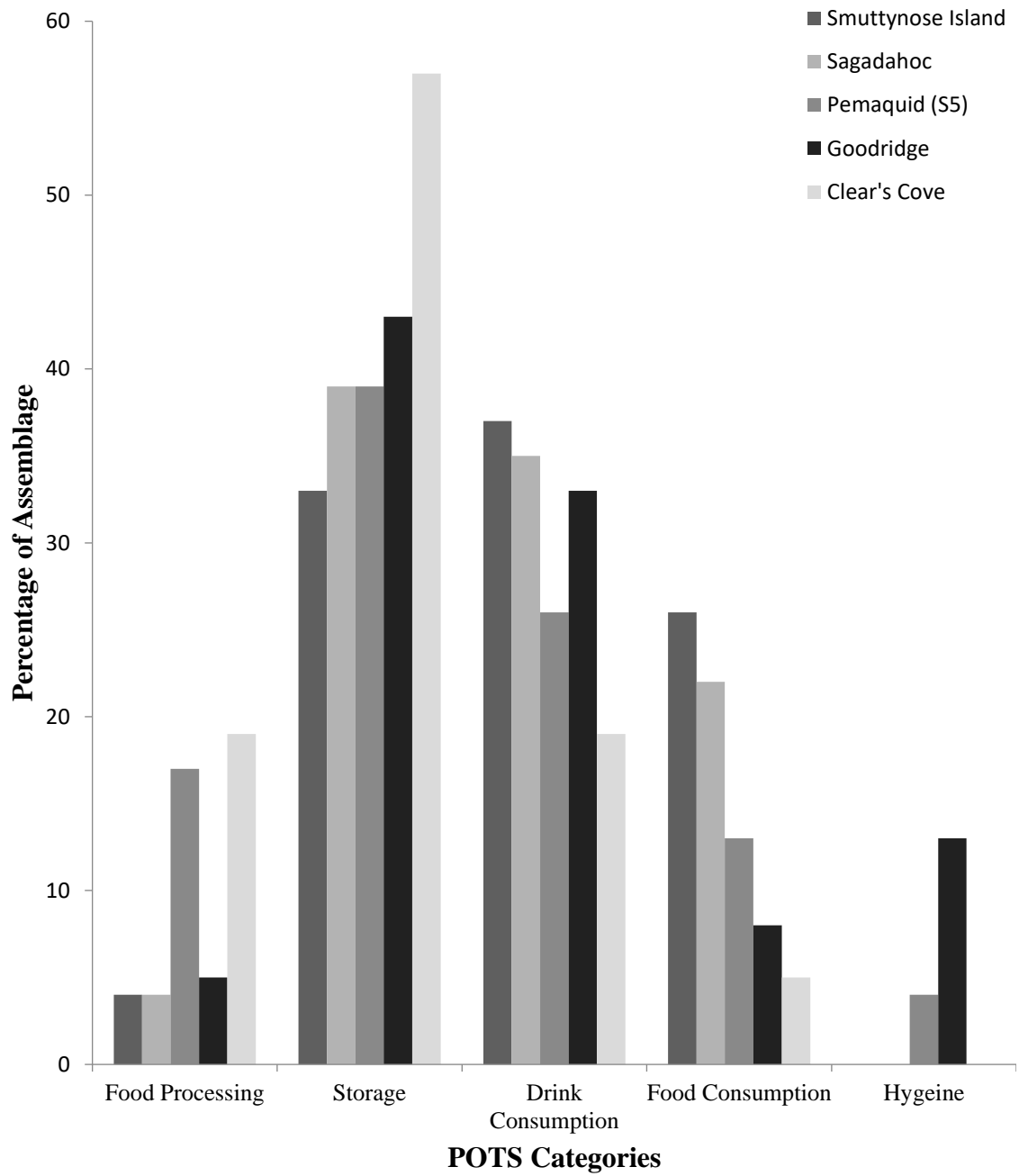
Not surprisingly, these early migratory occupations emphasized storage vessels over all other types. This is due to the short periods of occupation and the concurrent lack of ability to produce large amounts of food locally, necessitating that sufficient food supplies be brought on the fishing voyage. Breaking the storage category down into vessel forms does reveal significant differences. In the Ferryland Event 326 assemblage, the storage category was dominated by tall pots, with eight of the nine vessels. On Smuttynose Island, tall pots form only 45 percent of the storage vessels, with other storage pots forming 40 percent of the assemblage and jars, absent from the Ferryland assemblage, comprising the remaining vessels. Tall pots, as discussed previously, were designed for the preservation and shipping of provisions, particularly important on the months-long trans-Atlantic voyages. Conventional- style storage pots were also used in the transshipment of provisions, but could also be used for kitchen storage. The higher percentage of these vessels on Smuttynose Island during the migratory period is suggestive of a different type of supply situation; the fishermen working the island were likely bringing portions of their household provisions with them to the island during the fishing season, and it is even possible that they received regular resupply from the mainland plantation on the Piscataqua River.

The difference between the two migratory assemblages is further emphasized in the food consumption vessels. On both sites, this forms the second-largest category, yet as with the storage category, the devil is in the details. The Ferryland Event 326 assemblage is composed completely of vessels suggestive of a communal serving and eating strategy. The Smuttynose Island assemblage suggests that individual consumption

was more common at that site. Again this may be the difference between a boat crew on a migratory voyage and an individual contractor working under the fishing factor on the Mason and Gorges plantations. The ware types represented by these vessels is also telling. In the trans-Atlantic Ferryland occupation, all of the vessels are inexpensive and durable ware types, notably Borderware and North Devon earthenware. On Smuttynose Island, more expensive types such as tin-glazed earthenware are found. This suggests that fishermen there were willing to take more expensive ceramics on the six-mile trip from Strawberry Banke to the Shoals, possibly as a status symbol or a reminder of the comforts of home on the mainland.

The transition to a permanent occupation is marked by a shift in the distribution of POTS categories as the use of ceramics increased and diversified; significantly, the resulting distribution is largely consistent between the sites in Maine and those in Newfoundland, suggesting that the planters in both regions (those who worked in the fishery, at least) led largely similar lifestyles (Figure 6.2.). Generally speaking, the transition to a planter fishery saw a decrease in the percentage of storage vessels; however, these vessels still dominate the ceramic assemblages in the four northern-most sites. Smuttynose Island seems to have been less dependent on stored food than the northern sites, possibly by virtue of its proximity to Portsmouth and the Massachusetts Bay ports. The changes in the distribution by vessel use also reflects a diversification of economic activities. The planters at Pemaquid, and possibly those at Clear's Cove, participated in cattle-rearing as a supplement to their fishing activities. Those on Smuttynose Island and the Goodridge site, on the other hand, participated in an informal

hospitality industry involving the retail of tobacco and alcohol. The residents of Sagadahoc Island do not seem to have participated in either of these activities; however, as much of the data from that site is derived from an occupation which is partially of a military nature, this is not necessarily surprising. Garrison duty can also be seen as another economic strategy; it is also possible that the local fishermen kept their primary dwellings at nearby Arrowsic and used Sagadahoc Island only as a base for fishing. If this is the case, any archaeological evidence for economic diversification would be on the mainland and not the island.



**Figure 6.2.** Potomac Typological System Category Distributions, Planter Contexts.



How did these sites compare with other sites in British North America from the same time period? Table 6.1 presents the distribution of ceramic vessels by use for the five planter sites in this study along with those from twelve other sites. These include three dwellings and a tavern from Newfoundland, two dwellings from Massachusetts, two dwellings and a tavern from Maryland, and three dwellings from Virginia. The first thing that is immediately apparent is that all of the sites in this study, as well as the other four Newfoundland sites, have higher-than-typical percentages of storage vessels. Only the Knoll House site and the Martin's Hundred H dwelling had percentages approaching the northern sites. The latter structure is one of the earliest known from Martin's Hundred, which may explain the higher percentage of storage vessels present; at the former site, it may be that the small sample size (only 36 vessels) is biasing the data (Chartier 2012).

**Table 6.1:** Percentage Distribution of Ceramic Vessels by Function, at Selected Sites

Site	Food Processing	Storage	Drink Consumption	Food Consumption	Hygiene	Total
Smuttynose Island (n=48)	4%	33%	37%	26%	0%	100%
Sagadahoc Island (n=26)	4%	43%	30%	22%	0%	99%
Pemaquid (n=27)	19%	44%	22%	11%	4%	100%
Goodridge (n=43)	5%	43%	33%	8%	13%	102%
Clear's Cove (n=25)	19%	57%	19%	5%	0%	100%
Ferryland Area B (n=188)	16%	35%	29%	19%	1%	100%
Ferryland Area D (n=292)	17%	43%	23%	13%	3%	99%
Kirke Tavern (n=62)	23%	40%	7%	26%	5%	101%
Renews Dwelling (n=44)	16%	42%	27%	9%	7%	101%
Compton Homelot (n=54)	60%	2%	15%	24%	0%	101%
St. Mary's City ST1-23 (n=90)	37%	10%	7%	42%	3%	99%
St. Mary's City ST1-13 (n=245)	19%	13%	34%	33%	1%	100%
Martin's Hundred H (n=95)	31%	23%	16%	26%	4%	100%
Martin's Hundred B (n=194)	34%	12%	13%	34%	7%	100%
Martin's Hundred A (n=126)	42%	13%	15%	22%	7%	99%
Knoll House Site (n=36)	31%	36%	17%	14%	3%	101%
Howland Site (n=132)	29%	16%	31%	10%	14%	100%

Note: Percentage totals of less or greater than 100% reflect rounding errors.

The two food-related categories also demonstrate some interesting variations in vessel distribution, particularly in the area of processing. Smuttynose Island, Sagadahoc Island, and the Goodridge site have remarkably low percentages of food processing vessels, even compared to the other northern sites. Pemaquid and Clear's Cove have percentages which are more in line with other Newfoundland planter sites along with the Kirke tavern and Smith's Ordinary. However, all of these planter sites have lower percentages of food processing vessels than the southern sites. Breaking down the broader category to its constituent sub-categories of preparation, dairying, and cooking helps to explain this trend; the southern sites, on average, have at least twice the relative number of dairying vessels as does the northern sites. Interestingly, Pemaquid's percentage of dairying vessels is closer to the agricultural sites in the Chesapeake, while Clear's Cove has a slightly larger percentage than the other Newfoundland sites. This supports the interpretation that both of these sites placed a greater emphasis on dairying as a supplemental economic activity, though not to the same degree as the Plymouth Colony sites which likely relied on dairying and cattle raising as a primary economic activity.

Unlike the food processing vessels, the distribution of the food consumption vessels does not seem to follow any regular pattern. Pemaquid, the Goodridge site, and Clear's Cove all have low percentages of these vessels, as do the remaining Newfoundland dwellings and the two Plymouth sites. Smuttynose Island and Sagadahoc Island, on the other hand, have a relative number of vessels similar to the lower-status sites from the Chesapeake, while the gentry-status houses there have a somewhat higher

percentage, which is also seen at Sir David Kirke's house at Ferryland (Gaulton 2006:253). However, neither of these two sites is a domestic occupation in the same style as the Chesapeake sites. Sagadahoc Island was at least in part a military occupation, and it is possible that Structure 1 served as a living/eating space for the garrison. With the limited excavation and small sample size, this could easily have biased the results of the material culture analysis. On Smuttynose Island the artifact assemblage is associated with a structure most likely to be the meetinghouse, the evidence suggests that it may have served an informal function as a tippling house. This would have been particularly important during the spring and fall when merchants arrived to purchase fish and settle accounts. It is possible that these merchants were entertained in the meetinghouse, which would have involved the serving of food as well as drink. The large number of plates and dishes is suggestive of individual servings, and the fishermen may have intended for the relatively high cost and/or heavy decoration of these vessels to impress the people being served off of them as a symbol of the owner's previous successes in the fishery. Otherwise, the inhabitants of Smuttynose Island and the other study sites, along with the inhabitants of the Newfoundland and Plymouth planter dwellings, would have relied on cheaper and more durable materials for their own consumption purposes.

The architectural evidence, limited as it may be, also illustrates the transition from a migratory to a residential mode of production. The migratory cookroom at Clear's Cove was a well-built, but rather rudimentary structure. Its pole construction, using trimmed but not necessarily cleaned or dressed pieces of timber, speaks to the expediency of its construction and its temporary nature. In contrast, the dressed timbers and planks seen in

the planter occupation there, the dug cellars and stone foundations of the Pemaquid occupation, and the brick elements of the meetinghouse on Smuttynose Island all speak to structures where more time and effort were taken. These structures were permanent, intended to function for extended periods of time. Even saying this, it is important to note that all of these structures were at least partially of earthfast construction. In earlier studies the lack of proper foundations was interpreted to mean that earthfast structures were time-expedient and impermanent structures, only lasting a few years before rotting away and being replaced. That earthfast construction was an expedient form of construction is almost certainly true; however, the impermanence of these structures has been called into question. Earthfast construction was a vernacular adaptation to the realities of the colonial frontier, impermanent only in the way that all wooden structures are (Baker et al 1992; Carson et al 1981). As demonstrated by the Chadbourne house, Kirke house, and other examples, it was used even by the new colonial gentry who then also made use of other status markers to proclaim their standing in the community, such as fancy ceramics and items of personal adornment (Baker 2012; Gaulton 2006; Pope 2013a).

There are other material markers of permanence; for example, goods representative of a female presence on sites are almost certainly a marker of permanence, for “soe longe as there comes no women they are not fixed” (Handcock 1989; Pope 2013a; Wheler 1684). Unfortunately, the dearth of small finds from the study sites, along with biases in excavation, preservation, and decisions made by the researchers, means that few traditionally female-gendered artifacts were identified in the

study collections. The few pieces which were found, such as the thimble from Clear's Cove, must be interpreted with caution, for even traditionally female-gendered items are not necessarily indicative of a female presence on a site. It has been seen that on male-only sites feminine tasks are taken up by men; in British military units, for example, sewing kits were referred to as "hussifs"<sup>1</sup> or "housewives", blatantly proclaiming the embodied gender of the object even as it was being used by soldiers on the front lines of war. Other all-male occupations, such as sailors on a trans-Atlantic voyage or Chinese mineworker camps, also required traditionally feminine crafts such as sowing to be taken up by men (Beaudry 2006:175-176). Even sites believed to be explicitly gendered, for example, the brewhouse/bakery structure at Ferryland, may not produce any gendered artifacts.<sup>2</sup>

The presence of glass bottles and the large number of smoking pipes found on the planter sites, along with the evidence for an informal hospitality industry on two of them, does speak to another feature of the developing colonial world. This is the desire for new goods which increased the comfort of the new arrivals in foreign lands (Pope 2013a:42-45). These artifacts show the demand for alcoholic beverages, particularly newer types such as the fortified wines of Spain and Portugal (known as sack) and rum made from Caribbean molasses, and for tobacco. Both of these products have properties, both actual

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<sup>1</sup> Hussif is a contraction of housewife believed to have originated in the Lancaster dialect. While the term pre-dates the WW1 army, originating around the Napoleonic Wars when housewives would follow armies and perform "feminine" activities such as cooking and sewing, its persistence into the 20th century illustrates the continued gendering of certain activities.

<sup>2</sup> The perception of the brewhouse/bakery at Ferryland as a gendered site is based on Wynne's specific request for maids who could brew and bake and the presence of women in his list of overwintering personnel. However, no gendered objects were identified in brewhouse-related contexts. (Clausnitzer 2011; Clausnitzer and Gaulton 2013; Wynne 1622b).

and perceived, which placed them in great demand amongst fishermen and other inhabitants of the northern colonies and which in turn led to the multi-lateral trades which turned fish into wine (Pope 2004:396-397; 2013a:44-45). Wine and other strong liquors provided a feeling of warmth when consumed, desired by fishermen exposed to the cold waters of the North Atlantic and residents trudging through the cold, snowy winters on the shores of Newfoundland and New England (Pope 2004:397). Tobacco had much the same effect, being perceived as a little hearth providing warmth and comfort, as well as having the physiological effect of suppressing the appetite (Jo et al 2002; Pope 2004:396). For men laboring hard in the fishery and residents subsisting on preserved foods and whatever could be gathered from the local environment, this could be the difference between constantly feeling hunger and feeling satiated, even if only temporarily.

The consumption of wine and other spirits served another purpose beyond the intrinsic qualities discussed in the previous paragraph. Liquor and tobacco were “little luxuries” for planters and fishing servants on the North American fishing stations (Pope 1994:273). Contemporary observers expressed surprise, and often contempt, at both the quantity and quality of these goods consumed by residents of Newfoundland and Maine. Christopher Selman wrote that the retailing of alcohol and tobacco “deboist [debauch] the fishermen sent thither on fishing voyages”; John Josselyn writes of a “walking tavern” from Massachusetts Bay which retailed “legitimate blood of the rich grape, which they bring from Fayal, Madeira, Canaries, with brandy, rum, the Barbadoes strong water, and tobacco” to Maine planters (Josselyn 1675:161; Selman 1667). Inflammatory language

aside, the consumption of these goods serve a social function, as noted by Josselyn, and as an additional source of income, by allowing planters to recoup wages given to servants through the sale of alcohol and tobacco (Josselyn 1675:161; Pope 1994:276-278).

## Section 6. II. 2. Trade Development

The archaeological investigations also highlighted the differences in trade patterns that developed in Newfoundland and New England. Specifically, analysis of the ware types present in the ceramic assemblages shows that, although Newfoundland was being integrated into the greater New England trade network, it was still strongly tied to England through both the migratory fishery and traditional trade networks. Whereas sites in Maine and elsewhere in New England received goods through the Massachusetts Bay merchants, Newfoundland planters continued to receive a majority of their supplies and other goods directly from British sources. This is particularly highlighted by the continued presence of North Devon shipping containers (notably tallpots) on Newfoundland sites decades after they had practically disappeared from New England sites. New England merchants tapped into local sources of victuals in order to supply their clients and acquire other trade goods, including fish and timber from both Maine and Newfoundland, which was then exchanged for other colonial goods such as tobacco and molasses. These goods were then retailed either directly, in the case of tobacco, or in another form, such as rum for molasses, to consumers in exchange for more products.



The case of the red clay smoking pipes demonstrates both the interconnected nature of the colonial economy and the development of the Massachusetts Bay-centered multi-lateral trade. As noted in the previous chapter, geochemical analyses have shown that these pipes originate in the Chesapeake and the Caribbean and that their presence on northern sites is the result of the trading activity of the New England and Newfoundland merchant-gentry. However, the mechanics of this trade can be elaborated upon further. Specifically, the distribution of the red clay pipes in archaeological contexts and a historical account suggests that they were used as a supplementary item in regular trade exchanges and owe their existence on northern sites largely to Massachusetts Bay merchants.

In his study of red clay pipes in Port Royal, Jamaica, Kenan Heidtke found that they had been locally manufactured for local consumption by the poorest class of citizen; the majority of the Chesapeake pipes were also intended for local consumption, though products from the Bookbinder, Star Maker, and Nomini traditions have been recovered in Maine and Newfoundland (Heidtke 1992:82, 107; Luckenbach and Taft 2006:167, 169). Massachusetts Bay merchants had found a niche for themselves in the shipping of mixed cargoes, including farm products, timber products, salt cod, and other goods (Bailyn 1955:83; McCusker and Menard 1985:100-101). These red clay pipes were likely picked up as part of this trade, along with tobacco, molasses, and other southern products, and carried back to Massachusetts Bay. From here they were reshipped to sites in Maine and even as far north as Newfoundland as merchants sought new cargoes.

John Josselyn's account of his 1663 voyage to New England provides insight into what may have been one of the distribution mechanisms for red clay pipes. In describing the economic activities and status of Maine's residents, Josselyn described the regular arrival of what he termed a "walking Tavern", or a ship loaded with wine and other strong spirits to retail to the planters, fishing servants, and other occupants of Maine's coast (Josselyn 1675:161). It is entirely likely that these floating taverns not only supplied tobacco but pipes to smoke it in; furthermore, it is possible that red clay pipes were available as a cheaper alternative to imported English and Dutch pipes. Whatever the means of distribution, the red clay pipes clearly made their way into Maine via Massachusetts Bay merchants. This can be seen in their distribution across the New England region, as some of the largest concentrations of these pipes are on Massachusetts Bay sites (Otterson et al 2012). Furthermore, most, if not all, of the sites in Maine where these pipes have been found are known to have trade connections with Massachusetts Bay merchants; for example, the Clark and Lake Company site, owned by two Boston merchants, and Fort Pentagoet, a French fortification which traded with Massachusetts Bay merchants (Baker 1985b; Faulkner and Faulkner 1987:172). The situation in Newfoundland is less certain; while the unmarked pipes from Renew's and Ferryland could have been carried there by Massachusetts Bay merchants, the DK-marked examples are certainly linked to the activities of Sir David Kirke. Additionally, the North Devon and Dartmouth trading networks were also involved in the inter-colonial trade in the northeast, and are therefore also potential suppliers of red-clay pipes to Newfoundland.

### Section 6. II. 3. Identity Construction

Peter Pope and others have noted that the early colonists in North America benefited greatly from an early stage of the Industrial Revolution; though lacking the intensive industrialization and increased consumerism that marked later developments, this early period saw the innovation and expansion of new products. These range from enclosed chimneys and feather beds, to cast-iron skillets and cookware, to hopped beer and new agricultural crops (Pope 2013a; Thirsk 1978). Hopped beer is an excellent example of these changes. Prior to its introduction to England, the preferred alcoholic drink was ale, an unhopped product made from malt, water, and yeast. For the large part, it was made domestically as part of a household's weekly chores. This was because ale was both widely consumed and stored poorly, placing it in constant demand. The addition of hops changed this; the resins in hops act as a preservative, meaning that it could be stored for an extended period of time. The addition of hops made the process more complex and time-consuming, however; this resulted in the construction of dedicated brewhouses and the eventual development of brewer's guilds and the concurrent shift in production from domestic contexts to industrial contexts by the end of the 17th century (Clausnitzer 2011:18-22).

These changes in the material culture of the 16th and 17th centuries both enabled the colonization of North America by providing new tools and equipment with which to transform the wilderness, and allowed the construction of a stratified society by providing new items to replace old markers of civility and wealth which were unobtainable on the frontier (Pope 2013a:44-45). An example of this has already been seen in Humphrey Chadbourne's fine ceramics and equestrian tackle; another example can be seen in the possessions of Sir David and Lady Sarah Kirke. The Kirkes possessed a large collection of finely-made, expensive, and entirely ornamental Portuguese ceramics on Newfoundland's rugged shores; and both Sir David and Lady Sarah invested in personalized goods, specifically Sir David's monogrammed pipes and Lady Sarah's initialed tin-glazed ceramics (Figure 6.3a., Figure 6.3b.) (Gaulton 2006:130-132; Gaulton and Casimiro 2015). These same goods can also be used to express the chosen identity of the owner. It has already been discussed how Humphrey Chadbourne may have styled himself as a sort of New England cavalier; another example is the case of Grace Stout, whose silver thimble and finely carved sewing box aroused the suspicions of her employers and neighbors, but also testify to the pride she took in her skills as a seamstress. It also suggests that, despite her status as a mere housemaid, she saw herself as the equal of the families she worked for and sought to express this through the acquisition of goods above her station (Beaudry 2006: 86-87; Loren and Beaudry 2006:259-260).



**Figure 6.3a.** Ferryland, Newfoundland (CgAf-02): DK Monogrammed Smoking Pipe Bowl. Image courtesy of Barry Gaulton.



**Figure 6.3b.** Ferryland, Newfoundland (CgAf-02): SK Monogrammed TGEW Dish. Artifact Numbers 525894, 525827, 526153a-b, 524998a, c-e, 526088c. Image by the author.

Unfortunately, the sharply limited presence of small finds on the sites in this study has correspondingly limited the scope of identity studies concerning the inhabitants. Biases in preservation and excavation aside, it is possible that the reason few small finds have been recovered is that there were few to begin with, or even that the wrong objects are being sought. The men on these fishing sites were largely of the common sort, engaged in a labor-intensive and time-consuming extraction industry on the frontiers of the English world. It is entirely likely that their identity was largely built on their role as fishermen and fishing masters/planters, even if they did not explicitly express it that way. In this case, the expression of this identity would have been based on the quantity and quality of fisheries-related objects, such as shallops and fishing tackle, and in their skills in the taking and making of fish. The story, likely apocryphal, of a fisherman who responded to a sermon about the religious motivation behind the settlement of New England with “Sir, you are mistaken... Our main end was to catch fish”, can be seen as a reflection of this identity and a stubborn pride in it (Clark 1970:13).

Lady Sarah Kirke expressed her status as a member of the colonial gentry through her material wealth and her status as a leading merchant through the four shallops she owned (Poole 1677); Edmund Pickeard’s and Walter Matthews’ two shallops and other fisheries infrastructure speak to their status as fishing masters at the Isles of Shoals (Matthews 1678; Pickeard 1661). These planters and fishing masters owned the occasional nice object, such as the higher-status ceramics seen in the archaeological record or Stephen Crafford’s “gould ring”, valued at £1.0.0, but invested most of their capital into their primary economic pursuit (Seavy 1647). Even the planters who

diversified their economic activities remained predominantly focused on their primary industry (Pope 2004:337-348). This can be seen in the similar percentages of dairying vessels at Pemaquid and Clear's Cove and those from sites in the Chesapeake. The southerly colonies were focused on tobacco monoculture; cattle rearing and dairying activities were supplementary and subsistence-level activities (Gibbs and King 1991:112). In much the same fashion, the planters at Pemaquid and in Fermeuse Harbour were focused on the fishery as their primary economic activity but supplemented that with cattle rearing and dairying.

In this way, the common planters and fishing masters of Maine and Newfoundland established an identity for themselves which contrasted with the merchant-gentry of each region. While the merchant-gentry, particularly those of Massachusetts Bay, were able to accumulate wealth and capital and express this through the acquisition of status markers, the subjects of this study were, with a few exceptions, not able to do so due to natural and artificial constraints. These include their participation in a resource-extraction industry necessarily constrained by local environmental conditions, which demanded great time and energy commitments and limited the ability of participants to diversify; the realities of debt-clientage, which largely favored the merchant over the client; and social and political developments at local, regional, and international scales, which had both indirect (through the closure of ports to trade and corresponding economic effects) and direct (the wars of 1652 to 1713, for example) effects on the fishery. As a result, planters and fishermen built their identities through the participation in their trade. By investing what little spare capital they were able to



accumulate into the fisheries, planters were able to expand their share of the industry, marking their success and status even in an environment of chronic indebtedness and constrained economic opportunities. When planters invested surplus capital into consumer goods it was overwhelmingly comfort goods, such as alcohol and tobacco, or practical items. Investment in status objects, such as higher-class ceramics, pewter, fancy fabrics, or gold and silver objects, was limited and was intended to proclaim status at the household or community level rather than at a more worldly scale.

## Chapter 7: Conclusion

### Section 7. I. Introduction

The preceding chapters have sought to address the history and archaeology of the cod fisheries while identifying and discussing the processes which brought the first Europeans to northeastern North America and shape their way of life after arriving. By and large, the early visitors were explorers and, in many ways, exploiters, men on the hunt for new lands while keeping an eye for new sources of revenue with which to enrich themselves and their nation. North America's vast, and to European eyes, untouched natural resources were just what they were looking for. The motivations of the first settlers were more varied, but an eye towards enrichment was always present.

In the northeast, several resources were readily available for exploitation, including whales, timber, furbearing animals, and cod. It is the last, a "knowne and staple commoditie", which captured the most interest from the English, French, and other would-be powers in the region (Vickers 1988). From the 1502 arrival of North American cod to Bristol until 1763, the North American cod fisheries, particularly those around the island of Newfoundland, were the scene of much international competition. This competition saw the rise and fall of the Spanish and Portuguese fisheries, a steady and intense interest on the part of the French, and the entry and eventual rise of the English into a position of dominance both within the industry and within North America. Competition over the fisheries gave encouragement to settlement in the northeast, first as wealthy patrons sought to gain a share of the fisheries for themselves and later as a new class of merchants developed new methods of exploiting and profiting from the fisheries.

Permanent settlement and continued competition in the fisheries and other industries, in turn, played a role in the socio-economic development of the new colonial societies.

Participants in the fishery sought to both enclose and control the resource, including the labor required to prosecute the industry, and reacted to local, regional, and international economic and political developments. To conclude this dissertation it is appropriate to return to two questions. The first is the issue of underdevelopment in Newfoundland during the 17th century; the second is the resource-extraction industry research framework proposed in Chapter 2.

## Section 7. II. Newfoundland vs. New England

As mentioned already in this dissertation, 17th-century Newfoundland has been perceived as an underdeveloped colony, lacking the same forms of government institutions, social structures, and economic developments as other colonies such as Massachusetts Bay. This is perhaps best illustrated in McCusker and Menard's *The Economy of British North America 1607-1789* (1985), which spends a considerable number of pages discussing the rest of the British colonial world but largely treats Newfoundland as an extension of New England. It goes so far as referring to the cod fishing region from Newfoundland to Cape Cod as a "greater New England" (McCusker and Menard 1985:114). This illustrates one of the drawbacks of the staples thesis, and by extension world-systems theory; namely, that these theories focus on large-scale processes, marginalizing or ignoring vernacular local developments. They also fall into the trap of using the general term "New England" while focusing essentially on the

economic activity of Massachusetts Bay merchants along the Boston-Salem-Ipswich axis, along with those from Portsmouth, New Hampshire. By doing so they marginalize the impact of local developments in regions like Maine, which was, in many ways, culturally distinct from Massachusetts Bay, even as it was economically and politically joined to the southern colony.

The historical discussion of the development of the fisheries and related economies of Massachusetts Bay, Maine, and Newfoundland does, however, show the development of Massachusetts Bay into an example of Wallerstein's semi-periphery; it is impossible to deny the influence and role that Bay area merchants played in the economic development of Maine and the West Indies. Nor is it possible to deny their importance as a source of shipping and goods for Newfoundland's economy, as well as being an outlet for population pressure in that region. It would be an over-simplification to say that the perceived underdevelopment in Newfoundland was the result of Massachusetts Bay's economic dominance, for both were still integrated into and dominated by the larger English colonial economy. McCusker and Menard made one further mistake in their brief discussion of Newfoundland: they assume that further study into Newfoundland's economic development would reveal a "weaning" of Newfoundland from the English economy to the mainland colonial economy (McCusker and Menard 1985:114). This never happened, for while New England would become a source of lumber and other wood products, along with foodstuffs, Newfoundland remained largely dominated by the English economy, both through the migratory fishery and the sack trade, and the later development of the truck system.

The founding of Newfoundland and the New England colonies can be traced to the desire to exploit the commercially and strategically important stocks of codfish in their waters, first by drawing in migratory fishermen and explorers, and later economic interests controlled by merchants and gentlemen. Sponsored settlements gave way to a vernacular immigration process, yet by 1696 the senior colony of Newfoundland still possessed only a small population and lacked a formal domestic government. Meanwhile, Massachusetts Bay, despite recent political and social turmoil had a stable government, a large self-sustaining population, and an economy driven by trade and fueled by the cod fishing, timbering, and shipbuilding industries (Bailyn 1955; Baker 2015; Pope 2004). The truth of the matter is that labeling Newfoundland as underdeveloped is applying a false standard, for is it actually Massachusetts Bay which is the aberration in colonial North America. Newfoundland was comparable to Maine and Acadia in terms of population, and unlike the southern colonies had a relatively large class of wage-earning producers (Pope 2004:201, 418). Newfoundland was unavoidably constrained by a series of environmental, political, social, and economic factors, and together these had a significant impact.

The shared pattern of settlement in Newfoundland and the different regions of New England diverged significantly in the third decade of the 17th century. In Newfoundland, this period was marked by homeostasis, as the early proprietary plantations had failed as commercial ventures but the inhabitants continued to live there and maintain a European presence on its shores. Maine, on the other hand, saw a small, but increasing, immigration as the Council for New England and its members proceeded

with their colonial endeavors, which included the establishment of fishing plantations and small communities along the coast. In Massachusetts Bay, by contrast, the 1630s was the period of the mass Puritan migration. This Great Migration involved the arrival of a large number of relatively well-financed immigrants, including a large number of cohesive family units. This mass migration gave Massachusetts Bay a demographic and economic head start, in many ways jump-starting the colonization process. In the 1640s, however, both Massachusetts Bay and Newfoundland saw the development of residential merchant-gentry, as Sir David Kirke introduced (in a fashion) a new way of conducting business in Newfoundland, and local merchants in Massachusetts Bay stepped up to fill the trading gap caused by the outbreak of civil war in England and the resulting loss of immigration. In Maine, these developments were delayed by the feudal aspirations of Sir Ferdinando Gorges, and it was only after the region was annexed into Massachusetts Bay that residential merchant-gentry began to appear. Growth in both Maine and Newfoundland, however, was hindered both by internal factors, such as demographic instability and environmental constraints, and external factors, including the influence of foreign bodies. These last included West Country merchants for Newfoundland and Massachusetts Bay merchants for Maine. As a result, neither of the northern regions were able to develop an economy of the same scale and sophistication as Massachusetts Bay, who had an extensive carrying trade fueled by fishing, lumbering, and shipbuilding.

This meant that the society and economy in these northern colonies were fragile, held together as much by tension as it was by more traditional bonds of community, faith, or neighborliness (Churchill 1979:341-350). Furthermore, the prevalence of outside

merchants meant that much of the wealth generated by local economic activities ended up in foreign hands, and what remained was concentrated into production infrastructure and consumer goods. The economic recession of the 1680s, which included a decline in both the number of fish caught and in the price of cod in overseas markets, hit Newfoundland hard; Maine's slightly more forgiving environment, which had enabled a combined farming-fishing subsistence strategy, may have allowed it to weather the downturn better had many of its communities not already been destroyed by warfare in the 1670s. In Massachusetts Bay the merchants responded by reorganizing their fishery, moving away from small vessels outfitted on credit to larger vessels crewed by wage-earning fishermen, and by shifting from an inshore to an offshore industry. Further outbreaks of warfare in Maine towards the end of the 1680s destroyed much of what remained of Maine's developing society, including the wealth of its merchant-gentry; the French raid of 1696 did the same to the English Shore of Newfoundland. These calamities broke the fragile bonds within Maine and Newfoundland's colonial societies and set back colonial development, in the process making Maine and Newfoundland even more vulnerable to outside influences; the persistence of outside influences and the fragile economic situation contributed to the development of the truck system of outport merchants and credit in Newfoundland and a continued reliance on Massachusetts capital and governance in Maine.

It is simplistic to say that Newfoundland was underdeveloped during the colonial period. It was, in actuality, a developing society which was reaching certain benchmarks of sophistication and stability, including a wealthy class of local gentry, a self-sustaining

population, and economic diversification. Environmental realities, combined with economic and political factors beyond local control, meant that this growth and development was constrained and would never be as rapid as that seen in Massachusetts Bay. However, had the French raid not reset colonial development, it is entirely possible that within a couple of decades English Newfoundland could have developed as other colonies in the English Atlantic World had. The same can be said for Maine as well, which possessed further advantages over Newfoundland in terms of environment and social development, including a number of nucleated communities with local governance, and increased demographic stability.

### Section 7. III. Looking Back: The New Research Framework

One of the primary research goals of this dissertation was to develop and refine a framework for the study of early resource-extraction industries and their influence on colonial development. The historical and archaeological analyses and interpretations have been undertaken with this framework in mind but without explicit application. Revisiting this framework with explicit reference to the cod fishery is appropriate at this stage, identifying and making adjustments to the framework as necessary.

To review quickly, it has been suggested that colonial resource-extraction industries, such as the cod fishery and monoculture plantations, are developed as part of a system designed to convert those resources into a commodity for exchange and consumption by a metropolis; the specific resource is dependent on local environmental



and larger-scale economic factors. In exchange for these resources, there is a movement of labor, capital, and management to the colonies, eventually leading to the development of a colonial domestic sphere; this further encourages the growth of existing industries and the development of new ones. As these industries develop, they undergo at least one boom-and-bust cycle, where a period of rapid growth and high prices is brought to a (usually sudden) end with a stabilization or, more often, crash in the price of the commodity; this crash in prices usually leads to a reorganization of the industry into a more efficient mode of production, shifting from an open-access approach to resource acquisition to one based on the enclosure of the resource.

The North American cod fishery was developed as European nations sought to improve their political and economic standing in the international world. Codfish was part of this not only as an economic commodity, a way to increase the revenues of a nation and to balance its accounts but also as a strategic commodity. Cod provisioned ships, including the Tudor flagship *Mary Rose* and the army, and the fishery was thought to provide a reserve of skilled sailors for the fleet. During the initial open-access phase the industry was migratory and on a first-come, first-serve basis. Political control of the fishing harbors relied on a vernacular system of fishing admirals. The establishment of permanent settlements in Newfoundland, and their expansion into the Gulf of Maine and New England occurred as new parties sought economic positions in the industry; these economic claims were backed by politics, as the Stuart monarchs rewarded allies and sought to assert a measure of political control over the New World. In Newfoundland, the cod fishery came to dominate the economic and social development of society as the

most reliable method with which to make money. New England's more forgiving and diversified environment allowed for a greater integration of subsistence agriculture and other economic activities; the immigration of large numbers of demographically stable and well-capitalized families into Massachusetts Bay gave that colony a further advantage by jump-starting societal development.

The 17th-century cod fisheries witnessed three periods of economic recession in the fisheries. Each recession in the fishery resulted in greater enclosure; the 1620s recession, along with the economic and political maneuverings of the various parties, started the process of enclosing the shore space through the establishment of proprietary fishing plantations. Eventually, these proprietary plantations gave way to individual planters who owned and operated their own waterfront plantations. The 1650s/1660s recession saw an additional diversification in modes of production with the introduction of the bye-boat keeper; it also finalized the split between production and exchange as sack ships became the primary method of shipping catches to market, in effect enclosing that part of the trade. Labor control problems in the residential fisheries led to the widespread use of debt-clientage during this time period as well. The final recession in the 1680s finally saw the enclosure of the resource in the Massachusetts fisheries; the use of larger production units is parallel to the consolidation and enclosure of fields on England's agricultural landscape.

## Section 7. IV. Results

This dissertation was broad in scope, both geographically and chronologically, and sought to answer some large questions about the development of colonial North America through resource-extraction industries. The decision to focus on the cod fisheries opened up a large body of previous research for inclusion; at the same time, it became clear that some of that research, particularly on the fisheries in what was to become the United States, was dated and required a thorough critical reevaluation. Within the context of the historical narrative, the archaeology was approached with the goals of examining the transition from a seasonal and transient occupation to a permanent one, and with exploring the concepts of agency and identity as they played out with people on sites that were in many ways on the frontier of the English experience. It must be admitted that there was a background assumption that the direct participants in the fishery, the men who caught and made the fish, would express a level of independence from the rest of the colonial system through their material culture.

This was not found to be the case; rather, it was found that the fishermen seemed reluctant to invest in consumer goods beyond those with practical applications. For the most part, the relative wealth of these men was expressed in the archaeological record through the acquisition of higher-status ceramics, and even then access to these goods seems to have been limited more by geographical location than financial consideration. The fishing masters at Smuttynose Island, accepting the limitations of the archaeological collections, had the largest and most diverse ceramic collection, and were conveniently located near the commercial entrepôt of Massachusetts Bay. The planters in

Newfoundland had similar access to higher-status ceramics but invested proportionally less in them; the Maine planters, on the other hand, seem to have had the least amount of access to these goods, and it is possible that the economic manipulations of Massachusetts Bay merchants made them even more expensive and difficult to acquire. The exception to this trend was comfort goods, specifically alcohol and tobacco. Not only were these products consumed in large quantities, but the preferred alcoholic beverage, wine, was considered to be above the station of the planters and fishing servants. Its consumption provided physiological, social, and economic benefits, as well as a taste of luxury on the shores of North America that they may not have otherwise been able to consume.

By and large it appears that the fishermen, be they planters in Maine and Newfoundland or fishing masters at the Isles of Shoals, expressed their identity through their primary economic pursuit; in other words, they were fishermen, and they proclaimed both their identity and their success in the fishery by increasing their share in it via the acquisition of more boats, equipment, and servants. The most successful planters owned and operated two or more boats; the least, one or less. In a world where debt-relationships were the norm and most fishermen carried at least some debt liability, being successful enough to operate several boats was an accomplishment. The economic recession of the 1680s was devastating to these men, for with few exceptions many were forced to curtail their operations. Those who were of middling status fell to the lower status; many of those already in the lower strata of planters disappeared from the records.

The archaeological record reveals significant changes in the composition of collections with the transition to a residential mode of production. The small scale of most of these excavations and the overall lack of a definable household within the assemblages, along with biases caused by preservation and excavation, limited this analysis in many ways. The ceramic assemblages did reveal a marked shift in the functional distribution of ceramics between the two migratory assemblages and the five planter sites; the final migratory assemblage was recovered from a specialized structure with a specific purpose, which biased the data available and limited its utility in addressing the research objective. Significantly, the migratory assemblages represented two distinct forms of transhumance, trans-Atlantic in the case of Ferryland and localized in the case of Smuttynose Island, yet the functional distribution was largely identical. The differences were in the actual vessel forms; the Ferryland assemblage reflected both the duration and distance of the voyage involved with its large numbers of tall pots, while the Smuttynose Island assemblage reflected a much closer supply source and the ability to resupply with a larger percentage of less-specialized storage pots.

The transition to a permanent presence in North America had a concurrent shift in the functional distribution of ceramic vessels; it also revealed the economic diversification that came with permanent settlement. Storage vessels, particularly in environmentally-constrained Newfoundland, remained high; yet there was an increased emphasis on food and particularly drink service vessels. In fact, the proportion of drink service vessels on Smuttynose Island and the Goodridge site suggests that the inhabitants participated in an informal hospitality industry centered on the retail of alcohol,

particularly wine and rum, and tobacco. On Smuttynose Island this industry was centered on the meetinghouse; the planter at the Goodridge site likely operated out of his own house. The planters at Pemaquid and Clear's Cove, on the other hand, do not appear to have participated in a hospitality industry in any great way; rather, they invested into subsistence cattle rearing and dairying, as suggested by the presence of milkpans in a similar percentage as that on sites in the Chesapeake. The residents at Sagadahoc Island were part of the garrison for a fortified fishing plantation; the functional analysis of ceramic vessels suggests a greater investment in drinking vessels, but this may be a reflection of the recreational activities of the garrison and not of any diversification of economic activities.

A similar transition can be seen in the architectural evidence; the pole-and-bough construction of the migratory cookroom at Clear's Cove shows the concern for expediency in construction of what was intended as a temporary structure; the better-dressed beams from the planter occupation at the same site, the dug and rock-lined cellar holes at Pemaquid, and the meetinghouse on Smuttynose Island all speak to occupations which were intended to be permanent. The presence of glass storage vessels and increasing ubiquity of clay smoking pipes speaks to the demand for both new and more readily available products appearing in the 17th century, while the red clay tobacco pipes found on Massachusetts Bay, Maine, and Newfoundland sites demonstrate not only the development of colonial industries but also the distribution of the resulting products by local commercial networks.

## Section 7. V. Conclusion

Resource-extraction industries such as the cod fisheries were simultaneously a dynamic and moribund force in the development of the 17th-century colonial world, changing and adapting to new circumstances while constraining, in many ways, the people who participated in the industry. As environmental, social, economic, and political facts changed, so did the fishery, transitioning from a migratory presence on North America's shores to being an inducement towards permanent settlement, to a foundation for the development of a colonial economy and the associated society. Fishing masters, planters, bye-boat keepers, and fishing servants all participated in the industry as it developed into a number of different forms based on the needs of the time and place, often in the face of resistance by other economic and political groups and developments. The preceding archaeological and historical study has explored the role of the fisheries in the development of English North America, the role it played in colonial development, and both the systems put into place to control this industry and the reactions of participants against those systems. The analyses here suggest that there were no collectives of rogue fishermen operating outside of the mainstream society, nor did fishing communities and plantations lack social, political, and economic development. In a world system constrained by environmental, political, and economic factors, 17th-century planters lived and worked according to how they knew best. In many ways socially and economically limited by those afore-mentioned constraints, they were still able to acquire some nice possessions; by and large, however, those planters chose to invest their limited capital into their primary pursuit, expressing success by expanding

their role in an industry. More work is needed, particularly in New England, in order to fully understand the ways in which these men lived and worked; hopefully this dissertation will prove to be a cornerstone for future research into the study of the 17th-century fisheries of New England, and provide researchers with a foundation for comparison with Newfoundland's complex historical and archaeological records.



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