May 2020

Overturning the Turnbull Settlement: Artifact Analysis of the Old Stone Wharf in New Smyrna Beach, Florida

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Overturning the Turnbull Settlement: Artifact Analysis of the Old Stone Wharf in
New Smyrna Beach, Florida

by

Tracy R. Lovingood

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in Applied Anthropology
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Date of Approval:
March 17, 2020

Keywords: colonial archaeology, ceramic analysis, LiDAR analysis, Minorcan

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Dedication

I dedicate this thesis to the City of New Smyrna Beach, the New Smyrna Museum of History, Greg Holbrook, and the wonderful Dot Moore for allowing me to do my internship in the Museum and using artifacts from the Old Stone Wharf as the focus of this thesis. Special thanks to Diane Wallman, my thesis advisor, and Dr. Tom Pluckhahn and Dr. Scott Branting for being on my committee and providing guidance in the various areas of this research. Also, thanks to Dr. Jon Endonino for all of his help and input as I stress out about this research, and for encouraging me not to give up. Extra special thanks to my family, who have supported me in countless ways as I navigate this journey as a Master’s student and try to complete this chapter in my life. And of course, to my best friend, Theresa Bong: You know I couldn’t have done this without you. I will never forget the friendships made and memories shared during my time here at USF. Thank you.
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Abstract

This thesis is a report on an internship at the New Smyrna Museum of History, which primarily focused on the analysis of artifacts found at the primary import and export site of the Turnbull Settlement, called the Old Stone Wharf (8VO4298). The Turnbull settlement in New Smyrna Beach, Florida, was a plantation settlement founded by Dr. Andrew Turnbull of England, using the labor force of primarily European indentured servants. The settlement only lasted from 1768 to 1777. After it failed, all the inhabitants moved 75 miles north to St. Augustine and were able to flourish there, leaving a descendent community that still exists today. Why did the Turnbull settlement fail? We know there were several droughts, and that Turnbull seemed to not have a firm grasp of management of the settlement. Despite that, Governor Grant of St. Augustine in this time period assisted in supplying the settlement and providing goods and supplies to help the settlement survive, but the settlement still failed. Turnbull requested a great many materials and provisions, and there had previously been a revolt within the first month of the settlement’s establishment. Regardless of why it happened, we know that the people of the Turnbull settlement in New Smyrna Beach abandoned the area in 1777 and sought solace in St. Augustine’s embrace. My research examines the archaeological signature of this settlement, using digital elevation modeling to try to identify features from the plantation, and cataloguing the material culture recovered from the wharf site. By analyzing the artifacts from the wharf, this thesis examines what these materials tell us about the lives of the people working the land and trying to make the settlement survive. These artifacts may provide clues to the types of material being brought into New Smyrna for the survival of the short-lived plantation.
Chapter 1
Introduction

Florida’s history runs deep with Spanish influence, with Spain controlling the peninsula for a total of 288 years, interrupted briefly by twenty years of British rule in the 18th century. Often, the British history is overshadowed by the longer lasting Spanish period, and the story of the British in Florida gets overshadowed by the larger history of the British Colonies to the north in what later became the United States. These pasts are often an aspect of what Michel Trouillot calls “silences” of the past (Trouillot 1988).

New Smyrna Beach is no different in the prevalence of historical silences. Overshadowed by its neighbor 75 miles to the north, St. Augustine, New Smyrna Beach’s British past, and its role in Florida history often gets ignored in light of the historical richness of St. Augustine. The sleepy beach town is the site of one of the largest immigrations of white settlers to the New World (Panagopoulos 1978: 58). The town’s survivors became a historical legacy for St. Augustine. This town was once the site of the Turnbull Settlement, an 18th century plantation established by Dr. Andrew Turnbull of England, who hired and transported over 1000 indentured servants from the Mediterranean to the Atlantic coast of Florida (referred to in history as “Minorcans”, though they were Italian, Greek, and Minorcan). The story of these people and their role in Florida history begins in New Smyrna Beach, Florida, and has connections to St. Augustine, Charleston, South Carolina, England, Scotland, Spain, Italy, and Greece. Despite this, the story of the community at the Turnbull Settlement in New Smyrna story is an under-studied phenomenon.
Conducted through an internship at the New Smyrna Beach Museum, my research aims to contribute to the story of the Minorcans, the Turnbull Settlement, and New Smyrna Beach. For my internship, I identified and catalogued artifacts recovered from the Old Stone Wharf site (8VO4298) and completed analysis of LiDAR data to search for potential sites related to this settlement (Figure 1). This research, focusing primarily on the analysis of ceramics, aims to advance our understanding of the plantation and the lives of the indentured servants at this short-lived settlement. I also attempt to bring clarity to the role of New Smyrna and Florida in the bigger picture of British Colonial trade while Florida was under British rule.

**Internship**

My internship at the New Smyrna Museum of History was a great segue into understanding how the museum interacts with the public, practices public archaeology, engages with the city government’s Historic Preservation Commission, and acts as a reservoir for all artifacts discovered in Southeast Volusia County. My work revealed that many artifacts uncovered in the past from archaeological excavations, surveys, and monitoring have not been analyzed and are collecting dust in boxes in the museum’s storage unit. Information uncovered by analysis of the Old Stone Wharf artifacts should be compared with other artifacts uncovered from other New Smyrna locations to create a more understandable idea of what was happening at New Smyrna in the past.

In addition to artifact cleaning and identification, I assisted with museum events, revising of museum displays, and interacted with the public when they had questions about items found on their property. I also learned about proper labeling methods as per the National Park Service from a former park service employee, Linda Hulvershorn now serving as the museum’s archivist.
I also learned about challenges faced by the museum, such as funding, space, item acquisition forms and retention or return of items, and struggles faced in terms of maintenance of historic district lines. They also struggle with how to interact with the public in terms of what to do when artifacts are found on private property. Last, a constant battle with looters, collectors, and treasure hunters occurs within the city limits. Trouble with a deceitful treasure hunter was experienced by myself and museum staff while doing my internship made it clear to me that this museum cannot be the sole target of such bad intentions. Recommendations for how the museum should update and alter their methods, displays, and establishment for a plan for interacting with a curious public will be discussed later.

Environmental and Historical Setting

New Smyrna Beach, like the whole of Florida, is subtropical in climate, with native vegetation dominated by palm trees and palm scrub, oak hammocks, spruce trees, and cypress trees. Summers are long, hot, and damp with afternoon thunderstorms, and with temperatures in the high nineties- low hundreds. Winters short, dry, and mild, with temperatures falling into the sixties, sometimes lower. The town is located along the Atlantic coast and Indian River North in Volusia County, which meet at Mosquito Inlet. This inlet made New Smyrna Beach a great settlement location, since the town had access to ocean and riverine resources, while being protected from direct beachside exposure to the sea and sea-borne threats (Doggett 1919:11). The western side of the town is bordered by swampland, known today as Turnbull Bay. As a point of note, the town is 75 miles south of St. Augustine, but why this is important will be discussed later. In his book, originally published in 1791, William Bartram describes New Smyrna as “built on a high shelly bluff…(including) one entire orange grove, with live oaks, magnolias, palms, red bays, and others” (Van Doren 1955:134). Bartram continues “I observed then, near where
New Smyrna now stands, a spacious Indian mount and avenue which stood near the banks of the river: the avenue ran on a strait [sic] line back, through the groves, across the ridge, and terminated at the verge of natural savannas and ponds” (Van Doren 1955:134). Bartram paints a lovely image that is classically Floridian, down the Native American mounds and middens observed.

Figure 1.1 USGS Quadrangle Map of Old Stone Wharf (8VO4298) Location in New Smyrna Beach (Florida Master Site File 2018) Inset Map Credit: Tracy Lovingood
Wildlife is abundant in the area, with terrestrial, oceanic, and riverine resources available. This includes deer, alligator, tortoise, snakes, possum, squirrels, rabbits, and from the sea, many fish, such as gar and mullet, were available, along with oysters and other shellfish (Griffin 1991:61). Patricia Griffin (1991: 63) discusses mullet: “the waters near New Smyrna teemed with mullet…it is small wonder that the Minorcans became fishermen. To this day, smoked mullet remains a prized delicacy in St. Augustine.” In 2012, Dr. Arlene Fradkin conducted zooarchaeological analysis at the Turnbull Colonist House (8VO7051), which had been excavated in 1996 and 1997 by Dr. Roger Grange and Dot Moore (Fradkin 2012). The analysis showed that the Minorcans had been primarily subsisting on ray-finned fish, requiem sharks, hardhead catfish, mullet, sheepshead, porgies, and drum (Fradkin 2012). The data show a remarkable reliance on seafood.

Florida was first explored in 1513 with the arrival of Spanish explorer Juan Ponce de Leon on the Atlantic coast. The years that followed brought explorers such as Hernando de Soto, and the writings of chroniclers of his and the adventures of other Spanish explorers revealed the complexity of indigenous populations. Patricia Griffin (2000:48) mentions the area of New Smyrna Beach possibly being owned by Joaquin de Florencia, but suggests that whether or not it had been developed is unclear. Mention of this man is originally made in The Travels of William Bartram by Bartram himself in 1791, but further exploration of the veracity of this Spanish land grant in New Smyrna is warranted.

Spain turned over Florida to Britain in 1763 as a result of Britain’s capture of Cuba. Spain needed Cuba to retain a stranglehold on the Caribbean, so a deal was struck: Florida for Cuba. During the twenty years that followed, Britain attempted to establish agricultural plantations using various methods of labor to cultivate the land. In 1763, Dr. Andrew Turnbull
applied for and received a land grant for development south of St. Augustine just inland from the Mosquito Inlet in present day Volusia County, Florida. He named the area “New Smyrna”, after his wife Maria Gracia’s homeland of Smyrna, Turkey (Doggett 1919:26). Turnbull himself had spent much time in Turkey, and thought the environment of Florida to be similar enough to bear a similar name. He also reasoned that Mediterranean people would be best suited to work the land and planned to use indentured servitude to enlist workers for his land. Turnbull was successful in his recruitment. Settlers arrived in 1768 to the New World for their new start working a land they hoped they would own a part of one day. They hoped for their own land ownership because it was not given to them upon arrival to the New World-they came as indentured servants in service to Dr. Turnbull. In less than eleven years, the settlement was abandoned, the settlers escaped to St. Augustine, and Turnbull gave up his endeavor. This history will be further explored in Chapter 2.

**Theoretical Framework**

This research is informed by previous work on European colonialism and colonial settlements. The Turnbull Plantation was a planned colonial settlement, established using exploited laborers, and representing the emerging global economic system. The people who were brought to the Turnbull Settlement as laborers were introduced into an unfamiliar social, economic and natural landscape, to which they were forced to adapt rather quickly. As the indentured servants learned to navigate their new existence, they no doubt found ways to express agency through the items they used, and through their interactions with these landscapes. Understanding how the Minorcans lived in New Smyrna by analyzing their material remains provides insight to the systems that attempted to control them, and into their daily experiences within the settlement. In this research, I evaluate the artifacts of the Old Stone Wharf through the
lens of colonial landscapes and entanglements, in an attempt to understand trade and how connected the settlement was to the rest of the colony and other British colonies.

It is important to stress that the Minorcans, Greeks, and Italians that comprised the main work force of the settlement were indentured servants, having come to New Smyrna of their own volition. Enslaved laborers were also at the site, as Griffin (1991: 27) notes: “Turnbull did use slaves and other blacks on the plantation, particularly on his own acreage”. Griffin also refers to the use of enslaved “blacks” as overseers and drivers. There is still a discernible difference in the experiences of the indentured servants and the enslaved at the Turnbull Plantation. The Minorcans, referring to the entirety of Turnbull’s indentured servants, certainly experienced severe and harsh treatment, but they were not slaves. Handler and Reilly (2017) discuss this distinction at length, suggesting that despite evidence of violence toward indentured servants, the evidence is not to the level of that inflicted upon enslaved people. Though Handler and Reilly are referring to Irish and enslaved experiences in Barbados, this distinction is valid for all colonial settings. Indentured servants were born free, and their “social backgrounds probably shaped their perspectives on manual labor”. In addition, the indentured servants of New Smyrna had legal rights, whereas enslaved laborers did not (Handler and Reilly 2017). This is exactly what the Minorcans did in 1777, they appealed to Governor Patrick Tonyn of St. Augustine and asked for their freedom since the man they were in service to refused to honor their contracts.

Leone (1995) provides a theoretical approach regarding political economies in the colonial world. Leone questions the establishment of stratified societies, the tools used to maintain that stratification, and the use of landscapes and cityscapes in maintaining control over subjected peoples (Leone 1995:255). This method of control and reinforcement of political control by those in power was related to the baroque town planning employed in the 17th
century. The Turnbull settlement was planned out to purposely contrast with the Mediterranean village patterns, in order to destabilize the larger number of lower-class people to avoid uprising, and for the ruling bodies to maintain control (Griffin 1991: 43). In fact, following a quickly resolved uprising within the first months of the settlement, “for the rest of the plantation’s existence, it was an armed camp” (Griffin 2000:44). The spread of the homesteads along the shoreline in New Smyrna limited interaction among the settlers after working hours, in sharp contrast with the typical village of the Mediterranean with a centralized area for community gatherings after the day’s work (Moore 1999:38). The plan of the downtown’s storehouses and shops reflects how the organization of the settlement allowed for stronger control of the inhabitants of the town by Dr. Turnbull by limiting any places for social gathering.

Home (1996) provides excellent insight into the planning involved in establishing British plantations. The book outlines the layouts and identifies three reasons behind the way plantation cities were organized. The first of these is an ideology of state control, in which leaders control the design of the towns. This is reflected in the Turnbull settlement at New Smyrna in that the town was laid out in contrast with the traditional ways of the Minorcans and other Mediterranean settlers brought over by Turnbull, which consisted of homes surrounding a central community area.

The second concept identified by Home (1996:3) as important for plantation organization is that of capitalism, “applied in the colonies to accumulate wealth from trade, extraction, and production.” In the Turnbull settlement, the overall goal was to establish indigo as a cash crop, supported by other exports such as silk, olives, wine, corn, and rice. Letters between Turnbull and his supporters provide evidence of this goal, with the establishment of mulberry and olive trees near the town, to supplement the indigo cultivation (Acree 2008).
The third concept was that colonial settlement was seen “as an opportunity to experiment with new forms of social organisation” (Home 1996:3). This includes religion’s involvement of planting and planning regarding segregation of various types. This pattern may be due to the large numbers of religious groups fleeing Europe from religious persecution from rifts in the Catholic Church, as a means of depopulating Europe, or as a place to send the incarcerated. Home describes the model employed by city planners, seen in various cities where a British colony has been established. The model consists of eight parts (Home 1996: 10-18), including: 1) policy of deliberate urbanization, 2) allocation of town and country lots, 3) town planning in advance of settlement, 4) wide streets in geometric form, 5) public squares, 6) standard sized, rectangular plots, 7) public land reservations, and 8) green belts. Many these concepts are evident at New Smyrna.

Many of the smaller British colonial cities modeled their layouts from larger and more successful colonial cities close to them. Charleston and Savannah set the bar for other colonial cities in the area, including St. Augustine and New Smyrna. This was aided by city planning and architecture professionals (Home 1996:39). This is interesting, as Turnbull was a notable physician in Scotland and St. Augustine.

Jones (1997) provides a theoretical position regarding the development of an ethnicity. The Minorcans of came to be known as the descendants of the failed settlement in New Smyrna. The people that comprised Turnbull’s settlement were not just from Minorca, however. They came from Greece and Italy as well. The experiences they shared in New Smyrna united them, and they had to cooperate for the survival of the group. Societal restructuring and political events have also been pivotal in the emergence of new ethnic groups (Jones 1997:62). The removal of the of the settlers from New Smyrna to St Augustine, and the fact that most of them were
Minorcan, led to the designation of them all being Minorcan, despite their varying backgrounds. By the time they left New Smyrna, many of the New Smyrna settlers had intermarried, so this combined group identity persisted.

Daniel Schafer’s 1999 article discusses the Oswald Plantation just to the north of New Smyrna, in a town today called Ormond Beach. This site provides a good comparison of other plantation sites in the area, though this site predominantly used slave labor as opposed to indentured servitude. Oswald plantation was frequented by Dr. Andrew Turnbull, where he observed operations regarding the crop production, including indigo, and management of slaves. This site also failed, but closer to the end of the British Period due to the Revolutionary War. In another analysis and comparison of plantations adjacent to New Smyrna, Roy and Linda Stine’s 1999 article details the material recovered from excavations at Riverbreeze Park, south of New Smyrna. This site was the location of the Bisset Plantation, contemporary with the Turnbull settlement. Analysis of the artifacts found at Riverbreeze Park, associated with the Bisset Plantation, is useful in the search and identification of Turnbull settlement related artifacts.

Jordan (2009:31-32) provides several definitions which are useful in limiting over-use of the term settlement and explains the differences between colonization and colonialism. First, “colony” is a settlement established by a larger society. Second, “colonization” is the establishment of multiple colonies by a larger society that interact via three nodes: “1) the colonies themselves, 2) the indigenous groups impacted by the colonies, 3) the colonial homeland or metropole”. Third, “colonialism” is “an unequal relationship which exploits differences of economic, political, and ideological development between…one people and another”. These are important concepts that are important in understanding the dynamics that
occurred at New Smyrna between the British and the Minorcans, and the various British
Colonies in Florida, the rest of North America, the Caribbean, and England.

A primary theoretical position for this theory is that of entanglement theory (Jordan
2009:32). Entanglement theory is very useful in colonial archaeology. This concept is not
discussed much in other archaeological literature despite clear evidence of the entangled nature
of European colonies and colonization (Jordan 2009:32). In addition, Jordan’s article provides
the research framework for archaeology of colonial settings. He states “archaeology should study
not only realized domination but also the processes by which it was established and resisted”
(Jordan 2009:34). This is critical in understanding the occurrences in New Smyrna during the
Turnbull Settlement years: there was a rebellion very early on, but a rebellion did not happen
again, despite violence, starvation, and other circumstances. This raises the question: how were
the Minorcans practicing agency in other ways? The answer may also be provided by Jordan,
though this passage is in reference to colonial exertion of control over Native groups:

There are two main ways in which colonial powers come to dominate
indigenous groups. The first is through dependence, where Europeans
provided a set of goods or services so necessary that the indigenous group
was willing to remake their economic and political goals along the lines
desired by Europeans. The second is through disruption, where the actions
of the colonizers made previous indigenous ways of life impossible.
(Jordan: 2009:35).

While the indentured servants in New Smyrna were not an indigenous community, many
of these colonizing tactics are clearly evident in the methods employed by Turnbull to control his
colony and the people within it. The Minorcans depended on Turnbull to provide clothing and
other goods for them while they toiled the fields, and disruption is evident in the organization of
the plantation and in the forced structure of their lives. As discussed in the next chapter, they had
restrictions on their daily activities, including subsistence allowances (restrictions on fishing), limiting holidays and celebrations, and in a controlled domestic landscape and settlement.

Hodder (2011) addresses the theoretical approach of entanglement theory. The approach that Hodder takes in suggesting that humans depend on things (Hodder 2011:155) is evidenced in Jordan’s (2009) work (cited by Hodder) suggesting that the colonists in British Colonial Florida were made to be reliant on the people in positions of power in the fledgling cities. In addition, Hodder explains that “self and society are distributed down strings, or cables, of entanglement that quickly cross space and time. Self and society are thus subject to distant events” (Hodder 2011:164). In New Smyrna this is seen in that everything in the colony was being imported: the people, the material goods, the crops, the containers the crop seeds were in, the clothing, building material. All of those items were coming from various places around the colonial world, and therefore link New Smyrna to other, well established colonies such as Charleston. There was also the other obvious connection to St. Augustine, and to other plantations to the north and south of New Smyrna. In addition, the combined traditions of the Minorcans, Greeks, and Italians to form the Minorcan people of St. Augustine demonstrates a connection between modern descendents, the modern people of New Smyrna, and the materials left behind by Turnbull’s settlers.

Fradkin (2012) employs social theory and the use of agency by the people inhabiting the Turnbull settlement, which helps inform this research. It explores the idea of how the people expressed agency when they began to make the settlement their own, through foodways and combination of various backgrounds into one new title of Minorcan, called the Minorcan Ethnogenesis. Ethnogenesis is defined by Lightfoot (2015: 9220) as the emergence of new ethnicities in colonial contexts distinctive from parent or indigenous groups. Indeed, that is what the Minorcans did. The article discusses the conditions experienced by the people, and buildings
manufactured to make the city succeed. The use of social control via the placement of household structures as discussed in this article reflects concepts presented by Leone. Thus, the establishment of previous theoretical standpoints provides a frame of reference for looking at the site a different way.

To add to this, the archaeological evidence reviewed in the article again provides a reference point to be used in searching for other artifacts related to the Turnbull settlement. Interestingly, Fradkin points out that only one item was attributable to the Minorcan people, a religious medal (Fradkin 2012:32). The overall aim of the article is an analysis of the faunal assemblage found at the First House. The results of this analysis contrast with the statement that the Minorcans were not allowed to fish or hunt (Beeson 2006; Landers 2000). Faunal analysis indicates the Minorcans supplemented their diets by fishing and hunting wild game (Fradkin 2012:39). In fact, Fradkin goes on to list nearly twenty different species of fish found in the assemblage. She later states that despite being discouraged, the Minorcans may have fished or hunted when they could have (Fradkin 2012:42). Despite contrasting accounts, “the zooarchaeological evidence demonstrates that the colonists residing in this first house of Turnbull's Smyrna settlement to be excavated relied primarily upon locally available fish and wild game as the major source of animal protein in their diet” (Fradkin 2012:43).

By the time the Turnbull Colony was established, Europeans had already been interacting with indigenous groups along the Atlantic Coast for over 200 years. The Spanish-Native relationship was tense following the Spanish I period, which ended in 1763. Natives were therefore wary of the Spanish-speaking Minorcans upon their arrival, and but these fears were stifled by Governor Grant (Grange 2016). Lightfoot (2015) discusses the dynamic hierarchy that existed within various types of colonies. “Ethnicity, racial perceptions, and vocational skill,
which were believed to be the principal factors that defined a person’s position in the colonial hierarchy, influenced where you worked, lived, recreated, and procreated” (Lightfoot 2015: 9218). This might be the reason Turnbull arranged his town the way he did, with domestic sites spread out along the coast, but everything else, shops, workshops, storage, etc., was in the downtown. Further, Lightfoot states “the planter’s prerogative and control in creating the spatial layout of plantations, including the design and ordered location of worker’s houses, created underlying tensions and contestations among the laborers” (Lightfoot 2015:9218). This reflects Fradkin (2012) in that the inhabitants of the Turnbull settlement were unhappy with the locations of their homes and sought to create a new situation for themselves as their conditions in New Smyrna worsened.

The English dynamic of management and control over colonies and colonized through city planning and dependence on imported goods created a system where the colony could never truly be free from colonial rule, and in fact, movement towards independence was seen as rebellious. This dependency was recreated in St. Augustine’s need to exert control over the smaller plantations that surrounded the city. While the servants and slaves on plantations were expected to produce agricultural products for export, they also had to grow crops for their own consumption. Many items still needed to be imported, such as clothing, meat, containers to store crops for export, dishware, and raw materials for the construction of buildings, metalworking, and storage.

**Conclusion**

In this thesis, I will discuss how the layout of the plantation in New Smyrna was a way to destabilize the Minorcans and prevent the organization of mutinous factions by disallowing the indentured servants an area to congregate. The Minorcans were reliant on Turnbull and overseers
to have goods and food brought in, and correspondence between Turnbull and Governor Grant in St. Augustine suggest a near constant need for more food, and that Turnbull wasn’t properly managing food stores and distribution (Acree 2008). The indentured servants of New Smyrna found ways to connect and remain united through their hardships, and, once liberated from their indenture by abandoning the Turnbull settlement and relocating to St. Augustine, they became collectively known as the Minorcans. Analysis of artifacts found at the Old Stone Wharf may shed light on what was being imported and exported to the settlement to ensure success and survival, and contribute to the overall origin story of New Smyrna Beach.
Chapter 2
Historical and Archaeological Research at New Smyrna

Despite the known existence of the Minorcans and the New Smyrna Settlement started by Dr. Andrew Turnbull in 1768, little has been found in the archaeological record, and even less has been published on the findings. Only three Turnbull-era sites of New Smyrna have been excavated, with a fourth pending excavation. This chapter reviews the historical literature and archaeological research related to the site. This research offers insight into the lives of the people that lived there, focusing on how the Minorcan indentured servants lived and worked under the direction of Dr. Turnbull. This includes descendent accounts, and previous archaeological research in the site by Dr. Roger Grange, Dot Moore, and Dana Ste. Claire

Historical Overview
New Smyrna, along with Rollestown were the only two British plantations in East Florida that did not use enslaved peoples as the primary labor force while they were occupied (Griffin 2003). Although enslaved Africans were owned by Dr. Turnbull, he chose not to rely on slave labor because he believed he could use indentured servants just as easily and get the labor for cheaper than enslaved Africans. He succeeded. He went to the Mediterranean to recruit populations that were under pressure of famine and destitution, specifically some smaller Mediterranean Islands (Doggett 1919). He had more than the expected 500 willing recruits, nearly three times as much, in fact. Unfortunately, not all of the colonists and newly indentured servants would survive the trip across the Atlantic to the New World. Overall, 1,403 people left the Mediterranean with Dr. Turnbull, and 1,255 survived the passage to Florida. Like many sea
journeys of the time, people died from scurvy and other afflictions while in transit (Moore 1999). This is another reason that Grant and Henry Laurens frequently encouraged the use of enslaved Africans, because they felt they were easier to come by and harder working than Europeans (Griffin 1991). Turnbull did in fact end up with an unknown number of enslaved at the plantation, and a ship with nearly 500 was expected, but according to Beeson (2006), the ship sank off the coast. No known name of the ship is recorded.

The nearly 1,300 Minorcans, Greeks, and Italians that arrived to settle in Dr. Andrew Turnbull’s plantation were historically Catholic. Their arrival in Florida was in contrast with the British policy regarding land grants, which only allowed Protestants. Turnbull chose to overlook their religion when he chose the Minorcans for his settlement, and instead “allowed them to take a priest and a monk with them, with letters and credentials from the Vicar General of Minorca” (Doggett 1919:33). The Minorcans hailed from the Spanish-owned island Menorca, but Turnbull also hired Greeks and Italians to comprise his settlers. At the time, acquisition of the Minorcans to be indentured servants was feasible because the island of Minorca had been under English ownership since 1713 (Doggett 1919:32). The lack of a shared language was problematic, but the settlers overcame this dilemma. Regardless, the Mediterranean origin was specifically chosen by Turnbull because he believed the climate similarities between Florida and the Mediterranean would mean that people from there would be well suited to work in Florida, and because the people Minorca were in a desperate situation due to poor agricultural yields leading to starvation (Doggett 1914; Griffin 1991).

The area the indentured servants settled into was a 20,000-acre plot, but the primary township was located along the river not far from the inlet previously mentioned. The town had been prepared for occupation by James Grant, British Governor of Florida in St. Augustine.
Plans for the plantation and town, including provisions and goods necessary for building construction, were coordinated between Dr. Turnbull, his partner Sir William Duncan, Governor Grant, and Henry Laurens, father of John Laurens, in Charleston. Grant coordinated the construction of the town ahead of the arrival of the indentured servants using the labor of enslaved people, some of which were left there to be labor for Dr. Turnbull, to his dismay.

The town originally was built to house 500 people, so when three ships full of people arrived, there was a serious housing shortage, so makeshift structures were erected (Moore 1999:36). In fact, dozens of structures were built ahead of the servants’ arrival and during their entire stay, which is outlined by Dot Moore (1999:38)

Many buildings were constructed during the nine-year existence of the colony, although the total number has not been determined (Corse 1967:35; Griffin 1991:47). Housing and supporting structures for Turnbull, his wife and seven children, for the overseers, colonists, and slaves, the Catholic Church of San Pedro and housing for the two priests, wharfs along the water for loading and unloading ships, workshops for activities associated with the enterprise, such as a blacksmith shop, a cooper, a carpenter, etc., storehouses for supplies for the colonists as well as for agricultural products that were destined for overseas shipment...three barracks for single men, quarters for the small military garrison stationed at New Smyrna, a powder magazine, and jail (Griffin 1991:47)...a windmill and a mill using horsepower, 145 houses, an indigo house for drying and cutting of dye residue, 22 double sets of indigo vats, and bridges are also listed (Griffin 1991:88).

Very few of these buildings have been located, which includes the church and cemetery. This is significant because “the Governor’s official report of deaths in New Smyrna, from 1768-1777, the duration of the settlement, lists a total of 964 people. Of this number, 704 were adults and 260 were children” (Panagopoulos 1978:91, 92). While the number of deaths that happened is unclear, the priests would have conducted rites, and following Catholic tradition, the bodies would be interred in the church cemetery (Moore 1999).
The layout of the settlement as reconstructed from historical documents by Griffin (1991:47) reflect some of the characteristics of planned British colonial plantations as discussed by Home (1996). These include the pre-planning of the settlement, discussed in letters between Turnbull and Governor Grant (Acree 2008), and wide streets indicated in maps of the town. It could be argued that a green belt exists behind the houses of the indentured servants, but not to the degree as seen in Charleston or Savannah. The settlement experienced a revolt within the first two months of its establishment that was quickly snuffed out, with the leaders of the rebellion hung. Afterwards, the settlement crops were planted and established, yields were productive and of high quality, and the plantation seemed successful. Indigo was the primary crop, but this was supplemented with corn, rice, olives, and silkworm. The plant did very well in the Florida climate, and the quality of the New Smyrna Beach product did very well in the indigo market. Despite this, letters between Turnbull and Governor Grant indicate that Turnbull was in nearly constant need of support from Grant (Acree 2008). Turnbull also petitioned for aid from his friend Henry Laurens. Letters between Governor Grant, Turnbull, and Laurens discuss invoices and goods transported from Charleston to New Smyrna. Grant eventually fell ill and left Florida in the hands of Patrick Tonyn, another plantation owner and enemy of Turnbull (Griffin 1991).

Drought, poor management, and a lack of honor to the contracts of the indentured servants, combined with personal vendettas between Governor Tonyn and Turnbull led to the decline of the Turnbull Plantation of New Smyrna. The feud between Tonyn and Turnbull caused Turnbull to be recalled to England. During his absence, Tonyn put pressure on the Minorcans. The pressure was due to Tonyn’s own increased stress from Britain. In the late 1770s, the American Revolution was underway and loyalists to the Crown were fleeing to Florida. Tonyn threatened to use the Minorcans in his militia but didn’t (Griffin 1991). Instead,
in 1776, Tonyn sent men to inspect New Smyrna, and based on their observations of how the plantation was run, informed the Minorcans of their rights (Beeson 2006). This caused the Minorcans to appeal to Tonyn for aid and refuge, of which Tonyn, to spite and cripple Turnbull, obliged (Griffin 1991). By 1777, the plantation was evacuated, with nothing left but abandoned buildings.

New Smyrna was never completely devoid of citizens again. In 1805 the area came under the ownership of Ambrose Hull (Redd 2015). During this time, Florida was again under Spanish control. In 1812, the Hull house was destroyed in the Patriots War (Redd 2015). The property continued to change hands until roughly the 1850s when John Sheldon opened his inn (Redd 2015). Over 1,000 people were living in New Smyrna by 1860 (Bowden 2014). In 1863, a Civil War battle occurred between the river and the town in New Smyrna Beach, killing eight, destroying the Old Stone Wharf, the inn, and much of the rest of the town (Sweett 1963). Following this destruction, the property changed hands several times again, and was officially incorporated in 1887 due to the expansion of Henry Flagler’s Florida East Coast Railway (Cohen 2019). Thus, the modernization of New Smyrna Beach began.

**Historiography of New Smyrna**

Carita Doggett (1919), a descendent of Dr. Andrew Turnbull, offers the earliest publication on Turnbull Settlement of New Smyrna, published in 1919. The book is a narrative based on the letters between Dr. Turnbull and various others about the settlement in New Smyrna and its demise and seems to provide a favorable bias towards Dr. Turnbull. The book details financial aid requested by Turnbull to assist in New Smyrna’s success. Turnbull had to provide clothing and subsistence for his indentured servants, in addition to building additional housing for the surplus of people he arrived with. The book paints a picture of Turnbull as a solid leader
and well-traveled and -respected doctor that had acquaintances in high positions, such as the man that would become his partner in the New Smyrna endeavor, Sir William Duncan. While in Florida, Governor Grant offered him prestigious positions, such as on the East Florida Council. Turnbull claims he sacrificed everything for the success of his colony (Doggett 1919:79), because maintenance of his settlement was so time-consuming and almost constantly on the verge of failure References to Turnbull’s dedication to British success in Florida include documentation from colonial offices and war offices, and historical accounts by possible descendants or survivors of the Turnbull settlement. This book reveals details regarding lost sites, structures, or even details into the church and cemetery of New Smyrna.

There is the implication that the failure of New Smyrna was due to a series of unfortunate events. Doggett (1919: 11) suggests the following possibilities: supplies not being delivered when they were supposed to, or being stolen by pirates; the governor in St. Augustine that supported Turnbull falling ill and leaving Florida; drought; and personal grievances held by enemies of Turnbull. This may, however, reflect biases held by the author. Doggett (1919:94) explains how impressed visitors to his town were with the canal system Turnbull had implemented through the use of indentured servant and slave labor, and various correspondence suggest that the colony thrived for many years. Despite this, the population of New Smyrna continued to decline due to death from poor living conditions, and there was discourse regarding the unhappiness of the people living in the town. In addition, there was suspicion by the indigenous groups in the area that the town, comprised mainly of the Spanish-speaking Minorcans, was a Spanish town. This created tension between the townspeople and the indigenous communities because the latter distrusted the Spaniards. This tension eventually led
to a raid on the town by indigenous communities in the area while Turnbull was in England, a contributing factor in the unease felt by the settlers (Doggett 1919:166).

Seibert (1931) details the introduction and use of enslaved and indentured servants in Florida and discusses their exploitation at various locations from St. Augustine southward. During the First Spanish Period (1512-1763), enslaved Africans were allowed into Florida for refuge, and the Governor of St. Augustine provided them an area of land for their own, now known as Fort Mose (Seibert 1931:5). With the English control (1763-1783), slavery as it was known in the northern colonies was introduced (Seibert 1931:6). The English Governor, James Grant, had witnessed slavery in Charleston and determined that the practice would be appropriate in Florida (Seibert 1931:7). Settling in Florida by British planters was slow, but new planters did bring in varying amounts of enslaved laborers, many brought in by Governor Grant himself. According to Seibert (1931:13), Dr. Andrew Turnbull’s New Smyrna settlement had eighteen slaves kidnapped by Spanish privateers in 1779. Seibert’s work is the first publication identified that suggests that enslaved Africans were received in St. Augustine, despite alleged controversy via my personal observation of locals suggesting that slavery never happened in Florida, much less St. Augustine. Slaves were brought in by various planters and at various amounts and were moved around Florida or back and forth to Georgia and South Carolina during the British Period. By 1774, the enslaved Africans numbered over three thousand (Siebert 1931:23).

Leitch Wright, Jr. (1976) analyzes black and enslaved African history in East Florida, along with the limited understanding of their experiences in East Florida. Wright Jr states “there is an absence of data on the plantations of Grant, Oswald, Strachey, Bisset, Tonyn, and others that employed 100 or more slaves” (Wright 1976:429). This is another document that mentions the sale of slaves in St. Augustine, but also discusses the attempt at slaves to be kept in New
Smyrna. “Five hundred (slaves) shipped over from Africa were drowned just off the Florida coast and... crews from Spanish privateers occasionally landed and spirited away slaves” (Wright 1976:429). Wright’s article also discusses what happened to the enslaved following the end of the British period: most of them were taken to the Bahamas, but many stayed in East Florida (Wright 1976:440).

Griffin (1991:39-44) provides information regarding the Minorcans, their traditions, and their ways of life following arrival to New Smyrna. This book provides details regarding who the Minorcans were, where they came from, why they were convinced to come to the New World by Dr. Andrew Turnbull, and the conditions they endured in Florida when they arrived. Elsewhere in the British colonies, enslaved laborers were used to work the land at little expense of plantation owners. Turnbull took a different approach, though as previously mentioned, he did have an unknown number of enslaved laborers at his settlement. The book entails thorough research done by Griffin to understand the religious persecution that created a desire for exodus from the Mediterranean, along with their traditional lifeways regarding planting and harvest, and daily activities that contributed to a negative experience in New Smyrna. Griffin also explains one of the personal difficulties the indentured servants faced upon arrival to the New World: language barriers (Griffin 1991:20). Griffin details the population demographics at Turnbull, the rebellion that happened within two months of settlement establishment. This includes subsistence patterns experienced by the Mediterraneans that was sharply contrasted with what they experienced in New Smyrna, new residence patterns and work habits enforced by Turnbull and slave drivers he brought to force labor to be done by the Minorcans, among many other things. These factors led up to the exodus from New Smyrna to the arrival in St. Augustine. Griffin
discusses the experiences of the Minorcans following their replanting in St. Augustine, and how they lived and flourished there.

Griffin (2000) details the importance of indigo production to British trade, “blue gold”, as it was referred to. In addition, she details of the production method of the indigo, step by step, and how much was being produced in New Smyrna. Her chapter provides some insight into the violence and harsh conditions endured by the indentured servants in the settlement. This harsh treatment is also discussed in Doggett’s book, who suggests that claims of cruelty were too numerous and intense to be denied, and any suggestions that Turnbull was ignorant of this treatment were unbelievable (Doggett 1919: 159, 162). The violence reflects the stress the plantation was under to produce indigo to meet demands, both as a product for England’s markets and to make profits for Turnbull to pay his debtors. There is an account in this article of a child that was sick and violently forced to work, beaten in the field, and died while out among the indigo weeds. Another account is of a pregnant woman forced to work and consequently miscarried (Griffin 2000:53). There is another part of the text that is somewhat inconsistent across records. It regards the practice of fishing in New Smyrna and whether or not Turnbull allowed the Minorcans to hunt and fish. There is discussion from the Minorcans saying they were forced to hunt for other food sources, while Turnbull maintains that fish was so plentiful that every man could provide for his family, and he reports that fish could be seen drying in their homes (Landers 2000:55). This is also revisited in Fradkin (2012).

Kenneth Beeson (2006) tells the story of the Minorcans from a descendent standpoint. This book is another discussion of the history of the Turnbull settlement, from the background of Turnbull’s acquisition of the land grant to the failure of the settlement. There is detailed discussion of the indigo production and other crops being produced. Beeson also discusses how
the settlers were in an almost constant state of starvation, disallowed to hunt or fish (Beeson 2006:52). In addition, there is a detailed accounting of the Minorcans’ appeal to Governor Tonyn, in the absence of Dr. Turnbull, regarding their indentured servitude durations being complete but not honored, and their improper and violent treatment while in New Smyrna. There is the implication that Turnbull was not trusted by the Minorcans and that Turnbull was not as fair and proper as he would like his contemporaries to believe. Tonyn allowed the Minorcans to end their servitude, and to join the city of St. Augustine.

In 2016, the New Smyrna Museum of History published a pamphlet titled *Smyrnea Settlement: Archaeology and History of an 18th Century British Plantation in East Florida*. This pamphlet provides information to visitors and tourists to New Smyrna about Dr. Turnbull and his wife, the establishment of New Smyrna, and how the settlement was populated. It also details the way that indigo was cultivated and processed into a product, different from that of other colonies in the Caribbean and in South Carolina. Last, it discusses the failure and collapse of the colony, and what happened to the Minorcans afterwards. This work discusses much of the previous work discussed in the paper and was one of Dr. Roger Grange’s final works before he passed.

Stratton (2008) summarizes the history of New Smyrna and the Turnbull settlement, and provides useful maps depicting the plans for the town of New Smyrna. There are wonderful illustrations of the Minorcan Quarter of St Augustine, settled by the refugees of New Smyrna. In addition, the article provides names that could be used to locate descendants or track the Minorcan heritage as they flourished in St. Augustine. The article also discusses hardships faced by the Minorcans while in St Augustine due to other wars and battles. Last, the Patriot War Claims are documents that describe the daily lives of Minorcans living just north of St. Augustine following their exodus to the city (Stratton 2008). These documents could provide
insight into what material culture they Minorcans brought with them to New Smyrna, or what they had to acquire once in St. Augustine. Anything left in New Smyrna is an artifact today, waiting to be found.

Archaeology in New Smyrna

Much of the previous archaeological and historical research done in New Smyrna Beach was by Patricia Griffin, Roger Grange, Dana Ste. Claire, Dan Schafer, and Dorothy “Dot” Moore. The Florida Anthropologist Volume 52, published in 1999, is devoted to several plantations in Volusia County of East Florida. The article by Roger Grange is a report on the excavation done at the first habitation site found related to the Turnbull settlement. Grange’s (1999) work offers a blueprint for identifying residential signatures of this settlement, and for identifying assemblages associated with the 18th century Minorcan settlement. The First House site (8VO7051), located off US-1 across from what is now the airport, was a residence that was one of many that would have been built along the shoreline, housing Turnbull’s indentured servants. Analysis of the material used in the manufacture of the structure can aid in identification of similar structures of the time. The materials recovered from the First House can provide a standard to compare other artifacts found that might be from the same period.

Critically, Grange suggests that the coquina material used in the structure may have been taken after the settlement collapsed for use in other later structures (Grange 1999:75). Grange’s work also provides information regarding the dimensions of a household from the Turnbull settlement, the interior layout, and distance from the shore. Assuming the rest of the Turnbull indentured servant households were done in this fashion, searching for the houses and documenting them could be significantly easier.
Dorothy “Dot” Moore and Dana Ste. Claire’s article in this volume (Moore and Ste. Claire 1999) is essentially a summary of previously explored known Turnbull era sites, or sites assumed to be associated with Turnbull. The article details the plan for the settlement (Moore and Ste Claire 1999:38), which describes the locations of some of the buildings, types of material they were used to house, along with homesteads. The authors also suggest a contrast between the plan of this town as compared to traditional Mediterranean plans, which Arlene Fradkin alludes to in a paper discussed previously (2012). Importantly, the authors discussed the conditions of the abandoned town several years after the Minorcan exodus (Moore and Ste Claire 1999:39). There are several historic maps that may prove useful in GIS georeferencing. This article’s excellent resources are integral in understanding the whole history of New Smyrna, from Turnbull’s start to the lead into modernity.

*Previous Archaeological Research of the Old Stone Wharf*

Archaeological forms from the Florida Master Site File (FMSF) on research at the Old Stone Wharf date back to 1988, but according to the FMSF, it was “first listed on the Florida Master Site File in 1992” (Austin 2003). The last site file on the Old Stone Wharf was input in 2007. The Site File records numerous artifacts related to the British Period and the Native American occupation at the site, which is not surprising due to the Native American midden in the immediate vicinity of the Wharf Site (8VO5265). Only three site forms are on record in the FMSF, from Robert “Bob” Austin, Thomas Penders, and Jon Endonino.

Despite the information in the FMSF, which includes lists of artifacts found and other reports, very little has been done in terms of archaeology at the Old Stone Wharf. Thomas Penders (2006) and Jon Endonino (2007) both did work at the site as part of utilities surveys, and those surveys along with the previous one done by Bob Austin, Roger Grange, and Dot Moore
(Austin 2003), reference many recovered artifacts associated with the British Colonial period, such as ceramic vessel fragments and pipe stems. Based on dates of surveys and those in the FMSF, however, no further surveys, test units, or more extensive archaeological research on the Wharf Site has been done since 2007.

In 2002, the St. Augustine Lighthouse Archaeological Maritime Program (LAMP) conducted an underwater survey at the wharf to identify the extents and construction format of the colonial wharf. Analysis indicated that the wharf was more likely a slip, a “space between two piers”, “which lighters or other small vessels could enter to be loaded from the beach or the pier walls themselves, protected from the river current” (Burns 2002:9). This might provide an explanation as to why so many ceramic artifacts have been found along the wharf shoreline.

In 2007, the entirety of New Smyrna’s Turnbull sites and historic district were submitted to the National Register for Historic Places for formal designation. Surface survey of the wharf site in 2019 yielded several artifacts worth salvaging and preserving. Artifacts were photographed with a scale bar and north arrow before collection, and then promptly washed in the Grange-Moore Archaeology Research Center at the New Smyrna Museum of History with gentle soap and warm water to remove saltwater and sand. Artifacts were cataloged with the rest of the Old Stone Wharf artifacts.

**Conclusion**

Despite the plentiful writings on New Smyrna and the Turnbull Plantation, much of that work seems to be circularly referencing each other. Very little has been published regarding the archaeology that has happened in the town, and what has been published has not been published for the public. My research aims to look at one aspect of the site to understand what was being imported and exported, and how this relates to the people. Looking at these artifacts and how
they related to the people that lived and worked in New Smyrna will help us to get more answers to the question of this unique British Colonial plantation.
Chapter 3
Internship and Methods

Internship and Museum Challenges

I conducted my internship at the New Smyrna Museum of History under the leadership and direction of Dot Moore, from May 2019 to July 2019. Dot began by showing me the sites that had been previously researched in New Smyrna Beach that were associated with the Turnbull occupation, and explaining the historic district and the problems faced in redistricting that area due to recent demolition of houses that should have been included in the historic district. She also discussed the challenges presented by metal detectorists and collectors looting areas under construction, remodeling, or demolition. Artifacts are about as abundant as they are in St. Augustine, and although the city ordinance requires a city archaeologist, inadequate funding prevents this from being implemented. Therefore, many potentially historically valuable sites are under constant threat of looting, from Native American periods up to those of the 1950s.

Another challenge faced by the museum is that many of the artifacts are on loan from collectors, with little to no provenience. Some of these items are dirty, indicating a lack of proper care before display. This is in the process of being corrected by the museum, through reviews of acquisition forms and whether or not the items will be retained by the museum or returned to their lender. In addition, many artifacts that they could use to update their exhibits sit in a storage facility, which also contains all artifacts recovered in Southeast Volusia County. In showing me the repository of artifacts, and how they had been collected and retained in the storage facility, Dot and I decided the Old Stone Wharf artifacts would be the best place to focus my research, as
the artifacts were contained in only four boxes. Additionally, the wharf was the primary site of import of all products and materials introduced to New Smyrna, and the export site of much of the products made for profit. The four boxes were brought to the Grange-Moore Archaeology Research Center, the New Smyrna Museum of History’s archaeology lab. The boxes were labeled one through four, and beginning with box one, I carefully began to sort through the artifact bags.

Figure 3.1 The ruins of the Old Stone Wharf of New Smyrna Beach, Florida. Photo by author.

Methods
The artifacts were still in brown paper bags, rolled up to save space. Each 15x12x10 inch box was full. Many of the artifacts in the brown paper bags had not been sorted or cleaned, and dirt and sand quickly became a problem. The artifacts were removed from their bags one bag at a
time, and sorted by type: bone, ceramic, metal, small finds (if applicable). Then these artifacts were bagged in smaller four-mil polyethylene storage bags and labeled with the information present on the outside of the paper bags. These smaller bags were then placed in a larger four-mil polyethylene bag with original information from the paper bags and returned to the box for later analysis. This process was repeated for each paper bag in each box.

Upon completion of proper cleaning and sorting, field specimen (FS) numbers were assigned to each bag. This proved a challenging task, as some artifacts had been removed from the site and given an FS, while others had not. In the interest of consistency, I assigned FS numbers by date, type, and count, but I made sure to retain the original FS numbers if they existed. This resulted in a three part FS: FS (date)-type-count. For example, a pearlware artifact found on November 17, 1998 would have the FS of 17 (the 17th dated set of artifacts), while the plain pearlware would have a designator of 18. If it was the first artifact in the set, it’s full number would be 17.18.01, for November 17, 1998, plain pearlware, artifact one. Table 3.1 lists the new FS number as assigned by me, the date it corresponds to, and previous FS numbers assigned in each set. As I knew my focus would be on ceramics, I did not provide new FS dates to any dated bag that did not have ceramics. There were 14 bags of undated ceramic material, so after sorting and cleaning, these bags were labeled with numbers one through fourteen, and each given their own FS for organizational clarity. In addition, some of the original paper excavation bags had northing and eastings, which were retained, but no FS numbers. This confusion in labeling and recordkeeping was a contributing factor in deciding to develop a new numbering system.
After cleaning, sorting, renumbering, and separating, ceramic artifacts were identified using the Florida Museum of Natural History’s Historic Type Collection for historic ceramics (Waters 2020) along with the Jefferson-Patterson’s diagnostic artifacts of Maryland website.

Table 3.1 FS Numbers and Corresponding Dates

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<td>5/17/99</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>5/21/99</td>
</tr>
<tr>
<td>22</td>
<td></td>
<td>8/19/99</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td>9/99</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td>1/2001</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>3/14/19</td>
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<tr>
<td>26</td>
<td></td>
<td>5/14/19</td>
</tr>
<tr>
<td>27</td>
<td></td>
<td>5/17/19</td>
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<td>Undated 1 of 14</td>
</tr>
<tr>
<td>29</td>
<td></td>
<td>Undated 2 of 14</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>Undated 3 of 14</td>
</tr>
<tr>
<td>31</td>
<td></td>
<td>Undated 4 of 14</td>
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<td>33</td>
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<td>Undated 6 of 14</td>
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<td>Undated 7 of 14</td>
</tr>
<tr>
<td>35</td>
<td></td>
<td>Undated 8 of 14</td>
</tr>
</tbody>
</table>
(Maryland Archaeological Conservation Laboratory 2008). Ceramic types were recorded and given a designation number, for example, banded annular ware is designated 1, while ironstone has a designator of 10. Artifacts of uncertain identification were confirmed or corrected by Dr. Lindsay Bloch of the Ceramic Technology Lab at the Florida Museum of Natural History, University of Florida. Table 3.2 shows the designation number by type. Date ranges were included if they were available and used in identifying the Mean Ceramic Date.

Table 3.2 Artifact Types and Designation Numbers

<table>
<thead>
<tr>
<th>DESIGNATION NUMBER</th>
<th>ARTIFACT TYPE</th>
<th>DATE RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Unsorted/ Grouped Material</td>
<td></td>
</tr>
<tr>
<td>01</td>
<td>Annular Ware, Banded</td>
<td>1785-1840</td>
</tr>
<tr>
<td>02</td>
<td>Annular Ware, Cabled</td>
<td>1790-1820</td>
</tr>
<tr>
<td>03</td>
<td>Annular Ware, Marbleized</td>
<td>1782-1820</td>
</tr>
<tr>
<td>04</td>
<td>Alkaline Glazed Earthenware</td>
<td></td>
</tr>
<tr>
<td>05</td>
<td>Biot</td>
<td>1700-1750</td>
</tr>
<tr>
<td>06</td>
<td>Creamware</td>
<td>1762-1820</td>
</tr>
<tr>
<td>07</td>
<td>Tin-Enameled Ware</td>
<td>1640-1800</td>
</tr>
<tr>
<td>08</td>
<td>European Lead Glazed Coarse Earthenware</td>
<td></td>
</tr>
<tr>
<td>09</td>
<td>Huveaune</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Ironstone</td>
<td>1840-1930</td>
</tr>
<tr>
<td>11</td>
<td>Iberian/ Mediterranean</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Lead glazed coarse earthenware</td>
<td>1490-1900</td>
</tr>
<tr>
<td>DESIGNATION NUMBER</td>
<td>ARTIFACT TYPE</td>
<td>DATE RANGE</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>13</td>
<td>London Post-Medieval Redware</td>
<td>1500-1700</td>
</tr>
<tr>
<td>14</td>
<td>Marine ware</td>
<td>1700-1775</td>
</tr>
<tr>
<td>15</td>
<td>North Devon Gravel Tempered</td>
<td>1680-1750</td>
</tr>
<tr>
<td>16</td>
<td>Olive jar</td>
<td>1490-1900</td>
</tr>
<tr>
<td>17</td>
<td>Modern</td>
<td>1900-current</td>
</tr>
<tr>
<td>18</td>
<td>Pearlware</td>
<td>1780-1840</td>
</tr>
<tr>
<td>19</td>
<td>Pearlware, Edged (Rococo)</td>
<td>1775-1810</td>
</tr>
<tr>
<td>20</td>
<td>Pearlware, Edged (Neoclassical-symmetrical scalloping)</td>
<td>1802-1832</td>
</tr>
<tr>
<td>21</td>
<td>Pearlware, Edged (Unscalloped, impressed)</td>
<td>1823-1835</td>
</tr>
<tr>
<td>22</td>
<td>Pearlware, Edged (non-impressed)</td>
<td>1860s-1890s</td>
</tr>
<tr>
<td>23</td>
<td>Pearlware, Handpainted</td>
<td>1775-1840</td>
</tr>
<tr>
<td>24</td>
<td>Pearlware, transfer-printed</td>
<td>1784-1840</td>
</tr>
<tr>
<td>25</td>
<td>San Luis Polychrome</td>
<td>1650-1750</td>
</tr>
<tr>
<td>26</td>
<td>Mid-Atlantic (PhAB Ware)</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Vallauris</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>(unused)</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Pipe stem (5/64)</td>
<td>1720-1750</td>
</tr>
<tr>
<td>30</td>
<td>Pipe stem (4/64)</td>
<td>1750-1800</td>
</tr>
<tr>
<td>31</td>
<td>Porcelain, English</td>
<td>1745-1800</td>
</tr>
<tr>
<td>32</td>
<td>Porcelain, Chinese</td>
<td>1644-1912</td>
</tr>
<tr>
<td>33</td>
<td>Porcelain, Japanese</td>
<td>1753-1756</td>
</tr>
<tr>
<td>34</td>
<td>Redware</td>
<td>1500-1750</td>
</tr>
<tr>
<td>35</td>
<td>Reyeware</td>
<td>1725-1825</td>
</tr>
<tr>
<td>36</td>
<td>(unused)</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Slipware, Staffordshire</td>
<td>1675-1770</td>
</tr>
<tr>
<td>38</td>
<td>Stoneware, Albany Slipped</td>
<td>19th-20th C.</td>
</tr>
<tr>
<td>39</td>
<td>Stoneware, Brown Salt Glazed (English)</td>
<td>1690-1775</td>
</tr>
<tr>
<td>40</td>
<td>Stoneware, Elers-type</td>
<td>1690-1800</td>
</tr>
<tr>
<td>41</td>
<td>Stoneware, Rhenish Brown</td>
<td>1500-1700</td>
</tr>
<tr>
<td>42</td>
<td>Stoneware, Rhenish Blue</td>
<td>1575-1775</td>
</tr>
</tbody>
</table>
Collection Challenges
The biggest limitation to this site is that it is a wharf site and has thus been severely impacted by erosion. Many of the artifacts are water-worn and show visible signs of erosion, but almost all were identifiable despite the damage. Some of the tin-enameling has worn off a handful of artifacts but the paste is still recognizable by feel. Further, as most of the artifacts are from surface collecting, developing a clear chronology, and inferring context is challenging. Although the downside of surface-collected artifacts is that they lack depositional data,
benefit is that surface collected artifacts are on the surface. No digging is needed, and they still provide an accurate representation of occupations that occurred in the site. While there is no stratigraphy with a surface collection with which to develop a clear chronology, such sites remain “representative of ‘physical finds of a population’” (Lewarch and O’Brien 1981:298). In addition, Lewarch and O’Brien (1981:298) note that surface and subsurface assemblages are similar enough for comparison, since site formation processes are at play on both sets of artifacts. At the Old Stone Wharf site, artifacts from before the Turnbull period onward represent all time periods of the site’s use, but riverine erosion from tidal events, and major changes in river level from hurricanes have detrimentally affected movement of artifacts and exposure. This site remains under constant threat, but there is still much to learn about the Turnbull Settlement through the wharf assemblage. Lewarch and O’Brien (1981) discuss the importance of the use of surface collections despite the forces of nature that impact them. In the case of the Old Stone Wharf, I have chosen to aggregate the materials into one assemblage and treat the collection similar to how archaeologists treat those from plough zones (Seawright 2015).

Even though a plow zone assemblage, or in this case, a surface collection, includes a mixture of artifacts of different sites and time periods, “behavioral activity could still be reflected through spatial patterning and general artefact properties…(these patterns) can be examined against data from other sites, providing archaeologists with regional-wide information about past behavior” (Seawright 2015:7). Future work could certainly be done in comparing the data from this site with other Turnbull sites in New Smyrna, and the wharf site should have regular monitoring as artifacts come to the surface. This is especially important, since the wharf site is shared with the Clinch Street Midden site (8VO5265), a site that yields St. Johns and other Native American artifacts along the wharf shoreline.
**Mean Ceramic Date**

The Mean Ceramic Date (MCD) is calculated using the following formula (South 1977):

\[ MCD = \frac{\sum_{k=1}^{n} m_k f_k}{\sum_{k=1}^{n} f_k} \]

where:
- \( m_k \) is the median date for type \( k \)
- \( f_k \) is the frequency of type \( k \)
- \( n \) is the total number of types

As commonly done in historical archaeology, this calculation did not use all date ranges, as some are very large, such as that of Olive Jar, from 1490-1900 CE. Ceramics with date ranges that ended before the beginning of the settlement (1766) or started after the end of the settlement (1777), were not used. Those with long date ranges of over 150 years were also not included in the calculation. The resulting calculation provided an MCD of 1758. Given the date ranges of the Turnbull Settlement, this is not too far off from the dates of occupation (1766-1777), and what we may expect from a site primary composed of immigrants. Much of the material coming to New Smyrna was coming from Charleston, South Carolina (Acree 2008), so this may also contribute to the MCD pre-dating the settlement date.

The Mean Ceramic Date of the Old Stone Wharf could be fine-tuned if accurate date ranges for French artifacts, and if some of the tin-enameled artifacts could be applied. This might provide a more accurate understanding of when the ceramic items were coming into the site—closer to the establishment of the settlement, after the first two years, or closer to the end. In addition, more solid date ranges for earlier and later artifacts could provide insight to the occupation before and after Turnbull’s plantation, such as if the Spanish used the area as an outpost when owned by Joaquin de Florencia, or if the wharf continued to be used after the settlement’s failure by other plantations still operating in the vicinity. Time limitations restricted further refinement of the calculation for the sake of this thesis.
Chapter 4
Results

Artifacts recovered from the Old Stone Wharf site include bone, bottles, building materials, ceramics, glass fragments, metal, nails, pipe stems, pre-contact ceramics, and shell. A handful of small finds are also classified. The artifact breakdown by type is listed in table 4.1. Ceramics consisted of 409 of the artifacts, and the distribution of these ceramics was the focus of this analysis, with the overall distribution by origin listed in table 4.2. In this table, Germany is included in the Europe, and Iberian is included in Mediterranean and Spanish origins.

Ceramics

United States
Thirty-nine out of 409 ceramic artifacts, or just 9.5%, were American in origin. This includes several varieties of stoneware and two pieces of Mid-Atlantic “PHAB” ware (PHAB is abbreviated from Philadelphia/ Alexandria/ Baltimore). The American stoneware can be further divided into salt-glazed (11 pieces) or Albany-slipped (30 pieces).

While the date range for the Mid-Atlantic ware is unknown, only the Albany-slipped stoneware comes into existence after the failure of the Turnbull settlement. The modern ceramics from America are known as Fiestaware, and have a date range from 1936-present, with a hiatus in production from 1973-1985, but these are not included in the Mean Ceramic Date. The Fiestaware colors represented are yellow and cobalt blue, but it is unclear if these are original productions of the ceramic type or newer versions, but compared to modern colors, it is probable they are original. If they are original colors, cobalt blue was produced from 1936-1951, while yellow was produced from 1936-1969. (Homer Laughlin 2020).
Table 4.1 Artifact Distribution

<table>
<thead>
<tr>
<th>Artifact Type</th>
<th>Count</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bone</td>
<td>1092</td>
<td>48.7%</td>
</tr>
<tr>
<td>Bottles</td>
<td>8</td>
<td>0.3%</td>
</tr>
<tr>
<td>Building Materials</td>
<td>51</td>
<td>2.3%</td>
</tr>
<tr>
<td>Ceramics</td>
<td>409</td>
<td>18.3%</td>
</tr>
<tr>
<td>Glass</td>
<td>201</td>
<td>9%</td>
</tr>
<tr>
<td>Metal</td>
<td>105</td>
<td>4.7%</td>
</tr>
<tr>
<td>Nails</td>
<td>90</td>
<td>4%</td>
</tr>
<tr>
<td>Pipes/ Pipe Stems</td>
<td>9</td>
<td>.4%</td>
</tr>
<tr>
<td>Pre-Contact Ceramics</td>
<td>215</td>
<td>9.6%</td>
</tr>
<tr>
<td>Shell</td>
<td>33</td>
<td>1.5%</td>
</tr>
<tr>
<td>Small Finds</td>
<td>28</td>
<td>1.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2241</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 4.2 Ceramics by Origin

<table>
<thead>
<tr>
<th>Ceramic Origin</th>
<th>Count</th>
<th>Percentage of Total Ceramics</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>39</td>
<td>9.5%</td>
</tr>
<tr>
<td>China and Japan</td>
<td>17</td>
<td>4.4%</td>
</tr>
<tr>
<td>England</td>
<td>148</td>
<td>36.2%</td>
</tr>
<tr>
<td>Europe</td>
<td>33</td>
<td>8.1%</td>
</tr>
<tr>
<td>France</td>
<td>29</td>
<td>7.1%</td>
</tr>
<tr>
<td>Mediterranean and Spain</td>
<td>42</td>
<td>10.3%</td>
</tr>
<tr>
<td>Mexico</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Unknown Origin</td>
<td>100</td>
<td>24.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>409</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Table 4.3 American Ceramic Frequencies

<table>
<thead>
<tr>
<th>Ceramic Type</th>
<th>Date Range</th>
<th>Frequency</th>
<th>Percentage out of total American artifacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-Atlantic “PHAB” Ware</td>
<td>unknown</td>
<td>2</td>
<td>5.1%</td>
</tr>
<tr>
<td>Modern*</td>
<td>1936-1973, 1985-present</td>
<td>4</td>
<td>10.3%</td>
</tr>
<tr>
<td>Stoneware, Albany slipped</td>
<td>1790-</td>
<td>20</td>
<td>51.3%</td>
</tr>
<tr>
<td>Stoneware, Salt Glazed Bristol</td>
<td>1900-1920</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Stoneware, Brown Salt-Glazed</td>
<td>1740-</td>
<td>1</td>
<td>2.6%</td>
</tr>
<tr>
<td>Stoneware, Salt-Glazed</td>
<td>1740-</td>
<td>8</td>
<td>17.9%</td>
</tr>
<tr>
<td>Stoneware, Salt Glazed Gray</td>
<td>1740-</td>
<td>3</td>
<td>7.7%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>39</td>
<td>100%</td>
</tr>
</tbody>
</table>

**England**

One hundred and forty-eight artifacts, or 36.2%, were of English origin. The most common type was whiteware, with a combined percentage of the plain and transfer print being 18.4%, but whiteware occurs later than the Turnbull settlement. Of note, one of the transfer-printed pearlware artifacts is classic willow pattern, and there were also two samples of London Post-Medieval ware which have an approximate date range of 1500-1700. Both salt glazed stoneware and Staffordshire-slipped stoneware were common in mid-late 18th century sites in Alexandria and Charleston, so this is not at all surprising to find those British artifacts in this fledgling British site.

**France**

French artifacts constitute another 7.1% of artifacts found at the wharf site. Seventeen of the twenty-nine French artifacts were Huveaune, while just eight were Vallauris. One was part of a biot jar, and three were 19th century Huveaune.
Europe
Thirty-three of the 409 ceramic fragments (8.1%) were broadly European. Three pieces of German Rhenish stoneware were identified, two blue and one brown. European lead-glazed coarse earthenware accounted for ten of these artifacts, though it is possible that the English brown salt-glazed stoneware is actually German in origin, as their appearances are quite similar. The largest quantity of artifacts of broadly European origin were tin-enamedeled, totaling twenty. These tin-enamedeled artifacts are difficult to discern between English, Dutch, French, Spanish, and Italian origins, so the blanket terminology is the best fitting way to classify them.

Mediterranean and Spain
Forty-two artifacts out of the total were of Spanish and Mediterranean origin, constituting 10.3% of the total ceramic artifacts. Two were identified as Iberian earthenware, while the rest were Spanish olive jar.
Mexico
One of the artifacts was identified at the University of Florida as San Luis Polychrome.

This artifact is the only known artifact in this collection to be proven to have come from Mexico and provides an interesting twist in the interpretation of this site.

Table 4.4 English Ceramic Frequencies

<table>
<thead>
<tr>
<th>Ceramic Type</th>
<th>Date Range</th>
<th>Frequency</th>
<th>Percentage out of total English artifacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annular Pearlware, Banded</td>
<td>1790-1820</td>
<td>3</td>
<td>2.0%</td>
</tr>
<tr>
<td>Annular Pearlware, Cabled</td>
<td>1790-1820</td>
<td>1</td>
<td>0.7%</td>
</tr>
<tr>
<td>Annular Pearlware, Marbleized</td>
<td>1782-1820</td>
<td>2</td>
<td>1.4%</td>
</tr>
<tr>
<td>Creamware</td>
<td>1762-1820</td>
<td>18</td>
<td>12.2%</td>
</tr>
<tr>
<td>Ironstone</td>
<td>1840-1930</td>
<td>3</td>
<td>2.0%</td>
</tr>
<tr>
<td>London Post-Medieval Redware</td>
<td>1500-1700</td>
<td>2</td>
<td>1.4%</td>
</tr>
<tr>
<td>North Devon Gravel-Tempered Ware</td>
<td>1680-1750</td>
<td>6</td>
<td>4.1%</td>
</tr>
<tr>
<td>Pearlware</td>
<td>1780-1840</td>
<td>14</td>
<td>9.5%</td>
</tr>
<tr>
<td>Pearlware, Edged (Rococo)</td>
<td>1775-1810</td>
<td>3</td>
<td>2.0%</td>
</tr>
<tr>
<td>Pearlware, Edged (Neoclassical- symmetrical scalloping)</td>
<td>1802-1832</td>
<td>1</td>
<td>0.7%</td>
</tr>
<tr>
<td>Pearlware, Edged (Unscalloped, impressed)</td>
<td>1823-1835</td>
<td>2</td>
<td>1.4%</td>
</tr>
<tr>
<td>Pearlware, Edged (non-impressed)</td>
<td>1860s-1890s</td>
<td>1</td>
<td>0.7%</td>
</tr>
<tr>
<td>Pearlware, Handpainted</td>
<td>1775-1840</td>
<td>10</td>
<td>6.8%</td>
</tr>
<tr>
<td>Pearlware, transfer-printed</td>
<td>1784-1840</td>
<td>7</td>
<td>4.7%</td>
</tr>
<tr>
<td>Porcelain, English</td>
<td>1745-1800</td>
<td>5</td>
<td>3.4%</td>
</tr>
<tr>
<td>Staffordshire Slipware</td>
<td>1675-1770</td>
<td>14</td>
<td>9.5%</td>
</tr>
<tr>
<td>Stoneware, Brown Salt-Glazed</td>
<td>1690-1775</td>
<td>7</td>
<td>4.7%</td>
</tr>
<tr>
<td>Stoneware, Elers-type</td>
<td>1690-1800</td>
<td>2</td>
<td>1.4%</td>
</tr>
<tr>
<td>Stoneware, White Salt-Glazed</td>
<td>1720-1770</td>
<td>11</td>
<td>7.4%</td>
</tr>
<tr>
<td>Whiteware</td>
<td>1830-present</td>
<td>23</td>
<td>15.5%</td>
</tr>
<tr>
<td>Whiteware, Transfer-printed</td>
<td>1830-present</td>
<td>3</td>
<td>2.0%</td>
</tr>
<tr>
<td>Yellow ware</td>
<td>1840-present</td>
<td>8</td>
<td>5.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>148</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Figure 4.2 London Post-Medieval Ware

Figure 4.3 North Devon Gravel-Tempered Ware (Left) and Staffordshire-Slipped stoneware (Right)
Two kinds of porcelain were found, Chinese and Japanese. The Chinese porcelain ceramics totaled 11, while six were from possibly the same piece of Japanese phoenix-patterned dish, originating after 1914. In all, porcelain accounts for 4.2% of the total.
Unknown Origins
Artifacts with unknown origins account for the second largest group of historic ceramics artifacts in this collection. Totaling 100 artifacts, they are quite varied in their types. The most common type is Reyware, constituting 29% of the total artifacts with unknown origins, and 7.1% of all historic ceramic artifacts identified from this site. Table 4.5 demonstrates the distribution of artifacts with unknown origins.

Pipe Stems
Nine pipe stems were found throughout the organization process of the artifacts. Some were stained, and fragments ranged from approximately one centimeter to several. Eight of the fragments had 5/64-inch bores, dating to 1720-1750, in accordance with Harrington (1954). One of the fragments has a 4/64-inch bore, which corresponds to a date range of 1750-1800.
Figure 4.6 Tin-Enameled Ware (Left), German Rhenish Blue Stoneware (Right)

Figure 4.7 Spanish Olive Jar (left), Iberian earthenware (right)
**Figure 4.8** Chinese porcelain (left), Japanese Phoenix porcelain (right)

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
<th>Percentage of Total Artifacts with Unknown Origins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alkaline Glazed Coarse Earthenware</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Lead Glazed Coarse Earthenware</td>
<td>27</td>
<td>27%</td>
</tr>
<tr>
<td>Marine Ware</td>
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<td>1%</td>
</tr>
<tr>
<td>Modern</td>
<td>10</td>
<td>10%</td>
</tr>
<tr>
<td>Reyware</td>
<td>29</td>
<td>29%</td>
</tr>
<tr>
<td>UID Coarse Earthenware</td>
<td>24</td>
<td>24%</td>
</tr>
<tr>
<td>UID Refined Earthenware</td>
<td>4</td>
<td>4%</td>
</tr>
<tr>
<td>Unglazed Coarse Earthenware</td>
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<td>4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Small Finds

Twenty-eight artifacts classified as small finds were identified during the artifact analysis. Some of these objects are modern, such as a ceramic insulator for electrical wiring, and several marbles that appear mid-late 20th century. There are also ballast stones, lead fishing
weights, and chert flakes, and a possible gun flint. One item is a possible plastic gem from child’s ring or jewelry, the source is unknown (Figure 1.12).

One unique item appears to be part of a tin musical instrument (Figure 1.13, left). Another interesting item is part of a bone button (Figure 1.13, right). A shaped stone plug is also among the small finds (Figure 1.14).

Another significant item is a black pipe bowl (Figure 1.15). This item appears to be most closely related to those found in the Caribbean (Orihuela 2016). The item was confirmed with personal correspondence with Johanset Orihuela of the Florida International University and is similar to black clay pipes from the Balkans, the geographic region near Greece. Similar black clay pipes have been uncovered in Matanzas, Cuba, by Orihuela (Personal Correspondence) (Figure 1.16).

Figure 4.11 Yellow gem, possibly plastic. Handwritten notes by Dorothy “Dot” Moore
Figure 4.12 Musical instrument part (Undated) (left), and bone button fragment (right)

Figure 4.13 Stone cap or plug- use unknown, with top on left, and underside on right

**Glass**

*Bottles*

Only 8 intact bottles were recovered from the Old Stone Wharf. Many of them are small and appear to be perfume or cosmetic bottles. Some intact bottle bases suggest medicinal uses,
but these are included in the glass fragments count and not whole bottles. One bottle that is not intact is included in the bottle count because it is only missing the finish. Interpretations of the bottles were not done, however, and further research of the bottles used in New Smyrna Beach could be done, as the Griffin Brothers bottling company had a facility in New Smyrna in the early 20th century, and the Little Drug store was first established in 1922.

Figure 4.14 Black clay pipe bowl found at Old Stone Wharf Site

Glass Fragments and Shards
Glass fragments have been collected over the years of surveying at the Old Stone Wharf site, totaling 201 pieces. The colors of these fragments range from cobalt blue, manganese purple, “7-Up” green, and clear. As previously mentioned, bottle bottoms and finishes are included in this count, along with bottle body fragments. There was a crystal wine glass stem recovered, but this is included in the small finds count for its uniqueness.
Metal

*Nails*
Many nails were recovered from the Old Stone Wharf site and many others in New Smyrna. So many nails were recovered from one site that it is known as the “Copper Tack Site” (8VO5264), adjacent to the Old Stone Wharf Site. Copper tacks, and ferrous and non-ferrous nails were recovered from the Old Stone Wharf site as well. Interestingly, copper sheathing on ships was

*Figure 4.15 Pipe Bowl image from personal correspondence with Johanset Orihuela, for comparison*

*Figure 4.16 Medicine bottle (left), perfume bottle (right)*
not implemented by the Royal Navy until 1783 (Grange 2003). This is interesting, as it provides evidence for use of the wharf after the end of the Turnbull Settlement.

A metal plate, heavily compromised by saltwater, was recovered from the site. This plate has words that are barely discernible, and further analysis could be done in attempt to decipher and understand more about its origins. The item is pictured below, figure 4.19. Angling of the metal plate shows more clearly letters and wording that are barely legible. It reads

Built By
LA S FOUN
NEW ORLEANS
OF
STEEL ML
MANUFACTURING

Figure 4.17 Bottle bottom fragments with a fragment of very dark green olive amber

Figure 4.18 Iron nail recovered from the Old Stone Wharf
The spaces indicated by “_” are letters that are unable to be read. It is possible that it relates to Leeds Foundry in New Orleans, established 1824 (Zachry 2020), but this is extremely uncertain as the letters cannot be discerned. Further research could be done on the metal recovered at the Old Stone Wharf.

Other metal found at the site includes two flat, perforated fragment, metal spikes and large nails, some threaded metal that appear to be screws, and a heavy bar that is likely lead, and is short as if sheared at one end.

**Precontact Ceramics**

There is a known Native American midden in the immediate vicinity of the Old Stone Wharf, 8VO5265. Bearing this in mind, a total of 215 Native American artifacts, all ceramic, have been recovered. Most of these artifacts have been identified by Dr. Jon Endonino and Dr. Tom Pluckhahn as St. Johns Plain, but several other varieties have been recovered. The presence of a Native American midden here and another one located under the remains of the Old Fort Park, along with an extensive collection of Native American artifacts in the New Smyrna

*Figure 4.19 Metal Plaque with illegible wording*
Table 4.6 Native American Ceramic Counts

<table>
<thead>
<tr>
<th>Type</th>
<th>Count</th>
<th>Approximate Date Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Johns Plain</td>
<td>189</td>
<td>500 BC- AD 1513</td>
</tr>
<tr>
<td>St. Johns Incised</td>
<td>2</td>
<td>500 BC-AD 1513</td>
</tr>
<tr>
<td>Grit-Tempered</td>
<td>3</td>
<td>500 BC- AD 500</td>
</tr>
<tr>
<td>Sand-Tempered Plain</td>
<td>12</td>
<td>500 BC- AD500</td>
</tr>
<tr>
<td>Sand-Tempered Checked</td>
<td>1</td>
<td>AD 500-1565</td>
</tr>
<tr>
<td>Sand-Tempered Incised</td>
<td>1</td>
<td>AD750- 1565</td>
</tr>
<tr>
<td>Dunn’s Creek Red</td>
<td>4</td>
<td>AD 100- AD 750</td>
</tr>
<tr>
<td>Unidentified</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>215</strong></td>
<td></td>
</tr>
</tbody>
</table>
Museum of History suggests a separate project should be done to understand the depth and importance of the Native American presence in the New Smyrna Beach area. Dates in the table below are from Milanich (2017) and Ashley (2008).
LiDAR Sourcing, Analysis, and Interpretation

Light detection and ranging (LiDAR) was conducted using images from the National Oceanographic and Atmospheric Administration’s (NOAA) Data Access Viewer taken in 2006 via airplane. Images were processed using ArcGIS software, converting a data point cloud into a useable digital elevation model (DEM). This was the best format to use to attempt an identification of any features on the landscape that might be hidden by foliage. To be clear, the entire acreage owned by Turnbull was not surveyed, only the area inhabited by the Minorcans and those indentured or employed by Dr. Turnbull. The aim was to identify any features visible in the landscape such as plow-zones and agricultural fields, or foundations hidden by foliage.

The results of the LiDAR showed what may have been a refuse pit in an area that possibly was a site associated with indigo processing in the settlement. Excavations have been previously done at the site, known as the Blanchette site (8VO2580), but the artifacts recovered have not been analyzed as of yet. This site is one of the northernmost sites associated with the Turnbull Settlement (Figure 5.1). No other sites with possible affiliations with the Turnbull settlement were found. Despite this, the foundation of a building to the south, closer to the heart of the town, was revealed using LiDAR and identified using Sanborn maps as Florida East Coast Railway Shops associated with the railway station in New Smyrna Beach, circa 1916. Former railway tracks that went to the wharf were also visible, ghostly impressions on a developed landscape.
Overall, no new developments were made in the use of LiDAR to identify any sites associated with the Turnbull Settlement. This is possibly due to the fact that so much development has occurred along the stretch of coast where the dwellings of the indentured servants of the plantation existed, since the 1820s. Any agricultural fields have been covered by streets and houses and developed and redeveloped over time. As such, other forms of remote survey, such as ground penetrating radar, may be used in the future to attempt in locating any sites that might be associated with the Turnbull Settlement, such as the church and cemetery, residences, sites of industry, and indigo processing.

Figure 5.1 Murray Creek in North New Smyrna- Inset area indicates location of Blanchette Site (8VO2580), possible indigo production site associated with Turnbull Plantation Image by author.
Figure 5.2 New Smyrna Beach Digital Elevation Model showing foundation of 1916 Florida East Coast Railway Shops (circled in red) (map credit: Tracy Lovingood)

Figure 5.3 Sanborn Insurance Map from 1916 showing location of Florida East Coast Railway Shops (circled in red). Map courtesy of University of Florida Digital Collections. https://ufdc.ufl.edu/sanborn
Chapter 6
Discussion and Conclusion

Discussion
Given the presence of Native American sites in the area, it is clear that this area has been prime real estate since before Europeans arrived. Some artifacts that predate the site might suggest the use of the area as a Spanish outpost before the British Period, or that Joaquin de Florencia actually settled or allowed settlement on his property. Regardless, definitive evidence abounds that New Smyrna Beach was not officially populated by colonials until the Turnbull Settlement was established by Dr. Turnbull. The stone wharf he established provided a reliable port of trade, and this site may have continued to be used by other plantations in the area and afterwards, up until its destruction in the Civil War.

The wide variety of artifacts, specifically ceramics, suggests the support of a large population of people of varying social statuses, even before the arrival of colonists. Earthenware ceramics related to the Turnbull period suggest a predominant lower class in the area, presumably the Minorcans. There are other ceramics that predate the Minorcans and the Turnbull period, many from Europe, the Mediterranean, and Spain. These Mediterranean and Spanish artifacts may suggest that the Minorcans brought more to the New World than originally believed. The northern European and American ceramics may have come in at the request of Turnbull from Charleston, as many other supplies provided to the Florida Colony did. Regardless, trade in Florida during the British Colonial period needs to be more thoroughly examined and understood.
That so many of these artifacts come from Europe, America, and the Mediterranean region suggest a much more entangled network of trade that New Smyrna was engaged in. Indigo produced on the plantation, along with many other crops, were exported to England to be used as dyes for clothing and other material dispersed to the American colonies or to the Caribbean, along with other British colonies the world over that existed at this time. Items were being imported to New Smyrna from Charleston, Savannah, and England, but possibly from the Caribbean as well through illicit trade (Carvino 2017). Though the British period was short-lived in Florida, Britain had to supply her youngest colony with appropriate provisions for establishment and survival. No slave ships are documented as having come to Florida during the British period as per the Trans-Atlantic Slave Trade Database (Domingues da Silva 2019). Documentation exists indicating that enslaved Africans were brought to Florida, but trade to Florida overall is so little understood and researched during this time that more information about Florida’s connection as a colony to Britain and other colonies during this time might provide answers to Florida’s role in British, American, and Caribbean colonial history. Plantations with wharves such as in New Smyrna and how those plantations interacted with St. Augustine, the British capitol in Florida, could provide the insights needed to fill historical holes in American, British and Caribbean trade networks, and even trade with France and Spain. Clearly, more was going on during the British period in Florida than is understood by archaeologists and historians here and identifying and linking ports of import and export is a critical first step.

Analysis of ceramic artifacts uncovered at the Old Stone Wharf initially resulted in more questions than answers. Spanish olive jar fragments abound, and if Turnbull was sending his newly indentured servants to Florida straight from the Mediterranean, it would be unsurprising to
find olive jar fragments at the wharf, as these containers were likely re-used after functioning as storage for shipping commodities. Tin-enamed artifacts were difficult to differentiate origins, but the fact that they were all European in origin suggests trade with England-approved European trade partners. The variety of French artifacts is interesting in their own right. According to Frank Carvino, a mess of trade laws that were passed between England, France, and Spain in the mid-late 1700s sought to limit trade between colonies and merchants of differing homelands, but that monitoring of this trade occurred in the British colonies north of Florida (Carvino 2017). The lack of trade restrictions in British Florida may have been done to encourage British development there, and the trade restrictions imposed there as they were in northern colonies would have crippled the fledgling colony.

The largest variety of artifacts identified in my analysis was reyware, though the origins of this unique earthenware are unknown (Waters 2020). It is also frustrating that many of the forms of vessels are unidentifiable. Many of the fragments have shallow curves to them or are too eroded from water to discern. Future uses of petrography or XRF would be useful in determining answers to the origins of reyware and the tin-enamed pottery.

Documentation from several sources including letters between Turnbull, his partners, and Governor Grant of St. Augustine imply that provisions would be made for the indentured servants upon arrival, specifically food, bedding, and clothing. Doggett states that this was pretty common for new people arriving in the colonies (1919:46). Griffin (1991) explains that prior to sailing to the New World and New Smyrna, many of the Minorcans (from Minorca) downsized or got rid of their belongings (Griffin 1991:24). Many of the Greeks he picked up were refugees fleeing political turmoil, and Italians looking for a new start. The implication is that these newcomers to Florida brought little to nothing with them, with the exception of materials.
necessary for establishing a colony—corn, olive trees, silkworms, and items for “kitchen gardens” (Griffin 1991:24). Turnbull is also said to have brought cotton gins, and “carefully packed cuttings for grapes, olives, and mulberries” (Doggett 1919:39). Very little mention is made of what the colonists brought with them that was their own, and the ships bringing the settlers over were said to be very overcrowded (Panagopoulos 1978: 48-49). But the amount of Mediterranean ceramic artifacts, and the black clay pipe resembling that of the Balkans, provides evidence that the settlers did bring personal items.

The influence from different cultural backgrounds, the relaxed import and export laws applied to the colony of Florida under British rule, and the lack of understanding of trade in Florida during the British period makes a case for a closer examination of ceramic artifacts in Florida and Florida’s role in American and British trade history. The story of New Smyrna can be told from the perspective of indigo production and agricultural trade in the colonies and how these crop goods were interconnected and inter-reliant, since they were so critically important to Britain’s control in the region and over the American colonies. Overall, acknowledgement of the importance of New Smyrna in the history of the Minorcans and their lives in Florida deserves more attention as well, as this was the place where their story here began.

**Recommendations for the New Smyrna Museum of History**

Multiple recommendations can be made for the improvement of the New Smyrna Museum of History. Many of the displays can be updated to reflect artifacts recovered from New Smyrna Beach representative of the time periods the museum already highlights. Many artifacts in the current displays are on loan, and the museum is currently in the process of returning those items to their owners. Once that is done, the cases will be free for the display of locally found artifacts already owned by the museum or the Southeast Volusia Historical Society or donated by locals of the town. Updated labeling with the proper documentation should be implemented, with
acquisition and artifact numbers. To do this, Serrell (1996) and Rand (2009) would be good sources for museum staff to reference.

The New Smyrna Museum of History recently dedicated their archaeology lab to Dr. Roger Grange and Dorothy “Dot” Moore for their dedication and contribution to New Smyrna Beach’s archaeology and history. This lab could be put to great use by a permanent archaeologist that works with the city archaeologist to plan for site surveying, monitoring, excavation, and public outreach and education regarding archaeology within the town limits, and what to do if artifacts are found on private property. Someone skilled in the timely publication of site files, reports, and articles for the public would be ideal. The job could be divided in two as well, with someone dedicated to writing for the public. It is remarkable how few locals know about the British Period of Florida, or the Turnbull Settlement. A museum display on a previous excavation is already a part of the museum’s exhibits, however, information on how to interface with the public if and when they find things on their personal property is necessary. The Research Center could also benefit from volunteers that clean artifacts, do research on finds, or assist in monitoring and surveying of known sites, through the Florida Public Archaeology Network’s Heritage Monitoring Scouts or a locally organized system. Outreach to the local schools to teach the importance of archaeology and how close the locals are to the past could be beneficial in teaching a healthy respect for and preservation of the past. The museum and Research Center could certainly use volunteer work to clean and update storage of previously excavated artifacts for their preservation and for the benefit of future researchers and archaeologists.

It is my understanding the New Smyrna Museum of History plans to create a display about the Old Stone Wharf site. This should be done using any historic images of the Old Stone
Wharf and those depicting its current condition, and representations of the use of the site throughout time, documenting the Native American midden, to a ruin with a marked sign. This includes the use of artifacts recovered from the site to show the different types of artifacts found in the wharf site such as bottles, ceramics, metal, and Native American pottery. In addition, for the security of the site, it should be reiterated that removal of artifacts from the site is illegal.

**Conclusion**

The story of New Smyrna after the Turnbull plantation was abandoned and leading up to the establishment of Florida as an American Territory, followed by statehood, needs to be better understood. It is accepted that the area remained inhabited, and there are records of the sugar mill being destroyed in the Seminole Wars (Griffin 2003:172). Despite this, New Smyrna’s story remains mostly muted, and the story of the emergence of a people that helped create a Florida identity has been silenced, much like our understanding of the Native American presence in the area before the arrival of the British colonists. Analysis of ceramics found at all known Turnbull sites in New Smyrna Beach could more clearly illustrate an accurate history of the plantation and its failings. In addition, the stories of New Smyrna’s role in the Civil War, along with the roles of Florida as a whole, need to be more thoroughly researched. Last, the Native American material remains should be more closely analyzed, to understand the nature of the site, the lives of the people inhabiting the site, and its connection to other Native American sites in the area. Florida history is part of American history, in all areas, and those deserve the respect and diligence of research provided other areas of American history, to better understand how this country came to be, and how the depth of diversity exhibited in the Sunshine State impacts the rest of the nation.
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