SPATIAL ANALYSIS OF ACTIVITY AREAS AT THE FIRST CHARLES TOWN SETTLEMENT IN NORTH CAROLINA

by

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ABSTRACT

NICOLAS M. BOWERS. Spatial Analysis of Activity Areas at the First Charles Town Settlement in North Carolina (under the direction of DR. DENNIS OGBURN)

Charles Town, North Carolina was an inhabited settlement just to the south of Wilmington, and was occupied from 1664-1667 and has only seen one major excavation, conducted by the University of North Carolina at Wilmington in the 1980's-90's. In this thesis I have analyze the locations of artifacts found at the site to determine the activity that took place in different areas. Several Methods were used, but the main one is density mapping. This analysis will give a look into how early colonial settlements prioritized activities and spatially arranged their sphere of influence inside and just beyond the colonial settlement while being first established. Objects of concern are what they brought with them, where they worked, what they were doing, and how items of importance were kept within the colony. What was discovered was the more likely use of the structure found within, such as how the main building was used for a dwelling place and as a storage area, as well as how outside the colony was used as a dumping ground. A few of the artifacts found are various historic ceramics, iron fragments, and a few musket balls. My analysis shows that previous assertions on specific buildings did not have strong evidence to support it. As mentioned before Structure A served as both a barracks and a storage house, but this only adds to the previous assumption on the building. Other buildings, such as Structure B has a completely different meaning, as it was previously thought to be a gun emplacement, but instead shows stronger evidence for being a watchtower. Structure C in my findings shows evidence for being a dwelling for a single person, maybe up to five individuals. When concerning the outside areas, I found that the northern part of the colony was used as a work area/relaxation point. While the south and east part of the colony seems to be the dumping

grounds for broken ceramics and fire refuse. Finally, the center of the colony seems to be used as a traversing ground, being void of any clear meaning as most telling artifacts were found outside the courtyard.

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INTRODUCTION

Charles Town, North Carolina was a little-known settlement just to the south of Wilmington, NC (Figure 1), that was only inhabited for a brief time, from 1664 to 1667; because of this, we get an almost perfect archaeological snapshot of an early colonial town circa 1664. By looking at this settlement we are able to obtain a good idea of how the early stages of a colony were organized and which types of goods were considered important to the people who lived there. My research goal is to see if we can determine the locations of possible activities in excavated areas. The reason this is important to understand is because of the brevity of the town's occupation; many places we know of were inhabited for a long time and, therefore, do not clearly show the initial setup of those colonies. It is because of the brevity of Charles Town's existence that allows archaeologists to see the early activities of the colony. One could argue that Jamestown would also show the activity areas clearly due to ongoing excavations and written records. However, Jamestown was continually inhabited, and trying to determine which part of the site is earlier than any other can become difficult. The data that I will be using is gathered from the official reports made of the Charles Town excavations as conducted by The University of North Carolina at Wilmington, as well as the catalogs of artifacts that are kept in the Office of State Archaeology in Raleigh North Carolina.

As it stands, Charles Town is one of the few early settlements that we know the location of that experienced little to no expansion. What I expect is the colonists would have prioritized some activities in specific areas to both control the flow of colonial traffic, and to be convenient to daily life. Only three structures were found on the site, which limits the scale of interpretation I had to do. Today cities and towns have specific defined work and domestic areas and finding how this may be arranged in a colony may help us understand how colonial cities/towns were

established. Taking into consideration that some of the colonists were sons of wealthy plantation owners, it can be expected of them to not wish to have worksites close to their living areas, if they had their own dwelling place (Loftfield, 2005, p. 45). I believe that the analysis of high-quality goods, such as porcelain and other ceramics, and the observation of other utilitarian goods found in the settlement will help me determine the location of activity areas. Goods indicating a domestic area as opposed to a work site are as follows: higher quality pipes made by famous or well-known craftsmen of the time, specialized and higher quality pottery like fine china, and finally, a higher concentration of utilitarian goods, like flint and musket balls (Voss, 2012, Shryock et al, 2011, Adams & Boling 1989, p 74). This compares to work areas using primarily generic earthenware pottery, more practical goods such as farming equipment, and smaller dwelling areas. By comparing Charles Town to other contemporary colonies, I believe there is common link in spatial areas between the sites, such as the use of some buildings and the utilization of the area outside the colony's boundaries.

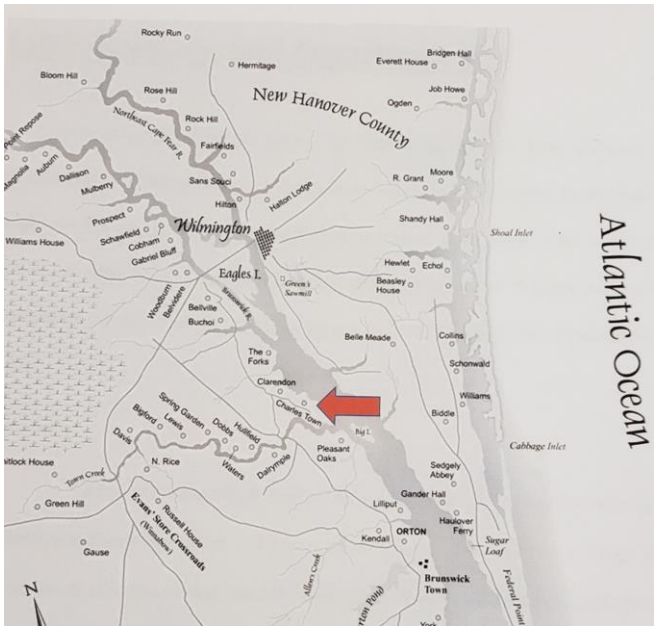

Figure 1. Location of Charles Town (Office of State Archaeology Map).

Due to the fact the site was only inhabited for a few years, it is important to keep in mind that it might not have had time to develop professional and established activity areas. However, this site still allows archaeologists to gather information on how activities would be carried out in an early colony (Elson, 1904). This can help us understand the distribution of people in an early settlement and could relate to other colonial sites in terms of spatial activity. By knowing the location of recovery for each artifact I can begin to form an idea of how goods were distributed through the colony. By looking at these goods and the spatial patterns from other English Colonies that were constructed around the same time as Charles Town, I expect to be able to detect common patterns.

BACKGROUND

Social and Political Relations in Early English Colonies

England in the 1660s had an estimated population of 5.3 million, and a vast majority were farmers, making the country feel overcrowded (Newman, 2013, p 27). It was also around this time there was a mass closing of farms so the landed gentry could raise sheep, forcing the peasants to move to the cities (Hoppit, 2003, p 83). During the Tudor period (1485-1603), it was discovered that sheep seemed to be a better market investment for the Lords. English wool was highly valued, sheep only had to eat grass, and in hard times you could eat them. As a result, many of the farmers were kicked off the land through the infamous Enclosure Act (an act enabled to kick people off the land) (Hoppit, 2003, p 83). The peasants had to move somewhere, and for many, that place was the city. Here, they found new employment and potential wealth, but many others were not so lucky and lived in abject poverty. The desire to govern yourself in a new colony would have been very attractive (Rose, 1989, p 4). The Americas during the 1600s, had been occupied by Europeans for about a century and a half, provided the opportunity for success and land for those who wanted to take the risk, and many of the aristocrats looking to expand their private capital took notice of this. In the case of the Carolinas, the land was given to the Lords Proprietors, the supporters of Charles II's return to the throne of England (Joyner, 2006).

Many of the people who first volunteered for the colonial missions were poor citizens, who were desperate and looking for any way to earn money and try to earn a living to escape poverty. The people who sponsored the ventures never left England (Crofis, 1938). To lead these colonies a person was usually appointed by the King/Monarch to act as the governor (Moore, 1922). Some of the more notable colonists include John White, governor of the Roanoke colony,

and John Rattcliffe, second president of Jamestown. White, did not stay in the colony but spent most of his governorship trying to secure more supplies for the town. These few were the men in charge of the colony, but they did not rule alone, instead, they governed by the will of the people. Rattcliffe, after deposing the first president of Jamestown, also fell out of favor with the colonists because he tried to have them help build a governor's house (Price, 2017).

We see that certain colonial leaders at the time believed they had the absolute right to rule their people (Second Virginia charter, 1609), at least in Jamestown. This idea came from a council that drew up how the Colonial Government would work. It was decided the Governor should have essentially absolute power. What the Second Virginia Charter specifically says is, "AND we do also GRANT and confirm to the said Treasurer and Company, and their Successors, as also to all and every such Governor, or other Officers, and Ministers, as by our said Council shall be appointed to have Power and Authority of Government and Command in and over the said Colony and Plantation" (Second Virginia Charter, 1609). This was a defining feature in the government of Jamestown and could be used as a basis for the rest of these far placed colonies. Historians know that even though an executive run government was more common, it was not universally accepted, with one example being the Mayflower Compact, an agreement stating the colonists were subjects of the King, and they would work together.

Trade

What were England's colonies relations to the rest of the world? They were established so the mother country could benefit from the money earned by them. In places such as Virginia, this revenue came from tobacco plantations and in the Carolinas, naval stores were of the utmost importance (Walker & Cobb, 2008). In 1651, England set up a series of laws called the Navigation Acts, which required any trade with the colonies to first go through England. The

goal of these acts was to establish a monopoly of trade that benefitted England and not necessarily the colonies. However, these acts were hard to enforce and many people broke them to make a profit (Gabriel & Casner, 1938). Part of a problem for England was the American colonies continuing relationship with Dutch traders that allowed the colonies to obtain many cheap goods with relative ease. The Dutch also owned many of the shipping lines at this time, leaving the English with few trade routes (Davis, 2012, p 292). Due to the English Civil War (1642-1651), it was hard for England to exert full control over the colonies and enforce the laws it had passed for these colonies, as the military was occupied at home. However, when the war ended, and Charles II was restored, royalist forces were able to take control of the government and soon the colonies were back under direct British rule.

The economy of the early modern period beginning around the mid-1500s was much different than that of the previous medieval period. It was Mercantilism that took precedence over the fading feudal system. The basic idea of Mercantilism is as follows: there is only a finite amount of wealth in the world, and the only way to become rich is to make other nations poor, as well as, hoarding as much gold and silver as possible to make a stronger national state. This was accomplished by attempting to export goods at a high level, while only importing the bare minimum (Johnson et al, 1917). It is with the ideas of Mercantilism that the colonies were established, to increase the wealth of the mother country, and to gain as much wealth as possible.

While following the ideas of mercantilism, England used tobacco as its leverage to trade with the rest of Europe. Tobacco was a product that had to be processed and sold, thus England had stumbled into the world of global trade via supply and demand. This system proved more stable than a simple extraction economy, as seen with Spain, and soon much of Virginia, Maryland, and even North Carolina held huge tobacco plantations. Other British holdings held

onto the plantation idea as well, Barbados became a sugar hub, being one of the wealthiest in the Crown Realm, and although inhabited later, South Carolina produced both rice and sugar (Edelson, 2007).

In the colonies, goods produced were not always sold for money; many times, they were bartered for other types of goods in the form of supplies. Examples of what could have been exchanged are European tobacco pipes, specific sets of pottery dishes, weapons, textiles, that the settlers did not have themselves. Trade did not happen with just the Europeans though. Much like in other colonial situations, many of the American Indians traded with the new colonials for European goods as well. This trade was mostly in the form of food for the colonists and utilitarian goods for the Indians (Scham, 2006). As the natives were familiar with their land, they were able to amass a surplus of edibles ready to trade. The European settlers were more than happy to trade for some this surplus, as doing so helped fill there storehouse until they could grow and hunt their own food.

Second Anglo Dutch War

The Second Anglo-Dutch War was fought from 1665 to 1667, and its outcome shaped the focus of British colonization for years to come. It was started by the English, who tried to take Dutch trade routes (Rikard, 2000). This war had a major impact on the life of Charles Town, and after the war ended, Charles Town ceased to exist. Before the war started, a supply ship bound for Charles Town sank. Also, the colonies sponsor had to flee to France because he lost favor with Charles II due to his failure to stop a Dutch attack on London during the war. Ultimately, England lost the war but was able to take and keep New Amsterdam, renaming it New York.

John Yeamans

John Yeamans, who would become the 3rd governor of South Carolina, was an important player in the formation of Charles Town. He was born in England but moved to Barbados in 1650 where he became a rich landowner and planter (Butler & Paschal, 1996). While on the island he gained a good reputation for himself by becoming a judge, and a councilman. He later became known to the Lords Proprietors who were able to secure a position for him in the Carolinas, and this is how Charles Town started. It was because of Yeamans that the settlement supposedly had a close tie with Barbados.

One of Yeamans responsibilities was to explore the coast, which he attempted to do while acting as governor of Charles Town. His expedition ended abruptly in 1665, and was forced to return to Barbados, effectively abandoning the colony as well (Butler & Paschal, 1996). Yeamans did not leave the colony completely alone, as he left a man named Robert Sandford to look after the colony (Butler & Paschal, 1996). It was during this time the colony failed. Yeamans did successfully establish Port Royal in Jamaica after the Charles Town experiment, proving he had the ability to establish a successful colony.

History of Charles Town

Charles Town had its start in Barbados. Barbados as one of the wealthiest colonies, it had a good standing in the British Empire, and many of the landowners were extremely wealthy. It is theorized the Charles Town expedition was started to help relieve population growth on the island. As many of the wealthier landowners would not leave their profitable sugar plantations, it can be assumed the poor would have been the ones to leave, as the same thing happened during the enclosure acts in Britain. The acts were a series of laws passed that allowed lords to remove pesents from their land.

Charles Town was set up by prospecting Lords who hoped to increase their capital gain. The colony was established in 1664 by settlers from Barbados, while hoping to increase their wealth while relieving some of the population pressures building on the island. The colonists were led by John Yeamans, a Barbadian planter. He was granted permission from the Proprietors to establish a colony in the Carolinas (Bull, 1995, p 331). While on the expedition, he was also told to try and explore the coastal region of the Eastern American Continent (Butler & Paschal, 1996). With the new colony established, the settlers tried to make the most of their situation, with their first export mainly being timber. In 1665 a supply ship sank on its way to Charles Town at the mouth of the Cape Fear River, and in 1666 the colony was cut off from England for long periods of time, mostly due to the second Anglo-Dutch war. Yeamans appealed to England to send some supplies, but to no avail (Butler & Paschal, 1996).

To make matters worse, the Lord, George Monck, who sponsored the colony to be started was also in charge of protecting London. He failed to stop the Dutch from sailing up the Thames and burning the city of Sheerness. Lord Monck then fled to France to avoid retribution from Charles II. With the war going on and the loss of a credible sponsor, the colony was cut off from the greater sphere of English influence. The English also could not give further help because of the great fire of London and the resurgence of the Plague in 1666. The colony may have survived with the goodwill of the neighbors they had, but that hope came crashing down quite dramatically. Much like the Romans who influence conquered people by educating them and giving them wealth and a life of luxury, at least for the leaders, the colonists tried to do this with their native neighbors (Thijs, 2016, p 205). The local tribes sent them some of their children to be educated in the ways of British society and Christianity, but these children were sold into

slavery by the colonists (Office of State Archaeology, Charles Town Lab manual, 2016). Some scholars think that the likely destination for the children was Barbados.

Without reinforcements and supplies to help the colony, it seemed the settlement was doomed, and this would eventually be proven correct. The final event that ended Charles Town was one of the most devastating hurricanes ever recorded in colonial history, which came up the East Coast in 1667. In Jamestown, this event was called “The Dreadful Hurricane” and was reported to have knocked down 10,000 houses (*1667- The Dreadful Hurricane of 1667*, 2001). The impact this storm had on early colonial America cannot and should not be overlooked, as, after this storm, Charles Town was officially abandoned in 1667. This, however, was not the end for the town's name and legacy, as in 1670 survivors of the settlement moved to South Carolina and established the modern Charleston (Loftfield, 2005, p 38). This colony would eventually grow to be one of the most successful, wealthy, and influential towns of Colonial America.

Colony Details: History and Archaeology

The major excavations were carried out by UNC-Wilmington in the 1980’s and 90’s Loftfield 2005), and a smaller one carried out in April, 18 19, 1969 by Mr. Debnam of the Cape Fear Historic Society, and two visiting archaeologists (Debnam, 1969). Both heads published a paper on their findings, but Loftfield was much more meticulous in his notes, and publications, while Debnam was a little vague on his findings. The results showed a variety of ditches, postholes, storage containers, hearths, and a lot of American Indian artifacts (as the site was built on an abandoned village). The goal of the excavation was to determine the socio-economic status of the colonists and see if there were any architectural influences from Barbados, which they were able to find (Loftfield, 2005, p 34). In totals 15,500 sq. ft. of land was uncovered (Loftfield 2005, p 39). Test excavations were carried out nearby but showed nothing, the whole site was

likely uncovered. What was discovered was three structures (Figure 2), Structure B was identified as a defensive feature due to the number of military-related artifacts found in it. Structures A and C were only identified to have hearths in them; however, Structure A is noted to be extremely long and could have acted as a storehouse (Loftfield, 2005, p 42).

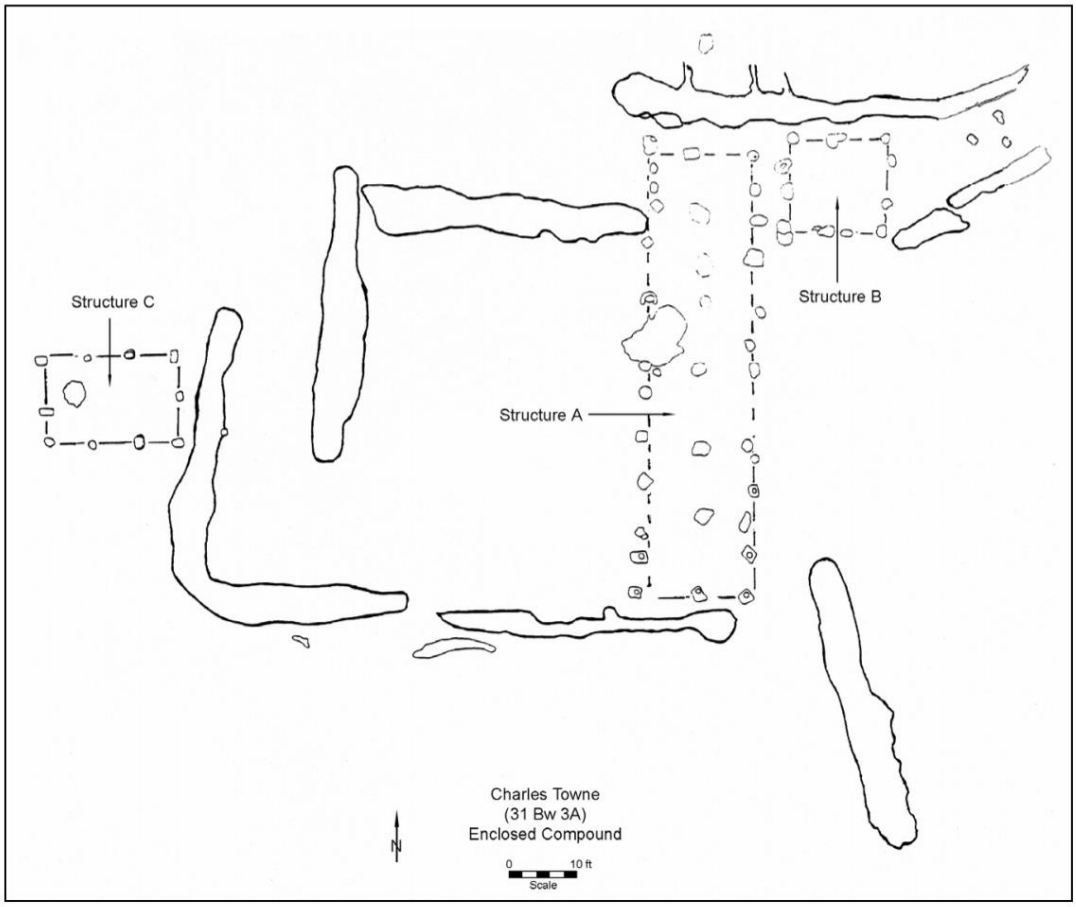

Figure 2. Excavated Area of Charles Town (Loftfield, 2005, p 42).

The Colony itself was rather small with earthen works acting as walls or defensive structures built around a central courtyard (Loftfield, 2005, p 34). Its location was near the mouth of the Cape Fear River just south of Wilmington, and on the same side of the River as Brunswick

Town. We only know Charles Town existed because of small records of it found in journals that some of the Colony's leaders kept, and even then, they did not live in the colony for long. Although the exact population of Charles Town is unknown, it is thought to be about 800 people. But given the limited size of the excavated area and that only three structure were uncovered, this seems way too large of an estimate. We unfortunately do not know the exact makeup of these people; it is assumed that a few were the second sons of plantation owners of Barbados, and the rest were poor free whites (Loftfield, 2005 p 45). It is assumed that people of lower classes who were brought with the nobles were former servants who wanted to become farmers (Loftfield, 2005, p 36). It was hoped these farmers would spread along the rivers that traverse the region and use Charles Town as their hub (Lee, 1965).

We have an extensive record of artifacts found in the excavations. A few categories of items recovered include fine china, olive jars from Spain, Salt Glaze stoneware, and tin-glazed pottery. These ceramics are only a few examples of what was uncovered at Charles Town that may have belonged to more wealthy individuals. Some other artifacts recovered include Redware, tin-glazed pottery, Rhenish brown (bellarmine) stonewares, various earthenware potteries, American Indian pottery, clay/kaolin pipes, and iron products. We also have a map detailing all the dwellings found and trenches discovered so far (Figure 2). Many of these types of artifacts are unremarkable as they do not indicate wealth or status and can be found in most colonial sites, but they could be indicative of specific activities. Out of the many trenches dug, only a few came up with pipes that bore a certain makers mark on them; the most common being "EB" for Edward Bird, as his mark fits in with the period of habitation for the town. Along with the special pipes, only a fraction of the historic pottery unearthed is stoneware, with a larger majority being earthenware. When looking at the quality of artifacts, specifically the ceramics

recovered, a few indicate that they belonged to people of high status. This shows possible evidence for a difference in social class in the colony, but more importantly, show where certain activities are being conducted.

HISTORICAL ARCHEOLOGY IN RELATION TO CHARLES TOWN

In the Americas, Historical Archaeology deals with the post-contact period. By its literal definition, it means conducting archaeology with the aid of historical documents to provide context, confirm numbers, and act as a source of information about a site (Hall, Silliman, 2006). Charles Town archaeological site is currently located on a farm and is in no imminent danger of being destroyed. Despite that, it is still important to try and excavate and learn from the settlement while the opportunity is still available to us. As archaeology is the only way to obtain information on Charles Town, many decisions have to be made with educated guesses that consider the archaeological context. We can, however, take models from other settlements and use them as a basis for understanding Charles Town.

A few sites for comparison are Jamestown in Virginia and, Plymouth in Massachusetts, and in North Carolina, there are Bath, Brunswick town, and Guilford Courthouse. Looking at the early history and setup of these towns, it is possible to get an idea of how Charles Town was initially planned. With the excavations that have been done at those sites, we can identify the location of dwellings, kitchens, outhouses, storerooms, and various other buildings. Each building types have distinct archaeological traces. For example, houses will typically be larger than a disconnected kitchen, and the artifacts recovered would indicate what the dwelling was used for. Most were used for one primary purpose, with the exception of outhouses, as they were often used as a garbage dump for the people who owned them.

To understand how activities were located spatially in Charles Town, it would be beneficial to know how other colonies were arranged. An excavation at Bath can be seen as a good model for what is usually done with early colonial sites. Despite the town being founded in

the 1700s, much later than Charles Town, it can still be a good reference for how to apply Historic Archaeology to an early Colonial site. Dan Baicy did a thesis on how the excavation was supposed to work, dividing it into different themes to get a full picture of the site (Ewen et al, 2011, p 245). It was stated that the first goal of the excavation was to identify the structures and features that belonged to the original site. With this goal in mind, the excavators were able to make progress by looking for specific items and then analyzing them through a variety of theories and viewpoints to see what would make the most sense (Ewen et al, 2011). His work provides a framework for how future archaeologists can conduct excavations at colonial sites (Baicy 2003).

In Australia, a study was done to determine the spatial dominance (how the organization of buildings for importance influenced how the people lived and worked) of the Poonindie mission which first appeared in the 1860s (Griffin, 2010, p 159). During this time, the spatial layout of a European city had a focus on the nuclear European style of family; living in individual houses, which is not usually compatible with other cultures that focus more on the extended family (Griffin, 2010, p 159). The same style of plan was imposed on the natives living at the mission, with the center of the village being the church, in an effort to try and force the European worldview (Griffin, 2010, p 160). The first archdeacon of the area desired that the mission should be modeled after an English village. As there was a staff house that was larger than the others, it was seen that this structure acted as the local manor house (Griffin, 2010, p 158, 161). The buildings were constructed so they would have been in the everyday view of the local people, such that they blocked the view of the landscape surrounding the village and physically separated them from it (Griffin, 2010, p 162). This view of spatial analysis is all about control. How the mission was established and laid out is useful for interpreting Charles Town.

By relating how this colony was set up organized and relating it to Charles Town could help learn how the colonists prioritized the used space. This site however is not a perfect fit. Poonindie was a colonized area full of aboriginal people, whereas Charles Town was inhabited by only Englishmen, as far as we know.

A better place to look for comparison would be a Colonial American city that followed a European pattern of a grid or irregular plan (Miller, 1988, p 58). St. Mary's City in Maryland is such a town, however it is poorly documented and the existing records seemed to indicate the settlement was not dense and the structures were highly scattered (Miller, 1988, p 59). The city was mostly abandoned during the 1700s leaving the rest of it covered in agricultural fields (Miller, 1988, p 62). Urban geographers trying to help interpret the maps and excavations of the area found that the local topography heavily influenced the layout of the town. It was also shown that street layout influenced structure placement (Miller, 1988, p 62). There is a separation of types of buildings, ranging from elite to a more common type, mostly by spatially arranging them. For instance, the church and the government buildings are located in the town square, and more private structures are located outside that area (Miller, 1988, p 62-64).

A separation was also found in the construction of the buildings uncovered, with public structures being made out of brick and private ones being of wood (Miller, 1988, p 64). Seeing the importance of some structures gives us a good idea of what the colonists valued, but its layout is still confusing. The city does not follow a grid or an irregular pattern, but instead a baroque pattern, which emphasized certain points that had a high amount of symbolism by making them visible, and constructing large open roads to make the visibility possible (Miller, 1988, p 67). This is an interesting concept of showing an emphasis on a site; in Charles Town, the largest building was in the center of the site, giving it a more symbolic or vital emphasis.

An excavation at Fort Raleigh could give some insight into how spatial analysis can be practiced by looking at ceramics. At this excavation, 101 ceramics were uncovered which included Iberian olive jars, French stoneware, Tin-glazed earthenware, and a few other various earthenwares (Skowronek & Walker, 1993, p 60-64). Most of the ceramics uncovered from this time period are not considered to be dishes for eating, as the main tableware of choice was made of wood (Skowronek & Walker, 1993, p 64) (Figures 5,6,7,8). What the excavation focused on was the distribution of storage wares, and how it reflected cultural affiliation. The settlement pattern for the town indicates having a wall/fortified enclosure around it, which would have had a house lined street from the gateway (Skowronek & Walker, 1993, p 66). The reason for the layout is that it is one of the two main settlement plans used by the British at this time (Skowronek & Walker, 1993, p 66). Knowing why certain materials are favored over another is important for knowing the situation the colonists were in. But the interesting thing gained here is the settlement style for English encampments. Charles Town was incredibly small, so it may be the area was more of a fortified structure than a full-on walled town, with only a few critically important buildings located in its center.

Binford has stated that spatial distribution of artifacts can give us information on the social organization of different cultures (Binford, 1962, p 217). By knowing what an artifact is used for we can interpret space and function of the area where the artifact was found. With the association of human behavior, we can start to interpret Charles Town based on our knowledge of English society at the time. We have certain examples such as in Middle Caicos where a study of tool types led to an interpretation that a salt field was occupied seasonally. Based on the assemblages collected, as no one defined activity as discovered that would indicate year-round activity, meaning that there was no need to create a stratified society in this area (Casto, 2015 p

40). Kit Wesler did a study in 2013 on the spatial distribution of artifacts at a Jamaican household. He concluded the backyard was a work area for construction and the artifacts identified were reminiscent of upper-class citizens (Casto, 2015).

When looking at dwellings and defensive structures, one of the best comparisons is that of Jamestown. The houses of Jamestown were constructed of wattle and daub with a timber frame, not that much different from what is considered Tudor style in England (Cotter, 1976, p 156). Of these houses, the one that is most well-known is the Governor's/row house. It was two and a half stories high, constructed of wattle and daub, and had two chimneys. Contemporary sources from 1610 say that Jamestown had two row houses were two stories high, and it was not until 1618 that the first record of a governor's house appeared. We also know that the houses at Charles Town were constructed with timber frames. From historical accounts on Jamestown, the fort had two rows of houses, three storehouses that were rather large and joined together, and a raised platform for the cannons (see Figure 16).

Brunswick Town and its houses were vastly different from those of Charles Town. While the houses in Charles Town were made of wood, it appears the houses of Brunswick Town were built from a combination of both brick and wood (Lee, 1952, p 240). In addition, the buildings of Brunswick Town were highly regulated being 16 by 20 feet (Lee, 1952, p 240). From old maps of Brunswick Town, it is clear the town was planned in a grid pattern. Interestingly, they seem to know about Charles Town, as there is a road on one of the maps labeled "road to Charles Town". While houses can be a very good way to indicate particular areas of activity, they are not the only way. Brunswick Town in particular is known for having its own method of disposal named after it. This process is called the “Brunswick Pattern of Refuse Disposal” and is the process of discarding secondary refuse adjacent to a dwelling, primarily out the back door (South, 1978, p

226). While this method is usually used to identify public buildings such as taverns, it can be used in finding work areas such as in the Kings Reach Plantation in Maryland, where a similar system was used to discover activity areas (South, 1978, p 226). Because the plan of Brunswick Town is so well mapped by archaeologists, it is the "Brunswick Pattern of Refuse Disposal" method of artifact analysis that can be used to discover the spatialization of activities in Charles Town.

Due to Charles Town's Barbadian influence, it is important to look at how Barbados was colonized and settled. Barbadian colonial history originated at Holetown which was founded by William and Peter Courteen, the expedition was captained by Henry Powell (Smith, Watson, 2008 p 65). Although the land chosen on the island was little more than a swamp, local freshwater springs made the area attractive to colonists who needed to water their livestock (Smith, Watson, 2008 p 65). The settlement is located on the south end of the island, and among the first few structures built are a fort and a church, which still stands today (Smith, Watson, 2008 p 65). The village of Holetown was built in between the two structures in a U shape, with two roads going through them (Smith, Watson, 2008 p 66). What we have is a vague description of the settlement, and the earliest known map of the town shows a lack of urban development (Smith, Watson, 2008 p 65). The artifact assemblage shows that "First Street" (the name of one of the two streets) had domestic dwellings established on it. In combination with the domestic ceramics, there is a high amount of foreign (non-English) ceramics found, indicating the colony had a heavy reliance on trade (Smith, Watson, 2008 p 68).

To try and understand how the urban geography of Charles Town would have been likely influenced by Barbados, it is necessary to understand how a few Barbadian settlements were laid out. Holetown may have been the first settlement, but Bridgetown was a faster-growing one

(Smith, Watson, 2008 p 71). Growth may have started slowly but picked up quickly after the town became the preferred harbor for the colonists (Smith, Watson, 2008 p 71). The town had poor urban planning that did not match either a grid or baroque plan but was built upon the sugar trade. There were warehouses near the port and houses, inns, and stores popping up as needed (Smith, Watson, 2008 p 73). While it may have seemed planned, the growth was unplanned and chaotic (Smith, Watson, 2008 p 72). The two settlements of Bridgetown and Holetown could have influenced how Charles Town was organized. It would seem that the urban planning for both towns differed except for early houses being made of post in hole dwellings (Smith, Watson, 2008 p 71). Loftfield gives a diagram on gun emplacements laid across Barbados and relates it to Structure B, saying they are similar in design, being a squarish structure with a barracks attached to it.

Archaeology of Charles Town

The Charles Town site is a difficult project to work on, not just in the sense of historical archaeology, but in the context of research in general. Not many people know about it and fewer have written on the topic. When looking at historical sources, there was no official charter written up to outline the borders or list the rights of the colony. Of first-hand accounts, there are only a few journal entries made by people who were not even in the colony for a majority of its existence. What was uncovered at the site were three identified structures (see Figure 1), and a plethora of historic pottery and kaolin pipe stems, among other artifacts. When looking at the archaeological report on the excavation of Charles Town, the only detailed one written is not extensive (Loftfield, 2005, p 34-48). In this article the lead archaeologist mentioned he was trying to see if Barbados had any influence on the colony in terms of its social system/hierarchy. He concluded there was Barbadian influence, as one of the buildings on the site, specifically

Structure B, the defensive unit, was built in the style of gun emplacements of Barbados. After a few seasons of digging, he decided the reason the colony failed was because of a reluctance to adapt to the enviornment of North Carolina (Ewen et al, 2011).

When reviewing the site, the reason that some archaeologists believe this area was chosen is due to the fact it is on higher ground than the surrounding area, has a fresh water source, and is relatively centralized in the Carolina territory (Loftfield, 2005, p 36). In some of the first excavations, discoloration in the soil indicated a long ditch suggesting a defensive structure was built (Loftfield, 2005, p 39). Furthermore, at the end of 1991, several post holed buildings were identified (Loftfield, 2005, p 39), and they were built in a way that appeared to be in an enclosed position that was in line with the long ditches. Despite how large this sounds, the actual dimensions of the space within the earthworks are around 45'by 50' (Loftfield, 2005, p 41). Although it was common for early settlements to have artillery, these structures represent a more military layout than a settlement, mostly due to its similarity to the Barbadian fortifications The inhabitants of Charles Town are known to have come from Barbados, so with that in mind, it is likely they would be influenced by its settlement planning. During the time of Charles Town, this organizational plan is not what other colonies used (Loftfield, 2005, p 46), and this discrepancy is what the UNCW team wanted to explain. It is because of the heavy Barbadian influences that the possibility of spatialization was examined. If Charles Town adapted their defensive architecture to be similar to that in Barbados, the layout of the towns may be similar as well.

Charles Town was built in a square- like manner, with three identified buildings. Two buildings were located within an earthen boundary that the previous archaeologist interpreted to be defensive earthworks. The smaller of the two structures is a square building located in the northeast corner of the compound situated in a narrow path facing toward the Cape Fear River.

The second building is located in the center of the colony situated in the north-south direction and divides the colony in half. To the west of the longhouse, there is a large open courtyard that stops at a wall that has a break, and outside the wall, there is a smallish rectangular building that is situated at a 90-degree angle to the longhouse.

The site was framed on four sides by ditches made of dirt, which have been interpreted as walls/defensive earthworks by Loftfield. Close to one of the ditches is structure B, which was interpreted as a gun emplacement due to the size of a central post hole; this was also suggested by the large number of military artifacts found within the square, such as flint and musket balls. All of the structures found had a hearth, except for structure B, adding to the possibility of it being a gun emplacement (Loftfield, 2011, p 42). Next to it is structure A, which is thought to be a two-story company building/storehouse. In excitations in the mid- 1900's, a pile of bricks that was once part of a chimney was discovered, indicating a dwelling (Debnam, 1969 p 3). These bricks were found near a creek that flows to the south of the square that Loftfield uncovered, showing there were dwellings outside of the walled enclosure. The artifacts found here were interesting as well. They were porcelain and delftware, two artifacts usually associated with wealthy individuals of the time (Debnam, 1969 p 4). Another indication may be a wealthy person's house is the size of the chimney implying about 4 fireplaces (Debnam, 1969 p 4). This house exists outside the earthworks and has been implicated to hold more of the valuable materials found in Charles Town. With this house and its goods existing outside the defensive earthworks, it may indicate that urban planning which incorporated spatial separation did exist in the settlement. It may also show a more extensive settlement, but test excavations from Dr. Loftfield do not support that assumption.

Table 1 minimum and maximum per unit non sherd artifact

Artifact	Minimum amount	Maximum amount	Total found
Pipe stem	1 (multiple locations)	92 (1915L555)	2570
Brick	1 (multiple locations	>200 (1985L605	5704
Iron	1 (1935L675)	>300 (1915L555)	11485
Musket Ball	1 (multiple locations)	50 (1925L605)	273
Flint	1 (multiple locations)	54 (1945L585)	1275
Charcoal	1 (multiple locations)	>2000 (1945L565), (1995L675)	11933

Table 2: Ceramics: Minimum and Maximum Sherd Count Per Unit

Artifact	Minimum	Maximum	Total
Earthenware Olivegreen	1	1	1
Earthenware Cream	1	2	3
Earthenware Buff	1	3	13
Earthenware Greenborder	1	1	6
Earthenware Yellow	1	1	2
Earthenware Oragne	1	3	36
Earthenware Tan	1	3	10
Orange Mica	1	1	8
Bellermine	1	3	37
Borderware	1	2	3
Redware	1	1	1
Staffordshire Brown	1	1	1
Stoneware Grey	1	1	5
Earthenware Pink	1	1	1
Earthenware Blue	1	3	11
Earthenware Brown	1	4	15
Staffordshire	1	1	1
Delfware	1	2	10
Devonshire	1	3	14
Staffordshire red	1	1	2
Earthenware white/blue	1	3	21
Earthenware white	1	2	7
Earthenware Grey	1	1	1
Earthenware Red	1	4	11
Stoneware white	1	1	1
Olive Jar	1	5	21
Porcelain	1	1	2
Leadglaze Blue	1	8	19
Stoneware black	4	4	4
Earth Green	1	1	2

METHODS

Spatial Layout

This project focuses on looking at and interpreting data from a previous excavation. The records are kept at the Office of State Archaeology in Raleigh, North Carolina. I was given permission to look at the stored collections and the documentation submitted by the University of North Carolina at Wilmington. Other than examining Charles Town's Barbadian influence, no further interpretations were pursued in the original research; by looking at these records, I aim to determine the spatial arrangement of activities in the colony as well as the possible physical separation of people in terms of residences.

There are a few ways in which a person can determine the activities in a space, as well as the status of people using those spaces; this includes analyzing size, design, and assemblages of artifacts (Pluckhahn 2010, p 347). For example, it is a general rule that the higher status a person has, the larger their home will be, mostly stemming from their greater control of resources. With that control and wealth comes an influx of higher quality goods (Pluckhahn, 2010, p 338). Normally, when sites have been inhabited for a significant amount of time, the difference between spaces used by the rich versus, poor are more discernible.

To show the distribution of artifacts recovered, I have produced a series of maps of where artifacts of different types were found. Dr. Loftfield has left the Office of State Archaeology a gridded map (170x110 ft) to show specific points where both features and artifacts were discovered. He also left a list of artifacts and their location coordinates, which I matched to the grid; I used these data to plot artifact distribution on the maps. I focused on a set of artifact types,

all of which pertained to the post-contact period of settlement; pre-contact artifacts were not included.

I am looking at the quantity of artifacts found in each area, with the expectation that higher concentrations of certain types of artifacts will indicate the locations of specific activities. The artifacts I included in the analysis were: historic ceramics, charcoal, flint, musket balls, trade beads, and copper plates, brick fragments, and iron fragments (which were mostly nails), and charcoal. For plotting the artifacts, I made 11 maps, each containing a set of different artifact types, with the non-pipe ceramics grouped into different maps based on types of fabric used. The dots in the map show the location on the overall site where they were found according to unit, however they do not show exactly where within the specific unit they were uncovered.

The range of amounts of each artifact type are represented on the maps. The artifacts that I thought would be most useful to what I am trying to learn about Charles Town are recorded and are listed on the maps with dots of varying size and occasionally color, to show the amount that was uncovered in the grid that is shown on the respective map. I chose to represent these various types of historical artifacts, because I believe it is the best way in which I will understand how the colonists utilized space. Once I had organized and plotted the data, I looked for patterns to try and determine the spatial distribution of activities that were being practiced in the colony town by examining vessel count, artifact location, and artifact type/known functions.

All artifacts recovered were excavated from 1987 to 1992 from the Charles Town site by the University of North Carolina at Wilmington. The artifacts so far have only been roughly cleaned with a majority of samples still having some dirt attached to them during processing Around half of the artifacts have so far been processed and labeled by the Office of State

Archaeology in North Carolina. Those that have been processed have been indexed and cataloged. Few have been photographed and no official collection or display has been made outside of the Laboratory of the Office of State Archaeology.

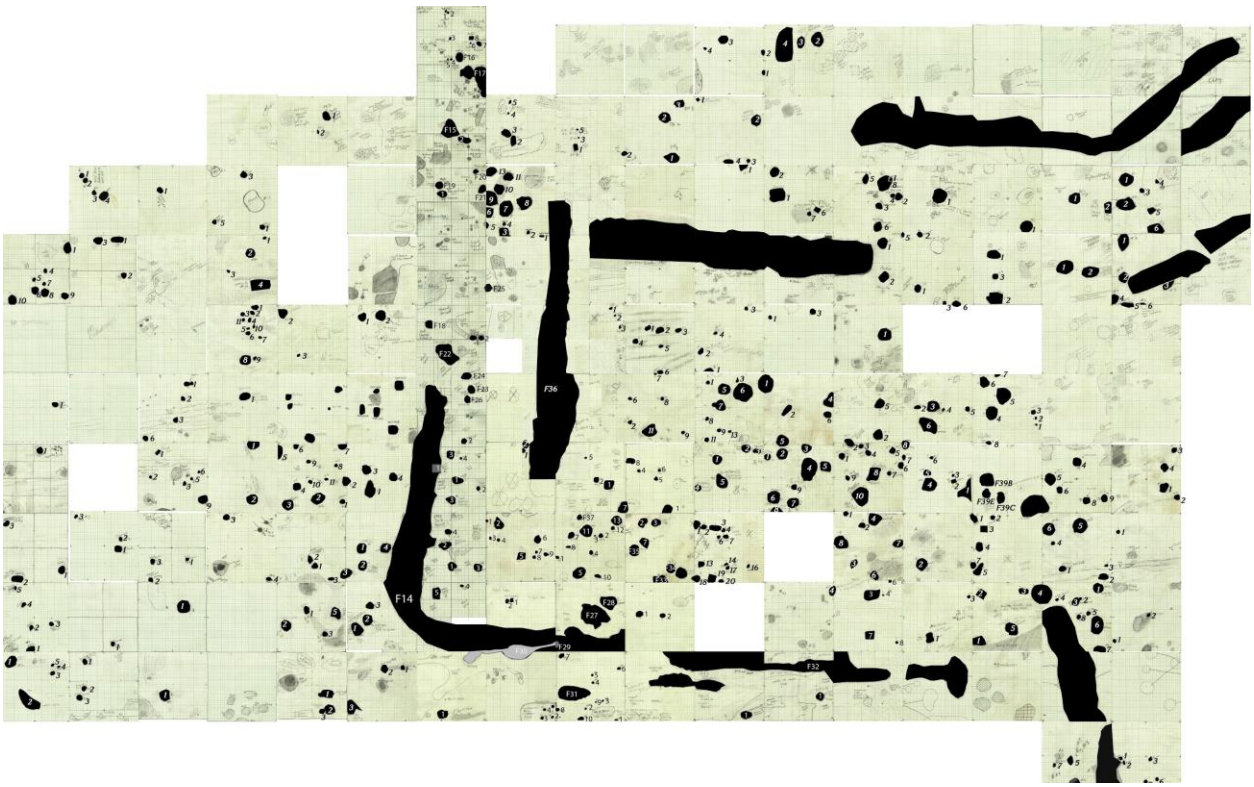

Figure 3: Unedited grid map of Charles Town.

Figure 4: Locations of structures in Charles Town (Loftfield 2004).

RESULTS/DISCUSSION

Collection

What was uncovered at Charles Town is typical for most Colonial and European influenced settlements at the time. As will be shown in the maps of this section, they had a variety of ceramics ranging from common earthenwares to the more extravagant porcelain, as well as many kaolin and Indian pipes. There was plenty of iron that came in the forms of both nails and metal sheets, along with the inclusion of the more martial artifacts such as musket balls and gunflint used for their firearms. There is evidence of animals being eaten due to various bones found on site, and there are fragments of brick found in various locations and of differing sizes.

From Loftfield's excitations we also know that each of the main buildings had a hearth except for structure B. While it was easy to see divisions in Jamestown's row house, there does not appear to be an indication of separation in the long building in Charles Town, indicating it was one long open room, with multiple hearths. There is a possibility that since the population of Charles Town was made up of men, the large building acted as a bunkhouse, much like how a row house would act for early Jamestown. This would make sense due to the amount of charcoal discovered in the structure. If it is true that the building is a bunkhouse, it would help show special activity with the gathering of people in a specific area for one activity. While the houses may mostly be similar, the main difference is in the defensive structure of the colony. For Charles Town, we see what is thought to be a palisade around the courtyard, which was constructed of earth and the one around Jamestown was wood (Loftfield, 2005, p 40).

Ceramics

Of the ceramics exclusive of pipes, most historic sherds were found outside of the known buildings, with a large concentration of earthenware sherds located along both the south and west boundaries of the town square (Figure 7,8). Structure C (Figure 5) has porcelain, bellarmine, and delftware inside it, along with various earthenware sherds. Structure A (Figure 5), while being much larger than structure C does not have nearly as many historic sherds found inside it, with only a few sherds of Bellermine and Delftware, which were located at the building's south end. Both the north and western parts of the site have no historic sherds found in them at all. All ceramics uncovered indicate being brought with the initial colonization as there was no kiln discovered at the site.

The final group of ceramics to look at are pipe fragments and their locations. For the stems found inside structure A, consistently the largest deposits are found on the western part of the structure. When looking outside the buildings there is a completely different pattern to deposition than that of other ceramic artifacts. Pipe stems show a consistent deposit near the center of the colony to the west of structure A (Figure 9). Pipe bowls on the other hand have a more random area of deposition with seemingly the northwestern area having the most finds (Table 1,2). What this indicates is that for the most part the colonists were smoking actively in the center of the colony, while not so much inside Structure A. While the used pipe bowls were disposed of in the north part of the colony. It does seem fort the most part the colonists disposed of the bowls in the northern part of the colony, but it is not strictly so, as a few pipe bowls are scattered in the colonies center as well, just more infrequently. Where pipe stem fragments are left, indicates where people were actively smoking, as bits would break off and left where they

fell. The discarded bowls indicate where the colonists tossed the pipes after the last bit of stem broke, and then they threw them down.

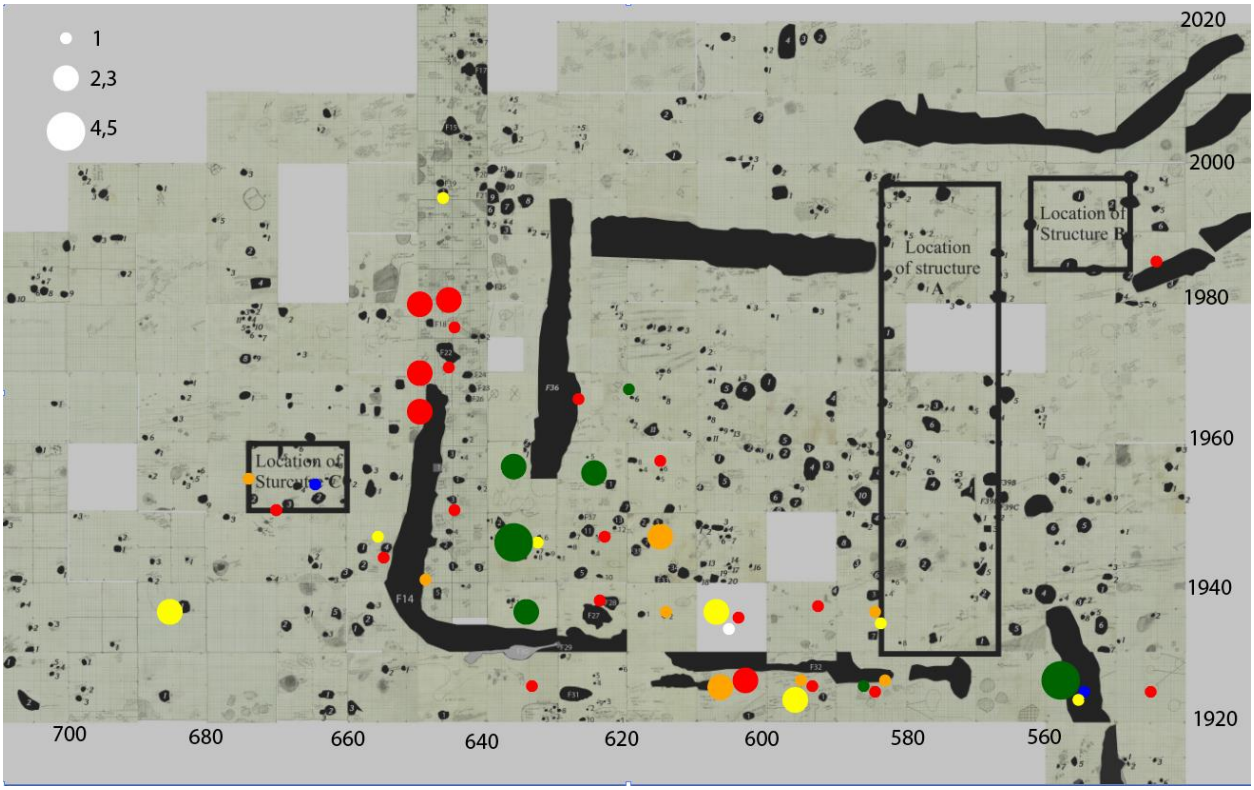

Figure 5: location of five types of non-earthenware historic ceramics: red= bellarmine, blue= porcelain, orange= delftware, yellow= Devonshire ware, dark green= olive jar; buildings are outlined in black.

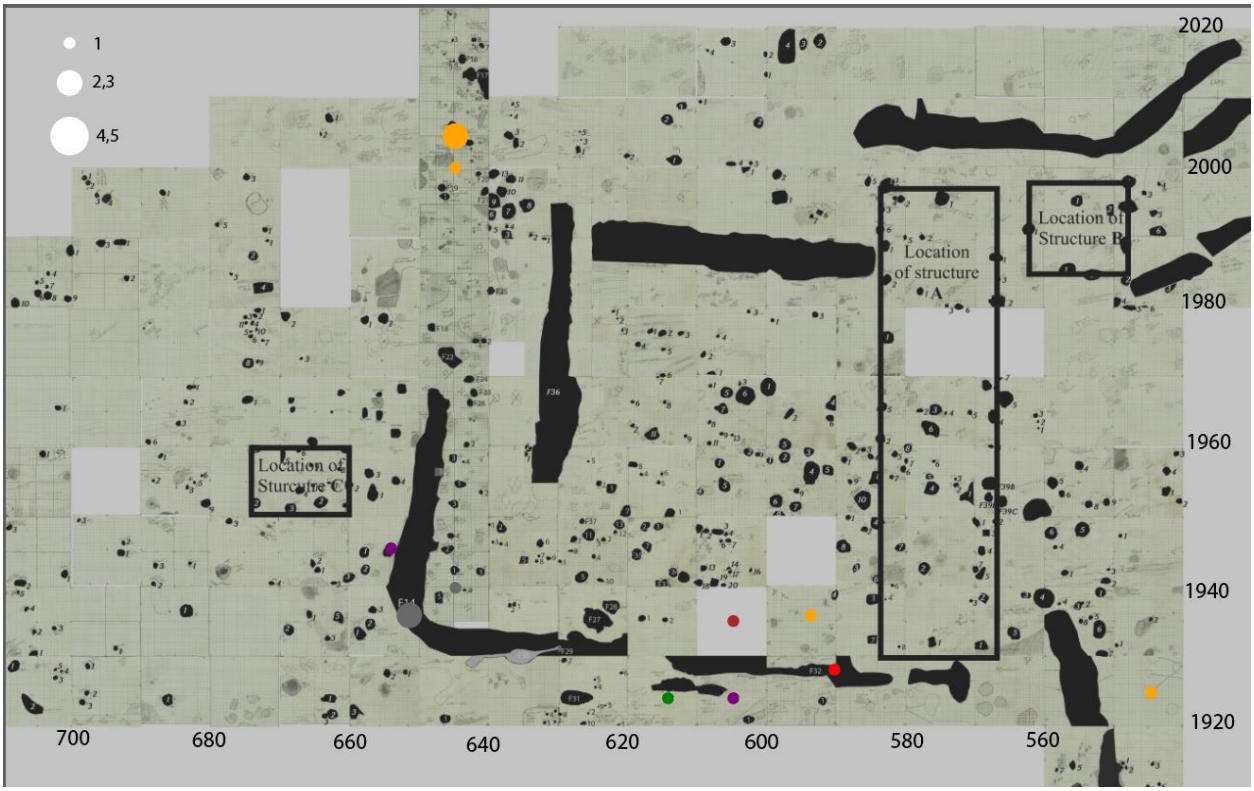

Figure 6: location of six types non-earthenware historic ceramics: dark grey= Borderware, red= redware, brown= Staffordshire Brown, green= stoneware white, orange= stoneware grey, purple= Staffordshire Red.

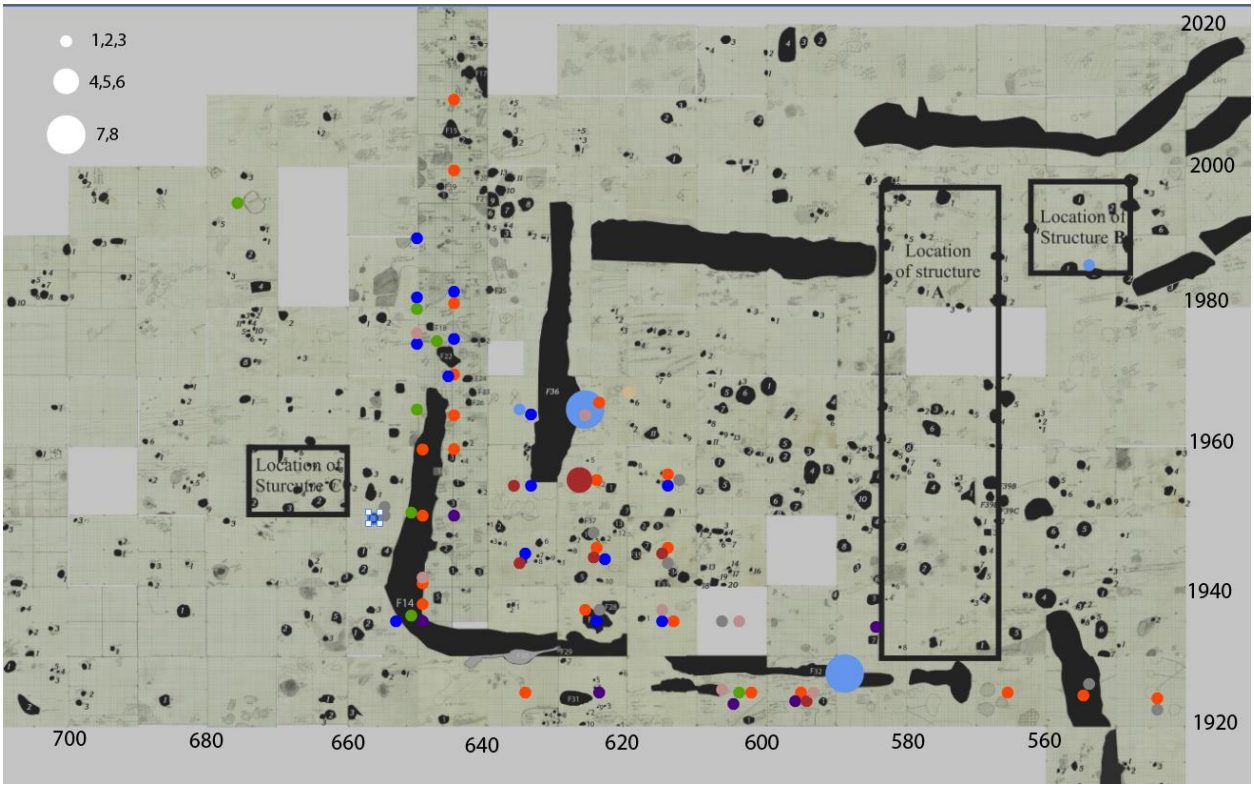

Figure 7: location of nine types of earthenware historic ceramics; orange= orange mica, cornflower blue= ledglaze blue, red orange= orange earthenware, indigo= earthenware blue, blue= earthenware white/blue, brown= earthenware brown, rosybrown= earthenware tan, grey= earthenware buff, dark grey= earthenware grey.

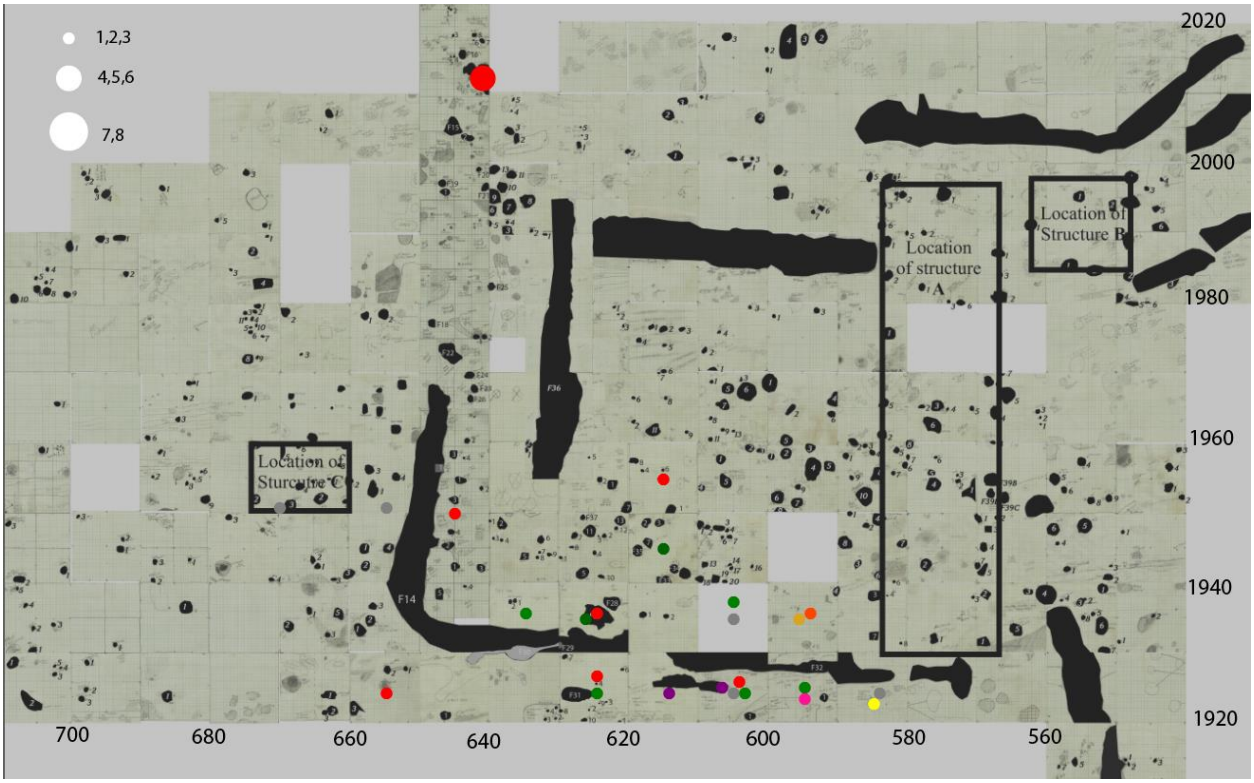

Figure 8: location of nine types of earthenware historic ceramics; Grey= earthenware white, red= earthenware red, yellow= earthenware yellow, green= earthenware green borderware, deeppink= earthenware pink, purple= earthenware cream, light brown= earthenware olive green, red orange= staffordshire ware, dark green= earthenware green.

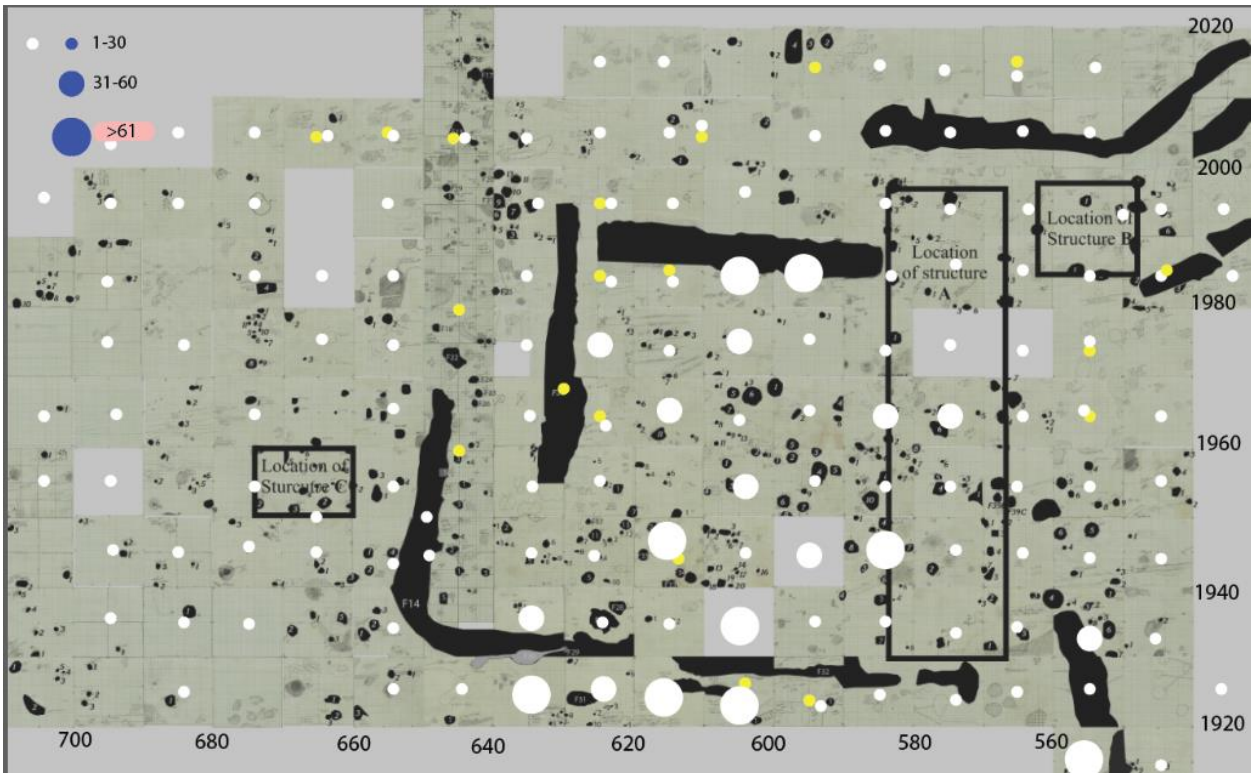

Figure 9: Location of pipe stems and pipe bowls; white = stem, yellow= pipe bowl

Domestic goods.

Domestic goods (artifacts that are not ceramics/trade goods) form the second-largest quantity of artifacts found at Charles Town. Inside the buildings, there is a curious distribution. Once again in Structure A, there is a concentration of artifacts located at the south end of the building, along with an incredibly large charcoal deposit (Figure 14). There are only a few exceptions such as an area that has more brick and iron than the other adjacent areas. Structure B, the supposed military structure, does not have any large concentration of martial artifacts with only a small amount of flint uncovered, and an even smaller amount of musket balls (Figure 11). Structure C, however, only has a large number of bricks uncovered where Loftfield interpreted a hearth (Figure 13). Charcoal is the most frequently found artifact on-site, but only a few deposits are of note, with one adding up to over 2000 fragments discovered in structure A (Figure 14,

Table 1). What these depostis tell me is that the large ones inside indicate a hearth/cooking area. The large deposits outside give two major possibilities, with the ones inside the colony barriers being outdoor fires, and outside the boundaries being dump areas to dispose of the old charcoal.

Outside the buildings there is a much more random scatter of artifacts except for two notable exceptions. Charcoal is located in the southern sections of the colony, except on the eastern side (Figure 14); and musket balls (Figure 11), are located around the earthworks of the colony. The other artifacts such as iron are more evenly distributed throughout the site with no true concentration of location (Figure 12). The charcoal I believe as stated in the last paragraph shows where the colonists deposed of the remains of a fire when the charcoal pile became too big. The musket balls tell me the colonists spent a lot of time on the defensive structures of the colony keeping watch, especially on the southern side, this is indicated in square 1925L605. The musket balls could show that they either dropped or set down so the men would not have to hold them.

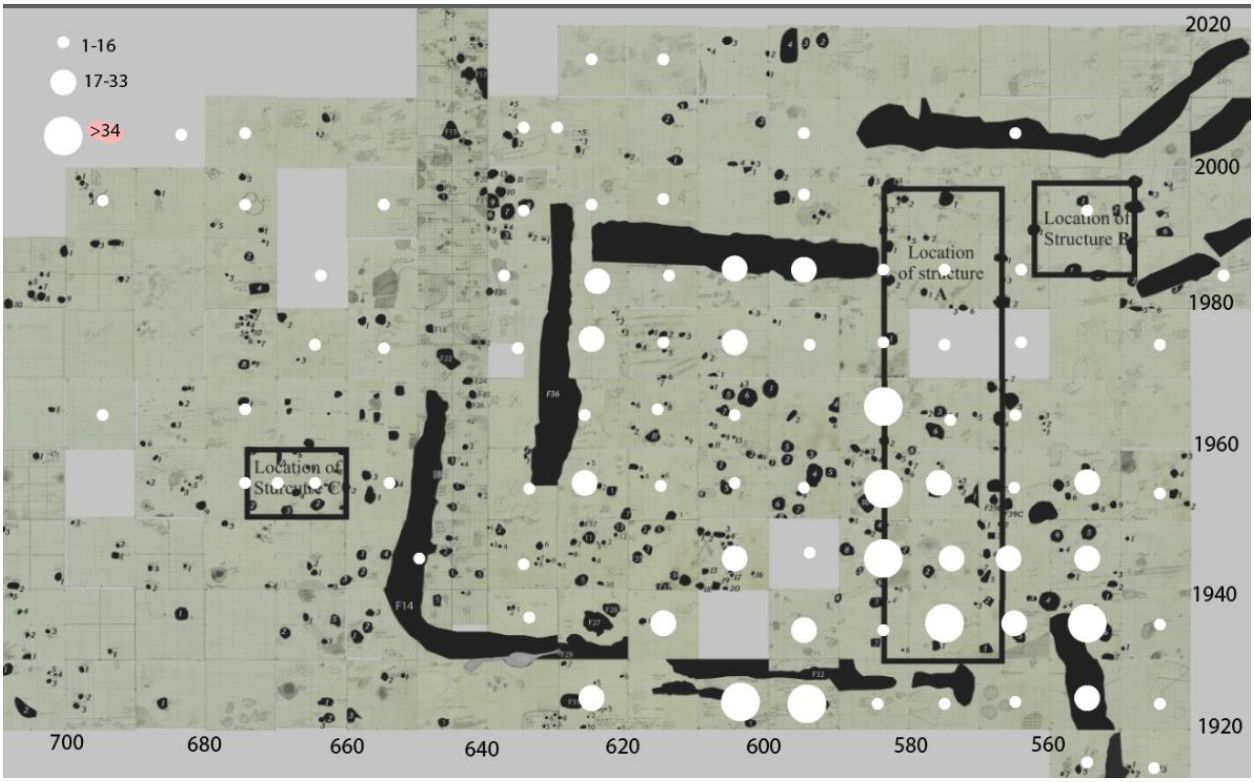

Figure 10: Location of uncovered flint deposits.

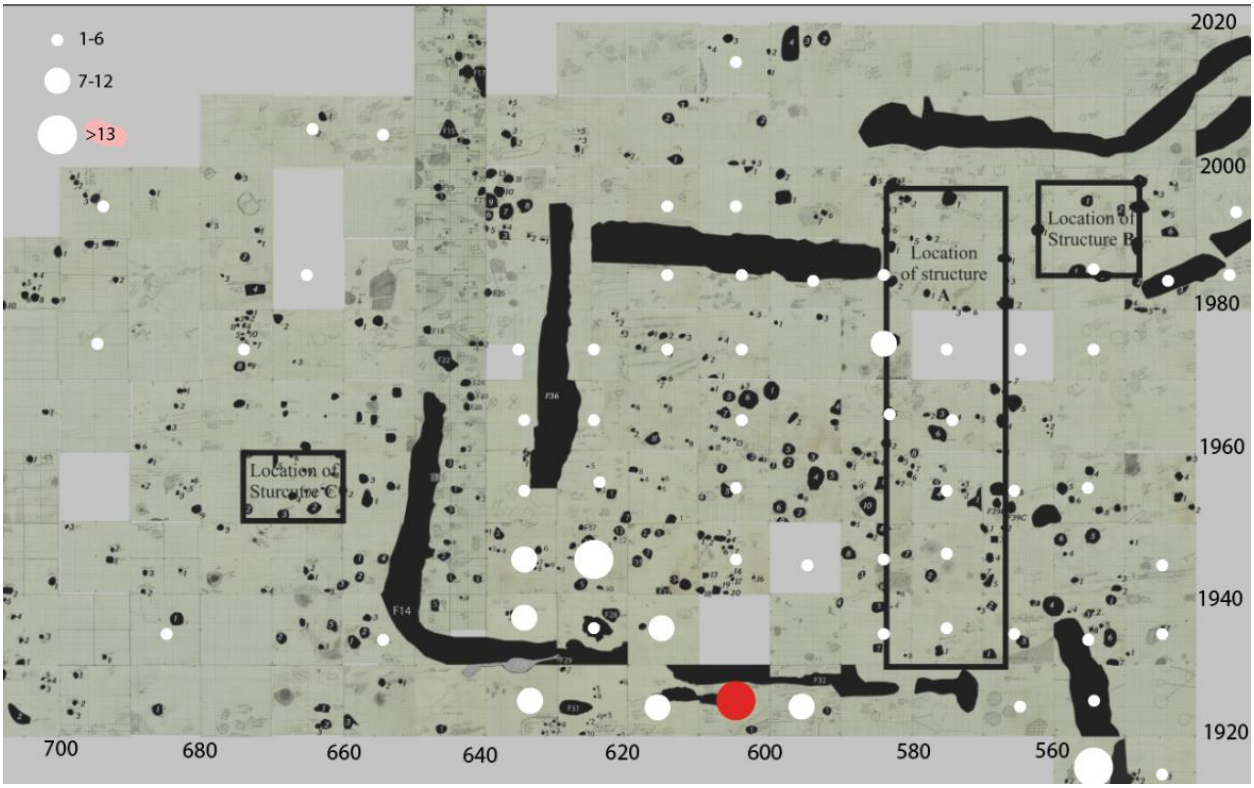

Figure 11: Location of uncovered musket balls; Red circle had more than 50.

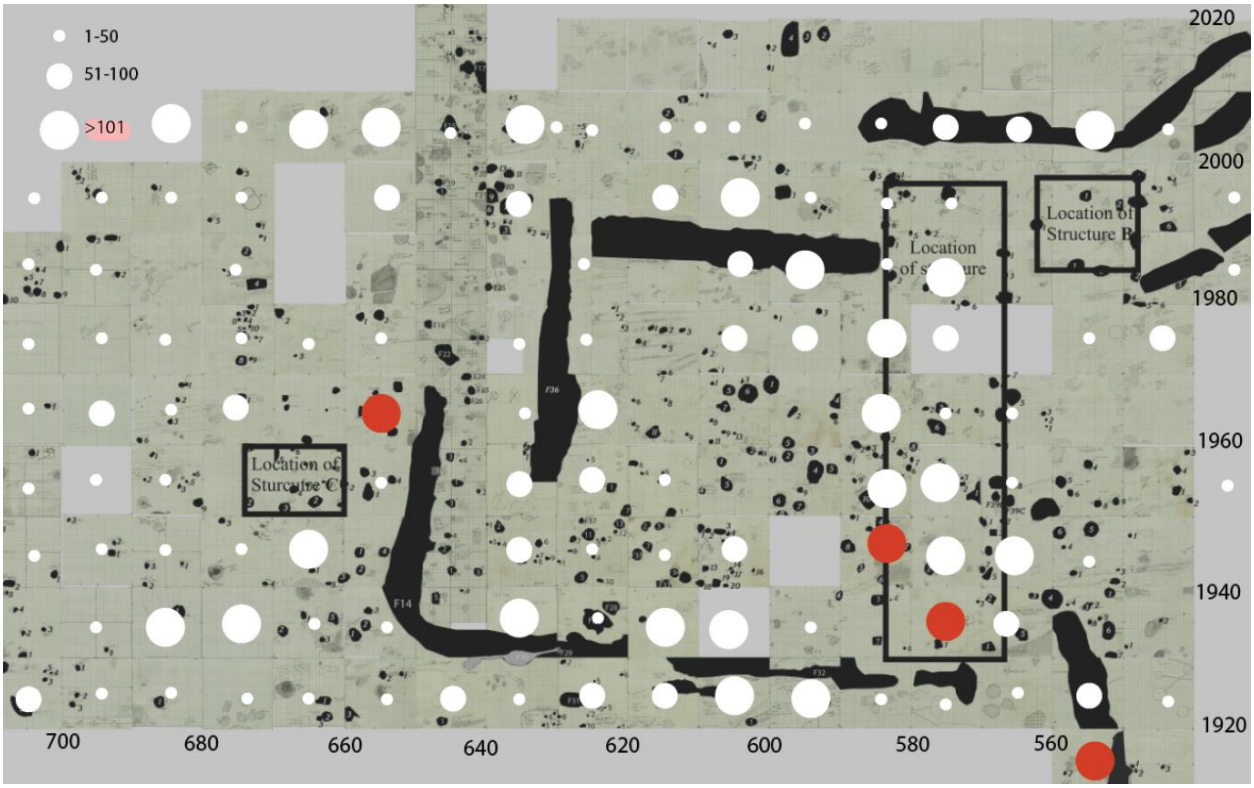

Figure 12: Location of uncovered iron deposits; Circles in red contain over 200 fragments.

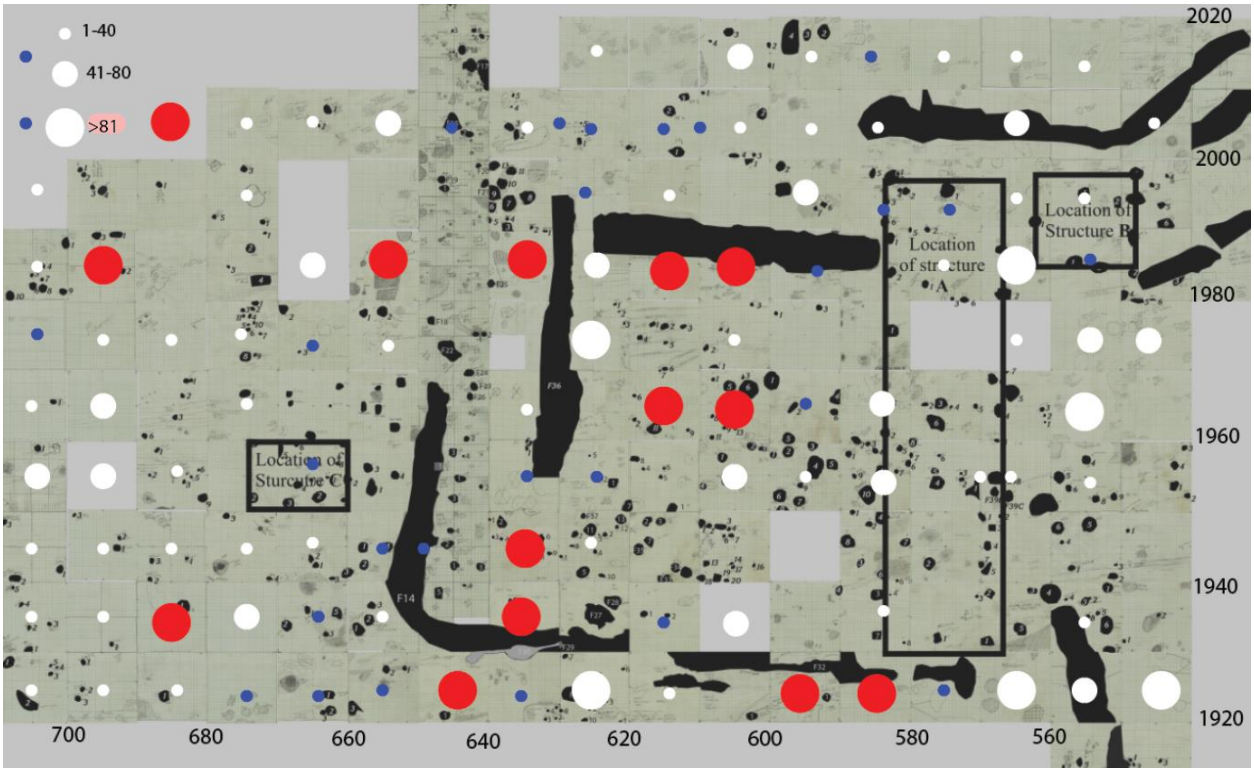

Figure 13: Location of uncovered brick deposits; blue= less than ten fragments, red= more than 100 fragments.

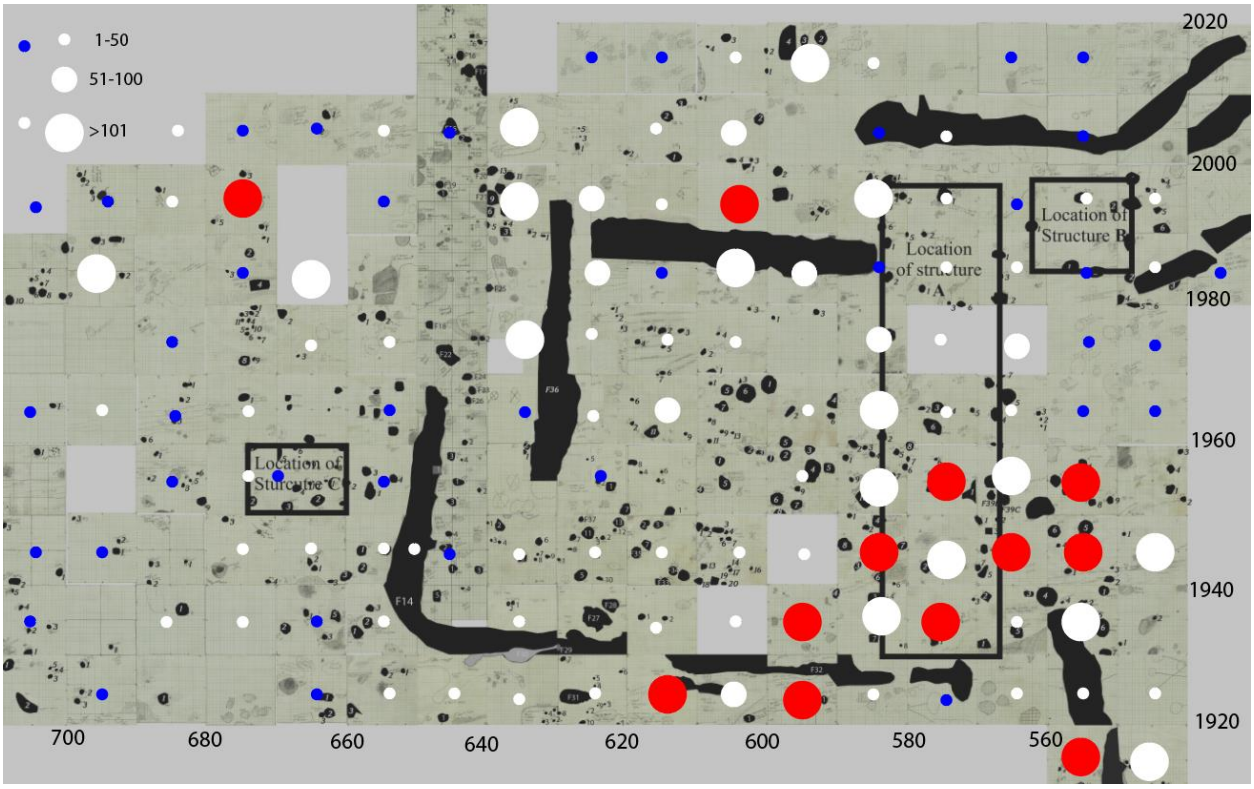

Figure 14: Location of uncovered charcoal deposits; blue= less than ten fragments, red = greater than 200 fragments.

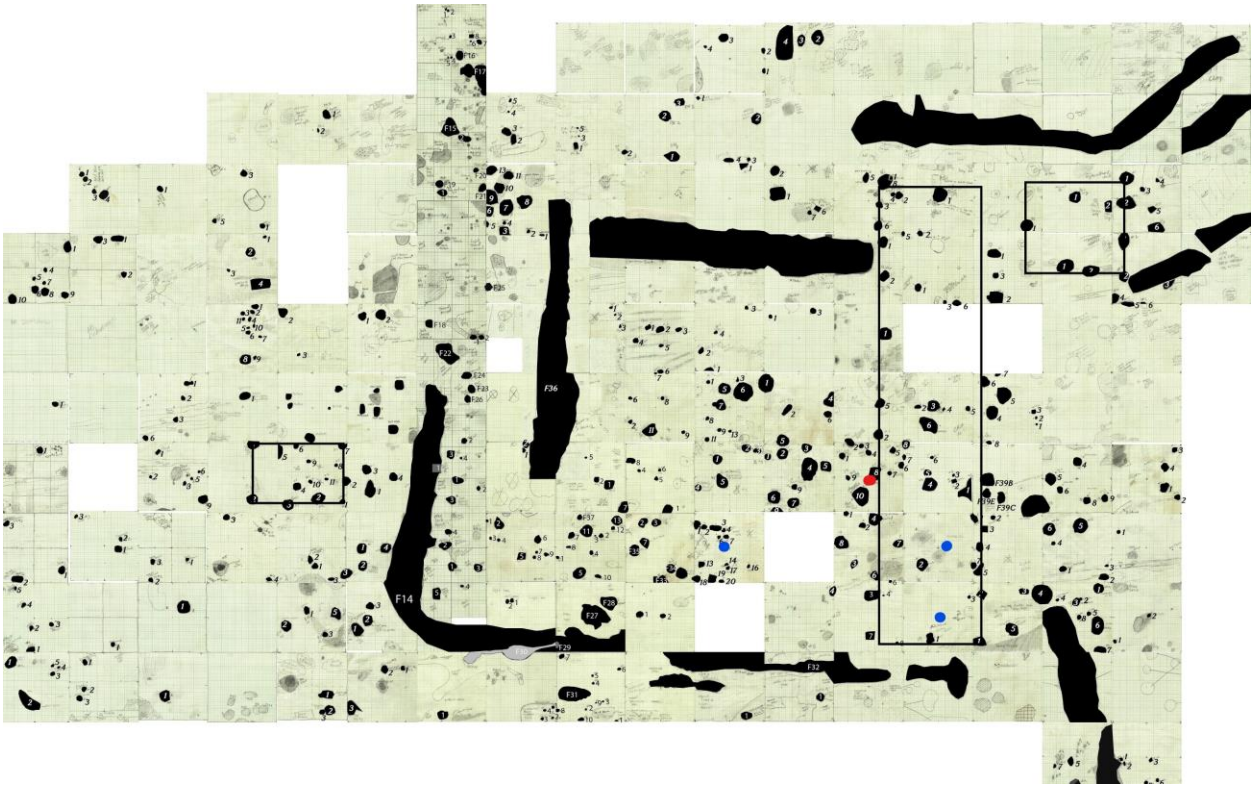

Figure 15: location of trade goods uncovered at Charles Town; blue = trade beads, red = copper plate.

Of the remaining artifacts, copper plates were found in the exact same position of a possible doorway to structure A, and a majority of the decorative beads were found inside structure A, with only one being in the courtyard (Figure 15). With most of the trading artifacts found inside the structures it only gives further credence to the idea the building was used as a storage area, especially the southern side of the structure. Other trade beads were found more to the south just outside the area that can be pictured. The Doorway is possible because on the known walls of a structure, there is often a buildup of artifacts close to a specific area, likely indicates an entry way. People would often just toss or drop trash right outside of a buildings entrance way as to not have it inside the structure (Pogue, 1988 p. 53)

Finally, in relation to the earthworks, it seems some of the colonists did patrol them as flint and musket balls were found in no small number on/in them. Charcoal was found on the eastern side of Structure A near or outside the earthworks in great amounts, close to where the deposit of charcoal is inside the building. I believe they dumped the excess charcoal out of either a window or even an unseen door, so they would not have to carry it far (Figure 14). Sherds of ceramics, both earthenware and non-earthenware, were found on the southside of the colony near the wall, and on the western part of the colony near/between the wall separations (Figure 5,6,7,8). What this tells me is they dumped most of their garbage just outside the defensive earthworks area, much for the same reason as the charcoal, so they would not have to carry it far. The distribution of brick is not widespread, there are a few concentrations that have no real rhyme or reason. Iron however is fairly evenly distributed in the colony, this even distribution may indicate that most of the site's interior acted as a worksite, possible a carpentry area (Figure 12). Much of the material the colonists would have worked with was wood, due to its abundance. If they were working with wood, they would likely need a lot of nails to create/utilize usable materials. But this was not necessary, as carpentry had been done with minimal nails for centuries. While many of the iron fragments found were identifiably nails, a lot were so corroded they were not able to be identified, and what these items are is unknown. There are a few possibilities though, such as farming equipment, saws, or cooking pots.

General Patterns

Looking at the artifact distribution that appear on the maps, I see a few notable patterns between maps, with the most similar being the maps of both charcoal and flint. The overlap of these two artifact types is so similar I have to say they are related. Knowing that flint is needed to light a fire, it would be expected the colonists used the flint to light fires, and then tossed the

remains into the burning pile. A shard of flint used to lite a fire is generally larger than a piece used for firearms. However, during my internship at the Office of State Archaeology, I have seen some of the flints uncovered, and none were large. What the lab directors told me is that it is gunflint, which is a pillow shape. Some of it was broken in half, and some were just tiny flakes. While I acknowledge it is completely possible, I only looked at gunflint and not flint to light a fire, the amount of gunflint I handled makes me think the colonists used the gunflint for both purposes, from lighting fires to shooting their firearms. They could also have had an abundance of gunflint for other firearm related activities such as target practice, and hunting.

As expected with a certain type of artifact, all ceramics excluding pipes how similar pattern of deposition, that being a gentle curve that starts about midlevel of the colony on the western side and then goes in said curved line heading south until it straightens out and extends past Structure A. No other artifact type shares this characteristic pattern. It appears the colonists had a more specific way of depositing their ceramic pots than any other artifact. The only artifact that slightly lines up with the pattern is musket balls. With the largest deposits being found among the ceramic scatter, with only a small amount found scattered through the colony, and the second-largest deposit found within Structure A. As mentioned above, more musket balls were found closer to the defensive earthworks than in the center of the colony, which still tells me the colonists dropped a few when standing on or near the defensive earthworks, looking out over their surroundings.

Two other types of artifacts that share a pattern are the deposits of iron and the pipe stems/bowls. Focusing first on structure A, there is a distinct separation in the distribution of pipe stems found and of iron found. What this tells me is iron was used in the construction of the building, which is no surprise, but what is a surprise is that the amount of pipe stems found

indicates that the colonists did not smoke so much inside the main building. I do not know if the colonists did any work inside Structure A, but considering most jobs at the time took place outdoors I can say with an educated guess if any work was done inside, it was minimal. Concerning inside the colony's barriers, there is a match up with the largest deposit of iron and the largest deposit of pipe stems, both being adjacent to the north and south wall. Even my proposed doorway shows a similarity in the amount of pipestems uncovered. This can strongly indicate two things, either this was a popular deposit area for broken items, or they did most of their work, whatever that may be, in this area. For pipes, as pieces broke off, they just dropped the piece there and continued to use the pipe, and if working with iron, if a fragment was too small to notice, or in a work area, one simply would not pick it up. Everywhere else inside the earthworks show a similar scatter. Outside the earthworks, the opposite distribution stops, and lines up to a more similar distribution pattern. To the north the large iron deposits line up with disposal of pipe bowls. Pipe bowls are thrown out when the pipe is no longer useful, so I would say because of the amount found here, along with the amount of iron, this spot is more than likely a pure workstation, no other artifacts are found here in abundance. I can only guess with intense work on whatever job, a broken pipe bowl was dropped and then trampled into the dirt.

There is only one map that does not have any clear pattern that relates to other artifacts, and that is the brick deposit map. What I see is a random scatter. The amount found has no relation with any of the buildings in terms of proximity, and within the buildings, there are few fragments to really guess what it was used for. The largest deposits of them are found near the earthworks or beyond even structure C. One possibility is they were used as stairs to get over the earthworks, but this is just speculation.

Building Layout

While a household is typically where archaeologists can get a more specific look at the social make up of a site, the Charles Town site is more ambiguous in terms of its living areas. Identifying a household at Charles Town is difficult because of the lack of both information on the site and the limited excavation data. Even with what was uncovered, I can still interpret possible households or dwelling spaces on the site. To do so, it is important to look closely at the identified structures and see how they are arranged to make the areas they are living in either culturally familiar or efficient, this task can be aided with comparison to other more mapped out settlements (Bassett, 2015, p 94). There was no official way for a town to be built at this time, with the only indication for this area being in "The Fundamental Constitution of the Carolinas" written in 1669, after the colony had failed. In this document the direction of buildings and public works are decided by the court.

In terms of possible functions of the buildings on the site, when looking at Structure A (the longhouse), Dr. Loftfield has mentioned the possibility it was two stories tall and was a company house. While I found no conclusive evidence it was two stories tall, the artifacts foundn within indicate it did act as a company house but was also a living space. But this still leaves the two other buildings at Charles Town. Dr. Loftfield says that the small building in the northwest corner of the compound was a gun emplacement due to a large posthole he says was used to support a cannon and the number of military artifacts found in the vicinity of the site. While the large posthole is there, from looking over the artifacts recovered I do not think this building was a military enclosure/ arsenal. The cannon, if there was one, would have ideally been placed on this building, as the opening was facing the river and through a path which would have forced people to be funneled through a small narrow area, most of the martial-related artifacts however

are found in the longhouse near the walls of the structure and on the earthworks of the colony. While there was no great amount of musket balls uncovered, any deposit greater than five, which would be expected to be found in a guardhouse, was found in the longhouse and not in the square building.

Jamestown Comparison

In comparison to Jamestown, there is an astounding difference in the sophistication of artifacts uncovered. Jamestown, being better established, inhabited longer, and larger, had more specialized and unique items found. These artifacts include more decorative handles for knives, fishhooks, shaving equipment, and much more (Crafts and industry, 2020). But many of the more basic artifacts are the same, such as the utilitarian pottery, trade goods, and clay pipes. By comparing the artifacts uncovered at these two sites we see not only the shared heritage they have, being both English colonies, but also what would have been prioritized in the startup of a new colony. It is in Charles Town one can see the beginnings of Jamestown, what the colonists had, what they worked with, and what was considered essential to the new colony.

What the two have in common is the inclusion of a longhouse, but what seems to be the main difference is how they were used. Jamestown had a dedicated storehouse that has not only been uncovered but has also been mentioned in historic contemporary records. This storehouse allowed for dedicated dwelling areas to be built on-site, which is one difference Charles Town seemed to have, with a proposed dual-purpose longhouse.

The other comparison is in the colonies shape and defense, Jamestown is set up in a triangular shape, with one of its sides facing the James River. At each of the three corners of the colony are rounded bastions that hold cannons. Charles Town however had a square shape, with only one area thought to have a cannon. That being said, for both colonies what could be argued

to be the main side faced the river. For defense, both towns had a barrier between them and the outside of the colony, but the scale between the two was greatly different. Jamestown had a fully enclosed wooden palisade, and Charles Town had a mostly enclosed earthen compound with huge openings on both the eastern and western sides.

The final comparison to make is the number of buildings uncovered. There are several identifiable buildings in Jamestown. Two longhouses that lay next to the northwestern wall, a church and storehouse in the center of the colony, and on the south wall there is a third longhouse that has been interpreted as barracks, and a posthole house (Map of Discoveries, 2020) (Figure 16). Charles Town by comparison had only three identified buildings, one longhouse, a square building, and a small rectangular building outside of the earthen defenses. According to Debnam, there was one building uncovered during an excavation in 1969 that had a chimney that had multiple fireplaces. But I have not seen any evidence of the this building on the map, and there was no mention of it in Loftfields report.

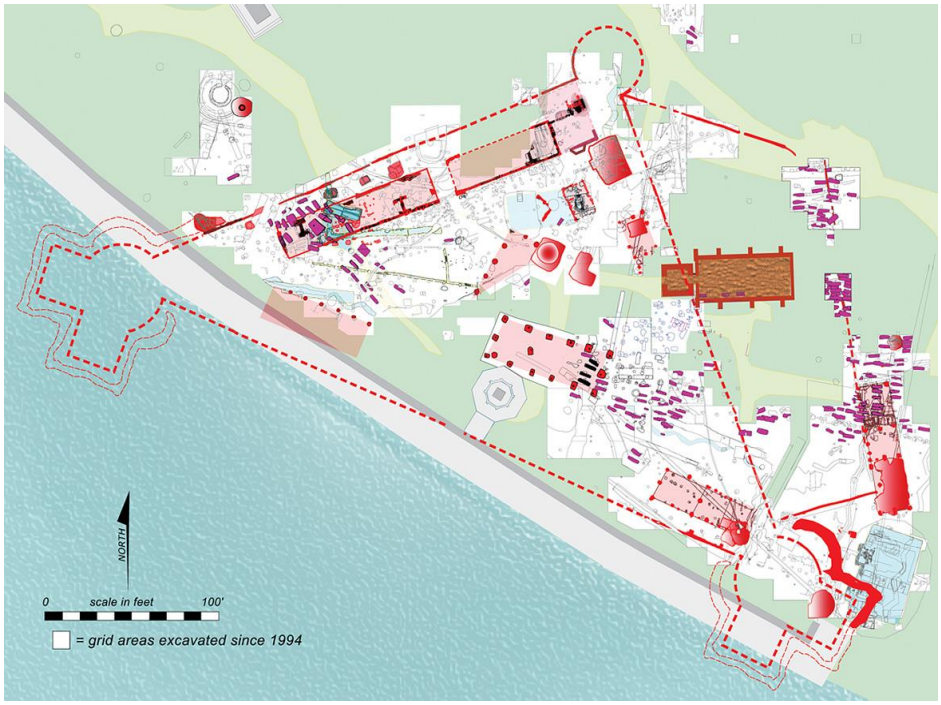

Figure 16. Jamestown excavation: historicjamestown.org.

CONCLUSION

When concerning the activity areas for the colony of Charles Town, it would appear that Structure A, pulled double duty and acted as the main dwelling center and a storage house. With the abundance of artifacts relating to relaxation and utilitarian purposes, it shows strong support for both. While comparatively few artifacts were found in its northern portion, and many activities for everyday life were accomplished outside, I say the northern half of the structure acted as a sleeping area. Again, in structure A, there is a concentration of all these domestic-related artifacts found near the south section of the building, with only iron being evenly scattered throughout. What this indicates to me, is the south section of the building acted mainly as a storage area for the colony. And while nothing is particularly indicating of a second story, Dr. Loftfield does mention the structure can have a second floor, much like the longhouse of Jamestown.

Finally, for structure A, I believe that it also acted as a communal kitchen, due to the massive amounts of charcoal fragments found in the southern area, as compared to the rest of the site (Figure 14). Inside structure A, there is a location that is clearly a hearth, as only a fireplace can have as much charcoal as is found in this area. In most of the other areas where charcoal was found, there is not a high enough quantity to take note. Other artifacts such as flint and musket balls found outside the structures are located almost exclusively near and around the barriers of the colony. Artifacts such as iron and, brick are found in an even scatter through the colony with no real pattern.

Structure C, in comparison with Structure A, had few artifacts found within, and it is odd as it is outside the proposed earthworks. While Dr. Loftfield suggested it did have a hearth, due

to the amount of charcoal found in a specific section, I have found nothing really indicating a hearth. However, I do admit the reason may be the people who used the structure did possibly keep it cleaner than structure A. Evidence for this is the large charcoal deposit found to the north of Structure C. Other domestic artifacts were really too small to notice. What indicated what the buildings use was the non-earthenware found within, as sherds of porcelain, delftware, and redware were found. What these sherds indicate to me is that this was a private house. It is much smaller than structure A and would not have been holding that many people. It does not have enough material evidence to show it was a storage area or a workspace. As most activities were completed outside, there was no need to have a lot of materials in the house, thus leaving sparse findings. It is because of these factors I believe the structure is a dwelling place for a single person, maybe five at most. There is the possibility the structure could have acted as a chapel. It is constructed in an east to west style, which is how churches at this time would have been oriented, but the building is rather small, and nothing found inside would have indicated any religious activity.

Structure B is an odd one. Charcoal was found within it, much like the other buildings, but it did not have enough to make any clear assertions as to its use. Ceramics are absent except for a few pipe stems and one sherd of lead glaze blue earthenware. Dr. Loftfield called this building a gun emplacement due to a large posthole being found inside which would have held up a cannon, and a large amount of martial related artifacts being found inside. Reading through the findings, however, reveals there are few military related artifacts found with only a small amount of musket balls and flint shards. The only support I can find that would give credence to the idea of Structure B being a defensive structure. The buildings position is related to the defensive characteristics of medieval castles. As this structure is the closest to the river, it would

therefore be the first structure encountered by visitors, its easternmost wall is flanked by two earthen ramparts, leaving only a narrow walkway to enter from that side (Figure 3). This would be a perfect place for a gun, as theoretically the only way to get into the colony was defended in such a way as to make surviving a volley impossible. The only problem is that, except for the area near structure B, all of the eastern parts of the colony are unwalled, meaning that people can walk into the colony with relative ease, from this side. Which is curious as all other sides are protected by the earthworks. Why the colonists set up the colony like this may never be known. But a possible answer is that with both doors of structure A looking west (Figure 13), the building itself may have acted as a wall, but there is no definitive proof for this idea.

Figure 17: Location of proposed doorway in structure (Red dots).

To conclude, my findings indicate that much of the everyday activities such as cooking, woodworking and relaxing was done inside the colony's earthen defenses. Structure A, acted as the main dwelling for a majority of the colony's population, and served as a storage building for some of their supplies. Structure B, I believe has strong evidence for acting as a watchtower/lookout point. This is due to its position, and the lack of any artifacts found within to give it any other indication. Structure C shows strong evidence for being a sperate dwelling for the wealthier individuals of the colony. This is indicated by the more valuable ceramics found within. Outside of the colonies earthworks to the south appears to have been the dumping grounds, as a large amount of refuse consisting of charcoal, broken ceramics, and brick fragments were found outside the colony's barrier. The northern part of the colony outside of the earthworks is where I believe the colonists worked and relaxed as indicated by the large amount of iron fragments found, in combination with the pipe bowls found. And the center of the colony served as a crossing ground as many different artifacts are found within, with a majority of them consisting of pipe stems.

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APPENDIX

Table 3: full list of artifacts

Plot	Charcoal	Brick	Iron	Pipe steam	Musket Ball	Flint	Bead
1925L555	3	58	196	21	1	17	
1925L635	2/Ph-1/L2-22	L2-1	L2-3	91	7		
1925L685		18	31	1			
1925L625	9/L2-17	92/L2-3	84	43		17	1
1925L665	4	3					
1925L675		6	4				
1925L655	14/L2-12	18	7				
1925L545	23	97	27	2		3	
1925L705		16	>80				
1925L565	12	91	44	12	4	9	
1925L585	11/L2-1	168	28/L2-4	7/L2-4		L2-1	
1925L575	9	10	28	10		10	
1925L645	40	153	74	20			
1925L695	4/L2-206	127	91/L2-13	8	6/L2-1	29/L2-10	
1925L595F32	1	22	24	8	2		1
1925L605	60/L2-25		179/L2-102	89/L2-1	L2-50	42/L2-32	1/L2-4
1925L615	318	4	68/L2-27	62/L2-15	9		L2-6
1925L615F32	42	27	30	26	7		
1965L625F36	1		4	3			
1965L595	19	5	17	1			
1965L625	19		96/L2-14	13	1	2	
1965L545	6		78/L2-19	12			
1965L635	3	23	25/L2-7	8/L2-5	3		
1965L695	12	52	62	8		12	
1965L705	1	20	12	2			
1965L655	7/L2-3	86/L2-17	>200/L2-58	4			

1965L555	4	43/L2-5	39	6			
1965L675	25	21	52	10		8	
1965L685	1		2				
1965L615	27/L2-63	156/L2-6	166/L2-17	50		8	
1965L605	36	>130/L2-9	117/L2-10/ph-13	23/L2-3/ph-2	1	13	
1915L545	170/ L2-42/ PH-1	1	47/ L2-14	14	1/L2-3	17/ L2-11	
1915L555	>200/L2-13	>100	>300/L2-4	92/L2-5	17	14	27
1935L595	>200	39	48	30		26	9
1935L685	19/L2-4	>100/L2-8	>250/'l2-40	10	1		
1935L695		11/f36-3	18/f36-22	2			
1935L635	L2-45	372	82/L2-27	31/L2-6	4/L2-3	L2-3	
1935L625F29				4	1		
1935L605	36	66	104	64			
1935L545			15	1/L2-5	L2-1	L2-3	
1935L655	13	27	17	2	1		
1935L665	5	1/L2-2	1/L2-1				
1935L675	19	47	103	7			
1935L615	24/L2-22		104/L2-10	57/L2-2	8	20/L2-12	
1935L555	73/L2-105	11	133/L2-4	40	6	54/L2-13	
1935L705	7	25	44				
1905L545-L2	32/L2-32	5	66/L2-9	16/L2-2	5	30/L2-5	
1905L655	L2-17						
1905L555	33/L2-5	12	90/L2-19	10/L2-2	3	9/L2-9	
1945L595	14		70	43	1	15	
1945L685		30	32/L2-4	1			
1945L675	L2-27	36	22	2			
1945L695	1/L2-4	45/L2-1	12/L2-27	1			
1945L625L2	20	33	6	17			
1945L655	27	8	2	2			
1945L705	ph1,2,3-1	11	7				

1945L615	24/L2-2	10	L2-9	89L2-1	15		6
1945L650	L2-12	9/L2-1	9/L2-2	1/L2-3		1	
1945L605	31	21	77/L2-21	22/L2-1	1/L2-1	16/L2-2	
1945L635	30/L2-13	106	57/L2-8	12/L2-3	6/L2-1	13/L2-1	
1945L645	ph3,1-5						
1945L665	43	37	119	9			
1945L555	35/L2-324		66/L2-55	12/L2-1		25	
1945L545	25/ L2-128		44/ L2-7	5	1		
2015L555	4	22	66	2			
2015L565	2	40	>180	7			
2015L575	12	16	24	5			
2015L585	23	9	>70	2			
2015L595	46/L2-68	37	49				
2015L605	38/ Ph-3	68	69		2		
2015L615	9		15	14/ L2-1		1	
2015L705	7	9	13	1			
2015L625	2	28	13	6		2	
1985L605	10/L2-108	>200/L2>150	>90	61/L2-1	1	27	
1985L535	2		15/L2-8	9/L2-2	1	1	
1985L615	6	63L2/103	37/L2-21	10/L2-21	1/L2-1	5/L2-1	
1985L635		178/L2-32	138/L2-29	10/L2-2		12	
1985L575			10	3		2	
1985L655		172	25	2			
1985L665	76/L2-43	56/L2-10	70/L2-10	13/L2-1	1	5	1
1985L705		16	2				
1985L595	51	1	367	79	6	32	
1985L675	6	69	21	7			
1985L625	96	73/L2-2	157/L2-7	17/L2-3		17/L2-2	
1985L695	96/L2-4	>100	60/L2-3	9			
1975L635	45/L2-48		129/L2-41	14/L2-4	3	14	
1975L615	16/L2-6	136	122/L2-8	24/L2-3	1	14/L2-2	

1975L605	9/L2-4	11	74	37/L2-1	6	21/L2-2	
1975L665	ph-14	2	ph-5/36	9		1	
1975L665							
1975L655	5/L2-78	19/L2-7	17/L2-4	6		9/L2-3	1
1975L585			Ph2-2				
1975L705		6	8				
1975L695		13	19	1	1		
1975L545	5	61	31/L2-3			4	
1975L595			51	39		13	
1975L625	16/L2-10	46/L2-36	131/L2-53	29/L2-16	3	18/L2-6	
1975L685	3/L2-1	34	39/L2-11	2			
1975L675	5	22	17		1		
1975L555	L2-4	51	19	11	3		
1995L625	13/L2-39	3	20/L2-29	3/L2-5		5/L2-4	
1995L605	25/L2-200		104	20	1		
1995L635	15/L2-102		30/L2-36	7		2	
1995L655	3/L2-2		64/L2-8	13		10	
1995L675	10/L2->2000	17	32	7		3	
1995L685	16		9/L2-33	2			
1995L695	1		33	28	2	4	
1995L595	17L2-8	55/L2-8	9/L2-18			L2-1	
1995L705	10	11	6	1			
1995L615	32/L2-9	19	78/L2-8	11	1	7	
1995L535			4	3	1		
1995L535			4/L2-1	3	1		
2005L205			6	1			
2005L545		21	92				
2005L555	5		>150	10			
2005L565		41/L2-4	77/L2-20	14/L2-1		2	
2005L575	16		53	9			
2005L585	2	22	35	6			

2005L595		18	30	1		2	
2005L605	59	21	30				
2005L610		6	5	3			
2005L615	9/L2-2	6	21	2			
2005L625	PH-10	1	38/ph-4	7			
2005L695	52	11	38	3			
2005L705	14	5	42				
2005L630		1	4			4	
2005L635	114/L2-23	L2-30	>100/L2-28	4		2	
2005L645	3	10	39	4			
2005L655	27	78	>120	23	3		
2005L665	10	34	>100	14	4		
2005L675	2	26	37	2		3	
2005L685	24	>150	>120	10		10	
1955L635L2		2	20/ph-3	10		2	
1955L635			60/L2-4	4/L2-2	3	14	
1955L615			8	5		10	
1955L685	1/L2-5	L2-26	L2-13				
1955L625		L2-2	79	10/L2-24	4	9/L2-17	
1955L625L2	8	5					
1955L625			f36-3	f36-5			
1955L675			ph-3				
1955L705	2/L2-10	22/L2-32	5/L2-4	1			
1955L595	1	34	12/PH-5	6		8	
1955L545			5/L2-11/Ph-7	2		1/L2-1	
1955L695		41	44	1			
1955L555	>200		>120	17	2	22	
1955L655	L2-21	1/L2-2	2	3		1	L2-1
1955L605	40/l2-7	62	69	42	6	11	

ass#	Charcoal	brick	iron	pipestem	musketball	flint	pipebowl
1995L545	5/ph1-19		33/ph1-3	18			
1995L555	1/ph1-10	35	44	14		4	
1995L625							3
1995L675							
1995L575	21	4	30	6			
1995L565	2	11	70	2			
1995L585	122/ PH1-16/ PH2-15/ PH6-19	6	13/ PH1-1/ PH2-1	1			
1985L625							6
1985L615							1/L2-1
1985L545	9/ph5-2		55/ ph3-5/ph4-3/ph5-2	4	1		6
1985L575	11	14	>100	4		4	
1985L585	3		45	30	1	7	
1985L565	12	88	92	14		1	
1985L555	1/L2-1	1	42/L2-21	12/L2-1	L2- 1		
1955L665		17	9			1	
1955L635							
1955L625L2							
1955L565	59/ L2-95	L2-18	L2-41	13/L2-2	1	12/ L2-2	
1955L585	113/L2-25/PH61/PH7-3/PH4-2/PH3-10/PH2-1/PH9-50	79	150/L2-10/PH6-4/PH51/PH3-5/PH9-3/PH10-5	1/L2-1		39/L2-1	
1955L615							
1955L575	L2->1000		98/L2-12	23	2	30	
1955L655	10	21	21	14		1	
1955L675	17	35	9	4/L2-1		3/L2-1	
1955L670	4	8	10			1	
1950L650				9			
1950L655							
1950L670							
1950L645							

1950L665				6			
1950L670							
1935L585	63/ Midden-40	29	20/ L2-11	18	1	9/ L2-2	
1935L635							
1935L650							
1935L615							
1935L625							
1935L595							
1935L654							
1935L685							
1935L605							
1935L575	100/ L2-170		128/ L2-22	23	1/ L2-1	27/ L2-7	
1935L565	L2-13		89/ L2-2	20	1	31	
1975L565	29/ L2-25/ PH1-9	23	42/ L2-64/ PH1-94	30	1	9	
1975L555							3
1975L650							
1975L645							
1975L575	22		82	8	2	15	
1975L585	75		144	27	11	14	
1965L575			L2-3	33/L2-1	2	5	
1965L650							
1965L565	1/ PH1-8/Ph3-1/Ph4-3/PH5-6/PH6-1/PH7-4		24/ L2-1/PH5-1/PH6-8/PH7-4	19/ L2-1		8/ L2-1	
1965L645							
1965L635							
1965L555							2
1965L625							1
1965L585	150	64	>120	42	5	38	
1945L605	9		77/ L2-21	22/ L2-1	1/ L2-1	16/ L2-2	
1945L615							2
1945L625							
1945L565	>2000		135/PH5-2	23		24	

1945L645							
1945L655							
1945L635							
1945L650							
1945L575	43/L2->120		86/L2-43	30	2/L2-2	25	
1945L585	125/PH3-15/PH4-15/PH6-80/PH8-60		>200/PH3-6/PH4-9/PH6-9/PH89	89	5	54	
1925L545							
1925L555							
1925L565							
1925L585							
1925L595							3
1925L605							1/L2-12
1925L615							1
F36							1
1960L645							1/L2-1
2005L645							1
2005L655							3
2005L665							6
2005L610							4
1980L645L2							1
2015L565							3
2015L595							1

ass#	Earth green	Staffordshire	Earth olivegreen	Earth Cream	earth pink	earth Green Border	Earth Yellow
1935L635						1	
1935L625	1						
1935L595		1	1				
1935L605						1	
1925L585							1/ L2-1
1925L595					1	1	
1925L605				1		1	
1925L615				2			
1925L625						1/L2-1	

ass#	Earthware Red	Earth White	Earth-Grey	Earth buff	Earth Tan	Earth Brown	Earth white/Blue
1955L635						2	L2-1
1955L625L2						4	
1955L615	1			L2-2			L2-1
1950L655		1	1	1			
1950L670		1					
1950L645	1						
1935L615					1		1/L2-1
1935L625	1			1			2
1935L654							1
1935L605		1		3	3		
1975L650							1
1975L645					1		1
1965L635							1
1965L625					1		
1945L615				3		2	
1945L625				1		2	1
1945L635						3	2
1925L545				1			
1925L555	1			2			
1925L585		1/L2-1					
1925L595					2	2	
1925L605	1	2			1		
1925L625	L2-1						
F17	4						
1940L650					1		
1970L645							1
2025L650	1						
1980L645L2							2

1980L650							3
1990L650							2

ass#	Earth- Blue	Earth-orange	lead glaze/blue	orange mica	Borderware	Redware	Staffordshire brown
1995L675				1			
1985L555			1				
1955L625L2		1					
1955L615		L2-1					
1950L650				1			
1950L655		2					
1950L645	1						
1935L585	2						
1935L650	1	1					
1935L615		3					
1935L625		1					
1935L654				1	2		
1935L605							1
1975L645				1			
1965L650				1			
1965L645		1					
1965L635			3				
1965L625		2	6/L2- 1				
1945L615		3					
1945L625		3					
1925L545		1					
1925L555		3					
1925L565		2					
1925L595	L2-2	1					

1925L605	3	1/L2-1		1			
1925L625	2						
1925L635		L2-2					
F32			8			1	
1940L645					1		
1940L650		1					
1960L650		1					
1960L645		1					
1970L645		1					
2010L645		1					
1980L645L2		1					
1980L650				1			
1980L650				1			
2000L645		1					

ass#	Stoneware white	Stoneware grey	staffordshire red	Olive Jar	Devonshire	delfware	Porcelin
1955L665							1
1955L635				2/L2-1			
1955L625L2				3			
1955L675						1	
1935L585					1	1	
1935L635				1/L2-1			
1935L615						L2-1	
1935L595		1					
1935L685					3		
1935L605				1	2		
1965L625				1			
1965L585							
1945L605							

1945L615						2	
1945L625							
1945L565							
1945L645							
1945L655			1		1		
1945L635				4	1		
1925L545		1					
1925L555				5	1		1
1925L585				L2-1		L2-1	
1925L595					3(grey)	1	
1925L605			1			2	
1925L615	1						
F29				1			
1940L650						1	
2005L645		2					
1990L645					1		
2000L645		1					
2020L650					1		