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Freedom and Food: Transformations and Continuities in Foodways Among the People Who Labored at Stono Plantation, James Island, South Carolina During the Eighteenth, Nineteenth, and Twentieth Centuries

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ABSTRACT

This dissertation compares archaeological assemblages from the Stono Plantation/Dill Farm, James Island, South Carolina between the periods of enslavement and Emancipation. Further comparisons are made with the neighboring Ferguson Road archaeological site and the Smith Plantation archaeological site, Port Royal, South Carolina. These comparisons are made in order to understand how Emancipation impacted the foodways including diet, vessel type and use, and cuisine of Lowcountry residents. Results suggest that while technological innovation and increased globalization enabled a shift in material culture, the overall foodways of the region remained relatively unchanged through time.

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CHAPTER 1
INTRODUCTION

This dissertation spans two eras, the era of Enslavement and the era Emancipation, which consisted of sharecropping and tenancy. The latter era overlaps with a period known as Reconstruction (1866-1877), a time during which the United States sought to recover and rebuild after the Civil War. It was a period rife with transformations during which what constituted property and what constituted human and civil rights were not only debated but also acted out across the American landscape. It was also a period of economic depression, high property taxes, indebtedness, discrimination, and persecution for Southerners, particularly poor Southerners, and most particularly poor, Black Southerners (De La Cova 2008). Studies indicate that social stress and interpersonal and/or racially motivated violence (using gunshot wounds as a proxy) increased among Reconstruction-era African American populations than was present among enslaved predecessors (De La Cova 2008). Moreover, average lifespans decreased between the two periods (De La Cova 2008). Yet, very little of this period is taught in U.S. schools[1]. Indeed, when referred to, the focus is often on "Radical Reconstruction," an era of corruption involving "carpetbaggers," Southern "scalawags," and ignorant freedpeople (Foner 1988:xvii, personal experience). It is held that these

[1] Here I speak from personal experience, but see Foner 1988.

groups brought suffering to the South and whites had to band together to restore "home rule" (Foner 1988:xvii)[2]. In short, Reconstruction was seen as a bleak era and a blight on the rights of local and state governments. Perhaps this way of envisioning the past is the primary reason it is not discussed, when politics and history intertwine, people become uncomfortable and unfortunately some Americans still hold such a view of society today as well as ascribing it to past injustices against the diasporic minority.

With this dissertation I seek to contribute to reframing of the era of Reconstruction by adding knowledge about the era to the field of historical archaeology, diaspora studies, Southern studies, and even American history. In fact, I hope to help enlighten readers of this and future works about the abuses done to millions of Americans and Southerners in particular, after the end of slavery. Certainly, I am not the first such scholar to seek such ends. Indeed, W. E. B. DuBois did so in the mid-twentieth century with Reconstruction Revisionism. Henry Louis Gates continues to contribute to the cause through popular media today. Numerous others have contributed as well[3].

I do think, however that this dissertation contributes something unique to the study of Reconstruction. Here, I compare the foodways of enslaved people and their descendants who worked as tenant farmers and/or sharecroppers on Stono plantation, James Island, South Carolina. While much has been written about the foodways of

[2] To clarify, Restoration is only a part of Reconstruction. Restoration is defined by Summers (2014:67) as 1865-1866 during which President Johnson sought a Union between the North and South through a "voluntary" adoption of a pardoning program that was in actuality, forced.

[3] Alexander 2012, Baptist 2014, Barnes and Steen 2012, Blackmon 2008, Foner 1988, Hayden et. al 2013, Oakes 1990, Van Auken 1950, Wilkie 2004, Williamson 1965, Zierden et. al 1999, Zinn 2015, etc.

enslaved people[4] and much has been written about "modern" foodways[5], I have found very little that spans the two[6] and even less that links the people whose foodways are being studied as a single and unique cultural group that existed during both periods.

The era of Reconstruction is important for this dissertation as it marks the transition between the two periods studied and links the enslaved with the freed and because it is so understudied archaeologically. As will be discussed in upcoming chapters, it is not entirely clear whether there was overlap in the occupation of the pre-Emancipation Stono "Slave Settlement" and post-Emancipation Stono "Tenant Settlement," or whether the shift in the habitation space occurred after a period of abandonment. In either case, I use Emancipation as a marker for dividing the two periods so that they can be compared.

To study the changes that occurred to foodways as a result of Emancipation and Reconstruction, I compare not only habitations dating to pre- and post-Emancipation at Stono, I also broaden my study by comparing my findings at Stono with those of two other Lowcountry plantations: Ferguson Road and Smith Plantation. More information on these archaeological sites and assemblages can be found in Chapters 2, 4, and 8. The methodology for these comparisons, laboratory analyses, and this dissertation project as a whole can be found in Chapter 3.

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[4] Barnes and Steen 2012, Berlin and Morgan 1993, Bowes 2011, Deetz 2010, Fairbanks 1984, Harris 2011, Isenbarger 2006, Klippel et. al 2011, Lev Tov 2014, Mrozowski et. al 2008, Otto 1975, Thomas 1998, Tuma 2006, Wallman 2014, Wallman and Grouard 2017
[5] Cheek and Friedlander 1990, Henderson 2007, Holland 1990, Nettles-Barcelón et. al 2015 and non-archaeology works including Bailey 2007, Carney 2018, Cronin et. al 2014, Dusselier 2009, Shields 2015, Twitty 2017
[6] Scott 2001

When I began this research project my hypotheses were numerous. They are listed and then explained below:

1. Enslaved laborers received rations, but free tenant farmers did not. Thus, enslaved people ate much domesticated meat relative to their tenant farmer descendants; more domesticated animal remains will be seen in enslavement-era assemblages than in the tenant-era assemblage.
2. Due to the “loss” of rations, tenant farmers had to procure more of their own foodstuffs. Thus, tenant farmers relied more heavily upon fished and gathered seafood than their enslaved predecessors; more seafood remains are present in the tenant-era assemblage than in the enslavement-era assemblages.
3. In contrast, fewer wild game animals would be consumed during the tenant-era than during the era of enslavement due to a loss of natural habitat for such species and decreased “free time” for tenant farmers relative to enslaved laborers; fewer wild animal remains will be seen in the later site assemblage than in the earlier assemblages.
4. Tenant farmers relied more heavily upon poultry they raised themselves and thus consumed more poultry than their enslaved predecessors; more domesticated bird remains will be seen in later assemblages.
5. Tenant farmers relied more heavily upon subsistence crops than did their enslaved predecessors; fewer faunal remains will be present within the overall tenant site archaeological assemblage.

6. The primary fishing method shifted from cast net to hook-and-line. Fewer net weights will be found in later assemblages; more fishhooks will be found in later assemblages. Different species of fish will be identified in assemblages from different eras.
7. Food preparation techniques changed through time. Specifically, there was a shift from communal eating to household-level dining. This shift will be seen by an increased ratio of small- to medium-sized cast iron pots and pans relative to large coarse earthenware vessels.
8. Enslaved laborers in the Lowcountry relied upon the informal market for non-rationed and non-self-produced goods.
9. Tenant farmers in the Lowcountry relied upon the informal market in combination with the formal market in addition to self-provisioning.
10. Glass and ceramic vessel forms shifted from mostly hollow bowls to mostly plates; the tenant-era assemblage will contain more tablewares than assemblages from the era of enslavement.
11. Utensil use shifted from hands and spoons to knives and forks; more utensils in general and more knives and forks in particular are present in the tenant-era assemblage.
12. "Free time" decreased after Emancipation such that prepared foods were used more often; food storage jars and cans increase through time and are thus more plentiful in the tenant-era assemblage than in the earlier assemblages.

13. Locally produced, handmade goods were supplanted by mass-produced imported goods. So, fewer locally/regionally produced goods are present in tenant-era assemblages relative to enslavement-era assemblages.
14. Reliance upon purchased goods increased through time; cans are more plentiful in the tenant-era than in the era of enslavement, which is reflected in the ratio of can fragments between sites from the different periods.
15. Cuisine style shifted from stew-like to meat-and-three-style meals; faunal remains are more fragmented in earlier assemblages than in the later assemblage.
16. Fragmentation is a proxy for plowing; earlier assemblages will be comprised of smaller artifact fragments than later assemblages.

First, I took into account that individuals enslaved on James Island plantations (including Stono) are known to have hunted and fished to supplement the rations they were given (Butler ca. 1937, Zierden and Reitz 2009). It is not clear whether enslaved people at Stono received rations (although an enslaved butcher did work there[7]) nor is it certain that tenants who and/or sharecroppers who later inhabited the site did not receive rations (an 1866 labor contract indicates they may have). Still, I set forth presuming rations were received during the era of enslavement and not during tenancy[8]

[7] Calhoun 1986
[8] Of course, the idea of enslaved people receiving rations and freed tenant farmers not receiving rations is presumptuous; there are many incidences in which freedpeople did receive rations (Hayden et. al 2013, McInniss 2016, Montrie 2008, Ruef 2014).

(see Emmer 1992, Handler 2014, Scott 2001, and Twitty 2016). Hence, I focus on how the loss of rations would have impacted the diets of laborers. First, I thought that tenant farmers would also have fished and gathered more seafoods than their enslaved predecessors in order to supplement their diets. Such a shift would be clear by the presence of more seafood remains in the faunal assemblages of the tenant site relative to the earlier sites. My results indicate no such difference in seafood consumption exists; both domesticated mammals and seafood were important food sources through time.

I further conjectured tenant farmers would have raised more small domestic animals (specifically poultry such as chickens), and that they would have relied more heavily upon these birds as a food source than enslaved laborers did. As with aquatic remains, such a shift would be visible in the faunal records of the compared sites. Specifically, tenant-era sites would have more poultry remains than enslavement-era sites. My analyses indicate that domesticated birds were minor dietary contributors during both periods.

Regarding wild game consumption, Previous research by Dukes and Reitz (1994) found that the inhabitants of Stono (not limited to the enslaved population) used more wild than domestic animals, but that domestic animals made up a greater percentage of the site's biomass (Dukes and Reitz 1994:1). Chapter 5 of this dissertation provides archaeological evidence for the consumption of both domesticated and wild animals on all sites, but also that their ratios differ through time and among assemblages. In general, wild animal consumption was always low.

Oral and written histories indicate that sharecroppers relied heavily upon the produce they grew (Frazier 2006 and 2010, Robinson 2007, Shields 2015), but the archaeological component of my project does not include botanical analyses, so I have little information from the era of enslavement to use as a comparative sample. Regardless, it is clear that freedpeople continued to cultivate, harvest, consume, sell and trade produce from their own garden plots, they may have had to rely more upon these crops as food sources for themselves than they had in the past. Knowing that James Islanders had always cultivated their own crops (Zierden and Reitz 2009), I thought that later inhabitants would have utilized this food source more than earlier residents. Thus, fewer faunal remains would be found within the overall archaeological assemblages of later sites. This is true; however, it is likely the result of sampling bias rather than an actual transformation in foodways.

My preliminary artifact analyses indicated a shift from cast net fishing to hook-and-line fishing occurred. Specifically, I saw numerous cast net weights in the earlier Stono assemblage and multiple fishhooks in the later Stono assemblage (further detailed is provided in forthcoming chapters). I suspected the comparison site assemblages would mirror this finding and support my extrapolation of a shift in seafood procurement method. Interestingly though, it is unlikely such a shift ever occurred. It is more likely that cast nets and hook-and-line have been used through time depending upon the environment and season in which the fishing took place and the type of fish sought.

In terms of food preparation methods, I hypothesized a shift from community-level to household-level. The material correlates of such a shift would be identified through the presence of large locally/regionally produced, handmade cooking vessels to smaller machine-made cast iron pots. Along with a shift in preparation method, I foresaw a transformation in the type and form of goods used during food consumption. Specifically, I thought stew-type meals eaten out of bowls with spoons or hands would give way to plate-based meals consisting of a protein and drier side dishes (meat-and-three) eaten with knife and fork. In terms of relevant artifacts, I suspected I would see a shift from locally produced coarse earthenware bowls to mass-produced plates and serving dishes composed of refined earthenwares and/or machine-made glass tablewares. My results do indeed show such a shift.

In conjunction with the rise of industrialization and shift to wage labor that coincided with the transition from enslavement to tenancy, I hypothesized tenant farmers would have had increased access to goods through the formal market relative to enslaved people. Industrialized goods as defined here include canned foods; machine-made containers including glass vessels and ceramic wares; as well as machine-made, metal eating and cooking utensils. My results show the presence of goods produced through mechanized means did increase through time.

I thought the availability of mass-produced goods meant their use of informal markets and self-produced items such as handmade pottery would decrease. This notion was based upon the increased availability of inexpensive, mass produced ceramics (such as whiteware) increased over time and locally made ceramics (primarily colonoware, which would have been expensive in terms of time if not money) fell out of favor. In fact, my comparison between pre- and post-Emancipation archaeological assemblages indicates such a shift did occur. I also show that the diversity of ceramic ware types (both locally made and non-locally produced) decreased through time. Ceramic forms on the other hand, seem to have increased through time in accordance with the ability to manufacture a wider variety of shapes through molds and mechanization.

I further hypothesized that glass wares and metal cans would also have become more common through time simply as technological innovations and industrialization of society in general made them easier to obtain in terms of expense. As with ceramics, glass vessel form types increased in number through time. Regarding cans, archaeological evidence from the Stono "Tenant Settlement" indicates that canned goods were indeed consumed during the post-Emancipation period. These changes in large- and regional-scale economics related to industrialization would have impacted the foodways of Lowcountry people (including those on Stono plantation) in terms of the vessels used to cook foods and contain them during and after the process of eating.

Even though access to the formalized market may have been greater for tenant farmers than for their enslaved ancestors, by consuming the produce they cultivated themselves, their ability to accumulate capital by selling surplus produce would have been limited. This lack of capital would have meant their ability to purchase meats (if and when available) was in turn, diminished. At the same time, working for wages would have decreased the amount of time tenants were able to put toward farming, fishing, and gathering their own foods[9]. Again, I suspected faunal materials would be few in the tenant-era assemblage relative to the earlier assemblages. As noted above, the faunal assemblage for the tenant-era site is smaller, but this is likely due to the difference in sample size rather than an actual shift in foodways.

The ingredients of the different meal types, I suspected, would diverge from tiny bits of meats combined with a starch (such as rice) and vegetables, to a more formal cut of meat or dish made from canned or processed meat served alongside a stand-alone starch and separate vegetable. That is, earlier assemblages would have more fragmented faunal remains because proteins would have been hacked into smaller bits for use in stew-type meals than in cuts of meat used in meat-and-three meals. I hypothesized this shift would be visible in the presence of larger fragments of faunal remains through time. This hypothesis is based on past studies, which indicate stewed meats are uncovered archaeologically on plantation sites as small bone fragments (Crader 1984, Landon 2005, Newman 2010, Tuma 2006, Wallman 2014). Conversely, larger faunal remains have been used as evidence of identifiable cuts supporting the idea of an independent serving of protein using archaeological evidence (Fennell 2011, Fountain 1995, Stewart-Abernathy and Ruff 1989, Thomas 1998).

A cultural shift away from communal stews would, thus, be reflected in not only through an increase in identifiable cuts of meats in the faunal record and a related increase in the overall size of faunal remains within the later assemblage as compared

[9] Excluding younger and older people who likely did not work for wages and continued to contribute labor-time towards food procurement as they had prior to Emancipation.

with the earlier assemblages, but also in the transition from communal preparation and consumption via bowl and spoon to household preparation and consumption via plate, knife, and fork. Thus, I anticipated a combination of shifts in vessel wares and manufacturing techniques, vessel forms related to those techniques, utensils number and forms, the presence of can fragments, and dietary contributors.

Finally, I thought rates of fragmentation would be greater in earlier times not only due to the shift in cuisine form, but also because the amount of plowing that would have impacted earlier sites would be greater than that on the remains from later sites. Put simply, assemblages that had been part of the archaeological record for a longer period of time, would consist of smaller fragments than those that were more recently deposited. I hypothesized the average size of archaeological fragments would thus be smaller on older sites deposited by enslaved peoples, and larger on more recent sites deposited by tenant farmers. I use maximum artifact size and average weight to determine whether or not plowing duration and intensity are identifiable through archaeological remains. If they are, then I would be able to extrapolate increased, decreased, or equivalent plowing activity through time.

To frame the project, I utilize an African Diaspora and multi-level temporo-spatial framework. That is, I study the material traces of African and African-descended enslaved people and tenant farmers to explore how foodways including procurement, diet, processing, consumption, and discard transformed through time. The study focuses on a single plantation, but expands to include two other plantations within the South Carolina Lowcountry. The first, Ferguson Road, is also located on James Island. The second, Smith Plantation, is located in Port Royal, more than seventy miles south. I identify similarities and differences with the material records from these plantations in order to demonstrate that the Lowcountry shared a culinary heritage while simultaneously encompassing diversity in terms of what was eaten and how it was eaten.

I explore Lowcountry foodways as a process of creolization within a diasporic frame. Foodways refer to the ways people engage with food. This concept involves social aspects of subsistence, including groups such as the family and community, and notions of gender roles, race, and class. It also involves the physical environment, and how people interacted with their local landscape (Bryant et. al 2007, Gibbs et. al 1980). It includes ideologies and worldviews related to geography, origins, culinary history and movements, and values about nutrition, ecology, and economics (Bower 2007, Bryant 2003b, Cheek 1998, Deetz 2017, Dusselier 2009, Gumerman 1997, Henderson 2007, Janowitz 1993, Ruiz 2008, Scott 2001, Whit 2007). It incorporates actions like production and collection, distribution, cookery, and consumption (Camp 1982, Marshall 1979, Whit 2007). The ideologies held about those actions and customs can be conscious but are most often expressed through unconscious choice and preference, or taste (Camp 1982).

The physical and sociocultural factors that influence foodways, cuisine, and diet include climate, soil, water amounts and access to water, variety and density of plant and animal species, as well as the tools and techniques for procuring, producing, processing, and preparing food, and all of the ideology and practices that go along with food and eating (Bryant et. al 2007, Gumerman 1997, Shields 2015) (including a vast number of objects that can be found in the archaeological record such as hoes, plow parts, cooking and serving vessels and sherds, storage container fragments, and knives and other utensils). The undocumented and sometimes unconscious nature of some aspects of foodways require that scholars study the tangible material remains (Gumerman 1997, Lehrer 1972, Levi-Strauss 1966:595). For this reason, archaeological investigations and the material culture that is uncovered as a result of those investigations are useful for identifying foodways and changes therein through time.

As mentioned, diet is part of foodways. The word "diet" refers to the actual foods that are consumed to meet nutritional needs (for example: meat, vegetables, and grains) (Bryant et. al 2007:9, Landon 2005:12). In contrast, "cuisine" is the foods, preparation techniques, and taste preferences shared by groups (Bryant et. al 2007:9, Cheek and Friedlander 1990, Shields 2015). Thus, diets can vary among individuals within groups, but cuisines are sociocultural collectives. In this dissertation, diet is approached through faunal remains and other material residues such as fishing hooks, net weights, and cans left behind by site inhabitants. Cuisine is pieced together from oral and published histories taken together with material evidence such as cooking vessels and utensils.

While only faunal dietary remains and the non-edible material culture associated with foodways are considered here, it is important to note than many botanical foodstuffs were also consumed by enslaved people as well as their unenslaved contemporaries and descendants. Such foods have been brought across the Atlantic world and into colonies including South Carolina for centuries. In fact, it is known that prior to 1492 captives, grains, malagueta (grains of paradise) peppers, and rice were brought from Sierra Leone, Liberia, Senegal, the Ivory Coast, and neighboring areas to southern Europe (Allen 2010:16) and from there to the Atlantic colonies (Carney 2018). Some of the foods brought from Africa directly to the Americas were rice, okra, sesame, yam, and black-eyed peas (Allen 2010:16, Hall 2007, Shields 2015).

Over time, Atlantic world settlers came to incorporate foods that were introduced to colonial settings via both direct trans-Atlantic trade and indirect trade from Africa by way of Europe. These trade goods include foods brought from Africa by slaves and other individuals on slave ships (Carney 2018, Twitty 2017). These foodstuffs have been consumed ever since as part of a creolized cuisine (Allen 2010, Carney 2001, Chaplin 2014, Delle 2000, Mintz 1996, Shields 2015, Wallman 2014).

Such a creolized cuisine was consumed by enslaved and tenant farmers at Stono plantation. Evidence is seen in nineteenth century documents, which indicate that in addition to agricultural activities, domesticated animals including cattle, sheep, and pigs, as well as poultry were kept and slaughtered on site. These animals were raised for their meat but were also used for dairying, wool, and manure (which was combined with oyster shell for crop fertilizers), and to tramp grasses and mud to prepare fields for planting (Calhoun 1986).

Though the social structure of the plantation that fostered creolization allowed for resistance through daily acts[10] such as deciding what to eat and how to eat it, it also

[10] Bourdieu 2013 (1974-1980), Delle et. al 2011, Fennell 2011, Lenik 2014

to some degree determined what was available to people and how it came to be available to them. For example, if enslaved people at Stono planation had received rations and their tenant descendants did not, then it is possible their intake of domesticated meats decreased between the two periods. Although his dissertation will show that a decrease in domesticated meat consumption did occur, it cannot address whether this change was caused by a loss of rations. It is also possible that domesticated meats consumed at Stono were supplanted by canned meats.

This dissertation demonstrates that it was not Emancipation, or "Freedom" *per se* that was the impetus for changes in the foodways of Stono's laborers. Rather, it was the industrialization of the region and the broader Atlantic World that impacted what was eaten and how it was eaten. With Emancipation and industrialization came wage labor, something that freedpeople sought and at least to some extent, found. It is those wages and the economic systems that ran concurrently (including formal and informal markets, transportation, mechanization, storage technologies, and eventually, stores as well as access to each of those) that helped to change the nature of residents' foodways.

Perhaps what is most important about Emancipation is that while it legally changed the status of enslaved people, it did very little to improve their material wealth or societal standing. This conclusion of this dissertation shows that discrimination (both licit and illicit) forced freedpeople to remain stuck in a system that marginalized them socially and economically. The transformations and continuities of their foodways demonstrate their continued oppression as well as their ability to resist that system by creating their own lives with their own foods created and consumed through their own choices.

CHAPTER 2
HISTORICAL BACKGROUND

This chapter details the history of the Lowcountry region where the Stono plantation is situated. The region is part of an Atlantic World setting that entangled people from the continents of Europe, Africa, and North America with the Caribbean islands socially, culturally, economically, and politically. They are investigated here through a study of their histories and material residues left behind from the practices undertaken during their lives.

Specifically, I analyze the history of the peoples living on Stono plantation, James Island, South Carolina through oral accounts and written documents ranging from novels to academic publications and cookbooks to archival sources. These sources are interpreted in an effort to get at the ways in which the foodways of the people enslaved on plantations came into being as well as to understand their form. I also seek to understand how foodways may have been transformed through time.

2.1 HISTORY OF THE SOUTH CAROLINA LOWCOUNTRY

The Lowcountry is a region containing the easternmost portion of the states of Georgia, South Carolina, and North Carolina (see Figure 2.1). This region eventually came to be known as the “lowcountry” because of its nearness to sea-level, which inundated it with waterways including numerous rivers, creeks, and estuaries and the Atlantic Ocean (Gibbs et. al 1980, Kovacik and Winberry 1987, Morgan 1998:29,

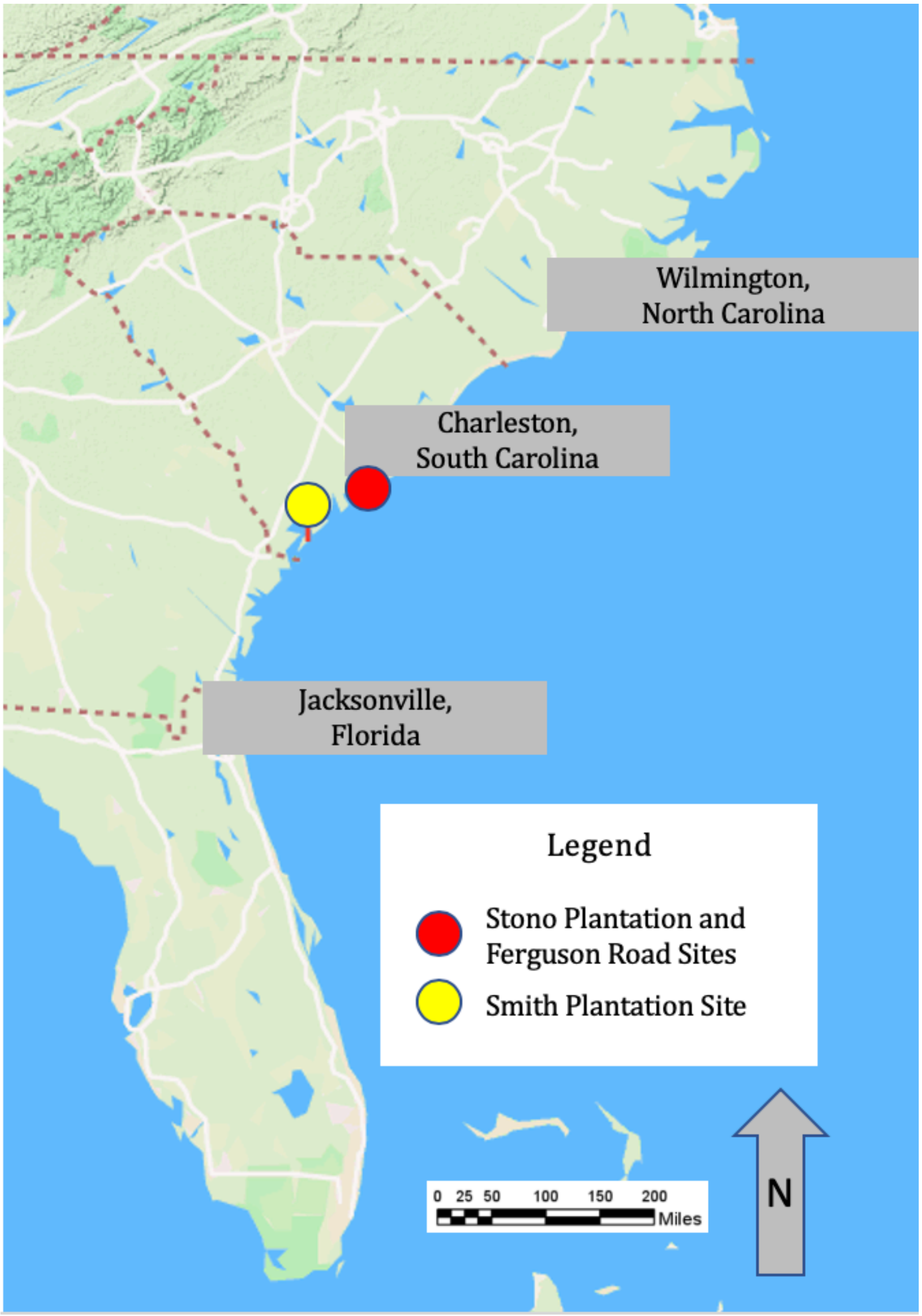

Figure 2.1. Map of Lowcountry[11].

[11] Map created with Snazzymaps.com by author. Scale from https://pro.arcgis.com/en/proapp/help/ layouts/scale-bars.

Zierden and Reitz 2009). The idea of a "Lowcountry" only came into being when (agri)culture inflected the understanding of the region (Morse 1926, Shields 2015). This shift in ideology that incorporates the idea of a cultural group based on farming into the meaning of "Lowcountry" is why I choose to capitalize the word in this dissertation.

The Stono planation lies within the Lowcountry both geographically and culturally. It is physically situated along the Stono River on the southeast shore of James Island, South Carolina (see Figure 2.2). The island itself is southeast of the city of

Figure 2.2. Map of Stono Plantation relative to Charleston[12].

[12] Map created on Snazzymaps.com by author. Scale from http://ludwig.missouri.edu/2840/scaleans.

Charleston, South Carolina, which lies on a peninsula near the island. The island and peninsula are separated from each other by the Ashley River. The island is separated from the rest of the mainland by Wappoo Creek. These features tie the land and water closely together in a way that impacts the lifeways of the people who live there through diversified resources created by the many environs (oak hammock, pine forests, hardwood swamps, marshlands, and brackish and marine waters [Zierden and Reitz 2009]) of the island as well as in the Lowcountry region, more generally.

The Lowcountry was inhabited by a number of indigenous groups during the proto-historic and early colonial periods. These groups include the Ashepoo, Bohickett, Combahee, Edisto, Escamacu, Etiwan, Kiawah, Kussah, Kussoe, Sampa, Santee, Sewee, Stono, Wando, Wimbee, and Witcheaugh (Waddell 1980). The Stono and Westo lived in the immediate Charlestowne area (Gatschet 1884, Swanton 1919 and 1922). The Stono are the source of the English name for the Stono River (Swanton 1922) and the subsequent plantation lying astride the river (known as Stono plantation), on which this dissertation project is based.

The first Europeans to colonize the region were the Spanish; however, the English had the longest lasting impression. The English's first venture into the Atlantic World was to the Caribbean but not long after, they ventured farther north and west to mainland North America. They first the Carolina mainland at Charlestown, which they established not far from James Island. Throughout the region the English, indigenous groups, and enslaved Africans created new societies, which emerged in the novel environment through rapid response to changing economic, social, and political conditions and opportunities (Edgar 1998, Morse 1926, Waddell 1980, Zierden et. al 1999). These conditions transformed the culture of the region's people in terms of how societies should be ordered, what could be expected of peoples within societies (and what people could expect from their societies), and the material culture created by the people of the area during colonial period and into the present.

At the time of Charles Town's establishment in 1670, non-indigenous settlers and the Stono are said to have had good relations (Lawson 1709); however, those relations were short-lived. There were a number of hostile encounters between the Stono and colonists during the seventeenth century (Gallay 2002, Swanton 1922); however, the colonists ultimately defeated the Stono and took the best lands for themselves (Gallay 2002). By the eighteenth century, Carolina was comprised of approximately twenty-five percent indigenous peoples, more than any other mainland British colony of the period (Ramsey 2002).

The Political History of South Carolina

As noted above, prior to being established as an English colony, South Carolina had been colonized by the Spanish. Multiple excursions were made into the region during the sixteenth century; however, the colony's largest city of the Spanish colonial-era, Santa Elena was established in 1559. The city was abandoned by 1585 (Edgar 1998, Landers 2003, South 1988).

It was not until the next century that the English established the boundaries of the Carolina colony at 36 degrees 30 minutes (which is also the southern border of Virginia) and at 29 degrees (what is now Daytona Beach, Florida) (Edgar 1998, Lawson

1709, Thomas 1930). The original charter on South Carolina was granted on March 24, 1663 by King Charles II to a group of eight men known as the "Lord's Proprietors". The eight men were John Colleton, a royalist English exile who had escaped to Barbados for a period and made a fortune from sugar planting prior to the Restoration in 1660; Sir William Berkeley, governor of Virginia; Sir Anthony Ashley Cooper, chancellor of the Exchequer and later earl of Shaftsbury; Sir George Carteret, vice chamberlain of the household and treasurer of the navy; Edward Hyde, earl of Clarendon and the king's first minister; and his own cousin George Monck, duke of Albemarle (Bull 1995, Edgar 1998, Lawson 1709, Rugemer 2013, Thomas 1930, Waterhouse 1975, Wood 1974).

The first draft of concessions for the settlement of South Carolina were created by a group of Barbadian Adventurers; the draft allowed settlers self-governance, freedom of religion, and land grants (Edgar 1998). In 1684, the lands formerly occupied by the Stono were ceded to the Lords Proprietors, the original governing body of South Carolina. This group had the power to make war and peace, create towns and ports, grant titles of honor, raise and maintain armies, collect taxes and duties, impose sentences of death and pardon, derive income from towns, fairs taxes, and customs duties, trade with natives, fishing rights, quarry rights, and land (Edgar 1998, Lawson 1709, Thomas 1930). The first constitution, known as the Fundamental Constitution[13] was never ratified by colonists because they did not wish the Proprietors hold the power they sought through the document, yet both groups referred to it when it suited their

[13] The fundamental Constitution was written under the secretary of Lord's Proprietor Lord Ashley (Thomas 1930:82-83).

needs, particularly in order to appeal to the governor[14] (Edgar 1998, Lawson 1709, Morse 1926, Thomas 1930).

Land allotments in the colony were provided to men on a schedule and in proportion to various titles (Edgar 1998, Lawson 1709). The first fleet log of 1670 lists ninety-four white men's names and nineteen (presumably white; it is not specified) women's names, as well as a "Negro servant" and a handful of children; these people were the first English colonists to settle in Charles Towne (Childs 1970, Donnan 1928:804, Menard 1995:282, Wood 1974). Even indentured servants were allotted land; however, every slaveholder had "absolute power and authority over his negro slaves" such that they were not allotted land (Edgar 1998:44). As a result of land allotment practices, proprietors and local nobility owned forty percent of Carolina's land (Edgar 1998:44).

Proprietors not only had more land than other colonists; they also had more power. In fact, the Lords Proprietors had the power to outvote those who were not Proprietors regardless of landownership (Edgar 1998, Lawson 1709). The result was that the Lords Proprietors controlled colonial society and governance. Their control was instituted through a series of legislative acts based on those created in Barbados: The Black Codes[15].

[14] The first governor of South Carolina was Robert Johnson (Edgar 1998). Johnson was appointed by King Charles II in 1729 after the Lord's Proprietors sold their interest in the government to the crown (Edgar 1998:113, Hendrix 2006:88, Smith 1912.)

[15] The first "slave code" of Barbados was instituted by colonial legislative assembly in 1661 (Rugemer 2013:429). Thirty years later, the South Carolina Assembly followed suit (Rugemer 2013:430).

Black codes were a means of criminalizing the activities and movements of people of color up to and including theft and vandalism as capital offenses (Fisher 2014, Rugemer 2013). The codes are explained as a way of "better managing" an "unruly" slave society (Rugemer 2013). The codes of 1691 Carolina specifically stated that it was lawful for enslaved people to enter into the church or profession "any of them think best, and thereof be as fully members as any freeman;" however, no slave was "exempted from that civil dominion his master hath over him" and every freeman of Carolina had "absolute power and authority over his negro slaves" (Cooper et. al 1836:54-55). Such codes existed throughout the Atlantic World during the colonial period[16] and into the nineteenth and twentieth centuries. During the latter period, Emancipation threatened white supremacy in South Carolina and legislators fought back by using the codes to restrict the rights of freedpeople to possess firearms, serve on juries, and vote (Barnes and Steen 2012, Giltner 2005, Hayden et. al 2013, Morse 1926).

Lowcountry Carolina Demography

The Lord's Proprietors sought colonists to settle South Carolina in hopes of offsetting the enslaved majority. They began with their own people; half of the Lord's Proprietors were themselves either residents of Barbados or had been born there as sons of Englishmen (Dunn 2000, Thomas 1930, Waterhouse 1975, Wood 1974). Indeed, for most of the seventeenth century, the majority of white immigrants to Carolina were English (by way of Barbados) (Thomas 1930). The best rough estimate is that a few hundred people left Barbados for Carolina between 1670 and 1682 (Bull 1995).

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[16] See Amussen 2007, Fisher 2014, Landers 2003, and Rugemer 2013.

After exhausting their own pool of potential immigrants, the Lord's Proprietors sought other "Whites" to settle the Carolina colony[17]. The groups they targeted included English, Scots, Irish, Welsh, German, Dutch, French, Swedish, and "Jewish" peoples (Edgar 1998, Morse 1926:691-692). The numbers of people from these groups was small compared to the number of Barbadians who immigrated to the colony, however (Bull 1995).

Initially, colonists relied upon their own labor as well as that of enslaved Native Americans and Africans, and indentured servants from Europe (Ferguson 1992, Menard 1995, Rugemer 2013). Over time, Africans came to be preferred as laborers because they were cheaper to acquire and because they were used to tending cattle, fishing, boating, and other tasks needed for Lowcountry living. Another reason African slaves came to be preferred over other groups was because indigenous peoples had greater resources with which to successfully escape (Ferguson 1992, Hendrix 2006, Littlefield 1981, Piersen 1996, Smith and Watson 2009). For their part, indentured servants could not legally be held in lifetime servitude and were considered to be a "generally unruly lot" (Zinn 2015).

[17] Some of these "White" colonists immigrated to South Carolina in search of religious freedom. Although Carolina was under the Church of England, the parishes had elected vestry with lay boards who oversaw social and structural projects that were assigned by the provincial government. The involvement of lay people and the presence of African belief systems, along with Protestant dissenters meant that the Church did not hold complete power of Carolinian society (Beasley 2011:2). These freedom-seekers include Quakers, Baptists, and Presbyterians (Rogers 1988).

In addition, racialization was increasingly taking root among colonial peoples as shown by the institutionalized slavery of Africans in Barbados and elsewhere in the Caribbean[18]. The Black Codes mentioned above is evidence for the formalization of racialized attitudes within colonial societies; specifically, the codes officially stationed enslaved people (who were in general, "black") under the control of slaveholders (who were typically "white"). The fact that Carolina relied upon these codes in an effort to control its enslaved work forces demonstrates the way in which racialization had taken root in colonial society.

From early in the colonial period, the majority of the Lowcountry's populace was "Black"[19] and was marginalized as a result of their blackness. Most "Black" people, or people with African ancestry in South Carolina are descended from enslaved Africans. Nearly 300,000 enslaved people arrived on mainland North America directly from Africa during the eighteenth century (https://www.slavevoyages.org/assessment/estimates), while approximately 50,000 arrived on vessels coming from within the Americas during the same period (https://www.slavevoyages.org/american/database#statistics).

Between 1700 and 1775, forty percent of Africans imported into North America came through Charleston (Edgar 1998, Ferguson 1992, Gonzales 1922, Schweninger 1992, Wood 1974). During the middle part of the eighteenth century enslaved Africans and their descendants comprised up to sixty percent of Carolina's population (Ferguson 1992, Gibbs et. al 1980, Menard 1995, O'Malley 2009, Wood 1974). There was variation

[18] See Beckles 2013, Rugemer 2013, Thomas 1930, and Wallman 2014.
[19] I use "Black" throughout this dissertation in keeping with the verbiage used by Wood (1974) as well as to draw attention to the fact that it is a sociopolitical construct.

within the colony, however with the Lowcountry region's population having up to eighty-percent enslaved "Blacks" (Menard 1995, Wood 1974).

The "Black Majority" was not limited to eighteenth century Carolina; rather, Africans and their descendants comprised the majority of South Carolina's population for almost three centuries of the state's history. Most of the people enslaved in South Carolina were forced to labor on the agricultural fields of the state's plantations (Gibbs et. al 1980, Menard 1995, Morse 1926, Wood 1974). Yet many captives did not survive the trip to Carolina; one in six Africans died during the middle passage, the forced journey from Africa to the New World colonies (Edgar 1998).

Those who survived the journey on slave ships that came into the port of Charleston were quarantined for a period of ten days (Donnan 1928, Kelley 2016, Morgan 1998, Rogers 1988). The quarantine period not only ensured that epidemics would not be brought into the city, but also provided a time for sellers to advertise. After being released from quarantine, captives' skin was oiled so that they appeared healthy, an act intended to increase their salability. Typically, an ad was placed in the newspaper and handbills were distributed informing the citizenry about the upcoming sale (Kelley 2016, O'Malley 2009 and 2017). Then they were sold in the merchant's market in a process known as "the scramble;" only those who didn't sell at that point went to auction (Kelley 2016).

Most buyers of the captives sold as slaves were Carolina elite, though some were of more modest means. Even those purchasers who did not require a vast workforce for their extensive plantation lands sought to be slaveholders because slave ownership denoted not only the "ability to control and enjoy the fruits of someone else's labor," but also a certain economic stability and social enfranchisement (Kelley 2016).

South Carolina closed and reopened the trans-Atlantic slave trade a number of times in tandem with various periods of political instability, civil unrest, and economic depression before finally closing it completely in 1808 (O'Malley 2009).

Economic Initiatives and Labor Demands in the Lowcountry: Slavery

Lowcountry planters intensively farmed their lands through the labor of others just as their Barbadian and English predecessors had done. Plantations required a host of skilled workers including drivers, coopers, carpenters, sawyers, bricklayers, blacksmiths, leather workers, and boatmen[20] (Chandler ca. 1937, Caldwell 1938, Kelley 2016, Summer 1937a). The main endeavor, however, was to grow produce crops for the port cities of the region where produce was more difficult to produce in sufficient quantities due to urbanization (O'Malley 2017). They also grew food for those who lived on plantations. James Islanders primarily grew crops for the Charleston market, though they also engaged in monocropping the same cash crops as the rest of the Lowcountry: indigo, rice, and cotton (Chandler ca. 1937, Edgar 1998, Feeser 2013, Kelley 2016, Samei 2010, Zierden et. al 1999).

The ability to earn a profit through cash crops in the Lowcountry required massive labor forces to work the fields and process the raw materials for sale. These laborers included landowners and their families as well as indentured servants but

[20] Women comprised only 2% of these skilled workers (Kelley 2016:152).

consisted predominantly of enslaved people who were primarily of African descent[21] and had been imported to the colony. Prior to 1712 fewer than 100 slaves were imported annually; after that year the number increased six-fold. That jump in number is primarily due to rice cultivation[22] and an increase in naval stores production. Another jump occurred in the importation of enslaved peoples came in 1730; this time it was due to the expansion of rice and indigo cultivation (Edgar 1998).

The enslaved work force of colonial South Carolina brought not only their physical capacity for labor but also their cultural skills and knowledge, which contributed greatly to the success of the region's crops as well as the evolution of Lowcountry culture and cuisine (Agha 2015, Gibbs et. al 1980, Joyner 1984, Kelley 2016, Miles 2004, Samei 2010, Zierden and Reitz 2009, Williams 1992). The foodways introduced by enslaved settlers were used in conjunction with and alongside of those introduced by European and European-descended people as well as those of peoples indigenous to the area and (in the early colonial period) indigenous peoples who were enslaved with Africans and people of African descent. The next chapter delves further into foodways.

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[21] During the early colonial period, enslaved peoples in the Lowcountry were of indigenous and/or African descent (Anthony 2012, Edgar 1998, Morse 1926, Steen 1999). In 1703, a governmental order set a higher import tax on slaves coming from the West Indies than on those coming from Africa. The higher tax was supposedly set in an effort to avoid bringing "troublemakers" who had overtly resisted or rebelled enslavement in the West Indies into the colony (Edgar 1998:63).

[22] The increase in enslaved Afrlcans rose with rice cultivation because the crop was introduced to the Americas via slave ships both as seedlings to be cultivated upon arrival and as provisions while on board the ships. The enslaved Africans aboard these ships brought with them the knowledge of how to cultivate and process rice and used this knowledge after arriving (Carney 2001).

In general (and regardless of crop) Lowcountry planters used a task-based system in which workers were given specific, standardized duties to perform, after which their time "was their own" or "free" (Gibbs et. al 1980, Ladson ca. 1937, Joyner 1984:43-45, Kelley 2016:152, Morris 1998:996). Of course, many of the activities they undertook during this "free time" also involved labor. The garden plots cultivated by enslaved people used shifting cultivation, animal manure and ashes as fertilizer, vegetable scraps to enhance fertility, soil turning, and modeling gardens after the plant communities of nature (Twitty 2017).

As a result, much of an enslaved person's time was used in labor production. Their tasks were designed to occupy an entire day, but varied among seasons, upon the goals of the planter, and upon the ability of the enslaved individual[23]. Tasks included working in the fields to plant, cultivate, and harvest crops as well as tending livestock and maintenance jobs like making brooms, whips, and other household items, splitting wood, carding, spinning, and sewing, and numerous other household and farming related jobs (Dixon ca. 1937a and ca.1937b, Gibbs et. al 1980, Sims 1937 and 1938, Zierden and Reitz 2009).

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[23] Portions of acres were assigned to people for a particular task per day on a standardized regional system (in which slaves were referred to as hands, half-hands, and quarter-hands) (Joyner 1984:43-45, Kelley 2016:153). For example, field hands were divided into four classes of laborers: quarter hands (children and elderly), half hands (older children, pregnant and lactating women), three-quarter hands (older teens), and full hands (mature, able bodied, healthy adults) (Gibbs et. al 1980:246 as cited in Olmstead 1856). They were also assigned based on gender such as in rice cultivation, which was aa “woman’s crop in the northern portion of the West African rice region” (Carney 2001:107). Overseers assigned tasks based upon the abilities of the laborer though drivers did most of the actual day-to-day apportioning of tasks to individuals (Butler ca. 1937, Kelley 2016:152-153). et. al 19080:246-247).

Lowcountry slaves used the time they had left after finishing their tasks to tend their own garden plots, raise and sell their own crops, and tend horses and livestock after completing their assigned tasks. Their endeavors created an "informal economy, " through which they were able to trade, barter, and sell products such that they were able to amass wealth (Berlin 1993, Forrett 2004, Joyner 1984, Kelley 2016, Martyris 2017, Morris 1998, Schweninger 1992, Twitty 2017, Weik 2009, Zierden and Reitz 2009). In the Lowcountry, relatively few "poor whites" were living near vast plantations and masters often purchased the commodities produced by enslaved people themselves (Forrett 2004:787, Joyner 1984:52). Enslaved people also traded with one another and with "free blacks" (Morris 1998:994).

The enslaved laborers of James Island not only grew the produce crops for the Charleston market, but also for the planter family, and themselves. They also hunted, fished, and collected wild fruits, nuts, and herbs from the lands and waters surrounding plantations (Frazier 2006, Robinson 2007). In fact, fishing has been an important part of James Islander's lives and Lowcountry culture[24] more broadly, for centuries. Fishing and the consumption of fish are commonly mentioned in oral histories including various Work's Progress Administration interviews (Butler ca. 1937, Chandler ca. 1937, Dixon ca. 1937a and 1937b, Ladson ca. 1937, Sims 1937) and the history of James Islanders published by Frazier (2006 and 2010).

[24] In searching WPA interviews, the only mention of hook-and-line fishing I found was a reference to cane fishing in the rivers of Spartanburg, County. Likely these fish were different species than those present in the estuaries of the Lowcountry.

Cast net fishing is particularly prevalent among Lowcountry people of African ancestry (commonly referred to as "Gullah"), as is the construction and mending of cast nets (Barnes and Steen 2012, Shuler 1992, Vlach 1992). Indeed, cast net production is cited as a traditional Gullah art by the National Park Service (https://www.nps.gov/ethnography/research/docs/ggsrs_book.pdf). Lowcountry fisherfolk also use the hook-and-line method of fishing. Interestingly, a Gullah "taboo" dictates nursing mothers should not eat netted seafoods such as crabs, prawns, or net fish, whereas "channel fish"[25] (caught with hook-and-line) are acceptable fare (Dillard 1975:286). Practical considerations are also at play in the choice of which fishing method to use; some species of fish (such as whiting and trout, which are available in warmer months and mullet, which are available in winter) are seasonal (Gregory et. al 2013). Whiting, trout, and yellowtail are typically hook-and-line caught (Gonzales 1922:243). Although personal experience with drum has involved hook-and-line fishing, they were seemingly also netted at least periodically in the Lowcountry (Chandler 1938). Mullet on the other hand, are almost always net-caught (Colleton 1992, Gregory et. al 2013).

Regardless of procurement method, both enslaved people and freedpeople tended to obtain their own fish rather than purchase them from commercial vendors. Yet, they were able to buy and sell fish and other foods at the Charleston market (Joseph 2016, Zierden and Reitz 2009). In fact, there were a number of market opportunities open to enslaved people including: vendor, a seller of general

[25] Channel fish seemingly refers to the channel catfish, *Ictalurus punctatus*, a relative of the hardhead catfish (https://www.fws.gov/fisheries/freshwater-fish-of-america/channel_catfish.html).

merchandise; hucksters, produce sellers; fruiterer, seller of fruit and cakes (after 1816); and huckster, who sold at market, set up near it, or out sold out of mobile baskets or carts (Joseph 2016, Orwell 1996, Schweninger 1992, Shields 2015, Zierden and Reitz 2009). Many market women were married[26] to African American fishermen[27] who, by the mid-eighteenth century monopolized the fishing industry and manipulated the price and supply of fish in Charleston (Zierden and Reitz 2009).

In addition to marketing activities, enslaved women generally cooked the crops cultivated by enslaved people for planters' families as well as their own households (or field-working crews) using the skill sets they already possessed combined with the wants, needs, and expectations of planter families (Carney 1996, Deetz 2010, Gonzales 1922, Horry 1984). As a result of the many market positions open to enslaved people with diverse but primarily West African backgrounds and the creation of Lowcountry meals by these same people, a creolized cuisine was forged in the region. Over time the cuisine created by labor and knowledge of enslaved peoples came to be the primary cuisine for all the people of the region (Edgar 1998, Van Sant 2015, Zierden and Reitz 2009).

[26] The connection between marketing women and fishermen has also been documented in West Africa including coastal Ghana (Britwum 2009) and among Lebou and Wolof women in Senegal (Mintz 1971). In contrast, in Guinea, women do most of the local fishing (Diane Wallman, personal communication). Today impoverished women across Africa and beyond commonly trade sex for fish as a survival strategy (Béné and Marten 2007).

[27] These men were typically enslaved, but "exercised an unparalleled level of independence" as they traveled in boats, which they sometimes owned (Zierden and Reitz 2009:341).

A Social History of the Lowcountry

Even with its insidious nature, enslavement did not determine all aspects of Lowcountry life. Instead, the "contours of living" were largely in the hands of the enslaved Africans and people of African or mixed ancestry living in the area's communities (Kelley 2016:159, Piersen 1996); a perspective that is supported by the creolized cuisine of the region. Of course, variation among the region's "creolized" communities was found in crop regimes, economic activities, temperament and practices of locals, geographic location of their works and residences, density of population, and proximity to others (and which others those might be) (Ferguson 1992, Kelley 2016:159, Smith and Watson 2009); however, in other ways the enslaved communities of the Lowcountry were similar such that they comprise a cultural group with identifiable practices. These lifeways were established in the Lowcountry beginning with the Middle Passage and the trans-Atlantic slave trade.

Although they were most often separated from their shipmates upon arrival, the relationships they forged are an example of the building blocks upon which enslaved people helped to construct Carolina society. Enslaved peoples being brought to Carolina were able to communicate with at least some of their fellow captives either directly or through translation, thus creating "shipmate" relationships, an intense bond formed among those who crossed the Middle Passage together. Being surrounded by people from one's own ethnic group was a potential source of comfort, help, networking, and language acquisition, particularly upon arrival, but it was not a requirement for forming meaningful relationships (Delle 2000, Kelley 2016:159-160, Littlefield 1981:74-75).

Relationships among individuals that enabled the creation of a creolized community include cultural and linguistic exchange as well as similar life experiences including forced labor, daily routines, levels of market access, and working and living in a similar physical environment (Armstrong 2008, Barnes and Steen 2012, Ferguson 1992, Hardy 2011, Smith and Watson 2009).

The Physical Environment of the Lowcountry

The resources provided by the physical environment of the Lowcountry that have been most useful to humans include waterways and land-based routes of transport, the ability to grow various types of crops and hunt and fish a multitude of terrestrial and aquatic species, and a temperate climate (Kovacik and Winberry 1987, Zierden and Reitz 2009). At the same time, the various waterways separate the Lowcountry into those portions that are part of the North American continent (specifically, the southeast portion of the United States) and barrier islands that are physically separate from the mainland[28].

The semi-isolation of these islands enabled livestock animals such as cattle and hogs to be let out for foraging without giving them the opportunity to stray too far from the pens where they were kept during the periods in which people needed to have them confined (such as calving) (Bell 2011, Calhoun 1986, Edgar 1998, Ferguson 1992, Zierden and Reitz 2009). Colonists (and later residents) who were able to raise cattle provided beef, which was consumed by the residents themselves but was also a major industry

[28] The climate and geography of the Lowcountry is similar enough to that of the rice growing regions of West Africa that landscape management strategies used there were implemented by enslaved Africans in Carolina rice cultivation (Agha 2015).

and trade good throughout the historical period (Battalio and Kagel 1970, Berlin 1993, Carney 1996, Edelson 2010, Edgar 1998, Ferguson 1992, Greene 1987, Lawson 1709, Otto 1986, Pyszka 2016, Zierden and Reitz 2009). Cattle also provided dairy products, which were consumed throughout the region as well as distributed after the advent of refrigeration (Agha 2012, Dangerfield 2015, Zierden and Reitz 2009).

Other foraging animals included sheep and or goats, which were raised mainly for wool (Calhoun 1986) but were also sometimes used as a food source (Dukes and Reitz 1994). Although convenient for humans' husbandry practices, releasing livestock into the landscape increased competition among species, negatively impacting native flora and fauna including white-tailed deer and various grasses (Zierden and Reitz 2009).

In addition to eating domesticated meats, people of the Lowcountry collected animals from the forests and waters of the area for consumption. The species consumed include opossums, raccoons, rabbits, squirrels, foxes, turtles (both terrestrial and semi-aquatic), a multitude of fish species (both marine and estuarine), shellfish and mollusks (mostly shrimp and oysters, but also whelks) (Agha 2012, Berlin 1993, Agha et. al 2012, Epps 2014, Ferguson 1992, Fountain 1995, Gonzales 1922, Lev Tov 2014, Reitz 2004, Ruiz 2008, Samei 2009, Zierden 1999, Zierden and Reitz 2009). Indeed, aquatic food resources were and continue to be of vast importance among Lowcountry residents (Burrell 2003, Fairbanks 1984, Horry 1984, Shields 2015).

2.3 HISTORY OF STONO PLANTATION

The Lowcountry archaeological site known as Stono plantation is located in the Dill Sanctuary (see Figure 2.1), which is owned and managed by the Charleston

Figure 2.1. Map of the Dill Sanctuary/Stono Historic Area with National Register Polygons (blue) and Historic Structures (light purples). SC Archsite 2020 (http://www.scarchsite.org/PublicView.aspx).

Museum. What is known about the enslaved and tenant farmers who lived on the property has been pieced together from published works by Frazier (2006 and 2010) and archival sources. Much more is known about the primary property owners, the Rivers and the Dills.

The Sanctuary was established in 1986 after the death of the final private landowner, Pauline Dill in 1985 (Calhoun 1986, Frazier 2010). Dill's bequest stipulated that the land become a place for the preservation of natural and cultural resources under the ownership of the Charleston Museum in perpetuity as a means of protecting it from development (Burger 1985, Dill 1980, Frazier 2010, McGee ca. 1986). The Sanctuary is now a land trust used for field trips, educational purposes, and research, although the Museum went through a legal battle with the City of Charleston and Charleston County Parks and Recreation who wanted a portion of the land for their own purposes. However, the court decided deed restrictions would be placed on the Sanctuary for a period of thirty-five years (McGee ca. 1986). Those restrictions end in 2021, but the Museum plans to continue operating the Sanctuary under the same plan they have been using since the Dill bequeathment (Martha Zierden, personal communication).

Stono Property Ownership

The Stono "Slave Settlement" archaeological site dates to the early nineteenth century when the plantation was owned by Captain John Rivers (Figure 2.3). Upon the death of Captain John Rivers, his personal and real estate was (for the most part) bequeathed to his wife Sarah E. Rivers (also in Figure 2.3). The income and profits from

Figure 2.3. Portrait of Captain John Rivers and Sarah E. Rivers (Anthony 2012a).

Rivers' estate on the other hand, were to be divided equally among his wife, and his daughters Melvin S. H. Godber, Mary Hayes Rivers, and Eleanor C. Dill. That same year, however, Sarah E. Rivers conveyed her interest in the (Stono/Rivers/Dill) plantation to her three daughters (Melvin, Mary, and Eleanor). All these transactions occurred under the executorship of Joseph T. Dill[29] (Figure 2.4), who came to be owner of the plantation

[29] Calhoun 1986; Rivers ca. 1857, Rivers and Gravely Family Papers, Gravely, Sarah Jane Rivers, Legal Records 1845-1855, Box 1, File number 0243, South Carolina Historical Society, Charleston.

by way of his first marriage, with Eleanor C. Rivers[30], the daughter of Capt. John and Sarah E. Rivers. The two were married prior to the death of Eleanor's father, Captain John Rivers in 1857.

Joseph T. Dill left the property to his three daughters, and his second wife (the mother of his younger two daughters) Frances Hinson Dill. Each received a portion of the Dill estate at some point around the turn of the nineteenth and twentieth centuries (Calhoun 1986, Dill ca. 1960s-1970s). Pauline Dill (Figure 2.5, left) eventually inherited the entire property from her sisters and mother, who predeceased her. There are two possibilities for exactly what the line of transmission was.

The first possibility is that it passed directly from Joseph T. Dill to his second wife Frances upon his death in 1900, after which it went to their three daughters: Julia [Rivers] Dill Rogers, Frances Hinson Dill Rhett, and Pauline Dill (Dill ca. 1960s, McGee ca. 1980s).

[30] Rivers was married three times and each of Rivers' wives was also a Rivers. However, his last wife, Sarah Ecklin Wyatt Rivers had married into the Rivers family. Specifically, she has been widowed by John Rivers' first wife's [Susannah Love Rivers] brother (Calhoun 1986:9; Frazier 2006:138; Rivers and Gravely Family Papers, Gravely, Sarah Jane Rivers, Legal Records 1845-1855, Box 1, File number 0243, South Carolina Historical Society, Charleston).

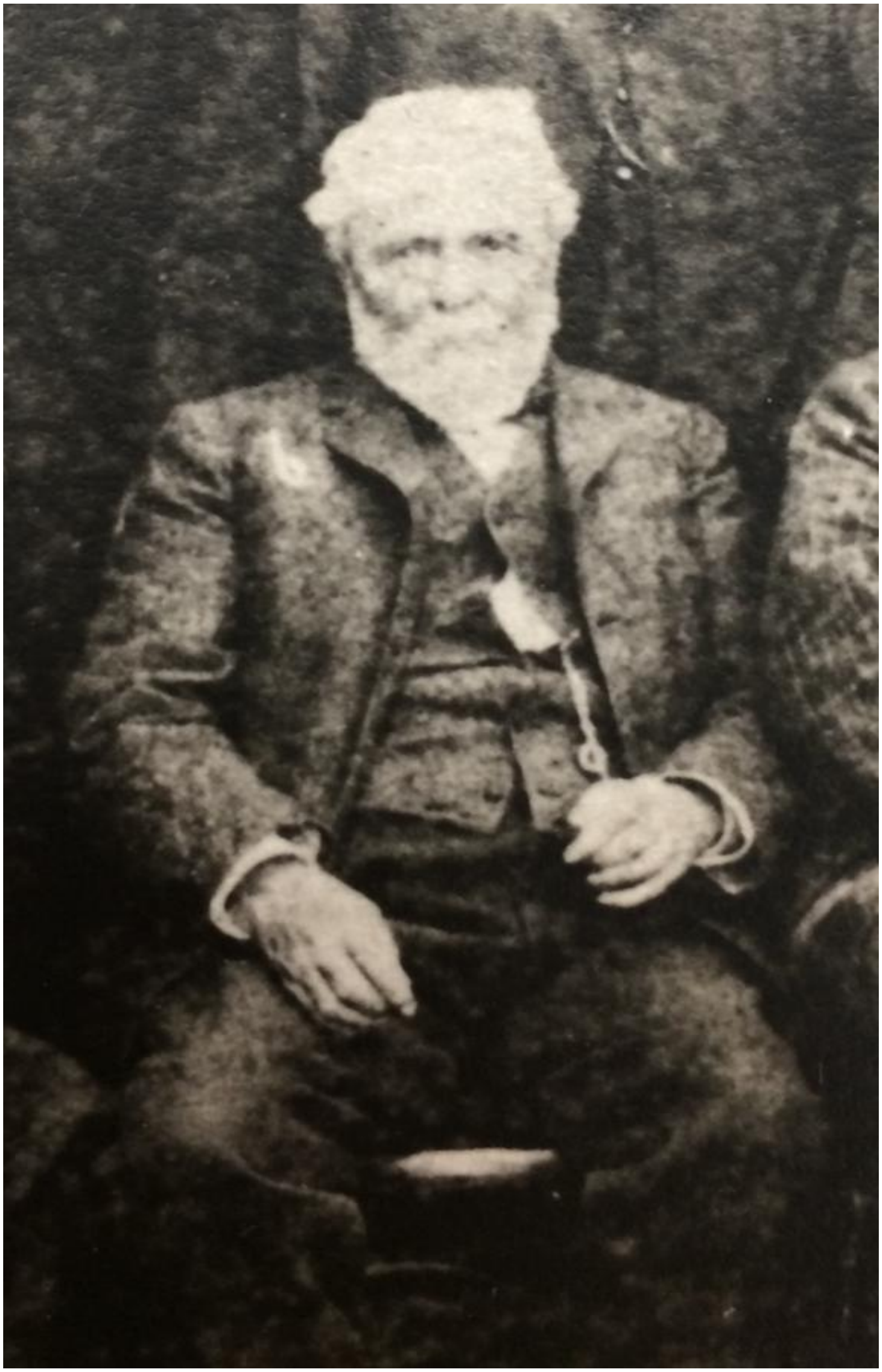

Figure 2.4. Joseph T. Dill (Unknown ca. 1880s). Image cropped from Lebby Family Photo, Caroliniana Library, Columbia.

Figure 2.5. Pauline and Frances Dill (Unknown ca. 1910s). Image from Frazier (2010).

The second possibility is that Joseph T. Dill left the tract to his eldest daughter Regina Dill[31]. Upon Regina's death the land was left to her stepmother Frances Hinson Dill for life, after which it was to be passed to her three half-sisters (Calhoun 1986).

Regardless, Pauline was the last of the Dill heirs (as both of her full sisters and her half-sister predeceased her without having left any descendants). She left the land to the Charleston Museum.

Land Use at Stono Plantation

Both Joseph T. Dill and Captain John Rivers used the Stono tract where the Stono archaeological site lies as a plantation (Anthony 2012a, Calhoun 1986). Both men ran diversified operations, which included sea island cotton as well as various food crops including corn, peas and beans, along with both Irish (white) and sweet potatoes. Rivers' plantation at Stono also produced wool, hay, dairy products including butter and cheese, and meat products[32] (Calhoun 1986; United States Agricultural Census, St. Andrews Parish, 1850; United States Agricultural Census, St. Andrews Parish, 1860).

Dill was also a planter, though his occupation in the 1870 and 1880 United States censuses is listed as a "cotton factor." Additionally, an 1884 account describes him as a "factor and commission merchant" with an office under the purview of himself and J. A.

[31] This daughter was born of his previous marriage to Eleanor Rivers Dill, who died in 1878 (Calhoun 1986:13).

[32] It is likely that there was also a dairy during Dill's tenure as landowner; Frazier (2006) published an interview with his grandfather, Daniel Smalls who was enslaved on Stono plantation. He mentions that his brother worked on the "dairy farm" and was responsible for feeding, watering, and milking the cows. This dairy was run by a leasee, Dr. McGinnis during the twentieth century (Frazier 2006:32, 69, United States Census 1930).

Ball entitled “Joseph T. Dill & Co.,” established in 1883. Dill & Co. is described as the largest dealer in the market with some of the finest grade cotton in the world (Tallman 1884 as cited in Calhoun 1986). He is further described as a factor in the declaration of amnesty he signed on September 29, 1865[33] as well an on his oath of allegiance to the United States signed on January 18, 1866[34]. Therefore, the Stono plantation under Dill seems to have been both a sea island cotton plantation and a mixed crop plantation that grew produce for the city of Charleston.

Dill had previously been in business with Frederick E. Fraser; the two worked under the name Fraser & Dill until 1876, after which he (Dill) worked for a number of years alone[35]. Dill’s firms were said to have made “liberal” advances to growers, “taking every care to make advantageous terms with them” (Tallman 1884 as cited in Calhoun 1986:13). Even if Dill viewed himself more as factor and businessman than planter, he is listed as owner of six plantations on James Island (by way of being executor for John Rivers) by the Freedmen’s Bureau[36]. His (unspecified James Island) lands were restored

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[33] United States Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, Records Group 105, South Carolina, Roll 26, Register of applications for restoration of property, C-G, 1865-1866, National Archives and Records Administration.
[34] United States, Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, Records Group 105, South Carolina, Roll 30, Unregistered applications for restoration of property, A-K, 1865-1868, National Archives and Records Administration.
[35] South Carolina Historical Society, Charleston, South Carolina 1874: Frederick E. Fraser and Joseph T. Dill, Co-Partners, Trading Under Name and Style of Fraser & Dill, and Mary F. Davie, Respondents vs. City Council of Charleston, Appellant, and Others. Case on Appeal from the Circuit Court for Charleston County; Tallman 1884 as cited in Calhoun 1986.
[36] United States Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, Records Group 105, South Carolina, Roll 32, Register of applications for restoration of property, 1865-1866, National Archives and Records Administration.

to him on January 19, 1866[37] after he fled the Charleston area (for Alabama according to Pauline Dill [ca. 1960s-1970s]) for a time during the Civil War.

I mention this because Dill's contract with tenant farmers flies in the face of his business reputation as cited here. In addition, the fact of his business firm in Charleston alongside his residence on Legare Street (also in Charleston) suggests that he was at least a part-time absentee landowner for Stono. I make this point to underline the fact that tenants were overseen and managed by people other than Dill during the Stono "Tenant" period (Frazier 2006 and 2010). It is likely he was also partially absentee during the era of enslavement.; however, there is not documentation for a plantation manager prior to the early to mid- twentieth century.

In summary, Dill was both a planter and a factor and was thoroughly entangled with the planter community on James Island as well as the cotton market in Charleston, both of which interconnected his plantation and the people living on it both economically and socio-politically with the wider Atlantic World. These connections existed during the antebellum period as well as after the end of the war, during the post-Emancipation or tenant-era.

Ferguson Road Property Ownership

The Ferguson Road site is located about a mile from the Stono Plantation sites. The two have an entangled ownership history. Archival research indicates that the Ferguson Road site may have been part of the land owned by John Chaplin, and/or

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[37] United States Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, Records Group 105, South Carolina, Roll 32, Register of restoration orders, 1865-1866, National Archives and Records Administration.

Edward Wilson during the 1670s, but that within two decades it had traded hands and was sold to Jonathan Drake (Grunden 2007:9). After his death in 1731 the land was sold to Daniel Evans and then to Paul Hamilton, at which time it "formed the core of what became Stono Plantation" (Calhoun 1986, Grunden 2007:12). At this point it was joined with the lands I refer to within this dissertation as "Stono."

Hamilton died a mere seven years later after which is father took over the ownership of the land (Calhoun 1986). The elder Hamilton owned the land until his death in the late 1790s at which time the land came into the hands of Thomas Rivers (Calhoun 1986). The periods of Rivers' ownership is when I consider the history of Stono to begin as it aligns with the dates attributed to the Stono "Slave Settlement" archaeological deposits.

Based on the archaeological investigations, TRC analysts concluded that there was no sustained occupation at the Ferguson Road site until the middle part of the eighteenth century (Grunden 2007:73) likely during the time it was owned by Paul Hamilton and prior to being sold at auction to Rivers (Calhoun 1986). Thus, it is possible that the Ferguson Road site became part of Stono (as outlined above). If this is the case, then the Ferguson Road site comprises the earliest Stono component in my study. However, an 1825 plat indicates the landowner was Samuel Hanahan (Grunden 2007:12), and that the Dill tract lay just to the west. If this is the case, then the Ferguson Road site was not part of what I have outlined as the Stono Plantation, owned by Rivers and later, Dill. So, the history of the site is a bit confused. For this reason, in conjunction with the temporal difference between it and the Stono "Slave Settlement," I maintain Ferguson Road is a separate site from Stono.

Regardless of ownership, occupation of the Ferguson Road site seemingly lasted less than a century as an 1863 map shows the site as a wooded area. This documentary evidence is supported by the general dearth of late nineteenth century artifacts within the assemblage (Grunden 2007:71). It is likely, then, as I postulated above, that the Hamilton/Hanahan tract (the Ferguson Road site) and its "dwelling house, kitchen, and negro houses" (Calhoun 1986:5 from a 1784 ad posted by Hamilton's attorneys) were abandoned prior to Rivers' purchase. At the time of Rivers' purchase, the Stono "Slave Settlement" was in use.

Smith Plantation Ownership History

Unlike the Ferguson Road site, the Smith Plantation site is not directly entangled with the Stono sites. It is situated on the Fort Frederick Heritage Preserve, three miles south of the historic town of Beaufort, South Carolina. The Preserve contains an early eighteenth-century fortification as well as a late eighteenth and early nineteenth century plantation component. The eighteenth-century British fort was abandoned sometime prior to 1740 (Smith et. al 2017:20). In 1785 Captain John Joyner acquired the land on which the fort ruins are situated (Porcher and Fick 2010:391). Margaret Joyner (John Joyner's daughter) lived on the plantation at least part time with her husband, Archibald Smith, during the last quarter of the eighteenth century (Smith et. al 2017). Their son, John Joyner Smith owned the plantation during the first part of the nineteenth century (Smith et. al 2017:24).

Research by Karen Y. Smith and Tamara Wilson uses records for purchases of cloth to estimate that Joyner likely held about a dozen enslaved people in 1786. This period coincides with an increase in cotton and indigo production in the region (Smith et. al 2017). This finding indicates that enslaved people were living on the property during that period. Interestingly, the first reading of the Emancipation Proclamation in the Southern U.S. took place at Smith Plantation on January 1, 1863 (Pearson 1969:128-132). As a result of this event and The Port Royal Experiment that followed, photographs of the property and its residents and visitors at and just after Emancipation exist. Two of these are shown in Figures 2.6 and 2.7.

Figure 2.6. Image identified as "Large group of slaves(?) standing in front of buildings on Smith's Plantation, Beaufort, South Carolina" (b&w film copy negative cph 3b15290, http://hdl.loc/gov/loc.pnp/cph.3b15290).

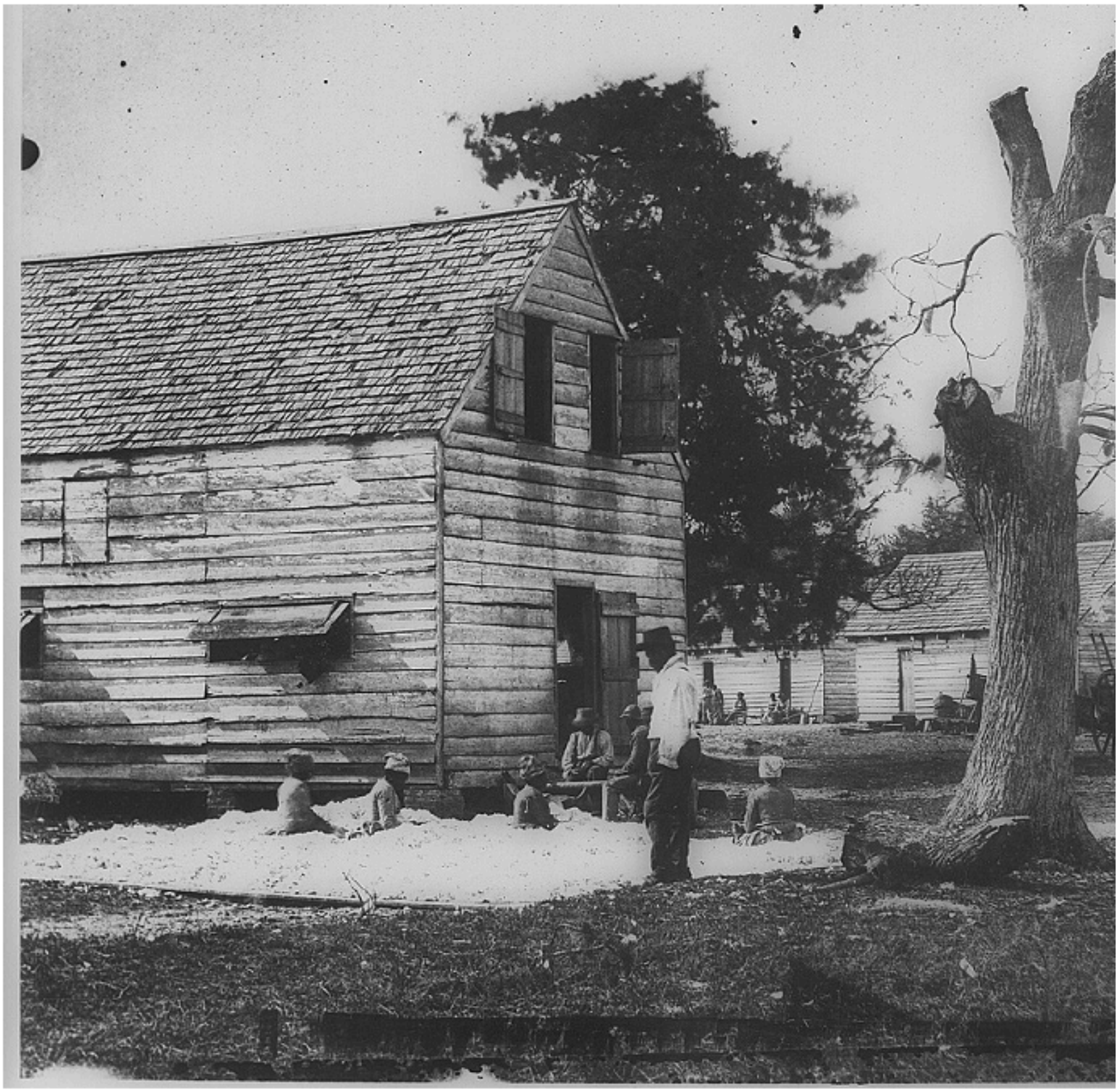

Figure 2.7. Image identified as “Port Royal Island, S.C. African Americans preparing cotton for the gin on Smith’s plantation” (digital file from b&w film negative, ppmsc 00053, reprinted at https://www.nybooks.com/daily/2019/03/18/making-good-on-the-broken-promise-of-reparations/).

The Bureau of Refugees, Freedmen, and Abandoned Lands, or the Freedmen’s Bureau

The Freedmen’s Bureau was established in the War Department by an act of Congress on March 3, 1865. The Bureau was responsible for the supervision and management of Emancipated peoples and lands abandoned and seized during the Civil

War. Two months after the act passed through Congress, President Andrew Johnson appointed Major General Oliver Otis Howard as Bureau Commissioner, a position he held until June 30, 1872 after the termination of the Bureau (Hayden et. al 2013, Kane and Keeton 1994, Ruef 2012, United States Congress 2005).

The Bureau's primary mission was to provide relief to Freedpeople and to help them become "self-sufficient" (United States Congress 2005:1). Towards this end, the Bureau issued rations and clothing to Freedpeople and refugees; it also operated hospital and camps, moderated disputes and complaints, assisted "benevolent societies" in establishing schools, helped Freedpeople legalize marriages conducted during slavery and collect monies owed them from various governmental sources (such as Army and Navy pensions), provided transport to people attempting to reunite with family members from whom they had been separated during the War or as a result of slave trading, and supervised labor contracts between Freedpersons and landowners[38] (Hayden et. al 2013b, Kane and Keeton 1994, Montrie 2008, Prunty 1955, Reid 1973, Ruef 2004a and 2012, United States Congress 2005, Williamson 1965).

[38] Lest the Bureau come across as perfectly benevolent, I point out here that it struggled to meet the interests of freedpeople entirely. It sought to appease Southern whites' demand for a "cheap, tractable, immobile, dependent, labor source" (Smith 1998:332), which of course was in opposition to African American equity and freedom. Indeed, W. E. B. Du Bois (as cited in Stossel undated) states that the Bureau set going a system of free labor; established the "black peasant proprietor;" secured the recognition of black freemen before courts of law; and founded the free public school in the South. Yet, it also failed to establish good will between former slaveholders and freedmen; guard its work from paternalism and the related discouragement of self-reliance; or make "Negroes" landholders in considerable numbers.

The Commissioner and his assistants (including the Assistant Adjutant General who handled the Commissioner's mail) received letters from the local citizenry as well as state and Bureau officials, and prepared reports for the Bureau (United States Congress 2005, examples reprinted in Hayden et. al 2013b as cited below). These documents are useful as a source of historical events that are otherwise difficult to investigate. A number of Bureau documents link Joseph T. Dill, neighbors, and James Island Freedpeople.

South Carolina, Georgia, and Florida were under the direction of Assistant Commissioner Brevet. Major General Rufus Saxton starting June 10, 1865; however, within three months Georgia and Florida gained their own Assistant Commissioners (Hayden et. al 2013b, United States Congress 2005, Williamson 1965).

Initially, General Saxton established his headquarters in Beaufort; they were moved to Charleston in September 1865[39]. The next year Brevet. Major General Robert K. Scott replaced Saxton. By February 1867, there were thirteen sub-districts in the state including Beaufort and Charleston. In 1868, Scott resigned to become the state Governor. Brevet. Colonel John R. Edie took over that August and served until May 1869, when the Bureau was abolished in South Carolina (United States Congress 2005).

When the Bureau was established in South Carolina during the summer of 1865, there were tens of thousands of Freedpeople and refugees in need of assistance. At that time, the Bureau provided more than 300,000 rations, clothing, and medical supplies to

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[39] The location of these headquarters explains why Dill's labor contract was signed in Beaufort [see below] rather than in a locale closer to the planation.

almost 9,000 individuals. The next year, the number of rations issued was reduced and those that were provided were limited to hospitalized people and children in "orphan asylums" (Hayden et. al 2013b, United States Congress 2005:3-4).

Yet, food shortages and crop failures continued at least in part because of a labor shortage (Berlin et. al 1992, Berlin 1993, Blackmon 2008, Ruef 2014a). The Bureau's response was to adopt the crop-lien system in which planters were given rations to distribute to laborers in exchange for liens placed against their crops. They supposed that when the crops were harvested and sold, the liens could be repaid (Hayden et. al 2013b, Thompson 2008, United States Congress 2005, Williamson 1965). According to the Bureau, the "lien plan was well-conceived and helpful for both the employers and their employees, many planters were unable, and in some cases unwilling, to repay their loans" such that when the relief program ended in South Carolina in 1870, most of the loans were still outstanding (United States Congress 2005:4).

For many Freedpeople living on the sea islands, it was too late in the season to plant crops. As a result, they were unable to create livelihoods through farming and were forced to look for work in cities or to survive by hunting and fishing (Hayden et. al 2012). The latter two skills had been necessitated by the system of enslavement and were proven vital for the survival of tenant farmers and sharecroppers of the Lowcountry during the post-Emancipation period.

Stono Plantation's Emancipated Laborers

There were 83 enslaved people living on Stono plantation under the ownership of Captain John Rivers (Calhoun 1986). Among them were 12 with "special skills" including a driver, carpenter, house "servant," washer, "lady woman," butcher, hog minder, gardener, seamstress, housekeeper, coachman, and cook (Calhoun 1986:9).

Dill also held a number of enslaved people although little is known about them aside from their number and race[40]. It seems likely that at least some of the people he had held as slaves would have had no choice but to engage in sharecropping (or tenancy) at his farm after their Emancipation; however, I have not been able to uncover any detailed evidence of this aside from oral histories published in Frazier[41] (2006 and 2010). What is clear is that Dill did enter into labor contracts with a number of individuals.

On April 12, 1866, Dill signed a sharecropping contract with 26 people: Bella Perleau, Bessie Johnson, Cuffy Moultrie, Dinah Jennett, Flora Bush, Harriet Novels, Harry Green, Isaac Washington, James Perleau, Joseph Galliard, Juna Small, Lewis Small, Louisa Richardson, Maria Richardson, Mary Champagne, Molly Days, Peter Novels, Robert Jennett, Robert Perleau, Sally Getters, Samuel Bash, Shepherd Johnson, Tena Green,

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[40] Nineteen are listed on the 1860 slave schedule for Dill.

[41] In addition, the 1870 census lists black "laborers" in the vicinity of Dill and one black "domestic" is cited in his household.

Thomas Bush, and Violet Giles[42]. The majority of the "signatures" on this contract are "X" marks, suggesting they were made by illiterate individuals[43].

The document states the stipulations of the agreement: the laborers would be treated "with fairness and kindness" and be assigned "one half the whole provisions crop when harvested and one half the cotton when prepared for market." Dill also agreed to provide "the necessary farming lots and work animals" to the contracted laborers and to provide the food necessary for the work animals (half of the cost for which would be charged to the laborers). Dill agreed to furnish the laborers themselves with (unspecified) rations, the cost of which were to be charged to the laborers[44].

In return, the laborers agreed to work on Dill's James Island plantation for a period of one year beginning January 1, 1867, to "obey all lawful orders of [Dill] or his agent," "take good care of all animals and tools committed to [their] care and to pay for any damage done to either by [their] carelessness or neglect." The work was to be performed daily based on a "fair average task" (Sundays excepted) or a 10-hour workday. The contract has the portion of task (hand, half hand, quarter hand) assigned to each person beside their name.

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[42] Freedmen's Labor Contract, Berkeley County, SC, 1866, Records of the Field Offices for the State of South Carolina, Bureau of Refugees, Freedmen, and Abandoned Lands, 1865-1872, Record Group 105.
[43] Indeed, Frazier (2006:25) indicates that "all of the slaves on the Dill plantation" could not read or write and had limited vocabularies. Even well into the twentieth century not all descendants were literate (Frazier 2006:27-28, 35).
[44] According to the United States Congress (2005:5), contracts generally entitled laborers to housing, rations, medical attention, fuel, and at least half the crop. Freedpeople working for wages were generally paid between $8 and $12 a month and were responsible for securing their own rations.

The laborers contracted to work for Dill qualify as both tenants and sharecroppers. Tenants are defined as a worker whose housing is provided by the landlord but whose food procurement was their own responsibility (Holland 1990, Van Auken 1950). Tenants were supposed to be paid in cash and were expected to pay rent with cash (Montrie 2008, Pyszka 2016:52, Stoesz 2016, Van Auken 1950). These farmers were the legal owners of their crops (Tyson et. al 2013). Sharecroppers in contrast, were given credit for seed, tools, food, housing, and access to land by the landowner in exchange for part of the harvest, all of which legally belonged to the landowner (Jackson 2011, Oakes 1990, Pyszka 2016, Stoesz 2016, Tyson et. al 2013, Wilson 2000). Frazier (2006:78) refers to Stono farmers as sharecroppers as "most of them had no money to buy the land." Thus, Dill's contract was a sort of combination of the two arrangements; laborers were provided rations and equipment but were also expected to pay for damages they caused indicating that they were also given wages. All types of contracts existed throughout the Atlantic World[45].

In reality, whether the laborers at Stono plantation were contracted to sharecrop or paid wages as tenants is not particularly important because there was so much overlap in the experiences of the two groups. For one thing, the Dills provided seeds to the peoples farming their land well into the early twentieth century (Frazier 2006). Yet, the most notable overlap between the people living during the two periods

[45] See Armstrong and Reilly 2014, Ashlock 2001, Barickman 1994, Blackmon 2008, Delle 1999, Holland 1990, Jackson 2011, Kane and Keeton 1994, Montrie 2008, Orser 1988, Schwartz 2012, Scott 1990 and 2011, Symanski 2012, Wallman 2014 and 2018, Wallman and Grouard 2017, Wilkie and Bartoy 2000, and Williamson 1965.

is that they were impoverished and engaged in an endless cycle of debt peonage (Berlin et. al 1992, Blackmon 2008, Bletzer 2004, Holland 1990, Jackson 2011, Johnson 2003, Lichtenstein 1998, McInnis 2016, Orser 1988, Pyszka 2016, Ruef 2014b, Stoesz 2016, Thompson, Williamson 1965). Isaac Kinlock (as cited in Frazier 2006:43) notes that they did the same tasks with the same tools during the early twentieth century that had been used during the era of enslavement on Stono plantation and that it was a "tough time" during which workers "caught hell."

Dill's labor contract with the James Island laborers was subject to cancellation should the laborers be found "idle" or "insubordinate" or if Dill or his agents were abusive toward the laborers[46]. No documentation of complaints against the laborers or Dill or his agents have been uncovered nor is there any evidence to indicate whether or not any of the parties involved followed the stipulations put forth in the contract.

There is little else in the way of documentation after the 1866 labor contract. No other evidence of the individuals who signed the paperwork has been uncovered and no contracts for the following years have been found. However, there is one specific mention of the Stono plantation[47] in a letter written by a Freedmen's Bureau agent to the Assistant Commissioner:

[46] Freedmen's Labor Contract, Berkeley County, SC, 1866. Records of the Field Offices for the State of South Carolina, Bureau of Refugees, Freedmen, and Abandoned Lands, 1865-1872, Record Group 105, National Archives and Records Administration.
[47] The letter refers to Stono as Rivers' plantation because in 1866 Joseph T. Dill was acting as executor for the Rivers' estate, which included Stono plantation.

Aide-de-Camp of the South Carolina Freedmen's Bureau Assistant Commissioner to the Assistant Commissioner

Charleston, S.C., Mar 16th, *1866.*

General, I have the honor to report that I repaired to James Island S.C. in obedience to your orders and proceeded to investigate the condition of the Freedmen…

I visited Several plantations where the Freedmen told me they had been ordered out of the Quarters on the plantation. I told them in all cases they could not remain in the Quarters unless they could make an agreement with the owner. The land titles I decided good or bad in accordance with your orders. On the Rivers Plantation near the Stono River I found Several Families that had been ejected from Barracks that had been Constructed by the Confederate Army.

This I knew to be in violation of your orders as the Barracks were on the forty acres Staked out by the Freedmen But as I understood the order to be given personally by Brevet Brigadier General Beecher, I determined to report the matter to you.

Several of those turned out complained of being Sick. I found a Sick colored woman in a Shed that had been erected by a Mr. Mathews who is cultivating vegetables on the Island. Mr. Mathews told me He had no room for her but She had been turned out by Military authority in that condition and he did not like to See her die in the open air.

A colored woman by the name of Glaze complained to me that her husband had been arrested and imprisoned Some time before for taking lumber from the ruins of a bridge That had been destroyed by the Rebels Dr. Brownley Acting Assistant Surgeon informed me he had told Glaze to take the lumber as Some Sixteen mostly Sick were crowded into one Small room. Glaze's wife is now living with five children without Shelter.

As the actions of the Military in Some instances (according to my Judgement) were in direct opposition to General Order No 1 Head Quarters Dept of S.C. Dated Jan 1, 1864 and also in opposition to orders from these Headquarters I considered it useless for me to remain longer on the Island.

I am General very Respectfully Your Obedient Servant, ALS J. H. Long[48]

A few of Dill's neighbors wrote the Freedmen's Bureau with complaints. These have also been reprinted in Hayden et. al (2013b):

South Carolina Planters to the Commander of the Department of South Carolina

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[48] Captain J. H. Long to Brevet Major General R. K. Scott, 16 Mar. 1866, L-57 1866, Registered Letters Received, ser. 2922, SC Assistant Commander, RG 105 (A-7393) reprinted in Hayden et. al 2013b.

Charleston [*S.C.*] January [*27?*], 1866

General, We the undersigned beg leave to make the following statement and respectfully ask your consideration of the same viz—that "land warrants," for forty Acres, are now being issued to freedmen on Johns and James Island by officers or Employees of the Freedmen's Bureau in this city. in some cases they have been issued to freedmen recently from the Interior who have planted no crops on these Island as we ascertained by enquiry and admission of a freedman yesterday.

We have the honor to be Very Respectfully Your Obedient Servants,

J. Townsend and I. Jenkins Mikell

We the undersigned certify to the fact that Mr. Pilsbury Agent of Freedmen's Bureau in this city said in conversation with us this day that these "land warrants" were now being issued to Freedmen at that office

J. Townsend

HLS Joseph W. Seabrook

These letters indicate most of the people living on reserve were from the area and had never left it, but Hayden et. al (2013b:217) states that many of the 1865 reserve residents had left the area with their former owners during the war and returned to homes already occupied by others who had moved in during the period of abandonment. As a result, returning freedpeople had nowhere to go and moved to the reserve. Exact numbers are not available for the origins of people living on the sea islands during the few years just after the end of the War (Blackmon 2008, Hayden et. al 2013b, Williamson 1965); suffice it to say that all were refugees and needed assistance regardless of where they had come from.

Their plight is described in another letter to Bureau agents:

> General James C. Beecher, had prepared the March 7 report after visiting each of the thirty-eight plantations on James Island. He wrote, "the state of the island is disheartening in the extreme." About 2,000 freedpeople were in residence, most of them living in huts formerly occupied as Confederate barracks, which Beecher described as "miserable hovels." Aside from the work under way on three plantations, he reported, "I have not seen the amount of two acres in any one patch under cultivation," and "[t]he people are destitute of seed, and nearly destitute of food."
>
> Although nineteen plantations had been restored to former owners, "no further action had been taken," so he had "cleared out three plantations as a beginning—the freedpeople having refused to contract." According to Beecher, a great many of the "so called Land titles" held by freedmen on the island were fraudulent, having been issued in December 1865 and January 1866 but dated between April and October 1865.

"There have been many atrocities upon freedmen reported from South Carolina," he maintained, "but . . . I have met with no atrocity so wide in its damage, so cruel to the freedpeople as the fraudulent issue of Land warrants." Indeed, Beecher believed that on the four islands of Edisto, Johns, Wadmalaw, and James, no more than eleven warrants "could pass strict scrutiny," while some 400 were so defective that their possessors were, under existing orders, subject to removal from the land they occupied… [49]

Stono Plantation Sharecroppers/Tenants and Descendants

Although Dill is not named in these letters, he did petition the Commissioner of the Bureau of Refugees, Freedmen, and Abandoned Lands on behalf of the Mrs. M. S. H. Godber estate (for which he was executor), which comprised an 80 acre plantation on James Island known as "Gibbes Plantation"[50]. The petition goes on to say that the plantation had been evacuated by Godber in June 1862 after an order by the Confederate government and hence came into the hands of the Union "Military Authorities." Dill goes on to say that these events do not constitute an abandonment within the definition outlined by the Act of Congress approved on July 2, 1864 and that

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[49] B.B General. James. C. Beecher to Captain M. N. Rice, 7 Mar. 1866, Letters & Reports Received Relating to Freedmen & Civil A airs, ser. 4112, Dept. of SC, RG 393 Pt. 1 [C-1410] reprinted in Hayden et. al 2013b.

[50] Joseph T. Dill to Major General O. O. Howard, January 29, 1865, United States Freedmen's Bureau, Land and Property Records, 1865-1872, National Archives and Records Administration.

the lands should therefore be restored to Godber and her agent (himself). A similar letter exists petitioning for the restoration of Burch Plantation, which is signed by Joseph T. Dill as executor of John Rivers estate[51].

In addition to acting as executor for various estates, Dill also served as witness for a number of individuals who were petitioning the Bureau for the reinstatement of their own lands. Two of these individuals were Winborn Wallace Lawton[52] and William B. Minott, executor for the estate of Susan C. Minott[53].

No such letter has been found for "Stono Plantation;" however, a list of Abandoned Plantations in the possession of the Freedmen's Bureau for James Island does list "Stono River" [54] and names "Joseph Dills" as the "original owner" of that land along with another piece of property in Charleston[55]. He is also listed as owner/executor

[51] United States Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, South Carolina, Roll 32, Restoration orders, 1865-1866, Record Group 105, National Archives and Records Administration.
[52] United States Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, South Carolina, Roll 31, Unregistered applications for restoration of property, L-Z, 1865-1868, Record Group 105, National Archives and Records Administration.
[53] United States Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, South Carolina, Roll 32, Restoration orders, 1865-1866, Record Group 105, National Archives and Records Administration.
[54] United States, Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, South Carolina, Roll 33, Captain AP Ketchum's records, abandoned land reports, 1865-1868, Record Group 105, National Archives and Records Administration.
[55] That piece of property is referred to in a restoration petition that was signed by Dill in regards to his house and lot at 15 Legare Street in Charleston, which had been "left in [the] charge of two family servants" along with all of his furniture (Dill ca. 1960s-1970s; United States Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, South Carolina, Roll 26, Register of applications for restoration of property, C-G, 1865-1866, Record Group 105, National Archives and Records Administration). That land was restored to him on October 6 (year unspecified, but presumably 1865) (United States Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, South Carolina,

for John Rivers' "Cut Plantation" and "Burch Plantation," and M. S. H. Godber's "Gibbes Plantation" (both located on James Island) on a list of sea island residents[56]. It was through means such as executorship and witnessing for one another that the majority of land throughout the region was restored to its former (Confederate, planter) owners (Frazier 2006, Hayden et. al 2013a and 2013b).

On at least one of John Rivers' plantations[57], the "negroes" were to be removed "forthwith" (excepting one male and one female slave per plantation as "necessary"). In addition to those particulars, the letter also dictates that livestock were to be left on the island for use by the military, while boats were to be taken to Charleston or behind the front lines established on the island. Brands were to be placed on livestock, while permits were to be obtained for any enslaved persons left behind so that ownership could be later proven for both types of "property" as needed. All of this was ordered so that the island could be "properly defended" for the duration of the war[58]. Such removal orders were placed upon the entirety of James island as well as other sea islands and inland areas (Calhoun 1986, Hayden et. al 2013, Steen and Barnes 2010, Williamson 1965).

Roll 32, Register of restoration orders, 1865-1866, Record Group 105, National Archives and Records Administration).

[56] United States Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, South Carolina, Roll 32, Register of lands and occupants, 1865-1868, Record Group 105, National Archives and Records Administration.

[57] A plantation for whom Joseph T. Dill was executor and hence functionally Dill's plantation.

[58] United States Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, South Carolina, Roll 26, Register of applications for restoration of property, C-G, 1865-1866, Record Group 105, National Archives and Records Administration.

An example of Dill's "advantageous terms" (as described in a letter describing his factoring abilities, above) are seen in a series of 159 crop liens taken out between 1886 and 1890 (Lowcountry Africana 2014). Approximately 110 individuals are named in these liens[59]. Although there is no evidence regarding which parties advantaged from the terms of the labor contracts (or lack thereof), most contracts benefited the landowner rather than the laborers such that a pattern of debt and poverty resulted[60]. It is likely a similar situation existed at Stono.

One other documentary source exists for tracing Emancipated peoples living and working on the Dill property: land sales directories. There are 10 records of land sales for lands lying on James Island by Eleanor (Rivers) Dill between the years of 1873 and 1878 (Appendix A) and 91 James Island land sales by Joseph T. Dill between 1869 and 1888 (Appendix B). Twenty-one of the names listed on these various documents can be found on more than one document type (e.g. census and crop lien or census and land sale; see Appendix C). Further, Harry Urie (cited in Frazier 2006:50) states that the Dills sold property to a number of formerly enslaved people; however, most of them got nothing (Frazier 2006:50).

Though I have been unable to directly connect the individuals listed on the censuses and those named in the crop liens with the 1866 sharecropping contract, many of the surnames on the documents match, which may indicate familial and/or

[59] Thirty-one of the defendants named in these liens can be found on the 1870 Federal Census, 30 of them can be found on the 1880 Federal Census, and 16 are listed on both the 1870 and 1880 censuses.
[60] See Blackmon 2008, Cooley 2015, Holland 1990, Ruef 2014b, Schweninger 1989, Stoesz 2016, Tyson et. al 2016, Wallach 2015, Wilkie and Bartoy 2000, Williamson 1965.

household relationships among them. Further, all of these individuals are categorized as "B" or "M" on the census indicating they are people of color and suggesting they are descendants of enslaved Africans and African Americans.

It is not clear what happened to these individuals between the time the crop liens were taken out and the time of Pauline Dill's death in 1985 after which the plantation property went to the Charleston Museum. Although according to Frazier (2006 and 2010:34), Fuller King managed the plantation during the sharecropping era, at which time he paid laborers ten cents a day work under a foreman (Charlie Goss [Figure 2.8]), who in turn worked under the manager (Frazier 2006 and 2010). Later during the 1950s and 1960s, Park Mikell managed the Dill Plantation and Jeffery Lemon served as foreman (Frazier 2006 and 2010). Goss says that they were worked from sunup until sundown regardless of the weather and that "goddamn Park Mikell waz a nasty cracker, un had no use for black people oter than work da hell out of you" (Frazier 2006:25).

In turn, Isaac Kinlock who worked under Goss says that Goss was one of the oldest slaves still alive at that time and that he "acted like he own dey damn plantation" and that he was small, "arrogant," and would "cuss like a darn sailor," who drank moonshine from a flask carried in his pocket and rode a horse that danced sideways (Frazier 2006:43).

Lemon states that prior to 1948 he paid farmers twenty-five cents a bushel for string beans and fifteen cents for two hundred pounds of potatoes on order from Park (Frazier 2006:73). After 1948 prices were raised do fifty and twenty-five cents,

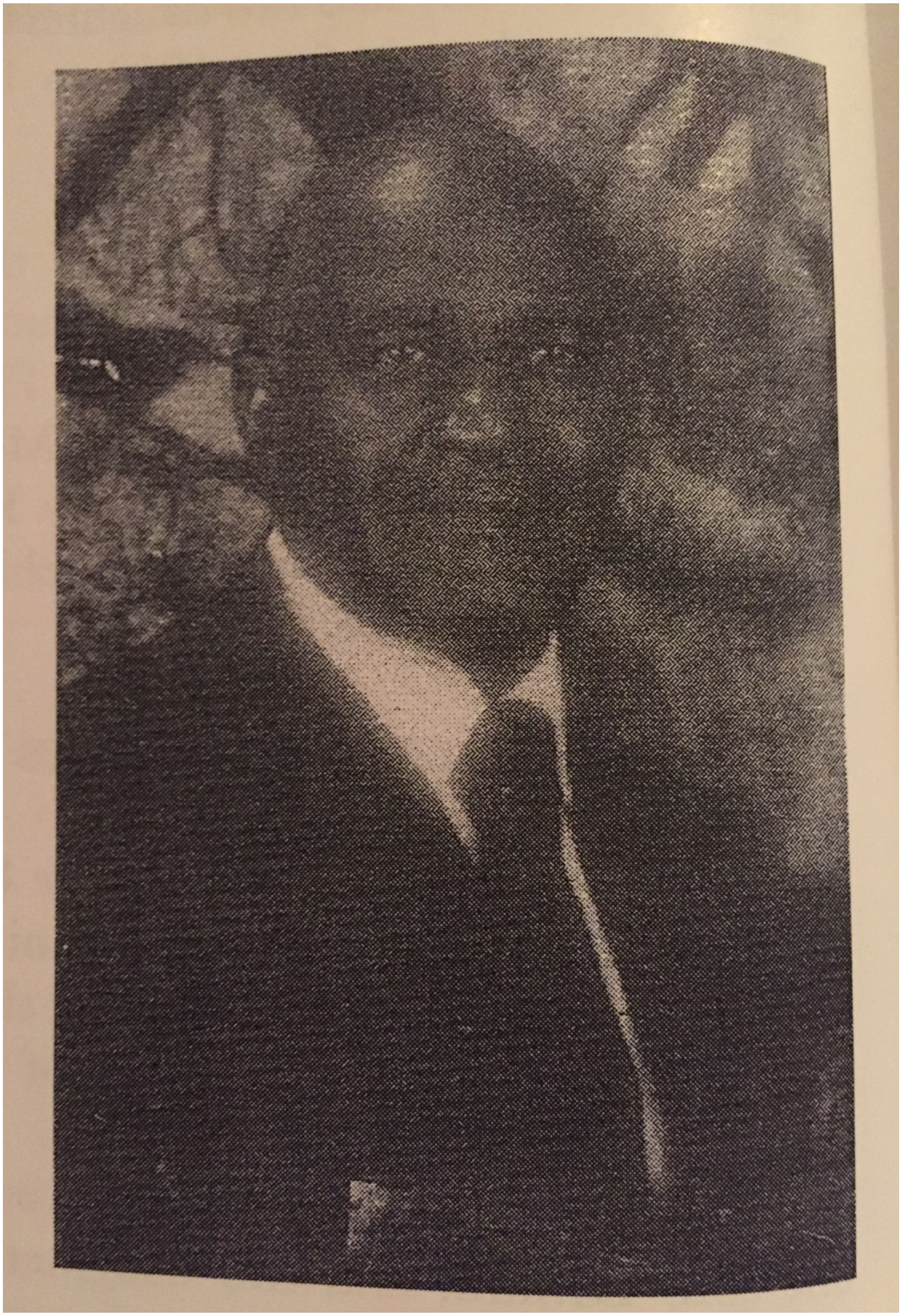

Figure 2.8. Image of Charlie Goss, foreman at Stono plantation during the sharecropping era. Image from Frazier (2010).

respectively (Frazier 2006:73). He sometimes paid them a token at the end of the day, which could be exchanged for cash later[61] (Frazier 2006:74).

Once Mikell could no longer run the farm, "Mr. Hill" managed it and, after him "Acock" (Joe Deleston [photograph in Figure 2.8], Jr. as published in Frazier 2006). Based on these published oral histories, it seems that the Dill Family left the plantation in the hands of managers rather than running it themselves after (or perhaps, even prior to) the death of Joseph T. Dill.

Frazier (2006 and 2010) outlines the genealogies of a number of James Islanders who worked as "sharecroppers and farmers" on the Dill (Stono) Plantation. A number of the surnames in these genealogies match with those in the 1866 labor contract described above including: Champagne, Galliard/Gilliard, Johnson, Prioleau/Perleau, Richardson, Small(s), and Washington; however none of the individuals mentioned in his books (2006, 2010) have the same first and last name as those who signed the 1866 contract with Dill nor do any of the people Frazier (2006) lists as having been enslaved on the plantation. The enslaved and descendant peoples discussed in Frazier's (2006 and 2010) books can, on the other hand be matched up to some of the people listed on the 1870 Rivers' plantation just north of Stono (and to which he was executor for a period).

[61] The price for a bushel of "snap beans" in mid-spring 1948 for the state of South Carolina was $3.00 (Rush and Taylor 1950:13) meaning farmers were paid approximately one twelfth the value of their product.

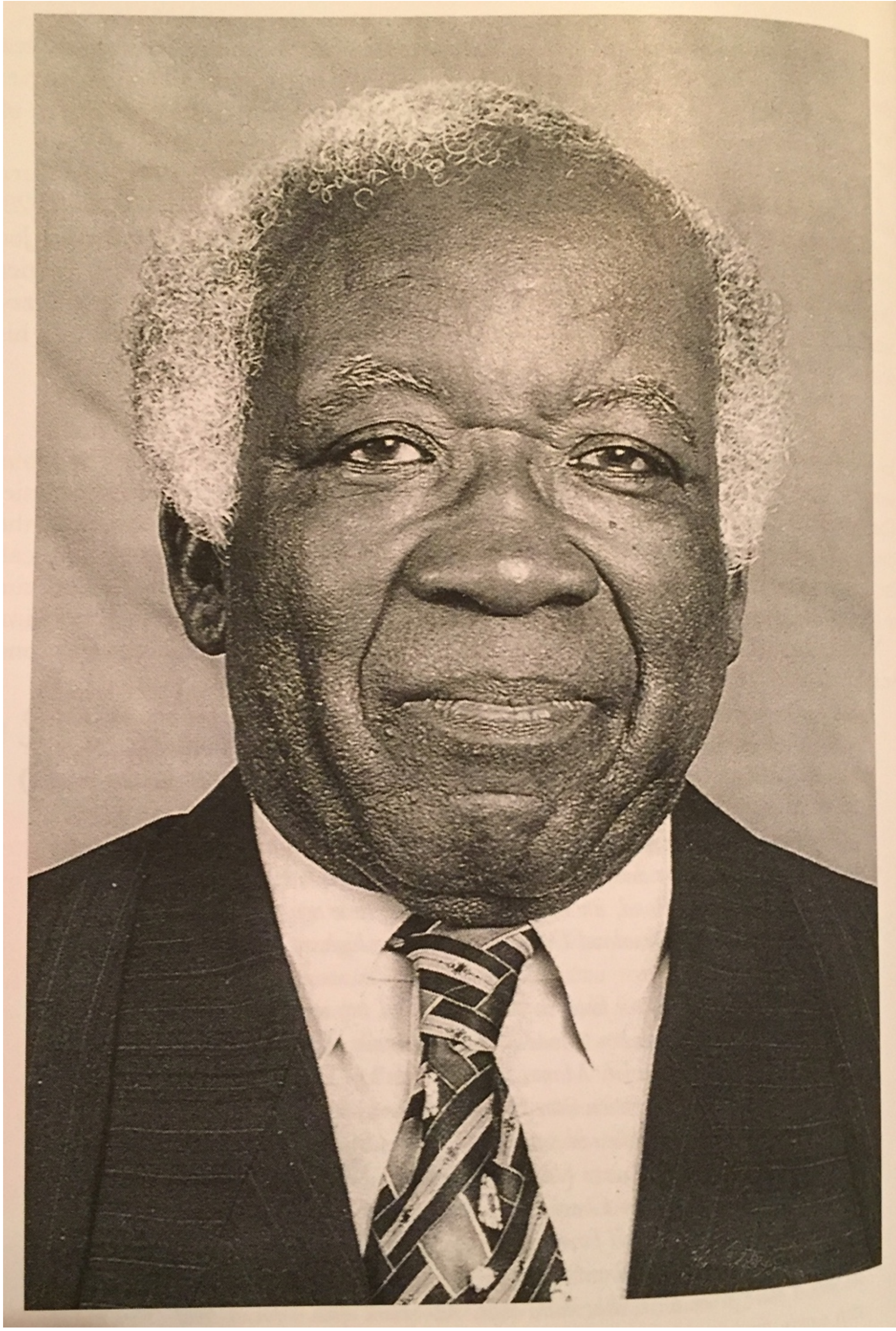

Figure 2.9. Image of Joe Deleston, farmer who worked under Park Mikell during the sharecropping era. Image from Frazier (2006).

Therefore, the lives of those laborers who contracted to work for Dill in 1866 remain unknown. Many of the individuals discussed in Frazier's (2006, 2010) books can, on the other hand be matched up to some of the people listed on the 1870 census population schedule for St. Andrews Parish (James Island). These individuals include Dolly Frazier [Deleston], whose granddaughter, Emily Deleston Champagne was a sharecropper on the Dill (Stono) plantation, along with her husband Frederick Champagne. Two more people found in both sources are John Small and his wife Jane Smalls[62]. Two more couples are Daniel Fell and Sarah Fell, along with their daughter Elizabeth and her husband Amos Prioleau/Priblea (an image of one of their many descendants is shown in Figure 2.10). Other people listed in both sources are: Morris Young, Samuel Richardson (Figure 2.11 shows a photograph of one of Samuel's descendants), George and Chloe Rivers, Joe(seph) Heyward, and William Washington[63].

In addition, there are a number of individuals listed on the 1880 census population schedule who are described as sharecroppers and/or farmers in Frazier (2006, 2010). These include: Daniels Small(s), Thomas Smalls, and Issac Smalls, along with their parents Jake and Violet Smalls, Bella Brown, Mary Frazier/Fraser, Joseph and Charlotte Gadsden, along with their children Betsy and Hettie/Hester, John Hamilton, John Sanders, Jacob Farr, Joseph and Sarah Simmons, Sandy "Samuel" Brown, and John and Jane Smalls.

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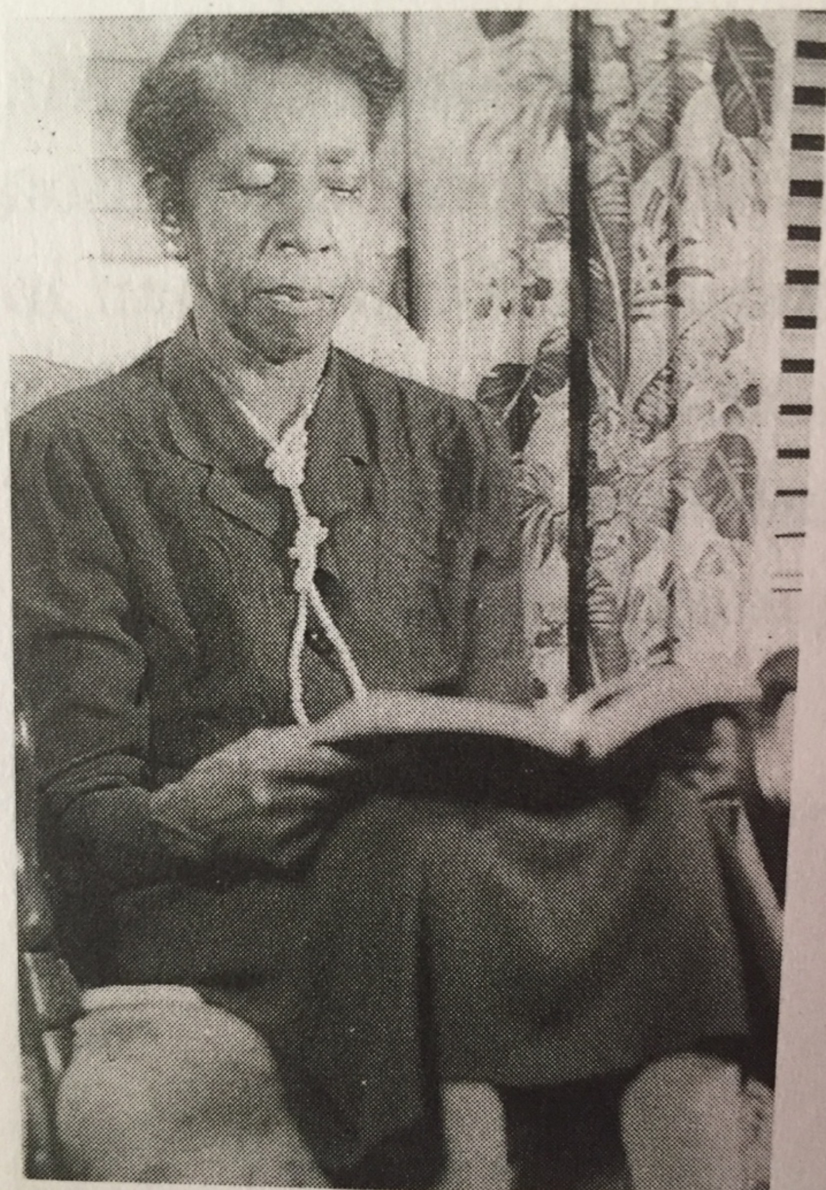
[62] Her name also appears on the census, although on a different page from John's (United States Census, population schedule, 1870:18).

[63]Washington would have been a small child at the time of the 1870 census (Frazier 2006).



Hester Fell Palmer. *Courtesy of Jacqueline W. Young.*

Figure 2.10. Image of Hester Fell Palmer, descendant of Daniel and Sarah Fell. Image from Frazier (2010).

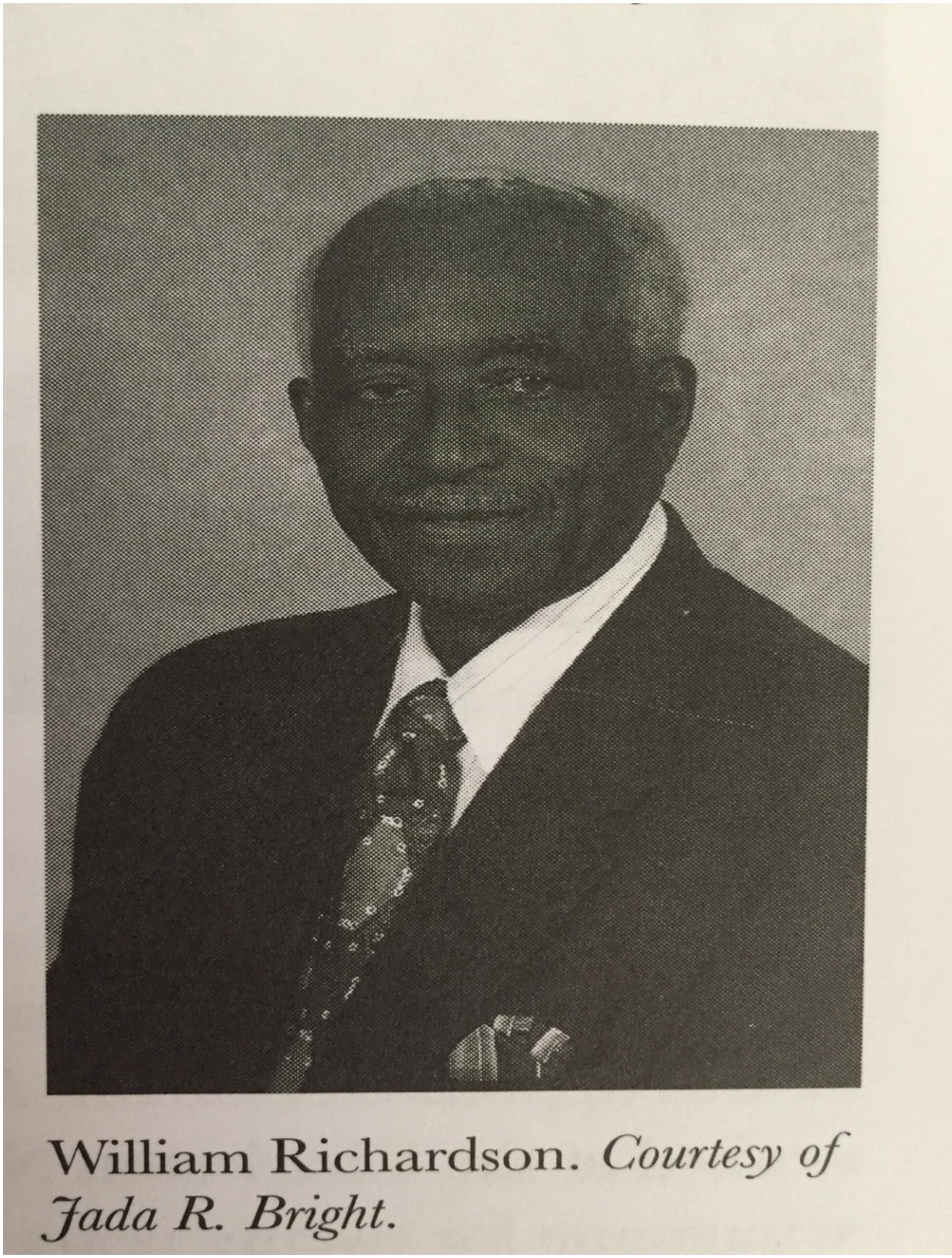


Figure 2.11. Image of William Richardson circa late twentieth century. Descendant of Samuel Richardson, Stono sharecropper. Image from Frazier (2010).

There are other people that Frazier (2006, 2010) identifies as descendants of individuals who worked on Stono plantation; however, I have not been able to find additional references documenting these people. They include Cesar Smalls, Charlie Goss, Franklin Gilliard, King Smalls, James "Son" Bennett[64], Fred Champagne, Hump Urie, Jonas Sanders, Willie Sanders, Alonzo Moore, and numerous others (Frazier 2006).

James Island Freedpeople

On January 16, 1865, General William T. Sherman issued Special Field Order Number 15, which set aside the "Islands from Charleston south, the abandoned rice-fields along the river for thirty miles back from the sea, and the country bordering the Saint Johns River, Fl[orida]" for the settlement of Freedpeople (Frazier 2006, Hayden et. al 2013b, United States Congress 2005:4, Williamson 1965).

As planters returned to their lands in the Lowcountry and found them "reserved" for Freedpeople, they were outraged. Claims of repossession and denials of abandonment flooded into the Bureau. Joseph T. Dill is named on a "List of Abandoned Plantations in the Possession of the Freedmen's Bureau;" however, the name of the plantation is not provided[65]

Regardless, Dill was definitely affected by General Order Number 11 that was issued on August 28, 1865 ordering that "fair and liberal" contracts be arranged between planters and Freedpeople (United States Congress 2005:4). Both groups were

---

[64] There is a crop lien against one S. Bennett dated 1888 available for viewing on Lowcountry Africana 2014.

[65] United States Freedmen's Bureau, Records of the Assistant Commissioner, 1865-1872, South Carolina, Roll 33, Captain AP Ketchum's records, abandoned land reports, 1865-1868, Record Group 105, National Archives and Records Administration.

reluctant to sign such contracts, Freedpeople because they had been promised land portions of their own and planters who felt they owned nothing to Freedpeople. Still, the threat of forcible removal left Freedpeople with nowhere to turn and nearly 8,000 contracts were signed involving nearly 130,000 freedpeople between 1865 and 1866 (United States Congress 2005).

Although it is not possible to make direct connections between individual freedpeople and Stono plantation residents, it is possible to get an idea of what was likely occurring there by reading letters between Freedmen's Bureau agents.

A letter from a Freedmen's Bureau representative illustrates the scene on James Island and the other sea islands in the Charleston area:

> **Freedmen's Bureau Acting Sub-assistant Commissioner for Johns, James, Wadmalaw, and Morris Islands, South Carolina, to the Headquarters of the South Carolina Freedmen's Bureau Assistant Commissioner**
>
> Charleston S.C. January 30th, 1866
>
> Major, I have the honor to report, that in the lack of other transportation, I borrowed a row-boat, and have visited the Islands upon which I was assigned to duty, and …
>
> I have found generally, that the Freedmen upon James, Johns, and Wadmalow Islands, are not willing to contract, under any circumstances.

They appear to be willing to work, but are decisive in their expressions, to work for no one but themselves: a few have told me that they would contract with ‘northern’ men, but that they would starve before they would contract with others. They use threatening language, when the former residents of the Islands are spoken of in any manner, and say openly, that none of them, will be permitted to live upon the Islands. They are not willing to be reasoned with on this subject.

A greater portion of the Plantations are now occupied by Freedmen, and many have commenced to work upon the land, getting ready to make a crop—

On those I have visited, with a few exceptions, I find no uniformity, or method; they have selected, here and there, parcels of land, just as the ground has suited their purposes: A few have united, & are cultivating lots and small parcels contiguous—

In most cases, the Freed people, who now occupy these plantations, are not those who were formerly in bondage upon them, and I found discontent, and quarrelling, because the original workers of these places, upon their return, find that they are now being occupied by other Freedmen who have, come from up the Country: and I would here say. that most of the people who do come from the upper Counties, are those who are unwilling to make contracts there, and who have come to the Islands, and ‘squatted,’ with the intention of making crops for themselves alone. I found men and women who have (as they state) slept upon the hearths, for two months, and they have nothing, and no way of getting anything, as I can see. Many are daily arriving, most part, strangers, from the main—some with nothing, others well prepared to go to work. upon their own account, with all necessary tools, and with the intention of squatting on the first vacant lot. I counted. twelve large flats. between "Church" flats. and "Wapoo cut" on Friday, of this class—

They have generally the idea that the Islands are theirs, and those who are not so sanguine in this, are firm in their declarations, that no one shall prevent them from occupying and cultivating them, as they see fit. When told, however, that it is the desire of the Govt that they should be orderly, industrious, and improving, and in a manner as it shall direct, they have confidence, more than in anything else, and seem willing to try. There are men among them, who are "oracles", and as *they* go. so go the whole without stopping to consider.

There is at present much suffering, among those who made no crops last year: the number of the suffering is daily increasing, as many of the new arrivals, bring insufficient means of support.

On Wadmalaw Island, there are people who are living upon *Acorns* and oysters…

There is one other subject, I wish to mention in this report. It is the "calculation" of the colored people. At first it looks a small matter, but to look upon the waste of time and material I cannot let it pass without a word in report. I visited the, Main, in company with Captain Nerland coming the Det, there, and find that those who stay there, are quite willing to make contracts, the others, who would not contract having gone to the Islands.

More of these people, possess the means, than there are of the Planters. They are willing to furnish generally everything; & give the Planter one third: and in some instances it is the reverse, but they are not so willing to give the general supervision of the cultivation of the crop to the Planter. This is apparently a damage to both: for instance: in the matter of. fencing, & draining—the colored people instead of working in gangs (which they do not like to do) individually ditch, drain, and fence separate tracts, and the time spent in this additional work will work an injury, as it is lost upon the Crops. On the other hand, they have but little confidence in the contractors if they let the supervision of the raising of the Crops go into their hands.

Delay at this time of the year, in these matters is disastrous to all parties, and to the Government, for it comes to a question of Economy.

If Crops are not raised, there will either be much more suffering & misery, than usual the coming year, or the Government will be to a great expense in supplying the necessaries of existence, perhaps to both the whites & blacks—

I most respectfully call attention again to the large number of Freedmen coming from the mainland to these Islands.— …

Captain Nerland 35th U.S.C.T. is investigating this a air, and intends to arrest the Ring leaders in it— I am Major Very Respectfully Your Obedient Servant, ALS Erastus W. Everson[66]

Soon thereafter, the Bureau removed freedpeople from the sea islands. Below is a letter describing the incident:

South Carolina Freedmen's Bureau Assistant Commissioner to the Commander of the Military District of Charleston

Charleston, S.C. March 14th, 1866.

General, I have the honor to call your attention to the acts of Brevet Brig General J. C. Beecher on James Island. It is reported to me, that General Beecher is ejecting freedpeople from plantations on which they hold possessory titles, in direct contravention to a letter of instructions sent him from these Headquarters Feby 26, 1866 and of the provisions of the letter of instructions from Maj Genl. O. O. Howard dated Washington. March 8, 1866.

[66] 1st Lt Erastus W. Everson to Brevet Major Henry W. Smith, 30 Jan. 1866, E-18 1866, Registered Letters Received, ser. 2922, SC Assistant Commander, RG 105 (A-7393. Lieutenant Everson signed as an officer in the Veteran Reserve Corps. as printed in Hayden et. al 2013b).

Much suffering has been caused by such ejections, as many sick people were turned out into the road to die, for lack of shelter. Such acts as these tend to hurt the Military Authorities, as well as this Bureau in the eyes of the public.

His Excellency the President of the U.S. has omitted taking any definite action in regard to the immediate restoration of the Island lands, and General Sherman's Special Field Order No 15. series 1865 (which established the sea islands as a reserve for freedpeople), therefore remains in full force.

I have the honor to request that such orders may be given to General Beecher as will cause the orders of this Bureau, and the instructions of the Commissioner to be respected.

I am, General Very Respectfully Your Obedient Servant, HLcSr R. K. Scott[67]

The conversation of what to do about the Freedpeople on James Island continued:

Commander of the 2nd Subdistrict of the Military District of Charleston to the Headquarters of the District, Enclosing a Letter from a South Carolina Planter to the Sub-district Commander

[67] Brevet Major General. R. K. Scott to Brevet Major General C. Devens. Jr., 14 Mar. 1866, vol. 11, p. 63, Letters Sent, ser. 2916, South Carolina Assistant Commander, RG 105 (A-10100) as cited in Hayden et. al 2013b.

SUMMERVILLE, S.C., March seventeenth, 1866.

Captain, I enclose herewith communication from T. A. Beckett Esq. land owner on Johns Island. This morning a Mr. Clark at instance of James Island planters, calls upon me & states verbally that General Scott has ordered parties removed by me from plantations in accordance with General Order No 1 Dept of S. Carolina to return and locate themselves & that in consequence all contracting is stopped. He also states that some freedpeople who had contracted, have been influenced to retract, and that in one case where a freedman had sold out to the proprietor his so called land title, the proprietor was ordered to return the money…

I regret that the labor of the last two months, which promised so satisfactory results, is thus rendered nugatory, and report the facts in the case as referred to me, because the responsible parties in the transactions alluded to are out of my jurisdiction. Unless otherwise ordered I propose to enforce the instructions given by myself, of course dealing kindly as possible with the freedpeople who are instructed in contempt for Military Authority.

I respectfully add in conclusion, that some of the parties reported to me as having been instructed to disobey my orders are those mentioned in my [previous] report.

Under existing circumstances, General Order No 1 Dept of South Carolina probably cannot be executed on the Islands without collision with the freedpeople who will suffer severely, though not at all blamable. My instructions have been given with all possible care. In no case has, a valid land warrant been interfered with.

Very Respectfully Your Obedient Servant, HLS James. C. Beecher

[*Enclosure*] Johns Island. [*S.C.*] March 15th 1866

Sir, I have the honor of requesting, your consideration to the following facts. The negros are not willing to agree to *any* contract, whatever, they are in a perfect state of insubordination, and say they will not leave the place, for you or anyone else. They are not willing for me, or any of my brothers to stay here, and here we are, and mean to stay until you come.

They are ruining the plantation by cutting of all the wood, and cannot control them, The season is late, and the time short, I would beg leave to mention, that your presence is *very much* needed, not only for this plantation, but for the whole Island. You can cross at John's Island ferry. Very Respectfully Your Obedient Servant, ALS T. A. Beckett[68]

In sum, the Lowcountry was in a state of chaos.

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[68] Brevet Brig General James. C. Beecher to Captain M. N. Rice, 17 March 1866, enclosing T. A. Beckett to Brigadier General Beecher, 15 March 1866, Letters Received, ser. 2421, Military Dist. of Charleston, RG 393 Pt. 2 No. 145 (C-1750) reprinted in Hayden et. al 2013b.

Emancipated South Carolinians

Interviews from the Works Progress Administration illustrate what the residences of some Emancipated peoples were like. Across the state, their homes are generally described as “ramshackle” (Davis 1938, Dixon ca. 1937b). Their quarters were similarly poor during enslavement; a Stono descendant cited in Frazier (2006:25) notes that “dat damn house we live in waz no better un da stable dey mule live in. Wen it rain, water leak to dey house roof un we get wet in bed, on rainy nights we catch hell.” In fact, at least some descendants of people enslaved at Stono plantation lived in “small slave cabins” well into the twentieth century (Frazier 2006:31, 43).

The homes’ shoddy appearances both prior to and during Emancipation were due to impoverishment. Yet, not all Emancipated peoples had roofs over their heads, “ramshackle” or otherwise. Those people who had no family to rely on and too few resources of their own to create a livelihood took up residence with friends and subsisted by doing “light jobs, mostly for white people” (Grant ca. 1937).

While Williamson (1965:177), notes that many formerly enslaved people were better off materially than they had been prior to Emancipation, while others were “of course” worse off materially than they had been during slavery. At least one study found that more than three times as many whites as “blacks” interviewed described the quality of their food as “good” (Yetman 1984:188). In addition, freeman Ezra Adams (Grant ca. 1937), states “freedom ain't nothin 'less you is got somethin' to live on and a place to call home.” His statement suggests that many freedpeople did not have the necessary resources to survive independently after Emancipation. This notion is supported by the fact that many freedpeople continued or returned to work for those who had previously enslaved them.

In order to assist Emancipated peoples in their efforts to become independent both materially and socially, the Bureau sought to “safeguard rights and secure justice” for Freedpeople who were living under South Carolina’s Black Codes (United States Congress 2005:5, Williamson 1965). Unfortunately, these codes effectively restricted the rights and legal status of Freedpeople (Blackmon 2008, Hayden et. al 2013b, Williamson 1965).

In addition to disenfranchisement, Emancipated peoples suffered from direct manipulation by resource-rich people with political agendas. One freedman (Ed Barber in Dixon ca. 1937a) says that in Winnsboro, South Carolina, if a man of color was hungry, he could “go to de white folk’s house, beg for a red shirt, and explain hisself a democrat.” That is, some Emancipated peoples either lied about or aligned their political affiliation against their best interest in order to access the resources they needed to survive Reconstruction. In fact, Emancipated peoples could be fired from their jobs (as contracted) if they openly held Republican ideals[69] (Williamson 1965).

Freedpeople could also be fired if they refused to labor beyond the terms of the contract. Such refusals included working for small shares rather than wages, refusing to harvest more than the agreed upon amount of cotton, or ignoring landowners’ demands

[69] Interestingly one of the Works Progress Administration’s interviewers, W. W. Dixon seems to have had political sway of the freedpeople he interviewed. Each of his interviewees mentions having voted for Hampton (Dixon ca. 1937a-j) or otherwise being aligned with Democratic ideology.

that they obtain passes for traveling off the plantation. When agreements could not be reached, Emancipated people sought living and working arrangements elsewhere, which led to population movements including relocation as well as emigration from the state[70] (Williamson 1965, Woody 1930).

As a result of the Bureau leaving the South to be handled by its own residents, the increase in wage-based labor in lieu of sharecropping, and the disenfranchisement of freedpeople in general, labor contracts in written form declined throughout the decade following Emancipation (Williamson 1965). This decline in written contracts may explain the dead end in the paperwork trail for laborers on Stono Plantation after 1866.

The gains toward full citizenship initially gained by Emancipated peoples in South Carolina were lost by 1877 with the election of Wade Hampton III. Hampton-backing Democrats rabidly sought the "Negro" and Northern immigrant vote and it is not clear how many voted Democrat by choice or persuasion[71] nor how many would-be Republicans were prevented from voting through such means as night raids by the Klu Klux Klan[72] (McInnis 2016, Kane and Keeton 1994, Orser 1989, Reed et. al 2016, Tyson et. al 2013, Williamson 1965, Yetman 1984). In fact, these types of intimidation or terror

[70] Yet, only about ten-percent were able to leave the plantations where they had previously been enslaved and remain away long-term (Williamson 1965:107-109).
[71] That is, convinced not to vote by the Redeemer campaign which vilified Republicans or fraud charges levied against Republicans.
[72] Notably, one of W. W. Dixon's (ca. 1937) interviewees, Thomas Campbell states that he remembers nothing about the "Ku Klux" because they "wasn't concerned 'bout me."

tactics were used throughout the Atlantic World and throughout the historical period[73].

According to Frazier (2006) most black James Islanders were Republicans in 1976.

[73] See Blackmon 2008, Ekeh 2001, Finch 2015, Gordon and Anderson 1999, Greene 1987, Hayden et. al 2013b, Higginson 1969, Linebaugh and Rediker 2000, Mintz 1996, Mullins 2004, Rugemer 2013, Sweet 2011, and Zinn 2015.

CHAPTER 3
THEORETICAL FRAMEWORK

In this chapter I establish the theoretical framework used in this research project. I first outline the history of historical archaeology as a discipline. I then delve into the framework for this dissertation: African Diaspora. I also discuss critiques of the perspective. While the framework is centered on an African Diaspora perspective, this dissertation specifically relies upon foodways as a means of identifying the daily lifeways of Stono plantation inhabitants. Foodways also enable me to broaden the scale of the project from the Stono site to the Lowcountry region and even further, to the American South and into the Atlantic World. Specifically, I explore creolization as a means of exploring cultural transformations and the ways in which they may be seen through foodways and their material residues. I then investigate racialization as part of the setting for these cultural transformations and habitus as the means through which the transformations occur.

Historical Archaeology

The earliest historical archaeology project was conducted during the 1960s when Fairbanks explored coastal plantations with the aim of understanding the lives of the people who resided there (Singleton 1995:119). He initiated "one of the most popular and rapidly growing research areas in historical archaeology" when he turned the focus away from the architecture of "great houses" and toward enslaved people (Singleton

1995:120). Other reasons that African American archaeology became popular among historical archaeologists during the latter part of the twentieth century include the Civil Rights Movement, black activism, historic preservation legislation, and public archaeology as a means of interpreting historic sites for the public (Singleton 1995).

Orser (2010) lays out a chronology of historical archaeology as a field of study. He (2010:113) notes that during the late twentieth century historical archaeology arose as a part of anthropology. During that period themes of the discipline included historical archaeology as a supplement to the histories of places and the people who inhabited them. In effect, historical archaeology fitted within historical studies rather than anthropological endeavors. A second theme saw historical archaeology as a means of reconstructing past lifeways; that is, an anthropological rather than "historical" pursuit (Deagan 1982).

The 1990s was marked by conversation about whether historical archaeology was processual (utilitarian, functional, and empirically centered in method and purpose) or postprocessual (focused on exploring meaning and symbolism) (Little 1994, Samford 1996). The processual approach saw cultural variation as differing behavioral systems that could be identified through pattern recognition based on the ratios of particular artifacts within site assemblages (Samford 1996, South 1977).

South's (1977) patterning process identified different site types, which have been revised over the years (Garrow 1982, Drucker and Anthony 1979) such as the Frontier and the Revised Frontier Pattern, the Carolina Pattern, and the Carolina Slave Pattern. Patterning involves putting artifacts into groups that label the activity the artifacts were used for. Garrow's (1982) groups include: activities, architectural, clothing, furniture, kitchen, personal, and tobacco (Grunden 2013). Proponents of patterning note that it is an imperfect way of categorizing artifacts as objects can have more than one use or be used for tasks they were not intended for. Patterning is still used by some historical archaeologists (Ramona Grunden and Jim Legg, for example) and archaeological departments of private sector firms and public institutions today (such as New South, SCIAA, and TRC).It is not used in this dissertation as I find human culture and behavior to be more variable than patterning accounts for.

The 1990s was also a time when historical archaeologists explored the ways in which the discipline as anthropology, linked with political science, most notably capitalism (Little 1994, Orser 2010) The most influential archaeologist to use this approach is Mark Leone who established the Annapolis School through his analysis of materials from sites in Annapolis, Maryland under a capitalist purview. The capitalistic project within historical archaeology involves examining class formation, revolution, marginalization as a result of capitalist social relations that see social hierarchy as a natural structure (Leone 1984, Marx and Engels 1948).

If the 1980s and 1990s were about defining the discipline of historical archaeology and finding projects for it, the 2000s were about scalarity. Both the "subjects" and scales of study were broadened to include intersections of social facets such as race, class, and gender, using both narrative and empirical testing, and leaving room for differing interpretations among practitioners (Orser 2010, Paynter 2000). Orser (2010) cites four areas of research: scale (linking local and global), capitalism (as a lens for exploring the globalization of people), vectors of inequality (using archaeology as a voice for those people who are either unrepresented or misrepresented in documentary sources), and heritage and memory (exploring the social meaning of places and why some are "more important" than others).

The influence of anthropological and historical ideology and approaches are clear throughout this dissertation. I rely upon historical documents but also take them as a biased perspective. I utilize the information contained within documents such as interviews; however, I make of point of noting authors' influence upon them when it arises[74]. This dissertation contributes to both anthropological and historical endeavors. I also rely upon empirical methodology including the development of hypotheses and the testing of these hypotheses through data analysis. At the same time, my interpretations are not processual in nature. I incorporate both functional/utilitarian uses for objects while also leaving room for symbolism[75]. These aspects of historical archaeology are discussed in relation to African Diaspora perspective and creolization in a forthcoming section.

Foodways in Historical Archaeology

As noted above, the first efforts at understanding foodways among diasporans in the Lowcountry were carried out by Fairbanks in 1967 at Kingsley Plantation, Fort George Island, Florida. He sought Africanisms reflected in material goods, but instead found that a variety of foods were prepared within the houses of enslaved people rather

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[74] See my notes on the WPA interviews conducted by Dixon (1937 and 1938), for example.

[75] See my discussion of identity in relation to the inhabitants of Stono, for example.

than in a common kitchen as had been believed (1984:2). This twist led him and his students to delve further into the lifeways of enslaved people within the southern Lowcountry.

Reitz et. al (1985) noted the gap in knowledge about diets of the enslaved. By using archaeological data, they demonstrated that enslaved people consumed a variety of foods including wild foods obtained from local environs, which supplemented the foods obtained through domesticated sources. They note the diversity of resources available in the sea islands, which includes estuarine fish, turtles, waterfowl, sea and shore birds, mammals, and invertebrates as well as numerous plants (Reitz et. al 1985:164). In fact, numerous sea island plantation sites have been documented as having diets composed of both domesticated and wild resources including: Rafield/Ryefiled Plantation, Cumberland Island, Georgia (Ascher and Fairbanks 1971, Fairbanks 1984); Stafford Plantation, Cumberland Island, Georgia (Ehrenhard and Bullard 1981); post-Emancipation Parland Plantation, Colonel's Island, Georgia (Steinen 1978); Sinclair Plantation, St. Simon's Island, Georgia (Moore 1981); Jones Creek Settlement, St. Simon's Island, Georgia (Moore 1981); Pike's Bluff, St. Simon's Island, Georgia (Moore 1981); and Butler Island, Darien, Georgia (Singleton 1980). This diversity is reemphasized in the faunal analyses and results in my dissertation.

I also follow Reitz et. al's lead in combining written documentation, including some based on oral transcripts from enslaved individuals and their descendants, with archaeological data in order to form a "more complete picture" of foodways among enslaved groups (1985:165). In addition, I listen to Fairbank's recommendation that scholars keep biases in mind when studying enslaved groups, especially when utilizing documentary resources related to them. The primary biases he cited were the oppression of firsthand written accounts and a focus on the unusual in the accounts written by observers (1984:1). I note such biases throughout this dissertation.

Archaeologists at Thomas Jefferson's Monticello were another group of late twentieth century scholars who sought to understand the foodways of enslaved people. A comparison of faunal remains uncovered from two sites known to have housed enslaved people surprised archaeologists. One contained the expected lower quality, lower desirability cuts of meat such as heads and feet, while the other included many different skeletal elements and higher quality meat cuts (Crader 1990). Crader's (1990) results demonstrate the variable among diets of the enslaved, even those residing on the same plantation.

Thomas (1995) found strikingly diverse assemblages among three habitations for enslaved people at Andrew Jackson's Hermitage Plantation in Tennessee. Those assemblages included varying numbers of mammals, both domestic and wild; bids, both domestic and wild; reptiles; amphibians; and fish. Enslaved residents of Thomas Jefferson's Poplar Forest also took advantage of natural resources. A faunal assemblage analyzed there includes marine and freshwater fish, amphibians, reptiles, birds, and mammals (Klippel 2011). The findings of Crader (1990), Klippel (2011) and Thomas (1995) are important because they signal the diversity of experiences within enslavement, a point which humanizes slaves as individual people and underscores the societal tendency to talk about slavery as a unified institution for labor and production.

They also emphasize the fact that people enslaved by powerful wealthy men who led our country and are sometimes thought of as "benevolent" slave owners[76], supplemented the diets provided to them in the form of rations. This fact demonstrates the way in which enslavement was dehumanizing. Enslaved people were not cared for as "members of the family;" they procured and prepared their own food and created their own cuisines. They (re)created foodways which have influenced those of the South and the Atlantic World at large. In this dissertation I seek to pay them homage.

A Note on "Second Slavery"

The Diasporic perspective I use draws upon the system of racialized slavery that existed at Stono and throughout the Atlantic World during the colonial era through Emancipation in South Carolina and into "second slavery" (Ferrer 2014, Kaye 2009, Schwartz 2012), the period during which repercussions of racialized slavery were experienced post-Emancipation into the early to mid-twentieth century, Jim Crow era[77].

During that period, capitalism began to rise throughout the Atlantic World. Markers of the era include sugar production in Cuba and cotton production in the United States (Tomich 2016). Indeed, cotton production at Stono may also have increased during the early nineteenth century as Dill, a cotton factor came to own the plantation. The combination of staple and subsistence crops as opposed to

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[76] See http://www.historianviews.com/?p=360 and https://www.npr.org/transcripts/670803601 for examples specific to Thomas Jefferson and https://tvtropes.org/pmwiki/pmwiki.php/Main/ SympatheticSlaveOwner for a discussion of the societal trope of benevolence among slaveholders.

[77] A post-Emancipation re-enslavement or "second slavery" also occurred in Haiti after the Haitian Revolution, on the cusp of the eighteenth and nineteenth centuries (Tomich 2003).

monocropping, and the shift from slave labor to wage labor are hallmarks of second slavery (Kaye 2009). As Grinberg (2018) points out, the nineteenth century may have begun with an increase in slavery, but the end of the century brought Emancipation, which did little to diminish agricultural production through the cultivation of cash crops.

I argue that the changes undergone across the Lowcountry are part of that shift to second slavery as defined by Tomich above. However, unlike Tomich (1991, 2003, and 2016), I argue that Emancipation ended slavery in name only. As discussed throughout this dissertation, the economic, social, and political conditions of freedpeople's daily lives changed little, while structurally, Lowcountry society's two decades of Reconstruction gave way to Redemption. Specifically, I note that the Stono Plantation continued to rely upon tenant labor, which was undertaken by farm workers only as a last resort (Frazier 2006 and 2010, Carl Steen in discussion comments at the Southeastern Archaeological Conference 2019). Even by the early to mid-twentieth century, the tenant farming descendants of enslaved people were not truly free and some avoided wage labor by producing their own food resources through gardening and fishing (Carl Steen in discussion comments at the Southeastern Archaeological Conference 2019).

Although I do not agree completely with Tomich's perspective, I do find connecting the antebellum and later period useful in that it emphasizes an Atlantic perspective over a localized one. The diachronic nature of this study enables me to connect the archaeology of a particular group of enslaved people using their foodways with those of their tenant farming, or sharecropping, descendants. To create this trail, I use dietary contributors, procurement methods, storage methods, levels of access within and among formal and informal markets. More broadly, I link these elements of foodways with changes to the economic structure, a physical environment that diminished in fertility and abundancy, a society that was continually oppressive (in terms of the ability to engage in free labor), equitable economic engagement and opportunities, and a political landscape dominated by white supremacy. Despite these obstacles, the enslaved populace and their foodways transformed through time such that their culture creolized, a process that I define below, and which can be identified through material correlates uncovered in archaeological excavations when used in conjunction with historical documents and oral histories.

African Diaspora Approach

In this dissertation, I use “diaspora” as defined by Vinson (2006:7): a stance that theorizes, documents, and strives to understand the movement of black peoples from their ancestral homelands to a variety of host-lands, but goes beyond migration to social, psychic, political, cultural, and economic meanings of black movement and the interrelationships maintained among diasporans, their hosts, and their homelands.

The diaspora concept enables scholars to discuss Africans and their descendants without homogenizing the diverse group into one particular race, ethnicity, or nationality. It labels a people with a common history while also acknowledging the wide diversity of people within the group. While it does engage Eurocentrism by pitting Africans as the Other on ‘the “wrong side of the Atlantic,” it is a useful ontology as it emphasizes that nature of collective exile (Echeruo 2001:7). The foundational premise for the diaspora concept is the spatio-temporal connection, which spans Africa to the Americas, beginning in the 16th century and continuing into the present (Okpewho 2001). In fact, the diasporic group coheres from collective experiences including the Middle Passage, enslavement, and later, class struggle created by the rise of globalized capitalism (Linebaugh and Rediker 2000, Walvin 1983). Such experiences are often negative[78]. Indeed, it is communal suffering and a shared idea of a foreign home that unites diasporans (Echeruo 2001). According to Okpewho (2001:xi-xiii), there are three paradigms within the diasporic premise: the labor imperative, the territorial imperative, and the era of the extractive imperative. Here, I focus on the labor imperative by emphasizing the role of enslavement and later, debt peonage as the contexts which enabled the process of creolization to exist in the Lowcountry and throughout the Atlantic world.

Using this kind diasporic frame in archaeology enables scholars to see how cultures and their material correlates vary through space and time. It incorporates traditions rooted in Africa and transformations brought forth by people descended from Africans (see Wilkie 1996a and 1996b for example). Diasporic studies in historical archaeology (specifically the Americas and the Caribbean) grew out of plantation studies that sought to understand African and African American lifeways (see Ferguson 1992, Howson 1990, Singleton 1991)[79]. Particular areas of study have included spatial

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[78] It should go without saying that not everything that has come out of the Diaspora is negative. Examples include the Harlem Renaissance and Kwanza (Skinner 2001); Calypso, Reggae, and Rastafarianism (Warner-Lewis 2001).

[79] Plantation studies in contrast, stemmed from nationalism and the desire to better know the lives of our "founding fathers" such as Thomas Jefferson and George

arrangements and the negotiation of power (e.g. Armstrong 2014, Singleton 2001, Symanski 2012, Thomas 1998). Other foci are material culture such as architecture (Finneran 2013) or ceramics (Adams and Boling 1989, Brilliant 2011, Galke 2009, Isenbarger 2006, Wilkie 2000). Spiritual objects have been another avenue of research (Davidson 2014, Lucas 2014, McKee 1993, Wilkie 1997). Tools and their use have been yet another (Evans 2012, Wilkie 1996b). A final grouping of artifact types that help archaeologists get at Diaspora-related questions are foodways (Crader 1990, Mrozowski et. al 2008, Reitz 1994, Scott 2001, Tuma 2006, Wallman 2014, Wallman and Grouard 2017). Combinations of these items have also been considered (Holland 1990, Wheaton and Garrow 1985, Voss 2005, Zierden and Reitz 2016).

Samford (1996:87-88) describes the ways in which the material correlates of African American histories, most notably those uncovered at plantation sites, drew archaeologists into studies of culture change through the use of the scientific method in conjunction with history, folklore, anthropology, and material culture studies. In this way, scholars are able to see objects as culturally significant articles of past lifeways (Samford 1996). Through such explorations, historical archaeologists have identified vast differences among the lives of African Americans, particularly groups such as enslaved people who are sometimes lumped together as a single entity rather than a diverse set of human beings (Samford 1996). For example, the concept that enslaved people consumed diets of rationed livestock has time and again been shown to be false;

Washington (Wilkie 2004). In recent years the archaeological agendas at Monticello and Mount Vernon have shifted toward diasporic approaches, the specter of powerful White men remains palpable within these programs (personal observation).

while at some plantations this may have been the case, others have demonstrated varying degrees of supplementation to such diets and even little reliance at all upon rationed foods based upon the prevalence of ammunition, wild plant and animal remains, and evidence of cultivated food gardens (Samford 1996:96).

Other approaches focus on activities and practices of Diasporans (Agha 2015, Bowes 2011, Handler and Jacoby 1996, Handler and Wallman 2014, Joseph 2016, Mullins 2011, Watters 1994, Young et. al 2001). More broadly, archaeologists have sought to get at structural questions such as class relations (Brown 2011, Delle 1999, Joseph 1993, Orser 2011, Reilly 2013, Wurst 1999). Another broad theme is labor systems (Berlin and Morgan 1993, Carney 2001, Crook 2001), and as it relates to subsistence (Klippel et. al 2011), and marketing (Reeves 2011). Other topics include power and resistance (Davidson 2004, Faust 1980, Finch 2015, Franklin and Schweninger 1999, Lenik 2014, Wallach 2015), cultural change (Cusick 2000, Finneran 2013, Weik 2009), and economics (Hauser 2008 and 2015, Orser 1988, Spencer-Wood and Matthews 2011). These questions and object-related avenues as outlined above, are typically combined.

Methodological questions such as scalarity (Hauser 2008, Kelly 2009, Lenik 2009, Ryzewski and Cherry 2015, Wilk and Rathje 1982) and temporality (Agorsah 1993, Armstrong and Hauser 2004, Brown and Cooper 1990) have also been addressed. So too have ontological questions about our questions and what it is we are even doing (Agbe-Davies 2017, Farnsworth 1993, Mullins 2008, Pestle et. al 2013, Potter 1991, Ross 2012, Wilkie and Bartoy 2000). Archaeologists working with a diasporic bent also continually make strides to rethink traditional approaches by creating continuity between the past and present (Battle-Baptiste 2017, Jackson 2011, Lane 2011). In addition, Orser 2010, Samford 1996, Singleton 1995, Wilkie 2004, and Zarankin and Salerno 2008 provide in depth synopses of past and future directions of Atlantic and Diasporan archaeologies.

Diasporic approaches have been critiqued as attempting to ignore variation among Black people (people with African ancestry) leading to homogenization of a highly diverse group comprised of people from a vast continent over hundreds of years (see Armstrong 2008, Morgan 1997, Mullins 2008, and Vinson 2006 for such critiques). In addition, identifying a group as “diaspora” Others them in a way that anthropological thinking has made strides to get away from over the past century (Echeruo 2001, Mullins 2008). Simply labeling a group as “Black” or as part of the African Diaspora, marks it as different (Barnes and Steen 2012, Mullins 2008). Sweet (1990) counters these claims by seeing the African diaspora as a perspective situated within a broader Atlantic Creole World.

One example of overgeneralizing “Africanness” in Diaspora studies is the blue bead. Agbe-Davies (2017) notes that uncovering blue beads in an archaeological assemblage has been linked to the presumptions that the bead expresses an “African” idea of blue as a color useful for protection that is shared among all members of the Diaspora and that the symbolism holds across all blue beads within the material record. DeCorse (1999:144) suggests that in some cases, the beads (being inexpensive) demonstrate more about the socioeconomic status of site inhabitants than it does the commonality of an “African” protective device.

Another example is discussed at length by Davidson (2014). He outlines the misidentification of a "hand charm" by Smith (1976) within the archaeological assemblage uncovered at the Hermitage Plantation, Tennessee. Davidson critiques that finding with his own recovery of the same "charms" at Kingsley Plantation, Florida. His extensive research provides evidence that the finds are not charms at all, but are instead inexpensive clothing fasteners.

Similarly, the Bakongo cosmogram (which resembles an "X"), has at times been inappropriately identified and/or interpreted as a marker demonstrating African practices and beliefs where it is not clear that such behaviors and ideology existed (Armstrong 2008:123, also see Mullins 2008:115). The cosmogram originated in the Bakongo religion found among the residents present-day Cabina, Democratic Republic of the Congo, Republic of the Congo, and northern Angola (Ferguson and Goldberg 2019:2). Its presence on objects such as pottery in other areas of the world has been taken as evidence of ancestral African practices continuing among Bakongo descendants (i.e. DeCorse 1999, Mullins 2008:114). Such continuance has been cited as a "survival" (Garrett 1966) and as a kind of "multi-source creolization" (Ferguson and Goldberg 2019:2).

Many of the authors cited above (Armstrong 2008, Davidson 2014, Mullins 2008) note the importance of avoiding overgeneralizations of "Africanness" and caution readers to attend to economic considerations alongside spiritual symbolism in their interpretations of material culture from archaeological sites inhabited by members of the Diaspora. Such cautions have been given for years (Howson 1990, Orser 1994, Samford 1996).

In this dissertation I have attempted to answer that call by establishing a study subject and avoiding over-objectification of that subject. I use evidence to support my claims and make efforts not to attach unfounded meanings to objects or put forth unsubstantiated notions about site residents. Further, by using multiple archaeological sites I provide evidence for variation with the portion of the diaspora I research, but in finding similarities among their material culture and histories I show their connectedness.

I aim not to further marginalize the residents of Lowcountry plantations, but rather to point out the real effects of their collective experience and to underscore the means in which they established a community with shared food-related practices. This community is reflected within the material culture, traditions, and oral and written histories of Stono residents. These pieces of evidence are compared with other Lowcountry plantations in order to demonstrate regional affinities within enslaved and tenant farming communities. These affinities are then used to identify cultural transformations related to foodways, economic access, and Southern and Atlantic world ideologies and practices related to racialization and discrimination, access to resources including food and related ephemera as well as economic networks and sociopolitical standing.

I link the collective experiences of the study site residents with the socioeconomic and political landscape of today in this dissertation. While this is not intended to be a piece of activism, it is true that diaspora studies are inherently political because they arose during the Civil Rights movement of the mid-twentieth century and because they are about "Blackness," a racialized identity indicative of African origin and difference from lighter-skinned populations who have experienced terror and marginalization even as their deeper histories vary (Gordon and Anderson 1999, Warner-Lewis 2001). As a result, this dissertation is political in that it refuses to serve as an apologist for slavery, "second slavery," and the effects of those institutions that influence the inequities of society today, which include economic, political, and social marginalization related to housing, jobs, incarceration, etc. that affect knowledge of food and its relationship to health as well as access to diverse and healthful foods. Most of these obstacles (such as red lining, gerrymandering, and "food desert" "ghettos"[80]) are covert rather than blatant as they were in the past (Alexander 2012, Armstrong 2008, Couto 1991, Ruef 2012).

Creolization

Creolization theory is a means of identifying diasporans and understanding the historical processes they experience(d). The theory was born in the field of linguistics. There, grammar refers to the learned rules of proper word order and sentences (Fennell 2011, Garrett and Baquedano-López 2002, Lemert 1979). With the grammar comes a lexicon of words that are used as signifiers and are ordered by grammar (Fennell 2011, Mintz and Price 1976 and 1997). These concepts were applied to culture in the following

[80] See Blackmon 2008, Brones 2018, Couto 1991, Daniel 2013, Hall 2014, McInnis 2016, Oakes 1986, Rothstein 2017, Weisbrot 1991

way: material culture served as the lexicon for lifeways, which were composed and ordered by social grammars. These were learned and passed on within and among cultures (Fennell 2011, Ferguson 1992, Mintz and Price 1976 and 1997). For example, when imported ceramics were used to serve West African-style meals, creolization was being demonstrated (Joyner 2001, Ferguson 1992).

Mintz and Price (1976 and 1997) argue that there is a fundamental contrast between people with European ancestry and people with African ancestry within a colonial setting. They suggest that while European groups tended to be homogenous or maintain national, ethnic, or linguistic boundaries from one another, Africans were drawn from diverse cultures and societies which may have had mutually unintelligible languages. The reason for this difference is that Europeans tended to migrate in groups whereas Africans were generally not able to travel or settle in cohesive groups with a common cultural background (Mintz and Price 1997:40). A common culture involves a body of beliefs and values that were socially acquired and patterned and serve to organize a group through guides of and for behavior (Mintz and Price 1997:40).

African American cultural heritage is thus defined more on values than on sociocultural forms. That is, while the expression of cultural practices varies among African societies and their members, the basic views about social relations and the workings of the universe are held in common (Mintz and Price 1997:42). Indeed, rather than treating commonly held African-based ideologies as "a culture," they suggest the lack of institutionalized articulation forms mean that the "culture" exists only when used in comparative contexts (Mintz and Price 1997). Essentially, creolization is a grammar with words that vary depending upon the speakers and situations. That is the tact I take in this dissertation. I do not suggest a Stono or Lowcountry culture, but instead suggest there are similarities among individuals who labored as enslaved or tenant farmers within these spaces, which may be compared with other groups.

The idea that African people hold at least some universal views has been critiqued as reductionist; that is, at some point Pan-African inclusiveness can become racial essentialism (Vinson 2006). It also tends to lessen specificity and detail in scholarship and instead encourages a vagueness that homogenizes the diverse people and cultures of an entire continent as well as those with African heritage that live in various places across the globe (Stewart 2016, Vinson 2006). Further, such "interculturation" and the "creativity of cultural production" enable "global appropriation," the stereotypification of culture by aligning identity with nationalism (Munasinghe 2006:1-2). That is, by assigning the label "African" or "Diaspora" to people, we are broadening their identities in a way that they themselves do not.

In precolonial Africa, countries, nations, and nationalism did not exist (Morgan 1997:153). Even the ethnic group terms that have been applied to peoples have sometimes been based on uprisings, artistic styles, religious affiliations, or other "traits," which are not "African," but are instead the result of ethnogenesis (Morgan 1997:137-140). In sum, the historic context in which creolization theory arose from a particular history to address the formation of specific social and cultural formations (such as African Americans in America) (Munasinghe 2006:10). It places a global theory of how culture changes above the local productive context of the very concepts of culture, indigeneity, and exclusion (Chivallon 2008, Munasinghe 2006:11). Such critiques while valid, also lend themselves to such particularistic application that no meaningful comparisons can be made at all (Echeruo 2001, Palmié 2006).

Put simply, creolization involves a mixing of traditions and heritages. It is a group identity that functions as resistance to dominant institutions and social structures, but the same time accommodates them (Cusick 2000, Johnson 2003, Sweet 2011). Borderlands, or areas set away from centralized power[81] provide the opportunity for its creation (Cusick 2000)[82]. Under this definition, creolization in the Lowcountry arose in part because of the rural element of plantation living that encouraged cultural cohesion among residents. Plantations such as Stono were set apart from cultural, political, and economic centers such as Charleston (although they were still in contact with that city and were socioeconomically entangled with it). The Anglo-centric colonial Charlestonian lifeways were brought to plantations through owners, their families, and visitors. Alongside this "official culture" was the "Black Majority" (Wood 1974) of enslaved people that farmed plantations and ran households. In plantation spaces, West African traditions such as Bakongo symbolism intertwined with White practices such as Christianity (Fennell 2007). This intersection of cultural objects, practices, and worldviews is creolization.

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[81] The separation of spaces from power centers does not have to be a defined "frontier" or "borderland," rather it can simply be land (Richardson 2001), which serves as a physical buffer and thus creates a psychosocial distance.

[82] This is not to say that urban settings cannot also foster creolization or that the material records of urban archaeological sites cannot be correlated with African American culture. See Dawdy 2000 and Leone 2005 for examples.

It is important to note, however that the colonizer-colonized dichotomy is only a means of simplifying a complex situation[83]; it is a false dichotomy. In reality, the colonial context was more complicated than a Black-White binary; various European, African, and Native American groups came together in a variety of ways such that the presumed European-Other boundary is fuzzy at best. Variations within groups exist be they based on ethnicity or place of origin, gender, nationality, religion, class, status, age, etc. Any of these can be important to identity and must be borne in mind by archaeologists studying the transformation of identity and the role of material culture in that transformation (Voss 2005). As a result, creolization involves interethnic interactions that stimulate cultural transformation through “creative combinations” (Lightfoot 2015). In the Lowcountry, these interethnic interactions involved indigenous, European, and African practices of production and the objects produced through modes of exchange such as trading and sale in both formal and informal markets. The particular combinations vary through time, across objects and practices, and among the individuals involved in any given interaction (Silliman 2012).

Ethnogenesis in contrast to creolization, is the development of a regional identity, which is forged through the experiences of colonization and cultural contact (Voss 2005:465). It emphasizes the birth of an ethnic identity that is distinctive from extant area groups (Lightfoot 2015). It denotes the creation of new collective identities

[83] According to Orser (2010) vectors of inequality (such as identifying a particular group as Other and labeling that group as “Black” or “enslaved,” for example) is a means of separating out an entity for examination; it is not a representation of a historical reality (Orser 2010:125).

based on changes occurring in existing groups (Cañizares-Esguerra and Sidbury 2011). It is ethnicity created anew, in contrast to a process through which various groups contribute to cultural transformations (Sweet 1990). Viewing culture change through an ethnogenic lens enables archaeologists and historians to emphasize the negotiation of identified and oppressive social hierarchies; it focuses on empowering marginalized people through the expression of self in and as resistance to the groups that are attempting to dominate and oppress them (Lightfoot 2015). Ethnogenesis might thus be seen as punctuated equilibrium rather than a gradual, temporally extended process.

The concept of hybridity is similarly a negotiation between a dominant and subaltern that occurs within a multiethnic context (Lightfoot 2015:9220). Like ethnogenesis, it results in creation. In contrast to ethnogenesis it does not suggest that ethnicity arises, but instead that material culture and practices are born out of cultural contacts within hierarchical social structures (Lightfoot 2015).

A postcolonial take on hybridity involves admitting than an empirical (Western, White) colonization of consciousness exists and is biased, but also that it allows for self-reflection upon European colonization and the social hierarchy involved in the process of colonization. This empirical bias can be used to identify false dichotomies and arbitrary boundaries by engaging revisionist and indigenous views. It can and should also acknowledge the effects that past actions, events, and studies of those actions and events inform our present and our views of the present (Lane 2011, Naum 2010, Warner-Lewis 2001). Indigenous views and the diversity therein, as well as the traditions used with those groups (such as oral histories and worldviews that are not based upon empiricism) are used to inform studies of culture contact (Graden 2014, Lane 2011, Nassaney 2012, Naum 2010).

All of these approaches seek to avoid centrism, both Eurocentrism and Afrocentrism, each of which ignores the negotiation of daily life in the (re)formation of identity and society in any given context (Price 2006). Further, the focus on cultural transformation through contact (termed in this dissertation as "creolization") seeks to avoid homogenizing any particular group (such as White or African) in favor of embracing the diversity of the people existing within the space under consideration (Price 2006). Here I focus on the groups present within the Lowcountry and acknowledge the variety of identities that exists within those groups. The differences among members of these groups enable the individualistic or particularistic mini-societies that comprise an individual plantation (such as Stono) and the unique material assemblages present at plantation sites. At the same time, it connects these mini-societies to one another through the broader common experience of captivity, relocation, enslavement, and tenancy.

The Gullah

In this dissertation I focus on one sub-group of African Americans that transformed collectively in a number of cultural practices (most notably language, but also perhaps, foodways): the Gullah or Gullah-Geechee. This group is comprised primarily of people who descended from enslaved Africans who lived and worked the Lowcountry and particularly on its sea islands, including James Island (Crook 2001, Steen and Barnes 2010). The Gullah are one of the premier examples of creolization as a process, transformation, or ethnic identity (Steen and Barnes 2010).

Gullah identity arose between 1808 and 1865, when two to three generations of predominantly enslaved African American people had been born in the Lowcountry (Barnes and Steen 2012:177). According to Barnes and Steen (2012), the Gullah cultural identity evolved beside and within broader society until the post-Emancipation period. That era brought poverty, homelessness, and institutional racism that increased through time and led to forced segregation. Impoverishment became associated with being Gullah, and that idea was spread through integrated education during the 1960s, which led to the abandonment of Gullah culture by many who sought equality (Barnes and Steen 2012:178, Smith 1991).

Yet, some Gullah and Gullah allies sought to chronicle Gullah lifeways and to keep them alive by rejuvenating and rebuilding Gullah identity (Barnes and Steen 2012:178). They have done this primarily through community building (Barnes and Steen 2012, Smith 1991), as well as through initiatives such as the Gullah Geechee Heritage Corridor, a National Heritage Corridor established by Congress in 2006 (gullahgeecheecorridor.org). Today, many Lowcountry residents ascribe to Gullah identity with pride (personal observation based on papers and interactions at the Inaugural International Gullah Geechee and African Diaspora Conference 2019).

The Gullah people are closely tied to the lands on which their ancestors were enslaved. These ties grew at least in part due to the agrarian lifestyle lived during the era of enslavement, during which many Gullah and Gullah ancestors labored on agricultural plantations in the Lowcountry (Barnes and Steen 2012, Cary 2019). Many of the cultivation techniques and knowledge systems employed on these plantations were brought across the Atlantic by enslaved Africans who were brought to the Lowcountry (Cary 2019 and as cited elsewhere throughout this dissertation). The abandonment of plantations by many slaveholding landowners during the Civil War strengthened the ties of Gullah people to the lands upon which they continued to live and labor (Cary 2019).

One expression of the tie between the Gullah and their land is seen in their resistance leaving the Lowcountry in terms of emigration as well as evacuation in emergency scenarios, such as hurricanes (Bliss 2018). They resist because of their ancestral ties to the region respect for Gullah traditional lifeways, but also due to economic limitations (Bliss 2018, Hazzard 2012). They are similarly tied to the waters surrounding their lands, which they have fished throughout cultural memory (Ellis et. al 2014). These ties, however, are threatened by the inundation of immigrants to the region who are able to obtain land and especially waterfront land, through the failure of heir's property.

Heir's property was prevalent after the Civil War when freedpeople bought or were deeded property in such a way that no demonstrable ownership exists for any particular individual. Instead, property is subdivided among families descended from deeded owners[84] (Bliss 2018). Keeping all owners on the same page in terms of continuing to hold and maintain the property in question is fraught with difficulty,

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[84] The origins of heir's property on James Island can be seen in the confused records of land sales conducted by the Dills with island residents discussed in the next chapter and in appendices A, B, and C.

particularly when some owners are absentee and/or have no personal connection to the property or surrounding region due to previous emigration (Bliss 2018, Cary 2019). Such owners are able to partition the property and sell their share without the consent of the other owners. Some of these owners are taken advantage of by buyers who low ball the purchase price (Bliss 2018).

Individuals who own heir's property also struggle with receiving federal aid including FEMA assistance following hurricanes and the like because they do not have clear titles of ownership (Bliss 2018, Cary 2019). Although legal assistance has recently become available for such situations, the monetary cost and length of time involved in many instances forces owners off their land before they can obtain help (Bliss 2018, Hazzard 2012). Similarly, the inability to purchase or build a house without a clear demonstration of ownership and/or without the necessary on hand cash, had led many Gullah to buy and reside in mobile homes, which are taxed as personal property rather than houses thereby lessening their link to the land upon which the home is situated (Cary 2019). The high tax rate on these island lands also are prohibitively expensive for many Gullah people (Cary 2019).

In addition to the influx of outsiders, Gullah culture is being threatened by environmental changes. Hurricanes have negatively impacted Lowcountry infrastructure and warming Atlantic waters have led to diminished aquatic resources such as the fish and shellfish that are so vital to their traditional foodways (Ellis et. al 2014, Milman ca. 2020). Decreasing numbers of aquatic animals has led to limits being placed on the allowable numbers of animals caught. These limits have diminished the ability of Gullah people to use seafood as an item for barter and trade, a practice which many have undertaken for decades and even centuries (Cary 2019). These economic, social, and environmental forces come together forcing Gullah to leave their ancestral lands.

The complexity of land ownership and sustaining livelihoods among residents of the Lowcountry serves as an example of structural racism perpetuated among African Americans within the South and greater Atlantic World. The structural racism that acts against the Gullah of today began with racialized enslavement of their ancestors. Importantly, racism is not the only effect of their enslavement. The foods they obtained from their physical environments and consumed during enslavement and throughout their history are linked to their origins as well as the cultural and societal transformations they underwent since the Middle Passage (Cary 2019). In this dissertation I focus on foodways among plantation residents and their descendants living in the Lowcountry as an entanglement of a group of people and their culture with the lands upon which they reside and the histories they have endured.

Archaeology of Culture Contact

The pride demonstrated by many Gullah represents strength in the development and ownership of their own identity within an oppressive system. Indeed, such pride may be seen as eschewing broader society[85]. Indeed, creolization is sometimes seen as resistance because it does not follow traditional, accepted norms. In the Lowcountry, creolization was a form of resistance because it embraced cultural diversity by including

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[85] For example, the Black Power movement of the 1960s and 1970s was seen as threatening to some who were not part of the movement (Ogbar 2019, Yetman 1984, https://nmaahc.si.edu/blog-post/foundations-black-power).

practices from African, African American, and Native American sources (Goldberg 2014). Resistance through identity has increased group bonding and cohesion within the Gullah community and enabled people to challenge the violence and forced subservience put upon enslaved people by slaveholders[86] and Carolina's society at large (Barnes and Steen 2012, Goldberg 2014). Further, cultural practices, which continued and/or arose as part of the creolization process in the Lowcountry also served as an act of resistance. For example, using a language not understood by slaveholders (Gullah) enabled enslaved people to hold private discussions even while under surveillance (Goldberg 2014:15). In addition, the separation of enslaved people (and other groups) from the physical proximity of slaveholders, which reinforced community-feeling has also been identified as resistance (Fennell 2011, Reilly 2014, Symanski 2012, Wallman 2014).

If continuing African lifeways serves as resistance within settings of enslavement (as suggested by Ferguson and Goldberg 2019, Fountain 1995, Goldberg 2014), then the objects created and used by enslaved people can tell us about resistance within their lives. Indeed, objects are sometimes taken as indicators of resistance, particularly when they are hidden from view (Thomas and Thomas 2004). However, objects do not have to be unseen to be connected with resistance. One example of this has been identified among people enslaved on Brazilian sugar plantations. These laborers lived within a hierarchical social structure, but they did so according to their own practices and

[86] Singleton (1995:130) states that enslaved people's efforts to maintain their own separate cultural identity from that of slaveholders can be interpreted as a form of resistance, but most studies focused (as of 1995) on objects that suggested a particular affiliation or identity.

traditions. Specifically, their production of earthenwares enabled them to express their own cultural mores into their physical spaces, which were ascribed to them by the plantation owner's spatial arrangement of structures (Symanski 2012).

Similarly, colonoware production and use in the Lowcountry were resistance because the ware "invoked the power of transformation and reinforced group solidarity in the face of oppression" (Ferguson and Goldberg 2019:16). Ferguson and Goldberg (2019:16) hypothesize that colonoware fell out of use during the 1830s and 1840s just as increasing numbers of enslaved people in Carolina converted to Christianity. The use of colonoware in traditional healing practices meant it had to be suppressed due to pressure from white ministers and slaveholders. In this way, colonoware, a product of and symbol of creolization and "Africanness" was quashed. It has also been suggested that colonoware was ascribed negative connotations due to its production during enslavement and all of the oppression that occurred within that context (Manassas 2009). Later, it fell out of use because of its connection to enslavement and thus, NOT using it was resistance[87] (Espenshade 2008).

Objects can be tied too closely to a particular identity as mentioned with the discussions of blue beads and hand charms above. For example, in the past it was common in archaeological studies to attribute objects to a particular group such as African, European, or indigenous, which ignores the actual social practices of daily life (see Singleton 1995 and Fennell 2011 for discussion and Greene 2011 for an example).

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[87] It has also been suggested that colonoware fell out of use because of the market revolution and the rise of industrialization that occurred during the 1830s (Greene 2011).

In reality, indigenous peoples, Africans and people of African descent, used European goods and vice versa. Further, the people themselves did not maintain bounded European, African, and indigenous groups, but mixed and varied (Lucas 2014, Silliman 2012, Weik 2004 and 2009). For example, creamware is a ubiquitous temporal marker often taken as evidence of British/Euro-American culture. So, its use in Native American households is taken as participation in the European market economy and evidence of culture change. The problem with this conclusion is that British/Euro-American households may have had Native (and African) servants, slaves, and/or employees whose interactions with the "European" objects was at least as prevalent as that of the Europeans themselves. Thus, the presence of "European" objects does not necessarily evidence a purely "European" space (Silliman 2012).

A second example of a material good that transformed in conjunction with creolization is low-fired, locally produced ceramics in the Spanish colonial Southeast. Where pottery may be taken as evidence of Indian women's incorporation into Spanish households, Silliman (2012) points out that nearly all households have the ware regardless of the ethnicity of their occupants. While some elements of an ethnic identity may be retained in stylistic attributes (Waters 2009:175), but because identities and symbols are so fluid, it is better not to attempt causal relations between the two (that is, a cross should not always be taken as evidence of Bakongo production and a pot with a cross does not necessarily indicate that the owner of the object ascribed to Bakongo ideals). In other words, a "Native" (or “African”) object does not become a "European" object, but instead reflects relations between groups (Silliman 2012:45, Waters 2009).

Lowcountry Cuisine as Evidence of Creolization

"The cuisine of the past is reconstructed through understanding how plantations and farms worked internally with respect to local and regional markets and in terms of commodity trade" (Shields 2015:7).

Cuisine: the combination of foods, manner of preparation, style of cooking and social rules regarding when, how, and by whom they are prepared and eaten as well as the circumstances under which they are eaten (Zierden and Reitz 2009:333), or "a repertoire of refined dishes that inspire respect among the public" (Shields 2015:1). Either way, a cuisine has common social roots, or social consciousness relating to what it consists of, how it is made, and how it should taste. Cuisine has been thoroughly explored as the signature of a community and as such is a source of pride, debate, and as a facet of identity[88]. For this dissertation, cuisine is a hallmark of Lowcountry history and culture.

Enslaved people supplemented their rations using both New World foods and Old World imports (Joyner 2001, Mrozowski et. al 2008). These foods include native, locally available items such as turtles, fish, chicken, duck and turkeys, crawfish and crabs, rabbits and squirrels, raccoons and opossums, deer, hominy, blackberries, mulberries, huckleberries, corn, and rice, as well as more recent arrivals such as domesticated pigs, lamb, peas, sweet potatoes, watermelon, sugar and molasses,

[88] See Atalay 2006, Bailey 2007, Bruegel 2011, Chambers 2015, Cronin et. al 2014, Dusselier 2009, Gumerman 1997, Hedegaard 2018, Mintz 1985, Moskin 2018, Mullins 2011, Pezzarossi et. al 2012, Reitz 1994, Shields 2015:4, Sunseri 2015, Van Sant 2015, Voss 2005, Way 2010, and Yu 2018.

ginger, okra, benne, and guinea squash (Berlin and Morgan 1993, Gonzales 1922:22, Shields 2015:8). Within the cooking process, adopted ingredients were used with an African preparation style, which Joyner (2001:38) terms the "grammar of the food." For the Lowcountry in particular, the blending of West African foods and practices of the enslaved majority combined with indigenous ingredients (such as those listed above) and practices and European and colonial Caribbean influences (creolized in their own right), a distinctive way of eating and cultural surrounding those ways was born (Gilmer 2015, Scott 2001, Scott and Dawdy 2011, Shields 2015, Zierden and Reitz 2009, Williams 1992). The creolized cuisine of the Lowcountry could not have arisen without the efforts of enslaved laborers and their descendants.

The term "creolized" as used here is not meant to indicate a melting-pot-style ignorance of historical texture that insinuates a loss of something and the generation of something else. Rather, it is intended to emphasize the cultural and material transformations that occurred as a result of slavery, Emancipation, Reconstruction, and its aftermath, a period referred to as "second slavery."

According to Kaye (2009), scholars of second slavery have shifted away from creolist approaches that emphasize the creation of newness in order to emphasize continuities between Africa and the rest of the Atlantic World. Even so, the two approaches do not have to be pitted against one another; they can work in conjunction with creolization positing slave and tenant/sharecropping cultures as an identifiable entity and the diasporic approach tracing African traditions that occur alongside cultural change as in the Lowcountry. In fact, using an Atlantic perspective enables a trans-

Atlantic rather than European or American centered focus that emphasizes African peoples' influences on the modern world (Lovejoy 2000[89]).

The residents of Stono plantation could easily be ascribed Gullah identity, but because identity is something that is both ascribed and subscribed (Gruesz 2008, Orser 2010, Voss 2005), and because I do not have any direct indicators or statements of any particular resident claiming a Gullah identity, I prefer not put that label upon them[90]. Instead, I view the foodways of Lowcountry tenant farmers and their contemporary descendants as cultural persistence; that is, change and continuity combined (following Gundaker 2000 and Lightfoot 2015). To me, this is what creolization means, change aside continuity, transformation and innovation alongside tradition and continuation. Whether or not James Islanders and other descendants of enslaved Africans identify as

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[89] Lovejoy's (2000) idea that an Atlantic World view is inclusive of the diverse actors from various continents counters Sweet's (2014) and DeCorse's (2012) feeling that Atlantic creolization emphasizes White people over Africans because it begins with European colonization and is based on a European Atlantic world construct. Like Orser (2012), I argue that Eurocentrism is unavoidable within historical archaeology because history and archaeology were established by Europeans and Euro-Americans delving into our past and how it coheres with the pasts of Others. Indeed, some degree of Eurocentrism is necessary because it emphasizes the world-changing role of European colonization (and the role of enslaved Africans within those colonies) that affected the past and effects the world we are currently living in. Ignoring the importance of European actions within world history endangers our ability to view the results of these actions and renders us unable to analyze the consequences of oppressive actions such as colonization, racialization, and the rise of capitalism (Orser 2012).

[90] I will note here, however that the attendees of my talk at the International Gullah Geechee and African Diaspora conference at the University of Coastal Carolina in 2018 begged to differ. They absolutely considered Stono inhabitants to be Gullah and verbalized their feelings to me. At the same time, Goldberg (2014) found that nearby Ferguson Road residents, who are descendants of enslaved and tenant farmers on James Island, do not necessarily consider themselves to be Gullah. Jodi Barnes suggests the refusal to claim Gullah identity may be related to the use of the word as a derogatory term.

Gullah, the Gullah people and their ancestors who were enslaved and farmed as tenants, sharecroppers, and freedpeople have a historical, cultural connection. Each group is entangled with the others, which makes a comparison of their material culture useful for studying transformations in that cultural connection through time useful.

Both creole and diaspora are continuums of forms and features. Each approach leaves room for flexible and shifting identities, members, and material correlates, which are continually undergoing transformations (Knörr 2010, Rahier 2001). Moreover, in contrast to diaspora, creole acknowledges all influences, changes, and agents within a particular environment or context rather than focusing solely on the Other, Black populace (Lovejoy 2000, Price 2006). It acknowledges the roles of slaveholders, landowners, politicians, and bureaucrats, who were generally white and thoroughly engaged in a racially hierarchical system.

Indeed, political economy and the rise of nationalism in the United States (post-Emancipation, in particular) are particularly important for the diaspora and are to some extent, not based on cohesive views of racialized identity among Black people (Tillery 2001). Although creolization and diaspora approaches can conflict (as they do when the creolism approach neglects the notion that social identities are collective exercises in which people fashion themselves through everyday encounters), when individual and group agency are included within the process of culture change and change is seen as continual rather than something with a fixed end, the two approaches can work in tandem (Kaye 2009).

Changes in Access and Food Procurement

The peoples of the Lowcountry creolized their lifeways through a process of culture transformation in a new environmental setting (Barnes and Steen 2012, Cusick 2000, Ferguson 1992, Smith and Watson 2009). Much of this process was and is unconscious; however, conscious decisions regarding identities, group membership, what objects to make, purchase, use, consume, discard, etc. may be made, a fact which contributes to cultural transformations (Apter 2013, Cameron 2011). In this dissertation I focus on the impact of industrialization on these creolized foodways. The foodways of Stono plantation and the Lowcountry more generally, were creolized as a result of many cultural groups coming into prolonged contact. Part of the creolization process involved a power imbalance (in this case, racialized slavery in the Lowcountry[91]). At the same time, the rise of mechanization, mass production, globalism, and capitalism (The Industrial Revolution) touched the lives of Stono, Lowcountry, and Atlantic World inhabitants.

The foodways of the plantation's inhabitants reflect a kind of creolization in that they incorporate multiple ingredients, procurement and processing strategies and technologies, cooking techniques, and food-related customs (as described in Agha 2015, Davis 1937a, Deetz 2010, Edelson 2010, Epps 2004, Evans 2010:71, Feeser 2013:79, Hendrix 2006, Joyner 1984:42, Kelley 2016, Littlefield 1981, Miles 2004, Piersen 1996, Reitz et. al 1985, Samei 2010, Scott 2001, Twitty 2017, Whit 2007, Yentsch 2007, Zierden

[91] In fact, the cuisine of the Lowcountry is marked by the region's history of racism, which has been imbedded in its fabric since the time of its founding as a slave-labor-based agricultural endeavor (Frazier 2006, VanSant 2015, Stein 2016, Wallach 2016).

1985, and Zierden and Reitz 2009). For example, the people enslaved on the Stono plantation, like those in much of the Lowcountry, used colonoware. Colonoware is a low-fired coarse earthenware, meaning it is fired in an open kiln at low heat. It was first named Colono-Indian Ware by Ivor Noël Hume in 1962 in a published discussion of unglazed earthenware pottery uncovered at Colonial Williamsburg, Virginia. Some of the forms uncovered there were seen as "copies" of European vessels such as porringers and skillets, while others were noted as having flat bottoms and slightly everted rims. They clay paste contained pulverized shell temper, which reminded Noël Hume of pots produced by local indigenous groups during both the historic and prehistoric periods. This similarity led to the conclusion that the vessels had been made by "free Indians." He suggested it was marketed to enslaved people in Virginia during the colonial period.

By the next decade, perspectives began to change based on the vast number of sherds uncovered in South Carolina (Ferguson 1992). Sherds were found near wharves, ferries, and bridges of plantations and to a much lesser extent, near the urban quarters of enslaved people living in cities (Ferguson 1992). Stanley South suggested that the Colono-Indian Ware of South Carolina was most likely made by the Catawba, but that there was a possibility that it was related to pottery being produced in West Africa (Ferguson 1992). Ferguson eventually came to the conclusion that enslaved people had produced the pottery themselves.

It was produced by enslaved people on colonial plantations by coiling and modeling the form, then adding any desired accoutrement such as handles or decoration, which can include rectilinear lands and grooves, incising, and burnishing

(Ferguson 1992). The paste can include crushed shell and/or sand tempering. It is thought to reflect a cultural chain from Africa to the Caribbean to the Eastern seaboard of North America (Howson 1990). Upon this revelation, the name was changed to Colono Ware (Ferguson 1992). That is, its presence on an archaeological site suggests enslavement and maintenance of African traditions that have, to some extent, been transformed over time. According to Ferguson (1992), it is the result of a colonial experience that affected the techniques of hand-built pottery. Colonoware and similar wares that are not ascribed that ware type label are found in many areas inhabited by members of the African Diaspora including the southeastern and mid-Atlantic United States and the Caribbean (Ferguson 1992).

In addition to producing ceramic wares, enslaved people cultivated crops. These crops include those indigenous to the Americas such as squash and potatoes. They also include plants from Africa such as watermelons, benne, okra, and sweet potatoes (and rice, which had been domesticated in West Africa for more than 3,000 years [Carney 1996:111]). Domesticates from Europe such as cabbage, turnips, and various greens (Berlin and Morgan 1993, Harris 2011). They also include native flora and fauna they collected, fished, and hunted such as opossums, catfish, porgies, mullet, and wild chives, which they ate alongside Old World domesticates such as cattle, and pigs (Harris 2011:95). Aside from variously sourced ingredients, they also used cooking techniques that have influences from all around the Atlantic World such as African-style stewing and New World frying, steaming, grilling, roasting, baking, and boiling (Harris 2011:11). This combination of “new” and “traditional African” ingredients and techniques can be seen in dishes such as hoppin' john (a beans and rice combination) and red rice, which is similar to Senegal's national dish called thiébou dienn (Harris 2011:71). These dishes are referred to as "creolized" (Harris 2011:71).

The foodways affected by creolization and industrialization include ways of accessing foods, what those foods were, how they were eaten, how often they were eaten, how they were presented, and who ate them. Acquisition and storage methods are also considered here because they involve various forms of fishing (line and hook, and cast net, both onshore and using boats). As will be demonstrated in later chapters, I hypothesized based on preliminary analyses, there was a transition at Stono from cast net fishing to hook-and-line fishing as well as shift from shore-based fishing to reliance upon commercially trawled fish[92]. Handler (2014:456) identified such a shift among Barbadian fishermen.

Yet, my final results indicate there was no shift in procurement in terms of shifting from net fishing to line fishing, but that both methods were used during the period of enslavement and the post-Emancipation era. My results follow those of Fairbanks at Cannon's Point, which found mullet and topgaffsail catfish within the faunal assemblages from the refuse of enslaved people (1984:3). He noted these species are most commonly caught in estuarine creeks with set nets or traps (1984:3). It is possible the weights I refer to as cast net weights may also have served set nets.

[92] Of course, people living in the Lowcountry continue to fish and gather shellfish for their own consumption today and they did so during the rise of industrialization alongside utilizing commercial sources of the same foods.

There was, however, an increase in commercially obtained fish through time. In fact, present-day islanders note the way commercialized fishing has cut into the availability of fish for those seeking subsistence and/or recreation (Ellis et. al 2014:1166). The move from generally self-procured fish to fish obtained through commercial endeavors in addition the continuation of self-procured fish constitutes an incorporation of capitalistic economy and reliance upon sources outside of the plantation for sustenance. Similarly, consumption of domesticated meats shifted. During enslavement people relied upon plantation-based raising, dressing, butchering, and rationing as a means of obtaining meat. After Emancipation and commercialization, people began to purchase cuts of meat and canned meats. They did this in addition to continuing to raise domesticated animals at home. In short, commercialized meats did not supplant a rationing scheme supplemented by self-provisioning. Instead, commercialized meats, like rations, were used in conjunction with meats that were self-provisioned.

As technological advancements occurred, storage containers shifted from locally/regionally made ceramics alongside imported wares to machine-made glass vessels. That is, the ratio of ceramic to glass vessels shifted to include more glass as it became inexpensive and easily accessed. Analogously, advancements in ceramics technology and metallurgy shifted the wares used to prepare and consume foods. For example, colonoware and creamware gave way to modern refined earthenwares; and flatware moved from primarily iron, wood, and bone to steel or other metal alloys. These shifts from “traditional” materials to “modern” ones utilized the knowledge and skillsets of various inventors, industrialists, entrepreneurs, craftspeople, etc., who came from various backgrounds including enslaved and freedpeople (Blocker 2001, Brown and Bowen 1998, Edgar 1998, Edge 2017, Foner 1988, Greene 2011, Mintz 1985, Scarborough 1923, Scott 2001, Weisbrot 1991).

Therefore, Lowcountry foodways are not entirely separable from other groupings of foodways; that is, they are both a part of and apart from American food, Soul food, Southern food, and even global food particularly as they are viewed in a time frame closer to (rather than distant from) the present. Although Lowcountry food and the foodways of Stono's enslaved and tenant inhabitants is in some ways unique, it is also part of a global and globalized human phenomenon (Dusselier 2009, Shields 2015, Whit 2007, Yentsch 2007).

Foodways

"The Old South is a place where people use food to tell themselves who they are, to tell others who they are, and to tell stories about where they've been" (Twitty 2017:xii).

Foodways are the processes of production, preparation, distribution, consumption, and discard of edibles within a society (Gumerman 1997:105). They include diet and nutrition through the exploration of technological, social, and ideological factors that influence humans' social, political, cultural, and health circumstances and how we live, think, and relate to our environments and fellow people (Bryant 2003:2-4). Archaeologists approach foodways through the study of daily practices and social lives related to foodways as expressed through material culture, which can include plant, animal, mineral resources, lithics, and ceramics, as well as feature-based findings uncovered during excavations (Atalay and Hastorf 2006).

Food (like creolization, see discussion above) has been likened to a communication system (Lévi-Strauss 1965 and 1969). It has also been noted that like language, food is not a structure imposed upon everyday life, but rather something that varies across time, space, and the particularities of human groups (Douglas 1975). Indeed, food is inseparable from other aspects of human life such as social, political, historical, economic, and cultural institutions and ideologies[93] (Mintz 1985, Mintz and Du Bois 2002). Food and foodways are entangled with identity, and notions of place and space because having control of food roots people in their environments (Dusselier 2009, Voss 2019). Further, food can act as a repository of memory where history resides (Dusselier 2009:37). As a result, studying people's relationships with food can provide entrée to many facets of human existence.

Like much of anthropological scholarship, food studies began with ethnographies (and linguistics as noted above)[94]. These ethnographic works span the early-mid to late twentieth century (Mintz and Du Bois 2002). Food has also been used as a means of studying functionalism and other processual-style questions (Gumerman 1997, Reitz and Honerkamp 1983, and Reitz 1994, for example). A social-history infusion came to food studies in the latter part of the twentieth century (Mintz and Du Bois 2002; see Marshall

[93] Interestingly, even the concepts of appetite and hunger are in part, cultural (Joyner 1984:91).
[94] A prime example of early anthropological ethnography is Malinowski's 1922 *Argonauts of the Western Pacific*.

1979, Peres 2008. and Tomich 1991, for examples). That period also ushered in the relationship of food with identity, class relations, and other intangibles relating to the human experience both within the field of anthropology and in the discipline of history (for instance: Joyner 1984:91, Moskin 2018, Newman 2010, Stewart-Abernathy and Ruff 1989, Sunseri 2015, Twitty 2017).

After initial colonization, African foodways were most influential upon Lowcountry cuisine as Africans and African Americans were responsible for most cooking[95] (Deetz 2010, Hendrix 2006:73, Piersen 1996:108, Pinckney 1984, Shields 2015, Twitty 2017, Zierden and Reitz 2009:338). Enslaved people obtained food through what has been described as a "subsistence triangle," which contained rations provided by the slaveholder, produce from gardens cultivated by enslaved people, and meat obtained by enslaved people from hunting, fishing, collecting, and animal husbandry (Butler ca. 1937, Zierden and Reitz 2009, McKee 1999). As will be shown in this dissertation, their reliance upon these sources varied through time and among plantations.

In general, though, the dishes they made include pilau[96] (Fairbanks 1984:4, Zierden and Reitz 2009:338), a rice-based dish containing meat and vegetables such as limpin' susan (a combination of stir-fried okra and rice), as well as the aforementioned hoppin' john and red rice[97]. There was also limping lizzie, a combination of peas and

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[95] African foodways have influenced regional cuisines beyond the Southern United States of course. Differences among food procurement, preparation, and degrees of influence exist among areas impacted by creolization including Brazil (Cameron 2011, Symanski 2012) and the Caribbean (Handler and Walllman 2014, Mintz 1996).
[96] Pilau is also commonly consumed on the island of Dominica (Diane Wallman, personal communication).

hominy (Chandler ca. 1937). These foods were brought into common (cross-race, cross-class) use through Black workers. Specifically, Black caterers were hugely influential to the cuisine of Charleston in their use of frying and French training (Shields 2015). In fact, the nearly infinite options available in the creation of a pilau lends that dish to practically any combination of native or exotic ingredients such as chicken and rice; tomatoes, sausage, etc. Grain, vegetable, and meat-based dishes such as chicken bog (a combination of rice, chicken, and peppers and onions, usually) are still common in the Lowcountry (personal observation)[98].

Unsurprisingly, it is not only the diets and procurement strategies of diaspora groups that differed; their physical environments, historical contingencies, and knowledge bases also varied. This variation is in part due to the fact that there is much oral instruction and history that comprise food-making knowledge (Deetz 2010, Twitty 2017:15-16). These kinds of histories are continually being (re)formulated as each individual and every group practices and teaches the information being transmitted. The same is true of written recipes, which are of European origin (Twitty 2017:15). The dishes these recipes communicated were full of Native ingredients, which were prepared in African manner (Shields 2015, Twitty 2017:15). As many cooks know, old recipes do not always provide measurements or describe techniques (Twitty 2017 and personal observation, see Pickney 1984 for an example). This lack of instruction provides the room for individual cooks' influence, further supporting the notion that not

[98] In fact, shrimp and grits, a modern hallmark of the Lowcountry is a spin on carb and protein combination dishes eaten from a bowl such as these rice-based pilaus or pilafs (Shields 2015:199).

everything there is to know about foodways is written and emphasizing the importance of oral traditions and observations of practices.

One example of traditional West African food practices in the sparing use of meat in stews and pilaus. These dishes exist in contrast to European (Anglo) traditional dishes, which were heavily meat laden (Piersen 1996:108, Zierden and Reitz 2009:338). As usual, the situation is not entirely “Black” and “White.” French Huguenot and Dominican Republic refugees also influenced the cuisine of the Lowcountry and the South (Twitty 2017, Zierden and Reitz 2009:338). Of course, some similarities are found among these groups' dishes. For example, pilau was commonly eaten by both French Huguenots as well as West Africans (Zierden and Reitz 2009:338). Harris (2011:55) notes the common theme of fermentation in the preparation of foods among people indigenous to the Americas and Africa, which at the time was foreign to Europeans. Although similarities and contrasts exist within their food-related practices, each group contributed to and transformed the foodways of the Lowcountry. These contributions from a variety of sources and their transformations through time and across individuals are the reason I consider the foodways of Stono and the Lowcountry to be creolized.

Racialized Slavery, Disenfranchisement, and Foodways

Regarding foodways of the laborers acting within racialized slavery, it is likely they were given little meat (Joyner 1984) as meat has historically been considered brain food and it was thought that people of color required very little of it (as they were thought to have little in the way of intellectual capacity) (Bailey 2007:45). This supposed lack of need is a way to articulating and maintaining racially based (and labor- or class-based) subordinance (Bailey 2007:44, Way 2010).

Another means of preventing freedpeople from acquiring and consuming the same meats as whites was through barring them from owning land, where they could have kept livestock. When freedpeople were able to purchase land, that land was generally of poor quality thereby limiting their ability to grow enough food for themselves (or their animals) to eat or to sell (Department of Commerce and Labor 1904, Du Bois 1903, Foner 1988, Hayden et. al 2013a, Scarborough 1923). Although racialized slavery ended with Emancipation, the promise of Reconstruction quickly dematerialized with the onset of the Jim Crow era. As a result, it is possible that the diets of freedpeople, as far as meat consumption goes, changed very little from the time of racialized enslavement and the ideology regarding protein intake that went along with it.

Additional examples of food-related marginalization in the Atlantic World include forcing the mouths of captives open in order to make them eat and keep them alive during the Middle Passage (Bly 1998). After captives arrived at Chesapeake and Caribbean plantations, slaveholders controlled rations in an effort to use food as a system of reward and punishment (Bowes 2011, Delle 2011, Genovese 1974, Faust 1980, Heinrich 2012, Morris 1998). They also controlled the ability of enslaved peoples to grow foods for their own use or for sale (Barickman 1994, Brown and Cooper 1990, Delle 1999, Edelson 2010, Fields-Black 2015, Handler and Wallman 2014, Hauser 2009 and 2015, Isenbarger 2006, Mandelblatt 2007, Orwell 1996, Reeves 2011, Singleton

1995, Van Auken 1950, Way 2010) or to hunt and fish (Giltner 2005, Young et. al 2001). These actions continued the systemic use of foods as tools of oppression.

Social hierarchies were further maintained through the use of "African" foods by poorer peoples in contrast to imported foods (Allen 2010)[99] and through feasting and exclusions from feasts (Carson 2013, Hedegaard 2018). These hierarchies are (re)constituted through deducting food expenses from farmworkers pay so that they do not have the ability to control their own spending and/or withholding their pay (Bletzer 2004, Sandy 2012, Stoesz 2016). A later exclusionary practice was preventing Black people from eating in restaurants by outright ban or fake menus with exorbitant prices used to prevent their patronage by way of economic exclusion (Raskin 2019).

This kind of inequity was (and is) perpetuated on a larger scale through boon famines, which are famines that occur within a particular segment of a society that is overall wealthy, or experiencing a "boon." Such famines are caused at least in part by the economic inequalities and systemic racism that skew the value, costs, and degrees of access to different food stuffs. These inequalities permeate the food systems of nations and other political entities such that people of color face greater degrees of food-related diseases like diabetes, hypertension, and malnutrition than those people within their societies who are relatively better off (Brones 2018, Sen 1985, Stein 2018).

[99] In other cases, imported foods served as a way of demonstrating class through conspicuous consumption of luxury or "ethnic" foods (Bailey 2007, Crass et. al 1999, Cusick 2000, Peres 2008, Moskin 2018, Scott 2001).

Situations of social and economic inequity, while distressing, also enable the creation of creolized cuisines[100]. These creolized cuisines can be stigmatized in whole or part alongside their practitioners (Briggs and Mantini-Briggs 2003, Dusselier 2009, Magnani and Magnani 2018). Even so, such cuisine may be proudly maintained by those who consume them (Camp 1982, Henderson 2007, Moskin 2018, Mullins 2011) and at times enabled groups to cross social barriers such as race (Forret 2004, Thompson 2008, Wilson 2000). There is a lot of community pride in "soul food," for example (Bailey 2007, Henderson 2007, Moskin 2018, Nettles-Barcelona 2015, Wallach 2015)[101]. Creolized cuisines also create social cohesion and support within enslaved communities in particular (Young 1997). As discussed, social cohesion is part of the creolization process and among the Gullah and their ancestors.

Racism can be researched through foodways because food is an excellent locus for the study of group dynamics: how different populations exclude, include, reject, accept, and otherwise influence each other (Bower 2007:8, Deetz 2017, Fertel 2016, Gruesz 2008, Ruiz 2008, Yentsch 2007). In the case of African Americans, "the study of

[100] As discussed in publication by numerous scholars including: Agha 2015, Ahlman et. al 2009, Armstrong and Handy 2011, Hauser 2004, Barnes and Steen 2012, Baumann 2004, Beaudoin 2013, Brilliant 2011, Chambers 2012, Delle 2000, Handler and Wallman 2014, Joseph 2016, Lenik 2009, Newman 2010, Pezzarossi et. al 2012, Scott 2001 and 2011, Stewart and Ruff 1989, Stoler 1989, Wallman 2014, Way 2010, and Weik 2009.

[101] "Soul food" is the food that was eaten by bondspeople and was incorporated into the post-Emancipation diet. It denotes a shared history of oppression inculcated with cultural pride and is a marker of Black identity (Henderson 2007). Yet, it is also problematic because it is associated with "Black" people and is thus sometimes denigrated (Henderson 2007, Moskin 2018, Wallach 2015). At the same time, it has been reclaimed as a marker of pride (Bailey 2007, Moskin 2018, Twitty 2017, Wallach 2015).

foodways enlarges respect for the way a people, so egregiously oppressed, have miraculously managed to hold onto certain traditions from the West African origins yet that adapted and evolved various customs ... contributing hugely to this strange patchwork we call American society" (Bower 2007:8). At the same time, foodways are not stagnant and actors have the ability to change them through time (Atalay and Hastorf 2006, Bower 2007, Elias 2012).

Habitus

Cultural shifts such as creolization and industrialization occur through daily actions on an individual level. Eating is the "ultimate habitus practice" as it must be done every day and in doing so it structures the lives of its preparers and its consumers, thereby forming the foundation of sociality (Atalay and Hastorf 2006:283, Bourdieu 2013, Fertel 2016, Steen and Barnes 2010, Way 2010). In the study of foodways, the conventions of edibility, sequence, timing, and location of practice illustrate how rules become embedded into the body and the group, through years and generations of daily routine (Atalay and Hastorf 2006:284, Bourdieu 2013, Bryant 2003, Joyner 1984, Steen and Barnes 2010). By looking at artifactual food remains and their distributions, archaeologists can get closer to the daily life of a site's residents (Atalay and Hastorf 2006:284, Bailey 2007:40, Way 2010).

Habitus is the means through which individuals make choices and manipulate the system of principles that organize humans' world. These manipulations are not necessarily conscious; rather they are a means of attainment that exist within a series of paths toward objectives (Bourdieu 2013). Observable habitus is thus a product of history generated by repeated individual and collective actions that establish regularity and enable transformation. Looking at these historical products from the vantage of the present enables us to see meaning and come up with explanations for behaviors and shifts of behaviors within society[102].

"Taste" has been described as the interaction between habitus and social institutions (Ollivier and Fridman 2001, Wilson 2014). Having a particular taste is a means of expressing status (as in a particular space of being within society, not necessarily a particular class or other hierarchical position) through cultural capital (Ollivier and Fridman 2001, Wilson 2014). Cultural capital is a means of gaining (and losing) popularity, power, and standing within a group (Bourdieu 1986, Wilson 2014). It can be reflected in material culture through conspicuous consumption (Orser 1989, Veblen 1970), but also through the kind of (un)intentional process described above.

In this dissertation, I extrapolate daily actions related to foodways through the material culture left behind by Stono inhabitants. The ceramics, glass, utensils, and other food-related objects they used indicate the practices they engaged. These objects and the way in which they were used to create particular dishes, for example, denotes a specific taste. Changes in the types and composition of these objects through time reflects changes in behaviors. Similarly, the faunal remains uncovered from the Stono archaeological sites provide evidence for the foods eaten through time as well as how

[102] In fact, the very definition of social science (within which anthropology is situated) is defined by Ollivier and Fridman (2001) as analyzing how taste is shaped by changing social conditions and how various tastes can coexist in complex societies. Identifying changes in taste and taste-related practices and understanding how and why they came about is the purpose of this dissertation.

they were prepared for consumption. That is, tastes change along with the historical contingencies that enable choice and development of tastes.

While it is alluring to look for patterns among groups, I avoid doing this to the extent that the members of those groups lose their individual agency and free will. Even in enslavement people have the ability to make decisions about their lives and the objects they involve in their lives on a daily basis. These choices enable larger scale cultural transformations (Hodder 2012). In other words, differences between the archaeological assemblages of the two sites are indicative in changes in habitus. Tastes and changes relating to taste, as well as modes of acquisition and access are identified between and among the plantation sites discussed below. Specifically, I demonstrate that through the process of creolization, members of the African Diaspora helped to create foodways unique to themselves. These foodways have influenced not only the lifeways of their descendants, but also those of the Lowcountry region and beyond. I aim to provide credit where credit is due, not to elite whites, but to the enslaved Black Majority.

The following chapters detail the methodology, analyses, and results used to identify changes and consistencies in foodways in the pre- and post-Emancipation Lowcountry by utilizing archaeological assemblages from those areas uncovered at Stono Plantation, James Island, South Carolina. These findings are compared with Ferguson Road (a neighboring James Island archaeological site) and Smith Plantation, a contemporaneous Lowcountry site.

CHAPTER 4
METHODOLOGY

In this chapter, I detail the methodology used in my research study. I first outline the project: a comparison of four historical archaeological sites, the Stono "Slave Settlement," Stono "Tenant Settlement," Smith Plantation, and Ferguson Road. The Ferguson Road site is the earliest of the assemblages, it seemingly was abandoned just before the Stono "Slave Settlement" site was inhabited. The two Stono sites overlap with one another in both physical and temporal dimensions, but are treated as discrete assemblages. The Smith Plantation site is closest to the Stono "Slave Settlement" site in terms of age. The site is used here to determine how broadly applicable my findings are in terms of extending beyond the Stono site into the rest of James Island, and beyond its borders into the Lowcountry.

In this outline I provide a brief synopsis of the fieldwork undertaken at the "Slave Settlement" site and then describe the archaeological excavations I directed at the Stono "Tenant Settlement" site in summer 2018. I then briefly outline the fieldwork conducted at the Ferguson Road and Smith Plantation sites. I next explain the laboratory analyses conducted on the assemblages from the two Stono sites and provide synopses of the calculations I performed in order to identify similarities and differences between the assemblages. I also detail the analyses I conducted on the two other Lowcountry plantation sites (Smith Plantation and Ferguson Road). The results of all analyses are discussed in the next two chapters.

The Stono "Slave Settlement" Fieldwork

The Stono site (38CH851, Figure 4.1) as a whole, has an extensive excavation history including terrestrial survey, shovel testing, block excavation, and remote sensing. In the 1970s, Elain Herold and Alan Liss conducted a limited subsurface survey and preliminary surface collections on the site. More than a decade later in 1986, the property became the Dill Sanctuary, a wildlife conservation site owned and managed by The Charleston Museum. That same year, Martha Zierden and Debbie Hacker undertook a comprehensive pedestrian surface survey of the non-wooded areas on the property. They identified sixteen prehistoric and historic sites (Anthony 2012a).

Soon after, Museum archaeologists and volunteers began a multi-year field investigation of Stono plantation. The majority of site excavations occurred between 1991 and 2011 with efforts focused primarily on Stono and Turquetts (38CH465) plantations, both of which lie on present Dill Sanctuary. Through the course of their efforts, Museum staff identified the archaeological imprint of a structure, which has been interpreted as an eighteenth and nineteenth century main house. They also identified the site for the "Slave Settlement" contemporary with that structure, as well as a tenant-era settlement area (along with a number of other sites) (Anthony 2012a). The map in Figure 4.2 shows these areas.

All Stono site explorations have been based on a "Chicago style grid" with grid north being approximately 10 degrees west of magnetic north following the trend of a

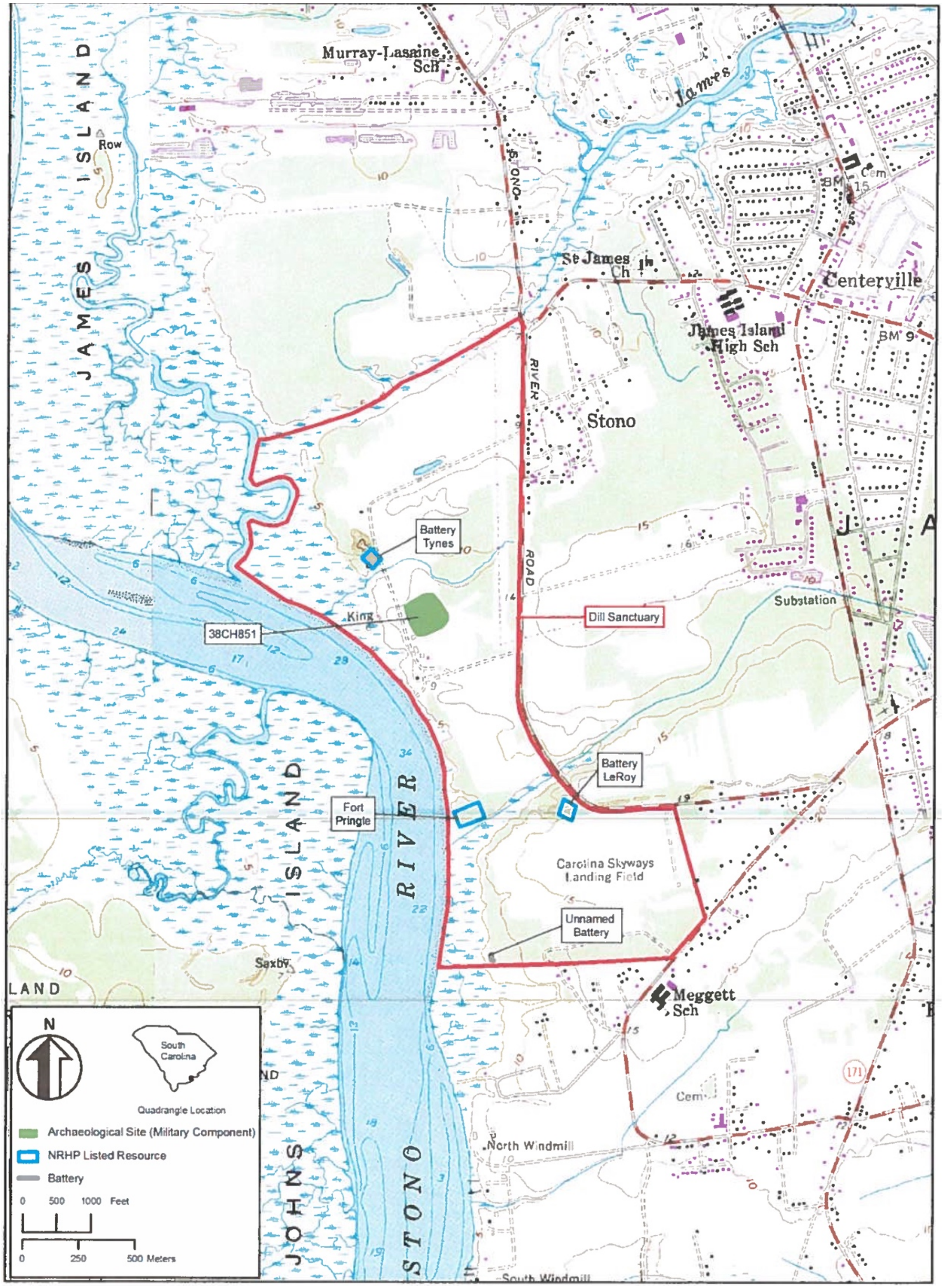

Figure 4.1. Map of Archaeological Site 38CH851, Stono (in green) surrounded by the Dill Sanctuary (in red). Image from Anthony (2012).

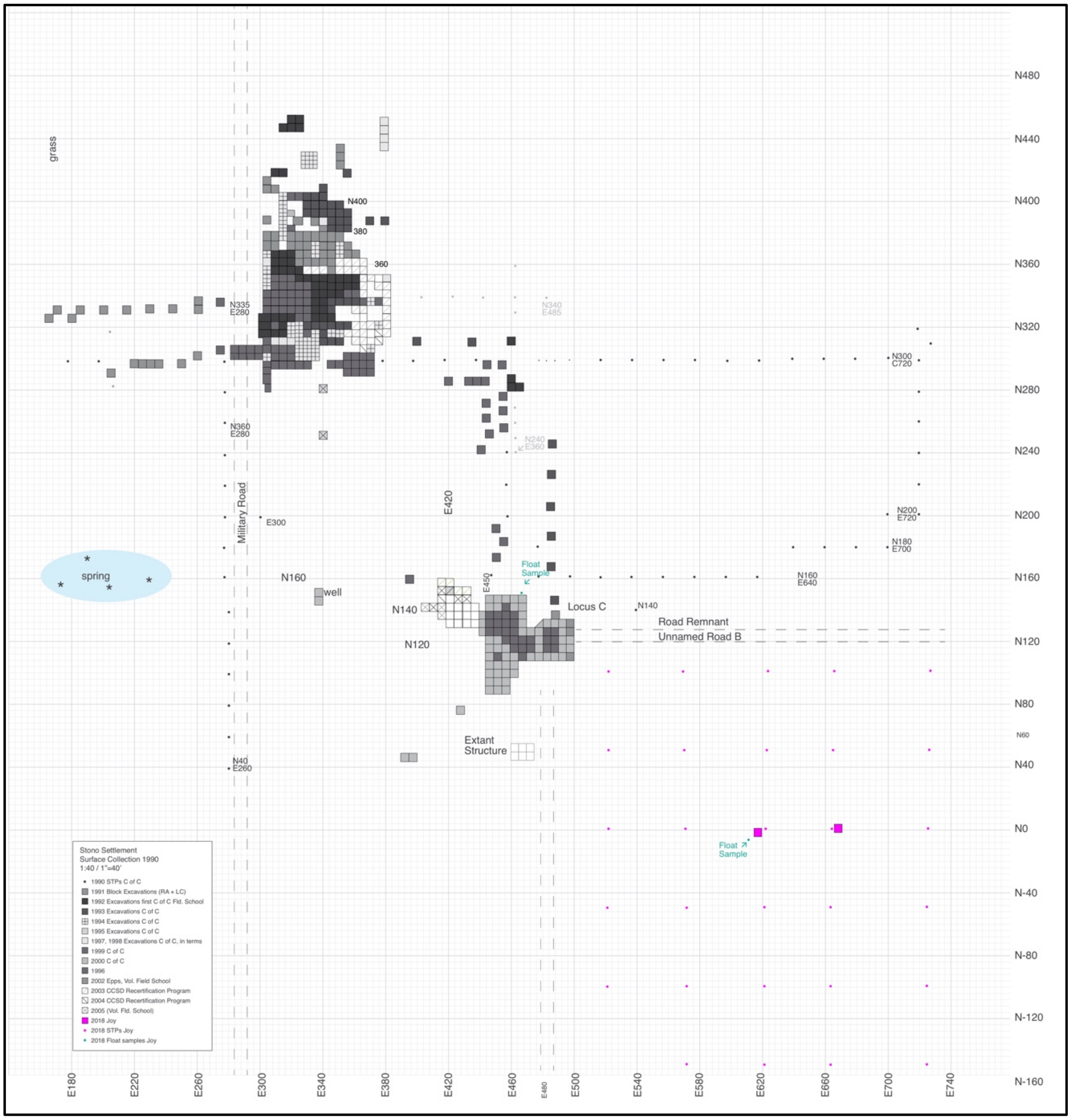

Figure 4.2. Map of Stono “Slave Settlement” and “Tenant Settlement” sites. Original map by Anthony (2012) with 2018 excavation updates by Amy Oglesby (2019).

historic road known as “Military Road” (Anthony 2012a). Although the original datum for the main house and “Slave Settlement” site has been lost, a stake lain in at grid N300 E300 remains. That stake (located near the eastern edge of Military Road) has been used as the datum for my excavations and for many years of excavations that occurred prior to mine after the loss of the original datum (Anthony, personal communication 2018). The stake is also a marker for two elevation reference points, which measure 13.01 and 13.45 feet above mean sea level (Anthony 2012a:18).

The 1990 surface survey was conducted on both sides of Military Road. The artifacts recovered during this survey were analyzed and density projection maps were created by the Charleston Museum Archaeology Lab and Julia King. Seven groups of artifacts were identified including historic ceramics from pre-1830 and post-1830 (Anthony 2012a). These maps were the basis for pinpointing where subsequent archaeological investigations would occur.

Of greatest interest for my project is the density map of historic ceramics (Figure 4.3). It shows historic wares centered around a point just south and east of N300 E300, an area which came to be known as "locus C" (Anthony 2012a:20). This area is where the plantation owner's house and "Slave Settlement" area were situated and has been the primary locus of archaeological endeavors prior to my 2018 excavations. The materials I refer to as belonging to the Stono "Slave Settlement" assemblage came from 128 of the units excavated in this area[103].

In 2018 I returned to the Stono "Slave Settlement" to excavate a 1' by 1' test unit. The contents of this unit were to serve as a floatation sample for my comparative analyses. I situated the unit in the southeastern area of Locus C, where I was able to

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[103] The volume of these contexts is about 3,200 ft^3, which is 90,614 liters or 23,938 gallons.

relocate a number of corner nails due to incomplete back filling. This new sample unit (SU2) was placed at N-155, E425.

The first .40 feet of SU2 was topsoil. It was screened through ¼" mesh on site. The remainder was removed following the natural stratigraphy of the site. The upper two levels were plowzone but were differentiated on the basis of soil color, texture, and artifact density just as we had done in the previously excavated test units. The lower level was "sub-soil" and contained no artifacts, as described above for the STPs. These three zones were collected in plastic bags and taken back to the laboratory.

In the lab, I processed the samples using flotation. I ran water over a mesh pasta strainer over a plastic tub. I then set the strainer into the tub. The heavy fraction fell to the bottom, while the light fraction floated to the top. The heavy and light fractions were then separately placed into nylon knee-high stockings and hung to dry. Later, I analyzed the materials separately. The artifacts uncovered are discussed in the next chapter.

Stono "Tenant Settlement" Fieldwork

The density map in Figure 4.3 shows historic ceramics to the south and east from locus C. These wares date to post-1830 (Anthony 2012a). There is also above-ground evidence of occupation is this area, including brick scatters identified as structural remnants (Figures 4.4 and 4.5) as well as mid-late nineteenth and early-mid twentieth century surface deposits, which are primarily architectural, agricultural, and household debris (Figure 4.6) (Anthony 2012a, personal observation 2017 and 2018). There is also an extant structure just south of locus C and just west of the unnamed road (personal observation 2017 and 2018).

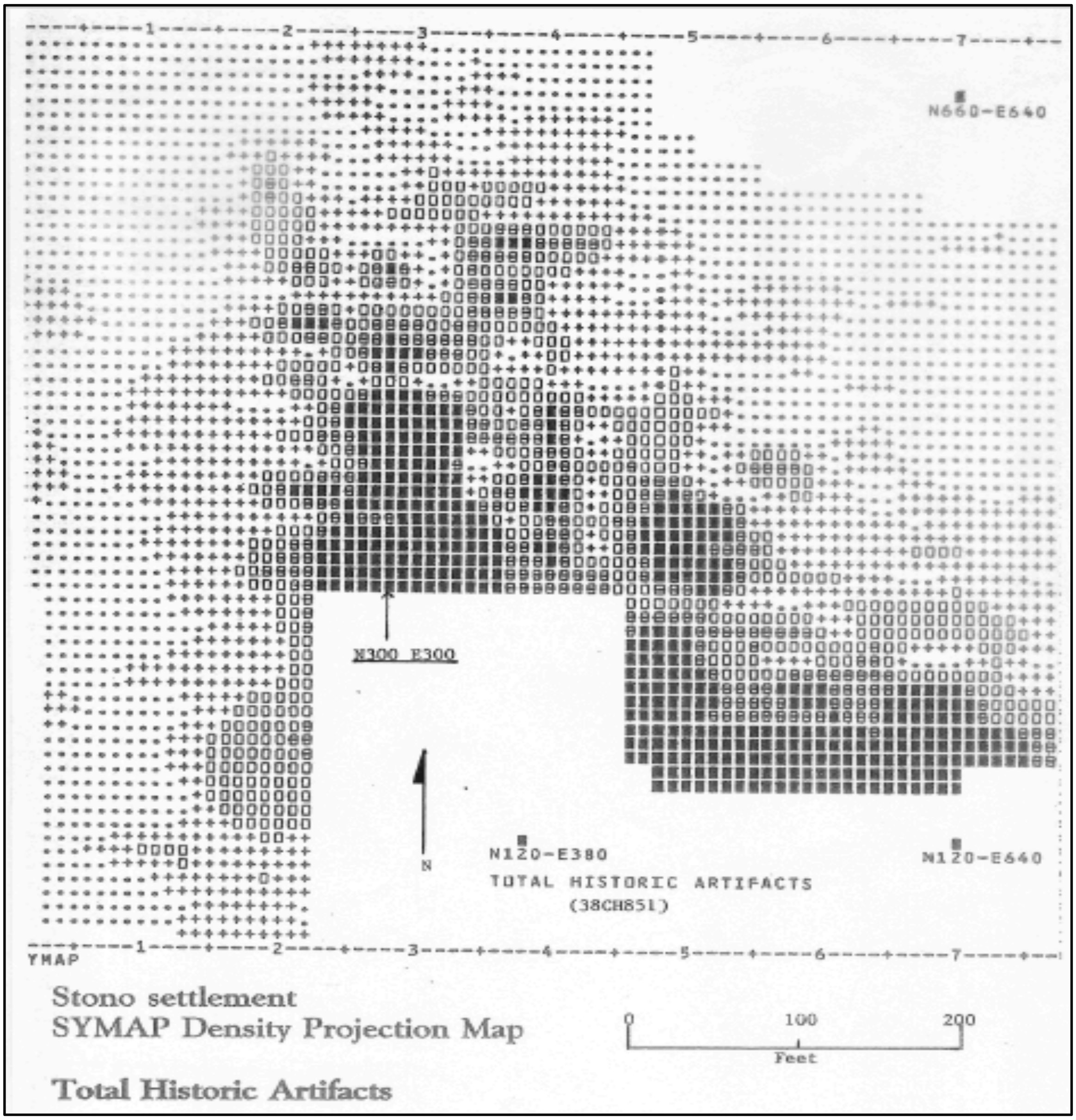

Figure 4.3. 1990 density map of historic ceramics (Anthony 2012a:92). The Stono "Slave Settlement" site is the area where the arrow labeled N300 E300 is pointing.

Figure 4.4. Photograph of bricks in-situ.

This structure is shown in Figure 4.13. In addition to these visible features, a twentieth century map show structures in this locale (Figures 4.7). My excavations focused on the wooded area east of the unnamed road (hereafter referred to as "unnamed road A") and south of another unnamed road (hereafter referred to "unnamed road B"), which runs roughly east-to-west along the grid's N135 line. From that point, my assistant and I ran a baseline (Figure 4.8), which roughly corresponded to the northern most edge of unnamed road B. We then established a grid beginning 15 feet[104] south from that base line on a 30' grid. All grid lines were laid using a pull-tape and compass.

Figure 4.5. In-situ brick scatter indicating former location of tenant habitation.

[104] Feet were used throughout this project at the request of Museum archaeologist Ron Anthony and curator Martha Zierden.

Figure 4.6. Various kinds of household and agricultural debris.

The grid extended to the southernmost and easternmost boundaries of the wooded area. At those points (which aligns with a field that boarders the northern side of the entrance road that is currently maintained as a mowed grassy area/meadow, and a third unnamed road and hereafter referred to as “unnamed road C”) (See Figure 4.9), artifact densities dropped off significantly. As a result, we did not extend the grid beyond this area. We also excluded the area south of locus C and on the western side of unnamed road A from our sub-surface survey because we did not want to disturb the extant structure with our excavations and because the area is currently used for storage. Our excavations (as well as those conducted previously by the Charleston

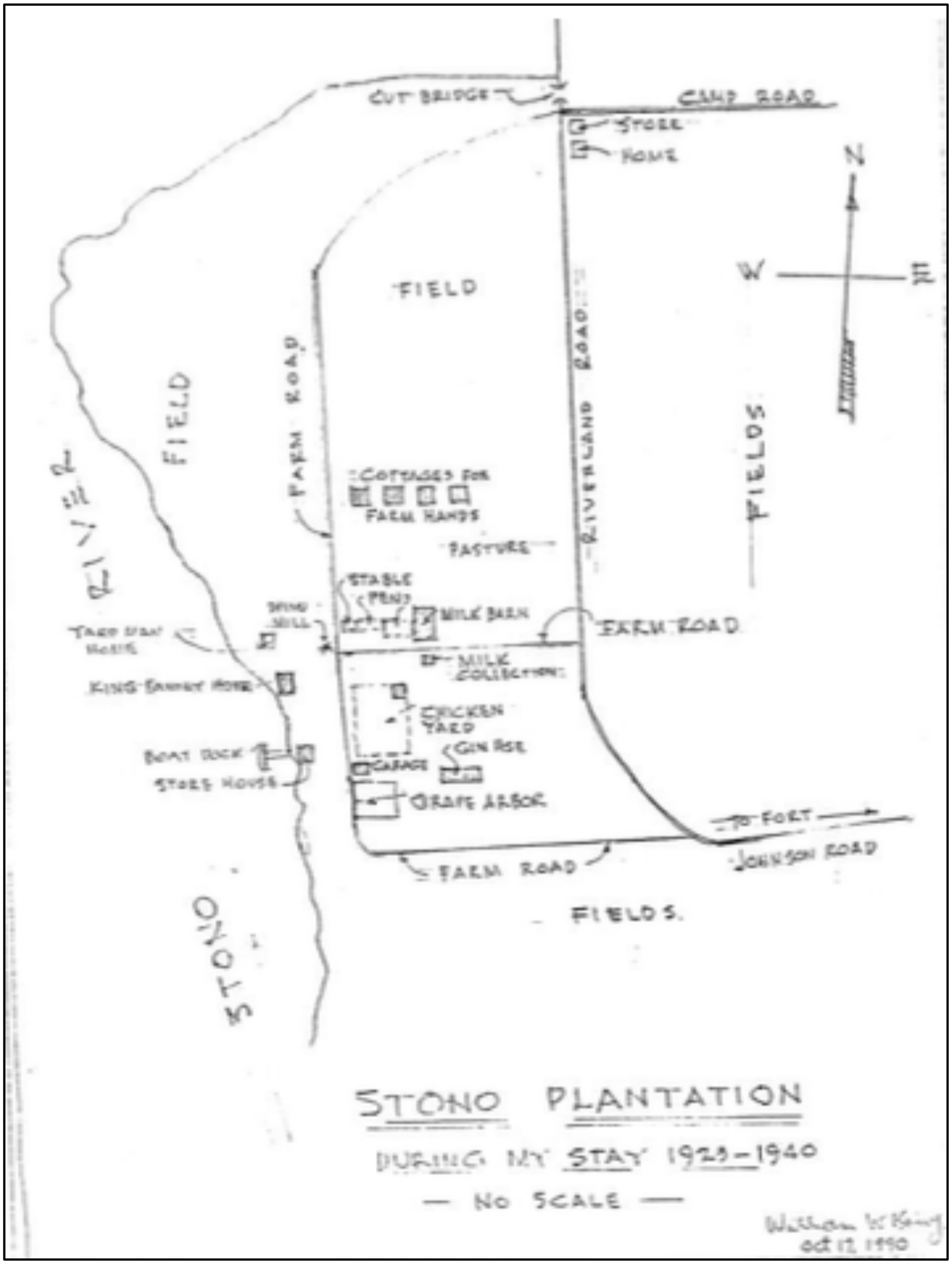

Figure 4.7. King Map (taken from Anthony 2012a). This map dating to the tenant-era shows four "cottages for farm hands" as well as multiple "farm roads."

Figure 4.8. Unnamed road B, running north of my survey area. The pink flags on the by the sanctuary caretaker (there is a barn and a number of farming machines are parked there).

Museum) utilized ¼" wire mesh screen. We used only a dry screening method. Our STPs (shovel test pits) were dug on a 50' (15.2 m) grid[105]. We dug 28 STPs following the natural stratigraphy, which consisted of two levels. These levels were 10YR 3/1 very dark gray or 10YR 3/3 dark brown sandy loam and 10YR 5/8, 10YR 5/5, or 10YR 5/4 yellowish brown sand. Three of those 28 STPS were only excavated to the bottom of the

[105] The state guidelines allow for STP intervals to be adjusted to the desires of the researcher and demands of the project; however, they suggest 30 m and not to exceed 60 m. Our grid was much closer due to the small size of the area and high density of positive STPs.

first level due to root obstructions[106]. All STPs were dug to the South Carolina standards[107] of 30 cm (11.81 in) in width and to at least 80 cm (31.5 in) in depth (when possible).

Figure 4.9. This photograph was taken from just outside the south boundary of my survey area, facing east.

Every STP my team dug was positive, though artifact density varied. In all cases, we did not collect fragments smaller than 15mm in diameter. We found ceramics in

[106] The three STPs that could not be dug to a depth of 80 cm were T2570, T2577, and T2581.
[107] These standards were established by The Council of South Carolina Professional Archaeologists, the South Carolina Department of Archives and History, the State Historic Preservation Office, and the South Carolina Institute of Archaeology and Anthropology and published in 2005.

nearly every STP, but very few contained faunal remains. As a result, we decided to place the first of two 5’ by 5’ excavation units near an STP which yielded the most animal bones, which was also near the easternmost of the brick remains that exist above-ground. The unit was named TU N0 E620 (Figure 4.10), for its position on the grid. It was relatively shallow (we stopped at 2 feet below datum, the base of the second natural stratum) and had few artifacts.

Figure 4.10. TU N0 E620.

We placed our second unit (TU N-5 E570, Figure 4.11) atop a mounded area (historical midden) that yielded a very high artifact density in our STP survey. This unit was located just south and west of the easternmost brick remains. The general matrix extended to the base of the second stratum (averaging 2 feet below surface). Artifact density was very high in the upper most stratum and decreased with depth until we reached the top of stratum III, which consisted of very pale brown or yellow sand (ranging 10YR 7/3 to 10YR 8/6).

Figure 4.11. TU N-5 E570.

Six features were identified and excavated in TU N-5 E570. All features reached into the third, artifact-free, sub-soil stratum. Features included two possible postholes, two post molds, a root disturbance, and a trash burn pit. The soil from all features was

10YR 3/2 very dark gray to 10YR 3/4 dark brown. The burn pit (FEA 1556, see Figure 4.12) was the most productive of the features in terms of artifacts. Its contents are discussed in the next chapter. The soil in FEA 1556 was 10YR 3/2 dark brown sandy loam with heavy ash inclusions. It was screened with ¼ inch mesh.

Figure 4.12. Note the feature on the left side of the photograph.

In October of 2018, I revisited the site in order to take flotation samples. No previous investigations took this kind of sample. These flotation samples were taken so that I could identify faunal species present at the site that had been lost as a result of using ¼” screen during previous excavations. The method is particularly useful for uncovering the bones of small fishes (Grayson 1984, Wallman 2014).

To collect the flotation sample for the Stono "Tenant Settlement," my assistant and I followed the same procedure as described above for the Stono "Slave Settlement" sample unit. Specifically, we placed and excavated a 1-by-1-foot unit (SU N-8 E568 or SU 1) immediately west of the southwest corner of TU N-5 E570. The soil was excavated following the same procedure as my earlier excavations. As before, the lower level was "sub-soil" and contained no artifacts. Again, the uppermost .40' was screened using ¼" mesh on site. The remainder was taken back to the lab and floated using the bucket, hardware mesh, and water method described above. The artifacts uncovered are discussed in the next chapter.

The Extant Structure

I have included the extant structure (Figure 4.13) as support for my identification of the "Tenant Settlement" because my analyses of the structure suggest that it dates to the post-Emancipation, or tenant era[108]. Specifically, the structure fits into the style of architecture correlated with "Freedmen," or tenant farmers throughout Charleston County and have been dated to 1865 through 1945 (Fick et. al 1992:23-24). Further, materials used in the construction of the structure that are visible include both square cut and wire nails thus pointing to a construction date circa 1880-1890 (Adams 2002). Of course, old nails can be used in new construction, so it is possible the structure is even more recent. To this point, the structure contains numerous materials that date it to the

[108] It is possible that the structure dates into the antebellum period with continued habitation after Emancipation (Anthony and Zierden, personal communication 2017 and 2018). Unfortunately, the architectural historian's reports stating this possibility have not been recovered.

early twentieth century including a type of wood pulp material known as Homasote and corrugated galvanized steel sheeting. Homasote was invented in 1916[109] and is on both the interior and exterior walls of the structure.

Figure 4.13. Photograph of extant structure. This structure is located immediately south of the "Slave Settlement," approximately 15 feet west of unnamed road A, and northwest of my survey area.

Similarly, corrugated galvanized steel sheeting was not widely manufactured in the U.S. until after WWI (Hall 1988:10). This type of sheeting is nailed over windows and holes on the structure. There are also fragments of the material lying around on the ground outside the structure. The chimney thimbles (seen near the center of the

[109] www.homasote.com, accessed February 4, 2019

exterior side wall of the structure shown in Figure 4.13) that were used to protect the wooden walls from the segmented metal chimneys date to 1902[110]. These construction materials suggest an early twentieth century, post-Emancipation habitation period for the structure. Although it is possible that these materials are retrofits and that the building dates to the earlier part of the nineteenth century, I suggest the structure more likely dates to the post-Emancipation period due to the abundance of late-nineteenth century materials within and surrounding thee structure in addition to a dearth of earlier structures in the area. This scenario likely makes the structure a representative example of those no longer standing in the "Tenant Settlement" area where my excavations took place.

In addition to the extant structure, there are numerous machine-made glass bottles in the vicinity. The area surrounding the extant structure is only about 15 feet from the "Slave Settlement" site, which could make teasing the occupations apart quite difficult and is yet another reason I did not conduct any sub-surface investigations there.

Laboratory Methods: Ceramics

My laboratory analyses of the Stono "Slave Settlement," "Tenant Settlement," and Smith Plantation assemblages[111] involved cataloging all artifact classes into the DAACS (Digital Archaeological Archive of Comparative Slavery). DAACS has a well-established, particularized system for cataloging[112]. While I did analyze all of the faunal

[110] United States Patent Office 1902. Official Gazette of the United States Patent Office 98(2):144.
[111] Non-faunal analyses for the Ferguson Road assemblage were conducted by TRC.
[112] See https://www.daacs.org/about-the-database/

materials from the “Slave Settlement” assemblage, I was unable to analyze the other artifact classes from the “Slave Settlement” in their entirety because of the assemblage’s vast size. The highly disturbed, heavily plowed soil at the site led me to the decision to catalog only the lowest of the three natural strata. This stratum contains the lowest portions of the plowed zone (strata I and II are entirely plowzone) as well as un-plowed, relatively undisturbed soil, and features. Each zone is approximately one foot in depth (Ron Anthony, personal communication). The majority of features uncovered were not excavated (Ron Anthony, personal communication). This lowest stratum is referred to as “zone III.”

I initially selected a random selection of proveniences from the “Slave Settlement’s” zone III, then added sequential FS (field specimen) numbers as I was able. In all, I analyzed 228 proveniences from the approximately 570 excavated proveniences, which makes up 40% of the Stono “Slave Settlement” Block 3 assemblage[113].

A number of resources were used to analyze materials. First, I have nearly 10 years’ experience with analyzing archaeological assemblages[114]. Specifically, I follow protocol established for the DAACS database (for which I underwent extensive training),

[113] 185 of the proveniences I analyzed were from stratum III, which comprises the complete stratum III assemblage.
[114] I have extensive training in ceramic analyses including direct instruction from Dr. Kathleen Deagan and former archaeologist for the City of St. Augustine, Carl Halbirt. Part of this training involved using the City Archaeology Program’s study collection located at the Dr. Sue A. Middleton Archaeology Center in St. Augustine.

the Florida Museum of Natural History (FLMNH), and the Guide to Native American Pottery of South Carolina[115].

Dating. Of primary importance for my study were MCD (mean ceramic date) and TPQ (*Terminus Post Quem*). I rely upon the DAACS method of calculating MCD, which computes manufacturing date range midpoints for each "traditional ceramic ware type such as White Salt Glaze, Creamware, Pearlware, Chinese Porcelain, and American Stoneware" taken from Noel Hume (1969) and Miller et. al (2000) (DAACS.org/query-the-database/meanceramicdate-queries/). These manufacturing midpoint estimates are then averaged by relative weight within the assemblage[116] (DAACS.org/query-the-database/meanceramicdate-queries/).

I also use DAACS' BLUE MCD (Best Linear Unbiased Estimator for calculating Mean Ceramic Dates), which is a method of obtaining the mean ceramic date using relative frequency, manufacturing midpoint, and manufacturing span in order to give less influence to ceramics with particularly long spans of manufacture (Neiman and Smith 2005). Although the majority of the ceramics I have analyzed are from stratum III, I have conducted my analyses on ceramics from all strata combined, or taken as one undifferentiable group because the calculated MCDs do not differ substantially among stratum III and the other two strata as shown in Tables 4.1 and 4.2.

[115] These resources can be accessed online at DAACS.org and scpottery.com. The FLMNH website is currently under construction. Other resources include Drs. Karen Smith, Chester DePratter, and Jim Legg all of or formerly of SCIAA. I also helped to establish a ceramic study collection at SCIAA.

[116] That is, ceramic ware types represented by a greater number of sherds are weighted more heavily within an assemblage than those represented by fewer sherds.

The TPQ method utilizes a range of dates for a given sample, rather than the mean that is provided by the MCD technique (Miller et. al 2000, Orser 2011, Turnbaugh and Turnbaugh 1977). A TPQ is calculated by identifying the earliest manufacture date of the latest ceramic ware type (or decoration type) within a given assemblage (Noël Hume 1969, Miller et. al 2000). TPQ provides a secondary line of evidence for determining dates of the strata for both the “Slave Settlement” and “Tenant Settlement” Stono plantation sites. For the Stono “Slave Settlement” assemblage, the TPQ is 1830 due to the presence of American yellow ware, which dates 1830-1940 (Miller 2000:12). However, nearly half (45%) of the dateable sherds analyzed were creamware or pearlware (DAACS 2019a). These wares date to 1762-1820 and 1779-1830, respectively (Miller 2000:12). These calculations reaffirm the dates identified by the density maps created by Charleston Museum archaeologists and colleagues.

Table 4.1. Stono “Slave Settlement” Assemblage Mean Ceramic Dates by Stratum[117]

Project Name	Stratum	MCD	Blue (Weighted) MCD	Total Sherd Count
Stono	1	1815	1797	260
Stono	2	1799	1793	291
Stono	3	1801	1795	3281

[117] 2019a Mean Ceramic Date Query 1, February 4, 2019. The Digital Archaeological Archive of Comparative Slavery (http://www.daacs.org/queries/form/meanceramicdate/mcdq1/).

Table 4.2. Stono "Slave Settlement" Assemblage Mean Ceramic Date for Site[118]

Project Name	MCD	Blue MCD	Total Sherd Count
Stono	1803	1795	4102

Smith Plantation also provides a nineteenth century MCD. When all contexts are taken in aggregate[119], the MCD for the site is 1805[120]. Stratigraphic groups have not been added to the data for contexts from Smith Plantation in DAACS; however, an MCD query (2020b Mean Ceramic Date Query 1, March 4, 2020. The Digital Archaeological Archive of Comparative Slavery [http://www.daacs.org/queries/form/meanceramicdate/ mcdq1/]) identifies 22 unique excavation unit and level contexts with MCDs ranging 1769 to 1861 (Blue MCDs range 1781 to 1809). Similarly, 11 features exist within the database. MCDs for these features span 1751 to 1802 (Blue MCDs span 1774 to 1802) (2020c Mean Ceramic Date Query 1, March 4, 2020. The Digital Archaeological Archive of Comparative Slavery [http://www.daacs.org/queries/form/meanceramicdate/ mcdq1/]). Thus, I find the overall MCD of 1805 an acceptable representation for the Smith Plantation site as a

118 2019b Mean Ceramic Date Query 1, February 4, 2019. The Digital Archaeological Archive of Comparative Slavery (http://www.daacs.org/queries/form/meanceramicdate/mcdq1/).

119 For this dissertation I have combined general matrix material with feature material. This means I have combined ¼" dry screened and the heavy fraction of floated materials, that is floated materials measuring greater than ⅛". I did not analyze floated materials smaller than ⅛"and they are thus not included in my analyses or results discussed here.

120 2020a Mean Ceramic Date Query 1, March 4, 2020. The Digital Archaeological Archive of Comparative Slavery (http://www.daacs.org/queries/form/meanceramicdate/mcdq1/).

whole and use all Smith Plantation assemblage data in aggregate. That is, I am not excluding features from my datasets.

Ferguson Road MCDs were calculated by TRC staff using South's 1977 method (Grunden 2007:63).

Ware Types. In addition to being used for dating purposes, ceramics from the Stono "Slave Settlement," Stono "Tenant Settlement," Ferguson Road[121], and Smith Plantation assemblages were used to explore access to mass produced goods, level of local and regional production versus mass produced and imported wares, vessel types and uses, and intensiveness of land use. These facets of ceramic use were approached through the identification of ware type, manufacturing technique, vessel form, vessel category, and completeness, as well as information about inclusions, finishes, decorations, and use wear as relevant.

Forty-four different ware types were identified from the ceramic assemblage uncovered from the Stono "Slave Settlement" (DAACS 2019a). Twenty-seven were identified in the Smith Plantation assemblage. Only one ware type was identified at Smith Plantation that was not found at Stono: Black Basalt. Twenty-five ceramic ware types were identified in the Ferguson Road assemblage. Not all of these match the ware types used in DAACS including "Border Ware," "Burnished," "Lead glazed," and "Sherd." I have excluded these from my analyses as it is not possible to identify them according to ware type without physically viewing them and they are no longer available for analyses. A description of each ware type can be found in Appendix D. All descriptions

[121] The Ferguson Road data were provided to me by Ramona Grunden, TRC.

are based on those within DAACS' 2018 *Cataloging Manual: Ceramics*, unless otherwise noted.

Vessel Forms. Vessel forms have been identified to the most precise possible level. These forms include Bottle, Bowl, Colander, Cup, Gaming Piece, Milk Pan, Mug/Can, Plate, Storage Jar, and Teapot. An exhaustive list can be found in the 2018 *DAACS Cataloging Manual: Ceramics*. When a particular vessel form could not be identified, the next level category was used. These categories include Unid: Tableware, Unid: Teaware, and Unid: Utilitarian, which are based primarily on vessel or sherd wall thickness. Teawares are those with walls less than 2 mm in thickness. Tablewares range from 3 to 5 mm in thickness. Utilitarian vessels are those with thicknesses greater than 6 mm. Any sherds that could not be categorized according to these guidelines have been considered "unidentifiable" forms.

Wear and Other Modifications. Wear and other modifications were analyzed based on DAACS protocol as detailed in the 2018 *DAACS Cataloging Manual: Ceramics*. They include burning, which can be cataloged by where the burning is located such as sides and surfaces or individual sides or interior or exterior. Other wear types include utensil wear, base abrasion, spalling, worn/eroded, toothbrush abrasion, and partially missing surface. All of these can also be recorded by which part of the vessel they are found on.

Fragmentation. I also measured fragmentation by taking the maximum sherd size of each ceramic sherd in keeping with DAACS protocol. Sherds smaller than 15 mm in size (when collected during field excavations) were batched unless decorated. All sherds greater than 15 mm in size or with decoration were analyzed individually.

Glass Vessels

I also analyzed glass vessels in order to identify changes in the type and number of bottles, jars, tableware, and other containers used by site residents through time. Glass vessels were analyzed according to DAACS protocol, which can be found in the 2018 *DAACS Cataloging Manual: Glass Vessels*. Analyses include identifying the color of the glass fragment, presence or absence of lead in the glass (as identified using a short-wave UV light, which makes lead glow ice blue) vessel category (hollow, flat, or unidentifiable), vessel form (Bottle, unidentifiable; Bottle, Wine style; Container, unidentifiable; Pharmaceutical Bottle/Vial; Tableware, unidentifiable; and Unidentifiable). I also recorded completeness (base, body, shoulder, neck, rim, finish, handle, foot, stem, lid liner, stopper, all possible combinations thereof, and unidentifiable), manufacture technique (mouth blow, free blown, machine made, mold blown, and unidentifiable), and mold type (contact mold, optic mold, pattern mold, and press mold, not applicable, or unidentifiable). In addition, I cataloged the sherd thickness (for tablewares), maximum sherd size, weight, rim length and diameter (when applicable), and base length and diameter (when applicable).

For non-machine-made bottles, I recorded bottle information per DAACS protocol (bottle completeness particulars such as shape and pontil mark information). The same is true for stemware (when relevant). Decoration was recorded in the database tables only for non-machine-made vessels per DAACS protocol. However, because the Stono site has so many machine-made bottles, I recorded decoration particulars such as technique and pattern type in the notes section of the database. I followed the same procedure for marks. I also recorded condition of all vessels including presence or absence of burning, patination, and solarization.

Although DAACS does allow for the batching of all machine-made glass, I only batched sherds smaller than 30 mm in size and did so by form, completeness, and color.

Utensils

Another artifact category I analyzed were utensils. As with all other artifacts, these were analyzed according to DAACS protocol as outlined in the 2018 *DAACS Cataloging Manual: Utensils*. Utensils are cataloged as either complete or incomplete as well as by form (1 piece or 2 piece knife, fork, or spoon and one piece or two piece, unid). For forks, the number of tines was recorded when possible. For knives, the shape of the blade was recorded, when possible. The same is true for the shape of spoon bowls. The length, width, and height of utensils were cataloged whenever possible as well, even when only a portion of the original utensil was present. Handle and tang shapes were also recorded for all utensil types, when possible.

Other attributes cataloged for utensils include manufacture technique (carved, cast, forged, molded, stamped, or unidentifiable) along with material (bone, ceramics, copper alloy, iron, pewter, plastic, silver, stone, wood, or unidentifiable). Decorative elements and condition (burning, post-manufacture modifications, and conservation completion) were also recorded.

Metal Cans and Potential Metal Cans

Although metal cans were not commonly used for containing foodstuffs until the late nineteenth century and early twentieth century (Twede 2009), I decided to determine their frequency at the various sites considered in my dissertation research project. I cataloged them according to DAACS protocol as outlined in the 2017 *DAACS Cataloging Manual: All Other Artifacts*. Can fragments were identified by the presence of a rim and rim shape (circular or rectangular). Their manufacturing technique was recorded as "machine made" along with the metal used (typically iron or iron alloy, but also aluminum). Fragments of thin metal sheeting have also been considered as potential can fragments and have been cataloged as "sheeting," by type of metal, and with manufacturing technique as rolled/sheet.

Faunal Remains

Previous analysis of faunal remains uncovered from a portion of the "Slave Settlement" area of Stono Plantation (Dukes and Reitz 1994) demonstrates the presence of both domesticated animals (primarily cow and pig) as well as wild animals (such as opossum, raccoon, fox, fish, and turtle). I have completed analysis on the faunal assemblages from the "Slave Settlement" as well as the entire "Tenant Settlement," the materials recovered from excavated features at Ferguson Road, and the entire Smith Plantation assemblage. In general, I aggregated materials from all recovery methods and deposits including combining features with plowzone.

I made this choice because the plowzone and feature contexts were determined to be roughly contemporaneous at the Stono sites. Similarly, at Smith Plantation, only a slight variation in chronology was identified between features and midden materials (Smith et. al 2017). Only feature material was analyzed from the Ferguson Road site. Thus, I found combining contexts made the analyses and results more straightforward. I find little evidence that taking the data in aggregate has profoundly impacted the results of this dissertation. When aggregation biases are found to exist as in the early date of Ferguson Road materials and the discrepancy in fish remains interpretations between the Smith Plantation and Stono "Tenant Settlement" recovery method comparisons discussed above, I have pointed them out.

Another potential bias is present because of inter-analyst variation. Specifically, some species in the "Slave Settlement" assemblage I analyzed had previously been identified by Dr. Elizabeth Reitz (circa 1994). In general, I used her identifications and cataloged them into the DAACS database along with the others I identified and analyzed under the guidance of Dr. Diane Wallman at the University of South Florida, two courses in comparative human and mammal osteology with Dr. Carlina De La Cova at the University of South Carolina, and based on standard zooarchaeological methods (Reitz and Wing 2008).

For the Stono "Tenant Settlement" I have analyzed all faunal materials personally per DAACS expert protocol. For Ferguson Road I cataloged into a spreadsheet per TRC's request. I completed analyses at what DAACS would refer to as "expert level;" that is, to the lowest taxa and with the highest possible level of detail and precision. For Smith Plantation, I analyzed faunal remains at a non-expert level because I had not yet undergone training with Dr. Wallman or Dr. De La Cova, which limits the options for a number of fields in the DAACS database. Specifically, taxa identification level is limited to class. Element selection is limited to antler, baculum, claw, cranium, mandible, maxilla, rib, scale, scapula, tooth, tooth row, vertebra, and unidentified. Symmetry, location, descriptor, fusion, relative size, tooth information, and condition are all cataloged as "not recorded." In all cases except for Smith Plantation, I have cataloged the specimen count, osteological element, symmetry/side, weight, location/portion and descriptor/landmarks, age and fusion, butcher and cut marks, burning, weathering, disease or trauma, and taxon to the lowest possible level per DAACS' standards for zooarchaeological experts as outlined in the 2017 *DAACS Cataloging Manual: Faunal.*

For fish, identifications were made based primarily upon brachio-cranial elements (Reitz and Wing 2008, Wheeler and Jones 1989). Some specimens in the Stono "Slave Settlement" assemblage had been previously identified at the species level by Reitz (ca. 1994). I was able to identify some fish specimens from the Stono "Tenant Settlement" assemblage at the species level during a brief visit I made to the FLMNH aquatic collection in October 2018.

The rest of the specimens (including all of those from Ferguson Road) were identified at the family level based upon vertebrae, neurocranial elements, and pectoral girdle elements using Dr. Wallman's collection at the University of South Florida (USF) in Fall 2017. When family level identifications could not be made, fish were assigned to the next lowest possible level (order or class). Fish remains from Smith Plantation were analyzed at the non-expert level as detailed above. I did not conduct aging analyses on any aquatic specimens due to the high level of fragmentation and limited access to a complete aquatic assemblage such as that of FLMNH.

The only reptiles identified in any of the four assemblages were turtles, which followed the same protocol outlined for fish in the preceding paragraph. The same is true for mollusks and crustaceans. That is, I used Reitz' species-level identifications when available, or identified specimens from the Stono "Tenant Settlement" myself at the lowest possible level using the FLMNH collection in the limited period of time I spent there, and in all other cases made the lowest possible level identification (generally family) using the USF collection during my time there.

I have calculated the NISP (number of identified specimens), MNI (minimum number of individuals), and taxonomic group biomasses at all sites in order to identify changes in the diet and cuisine of Stono inhabitants through time. These tests were selected because they are the most commonly employed methods for measuring abundance in zooarchaeology (Grayson 1979:201, Steele 2015:169).

NISP. The number of identified specimens (NISP) is a count of faunal remains that have been identified at the lowest possible taxonomic level. It is a common quantitative method used in zooarchaeological studies (Grayson 1978 and 1984, Landon 2005).

NISP is problematic for a host of reasons. First, it is affected by butchering patterns. Namely, animals are less well represented as fragmentation increases both because the fragments are not recovered and because identifying them increases in difficulty inversely with their size. Further, NISP estimates tend to vary among species because larger animals are generally easier to identify at a lower taxonomic level purely because they are easier to examine. In addition, NISP assumes all specimens have an equal chance of breakage; they are not equal either naturally or culturally because larger animals are more often cut into smaller pieces than are small animals. Other issues with NISP as well; it may differentially exaggerate sample sizes across taxa, it supports fewer analytic procedures than other methods (namely MNI), element interdependence invalidates further statistical testing, and the nature of the context as a unit does not allow for valid intersite comparisons (Grayson 1973:432, 1979:201, 1984).

In order to combat this limitation, I calculated normalized NISP by dividing the NISP in each site assemblage by the total excavated volume for each site. Doing this enables a better comparison of NISP in terms of sample size, which is particularly useful among assemblages that vary dramatically in size such as those used in this dissertation.

A final issue with NISP and one that directly impacts this study, is related to the field methodology employed during excavations. The contexts from which fauna are uncovered may be affected by differential preservation and collection technique, but any such effects are not taken into account during lab analyses and later results interpretations. At the sites included in this study, ¼" screen was used for general matrix analysis, while ⅛" was used for features. Flotation samples were also taken. For the Stono sites, I analyzed ¼" screened materials, ⅛" screened materials, and both the heavy and light fractions from flotation samples. For the Smith Plantation, only items larger than ⅛" in float samples were cataloged. For Ferguson Road, I did not have access to the float materials. In order to combat some of these issues (particularly those related to interdependence), I have calculated MNI.

MNI. The Minimum Number of Individuals is another method of determining the number of faunal specimens within an archaeological assemblage. While NISP is a count of the number of identified elements per taxon, MNI is the number of individuals per taxon represented by those elements (Grayson 1978:53). MNI is calculated by matching the left and right elements of an assemblage with regards to age and size (Grayson 1973). I calculated MNI for all four sites using this procedure.

I calculated MNI for all taxa; however, it is more relevant for interpreting some taxa more than others. For example, if domesticated mammals (such as beef and pork) were rationed, then only some cuts would be distributed to any particular individual or household. As a result, the remains from that portion does not represent an entire animal. In contrast, for fish, birds, and other small animals, which would have likely been consumed in their entirety, MNI does represent an entire individual (Lyman 1994 and 2008).

Biomass. Unlike NISP and MNI, biomass estimates are interpretive measures; it uses mass for various taxa as proxies for meat yields, which are ranked in terms of relative dietary importance (Grayson 1979:224 and 1984, Landon 2005). I calculated biomass for all four sites based on Reitz & Wing's (1999) formula Y=aX^b, where Y is biomass, X is bone weight, and a and b are scaled constants.

I calculated biomass for three animal classes: mammal, bird, and turtle. Fish were not estimated because they vary in size across and within species such that biomass calculations of this nature lack accuracy compared to other classes. Estimating biomass for fish requires allometric estimations, which are not possible for the Smith Plantation and Ferguson Road assemblages due to fragmentation and loss of specimens due to large (1/4”) screen size.

As with NISP, I normalized biomass calculations by dividing the biomass for each site by the total volume of excavations at each site. This normalization procedure makes biomass comparisons relative to sample size and, thus, makes up for the vast differences in sample sizes among the assemblages investigated in my study.

Butchery. In order to investigate how the residents of the four sites prepared the meats they ate I examined the faunal remains for signs of butchery and burning. The signs of butchering include hack, cut, and saw marks, which are created by cleavers, knives, and saws, respectively. The analysis of hack and saw marks enabled me to identify whether animals were butchered in standardized cuts, what types of tools were used in butchering, and how common butchering was. Knife mark analysis spoke to preparation of cuts as well as whole animals.

Cuts created by knives can also be created during consumption, as discussed in the utensil analysis section above. I also identified “probable” hack, cut, and saw marks when I could not be certain about the nature of a particular mark. Like the other faunal analyses, I use identification of cut marks is a tried and true method for exploring foodways (Grayson 1984, Landon 2005, Reitz 1994, Steele 2015:169).

Skeletal Parts. The portions of faunal remains uncovered were cataloged as described above and following standard procedure for identification of osteological elements (Adams and Crabtree 2012, Gilbert 1990, White et. al 2011). Elements include every bone and tooth for each identified species. Locations, or osteological landmarks were also noted whenever possible. Recording these attributes enables me to identify which parts of particular animals were being consumed. Unfortunately, I was not able to catalog osteological landmarks for the Smith Plantation faunal assemblage because of the level of expertise I had at the time and the correlated level (non-expert) at which I cataloged those remains.

Aging and Sizing. In my analyses, I used epiphyseal fusion and tooth eruption sequences to estimate age at death (Hillson 2005, Payne 1973 and 1985, Grayson 1979). I also used the DAACS database "relative size" field to record whether a specimen was adult or juvenile. This information is used to identify the age at which faunal specimens were dispatched, which is used to infer the quality of meats (lamb versus mutton, for example). I do not utilize these data in this dissertation, however.

Taphonomy. Finally, I analyzed and cataloged taphonomic processes (Lyman 1994). These processes include presence and absence of disease and trauma, weathering, and burning.

All Other Artifacts

In order to exercise best practices, I have cataloged all other artifacts from the Stono "Slave Settlement" assemblages' proveniences that I used for my study of foodways into the DAACS database per DAACS protocols. That is, I have cataloged all artifacts from all assemblages I used for my study regardless of their utility in meeting my particular goals for this project. For the Stono "Tenant Settlement" and Smith

Plantation I have cataloged all artifacts uncovered from all proveniences. All of this data has been entered into DAACS. Note, my analysis of the Smith Plantation assemblage was done in my role as a Research Assistant for SCIAA (the South Carolina Institute of Archaeology and Anthropology), while the Stono assemblages were analyzed for this dissertation. For Ferguson Road, no data was entered into DAACS; however, I do have data for all artifacts collected from that site (excluding flotation materials, which were not available, as discussed below).

Data from the Stono sites is intended to "go live" on the public version of the DAACS database so that other scholars may share the data and use it for their own studies. Similarly, the Smith Plantation data is not currently public and is maintained in DAACS for those involved with the project only; however, in the future the project will be made public on daacs.org (personal communication with Karen Smith). Ferguson Road data will be published by TRC.

Ferguson Road Excavation History and Methodology

The Ferguson Road site is located on James Island, less than a mile to the northeast from the Stono sites (see Figure 4.14). The materials from Ferguson Road used in my dissertation research were uncovered in 2006 and 2007 by archaeologists working for TRC, an engineering and consulting firm (Grunden 2007, https://www.trccompanies.com/about/). TRC's initial field investigations included a Phase I shovel testing survey, which identified two sites, 38CH2105 and 38CH2106 Grunden 2007:1). The two sites are combined for the purposes of my study as they were found to be temporally and spatially affiliated by TRC archaeologists (Grunden 2007).

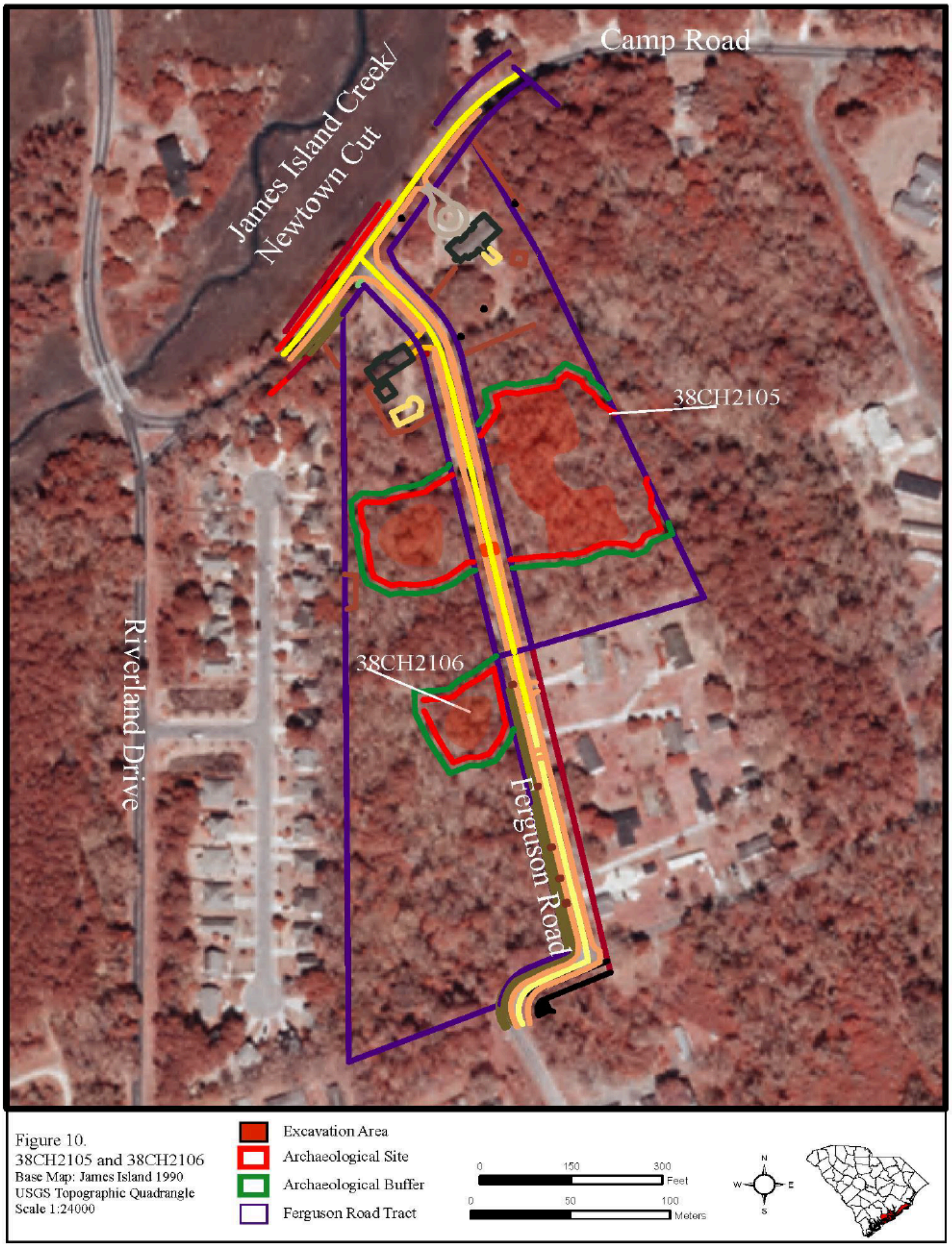

Figure 4.14. Map of the Ferguson Road site (Grunden 2007:18).

Soon after the initial survey, TRC returned to 38CH2105 to conduct Phase II excavation consisting of 374 five-meter interval shovel testing and 171 1-by-1-m test units. The units were excavated using shovels and trowels following 10-cm levels within natural strata. One-quarter inch screen was used. These efforts identified the site as an early eighteenth through nineteenth century site with a minor prehistoric component (Grunden 2007:1).

Fifty-two shovel tests were dug at site 38CH2106. Further excavations there were conducted with the aid of heavy machinery brought in to grade the site in an effort to uncover subsurface features. The upper 20-30 cm of the site were mechanically removed. These sediments were heavily disturbed by plowing activity and no artifacts were seen within them during removal (Grunden 2007:74). Consequently, all cultural materials from the site were collected from features, which were hand excavated after being exposed by stripping (Grunden 2007:16-17). The fill from these features was screened through ¼" and ⅛" mesh. When possible, a five-liter sample was taken features with the intent of floating (Grunden 2007:19). All flotation samples and non-faunal materials were relocated to TRC's Atlanta office and were not available for use in my study.

Ferguson Road site 38CH105 contained 48 features. Including one rock cluster, two fireboxes/hearths, two amorphous stains, 13 pits, and 16 post holes. One was found to be a tree stain. The remaining 13 features were identified as non-cultural and were not excavated (Grunden 2007:29-30). More than 4,000 artifacts were uncovered at 38CH2105 and analyzed by TRC archaeologists (Grunden 2007:53). Only one feature was identified and excavated at 38CH2016. That feature was a pit containing 244 historic artifacts all of which date to the late seventeenth to early eighteenth century (Grunden 2007:30). The pit feature also contained 1,409 grams of faunal materials (Grunden 2007:30). All faunal materials uncovered at the site came from features, which suggests that unlike much of the Stono faunal materials, it was part of discrete depositional episodes.

Smith Plantation Excavation History and Methodology

The first archaeology conducted at the Fort Frederick Heritage Preserve occurred in 1981 by Stanley South in an effort to find the 1562 French settlement called Charlesfort[122] (South 1982:2). In 1996 Jim Legg conducted a metal detector survey of the area. That same year, Thomason and Associates conducted a broad survey. In 2000 Markham and Thomas conducted a similar survey and three years after that, Butler performed a survey (Smith et. al 2017:6). These efforts identified Locus 2, the area where the plantation house once stood.

In 1999 the South Carolina Department of Natural Resources (SCDNR) Heritage Trust Program acquired the property in an effort to protect the standing remains of an eighteenth century British tabby fort. Five years later, SCDNR contracted with Applied Research Division (ARD) of the South Carolina Institute of Archaeology and Anthropology to conduct an inventory of cultural resources on the site. The site map created by ARD can be seen in Figure 4.15.

[122] He did not find it during this endeavor.

The cultural resource assessment included 305 shovel tests positioned across the property at 10 m intervals; it was then delineated at 5 m intervals. Fourteen 2-by-2-meter test units were also excavated. Seven of those units were located within the antebellum period midden identified by ARD archaeologists (Smith 2017:iii). A plowzone

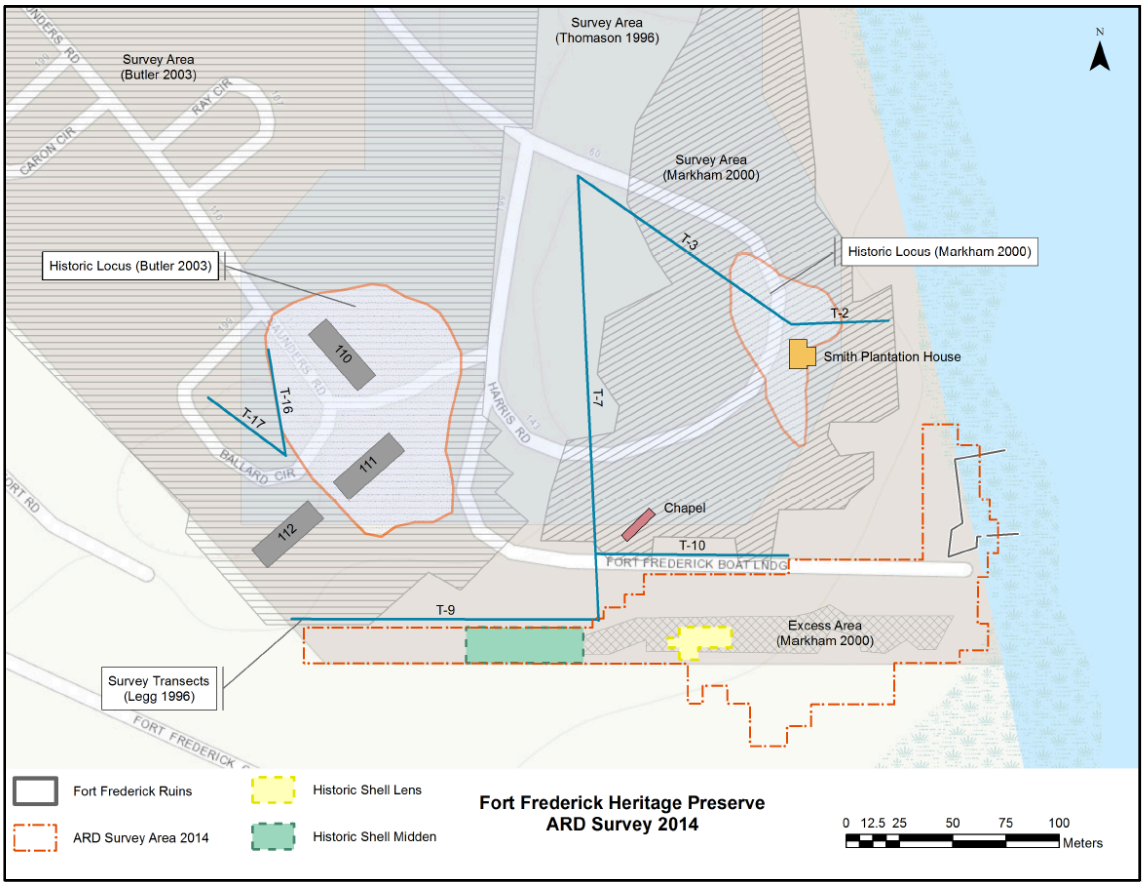

Figure 4.15. Map of Fort Frederick Heritage Preserve with Smith Plantation shown in 1864 plat map location (Smith et. al 2017:3).

roughly 20-cm thick was identified through ARD excavations. This stratum lies atop features (Smith et. al 2017:93), just as at the Stono Plantation and the Ferguson Road site.

Thirteen features were excavated in whole or in part during the ARD excavations of Smith Plantation (Smith et. al 2017:iii). As is the case for all sites considered in this dissertation, some of these features were likely cut off by plowing activities. The ARD excavations uncovered 12,359 artifacts from the plantation-era midden (Smith 2017:15). These materials from these seven antebellum period units are the only artifacts from Fort Frederick Heritage Preserve excavations analyzed in this dissertation.

The antebellum midden investigated by ARD was interpreted as having been deposited by an unidentified group of enslaved people residing upon the 700-acre Sea Island cotton plantation owned by John Joyner Smith from the early nineteenth century through the Civil War (Smith et. al 2017:iii). I must note here that Smith himself referred to the Port Royal plantation as Old Fort Plantation; however, archaeological reports from past projects and the historical photographs included above have established a convention of referring to the site as Smith Plantation (Smith et. al 2017:5). Following tradition, I use that name here.

Although, ARD interpretations of the site strata suggest that two occupations existed on the Smith Plantation, in this study, I have combined the two hypothesized occupations into a single assemblage. The effects of this decision may force the MCD and thus the age of the site earlier than it truly was. Yet, I find that attempting to tease apart the two potential occupations would be too cumbersome at this juncture and for the purposes of this dissertation.

The following chapters will detail my results for the Stono “Slave Settlement,” Stono “Tenant Settlement,” Smith Plantation, and Ferguson Road by artifact category. A discussion of those results follows.

CHAPTER 5:
RESULTS: CERAMICS

In this chapter I detail the results of the statistical tests I conducted on the Stono "Slave Settlement," "Tenant Settlement," Smith Plantation, and Ferguson Road ceramic assemblages. For all sites, my analyses included calculation of ceramic ware type frequencies, vessel category frequencies, and vessel form frequencies, as well as wear patterns and fragmentation. Using ware type frequencies, I hypothesize that ceramic diversity overall declines across all sites through time due to technological innovations in the mass production of ceramics. Such innovations would have enabled a few types of ceramics (such as whiteware) to be acquired more easily and cheaply than wares produced by hand be it locally, regionally, or overseas (as in the cases of colonoware, redwares, and porcelains, for example). In conjunction, use of handmade ceramics would have decreased due to their relative cost in terms of purchase, but more so because of the time-cost involved in their production[123]. Evidence for the decline

[123] That is, the labor-cost of producing colonoware (even if it were a second hand labor cost, as in the case that Stono, Smith, and Ferguson Road residents did not make colonoware themselves, but instead bought or traded for it) would have been higher for enslaved people than purchasing or trading for ceramics (Bourdieu 1986, Joseph 1989:62, Lees and Kimerly-Lees 1979, also see Gibble 2005 for a similar discussion involving locally produced redwares in colonial Pennsylvania). Planters were particularly concerned with streamlining costs so would likely have preferred enslaved laborers spend time on more profitable ventures (Hauser 2008). Although in some instances, the labor cost of localized pottery production was shared among individuals and thus took little time away from their other tasks (Ahlman et. al 2009:38).

In handmade ceramics includes the abandonment of colonoware in the early-mid nineteenth century (Ferguson 1992, Ferguson and Goldberg 2019, Greene 2011).

It is not clear how meals were prepared for the enslaved laborers at Stono. I seek to determine whether or not meals were prepared communally or on a smaller-scale basis such as by household. In order to make this determination, I compare flat and hollow form vessel ratios through time. If a shift from communal one-pot, stew-type meals to household-centered, meat-and-three-style meals occurred, then flat form ceramics may have increased relative to hollow vessels through time. A shift from trenchers and spoons or hands to plates, bowls, and mugs along with knives and forks is documented for Europeans and their descendants in the eighteenth century (Edgar 1998). It is possible such a shift occurred for people descended from Africans as well; however, on this point I prefer to let the analysis lead so as to avoid suggesting a Eurocentric process of acculturation occurred[124].

If such a shift from communal to smaller-scale meals occurred, large ceramic sherds from multi-serving pots would decline through time. Although the concept of meat-and three arose during the early- to mid-twentieth century (Edge 2017:10, Edge in interview published December 2016 at www.eater.com/2016/12/27/13990844/meat-and-three-north-carolina-alabama-georgia), I suggest it is conceivable that traces may be seen earlier. This hypothesis could include the fact that there is no documentary or oral historical-memory evidence for communal one-pot meals being consumed at Stono

[124] Indeed, Fogle (2015) found that no such transition occurred at Witherspoon Island in the inland South Carolina piedmont, and that stews may have been eaten from both flat and hollow vessels in that locale.

post-Emancipation. Of course, there is also no such evidence that communal one-pot meals were not served at Stono during the period of enslavement either; however, such evidence has been noted for other plantation sites in the Lowcountry (Edgar 1998, Ferguson 1992).

I further hypothesize that If the continuation of communal meals occurred at Stono, a decrease in colonoware sherds will be seen due to the increased availability and relative inexpensiveness of metal pots, which would have been mass produced in the middle part of the nineteenth century with the rise of industrialization. A decrease in colonoware sherds and an increase in metal fragments is expected. However, I must reiterate that there is no evidence of communal meals being prepared (or not) at Stono[125]. Alternatively, ratios of flat to hollow ceramic vessels may have remained relatively stable through time as it is clear that pilau-type dishes have been consumed in the Lowcountry for centuries and are still commonly eaten there today[126] (Harris 2011, Shields 2015).

Last, my analyses include an investigation of use-wear including marks left behind by cutlery, partially missing surfaces, and abrasions for which a cause is

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[125] Although Ferguson (1992), Edgar (1998), and Tuma (1996) suggest communal meals were served at some plantations, others (Agha et. al 2012, Ascher and Fairbanks 1971, Reitz et. al 1985, Poplin et. al 1993) have found evidence that communal one-pot meals were not served at other plantations. Samford (1996) suggests that the number of individuals working on a given plantation may be the determining factor in whether meals were communal or more individual/household based. Further, Europeans also engaged in communal consumption. For example, punch bowl fragments were common in the main house assemblage at Stobo plantation (Zierden et. al 1999).

[126] Wilkie (2000) has identified such a continuation in communal stew preparation in the Bahamas today.

unknown. Missing surfaces and abrasions on ceramic sherds can be created by many activities including turning the vessel (Agha et. al 2012:25), or simply by use (Stockhammer 2015) or lack thereof (Mullins 2011). I suggest that extensive abrasions and missing surfaces identified on ceramics from Stono and Smith plantations were caused by plowing, which occurred extensively at Stono (Frazier 2006 and 2010). I also suggest that plowing led to the heavy fragmentation of artifacts seen on the Stono and Smith Plantation sites. These results speak to land use, specifically in terms of agricultural practices and the intensity thereof, which led to numerous abrasions, partial removal of surfaces, and a high degree of fragmentation for ceramics at the two sites[127].

Ceramic Ware Types

In this section, I detail the number and type for each ceramic ware uncovered at the Stono "Slave Settlement," Stono "Tenant Settlement," Smith Plantation, and Ferguson Road sites. The results are compared across sites and time periods in order to determine differences and similarities in terms of ware type use. The number and types present are used to identify levels of access to handmade and mass-produced ceramics, as well as the origins of those ceramics. These findings indicate levels of access to formal and informal, local, regional, and trans-Atlantic markets for residents of each site.

Stono "Slave Settlement." Forty-four different ware types were identified from the ceramic assemblage uncovered from the Stono "Slave Settlement" (DAACS 2019a) (Table 5.1). Of these, 32 comprise only a fraction of a percent of the entire ceramic

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[127] Due to the cultural resource management work plan followed at the Ferguson Road site, few ceramics were collected from the upper levels where plowing would have impacted material remains. Thus, no analysis of wear for that assemblage is possible.

Table 5.1. Ceramic Ware Types from the Stono "Slave Settlement" by Percentage

Ware Type	Sherd Count	Percentage of Assemblage
Creamware	2340	23.37%
Pearlware	2165	21.63%
Colonoware	1705	17.03%
Whiteware	685	6.84%
Redware	640	6.39%
Native American	573	5.72%
Slipware, North Midlands/Staffordshire	281	2.81%
Ironstone/White Granite	276	2.76%
Stoneware, unidentifiable	230	2.30%
Delftware, Dutch/British	170	1.70%
Porcelain, Chinese	153	1.53%
Refined Earthenware, unidentifiable	137	1.37%
Westerwald/Rhenish	93	0.93%
Coarse Earthenware, unid	89	0.89%
Porcellaneous/Hard Paste	86	0.86%
White Salt Glaze	81	0.81%
Redware, refined	59	0.59%
Yellow Ware	45	0.45%
Astbury Type	21	0.21%
British Stoneware	21	0.21%
Rosso Antico	19	0.19%
American Stoneware	18	0.18%
Tin-Enameled, unid	15	0.15%
German Stoneware	13	0.13%
Whieldon-type Ware	13	0.13%
Red Agate, coarse	12	0.12%
Nottingham	11	0.11%
Jackfield Type	9	0.09%
Red Agate, refined	9	0.09%
Bennington/Rockingham	6	0.06%
Majolica	6	0.06%
Buckley-type	5	0.05%
Staffordshire Mottled Glaze	4	0.04%

Iberian Ware	3	0.03%
Refined Earthenware, modern	3	0.03%
Bristol Glaze Stoneware	2	0.02%
Faience	2	0.02%
North Devon Gravel Tempered	2	0.02%
Porcelain, Japanese	2	0.02%
Refined Stoneware, unidentifiable	2	0.02%
Staffordshire Brown Stoneware	2	0.02%
Agate, refined (Whieldon-type)	1	0.01%
Canary Ware	1	0.01%
Porcelain, unidentifiable	1	0.01%
Total	**10,011**	**100%**

assemblage (fewer than 100 sherds). Three wares make up more than half of the assemblage (62.12%): creamware, pearlware, and colonoware. It is notable that I identified more than 550 sherds, or 5.72% of the assemblage as Native American. As noted in the ware description in Appendix D, many of these sherds could perhaps be considered colonoware as South Carolina's archaeologists have never agreed on a typology for the ware[128] (Anthony 1989, Brilliant 2011, Isenbarger 2006, Steen 1999). This is particularly true for plain, undecorated Native American sherds, but also for stamped, incised, and burnished sherds, which do exist within colonoware assemblages elsewhere [129](Agha et. al 2012, Brilliant 2011, Ferguson 1992, Zierden et. al 1998).

[128] In fact, according to Ferguson (1992:18) the category was never intended to be used as a ware type, but rather as a signifier of locally produced wares with similar morphology. Identifying similarity of morphology among small ceramic sherds is difficult if not impossible.
[129] Although Anthony (2012b) argues Ashely series Native American pottery and colonoware are readily distinguishable on the site.

Stono "Tenant Settlement." Twenty-five different ware types were identified from the ceramic assemblage uncovered from the Stono "Tenant Settlement" (DAACS 2019b) (Table 5.2). Of these, 11 comprise only a fraction of a percent of the entire ceramic assemblage (fewer than 10 sherds). One ware (whiteware[130]) makes up more than half of the assemblage (53.97%).

Table 5.2. Ceramic Ware Types from the Stono "Tenant Settlement" by Percentage

Ware Type	Sherd Count	Percentage of Assemblage
Whiteware	415	53.97%
Ironstone/White Granite	90	11.70%
Porcelain, unidentifiable	46	5.98%
Yellow Ware	25	3.25%
Stoneware, unidentifiable	24	3.12%
Colonoware	21	2.73%
Creamware	20	2.60%
Native American	16	2.08%
Pearlware	15	1.95%
Porcelain, Chinese	15	1.95%
Refined Earthenware, modern	15	1.95%
Refined Earthenware, unidentifiable	10	1.30%
American Stoneware	9	1.17%
Redware	8	1.04%
Refined Stoneware, unidentifiable	7	0.91%
Slipware, North Midlands/Staffordshire	5	0.65%
Coarse Earthenware, unid	4	0.52%

[130] It is worth noting that differentiating whiteware from ironstone/white granite can be difficult. For this study, I separated the two wares based on glossiness of glaze, size and amount of crazing of glaze, and quality of paste. Ironstone/white granite is defined as being more glossy, with larger and/or little to no crazing, and a more porcelain-like paste.

Porcelain, Japanese	4	0.52%
Porcellaneous/Hard Paste	4	0.52%
White Salt Glaze	4	0.52%
British Stoneware	3	0.39%
Staffordshire Mottled Glaze	3	0.39%
Westerwald/Rhenish	3	0.39%
Bristol Glaze Stoneware	2	0.26%
North Devon Gravel Tempered	1	0.13%
Total	**769**	**100.00%**

The ware types "Refined Earthenware, modern" and "Refined Earthenware, unidentifiable" are used for refined earthenwares that date to the twentieth century and thus post-date DAACS typology. These wares have highly refined, porcelain-like pastes and a variety of decorations including decals and machine-painted elements. They may also have colored (non-white or clear) glaze that is either alkaline or lead-based.

Smith Plantation. Twenty-seven ware types were identified in the Smith Plantation ceramic assemblage (Table 5.3). This number is five fewer ware types than was found in the Ferguson Road and Stono "Slave Settlement" assemblages and two greater than was identified in the Stono "Tenant Settlement" assemblage. The Smith Plantation ceramic assemblage is comprised of more than one-third pearlware (see Table 5.3); however, it is important to mention that differentiating between pearlware and whiteware on the Smith Plantation site was particularly difficult. It is possible that the percentage of pearlware is over-estimated and the whiteware under-estimated. Still, Smith plantation and the Stono "Slave Settlement" have similar ceramic assemblages (in terms of historic period ceramics used in the calculation of MCD as shown in Table 5.4).

Table 5.3. Ware Types Identified in the Smith Plantation Ceramic Assemblage.

Ware Type	Sherd Count	Percentage of Assemblage
Pearlware	882	35.48%
Colonoware	461	18.54%
Creamware	411	16.53%
Whiteware	243	9.77%
Slipware, North Midlands/Staffordshire	137	5.51%
Redware	125	5.03%
Porcelain, Chinese	47	1.89%
Refined Earthenware, unidentifiable	24	0.97%
Red Agate, coarse	23	0.93%
Coarse Earthenware, unid	20	0.80%
Yellow Ware	18	0.72%
Native American	16	0.64%
Stoneware, unidentifiable	15	0.60%
British Stoneware	10	0.40%
Rosso Antico	9	0.36%
Jackfield Type	8	0.32%
Black Basalt	7	0.28%
Astbury Type	6	0.24%
Delftware, Dutch/British	4	0.16%
German Stoneware	4	0.16%
White Salt Glaze	4	0.16%
American Stoneware	3	0.12%
Westerwald/Rhenish	3	0.12%
Staffordshire Brown Stoneware	2	0.08%
Whieldon-type Ware	2	0.08%
Ironstone/White Granite	1	0.04%
Tin-Enameled, unid	1	0.04%
Total	**2486**	**100.00%**

Table 5.4. Comparison of Mean Ceramic Dates for the Stono "Slave Settlement" and Smith Plantation[131]

Project Name	MCD	Blue (Weighted) MCD	Total Sherd Count
Smith Plantation	1805	1798	1950
Stono	1803	1795	4076

As mentioned, pearlware is the most prevalent ware type in the Smith Plantation assemblage. That ware, along with colonoware, creamware, whiteware, Staffordshire slipware, redware, and porcelain[132] were in the top ten wares represented on both Smith Plantation and in the Stono "Slave Settlement" assemblage. Only pearlware and creamware are in the top five; however as noted, it is possible that whiteware is under-estimated for Smith Plantation. Thus, in addition to MCD, the ware lists are also similar between Smith Plantation and the Stono "Slave Settlement" assemblages.

Ferguson Road. Thirty-two ware types were identified at the Ferguson Road Site by TRC analysts. While the analysis does not conform to DAACS standards, it is in most cases possible to massage the TRC ware categories into DAACS' prescribed types. See Table 5.5 and the related footnote for explanations of these changes. Interestingly, my

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[131] 2019a Mean Ceramic Date Query 1, February 4, 2019. The Digital Archaeological Archive of Comparative Slavery (http://www.daacs.org/queries/form/meanceramicdate/mcdq1/); 2019c Mean Ceramic Date Query 1, February 18, 2019. The Digital Archaeological Archive of Comparative Slavery (http://www.daacs.org/queries/form/meanceramicdate/mcdq1/).

[132] However, for Ferguson Road the category is porcelain, unid. and at Smith Plantation it is Chinese porcelain. It is possible that the unid category at Ferguson Road contains sherds that might have been cataloged as Chinese if I had done the analyses.

analysis shows the number of ware types in the Ferguson Road assemblage exactly matches that of the Stono "Slave Settlement" assemblage; however, the type lists are not identical (see Table 5.5 below). The Ferguson Road assemblage varies substantially

Table 5.5. Transforming TRC Ware Types into DAACS Ware Types

Ware Type	Sherd Count	Percentage of Assemblage
Coarse Earthenware, unid.*	496	17.82%
Native American	465	16.71%
Pearlware	449	16.13%
Creamware	425	15.27%
Delft*	162	5.82%
Whiteware	125	4.49%
Porcelain, unid.	101	3.63%
Staffordshire/North Midlands	92	3.31%
North Devon Gravel Tempered	56	2.01%
Westerwald	45	1.62%
Stoneware, unid.*	42	1.51%
White Salt Glaze	39	1.40%
Colonoware*	35	1.26%
Buckley	32	1.15%
Unid*	30	1.08%
North Devon Non-Gravel Tempered	26	0.93%
Stoneware, British	25	0.90%
Jackfield	22	0.79%
Astbury	21	0.77%
Manganese Mottled	18	0.65%
Nottingham	14	0.50%
Japanese Porcelain*	11	0.40%
Redware*	11	0.40%
Lead Glaze*	10	0.36%
Faience	8	0.29%

Chinese Porcelain*	6	0.22%
Basalt	5	0.18%
Yellowware	4	0.14%
Refined Earthenware, unid.*	3	0.11%
Ironstone	3	0.11%
Stoneware, American	1	0.04%
Rockingham	1	0.04%
Total	**2783**	**100.00%**

*see footnote[133]

from the Stono "Tenant Settlement," a situation that is likely due to the period of habitation. The MCD for Ferguson Road ranges from 1714 (pit features) to 1806 (overall site excluding features), with an average of 1758 (both features and general matrix). The Stono "Slave Settlement" provided an MCD of 1803[134], while the "Tenant Settlement" is estimated at 1864[135]. Although the "Tenant Settlement" MCD is relatively early considering the fact that the site was occupied into the twentieth century, it is not as many of the ceramics in the "Tenant Settlement" assemblage are not incorporated into

[133] Some ware type shifts were required in order to compare TRC wares with Stono wares. Specifically, DAACS categorizes only sherds with pastes with particular pantone colors as Redware. I have presumed all sherds identified by TRC as Redware to be Redware as defined by DAACS. Those TRC sherds identified only as "lead glazed" were shifted into Coarse Earthenware, unid. Similarly, sherds listed as "Burnished" or "Burnished, incised" were categorized as Coarse Earthenware, unid. "Border Ware" was re-categorized as Refined Earthenware, unid. "Salt Glazed" Stonewares became Stoneware, unid. "Blue on White" Porcelain became Chinese Porcelain and "Imari" became Japanese Porcelain. All "Delft" was all categorized as English Delft.
[134] 2019a Mean Ceramic Date Query 1, February 4, 2019. The Digital Archaeological Archive of Comparative Slavery (http://www.daacs.org/queries/form/meanceramicdate/mcdq1/).
[135] 2019d Mean Ceramic Date Query 1, April 4, 2019. The Digital Archaeological Archive of Comparative Slavery (http://www.daacs.org/queries/form/meanceramicdate/mcdq1/).

the MCD calculation because they are considered "modern" or "unid" in the DAACS system and therefore are not included into the average (see discussion of ceramic ware types for "Tenant Settlement" and MCD in previous chapters). As a result, the MCD for the "Tenant Settlement" is skewed early.

Ceramic Vessel Forms

In this dissertation, I use ceramic vessel forms as a proxy for the types of meals consumed at the Stono "Slave Settlement," Stono "Tenant Settlement," Smith Plantation, and Ferguson Road sites. I take hollow forms (such as bowls) as an indication that liquid-heavy, stew-like meals were consumed and flat forms (such as plates) to indicate consumption of drier meals such as meat-and-three[136]. In addition, large hollow vessels are taken as evidence of communal eating such as one-pot, stew-like meals.

Stono "Slave Settlement." Of the more than 10,000 sherds I analyzed from the Stono "Slave Settlement" assemblage, more than half (52.27%) were identified as hollow forms, while just over 10% (11.07%) were identifiable as flat forms. The remaining 36.66% were not identifiable as definitively hollow or flat (DAACS 2019a).

Of the 5,233 hollow forms, 317 (or 6.06%) could only be identified as hollow teaware, hollow tableware, or hollow utilitarian (DAACS 2019a). While more than 80% of hollow forms could not be identified at any greater level of form specificity, 191 sherds (less than 4% of the assemblage) were identified as have once been part of bowls (DAACS 2019a).

[136] Although again, Fogle (2015) notes that stew-style meals can be dry enough to be eaten from a plate. My own shrimp and grits in fact, sometimes proves this to be the case.

Of the 1108 flat forms, more than 70% (804 sherds) were identifiable only as flat tablewares. Only 46 sherds (4%) were definitely plates (DAACS 2019a). See Table 5.6 for more information.

Table 5.6. Vessel Categories and Forms for Stono "Slave Settlement" Assemblage

Vessel Category & Form	Sherd Count	Percentage of Assemblage
Flat	**1,108**	11.07%
Milk Pan	2	0.02%
Plate	46	0.46%
Unid: Tableware	804	8.03%
Unid: Teaware	14	0.14%
Unidentifiable	242	2.42%
Hollow	**5,233**	52.27%
Bottle	5	0.05%
Bowl	191	1.91%
Colander	1	0.01%
Cup	22	0.22%
Mug/Can	12	0.12%
Serving Dish, unid.	2	0.02%
Storage Jar	1	0.01%
Teapot	6	0.06%
Unid: Tableware	232	2.32%
Unid: Teaware	317	3.17%
Unid: Utilitarian	46	0.46%
Unidentifiable	4,398	43.93%
Unidentifiable	**3,670**	36.66%
Gaming Piece	1	0.01%
Unid: Tableware	268	2.68%
Unid: Teaware	87	0.87%
Unid: Utilitarian	19	0.19%
Unidentifiable	3295	32.91%
Category Total	**10,011**	**100.00%**
Form Total	10,011	100.00%

Stono "Tenant Settlement." Of the 769 sherds I analyzed from the Stono "Tenant Settlement" assemblage, nearly half (49.57%) were identified as hollow forms, while 13.00% were identifiable as flat forms. The remaining third (37.32%) were not identifiable as definitively hollow or flat (DAACS 2019b).

Of the 382 hollow forms, just over half (193 or 50.52%) could only be identified as hollow teaware, hollow tableware, or hollow utilitarian (DAACS 2019b). One hundred eighty of the hollow forms (47.24%) could not be identified at any greater level of form specificity. Only 9 sherds (2.35%) were identified as having once been part of a specific form such as bottles, bowls, mugs, and teacups (DAACS 2019b).

Of the 100 flat forms, fewer than 10% (8.97%, or 69 sherds) were identifiable only as flat tablewares or flat teawares. Thirteen sherds (13.00%) were identifiable as flat without any greater level of specificity and only 18 sherds (18.00%) were definitely plates or platters (DAACS 2019b). See Table 5.7 for more information.

Table 5.7. Vessel Categories and Forms for Stono "Tenant Settlement" Assemblage

Vessel Category & Form	Sherd Count	Percentage of Assemblage
Flat	**100**	**13.00%**
Plate	17	2.21%
Platter	1	0.13%
Unid: Tableware	68	8.84%
Unid: Teaware	1	0.13%
Unidentifiable	13	1.69%
Hollow	**382**	**49.67%**
Bottle	2	0.26%
Bowl	5	0.65%

Mug/Can	1	0.13%
Teacup	1	0.13%
Unid: Tableware	147	19.12%
Unid: Teaware	29	3.77%
Unid: Utilitarian	17	2.21%
Unidentifiable	180	23.41%
Unidentifiable	**287**	**37.32%**
Unid: Tableware	126	16.38%
Unid: Teaware	2	0.26%
Unid: Utilitarian	8	1.04%
Unidentifiable	151	19.64%
Category Total	**769**	**100.00%**
Form Total	769	100.00%

Smith Plantation. More than two-thirds of the Smith Plantation ceramic assemblage is comprised of hollow form vessels (Table 5.8). This figure is much higher than the hollow forms percentage for Ferguson Road and Stono's "Slave Settlement" assemblage, suggesting Smith Plantation residents may have eaten more foods suited for bowl-based consumption than for residents of the other sites. Stono's "Slave Settlement" assemblage contained about 7% less identified flat forms than the Smith Plantation assemblage; however, the statistical significance of that difference is not clear.

Table 5.8. Vessel Categories and Forms from Smith Plantation Assemblage

Vessel Category & Form	Sherd Count	Percentage of Assemblage
Flat	**427**	**17.18%**
Unid: Tableware	361	14.52%
Unid: Teaware	1	0.04%

Unidentifiable	65	2.61%
Hollow	**1735**	**69.79%**
Bowl	1	0.04%
Cup	6	0.24%
Unid: Tableware	71	2.86%
Unid: Teaware	49	1.97%
Unid: Utilitarian	10	0.40%
Unidentifiable	1598	64.28%
Unidentifiable	**324**	**13.03%**
Unid: Tableware	22	0.88%
Unid: Teaware	2	0.08%
Unidentifiable	300	12.07%
Category Total	**2486**	**100.00%**
Form Total	2486	100.00%

Ferguson Road. Ceramic forms were not recorded for Ferguson Road and so, cannot be addressed in detail here. However, particular types of wares are more commonly found in conjunction with particular forms. For example, porcelains are often tea wares and whitewares are often table wares (Miller 1980). Thus, even without the ability to identify any particular forms, it is likely that a variety of forms were used by inhabitants of the Ferguson Road site including utilitarian, table, and tea wares. This mixed-mode ceramic assemblage was also present at Stono.

The Stono "Slave Settlement" ceramic assemblage is comprised of more than 50% hollow vessels while the later, Stono "Tenant Settlement" assemblage is comprised of just under 50% hollow vessels. Thus, there seems to be little difference in the ceramic vessel forms utilized as tablewares through time at that particular site. The Smith Plantation ceramic assemblage is comprised of more than two-thirds hollow vessels suggesting the inhabitants of that site might have consumed more liquid-based meals than those at Stono. Little more can be said about ceramic vessel form comparisons as forms are not available for Ferguson Road and few specific forms were able to be identified for any of the comparison sites.

Ceramic Wear

In this section I discuss the wear types present on ceramic sherds at the Stono "Slave Settlement," Stono "Tenant Settlement," Smith Plantation, and Ferguson Road sites. Wear uses explored include marks made by cutlery as well as partially missing surfaces and wear and abrasion of unknown origin. The cutlery marks are used to identify the types of utensils used at the comparison sites. The other types of wear and abrasion are taken as evidence for plowing on the sites, although it is possible they could have been caused by any number of activities involved in general use such as washing, stacking, breaking, discard, movement caused by trash burial, taphonomic processes, and even archaeological processing such as shovel and trowel contact, and washing.

Stono "Slave Settlement." Only one sherd (.01%) of the Stono "Slave Settlement" assemblage has marks that were definitively created by a utensil. Thus, I can say little about what kinds of utensils were used with which kinds of vessels (for example, knives and forks on plates) by analyzing the wear patterns at that site.

More than one-third (36.65%) of all ceramics from the Stono "Slave Settlement" assemblage are worn or abraded and another 21.32% had partially missing surfaces (DAACS 2019a, see Table 5.9). These modifications are most likely post-depositional effects created by the intensity of land use that occurred over the years at Stono. Plowing in particular causes sherds to be upturned, broken, and abraded.

Table 5.9. Use Wear on Stono "Slave Settlement" Assemblage Ceramics

Wear Pattern	Sherd Count	Percentage of Assemblage
No Wear	6483	64.76%
Worn/Abraded	3669	36.65%
Partial Missing Surface	2134	21.32%
Utensil Wear	1	0.01%
Total	**12,287**	*

*Note that the percentages listed for each wear type equal more than 100%; this is because 7,126 sherds had more than one type of wear present.

Stono "Tenant Settlement." As with the Stono "Slave Settlement," only one sherd from the Stono "Tenant Settlement" had marks that were definitively created by a utensil. Thus, as with the Stono "Slave Settlement," I can say little about what kinds of utensils were used with which kinds of vessels (for example, knives and forks on plates) by analyzing the wear patterns on Stono's ceramic sherds.

Approximately one-third of the sherds I analyzed from the Stono "Tenant Settlement" had no wear created during use or after deposition (Table 5.10). This figure is in contrast to the Stono "Slave Settlement," which had nearly twice as many un-worn/un-abraded sherds. Nearly three-quarters of the sherds (77.50%) from the Stono "Tenant Settlement" were worn or abraded. This figure is more than twice that for the Stono "Slave Settlement." In contrast, 20.68% of the Stono "Tenant Settlement" had partially missing surfaces[137] (DAACS 2019b), which is much closer to the 21.32% seen in the Stono "Slave Settlement."

Table 5.10. Use Wear on Stono "Tenant Settlement" Assemblage Ceramics

Wear Pattern	Sherd Count	Percentage of Assemblage
No Wear	232	30.17%
Worn/Abraded	596	77.50%
Partial Missing Surface	159	20.68%
Utensil Wear	2	0.26%
Total	**989**	*

*Note that the percentages listed for each wear type equal more than 100%; this is because 170 sherds had more than one type of wear present.

Smith Plantation. In terms of utensil use, the Smith Plantation assemblage contains seven times more than the single utensil mark identified on the ceramic sherds at the Stono "Slave Settlement" site and more than double that identified within the Stono "Tenant Settlement" assemblage. Still, all site assemblages analyzed contain only a fraction of a percentage of sherds with utensil wear suggesting a similar mode of food consumption. As a result, little can be said about utensil use at either plantation based on cutlery marks on ceramics for any of the study sites compared in this dissertation.

Almost half (48.35%) of the Smith Plantation ceramic assemblage has no wear. The other half have partial missing surfaces and/or wear/abrasion (see Table 5.11). These figures when taken with those from the Stono sites do not seem to indicate

[137] Of those, 20.53% had both wear/abrasion and partially missing surfaces.

Table 5.11. Ceramic Wear Types and Frequencies for Smith Plantation Assemblage

Wear Pattern	Sherd Count	Percentage of Assemblage
No Wear	1202	48.35%
Worn/Abraded	1182	47.55%
Partial Missing Surface	1253	50.40%
Utensil Wear	7	0.28%
Total	**3644**	*

*Note that the percentages listed for each wear type equal more than 100%; this is because 877 sherds have more than one type of wear present.

anything clear about plowing intensiveness at the sites. While the Smith Plantation assemblage contains similar amount of worn/abraded, partially missing surfaces, and unworn sherds, the other sites do not fit that pattern with figures varying from just over 20% to nearly 80% for each category. I deduce then that ceramic wear patterns are not correlated with plowing intensity in any identifiable way among these sites using my methodology.

Ferguson Road. Wear patterns were not recorded for the Ferguson Road assemblage; however, its proximity to Stono alongside the fact that little difference existed between the Stono "Slave Settlement" and Stono "Tenant Settlement" assemblages would suggest that the wear patterns would be similar between the two sites. Below I use maximum average sherd size and weight to try and identify any differences in the level of plowing activity that occurred at the Ferguson Road site in order to determine whether or not my hypothesis about ceramic sherd wear patterns and land use, specifically plowing are correlated.

Ceramic Sherd Fragmentation

Although ceramic sherd wear patterns including wear/abrasions not created by cutlery and partially missing surfaces do not seem to be correlated based on their presence within the Stono "Slave Settlement," Stono "Tenant Settlement," and Smith Plantation assemblages, I compare the maximum sherd size of ceramics uncovered at those sites in order to see if any pattern can be seen. I also use sherd weight for sherds at Ferguson Road as a proxy for plowing activity because maximum sherd size was not taken for ceramics uncovered at that site.

Stono "Slave Settlement" and Stono "Tenant Settlement." As seen in Figure 5.1, more than three-quarters of the ceramic sherds from the Stono "Slave Settlement" assemblage are between 15 and 25 mm in circumference (or approximately the size of a quarter). In contrast, nearly two-thirds of the ceramic sherds from the Stono "Tenant Settlement" assemblage are between 15 and 30 mm in circumference (or approximately the size of a nickel) [138]. (See Figure 5.2).

[138] Sherds of these small sizes are difficult to analyze in terms of original vessel form or even category, which is the primary reason I had so few specific results in terms of vessel form above.

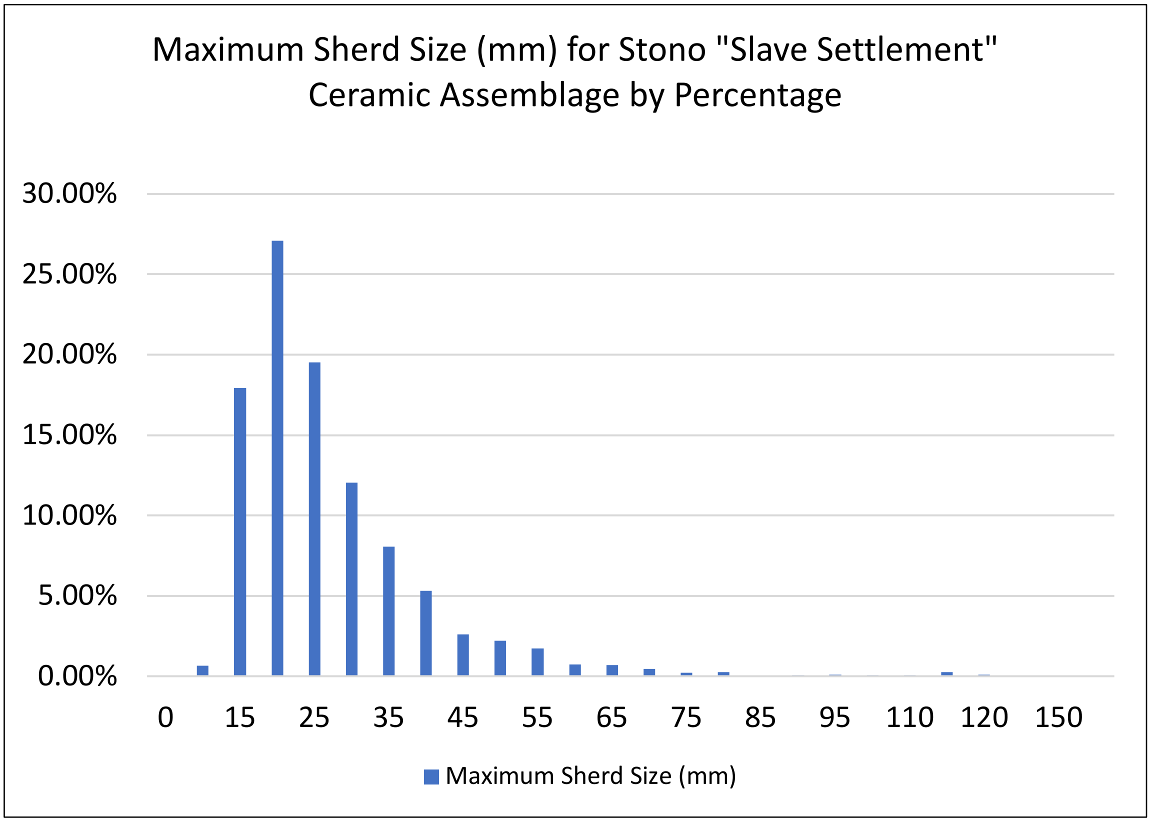

Figure 5.1. Maximum Sherd Size of Stono “Slave Settlement” ceramic sherds in mm.

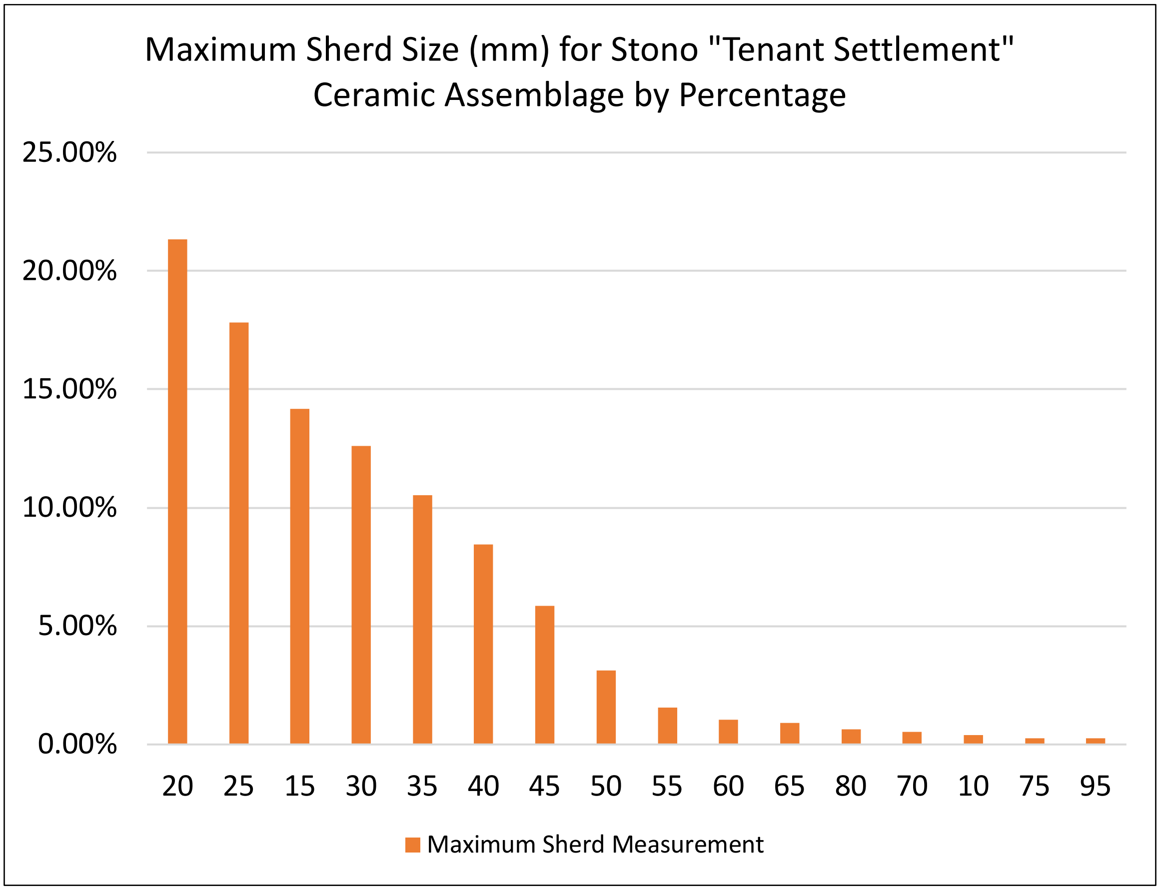

Figure 5.2. Maximum Sherd Size of Stono "Tenant Settlement" ceramic sherds in mm.

Smith Plantation. As with wear patterns, the maximum sherd size for ceramics from the assemblage uncovered at Smith Plantation does not suggest that the duration and intensity of plowing was any more or less than at the Stono "Slave Settlement" or Stono "Tenant Settlement." Three-quarters of the Stono "Slave Settlement" assemblage is between 15 and 25 mm in maximum size. In contrast, about two-thirds of the sherds from Smith Plantation fall into that size range (see Figure 5.3). Most of the sherds from the Stono "Tenant Settlement" assemblage are between 15 mm and 30 mm, which is

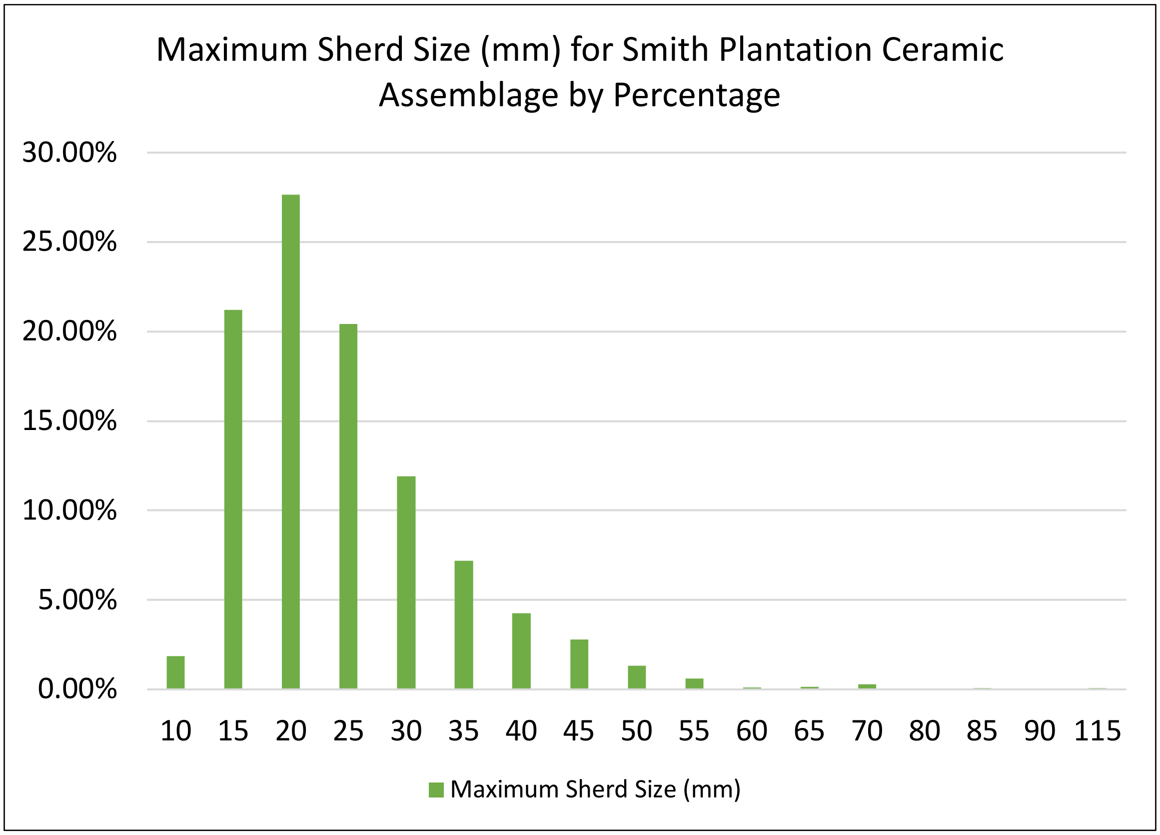

Figure 5.3. Maximum Sherd Size of Smith Plantation ceramic sherds in mm.

true of more than 80% of the Smith Plantation ceramic assemblage. These results show that the sites have similar sherd size frequencies, but do not correlate with any of my wear analysis results in any meaningful way. Thus, little can be extrapolated about plowing intensity among the sites based on my analyses.

As mentioned above, maximum sherd size was not recorded for the Ferguson Road ceramic assemblage; so, I calculated average sherd weights for all four sites. The results are shown in Table 5.15. Ferguson Road had the largest sherds by weight; they are more than five times heavier than those uncovered at the other sites. The reason for this difference is due to the fact that the artifacts at the Ferguson Road site were from features lying beneath the plow zone rather than directly in the plow zone as was the case for the other sites.

Table 5.15. Average sherd weight by site.

Site Name	Average Sherd Weight (g)
Ferguson Road	2.84
Smith Plantation	.51
Stono "Slave Settlement"	.57
Stono "Tenant Settlement"	.61

In contrast to the nearly 3 g. average weight of ceramic sherds uncovered at Ferguson Road, sherds from the Stono and Smith Plantation assemblages were all similar in weight (just over half a gram each), just as they were in maximum sherd size.

Discussion

As stated above, I had hoped to analyze vessel forms as a means of identifying cooking methods and meal consumption styles for site inhabitants. Specifically, I expected to link the shift from enslavement to tenancy with a transition from locally produced bowls to mass produced plates. Such a change would suggest a transition from primarily stews to multi-dish plates (i.e. meat-and-three). Towards these ends, I had hoped to identify large colonoware pots from the “Slave Settlement,” which I would have interpreted as a method of preparing one-pot stews (as in Ferguson 1992). I also expected that such communal preparation vessels might shift from large colonoware pots to cast iron pots, which are mentioned in twentieth century narratives (WPA interviews) and as discussed for plantations with large numbers of enslaved laborers (Ferguson 1992).

Such a shift would also mean that the proportions of hollow and flat tablewares would shift over time. Specifically, I hypothesized that the number of bowls would decrease through time while the number of plates would increase. Such a change would suggest a transition from primarily stews to stews in addition to multi-dish plates (like meat and three). This hypothesis is supported by the fact that there is no documentary or oral historical-memory evidence for communal one-pot meals being consumed at Stono post-Emancipation. Of course, there is also no such evidence that communal one-pot meals were not served at Stono during the period of enslavement either. In fact, the large proportion of colonoware sherds that were probably not once part of large cooking vessels and the fact that only two fragments of iron pot were identified from the Stono "Slave Settlement" assemblage indicates that large communal meals probably were not served at Stono.

Unfortunately, the high level of fragmentation of the ceramic artifacts made it such that identifying vessel forms and original sizes quite difficult. Yet notably, no large colonoware sherds suggesting the use of large colonoware pots being used to prepare meals for large groups have been identified for any time period at Stono or at Smith Plantation. Moreover, as touched on above, the colonoware sherds present had curvature suggestive of a smaller vessel.

Sherds identified as having once been part of large colonoware cooking pots were also not identified in the Smith Plantation assemblage. This lack of such sherds suggests that large communal meals were also not prepared at Smith Plantation, suggesting the inhabitants of that site, like those at Stono, consumed smaller-scale meals such as those prepared within households[139].

While large sherds of unidentified coarse earthenware were uncovered at the Ferguson Road site, most of which were identified as colonoware by TRC analysts, the sherds were not identified as the kind of vessels in which large communal meals would have been served. Instead, the colonoware assemblage consisted primarily of small bowl fragments. Once again, no evidence has been found for large, communal, one-pot meals. Taken together, the results suggest that few if any large-scale communal one-pot meals were prepared by the enslaved laborers or their descendants on James Island and perhaps they were not common in the Lowcountry except for at sites with large numbers of enslaved fieldworkers such as those identified by Ferguson (1992). It is possible that the household areas examined in this dissertation simply missed the areas in which such objects would have been uncovered. It is also possible that food production was in fact household centered.

The high degree of ceramic sherd fragmentation also made identifying utensil marks, which might have been indicative of the types of meals eaten (i.e. marks made by forks and knives would likely not have been made on vessels containing soft, stew-life foods) on ceramic sherds impossible. However, vessel form analyses suggest that there was not a dramatic shift from stew-type meals to meat-and-three type meals at

[139] It is always possible of course that the excavations missed any such pots that may have been present as they did not center on kitchen or meal preparation areas.

Stono or at the comparison sites. It is more likely that flat forms were consistently fewer than hollow forms at all sites through time. This would be particularly true if the unidentified forms at the Stono "Slave Settlement" and Stono "Tenant Settlement" sites were in fact hollow. Even with roughly one-third to almost one-half of those two sites' assemblages being unidentified forms, hollow wares still outnumber flat ceramic wares suggesting a consistent use of bowls through time and thus, little change in the types of meals being consumed among Stono, and perhaps even Lowcountry residents more broadly, through time.

I had also set out to identify differences in the level of plowing intensity among the sites based on wear patterns and/or the average sherd size and weight. I found potentially contradictory evidence for which (if any) site had more or less plowing. The average maximum sherd size at the Stono "Slave Settlement," Stono "Tenant Settlement," and Smith Plantation sites were situated between 15mm and 30mm. No maximum sherd size was recorded for Ferguson Road ceramic sherds.

The average weight of ceramic sherds Ferguson Road assemblage averaged higher in weight than any of the other sites because the smaller sherds were not collected. Only larger, more intact artifacts recovered from features were recovered and analyzed. In contrast, the Stono "Slave Settlement," Stono "Tenant Settlement," and Smith Plantation sites all had quite similar average sherd weights. As a result, I found no evidence that plowing activities varied substantially among study sites.

This interpretation suggests that the Smith Plantation and Stono lands were used similarly, lending credence to the idea that their labor in terms of plowing activity and perhaps tasks were similar. It is likely the same is true for Ferguson Road, although there is no archaeological data to support the notion. I say they were probably similar however because the Ferguson Road and Stono sites share a common past in that they were the same and/or adjoining plantation lands for much of their histories. The finding of no substantial difference in land usage in terms of plowing intensity is important because it suggests that the task schedule was similar among the sites through time. This being the case, the foodways of site inhabitants might also have been similar. This supposition is based on the idea that the time spent procuring and processing foods during "free time;" rations; access to formal, informal markets, and goods; physical environments and resources therein were also comparable.

CHAPTER 6
RESULTS: GLASS VESSELS

In this chapter I detail the results of the statistical tests I conducted on the Stono "Slave Settlement," "Tenant Settlement," Smith Plantation, and Ferguson Road glass vessel assemblages. For all sites, my analyses include vessel category frequencies, and vessel form frequencies, as well as wear patterns and fragmentation.

As discussed in the ceramics chapter (Chapter 5), it is not known what types of meals were consumed most commonly among enslaved laborers and their tenant farming descendants at Stono. While it is true that Lowcountry residents consumed and continue to consume stew-like dishes such as pilau, it has been noted that meat-and-three style meals became popular during the early- to mid-twentieth century (Edge 2017). The meat-and-three is noted in popular media as part of Southernness[140]. I seek to identify whether or not that claim includes nineteenth and early-twentieth century residents of the Lowcountry, particularly James Islanders, and more particularly, tenant farmers.

While my ceramic analyses suggest that no shift from bowl-based stew-style meals to plate-based meat-and-three-style dishes occurred at Stono or among the

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[140] See www.southernliving.com/dinner/meat-n-three, discoversouthcarolina.com/articles/just-what-is-a-meat-and-three, and discoversouthcarolina.com/articles/southern-lowcountry-gullah-or-soul-whats-the-difference-between-these-sc-cooking-styles for examples. There is also a webpage devoted to finding one near you: http://meatandthree.com/

comparison sites, I use glass vessel forms to determine whether such a transition of meal type might have occurred in conjunction with a shift to mass produced glass wares in lieu of particular ceramic forms. For example, colonoware bowls may have given way to machine-made glass bowls.

My analyses will also demonstrate the way in which industrialization impacted the material culture of Lowcountry planation residents. Specifically, I expect to see a decline in locally and regionally produced handmade wares as well as imported wares (such as was seen in ceramics in the shift from colonoware to whitewares, for a simplified example). That is, I expect glass vessels to increase through time. As glass production became increasingly mechanized, their affordability would have increased and with it, their presence within households including those of tenant farmers. Prior to the "Industrial Revolution," glass was a relatively scarce, "luxury" item (Berg 2004, Miller and Pacey 1985, Riordan and Adams 1985). More precisely, the glass container industry of the United States as well as Europe shifted toward mechanization in the late nineteenth century (Jones et. al 1989). I expect then to see more glass vessels in the Stono "Tenant Settlement" assemblage than in the Stono "Slave Settlement" assemblage.

Last, my analyses include an investigation of fragmentation of the glass vessels uncovered from the Stono "Slave Settlement," Stono "Tenant Settlement," Smith Plantation, and Ferguson Road sites. These results along with those from the fragmentation analyses of ceramics, speak to land use, specifically in terms of agricultural practices such as plowing, and the intensity thereof. If no differences are found among glass fragmentation at the sites, it will reinforce the notion that plowing practices and thus, agricultural practices and labor systems were similar among the sites.

Glass Vessel Category and Form

Any difference identified in glass vessel ratios between the Stono assemblages will reinforce the notion that the two sites were inhabited at different times (although there may have been some overlap). It will also enable me to identify a particular transformation in the foodways of the people: machine-produced glass vessels over mouthblown glass and handmade ceramics. The glass assemblages from the Smith Plantation and Ferguson Road sites will also be analyzed in order to identify rates of glass vessel use among the people inhabiting those sites. From this information I will be able to determine how widely applicable my findings about a shift in foodways toward machine-made containers was among residents of the Lowcountry. If residents of all sites are found to have used mass-produced glass vessels it will underline the fact of their participation in a "modern," mechanized, and globalized economy (as defined by Wolf 1982, noted as a "haunt" of historical archaeology by Orser 1996, and used as a temporal "hinge" by Baptist 2014).

Stono "Slave Settlement." I found that almost all of the Stono "Slave Settlement" glass vessel assemblage (92.59%) was comprised of hollow glass vessels (Table 6.1). This

Table 6.1. Glass Vessel Category and Form Counts for The Stono "Slave Settlement" Assemblage

Category & Form	Shard Count	Percentage of Assemblage
Flat	**2**	**0.07%**
Tableware, unidentifiable	1	0.04%
Unidentifiable	1	0.04%
Hollow	**2511**	**92.59%**
Bottle, Beer	6	0.22%
Bottle, Case	10	0.37%
Bottle, Liquor	4	0.15%
Bottle, Mineral/Soda	1	0.04%
Bottle, Unidentifiable	355	13.09%
Bottle, Wine style	923	34.03%
Bottle/Vial, Pharmaceutical	3	0.11%
Container, unidentifiable	781	28.80%
Drinking Glass, unidentifiable	3	0.11%
Jar	23	0.85%
Lid Liner	1	0.04%
Stemware	13	0.48%
Stopper	1	0.04%
Tableware, unidentifiable	35	1.29%
Tumbler	1	0.04%
Unidentifiable	351	12.94%
Unidentifiable	**199**	**7.34%**
Bottle, Liquor	1	0.04%
Bottle, Unidentifiable	1	0.04%
Container, unidentifiable	72	2.65%
Stemware	1	0.04%
Tableware, unidentifiable	4	0.15%
Unidentifiable	120	4.42%
Category Total	**2712**	**100.00%**
Form Total	**2712**	**100.00%**

makes sense because the most common type of flat glass, window glass is cataloged into the General Artifacts category rather than the Glass Vessel category in DAACS.

Of the hollow vessels, more than a third (34.03%) were olive-colored wine-styles bottles. These bottles were particularly common on eighteenth and early-nineteenth century mainland colonial/United States sites (Galle 2010) and are one of the most commonly found artifacts uncovered at historical archaeological sites (sha.org/bottle/wine). Another 13.13% of glass vessels were bottles of an unidentifiable type and 31.45% were containers of some kind that could not be identified as a bottle or other particular form (such as jar). Only 2.14% of the "Slave Settlement" glass vessels could be identified as tableware (including stemware, tumblers, drinking glasses of unidentified type, and tableware of unidentified type). This finding suggests residents of the Stono "Slave Settlement" used glass tableware very little. They tended to use glass as storage containers for liquid only, which makes sense as there was little alternative for storing liquids in sealable vessels at the time.

Stono "Tenant Settlement." As with the Stono "Slave Settlement" glass vessel assemblage, the glass vessels from the Stono "Tenant Settlement" are primarily hollow (89.18%) (Table 6.2). Only two fragments (less than 1% of the assemblage) are flat[141]. Two hundred eighty-seven fragments (10.75%) of the "Tenant Settlement" assemblage could not be identified as either flat or hollow.

Of the hollow vessels, nearly a third (32.97%) are clear containers, 17.51% are clear bottles, 2.7% are clear jars, 2.35% are aqua containers, and 1.95% are olive-colored wine-style bottles. Beer bottles, case bottles, food (condiments and pickles, for

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[141] Again, window glass is cataloged into the General Artifacts category rather than the Glass Vessel category in DAACS.

Table 6.2. Glass Vessel Category and Form Counts for The Stono "Tenant Settlement" Assemblage

Category & Form	Shard Count	Percentage of Assemblage
Flat	**2**	**0.07%**
Unidentifiable	2	0.07%
Hollow	**2381**	**89.18%**
Bottle, Beer	1	0.04%
Bottle, Case	1	0.04%
Bottle, Food	6	0.22%
Bottle, Liquor	11	0.41%
Bottle, Mineral/Soda	3	0.11%
Bottle, Unidentifiable	696	26.07%
Bottle, Wine style	47	1.76%
Bottle/Vial, Pharmaceutical	14	0.52%
Bowl	3	0.11%
Container, unidentifiable	859	32.17%
Drinking Glass, unidentifiable	22	0.82%
Flask	4	0.15%
Jar	59	2.21%
Lid Liner	7	0.26%
Stemware	23	0.86%
Tableware, unidentifiable	69	2.58%
Tumbler	2	0.07%
Unidentifiable	554	20.75%
Unidentifiable	**287**	**10.75%**
Tableware, unidentifiable	1	0.04%
Unidentifiable	286	10.71%
Category Total	**2670**	**100.00%**
Form Total	**2670**	**100.00%**

example) bottles, liquor bottles, soda and mineral water bottles, pharmaceutical bottles, bowls, drinking glasses, flasks, lid liners, stemware, and tumblers, when combined, make up another 4.07% of the assemblage. These findings show that while olive-colored wine-style bottles decreased through time, other bottle types increased.

Another increase is seen in jars, although their overall number is still relatively low (just over 2% of the assemblage). Similarly, tableware doubled in ratio; however, they too make up only 2.5% of the Stono “Tenant Settlement” assemblage.

The ratio of unidentified containers between the two time periods remained relatively stable through time. However, the number of sherds present on the Stono “Slave Settlement” site is a much smaller percentage of the entire archaeological assemblage for that site than the Stono “Tenant Settlement” glass vessel assemblage is for that site. In other words, the glass vessel to non-glass vessel ratio at the later habitation area is greater than the glass vessel to non-glass vessel artifact ratio at the earlier habitation site. Thus, although there are few differences among the ratios for glass vessel types between the two sites, the later site has a greater percentage of glass vessels in terms of their overall presence within the archaeological record. This finding indicates that later Stono residents did rely more heavily upon glass vessels than their enslaved predecessors.

Smith Plantation. Nearly all of Smith Plantation glass assemblage is hollow vessels (see Table 6.3). Further, more than three-quarters of the Smith Plantation hollow forms were wine-style bottles. As will be seen, this figure is only about 1% less than that for wine-style bottles at Ferguson Road, meaning site residents at both Smith Plantation and Ferguson Road possessed and discarded a large number of wine-style bottles relative to other glass vessel forms.

Table 6.3. Glass Vessel Category and Form at Smith Plantation

Vessel Category & Form	Shard Count	Percentage of Assemblage
Hollow	**1350**	96.91%
Bottle, Case	6	0.43%
Bottle, Unidentifiable	29	2.08%
Bottle, Wine style	1086	77.96%
Bottle/Vial, Pharmaceutical	11	0.79%
Container, unidentifiable	22	1.58%
Jar	1	0.07%
Stemware	3	0.22%
Tableware, unidentifiable	1	0.07%
Unidentifiable	191	13.71%
Unidentifiable	**43**	3.09%
Unidentifiable	43	3.09%
Category Total	**1393**	**100.00%**
Form Total	1393	100.00%

Interestingly, there are very few other bottle types within the Smith Plantation assemblage relative to the Stono assemblages. The ratios of hollow category vessels that cannot be identified by form are relatively similar across the three sites, as are non-bottle forms that are identifiable by form (such as jars).

In contrast to the Smith Plantation glass vessel assemblage, only about 34.03% of the Stono "Slave Settlement" assemblage was comprised of wine-style glass bottles. It seems then that people enslaved at Stono consumed less from olive-green wine-style bottles than did their contemporaries. This finding may mean their access to such products was somehow limited or restricted. Only 1.76% of the Stono "Tenant Settlement" assemblage was wine-style bottles. The dramatic difference between the ratio of olive-colored wine-style glass bottles in the "Tenant Settlement" assemblage and the other sites is likely due to temporality; by the latter part of the nineteenth century, or "tenant era," many types of glass containers were available along with many beverages in addition to wine including not only beers and liquors, but also sodas and tonics, all of which came in various bottle styles and shapes.

Ferguson Road. The glass vessels uncovered at Ferguson Road are primarily wine style bottles, which comprise nearly 80% of the assemblage (see Table 6.4). This ratio is

Table 6.4. Glass Vessel Forms Uncovered at Ferguson Road.

Form	Count	Percentage of Assemblage
Bottle, Wine Style	658	79.09%
Container, unid.	161	19.35%
Stemware	4	0.48%
Unid	4	0.48%
Pharmacy Bottle/Vial	2	0.24%
Tableware, unid.	2	0.24%
Bottle, Case	1	0.12%
Total	**832**	**100.00%**

more similar to that of Smith Plantation than to the Stono sites. Conversely, unidentified containers make up nearly 20% of the Ferguson Road glass vessel assemblage. This figure is more similar to the Stono "Slave Settlement" and Stono "Tenant Settlement" than it is to the Smith Plantation assemblage. Less than 2% of glass vessels from Ferguson Road are other forms.

Taken together, these figures suggest that storage was the primary use for glass vessels at the Ferguson Road site. In fact, the same thing is true for the other sites considered in this dissertation. Hollow vessels dominate the assemblages through time and there is little evidence for consumption of flat glass vessels such as plates at any of the sites. It seems then that there was little use of glass at any time among the sites aside from storage.

Fragmentation

Ceramic sherd fragmentation rates indicated that there was very little difference among agricultural (or other) activities that would have led to differing rates of artifact breakage among the study sites. I extrapolate then that plowing rates and practices were relatively similar across time and space. Here, I compare fragmentation of glass vessels across the four study sites in order to find support or conflicting data for this supposition.

Stono "Slave Settlement." The majority (1,954 fragments or 72.13% of the glass assemblage) of glass artifacts uncovered at the Stono "Slave Settlement" were between 15 and 25 mm in maximum size (see Figure 6.1). This is roughly the same as the ceramic average sherd size for the Stono and Smith Planation sites, as discussed in the previous chapter.

Stono "Tenant Settlement." The majority (1,911 fragments or 71.63% of the glass assemblage) of glass artifacts uncovered at the Stono "Tenant Settlement" were between 15 and 30 mm in maximum size (Figure 6.2). Again, this is about the same as the size of all other artifact fragments discussed for the Stono "Slave Settlement" and Smith Plantation glass vessel assemblages as well as the ceramic assemblages for both Stono sites and the Smith Plantation site.

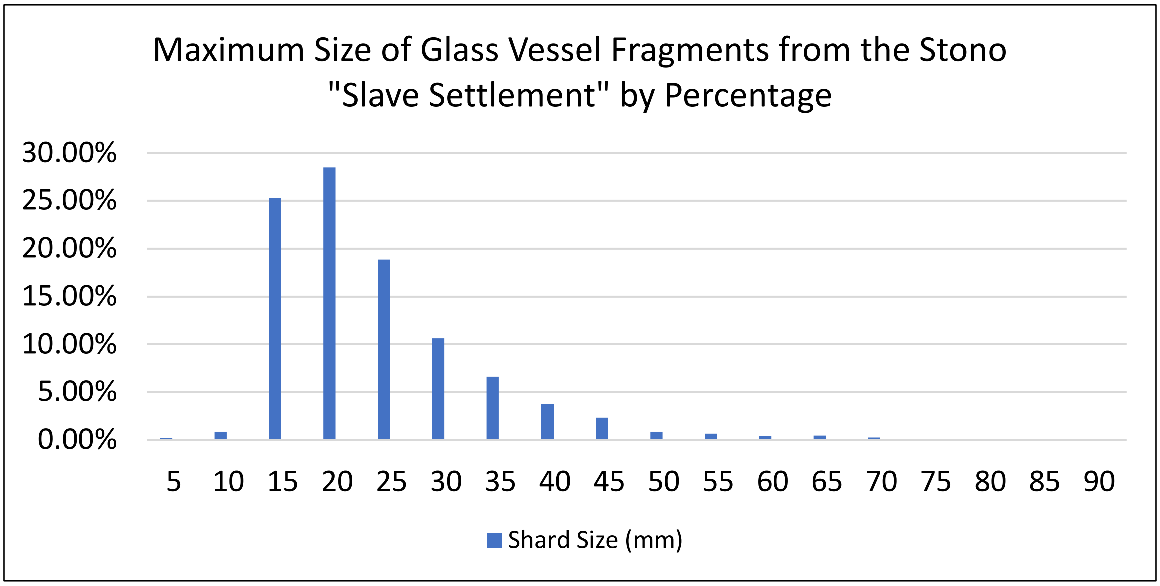

Figure 6.1. Maximum Glass Vessel Fragment Size for the Stono “Slave Settlement” Assemblage

Smith Plantation. More than three-quarters of the glass vessel fragments from the Smith Plantation assemblage are between 15 and 30 mm in size. More than two-thirds are between 15 and 25 mm in size (Figure 6.3). The Stono “Slave Settlement” and Stono “Tenant Settlement” glass artifacts uncovered were similar, between half and two-thirds of each of those assemblages were between 15 and 25 mm in size. As with ceramics, the similarity in glass fragment size indicates a comparable amount of plowing activity on the Stono sites. Once again, as with ceramic sherds, maximum fragment size was not calculated for Ferguson Road.

Figure 6.2. Maximum Glass Vessel Fragment Size for the Stono "Tenant Settlement" Assemblage

Ferguson Road. As with ceramics, the maximum fragment size was not recorded for artifacts from the Ferguson Road site. As a result, I have once again calculated average fragment weight. Table 6.4 shows these averages for glass shards at each study site.

As many of the Ferguson Road glass vessels were complete, I removed all individuals that weighed more than 200 g (presuming these to be complete bottles), which did not exist on the either of the Stono sites. Even after these steps, the average glass fragment weight for Ferguson Road was more than double that for any of the other sites. As with the average ceramic sherd weight, my supposition is related to the relative lack plow zone artifacts at the Ferguson site in comparison to the others. Unlike the average ceramic sherd weight however, the average glass fragment weight calculated for the Smith Plantation was two to three times greater than for the Stono sites.

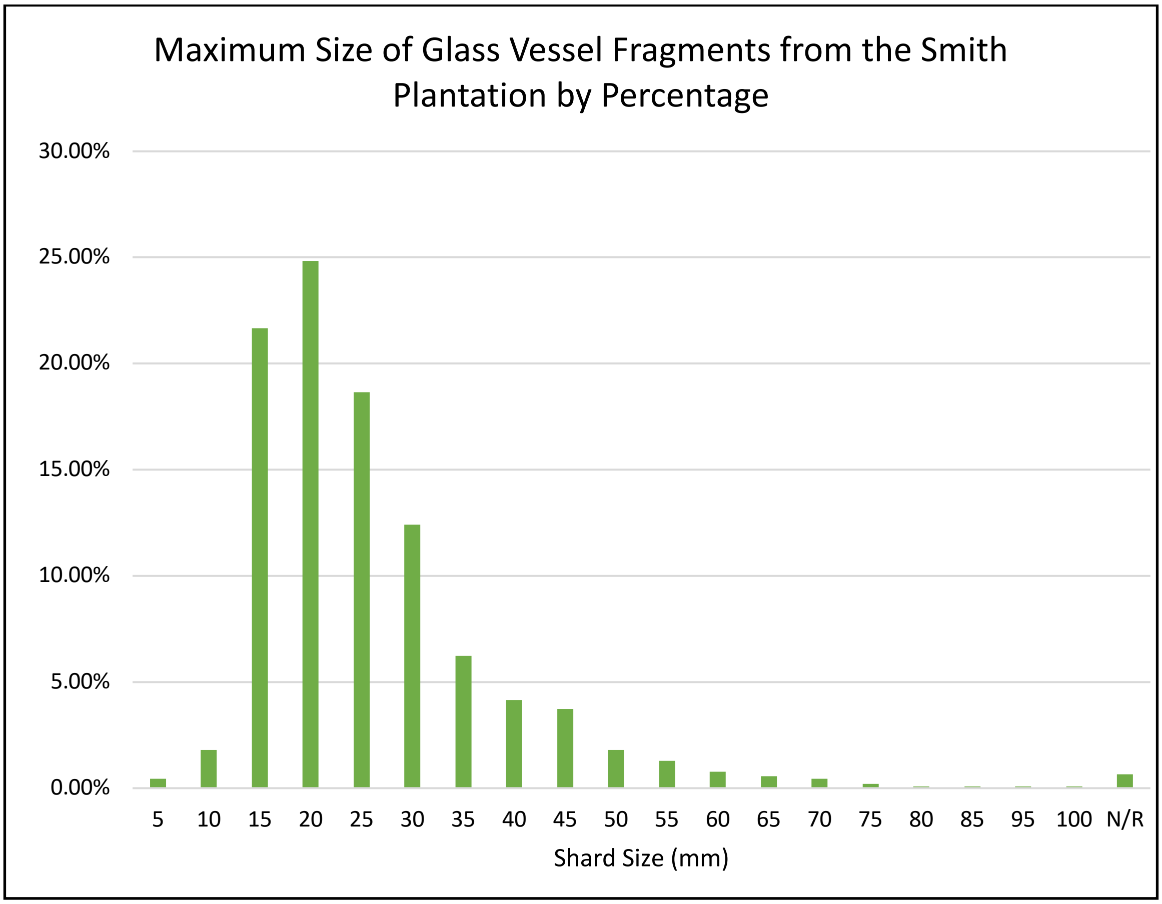

Figure 6.3. Maximum Glass Vessel Fragment Size for the Smith Plantation Assemblage

Table 6.4. Average Glass Fragment Weight for All Comparison Sites.

Project Name	Average Fragment Weight
Ferguson Road	5.63 (8.25)
Smith Plantation	2.69
Stono "Slave Settlement"	.74
Stono "Tenant Settlement"	.95

This discrepancy is due to two reasons. First, olive-colored wine-style bottle glass is markedly thicker than other types of glass wares. Second, pharmaceutical vials are also thicker than many other vessels, particularly the base portion. The presence of these in the Smith Plantation assemblage relative to the Stono Plantation sites is higher. Thus, it is not that there is a discrepancy within the fragmentation levels, but rather in the thickness of the vessels involved.

Discussion

As with ceramic forms, the majority of glass artifacts uncovered at the Stono “Slave Settlement,” Stono “Tenant Settlement,” and Smith Plantation were fragments between 15mm and 30mm in maximum size (Figures 6.1, 6.2, and 6.3 above). As previously discussed, this means the artifacts were too small to identify with a high level of specificity hence the large percentages of unidentified glass vessel category and forms seen in the tables above.

Thus, little can be said about the glass vessel assemblages in terms of particular uses that would enable a greater understanding of the site’s resident’s foodways aside from the fact that most glass vessels appeared to be used for storage functions through both space and time.

Based on the analyses presented in this chapter, it appears that the tenant farmers at Stono did not rely heavily upon glass tablewares as I hypothesized. While it is clear that the enslaved people living at Stono did have some glass tableware and the incidence of glass tableware fragments does indeed rise between the period of enslavement and tenancy, both figures are very small fractions of the entire glass assemblage. Hence, there is no evidence to indicate that site residents during either period relied upon glass for more than food and beverage (and other liquid) containment and storage. They did transition from mouthblown olive-colored wine-style bottles, which were so prevalent at Smith Plantation and Ferguson Road to various bottles of different colors and forms. However, olive-colored wine-style bottles were not as common at the Stono sites at any time compared to Smith Plantation or Ferguson Road.

Once again, as I demonstrated with ceramic sherds, the intensity of land use (e.g. plowing) disturbed the integrity of the sites' material records such that the majority of artifacts (aside from a whole bottle uncovered at Smith Plantation and the bottle storage pit found at Ferguson Road) are quite small. There is a difference among the average weights of glass fragments among the sites; however, this is not due to a difference in plowing intensity or duration that can be identified based on the analyses and resultant data I present here.

CHAPTER 7

RESULTS: METAL ARTIFACTS: UTENSILS, IRON POT FRAGMENTS, CAN FRAGMENTS, FISHHOOKS, AND FISHING NET WEIGHTS

In this chapter I discuss my analyses of a number of artifact groups including utensils (knives, forks, and spoons), iron pot and pan fragments, metal can fragments, and fishing related artifacts such as fishhooks and fishing net weights. I choose to lump these artifact groups together in this chapter rather than separating them each into individual chapters as I did for ceramics and glass, because there are relatively few of each and I conducted fewer analyses on them. Specifically, I will discuss relative frequencies of each group at each class, but I will not discuss fragmentation and plowing activity in depth as I did for other artifact groups.

Utensils

Utensils, like ceramics and glass vessels, are an artifact category that is vital for understanding the foodways of people. Like vessel shape and form, the type of utensil used can indicate the types of meals eaten. For example, a spoon may be correlated with liquid-based meals such as stews[142] whereas forks can indicate the consumption of more solid dishes like cuts of meat and drier versions of vegetables and/or rice dishes.

[142] Although it is also true that hands, rather than utensils may also used to consume stews (Ferguson 1992, Martyris 2017).

Correspondingly, the presence of knives can also indicate that meats were present and required cutting in order to prepare them for consumption, particularly when found in conjunction with forks.

To understand how utensil use at Stono might have changed through time, I compared utensils from the pre- and post-Emancipation periods. That is, I compare relative frequencies of knives, forks, and spoons from the Stono "Slave Settlement," Stono "Tenant Settlement," Smith Plantation, and Ferguson Road artifact assemblages. I then identify similarities and differences among these figures in order to determine whether site residents were eating one particular type of meal, or a suite of particular dish types (such as pilaus with bowls and spoons).

Stono "Slave Settlement." I identified 37 utensils in the Stono "Slave Settlement" artifact assemblage. These utensils include six forks, 16 knives, and one spoon as well as 14 unidentified utensil handles (Table 7.1). If all of the unidentified utensils were spoons, that utensil type would still comprise less than half of the assemblage (41%). If knives and forks are paired they make up nearly 60% of the utensil assemblage[143].

These findings suggest that knives and forks were being discarded and by extrapolation, used, more often than spoons. However, knives are also used in the preparation of food and I cannot differentiate preparation from consumption uses for

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[143] However, it is unclear if enslaved people or tenant farmers of the late eighteenth century paired their utensils in this way. Certainly, African Americans were doing so by the early to mid-twentieth century (Minton 1991) while Euro-Americans were doing so by the late eighteenth century (Lybbert 2010). Yet, it is cited that some enslaved people were prohibited from using such utensils and pairing them with plates (Kaufman 2011:19). However, to my knowledge, no such prohibition existed at any of the sites included in this study.

the knives present in this assemblage[144]. Along the same lines, I do not know whether or not the users of these utensils categorized them as either preparation or consumption knives or whether they used all knives for all purposes.

Table. 7.1. Stono "Slave Settlement" Utensil Types, Counts, and Frequencies

Utensil Type	Count	Percentage of Assemblage
Fork	6	16.22%
Knife	16	43.24%
Spoon	1	2.70%
Unid	14	37.84%
Total	**37**	**100.00%**

If I posit that knives and forks were paired, then it seems those two types of utensils more commonly used than spoons during consumption. Even if knives and forks are not paired, both of those utensil types out number spoons, thus the evidence suggests that spoons were less commonly used by Stono's enslaved residents than other metal utensil types. I do not believe that it is a matter of unequal discard as I have no reason to believe that spoons were less prone to breakage or loss than were other utensil types. I also do not think it is a matter of differential preservation because all of the utensil types that were identifiable were made of metal, which preserves relatively well at the site.

[144] Only one of the knife blade shapes in the Stono "Slave Settlement" assemblage was identifiable and it was pointed, which does not help to identify the particular task it might have been used for. In contrast, had it been rounded, it might have been a butter knife, which would indicate a table/consumption, non-preparatory use.

It is possible that there were spoons made of wood or another biodegradable material in use at the site. Although, the presence of metal spoons and utensils of other forms does not indicate that there was heavy reliance on wooden spoons, it is possible a combination of wooden and metal spoons was used, or that gourds were used, or that hands were used, or all of these methods were used. I have not uncovered any information about the use of wooden spoons, gourds, hands, or other items in lieu of metal spoons at the Stono "Slave Settlement" site[145], so it is not entirely clear why there is a difference among the counts for each metal utensil type.

Stono "Tenant Settlement." In the Stono "Tenant Settlement" assemblage, I identified 11 utensils. These 11 break down into one fork, two spoons, and eight unid utensil fragments (see Table 7.2). The small number of utensils recovered along with the

Table. 7.2. Stono "Tenant Settlement" Utensil Types, Counts, and Frequencies

Utensil Form	Count	Percentage of Assemblage
Fork	1	9.09%
Spoon	2	9.09%
Unid	8	72.73%
Total	**11**	**100.00%**

poor preservation of the utensils, which were metal and heavily corroded makes it difficult to interpret their importance for site residents' foodways. It is possible that

[145] However, there is a mention of eating from large of pots of cooked peas with hands by Henry Brown in a WPA narrative (Butler ca. 1937)

utensils were difficult to acquire and were thus treated with care and rarely discarded. It is also possible few were uncovered purely because relatively little of the site was excavated. What is certain is that site residents were using various types of utensils during both the period of enslavement and the period of tenancy at Stono.

Smith Plantation. Like the Stono "Slave Settlement" and Stono "Tenant Settlement" assemblage, there were relatively few utensils uncovered at Smith Plantation (Table 7.3). No spoons were identified, a fact that also makes Smith

Table 7.3 Utensil Forms and Counts for Smith Plantation

Utensil Type	Count	Percentage of Assemblage
2 Piece: Unid	3	60.00%
1 Piece: Unid	1	16.67%
Fork, 2 Piece	1	16.67%
Knife, 2 Piece	1	16.67%
Total	**6**	**100.00%**

Plantation similar to the Stono sites, which had fewer spoons recovered than forks or knives. This finding suggests that none of the three sites' occupants were engaging in culinary practices that utilized a high number of metal spoons. The possibility of biodegradable spoons or hands in lieu of spoons still exists as does the notion of mixed fork, knife, and spoon consumption.

Ferguson Road. Only one knife, one fork fragment, and one possible utensil handle were uncovered during the archaeological investigations conducted at Ferguson Road. Although these numbers are very small, they do indicate that knives and forks may have been used in conjunction with one another. The numbers also reemphasize the relatively few spoons relative to knives and forks identified at the Stono "Slave Settlement," Stono "Tenant Settlement," or Smith Plantation. However, the sample sizes are so small, I find it unwise to rely upon the data or make interpretations based on it. I will say that it is likely all types of utensils were used at all sites through time. It is also possible that biodegradable spoons made from wood, shells, or gourds were used. It is also possible site inhabitants simply used their hands rather than utensils in at least some instances.

Metal Cans and Potential Metal Cans

Metal cans were first put into mass production and use during the late-nineteenth century to early-twentieth century (Twede 2009). Seafood canneries cropped up on the sea islands in the late nineteenth century and in the Lowcountry (Burrell Jr. 2003, Giltner 2005, Preservation Consultants 1992). They came slightly later to Charleston (in 1902 according to Fick et. al 1992). Vegetable canneries were even later, being established in the Lowcountry circa 1930 (Preservation Consultants 1992).

These dates suggest that an increase in canned good consumption would not be seen in the archaeological record until about the turn of the twentieth century at the earliest. I hypothesize that tenant farmers would have had more access to and reliance upon canned goods than their enslaved ancestors, but that none of the groups in my study would have used canned goods as a primary food source. In order to identify how much consumption of canned foodstuffs was happening at the various study sites, I calculated frequencies of cans, can fragments, and metal sheeting that could potentially have comprised can parts at one time.

Stono "Slave Settlement." To provide support for these hypotheses, I provide results for the metal can and potential metals can fragments uncovered in the Stono "Slave Settlement" assemblage here in Table 7.5. As anticipated based on the 1830s median habitation date for the Stono "Slave Settlement" site, metal cans and metal can fragments make up very little of the artifact

Table 7.5. Potential Metal Cans from the Stono "Slave Settlement" Assemblage

Artifact Type & Material	Count	Percentage of Assemblage
Can	**1**	0.20%
Iron	1	0.20%
Can Closure/Can Key	**1**	0.20%
Metal, unid	1	0.20%
Sheeting	**11**	2.23%
Copper Alloy	4	0.81%
Iron	7	1.42%
Total	**13**	**5.27%**

assemblage. In fact, they comprise only up to 5.27% of the All Other Artifacts category, which excludes ceramics, glass vessels, faunal remains, beads, buckles, buttons, and tobacco pipes. This finding suggests that few or no cans were being used by the site's residents.

Although foods were not packaged in metal cans until the turn of the nineteenth century, there were a number of metal can and potential metal can (metal sheeting) fragments identified in the Stono "Slave Settlement" assemblage, a fact which requires explanation. The can fragments present in the “Slave Settlement” assemblage are likely present due to use of the area after the end of legal enslavement, during the era of tenancy. The fragments may also have found their way into the assemblage through non-behavioral, or discard means, such as through the high intensity of land use at the site. Specifically, plowing during the post-Emancipation period may have dragged later artifacts into the earlier areas[146]. It is also possible that some metal fragments identified as potential cans came from objects other than cans.

Stono “Tenant Settlement.” As mentioned, metal cans were first used to store food stuffs during the late nineteenth century, so it is not unexpected that there would be numerous sheet metal and metal can rim fragments uncovered at the Stono “Tenant Settlement” site. The counts for these fragments are provided in Table 7.6.

Only about 5% of the general artifacts category was can or potential cans for the Stono “Slave Settlement,” whereas the Stono “Tenant Settlement” assemblage has more than 8% of its general artifact assemblage comprised of cans or potential cans. These figures demonstrate an increase in the presence of metal cans through time at the Stono site, although not as large an increase as one might expect particularly when compared with shifts in the types of ceramic and glass vessels between the sites.

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[146] Importantly, few can fragments were collected during excavations of the “Slave Settlement” area and no counts or weights of cans or potential cans were recorded. Thus, it is not possible to determine the prevalence of can-use that may have existed among residents of the “Slave Settlement;” however, the advent of industrialized canning during the late nineteenth century suggests that canned good use would likely have been higher after that period rather than prior to it. I believe that few if any can fragments are missing from the assemblage.

Table 7.6. Potential Metal Cans from the Stono "Tenant Settlement" Assemblage

Artifact Type & Material	Count	Percentage of Assemblage
Can	**388**	38.23%
Iron or Tinned Iron	388	38.23%
Can Closure/Can Key	**6**	0.59%
Iron or Iron Alloy	6	0.59%
Sheeting	**621**	61.18%
Copper Alloy	14	1.38%
Iron	607	59.80%
Total	**1015**	**8.58%**

Still, my findings indicate that industrialization did indeed have a clear impact on the consumption of particular types of goods by inhabitants of the Stono site. Specifically, the increase is evidence for access to machine-canned goods and may suggest greater access to marketable goods. It is not clear however whether such goods were obtained directly from a formal marketplace or received through an informal market be it ration, barter, trade, or purchase on the informal market. However, it does suggest a commercialization of foodways towards more industrially produced food stuffs.

Smith Plantation. The results for Smith Plantation (Table 7.7) show that can fragments and potential can fragments make up only 3.67% of the Smith Plantation artifact assemblage.

Table 7.7 Potential Metal Cans from Smith Plantation

Artifact Type & Material	Count	Percentage of Assemblage
Can	**7**	0.03%
Iron	4	0.03%
Aluminum	3	0.02%
Sheeting	**450**	3.64%
Copper Alloy	1	0.01%
Iron	189	1.53%
Lead	2	0.02%
Tinned Iron	258	2.09%
Total	**457**	**7.37%**

The 457 artifacts listed here listed here are only 12,359 total artifacts uncovered at the site. Thus, canned goods at Smith Plantation comprise between 0.05% and 3.7% of the total artifact assemblage, a figure that falls close to the estimated can figure (between 0.40% and 5.27%) for the Stono "Slave Settlement" site.

Ferguson Road. No cans or potential can fragments were collected during the archaeological investigations conducted at Ferguson Road, so no data exists for me to compare from that site with the other sites included in this dissertation study. I posit that the rates of cans and can fragments at the site would be similar to those calculated for the other study sites based on what I have seen so far in terms of ceramic, glass, vessel, and utensil ratios.

Fishing Paraphernalia

It is well documented that Lowcountry enslaved people and their descendants engaged extensively in cast net fishing (Beoku-Betts 1995, Colleton 1992, Gonzalez

1922, Gonsalves et. al 2014, Jones-Jackson 1987). Steen (personal communication) notes that he has witnessed the practice throughout the course of his life (some sixty years) and I have witnessed it personally over the past five years during my visits to the Lowcountry. I have also seen many people fishing from water banks and bridges during my time living in the Gullah Heritage Corridor (some thirty years). In this section I compare frequencies of fishing net weights and fishhooks uncovered from the Stono "Slave Settlement," Stono "Tenant Settlement," Smith Plantation, and Ferguson Road sites in order to identify similarities and/or discontinuities through space and time among Lowcountry residents in terms of their means of fish procurement and frequency of fishing activities based on the material residues left behind that are related to fishing.

Stono "Slave Settlement." The presence of fishing weights and hooks suggest that at least two modes of fish procurement were used by people residing in the Stono "Slave Settlement," cast nets and hooks and lines. Table 7.8 breaks down the rates of each method as extrapolated by artifact presence.

Table 7.8. Fishing Related Tools for the Stono "Slave Settlement" Assemblage by Count and Percentage

Artifact	Count	Percentage of Fishing-Related Paraphernalia
Fishhook	1	3.57%
Hardware, unid	1	3.57%
Weight, fishing	26	92.86%
Total	**28**	**100.00%**

It is clear from the artifact record that fishing weights were used extensively relative to fishhooks during the period of enslavement at Stono. Although it is possible that fishhooks are underrepresented in the assemblage because they do not preserve as readily as fishing weights due to their smaller, thinner bodies, I suggest that the difference in figures reflects a true difference in procurement means. Fish skeletal remains will be examined in the next chapter, analysis of which will help to support or provide an alternative supposition for fish procurement and consumption at Stono.

Stono "Tenant Settlement." As with the Stono "Slave Settlement" site, both fishing weights and fishhooks were uncovered at the Stono "Tenant Settlement" site (see Table 7.9).

Table 7.9. Fishing Related Tools from the Stono "Tenant Settlement" Assemblage by Count and Percentage

Artifact	Count	Percentage of Fishing-Related Paraphernalia
Fishhook	6	15.38%
Potential Fishhook	32	82.05%
Fishing Weight	1	2.56%
Total	**39**	**100.00%**

Analyses from the Stono "Tenant Settlement" artifact assemblage demonstrate that that fishing weights dropped in usage, while fishhooks increased. It could be extrapolated then, that fishing related artifacts diverged a bit between the two periods. While the earlier settlement had 26 fishing weights, the tenant settlement had only one. In contrast, the number of potential hooks increased from one to 38; however, this is a tentative interpretation at best because many of the fishhook identifications are uncertain. It is possible that the potential fishhooks in the Stono "Tenant Settlement" assemblage are not fishhooks at all, but are instead simply pieces of curved wire, which could have been used for any number of purposes on a farm. Further, it is likely that many small unidentified metal fragments were not collected for analysis during the "Slave Settlement" excavations.

It is possible that the advent of motorboats negatively impacted the incidence of onshore net fishing. In fact, the famous Charleston Mosquito Fleet (a group of African Americans who supplied the Charleston area with the bulk of its seafood between 1860 and 1950[147]) used motorized fishing boats. It is possible that James Islanders received seafood through the fleet via an informal or formal market as they did for canned goods. However, archaeologists Carl Steen and Martha Zierden suggest that perhaps the 26 fishing weights uncovered in the Stono "Slave Settlement" excavations may be evidence of a single instance in which a net was left to disintegrate, or a load of net weights was lost or discarded. If this is the case, it is possible there was little change in fish procurement methods during the period of enslavement and the period of tenancy at Stono. This finding would be more "in line" with what has been seen for other shifts in material culture at the sites; that is, things stayed the same more than they changed except for the increase in inexpensive, mass-produced goods over the higher cost in

[147] https://www.postandcourier.com/news/to-the-archives-the-unsung-heroes-who-sailed-in-charleston/article_d993497c-04f8-11e7-8487-7fcca80f72b1.html

terms of labor-production handmade objects (such as the transition from colonoware to whiteware or blown glass bottles to machine made ones.

Smith Plantation. Like the other sites discussed so far, the Smith Plantation artifact assemblage contained relatively few fishing-related artifacts when compared with other artifact groups. Only one fishhook was identified, alongside one large hook identified by James "Jim" Legg as a probable gig such as those used for catching flounder[148] (personal communication). See Table 7.10 for more information.

Table 7.10. Fishing Related Tools from the Smith Plantation Assemblage by Count and Percentage

Artifact	Count	Percentage of Fishing-Related Paraphernalia
Fishhook	1	25.00%
Hook, unidentifiable	1	25.00%
Probable Fishing Net Weights	2	50.00%
Total	**4**	**100.00%**

While no definitive fishing net weights were identified, two lead pieces that are most likely malformed or repurposed net weights were identified. If these two artifacts are taken as fishing net weights, the Smith Plantation site's fishing-related artifact assemblage falls in line with those of the Stono sites. That is, fishing occurred, and it was both net-based and hook-and-line-based in nature.

Ferguson Road. No fishing-related artifacts were collected during the archaeological investigations of the Ferguson Road site. As before, I imagine the fishing

148 Large hooks were and are also used in conjunction with long poles for hunting alligators (Chandler 1938, Jones-Jackson 1987, personal knowledge from a Floridian).

behaviors at that site would have been more similar than dissimilar to those of the other sites considered in this study due to the historical and cultural connections and material continuities identified such as with ceramics and glass vessels.

Metal Pots and Pans

I hypothesized that if enslaved inhabitants of Stono prepared communal meals in large colonoware pots, there may have been a shift to large iron or other metal vessels when colonoware was no longer being produced. Such a shift would be visible in the material record by an increase in large fragments of metal pots and pans during the post-Emancipation period (within the artifact assemblage of the Stono "Tenant Settlement").

Stono "Slave Settlement." No metal pot or pan fragments were collected during the Stono "Slave Settlement" excavations.

Stono "Tenant Settlement." In support of my hypothesis regarding an increase in use of metal pots during the era of tenancy as compared to the period of enslavement at Stono, there are indeed more pot fragments contained within the later period's material record. See Table 7.12.

However, there are only three definitive pot or pan fragments and only one of those is definitely from an iron pot. Although there are 32 cast iron fragments that could be pot fragments, the identification is not certain, and the fragments could be from any number of objects present on a farm site with twentieth century agricultural equipment

Table 7.12. Pots and Pans from the Stono "Tenant Settlement" Assemblage by Count and Percentage

Artifact	Count	Percentage of Assemblage
Pot	1	0.01%
Pot/Pan	2	0.02%
Possible Pot/Pan	32	0.27%
Total	**35**	**0.30%**

and vehicles. Thus, neither Stono site contains enough metal pot fragments to support my hypothesis regarding a shift from colonoware to metal pots used in the preparation of communal meals.

Smith Plantation. Few pot and pan fragments were identified in the artifact assemblage from Smith Plantation. See Table 7.11 for specifics.

Table 7.11. Metal Pots and Pans from the Smith Plantation Assemblage by Count and Percentage

Artifact	Count	Percentage of Assemblage
Pan Fragment	2	0.02%
Pot Fragment	5	0.04%
Potential Pot/Pan Fragments	10	0.08%
Total	**17**	**0.14%**

Only seven definitive metal pot and pan fragments were identified in the Smith Plantation assemblage. Another 10 possible metal pot and pan fragments are suspected. All 17 are cast iron. When combined the fragments comprise only a fraction of a percentage of the entire assemblage suggesting they were scarce on the site.

Ferguson Road. No metal pot fragments were uncovered at the Ferguson Road site.

Discussion

My analyses of utensils, metal can fragments, fishing weights, fishhooks, and metal pots from the Stono "Slave Settlement." Stono "Tenant Settlement," Smith Plantation, and Ferguson Road sites provide little information in the nature of foodways in the Lowcountry. While forks, knives, and spoons were apparently used at the Stono sites and Smith Plantation, no data exists for Ferguson Road. Moreover, very few utensils were found at any of the sites making any interpretations beyond the fact that utensils of various kinds existed at the sites mere conjecture.

Similarly, few can fragments were found at any of the sites discussed. While the Stono "Tenant Settlement" contained the most of any of the sites, they comprise only 8.5% of the entire artifact assemblage from that site suggesting that cans were not particularly plentiful within the habitation. This finding suggests that tenants living at Stono did not rely heavily upon canned goods to feed themselves.

Few pot fragments were identified at any of the sites. In fact, none were identified at the Stono "Slave Settlement" and none were collected at the Ferguson Road site. Those that exist within the Stono "Tenant Settlement" and Smith Plantation assemblages are so few in number, it seems that they were either scarce and thus rarely discarded or were not in fact in heavy use.

Fishing-related artifacts were present in both Stono assemblages as well as in the Smith Plantation assemblage. None were collected from the Ferguson Road site. Those fishing-related artifacts that are available for analysis include both fishing net weights and fishhooks, suggesting both modes of procurement were in use during the period of enslavement and the tenant-era. Indeed, both modes are still in use today. Taken together, my analyses of metal artifacts from the four comparison sites shows little to suggest any major transformations in foodways among Lowcountry inhabitants.

CHAPTER 8
RESULTS: FAUNAL REMAINS

In this chapter I provide my analyses for faunal remains uncovered at the Stono "Slave Settlement," Stono "Tenant Settlement," Ferguson Road, and Smith Plantation sites. My analyses include calculations of the NISP (number of identified specimens), MNI (minimum number of individuals), and taxonomic group biomasses at each site[149] in order to identify changes in the diet and cuisine of Stono and more broadly, Lowcountry, inhabitants through time. These tests were selected because they are the most commonly employed methods for measuring abundance in zooarchaeology (Grayson 1979:201, Steele 2015:169).

As seen in Figure 8.1, the Stono and Ferguson Road[150] sites are all within one mile of each other. The Ferguson Road sites have been investigated by TRC's cultural resource management division on numerous occasions including a 2007 mitigation that involved an archaeological excavation, or data recovery (Goldberg 2014:2-3).

I have Ferguson Road artifact data from the TRC investigations. These data resulted from a combination of my own analysis of the faunal assemblage with data for other artifact groups (specifically, an unpublished spreadsheet Ramona Grunden

[149] Not all calculations were possible for all sites based on differential levels of data availability for each site as discussed in this and other chapters.
[150] Site numbers 38CH2105 and 38CH2106. Although they have been given two site numbers because they are currently separated a road, here I consider them one site.

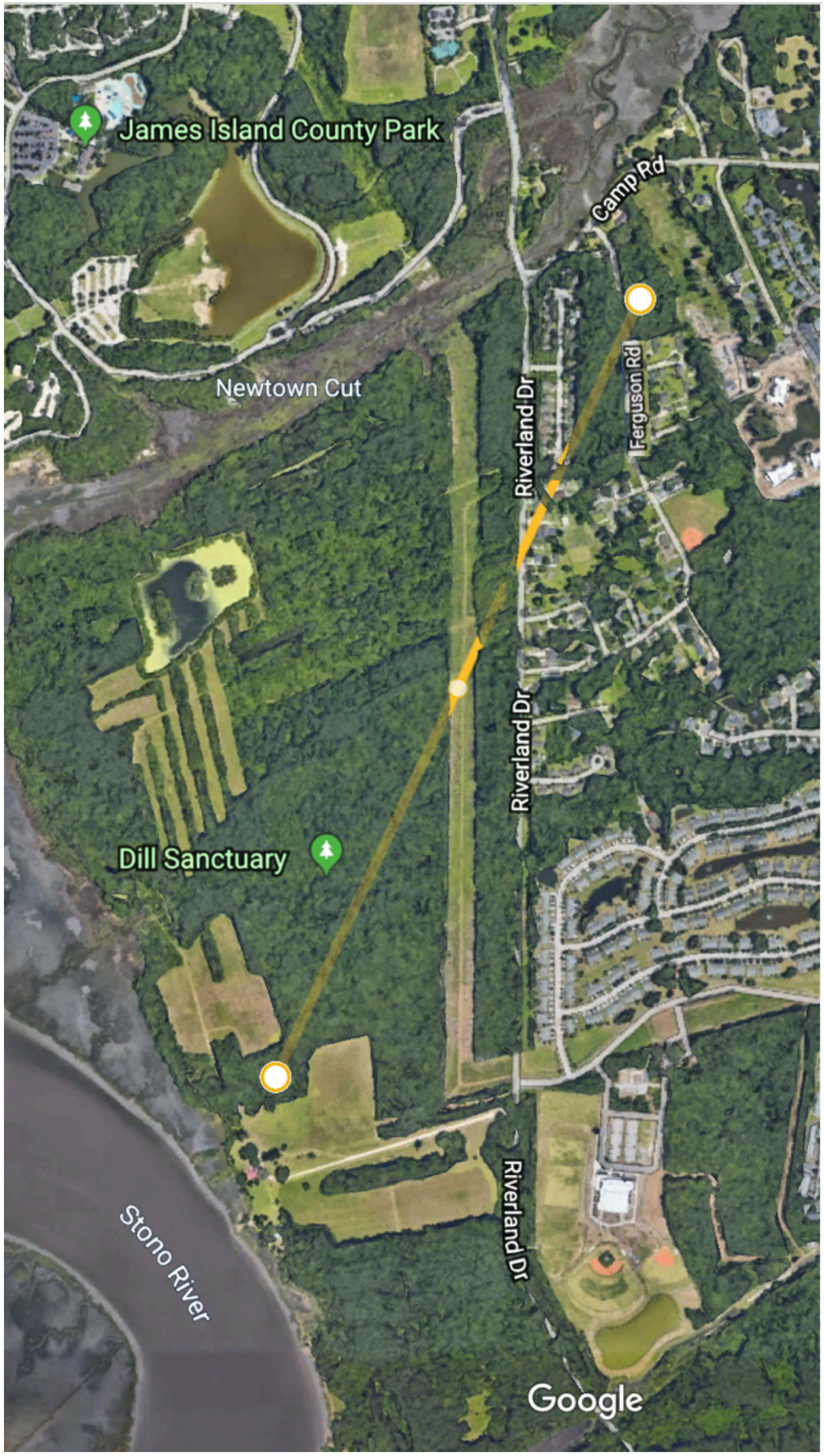

Figure 8.1. Map of James Island, South Carolina showing direct straight line from Stono sites to Ferguson Road site and other landmarks.

emailed me), which were analyzed by others after being uncovered at Ferguson Road during the 2007 excavations.

The Ferguson Road site is well suited for comparison with Stono because it was at one time part of the Stono (Dill) Plantation (Calhoun 1986, Frazier 2006 and 2010)[151]. If the two sites were under the same ownership at the same time, were concurrently inhabited, and the residents of both sites received rationed food and goods, then they would likely have similar foodways in terms of faunal remains. They would have been the same community and thus would have had the same degree of access to formal and informal markets, particularly if they were on the same or similar task schedules.

Similarly, being on the same or similar task schedules would give them relatively equal amounts of time to put towards procuring their own resources including marketing, hunting, fishing, gathering, and gardening as well as food preparation time. Additionally, the animals and products they had access to would be similar based on their proximity to one another and the fact that they would have been situated within the same physical environment as well as perhaps, socioeconomic contexts. Moreover, tenant farmers lived in close proximity to the Ferguson Road site, and at least some of them worked the Stono plantation well into the twentieth century meaning their daily lives would have been quite similar (Frazier 2006 and 2010, Goldberg 2014:39, Grunden 2011:6).

[151] Although the chain of landownership is unclear; see Goldberg 2014 and Grunden 2011.

If Stono and Ferguson Road overlapped in occupation and were separate plantations, they may still have received comparable rations and access to goods. However, my research indicates that the Ferguson Road site was occupied before the Stono "Slave Settlement." This finding means the sites should be understood as separate, discrete assemblages.

In order to broaden the applicability of my findings for foodways throughout the Lowcountry, I use the Smith Plantation. This comparison has been detailed throughout my dissertation; however, I mention it again here because the different physical locations may have had an impact on the availability of food resources. The Smith Plantation site is located in Beaufort County within the Fort Frederick Heritage Preserve, Port Royal, South Carolina. It is approximately 74 miles via roads or 47 miles as the crow flies from the Stono site (and 48 miles from the Ferguson Road site, see Figure 8.2). This distance means that the Smith plantation would have been reachable by land or waterways from James Island prior to advent of cars and the construction of bridges and roads for vehicular use.

In addition, Smith Plantation has less close ties to either James Island plantation under consideration here than the Stono and Ferguson Road sites do to one another physical, economically, and socially such that the likelihood of different rationing schemes is increased. As a result, comparing the modifications (butchery marks, in particular) seen on faunal remains among the sites is valuable. In effect, Smith acts as a control site. That is, the data from Smith Plantation helps me to identify how similar or different the Stono and Ferguson Road sites are from one another and how similar or different the two Stono sites are through time.

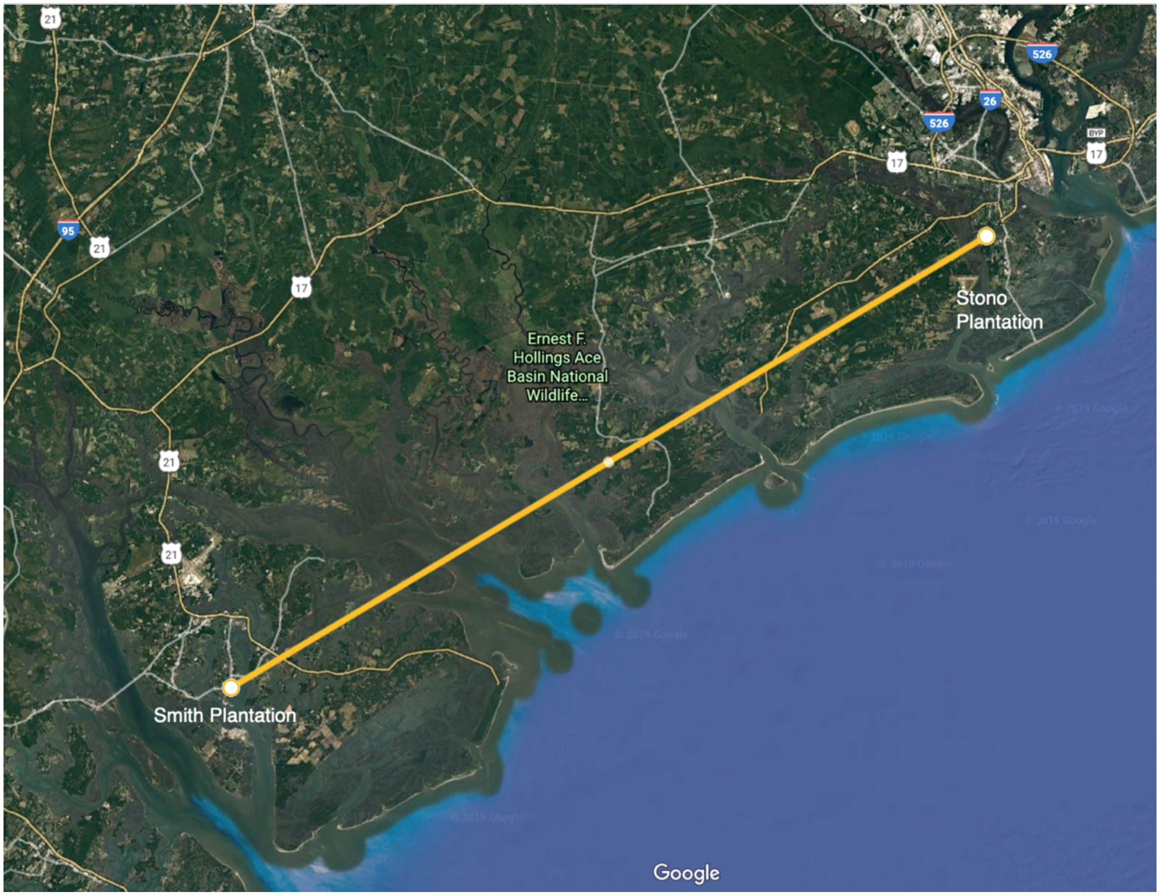

Figure 8.2. Map of the South Carolina shoreline showing the locations of Smith Plantation and Stono Plantation, which lie approximately 47 miles apart following a direct, straight line.

NISP

NISP, the number of identified specimens is an observational quantitative unit (Landon 2005:8). That is, it is a simple, direct count of specimens, also referred to as an "abundance measure" (Grayson 1979:201). For NISP, each individual bone, tooth, scale, antler, claw, etc. or fragment thereof counts as a single unit. The benefits to using NISP include the fact that it is direct and does require any manipulation or interpretation that may bias its meaning and it is additive, meaning that any additional specimens uncovered can simply be added to any outstanding NISP without requiring an entire reanalysis of the dataset (Grayson 1979, Klein and Cruz-Uribs 1984:25). In this dissertation, I strove to identify specimens at the species level; however, the high degree of fragmentation for remains from all of the sites often made such detailed identification impossible. As a result, I have identified all specimens at the lowest possible taxonomic level.

Stono "Slave Settlement." As with the other artifact groups, faunal remains from the Stono "Slave Settlement" assemblage are highly fragmented. The average specimen weight is .94g[152]. Only two fragments show signs of disease (infection) and only 23 have obvious weathering. These findings suggest that although the remains are highly fragmented (again, likely due to plowing in combination with butchering as discussed throughout this dissertations), most were not left out in the open to degrade after discard nor were they ill at the time of dispatch and consumption.

As I already mentioned, in this study, I attempted to identify faunal remains at the species level. For the Stono "Slave Settlement," in 80.55% of cases I was unable to identify faunal remains beyond a broader category level (family, order, class, and in two cases, phylum) (see Table 8.1). While the overall Stono "Slave Settlement" NISP is 7,758,

[152] Average specimen weight was calculated by dividing the sum of the total bone weights by the number, or count of specimens: 7314.2g/7785.

for specimens that have been identified at the species level, the NISP is 1,514. Appendix VI shows all specimens at their lowest identifiable level.

Table 8.1. Categories of Faunal Remains for Stono "Slave Settlement" in English and Latin by Specimen Count (NISP) and Percentage of Assemblage

Taxon English	**Taxon Latin and Taxon Total**	**NISP**	**Percentage of Assemblage**
Cartilaginous Fish	Class Chondrichthyes	8	
	Class Chondrichthyes Total	8	0.10%
Skates or Rays	Order Rajiformes	1	
	Order Rajiformes Total	1	0.01%
Bony Fish	Class Osteichthyes	107	
	Class Osteichthyes Total	107	1.37%
Gar Pike	Family Lepisosteidae	41	0.53%
	Order Lepisosteiformes	5	0.06%
Gar	*Lepisosteus spp.*	61	
	Lepisosteus spp. Total	61	0.78%
Long-Nosed Gar	*Lepisosteus osseus*	51	
	Lepisosteus osseus Total	51	0.66%
Bowfin	*Amia calva*	2	
	Amia calva Total	2	0.03%
Sea Catfish or Pout	Order Siluriformes	34	
	Order Siluriformes Total	34	0.44%
Hardhead Catfish	*Arius felis*	166	
	Arius felis Total	166	2.13%
Gaff-Topsail Catfish	*Bagre marinus*	81	
	Bagre marinus Total	81	1.04%
Sea Catfish	Family Ariidae	83	
	Family Ariidae Total	83	1.07%
Perch-like Fish	Order Perciformes	2	
	Order Perciformes Total	2	0.03%
Jack or Pompano	Family Carangidae	3	
	Family Carangidae Total	3	0.04%

Croaker or Drum	Family Sciaenidae	3	
	Family Sciaenidae Total	3	0.04%
Black Sea Bass	*Centropristis ocyurus*	1	
	Centropristis ocyurus Total	1	0.01%
Black Drum	*Pogonias cromis*	5	
	Pogonias cromis Total	5	0.06%
Mullet	Family Mugilidae	1	
	Family Mugilidae Total	1	0.01%
Flounder or Sole	Order Pleuronectiformes	1	
	Order Pleuronectiformes Total	1	0.01%
Righteye Flounder	Family Pleuronectidae	1	
	Family Pleuronectidae Total	1	0.01%
Turtle	Order Testudines	163	
	Order Testudines Total	163	2.09%
Mud Turtle	*Kinosternon subrubrum*	14	
	Kinosternon subrubrum Total	14	0.18%
Box or Water Turtle	Family Emydidae	4	
	Family Emydidae Total	4	0.05%
Box Turtle	*Terrapene carolina*	21	
	Terrapene carolina Total	21	0.27%
Diamondback Terrapin	*Malaclemys terrapin*	27	
	Malaclemys terrapin Total	27	0.35%
Bird	Class Aves	58	
	Class Aves Total	58	0.75%
Hawk or Eagle	Family Accipitridae	1	
	Family Accipitridae Total	1	0.01%
Turkey	*Meleagris gallopavo*	1	
	Meleagris gallopavo Total	1	0.01%
Pigeon or Dove	Family Columbidae	1	
	Family Columbidae Total	1	0.01%
Pigeon	*Columba fasciata*	2	
	Columba fasciata Total	2	0.03%
Chicken	*Gallus gallus*	31	
	Gallus gallus Total	31	0.40%
Bird/Small Mammal	Class Aves/Mammalia III	2	
	Class Aves/Mammalia III Total	2	0.03%

Mammal	Class Mammalia	1453	
	Class Mammalia Total	1453	18.66%
Small Mammal	Class Mammalia III	827	
	Class Mammalia III Total	827	10.62%
Medium Mammal	Class Mammalia II	1228	
	Class Mammalia II Total	1228	15.77%
Large Mammal	Class Mammalia I	571	
	Class Mammalia I Total	571	7.33%
Opossum	*Didelphis virginiana*	15	
	Didelphis virginiana Total	15	0.19%
Shorttail Shrew	*Blarina brevicauda*	1	
	Blarina brevicauda Total	1	0.01%
Eastern Mole	*Scalopus aquaticus*	3	
	Scalopus aquaticus Total	3	0.04%
Hare or Rabbit	Order Lagomorpha	2	
	Order Lagomorpha Total	2	0.03%
Rodent	Order Rodentia	3	
	Order Rodentia Total	3	0.04%
Old World Rat or Mouse	Family Muridae	9	
	Family Muridae Total	9	0.12%
Old World Rat	*Rattus spp.*	3	
	Rattus spp. Total	3	0.04%
Rats	*Rat spp.*	1	
	Rat spp. Total	1	0.01%
Norway Rat	*Rattus norvegicus*	4	
	Rattus norvegicus Total	4	0.05%
Roof Rat	*Rattus rattus*	1	
	Rattus rattus Total	1	0.01%
Raccoon	*Procyon lotor*	18	
	Procyon lotor Total	18	0.23%
Weasel or Skunk	Family Mustelidae	1	
	Family Mustelidae Total	1	0.01%
Striped Skunk	*Mephitis mephitis*	1	
	Mephitis mephitis Total	1	0.01%
Red Fox	*Vulpes vulpes*	2	
	Vulpes vulpes Total	2	0.03%

Grey Fox	*Urocyon cinereoargenteus*	1	
	Urocyon cinereoargenteus Total	1	0.01%
Domestic Pig	*Sus scrofa*	305	
	Sus scrofa Total	305	3.92%
White-Tailed Deer	*Odocoileus virginianus*	1	
	Odocoileus virginianus Total	1	0.01%
Sheep, Goat, Deer, or Pig	Order Artiodactyla I	6	
	Order Artiodactyla I Total	6	0.08%
Sheep, Goat, or Deer	Order Artiodactyla II	2	
	Order Artiodactyla II Total	2	0.03%
Even-Toed Ungulate	Order Artiodactyla	297	
	Order Artiodactyla Total	297	3.82%
Domestic Cow	*Bos taurus*	357	
	Bos taurus Total	357	4.59%
Domestic Sheep or Goat	*Ovis aries/Capra hircus*	15	
	Ovis aries/Capra hircus Total	15	0.19%
Vertebrate	Phylum Chordata	1266	
	Phylum Chordata Total	1266	16.26%
Mollusk	Phylum Mollusca	2	
	Phylum Mollusca Total	2	0.03%
Snails, Limpets, and Slugs	Class Gastropoda	2	
	Class Gastropoda Total	2	0.03%
American Oyster	*Crassostrea virginica*	403	
	Crassostrea virginica Total	403	5.18%
Shrimp, Lobster, Crab	Order Decapoda	3	
	Order Decapoda Total	3	0.04%
Total	**-**	**7785**	**100.00%**

Of the nearly 8,000 faunal remains I analyzed from the Stono "Slave Settlement" assemblage, more than half (65.7%) were mammal, but only 700 (8.99%) of those were mammal remains identifiable at the species level. Further, only 8.7% of the mammal specimens were definitely domesticates and only a fraction of a percent (.62%) were definitely wild mammals (see Table 8.1).

Among the domesticated mammal remains from the Stono “Slave Settlement” assemblage, 357 (or 4.59% of the assemblage) were cow and 305 (3.92% of the assemblage) were pig. Six other species comprise another 38 specimens or about one-half of one percent (.49%).

Another category of animal that contributed to the diet of Stono “Slave Settlement” residents is fish and shellfish. My analyses suggest that these specimens contributed less to the diet than mammals (see Table 8.2). However, I propose that the relative abundance of shellfish is underrepresented here because oyster remains were only recorded or collected when uncovered as part of a feature during the excavations of the Stono “Slave Settlement.” It is likely shellfish and fish contributed similar amounts to the diet as did mammals in terms of NISP. Whether or not this proposal is supported by other measures will be discussed below.

Table 8.2. Relative Abundance of Mammal to Fish and Shellfish Remains in the Stono “Slave Settlement” Assemblage

Faunal Category	NISP	Percentage of Assemblage
Mammal	5114	56.38%
Fish & Shellfish	1067	13.71%
Total	**6181**	**79.40%**

The fish specimens identified in the Stono “Slave Settlement” assemblage include both marine and estuarine species, which is typical of Lowcountry sites situated on estuaries (Peres 2010, Reitz 1985, Reitz et. al 1987, Samei 2009). Both Gafftop-Sail and Hardhead catfish live in the shallow marine waters and brackish estuaries of the southeast U.S. Atlantic coast and the Gulf coast from Cape Cod to the Yucatan. They prefer sandy or muddy bottoms and tolerate a wide range of salinity from the open ocean to nearly fresh. Long-nosed Gar are predators of the Hardhead catfish and can be found in the same ecosystems as their prey[153][154]. Black Drum are marine fish that live near shores spanning the Atlantic coast from the Gulf of Maine to Argentina. Like the catfish species described above, they are primarily bottom feeders. Juveniles are often predated by seatrout and jack[155]. Bowfin live in slow-moving coastal rivers, backwaters, swamps and other stagnant waters of the United States and Canada, east of the Mississippi to the Atlantic Ocean. Not surprisingly, the other identified fish species, Black Sea Bass also live along the Atlantic coast between Cape Cod and the Gulf of Mexico. Both skates and flounder consume the Black Sea Bass. Like the other species, they spawn in shallow, coastal waters such as those surrounding James Island[156]. Finally,

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[153] Gulf Coast Research Laboratory, The University of Southern Mississippi. Electronic document, http://gcrl.usm.edu/public/fish/hardhead.catfish.php, accessed March 31, 2019; Muncy and Wingo 1983.

[154] It is not clear how enslaved people and tenant farmers fished for these species. Today most fisherman catch gar by line and hook or by rope lures. Although they are occasionally caught in nets as well (Bethge 2014, southbassfisher 2007, Sutton 2019). Catfish (and Seabass) fisherman also tend towards hook and line. Although bottom trawls and other nets can be used, they are not preferred as the spines of catfish tend get caught in them making them difficult to remove (footnote reference 5 above and seacatfish 2008).

[155] Atlantic States Marine Fisheries Commission. Electronic document, http://www.asmfc.org/species/ black-drum, accessed March 31, 2019.

[156] Black Sea Bass. Species Directory, National Ocean and Atmospheric Administration (NOAA) Fisheries. Electronic document, https://www.fisheries.noaa.gov/species/black-sea-bass, accessed March 31, 2019.

oysters are prevalent within the salty or brackish waters on all U.S. coasts, clustering on older shells, rock, piers, or any hard, submerged surface[157].

Turtles were another dietary contributor (comprising 2.94% of the "Slave Settlement" assemblage); however, only 62 fragments were identifiable at the species level. The identified turtle species include box turtles, diamond back terrapin, and mud turtles. Box turtles are found throughout the eastern United States and in a variety of habitats. Although they are most common in open hardwood forest, they are also found along field and wetland edges. They are primarily terrestrial but can occasionally be found soaking in puddles or streams. Diamondback terrapins can be found along the Eastern Coast of the U.S., spanning Cape Cod to Texas. They are most common in salt marshes and shallow bays and are usually found in brackish water, though they occasionally travel out into the open ocean[158].

The range of mud turtles covers a similar geography, spanning Long Island, south to southern Florida, west to central Texas, and north up the Mississippi Valley to southern Illinois and southwestern Indiana. Like Diamondback Terrapin, Mud turtles can be found in fresh or brackish water, including marshes, small ponds, wet ditches and fields, and offshore islands. They prefer shallow, soft-bottomed, slow-moving water

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157 Discover Fishes, Florida Museum. Electronic document, https://www.floridamuseum.ufl.edu/discover-fish/species-profiles/amia-calva/, accessed March 31, 2019 and Freshwater Fish-Species, South Carolina Department of Natural Resources. Electronic document, http://www.dnr.sc.gov/fish/species/bowfin.html, accessed March 31, 2019.

158 Eastern Box Turtle; Diamonback Terrapin, Savannah River Ecology Laboratory, University of Georgia. Electronic document, https://srelherp.uga.edu/turtles/tercar.htm, accessed March 31, 2019.

with abundant vegetation. Individuals can sometimes be found on pond bottoms during warmer months, though they also dig burrows in the sand for overwintering and often wander away from water in mid-summer.[159].

Birds are even less contributory to the Stono "Slave Settlement" assemblage than are turtles. Bird remains comprise only 94 specimens or 1.2% of the total faunal assemblage for the site. Only about half (58) of those bird remains were able to be identified as having come from domesticated birds. Specifically, there were 31 chicken specimens and one turkey bone fragment. Another three specimens were pigeon or dove, which could be either domestic or wild individuals. There was one talon from a bird of prey; however, it is unlikely this specimen is food remains. Rather, it is incidental or of ritual significance. All other bird remains could not be identified as either domesticated or wild, although it is most likely they are domestic based on a dearth of evidence for the hunting of birds by people who were enslaved in the Lowcountry or their descendants for their own subsistence. In contrast, there is much reporting of rearing domestic birds, primarily chickens in the Slave Narratives recorded by the WPA in the mid- and late-1930s.

Stono "Tenant Settlement." As with all of the other artifact groups from both Stono sites, faunal remains from the Stono "Tenant Settlement" assemblage are highly fragmented. The average specimen weight for the faunal assemblage from this site is

[159] Eastern Mud Turtle Fact Sheet, Department of Environmental Conservation, New York State. Electronic document, https://www.dec.ny.gov/animals/7152.html, accessed March 31, 2019.

5.31g[160]. I hypothesize three reasons for the fact that the average specimen weight in this settlement was so much larger than that in the Stono "Slave Settlement," (which was 19.4g). First, the later date of the tenant habitation area means that it was plowed for a shorter length of time, which may have decreased the incidence of breakage; however, if this is true, less breakage would be seen across all artifact categories within the "Tenant Settlement" assemblage. As will be discussed in upcoming chapters, this is not the case. Second, the majority of the "Tenant Settlement" faunal remains came from the midden feature and just a few shovel tests while the "Slave Settlement" remains came from many different areas including general plow zones. This point like the first, suggests that contact between plow blades and faunal material was more limited at the "Tenant" area. Third, if my suppositions that the tenant inhabitants were more likely purchasing cuts of meat from off-site and were eating them from plates with knife and fork, then they may have been consuming more larger cuts than their enslaved predecessors. That is, if there was a shift away from one-pot, stew-style meals toward plated cuts of meats adjoining servings of vegetables and starches, then there would be an increase in average meat-piece size.

In this study, I attempted to identify faunal remains at the species level; however (see Appendix H for a list of these specimens), for the Stono "Tenant Settlement" assemblage, I am unable to identify remains beyond a broader category level (family, order, class, or phylum) in cases 70.56% (see Table 8.3). The overall Stono "Tenant

[160] Average specimen weight was calculated by dividing the sum of the total bone weights by the number, or count of specimens: 7041g/1325.

Settlement" NISP is 1,335; however, for specimens that have been identified at the species level, the NISP is 942. The majority of those (908 or 68.53%) were American Oyster, *Crassosotrea virginica*.

Table 8.3. Categories of Faunal Remains for Stono "Tenant Settlement" in English and Latin by Specimen Count (NISP) and Percentage of Assemblage

Taxon English	Taxon Latin	NISP	Percentage of Assemblage
Bony Fish	Osteichthyes	48	3.62%
Hardhead Catfish	*Arius felis*	8	0.60%
Gaff-Topsail Catfish	*Bagre marinus*	2	0.15%
Sea Catfish	*Ariidae*	2	0.15%
Perch	*Percidae*	1	0.08%
Croaker or Drum	*Sciaenidae*	2	0.15%
Turtle	*Testudines*	38	2.87%
Musk or Mud Turtle	*Kinosternidae*	1	0.08%
Box or Water Turtle	*Emydidae*	1	0.08%
Bird	*Aves*	23	1.74%
Chicken	*Gallus gallus*	2	0.15%
Mammal	*Mammalia*	66	4.98%
Small Mammal	*Mammalia III*	42	3.17%
Medium Mammal	*Mammalia II*	45	3.40%
Large Mammal	*Mammalia I*	17	1.28%
Mole	*Talpidae*	3	0.23%
Rabbit	*Leporidae*	3	0.23%
Rat	*Rattus*	2	0.15%
Weasel or Skunk	*Mustelidae*	1	0.08%
Domestic Pig	*Sus scrofa*	14	1.06%
Domestic Cow	*Bos taurus*	4	0.30%
Domestic Sheep or Goat	*Ovis aries/Capra hircus*	1	0.08%
Vertebrate	*Chordata*	69	5.21%
Mollusk	*Mollusca*	3	0.23%

Clam or Oyster	*Bivalvia*	2	0.15%
Whelk	*Buccinidae*	3	0.23%
Knobbed Whelk	*Busyconidae*	3	0.23%
Snails	*Gastropoda*	5	0.38%
Quahog	*Veneridae*	3	0.23%
American Oyster	*Crassosotreaa virginica*	908	68.53%
Crustacean	*Decapoda*	2	0.15%
Human[161]	*Homo Sapiens*	1	0.08%
Total	**-**	**1325**	**100.00%**

While it is possible that the consumption of oysters increased substantially between the era of enslavement and the period of tenancy; it is more likely that the field methodologies between the "Slave Settlement" and "Tenant Settlement" differed so as to create an artificial increase in oyster presence through time. Specifically, only oyster shells found in features were recorded, weighed, and/or collected from the Stono "Slave Settlement" assemblage. Although Anthony could not estimate the amount of oyster shells discarded in the field during those excavations (personal communication), I speculate that most oyster shells were left on-site and not recorded rather than returned to the Charleston Museum for analysis and curation.

For the Stono "Tenant Settlement," all whole oyster shells were collected and analyzed. My suggestion about the artificial different relative abundances of oyster within the assemblages and thus, between the two periods, is further supported by the fact that my float samples from the "Slave Settlement" and "Tenant Settlement" contained similar amounts of oyster shell.

[161] One human tooth was uncovered in the Stono "Tenant Settlement" assemblage. A carie filling indicated it was of relatively modern provenance.

Only 14.94% of the faunal remains from the Stono “Tenant Settlement” are mammal; of those, 9.60% were identifiable at the species level (18 of those were *Bos taurus* or *Sus scrofa*). The only other groups that contributed more than a fraction of a percent of the assemblage were bony fish, turtles, and birds, though none of these were major contributors.

The fish specimens identified in the Stono “Tenant Settlement” assemblage include both marine and estuarine species, as was the case with the “Slave Settlement” assemblage. The flotation samples I collected contained only fragmentary osteological remains from fish, most of which could not be identified at the family level or lower. However, the presence of small-bodied fish remains suggests that both large predatory fish and their smaller prey were consumed and that both hook and line and nets may have been used to procure a variety of species.

Notably, there were fewer gar uncovered at the Stono “Tenant Settlement” which could suggest a diminished population of that species and/or a change in dietary preferences between the two periods. It could also be a factor of the disparate sample sizes.

Smith Plantation. Unlike the analyses I conducted on the Stono and Ferguson Road Assemblages (which I identified at species level), for Smith Plantation I was only able to catalog the faunal remains by animal class. For faunal remains, DAACS has a two-level analysis protocol in which only zooarchaeological experts are allowed to catalog faunal remains with a high degree of specificity and detail (such as species identification). As previously mentioned, my level of expertise in 2015 and 2016 when I cataloged the Smith Plantation assemblage was categorized as non-expert, whereas after undergoing training with Dr. Wallman in 2017 and the following years when I analyzed the Stono assemblages, I was considered expert and as such, was allowed to catalog a more detailed analysis of the later assemblage.

I am unable to reanalyze the Smith assemblage due to lack of time and funding[162], so I cannot compare the Smith assemblage with any specificity beyond animal class for any of my faunal analyses. However, considering the fact that the Ferguson Road assemblage has also not been cataloged into DAACS at an expert level, the difference in level of analysis between the Smith Plantation and Stono Plantation assemblages does not negatively impact my findings; I was still able to identify similarities and differences among dietary contributors at all of the sites even though the particular categories of data differed among them.

The NISP for Smith Plantation is 4,409 specimens (Table 8.4). The majority (68.47%) of those could not be identified beyond the "Other Vertebrate" level. In other words, I was only able to identify them as animal bone. Mammal and Bony Fish were the next most prevalent animal classes, coming in at 15.31% and 13.61% respectively. All identified specimens and elements for this assemblage are shown in Appendix G.

[162] Although it was recently mentioned that such funding might have been secured from the South Carolina Department of Natural Resources. Perhaps future research will pursue this avenue.

Table 8.4. NISP for Smith Plantation Faunal Assemblage by Animal Class

Animal Class	NISP	Percentage of Assemblage
Other Vertebrate	3019	68.47%
Mammal	675	15.31%
Bony Fish	600	13.61%
Bird	62	1.41%
Crustacean	30	0.68%
Reptile	23	0.52%
Total	**4409**	**100.00%**

The percentage of fish at Smith Plantation is much higher than at either Stono site[163] (see Figure 8.3). The reason for this difference cannot be explained by proximity to water as the Smith Plantation lies along the shores of Port Royal Reach and Cat Island Reach, parts of the Port Royal Sound, a saltwater inlet comprised on numerous inlets leading inland from the Atlantic Ocean[164], a situation not dissimilar from that of Stono. The differentiating factor between the locations is the depth of the waters. The deep waters of the Port Royal Sound[165] may have enabled Smith Plantation residents to catch larger fish than the Stono River, estuarine waters, and marshland near Stono Plantation

[163] I have excluded the Ferguson Road site due to the lack of plowzone remains, which I find artificially lowers the incidence of fish in that assemblage; fish comprised only about 1% of the Ferguson Road faunal assemblage.
[164] The Beaufort River also leads inland from the Atlantic Ocean in the Port Royal Sound area. All waterways surrounding Port Royal and the Smith Plantation are considered saltwater by the South Carolina Department of Natural Resources (SCDNR). The waters surrounding James Island on the other hand, include both salt and fresh as the island lies on the division established by the SCDNR (http://www.dnr.sc.gov/marine/dividingline.html, accessed August 28, 2019).
[165] https://charts.noaa.gov/BookletChart/11516_BookletChart.pdf, accessed August 28, 2019

allowed[166]. There are two possible explanations for this difference in relative fish abundance. First, these larger fish remains from the deep waters near Smith Planation would have better withstood the taphonomic processes that impact faunal remain preservation in the region such as moisture and soil acidity. Alternatively, the residents of Smith Plantation may have indeed consumed more fish than their contemporaries on James Island.

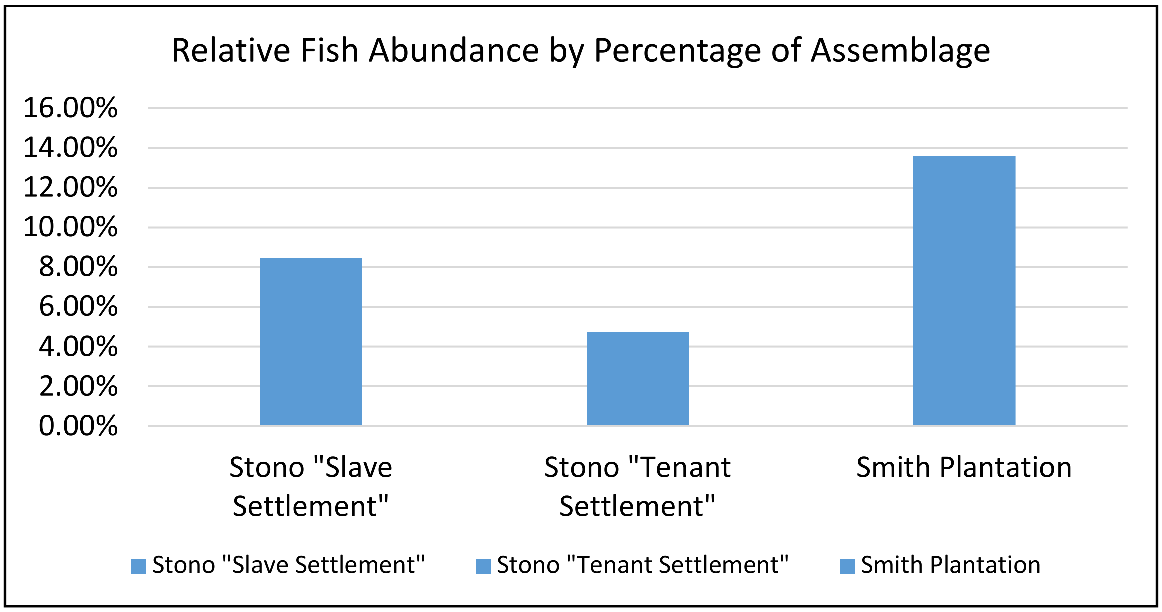

Figure 8.3. Comparison of Relative Frequencies for Fish Remains among Site Assemblages

[166] The Port Royal Sound near the Fort Frederick Heritage Preserve is approximately twenty feet deep at it deepest whereas the Stono River is only about ten feet deep at its deepest near the Stono Plantation. Moreover, the marsh at Stono Plantation is much wider than that at Smith making access to deep water at Stono more difficult (https://www.charts.noaa.gov/PDFs/11522.pdf and footnote 10 above.

The results presented above are based on aggregated data; that is, materials from ¼”, ⅛”, and flotation samples were combined when present. In order to determine how much bias was introduced by this aggregation, I separated flotation sample remains from ¼” dry screen materials (Figure 8.4). Note that flotation samples from Smith Plantation used within this dissertation consist only of materials greater than ⅛” in size. Both Stono site flotation samples, in contrast, contain materials of all sizes. No flotation samples were available from the Ferguson Road site, so that site is excluded from this particular comparison.

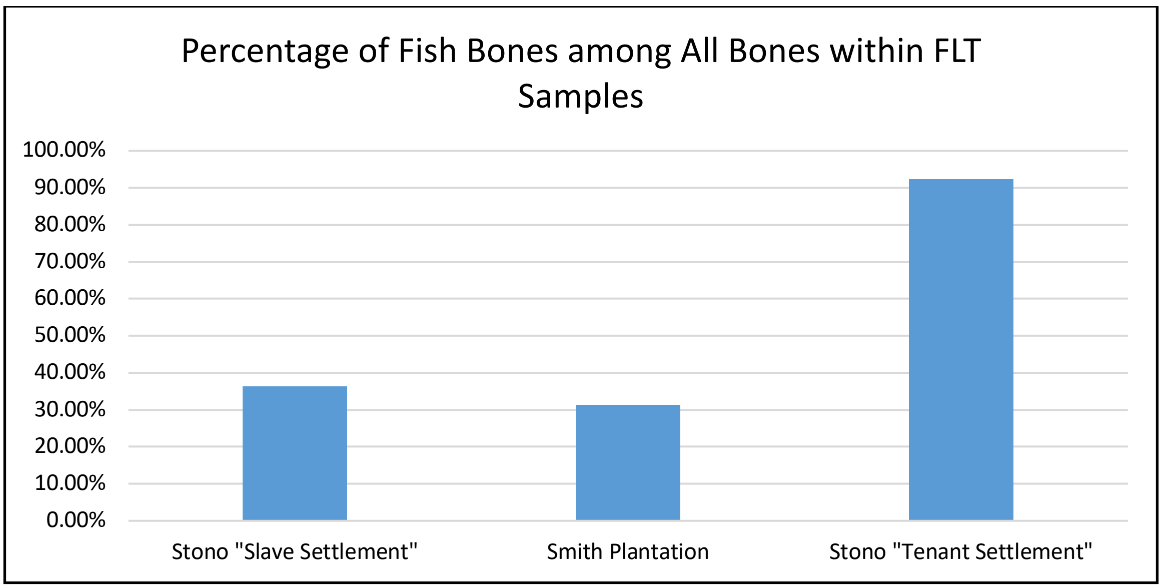

Figure 8.4. Percentage of Fish Bones Comprising the Flotation Sample Faunal Assemblages from the Stono “Slave Settlement,” Smith Plantation, and Stono “Tenant Settlement” sites.

The results of this flotation analysis indicate that Smith Plantation residents did not necessarily consume more fish overall than inhabitants of the other sites, but rather, that they consumed more fish with larger bones than other plantation residents considered in this study. Even so, nearly one-third of the Smith Plantation flotation sample was comprised of fish bones. The Stono "Tenant Settlement" inhabitants in comparison, consumed more small-boned fish than the other sites as more than 90% of the flotation sample from that site consists of fish bones.

Based on the data presented in Figure 8.4, Stono "Slave Settlement" inhabitants consumed more fish than Smith Plantation residents, but less than Stono "Tenant Settlement" residents. Seemingly they consumed a variety of fish sizes as the fish remain percentages from their refuse fall between the Smith Plantation and Stono "Tenant Settlement" percentages regardless of recovery method and the correlated fish size. It is likely that including fish bones from the Smith Plantation flotation sample that are smaller than ⅛" in size might shift the ratios yet again. The utility of this analysis is to demonstrate how important flotation samples can be for identifying dietary contributors within archaeological assemblages and that parsing out assemblages by context is a vital step in gaining a thorough understanding of diet through faunal remains.

Ferguson Road. The faunal assemblage from Ferguson Road comes from surface finds and feature excavations. This sourcing method stands in contrast to that of the Stono "Slave Settlement," Stono "Tenant Settlement," and Smith Plantation assemblages in which the majority of remains came from the general matrix of a plow zone. Still, because of the tied site histories discussed above and in previous chapters, the site is worthy of comparison. As with the Stono site analyses, I calculated NISP, MNI, and biomass for the Ferguson Road faunal assemblage.

The NISP for the Ferguson Road site is 231 (Table 8.5). Like all of the assemblages in this study, only a portion of the Ferguson Road faunal remains (55.84%) could be identified at the species level (see Appendix E for a list of all taxa identified in this site assemblage). Domesticated Cow and Pig are two of the most identified species in the assemblage. Together they comprise more than 50% of the assemblage. Unid mammals are also large contributors at the site. Turtles are relatively minor contributors to the Ferguson Road assemblage, making up less than 2% of the assemblage. Seemingly even less valued as a food resource is bird, which comprises less than 1% of the assemblage.

Table 8.5. NISP for Ferguson Road Faunal Assemblage

Taxon	NISP	Percentage of Assemblage
Domesticated Cow	101	43.72%
Mammal	85	36.80%
Domesticated Pig	23	9.96%
Vertebrate	9	3.90%
White-Tailed Deer	4	1.73%
Turtle	4	1.73%
Fish	3	1.30%
Bird	1	0.43%
River Otter	1	0.43%
Total	**231**	**100.00%**

MNI

MNI is the minimum number of individuals per taxon. It is useful for resolving the problem of interdependence associated with direct quantitative methods such as NISP. In MNI, each individual is inherently independent from every other. However, as such, it is also a derived measure, which requires it to be recalculated when new specimens are introduced into an assemblage (Grayson 1979:203). As a derived measure, it also requires massage and interpretation that direct measures do not require. While openness to interpretation is a functional part of archaeology, it can also provide a route for bias to enter analyses. Hence, many archaeologists utilize both methods as a way of minimizing bias and (re)affirming results and interpretations (Lyman 2008, see Fogle 2015, Scott 2001, Wallman 2014, and Zierden and Reitz 2009 for examples).

MNI, unlike NISP, does not bias quantifications toward taxa with more bones or taxa that are represented within an assemblage by more bones. MNI, however, is less useful for calculations being made about meats that were rationed. Rationed meats, unlike whole-caught or -collected meats are pre-apportioned prior to being consumed (Lyman 1994 and 2008). For example, a ration of beef and its proxy remain (a calcaneus, for example) does not represent the presence of a whole cow whereas a fish cleithrum more likely does signify the presence of a whole fish.

In this dissertation, I utilize the method of MNI calculation as detailed by Reitz and Wing 2008, which has been identified as the "standard accepted procedure" by Peres (2010:27). Specifically, I separated elements by left and right. I then used the higher of those two counts as the MNI by lowest possible taxonomic group. In addition, epiphyseal fusion and overall element size were taken into account during side-pairing.

Stono "Slave Settlement." As with NISP, MNI were calculated at the lowest possible taxonomic level. The results for MNI calculations for the Stono "Slave Settlement" assemblage are shown in Table 8.6.

Table 8.6. MNI for Stono "Slave Settlement" Faunal Assemblage

English Species	Latin Species	MNI
Cartilagenous Fish	Chondrichyhyes	1
Skates or Rays	Rajiformes	1
Bony Fish	Osteichthyes	1
Bowfin	*Amia calva*	1
Gar or Pike	Lepisosteiformes	1
Gar	Lepisosteus	1
Long-Nosed Gar	*Lepisosteus osseus*	3
Sea Catfish or Pout	Siluriformes	1
Sea Catfish	*Ariidae*	3
Hardhead Catfish	*Arius felis*	3
Gaff-Topsail Catfish	*Bagre marinus*	3
Perch-like Fish	Perciformes	1
Jack or Pompano	*Carangidae*	2
Croaker or Drum	*Sciaenidae*	1
Black Sea Bass	*Centropristis ocyurus*	1
Black Drum	*Pogonias cromis*	1
Mullet	*Mugilidae*	1
Flounder or Sole	Pleuronectiformes	1
Righteye Flounder	*Pleuronectidae*	1
Turtle	*Testudines*	1
Mud Turtle	*Kinosternon subrubrum*	1
Box or Water Turtle	*Emydidae*	1
Diamondback Terrapin	*Malaclemys terrapin*	1
Bird	*Aves*	1
Hawk or Eagle	*Accipitridae*	1
Turkey	*Meleagris gallopavo*	1
Pigeon or Dove	*Columbidae*	1
Pigeon	*Columba fasciata*	2
Chicken	*Gallus gallus*	4
Bird/Small Mammal	*Aves/Mammalia*	1
Small Mammals	*Mammalia*	1
Medium Mammal	*Mammalia*	2
Large Mammal	*Mammalia*	1
Shorttail Shrew	*Blarina brevicauda*	1
Eastern Mole	*Scalopus aquaticus*	2

Opposum	*Didelphis virginiana*	1
Hare or Rabbit	*Lagomorpha*	1
Rodent	*Rodentia*	1
Old World Rat or Mouse	*Muridae*	2
Old World Rat	*Rattus*	1
Norway Rat	*Rattus norvegicus*	2
Roof Rat	*Rattus rattus*	1
Raccoon	*Procyon lotor*	1
Weasel or Skunk	*Mustelidae*	1
Striped Skunk	*Mephitis mephitis*	1
Red Fox	*Vulpes vulpes*	1
Grey Fox	*Urocyon cinereoargenteus*	1
Domestic Pig	*Sus Scrofa*	9
White-Tailed Deer	*Odocoileus virginianus*	1
Even-Toed Ungulate	*Artiodactyla*	1
Sheep, Goat, Deer, or Pig	*Artiodactyla*	1
Sheep, Goat, or Deer	*Artiodactyla*	1
Domestic Cow	*Bos taurus*	6
Domestic Sheep/Goat	*Ovis aries/Capra hircus*	3
Vertebrate	*Chordata*	1
Mollusk	*Mollusca*	2
Snail, Limpets, and Slugs	*Gastropoda*	2
American Oyster	*Crassostrea virginica*	201
Shrimp, Lobster, Crab	*Decapoda*	2
Total	**-**	**294**

The Stono "Slave Settlement" assemblage contained at least nine individual pigs, six individual cows, four chickens, and three each of sheep or goats, hardhead catfish, gaff-topsail catfish, sea catfish, and long-nosed gar. See Table 8.7 for the top ten dietary contributors according to MNI for the Stono "Slave Settlement" faunal assemblage.

Table 8.7. Top 10 Stono "Slave Settlement" Faunal Assemblage MNI

Taxon English	Taxon Latin	MNI	Percentage of Assemblage
American Oyster	*Crassostrea virginica*	201	83.40%
Domestic Pig	*Sus Scrofa*	9	3.73%
Domestic Cow	*Bos taurus*	6	2.49%
Gar Combined	Lepisosteiformes	5	2.07%
Sea Catfish and Pout Combined	Siluriformes	4	1.66%
Chicken	*Gallus gallus*	4	1.66%
Artiodactyl Combined	*Artiodactyla*	3	1.24%
Pigeons Combined	*Columbidae*	3	1.24%
Gaff-Topsail Catfish	*Bagre marinus*	3	1.24%
Hardhead Catfish	*Arius felis*	3	1.24%
Total	**-**	**241**	**100.00%**

Stono "Tenant Settlement." As with all faunal analyses, MNI for the Stono "Tenant Settlement" were calculated at the lowest possible taxonomic level. The results are shown in Table 8.8.

Table 8.8. MNI for Stono "Tenant Settlement" Faunal Assemblage

Taxon English	Taxon Latin	MNI	Percentage of Assemblage
Bony Fish	*Osteichthyes*	1	0.29%
Sea Catfish	*Ariidae*	1	0.29%
Hardhead Catfish	*Arius felis*	2	0.59%
Gaff-Topsail Catfish	*Bagre marinus*	1	0.29%
Perch	*Perciformes*	1	0.29%
Croaker or Drum	*Sciaenidae*	1	0.29%
Turtle	*Testudines*	1	0.29%
Musk or Mud Turtle	*Kinosternon subrubrum*	1	0.29%
Box or Water Turtle	*Emydidae*	1	0.29%
Bird	*Aves*	1	0.29%
Chicken	*Gallus gallus*	1	0.29%

Mammal	*Mammalia*	1	0.29%
Human	*Homo sapiens*	1	0.29%
Small Mammal	*Mammalia*	1	0.29%
Medium Mammal	*Mammalia*	1	0.29%
Large Mammal	*Mammalia*	1	0.29%
Mole	*Talpidae*	1	0.29%
Rabbit	*Leporidae*	1	0.29%
Rats	*Rattus*	1	0.29%
Weasel or Skunk	*Mustelidae*	1	0.29%
Domestic Cow	*Bos taurus*	1	0.29%
Domestic Pig	*Sus scrofa*	2	0.59%
Domestic Sheep/Goat	*Ovis aries/Capra hircus*	1	0.29%
Vertebrate	*Chordata*	1	0.29%
Mollusk	*Mollusca*	1	0.29%
Whelk	*Buccinidae*	1	0.29%
Knobbed whelk	*Busyconidae*	2	0.59%
Quahog	*Veneridae*	1	0.29%
Snails & Limpets	*Gastropoda*	5	1.47%
American Oyster	*Crassostrea virginica*	301	88.79%
Clam	*Bivalvia*	1	0.29%
Crustacean	*Decapoda*	1	0.29%
Total	**-**	**339**	**100.00%**

The top dietary contributors for this assemblage according to MNI are oysters, followed by gastropods, Hardhead catfish, domestic pigs, and knobbed whelks. In fact, those taxa are the only categories with an MNI greater than one. Although MNI is problematic (as discussed in Chapter 4 and below), it is clear that both wild estuarine and domesticated terrestrial food sources contributed to the diets of freedpeople living in the Stono "Tenant Settlement."

Smith Plantation. Cataloging faunal remains at a non-expert level for Smith Plantation means that osteological elements were not sided during analysis. As a result, I cannot obtain estimates for MNI based on the data currently available for the Smith Plantation assemblage.

Ferguson Road. The MNI for Ferguson Road is 20 (Table 8.9). Cow and pig are two of the greatest dietary contributors within the assemblage at that site. Bird, fish, and turtle are relatively minor contributors within the assemblage.

Table 8.9. MNI for Ferguson Road Faunal Assemblage

Taxon English	Taxon Latin	MNI	Percentage of Assemblage
Mammal, unid	*Mammalia*	4	20.00%
Domesticated Cow	*Bos taurus*	7	35.00%
Domesticated Pig	*Sus scrofa*	3	15.00%
Bird	*Aves*	1	5.00%
White-Tailed Deer	*Odocoileus virginianus*	1	5.00%
Fish	Osteichthyes	1	5.00%
River Otter	*Lontra canadensis*	1	5.00%
Turtle	*Testudines*	1	5.00%
Vertebrate	*Chordata*	1	5.00%
Total	**-**	**20**	**100.00%**

Skeletal Part

Individual skeletal parts, or elements may be identified in order to obtain an MNE (minimum number of elements). This approach is particularly useful when applied to assemblages with small sample sizes, such as the Stono "Tenant Settlement" and Ferguson Road assemblages (Landon 2005). Unlike MNI, MNE is a calculation of elements rather than individuals. Using it creates a better representation of what was actually eaten. For example, a cow phalanx may not represent the consumption of an entire cow, but it probably does represent the consumption of a cow's foot. So, MNE is particularly useful in situations where large animals were likely divided among a number of individuals and households such as the plantation settings being considered in this dissertation.

Stono "Slave Settlement." Although the assemblage from the "Slave Settlement" at Stono is robust relative to the comparison assemblages, I have calculated MNE for its assemblage in order to maintain consistency among my analyses. Table 8.10 shows the counts of skeletal elements within the Stono "Slave Settlement" assemblage by lowest possible taxon.

Table 8.10. Counts of Skeletal Elements within the Stono "Slave Settlement" by Lowest Possible Taxon

Taxon English	Element	Count
Cartilagenous Fish	Vertebra	8
Cartilagenous Fish Total		8
Skates or Rays	Spine	1
Skates or Rays Total		1
Bony Fish	Cleithrum	2
	Cranium	1
	N/R	3
	Otolith	1
	Preopercular	1
	Unid	65
	Vertebra	34
Bony Fish Total		107
Gar Pike	Opercular	1
	Scale	35
	Unid	4
	Vertebra	6

Gar Pike Total		46
Gar	Scale	48
	Unid	4
	Vertebra	9
Gar Total		61
Long-Nosed Gar	Cranium	42
	Dentary	5
	Palatine	1
	Parietal	2
	Vomer	1
Long-Nosed Gar Total		51
Bowfin	Vertebra	2
Bowfin Total		2
Sea Catfish or Pout	Vertebra	34
Sea Catfish or Pout Total		34
Hardhead Catfish	Articular	1
	Basioccipital	1
	Ceratohyal	2
	Cleithrum	13
	Coracoid	2
	Dorsal spine	12
	Frontal	6
	Hyomandibular	2
	Interopercular	2
	Lacrimal	1
	N/R	2
	Opercular	1
	Otolith	3
	Pectoral spine	17
	Preopercular	2
	Quadrate	1
	Spine	9
	Unid	89
Hardhead Catfish Total		166
Gaff-Topsail Catfish	Cleithrum	3
	Cranium	1
	Frontal	13
	Hyomandibular	1
	N/R	5

	Otolith	5
	Pectoral spine	6
	Postcleithrum 1 (upper)	1
	Preopercular	1
	Quadrate	1
	Spine	2
	Unid	42
Gaff-Topsail Catfish Total		81
Sea Catfish	Otolith	51
	Spine	2
	Unid	30
Sea Catfish Total		83
Perch-like Fish	Tooth	1
	Vertebra	1
Perch-like Fish Total		2
Jack or Pompano	Cleithrum	3
Jack or Pompano Total		3
Croaker or Drum	Pharyngeal plate	1
	Tooth	1
	Unid	1
Croaker or Drum Total		3
Black Sea Bass	Unid	1
Black Sea Bass Total		1
Black Drum	Pharyngeal plate	1
	Tooth	1
	Unid	3
Black Drum Total		5
Mullet	Vertebra	1
Mullet Total		1
Flounder or Sole	Vertebra	1
Flounder or Sole Total		1
Righteye Flounder	Vertebra	1
Righteye Flounder Total		1
Turtle	Carapace	7
	Carapace or plastron	115
	Hypoplastron	1
	Long bone	2
	Phalanx	1
	Plastron	4

	Scute	1
	Tibia	2
	Unid	27
	Vertebra	3
Turtle Total		163
Mud Turtle	Carapace	1
	Carapace or plastron	9
	Coracoid	1
	Humerus	1
	Plastron	1
	Unid	1
Mud Turtle Total		14
Box or Water Turtle	Carapace or plastron	3
	Unid	1
Box or Water Turtle Total		4
Box Turtle	Carapace	4
	Carapace or plastron	16
	Plastron	1
Box Turtle Total		21
Diamondback Terrapin	Carapace	5
	Carapace or plastron	20
	Plastron	2
Diamondback Terrapin Total		27
Bird	Humerus	1
	Long bone	17
	Tarsometatarsus	2
	Unid	29
	Vertebra	9
Bird Total		58
Hawk or Eagle	Claw	1
Hawk or Eagle Total		1
Turkey	Radius	1
Turkey Total		1
Pigeon or Dove	Coracoid	1
Pigeon or Dove Total		1
Pigeon	Femur	2
Pigeon Total		2
Chicken	Coracoid	1
	Femur	5

	Humerus	1
	Long bone	4
	Metatarsal	2
	Phalanx	1
	Scapula	1
	Tarsometatarsus	7
	Tibiotarsus	3
	Ulna	2
	Unid	4
Chicken Total		31
Bird/Small Mammal	Unid	2
Bird/Small Mammal Total		2
Mammal	Bulla tympanica	1
	Cranium	3
	N/R	124
	Tooth	32
	Ungual phalanx	6
	Unid	1287
Mammal Total		1453
Small Mammal	Bulla tympanica	1
	Caudal vertebra	2
	Long bone	4
	Maxilla	1
	Molar	1
	N/R	73
	Phalanx	4
	Premolar or molar	1
	Rib	14
	Rib, body	4
	Second phalanx	1
	Tooth	1
	Ulna	1
	Unid	714
	Vertebra	4
	Vertebra, centrum	1
Small Mammal Total		827
Medium Mammal	Carpal or tarsal	2
	Incisor	1
	Long bone	12

	Mandible	3
	Maxilla	2
	N/R	133
	Phalanx	2
	Rib	4
	Rib, body	2
	Tibia	1
	Tooth	9
	Unid	1035
	Vertebra	13
	Vertebra, centrum	9
Medium Mammal Total		1228
Large Mammal	Bulla tympanica	1
	Carpal or tarsal	1
	Cranium	8
	Indeterminate	4
	Long bone	7
	Mandible	1
	Metapodial	2
	N/R	38
	Phalanx	1
	Rib	6
	Rib, body	1
	Sesamoid	1
	Tooth	12
	Unid	486
	Vertebra	1
	Vertebra, centrum	1
Large Mammal Total		571
Opossum	Humerus	1
	Maxilla	2
	Phalanx	4
	Premolar	1
	Ulna	1
	Upper molar 2	1
	Upper molar 3	1
	Vertebra	4
Opossum Total		15
Shorttail Shrew	Mandible	1

Shorttail Shrew Total		1
Eastern Mole	Femur	2
	Unid	1
Eastern Mole Total		3
Hare or Rabbit	Lumbar vertebra	1
	Sacrum	1
Hare or Rabbit Total		2
Rodent	Innominate	1
	Tibia	1
	Upper incisor	1
Rodent Total		3
Old World Rat or Mouse	Calcaneus	1
	Femur	3
	Innominate	1
	Mandible	3
	Unid	1
Old World Rat or Mouse Total		9
Old World Rat	Femur	1
	Innominate	1
	Maxilla	1
Old World Rat Total		3
Rats	Femur	1
Rats Total		1
Norway Rat	Humerus	1
	Mandible	2
	Maxilla	1
Norway Rat Total		4
Roof Rat	Mandible	1
Roof Rat Total		1
Raccoon	Canine	1
	Caudal vertebra	1
	Humerus	1
	Innominate	1
	Lower canine	1
	Lower molar 2	2
	Lower molar 3	2
	Mandible	1
	Maxilla	2
	Premolar or molar	1

	Upper canine	1
	Upper molar 1	1
	Upper molar 3	3
Raccoon Total		18
Weasel or Skunk	Thoracic vertebra	1
Weasel or Skunk Total		1
Striped Skunk	Mandible	1
Striped Skunk Total		1
Red Fox	Maxilla	1
	Ulna	1
Red Fox Total		2
Grey Fox	Ulna	1
Grey Fox Total		1
Domestic Pig	Astragalus	1
	Bulla tympanica	3
	Calcaneus	1
	Canine	4
	Carpal or tarsal	1
	Femur	1
	First phalanx	4
	Humerus	4
	Incisor	12
	Innominate	2
	Long bone	1
	Lower canine	16
	Lower incisor	2
	Lower incisor 2	7
	Lower incisor 3	4
	Lower molar 1	2
	Lower molar 2	5
	Lower molar 3	11
	Lower premolar	1
	Lower premolar 1	3
	Lower premolar 2	2
	Lower premolar 3	1
	Lower premolar 4	2
	Mandible	9
	Maxilla	1
	Metacarpal IV	1

	Metapodial	1
	Molar	11
	Phalanx	4
	Premolar	3
	Premolar or molar	43
	Radius	1
	Scapula	1
	Second phalanx	6
	Sesamoid	1
	Third phalanx	3
	Thoracic vertebra	2
	Tibia	5
	Tooth	65
	Ulna	1
	Unid	16
	Upper canine	1
	Upper incisor 1	2
	Upper incisor 2	6
	Upper incisor 3	3
	Upper molar 1	5
	Upper molar 2	3
	Upper molar 3	7
	Upper premolar 1	1
	Upper premolar 2	6
	Upper premolar 3	4
	Upper premolar 4	3
Domestic Pig Total		305
White-Tailed Deer	Rib	1
White-Tailed Deer Total		1
Sheep, Goat, Deer, or Pig	Humerus	1
	Phalanx	1
	Tooth	4
Sheep, Goat, Deer, or Pig Total		6
Sheep, Goat, or Deer	Tooth	2
Sheep, Goat, or Deer Total		2
Even-Toed Ungulate	Bulla tympanica	1
	Long bone	2
	Lower molar 3	1
	Metapodial	1

	Premolar or molar	12
	Sesamoid	1
	Third phalanx	1
	Tooth	274
	Unid	4
Even-Toed Ungulate Total		297
Domestic Cow	Calcaneus	2
	Carpal or tarsal	3
	Cervical vertebra	1
	Distal sesamoid	1
	Femur	1
	First phalanx	8
	Fused carpal 2 + 3	1
	Incisor	27
	Innominate	2
	Intermediate carpal	1
	Lower molar	4
	Lower molar 1	3
	Lower molar 1 or 2	1
	Lower molar 2	3
	Lower molar 2 or 3	1
	Lower molar 3	2
	Lower premolar 1	8
	Lower premolar 2	4
	Lower premolar 3	2
	Lower premolar or molar	3
	Main metatarsal	1
	Mandible	1
	Metacarpal	7
	Metapodial	13
	Metatarsal	4
	Molar	10
	Phalanx	3
	Premolar or molar	33
	Proximal sesamoid	2
	Radial carpal	1
	Rib	1
	Scapula	1
	Second phalanx	21

	Sesamoid	2
	Temporal	1
	Third phalanx	6
	Tooth	104
	Unid	28
	Upper molar	6
	Upper molar 1	6
	Upper molar 2	6
	Upper molar 3	4
	Upper premolar	1
	Upper premolar 1	7
	Upper premolar 2	6
	Upper premolar 3	3
	Vertebra	1
Domestic Cow Total		357
Domestic Sheep or Goat	Astragalus	1
	Carpal or tarsal	1
	Lower incisor 2	1
	Lower molar 1	1
	Lower premolar 1	1
	Lower premolar 2	1
	Metapodial	1
	Molar	1
	Thoracic vertebra	1
	Upper molar 1	2
	Upper premolar 1	4
Domestic Sheep or Goat Total		15
Vertebrate	Claw	1
	N/R	43
	Unid	1222
Vertebrate Total		1266
Mollusk	Shell	2
Mollusk Total		2
Snails, Limpets, and Slugs	Shell	2
Snails, Limpets, and Slugs Total		2
American Oyster	Shell	403
American Oyster Total		403
Shrimp, Lobster, Crab	Claw	3
Shrimp, Lobster, Crab Total		3

Total	**-**	**7785**

These results highlight the diversity of species from different environments (terrestrial and aquatic, wild and domesticated) that contributed to the diet of the enslaved laborers at Stono. It also indicates they ate complete animals in many cases. For example, although domesticated mammal teeth are common, so too are upper limb portions. The latter were once imagined as being "luxury" cuts, eaten primarily by upper-class individuals and rarely by enslaved people (Schulz and Gust 1983, Shields 2015, Singleton 1995). My results follow along with that of others (Lyman 1979, Reitz et. al 2006, Scott 2001) suggesting this kind of meat-cut hierarchy was not necessarily the reality among all groups of enslaved people and that there is not necessarily a direct correlation between meat-cut cost and economic status.

In addition, fish, reptile, and bird remains include vertebra, cranium, carapace, and limb portions, the combination of which suggests the consumption of whole animals.

Stono "Tenant Settlement." The small sample size of this faunal assemblage requires the greatest number of factors possible be considered when making interpretations about foodways. Therefore, I have calculated the skeletal parts of faunal remains uncovered at the Stono "Tenant Settlement" in my analyses (see Table 8.11). These results are compared with those from the other sites in order to determine whether or not tenant farmers were eating different parts of animals than enslaved people had eaten.

Table 8.11. Counts of Skeletal Elements within the Stono "Tenant Settlement" by Lowest Possible Taxon

Taxon English	Element	Count
Bony Fish	Cranium	8
	Pectoral Spine	1
	Scale	29
	Unid	6
	Vertebra	4
Hardhead Catfish	Cleithrum	3
	Cranium	1
	Frontal	2
	Lateral ethmoid	1
	Otolith	1
Gaff-Topsail Catfish	Otolith	1
	Unid	1
Sea Catfish	Cleithrum	1
	Otolith	1
Perch	Preopercular	1
Croaker or Drum	Tooth	2
Turtle	Carapace	4
	Carapace or plastron	21
	Plastron	5
	Unid	7
	Vertebra	1
Musk or Mud Turtle	Plastron	1
Box or Water Turtle	Plastron	1
Bird	Eggshell	4
	Phalanx	1
	Rib	1
	Unid	17
Chicken	Furculum	2
Mammal	Unid	66
Small Mammal	Innominate	1
	Lumbar vertebra	1

	Rib, body	1
	Tooth	1
	Unid	38
Medium Mammal	Tooth	1
	Unid	44
Large Mammal	Premolar or molar	1
	Tooth	8
	Unid	6
	Vertebra	2
Mole	Humerus	2
	Maxilla	1
Rabbit	Humerus	2
	Innominate	1
Rats	Mandible	1
	Maxilla	1
Weasel or Skunk	Mandible	1
Domestic Pig	Bulla tympanica	1
	Humerus	1
	Lower molar 1	3
	Lower premolar 4	1
	Mandible	1
	Premolar or molar	3
	Upper canine	1
	Upper molar 1	1
	Upper molar 2	1
	Upper molar 3	1
Domestic Cow	Cranium	2
	Lower molar 2	1
	Premolar	1
Domestic Sheep or Goat	Cranium	1
Vertebrate	Unid	69
American Oyster	Shell	908
Mollusk	Shell	13
Clam	Shell	2
Whelk	Shell	3
Knobbed Whelk	Shell	3

Snails	Shell	1
Quahog	Shell	3
Crustacean	Claw	2
Total	**-**	**1330**

The MNE calculations for the Stono "Tenant Settlement" emphasize the high degree of fragmentation within the site assemblage. Many oysters were once again identified. The majority of identifications greater than one are either fragmentary or are elements that are contained in large numbers within a single individual. For example, 29 fish scales are not particularly informative. As with NISP and MNI, the diversity of species and elements is less than that of the Stono "Slave Settlement" assemblage; however, much of this difference can be attributed to sample size. The results also indicate that as with the earlier Stono assemblage, remains from all parts of animals were consumed including head, limbs, and axial bodies.

Ferguson Road. Table 8.11 shows the counts of skeletal elements for the Ferguson Road faunal assemblage.

Table 8.11. Counts of Skeletal Elements within the Ferguson Road Assemblage by Lowest Possible Taxon

Taxon	Element	Count
Bony Fish	operculum	1
	vertebral spines	1
Turtle	carapace/plastron	2
Bird	unid	1
Mammal	epiphysis	2
	cranium	2

	femur	1
	fibula	1
	humerus	1
	metapodial	1
	phalanx	1
	radius	2
	rib	20
	scapula	2
	tibia	3
	tooth	3
	tooth root	2
	unid	49
	vertebra	4
River Otter	mandible	1
Domestic Pig	humerus	1
	incisor	1
	mandible	4
	mandible, tooth	1
	maxilla and molar	1
	molar	1
	phalanx, medial (2)	1
	premaxilla with unerupted incisor	1
	premolar	3
	premolar (lower)	1
	radius	1
	tooth	6
	tooth root	1
White-Tailed Deer	femur	1
	metatarsal	1
	phalanx, proximal	1
	tooth	2
Domestic Cow	carpal	1
	cranium	18
	femur	1
	humerus	2
	ilium	5

	incisor	1
	mandible	3
	maxilla and molars	3
	metacarpal	1
	metapodial	6
	metatarsal	1
	molar	4
	molar or premolar	13
	pelvis	2
	phalanx	8
	premolar	2
	premolar (lower)	1
	radius	2
	rib	2
	scapula	1
	tibia	1
	ulna	2
	unid	12
	vertebra	5
Total	**-**	**225**

The Ferguson Road faunal assemblage is the smallest in size of the sites for which MNI and MNE were calculated. However, like the Stono “Slave Settlement” and Stono “Tenant Settlement” sites, it contains remains from both terrestrial and aquatic animal groups as well as elements from all parts of the body including crania and feet as well as upper long bone fragments, which suggest a relatively diverse diet was consumed by residents of the site and little to no preference for particular portions of animals.

Biomass

Biomass is an estimate of the meat weight per taxa by unit area (Grayson 1979:225). In this dissertation, unit area is defined as the entirety of each site assemblage without regard to physical space or excavation volume. I use bone weight in order to calculate a derived meat weight, a method identified by Grayson (1979:224) as one of most commonly used measures for such calculations. In this dissertation, I utilize the allometric formula for specimen weight asserted by Reitz and Wing (2008:236). As a result of the way it is produced, biomass is a derived measure. As such, it is open to bias, in particular it falsely relies upon the idea that meat weight is a simple linear function of bone weight (Grayson 1979:225). At the same time, it is useful for providing meat weight estimates as it does not suppose which portions of an animal were considered to be edible or inedible (Peres 2010:28).

Stono "Slave Settlement." In order to obtain another estimate of protein source abundance, I calculated biomass (Table 8.12). The biomass estimates I calculated

Table 8.12. Biomass for Selected Animal Classes within the Stono "Slave Settlement" Faunal Assemblage

Taxon	Bone Weight (g.)	Biomass (lbs)	Percentage
Fish	159.7	55.93	42.39%
Turtle	90.9	0.65	0.49%
Bird	60.7	0.86	0.65%
Mammal	6851.4	74.51	56.47%
Total	**7162.7**	**131.95**	100.00%

reinforce the mixed-class dietary contributor findings identified by the NISP and MNI calculations presented above. That is, both domesticated and wild specimens were consumed. Biomass estimates suggest that enslaved Stono residents relied most heavily upon mammal and fish meats.

The relative importance of domesticated mammals to the diets of enslaved people at Stono is not an unexpected finding as beef and pork were two of the most important meat sources issued in rations (Landon 2005:16, Reitz et. al 1985). Fish are also well represented in terms of biomass, just as they were by NISP and MNI calculations. My findings support the idea that residents of the Stono "Slave Settlement" relied upon domesticated meats supplemented by wild hunted, trapped, fished, and collected animal sources. Supplementation of rations with wild resources was a common occurrence on plantation sites (Ascher and Fairbanks 1971, Landon 2005:15, Reitz et. al 1985). Further, coastal sites such as Stono are noted for having domesticated mammals and estuarine resources in roughly equal ranks of importance (Landon 2005:15).

Stono "Tenant Settlement." In order to obtain another estimate of protein source abundance for the later Stono settlement, I once again calculated biomass (see Table 8.13).

Table 8.13. Biomass for Selected Animal Classes within the Stono "Tenant Settlement" Faunal Assemblage

Taxon	**Bone Weight (g)**	**Biomass (lbs)**	**Percentage**
Mammal	179.9	2.82	66.20%

Bird	3.2	0.06	1.41%
Turtle	20.1	0.24	5.63%
Fish	7.6	1.14	26.76%
Total	**203.2**	**4.26**	**100.00%**

The biomass estimates I calculated reinforce the mixed- class dietary contributor findings. That is, both domesticated and wild specimens were consumed. However, biomass estimates suggest that post-Emancipation Stono residents relied more heavily upon mammal meat than NISP and MNI suggest. The relative importance of domesticated mammals to the diets of enslaved people at Stono is not an unexpected finding as beef and pork were two of the most important meat sources issued in rations (Landon 2005:16) and the labor contract signed by Dill and his tenants outlined provisions as part of the payment for farm workers. Thus, tenants may have consumed the same species through rationing that their enslaved predecessors relied upon.

As seen in the "Slave Settlement" assemblage, mammals and fish are two of the primary groups consumed by site inhabitants in terms of biomass. These findings support the idea that residents of the Stono "Tenant Settlement" relied upon domesticated meats alongside trapped, fished, and collected animal sources, just as their enslaved ancestors had done.

Smith Plantation. As with the other sites considered in this study, I calculated biomass for selected animal groups within the Smith Plantation faunal assemblage (Table 8.14). Like the biomass calculations for the two Stono sites, the Bird and Turtle groups were once again minor dietary contributors in terms of meat weight, or biomass. However, the biomass estimate for fish was much higher for the Smith Planation

Table 8.14. Biomass of Selected Animal Class Taxa within The Smith Plantation Faunal Assemblage

Taxon	Bone Weight (g)	Biomass (lbs)	Percentage
Fish	151.6	52.55	69.90%
Turtle	10.3	0.15	0.20%
Bird	15.2	0.24	0.32%
Mammal	1788	22.24	29.58%
Total	**1965.1**	**75.19**	**100.00%**

Assemblage than for the other site assemblages considered in this study. The data from Smith Plantation also demonstrate a combination of protein sources. The biomass estimates for this site, however, indicate heavier reliance upon fish than mammals. This finding is in line with those indicated by NISP. The reason for this difference is the proximity of Smith Plantation to deep waters, which contain larger fish than those of estuaries like those surrounding James Island.

Ferguson Road. I also calculated biomass for the faunal remains from the Ferguson Road site. See Table 8.15 for results.

Table 8.15. Biomass of Selected Animal Categories with the Ferguson Road Faunal Assemblage

Taxon	Weight (g)	Biomass (lbs)	Percentage
Fish	6.7	4.67	11.90%
Turtle	6.8	0.11	0.28%
Bird	3.3	0.06	0.15%
Mammal	2904.4	34.42	87.67%
Total	**2921.2**	**39.26**	**100.00%**

Biomass estimates from Ferguson Road indicates that the diet of site residents was comprised primarily of mammals. However, the results may reflect the bias toward larger bones that exists in relation to the use of ¼" screen at the site along with the fact that faunal remains from the plowzone were not included due to excavation techniques (mechanical stripping). In short, the biomass calculations for all four study sites show highest consumed volumes of mammal and fish, followed by minimal amounts of turtle and bird.

I normalized biomass by dividing the estimated biomass by the estimated excavation volume for each site. This calculation provided the results shown in Figure 8.5. These results indicate that Smith Plantation had the highest average biomass in

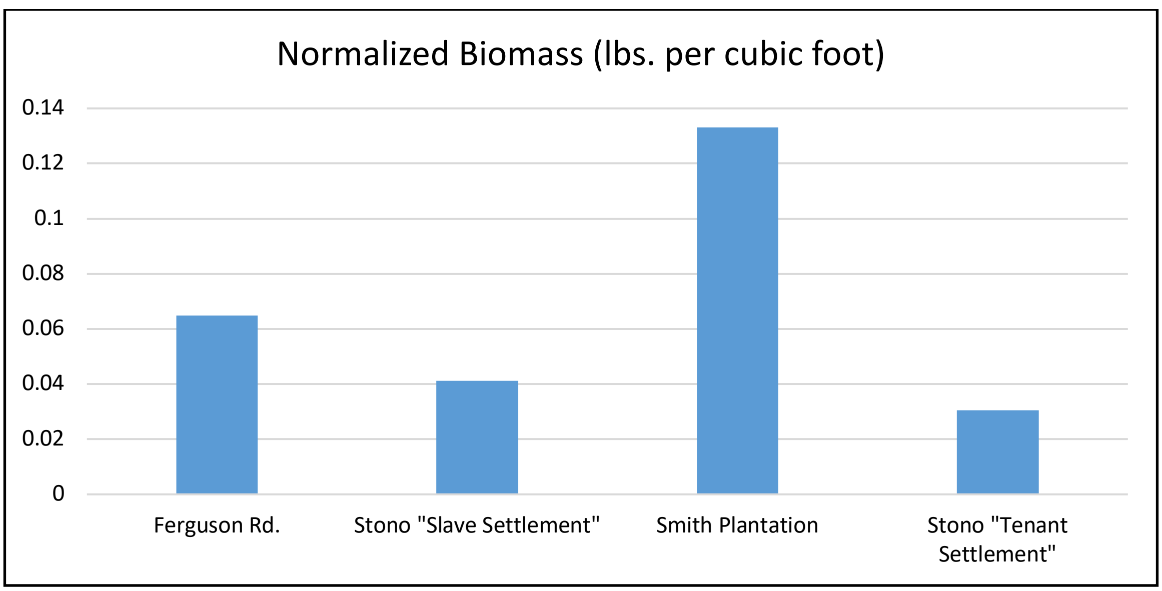

Figure 8.5. Normalized biomass for each study site calculated by dividing biomass by excavated volume.

terms of volume excavated. This finding makes sense because the Smith Plantation assemblage comes from a refuse midden whereas the other sites come from general habitation areas. Conversely, the Ferguson Road normalized biomass is a bit inflated because the faunal remains from that site are larger and heavier on average than remains from the other sites. This discrepancy is the result of the Ferguson Road assemblage containing only materials uncovered from features, which are better preserved than those obtained from plow zones.

Butchery

Analysis of butchery marks on the faunal remains left behind by past peoples can be used to identify specific food processing and consumption techniques including marrow extraction, portioning into what we in current society refer to as "cuts," and the presence, absence, and relative use of saws, cleavers, and knives (Crader 1990, Grayson 1979, Peres 2010). In this dissertation, I analyze marks left behind by saws, cleavers, and knives in order to identify the rates of particular types of butchery practices among the study sites. I also use cut marks to seek support for my hypothesis about increased use through time of plated cuts of meats consumed with knife and fork.

Stono "Slave Settlement." Less than 3% of the total Stono "Slave Settlement" assemblage had hack marks or probable hack marks. Less than 1% of the assemblage had cut marks or probable cut marks or saw marks. (See Figure 8.6). These results indicate that little butchery (in terms of hacking such as with a cleaver or cutting with a saw) was occurring; however, the high degree of fragmentation at this site may have masked the butchery marks that were once present on the remains. The very few cut marks present on the faunal remains of the Stono "Slave Settlement" assemblage suggests that there were few incidences of eating standardized cuts of meat from the bone with a knife and fork.

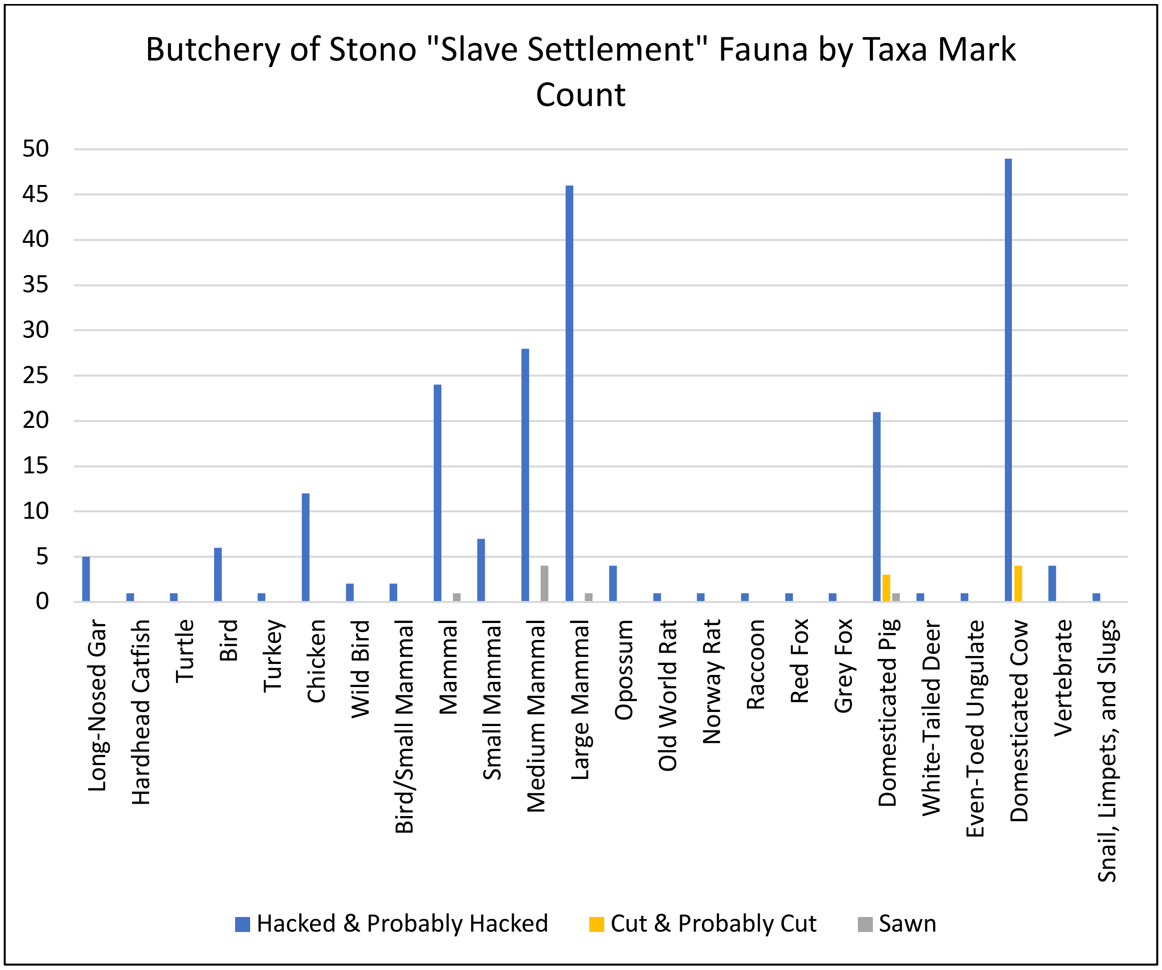

Figure 8.6. Butchery of Taxa by Count showing hacked, probably hacked, cut, probably cut, and sawn modifications on faunal remains uncovered from the Stono "Slave Settlement."

The preservation of the remains is relatively poor. The erosion of bone surfaces that has resulted from taphonomic processes such as moisture in the soil along with the high fragmentation of remains, have potentially erased butchery marks that might have once been visible on faunal remains. In sum, I believe the butchery data presented here is an underestimate of the true amount of butchery that occurred on site.

Stono "Tenant Settlement." Just over sixteen percent (16.3%) of the total Stono "Tenant Settlement" assemblage had signs of butchery. Nearly all of those (98.15%) were hacked or probably hacked; Less than 2% were cut or probably cut. (See Figure 8.7). These results indicate that little butchery (in terms of hacking such as with a cleaver or cutting with a knife) was occurring; however, as explained in the previous chapter, the butchery data presented here may be an underestimate of the true amount of butchery that occurred on site.

Only four fragments contained both hack or probable hack marks and cuts. Two of those fragments were medium mammal, one was mammal, and one was an unidentified vertebrate. These are very small samples and none were identifiable at the species level, so very little can be said about the co-occurrence of butchering methods on any particular taxonomic group; although it is possible that mammal butchery may have incorporated multiple tools at a higher rate than butchery performed on other animal groups. If this possibility is true, it could likely be explained by the fact that mammal bones are denser than other types of animal bones and therefore more difficult to manipulate such that multiple methods were required to obtain the desired size outcome.

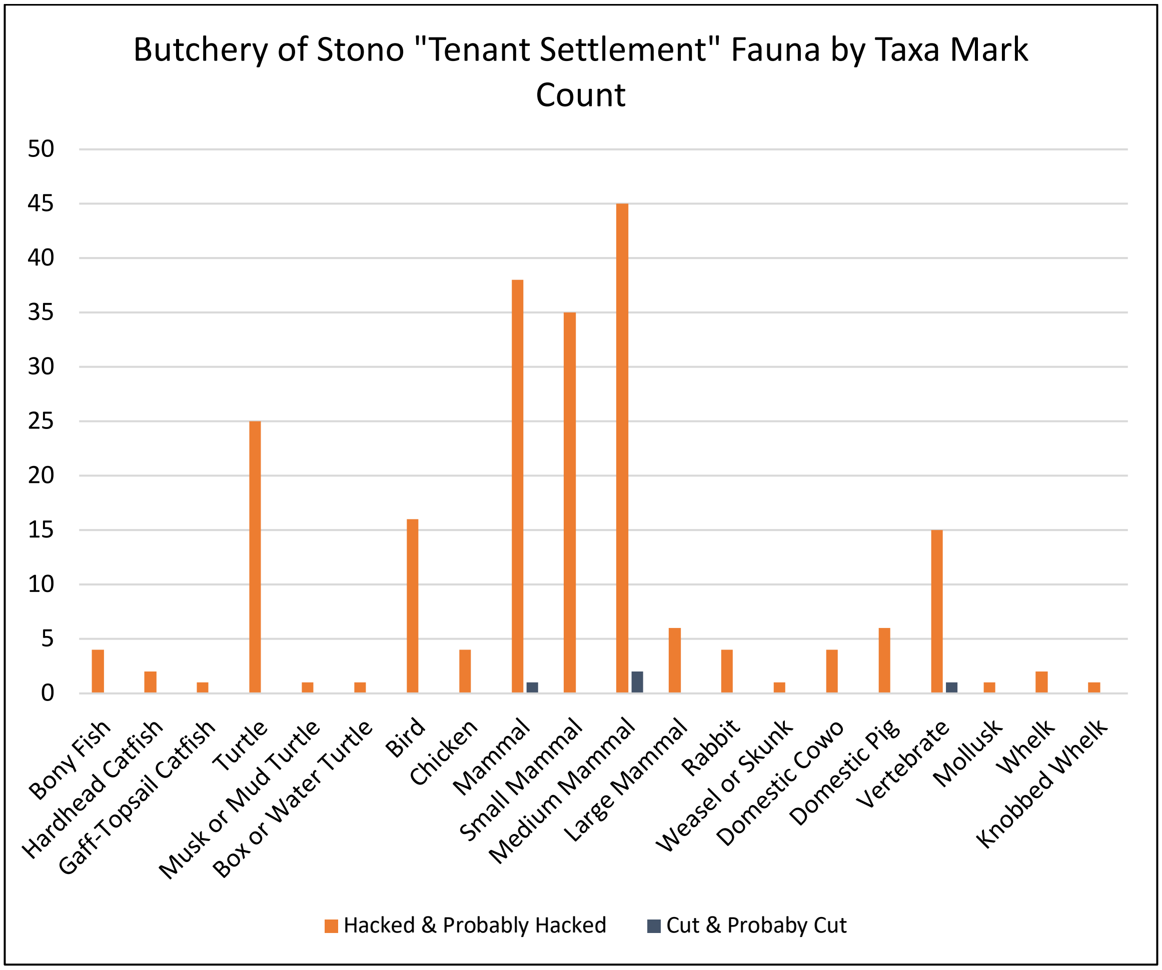

Figure 8.7. Butchery of Taxa by Count showing hacked, probably hacked, and cut, probably cut modifications on faunal remains uncovered from the Stono "Tenant Settlement."

Smith Plantation. I was not able to analyze the Smith Plantation faunal assemblage in terms of butchery, weathering, or burning due to the non-expert level at which I reviewed the materials.

Ferguson Road. More than half of the faunal remains uncovered at Ferguson Road were hacked suggesting a great reliance upon butchered meats (see Figure 8.8), which makes sense for large mammals (which are the primary faunal group within this assemblage) in particular as they generally require being processed into manageable portions. Likely all large mammals were butchered, but not all faunal remains contained evidence of such processing. The average size of the Ferguson Road faunal remains was also larger than that of the other sites, which makes identification of butchery marks easier.

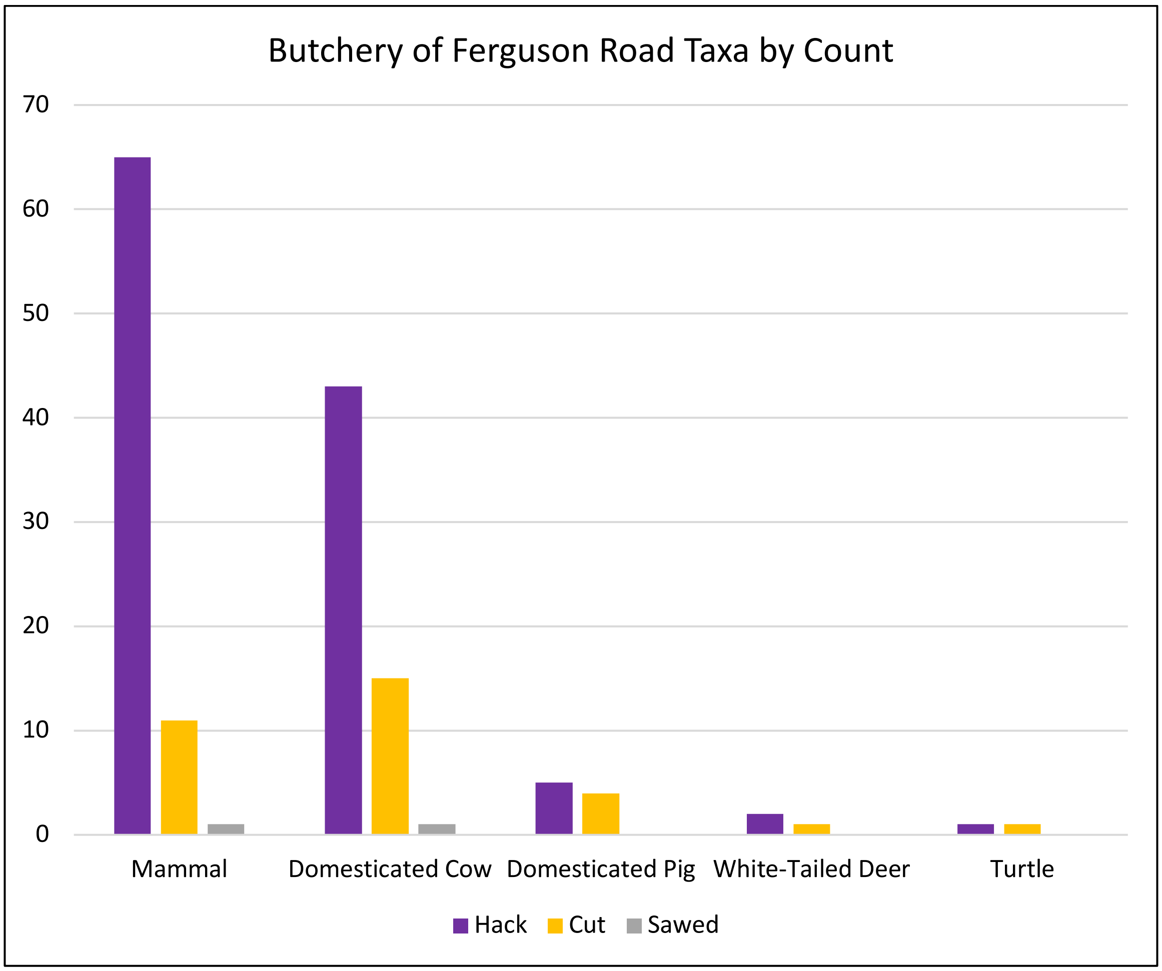

Figure 8.8. Butchery of Taxa by Count showing hacked, probably hacked, and cut, probably cut modifications on faunal remains uncovered from the Ferguson Road Assemblage

Just 14% of the Ferguson Road faunal assemblage was cut, which indicates relatively little eating of meat cuts with a knife and fork. Notably, the percentage of the assemblage's faunal remains with saw marks is nearly the same as that at the Stono "Slave Settlement" suggesting that neither sites' residents utilized sawing as a butchery method very frequently.

Burning

Another way to get at food preparation techniques is to determine the frequency of burning of fauna (Landon 2005, Steele 2015:169). Analyses of burning are used to indicate the amount of direct meat-to-flame contact that existed within the preparation techniques of the people who once inhabited places (Steele 2015). Such techniques might include spit-fire-roasting or grilling, for example (Atalay and Hastorf 2006). In order to identify the commonality of such practices among the residents of the Stono "Slave Settlement," Stono "Tenant Settlement," Smith Plantation, and Ferguson Road, I compare the rates of burning among the faunal assemblages uncovered at those sites.

Stono "Slave Settlement." Figure 8.9 shows the counts of burned faunal remains from the Stono "Slave Settlement" assemblage are burned. This low number suggests that there was little direct contact between meats and fire. Thus, roasting was probably not a typical preparation method. Boiling and/or baking were perhaps more common. It is worth noting, however that burning makes bone less likely to remain in the archaeological record for a long period of time (Landon 2005) so burned remains may be underrepresented in this study due to taphonomic processes discussed above. Burning also diminishes the identifiability of faunal remains, which is reflected in the higher frequency of burning identified on non-identifiable specimens.

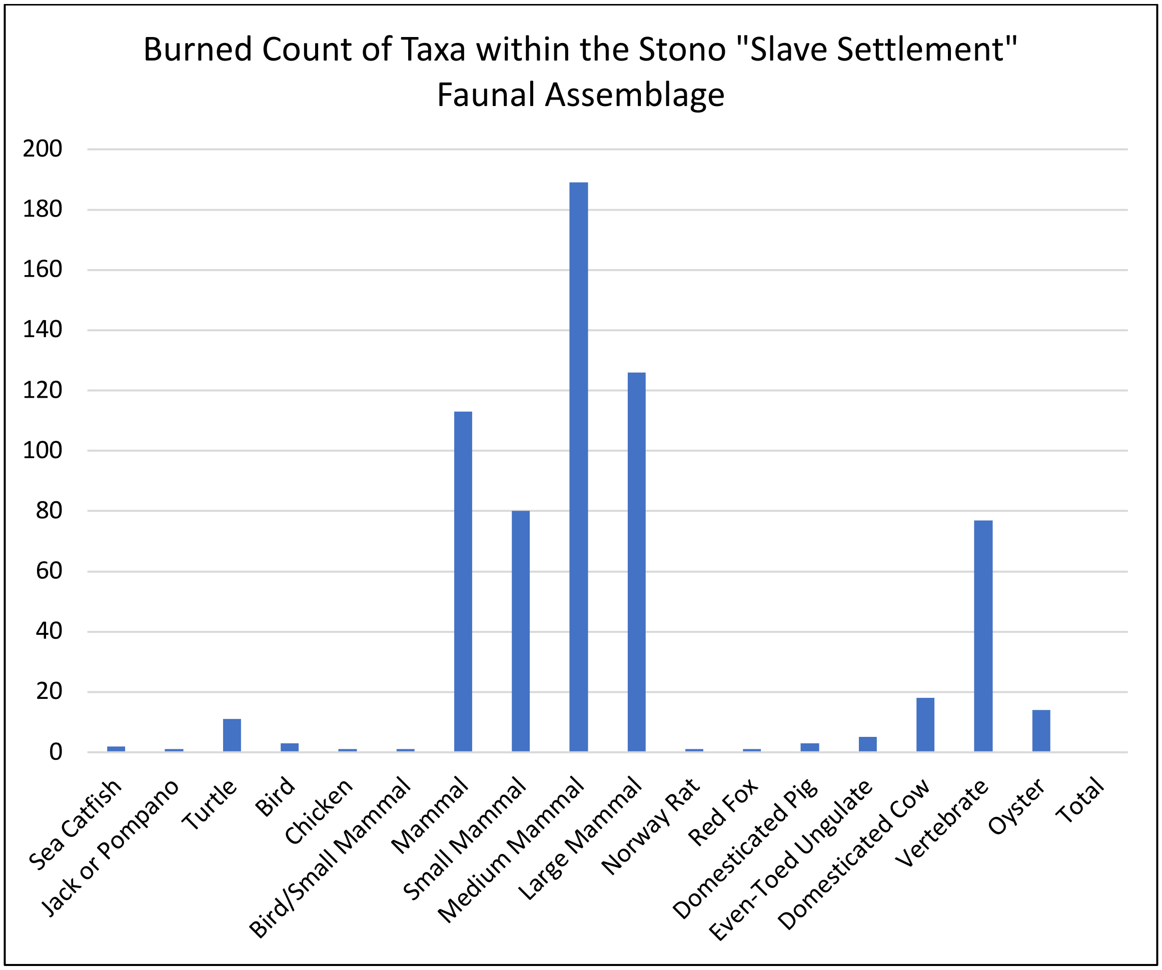

Figure 8.9. Burned faunal remains from the Stono “Slave Settlement” assemblage identified at the lowest possible taxonomic level by count.

Stono “Tenant Settlement.” The data show that nearly a third (30.11%) of faunal remains from the Stono “Tenant Settlement” assemblage were burned[167] (see Figure

[167] I have excluded oysters from this Figure as more than 300 oyster specimens were burned, which made an all-inclusive chart difficult to read.

8.10). However, most of those were not identifiable at a low taxonomic level. This figure suggests little direct contact between meats and fire. While it is possible that roasting was a preparation method used on the site, it is more likely that the burning seen here is the result of trash burning activities rather than food preparation[168].

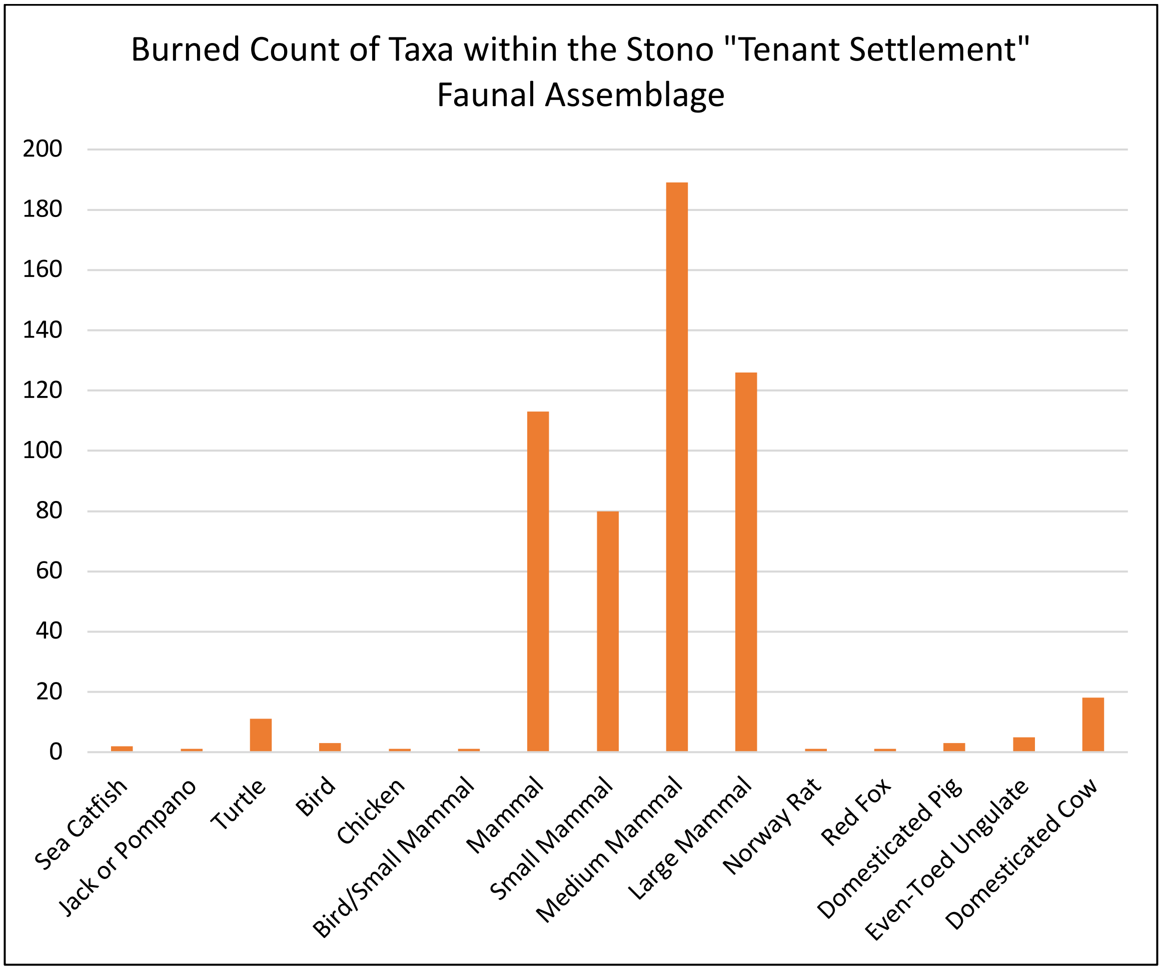

Figure 8.10. Burned faunal remains from the Stono "Tenant Settlement" assemblage identified at the lowest possible taxonomic level by count.

168 Trash-burning is possible a more "tasteful" explanation for the presence of Norway Rat within the faunal assemblage as well.

In this assemblage, more than 95% (95.11%) of the burned bones came from Test Unit 2 and the flotation column sample adjacent. While there were no ashy lenses observed during excavation, 16.7g of charcoal were found in the float sample; none was found elsewhere at the site. This indicates that the burned remains were likely burned due to disposal attempts rather than food preparation methods. With this fact in mind, only a remaining 4.89% of the assemblage was burned, suggesting that roasting was not particularly prevalent during the tenant era.

Smith Plantation. No evidence of burning was recorded for the faunal remains uncovered at Smith Plantation.

Ferguson Road. Just twenty four of the 231 faunal remains (10.39%) from the Ferguson Road site were burned.

Fragmentation

Minimum fragment size was not recorded for any faunal remains at any site. Here I have simply calculated the average specimen weight at each site in order to see if there might be any difference in fragmentation among the sites that might suggest differences within land use including plowing activity. See Figure 8.11 for results.

The average weight of faunal specimens from the study sites ranged from .59 g. at the Smith Plantation to 13.27 g. at Ferguson Road. Considering Ferguson Road as an outlier due to the large size of the faunal remains recovered there due to the collection of materials from features only and excluding float samples were I did not analyze, a comparison of the remaining three sites suggests the Stono “Tenant Settlement” assemblage contains the largest faunal remains. However, the small sample size of that

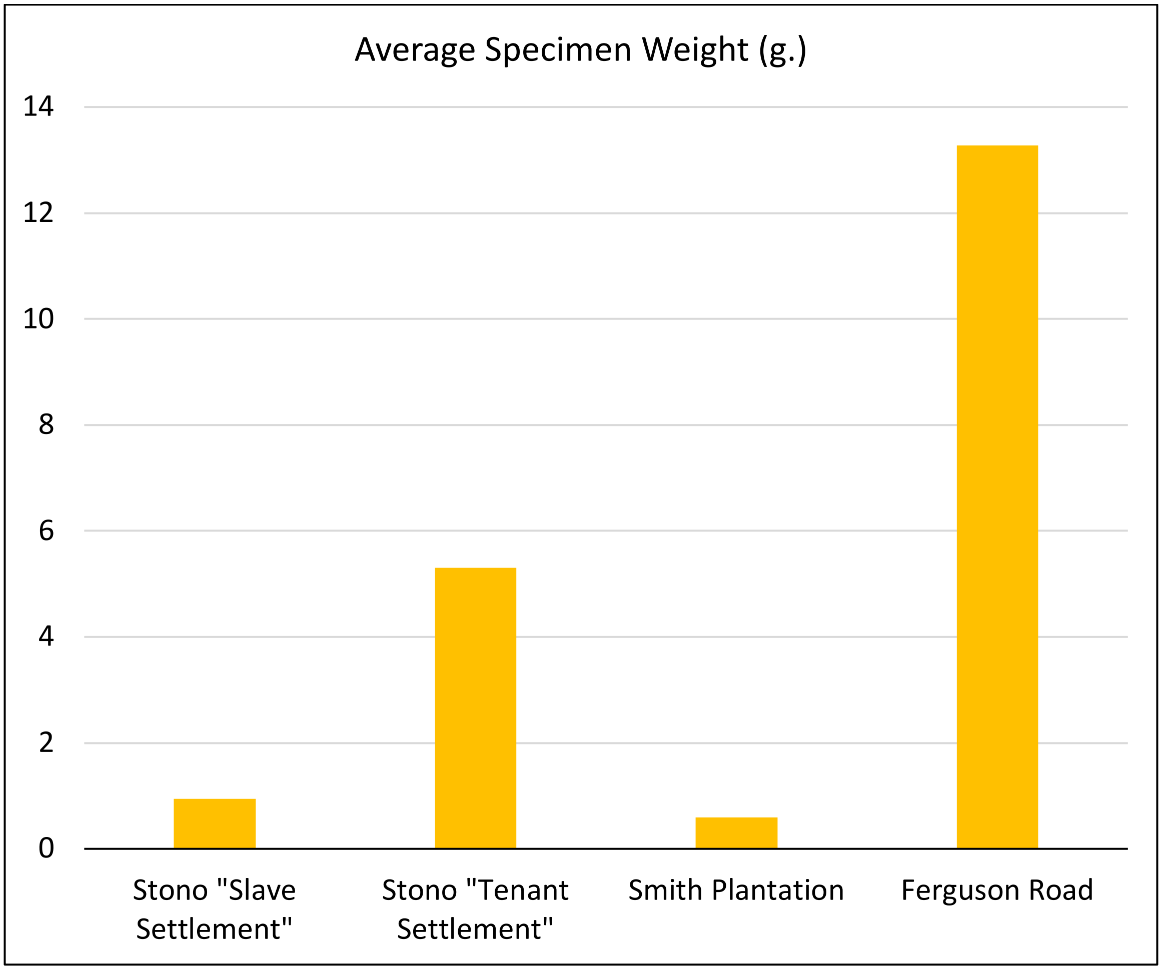

Figure 8.11. Average weight in grams for faunal remains uncovered from each study site.

site compared to the Stono "Slave Settlement" and Smith Plantation assemblages makes this kind of comparison suspect. The similar sample sizes of the earlier Stono settlement and the Smith Plantation assemblages suggest that a similar amount of fragmentation is found among the faunal remains of Lowcountry sites with similar sample sizes. This supposition indicates little difference in plowing activity between the sites.

Discussion

In summary, seemingly few facets of diet, preparation, and consumption changed between the era of enslavement and the era of tenancy at Stono. The total NISP for the Stono "Slave Settlement" site is 7,783. The total for the Stono "Tenant Settlement" assemblage in contrast, is 1,335. At first glance there is an apparent decrease in the diversity of faunal contributors through time. Specifically, the "Tenant Settlement" has only six identified species (NISP) that contributed to diet out of 32 categories. In contrast, the "Slave Settlement" had 28 species and 62 categories. However, this apparent decrease is most likely due to the dramatic difference in sample size between the two sites rather than an actual decrease in diversity or number of individual contributors to resident diets.

By normalizing the data by volume excavated, it is apparent that the percentage of faunal remains uncovered in the overall material assemblage from Stono "Tenant Settlement" is markedly larger than the percentage of faunal materials uncovered in the overall archaeological assemblage from the Stono "Slave Settlement." The later settlement contained 1,335 remains within 140 cubic feet of excavations, whereas the earlier settlement contains 7,783 remains within 3,200 cubic feet of excavations. That is an average of nearly 10 remains per cubic meter versus approximately 2.5 remains per cubic foot. This comparison suggests that the faunal assemblage from the later site is richer than that of the earlier site. However, I suggest that the difference is again related to sampling bias. Specifically, nearly half (47.70%) of the 1,325 faunal remains uncovered at the Stono "Tenant Settlement" assemblage came from TU2, the trash pit within it (Feature 1556) and the flotation sample column adjacent to it.

In terms of NISP, Smith Plantation assemblage falls between the two Stono sites with 4,409 specimens. Like the other sites considered here, this figure contains a diversity of resources including terrestrial and aquatic, wild and domesticate species. Unlike the Stono sites, however it is comprised of a higher percentage of fish remains. This finding suggests that Smith Plantation residents ate more fish than James Islanders. This dietary difference is most likely due to the fact that Smith Plantation lies along deep waters, which would have enabled site residents to acquire more and larger fish than their contemporaries living among the estuaries many miles north.

Normalizing this data leads to the rate of nearly 276 faunal remains per cubic meter of soil excavated (4,409 remains divided by 16-m^3, the total excavated volume of the seven 2-by-2-m units and the volume of the 12 features with length, width, and depth provided in DAACS[169]). This equates to nearly eight remains per cubic foot. Forty-three percent of the remains came from the second level (L2, which is the first general fill level) from three units[170] (Units 3, 6, and 7). The reason for these three units containing the largest number of faunal remains is not clear, but it may be evidence of discrete refuse deposits within the general midden. This normalization calculation demonstrates that the Smith Plantation faunal assemblage is most similar to the Stono

[169] DAACS. 2020. Context Query 2, March 27, 2020. The Digital Archaeological Archive of Comparative Slavery (http://daacsrc.org/queries/query_context_two_results#)
[170] Thirty percent of this figure is comprised of remains obtained through flotation.

"Tenant Settlement" in terms of richness, but it is not outrageously out of alignment with the Stono "Slave Settlement" site.

Ferguson Road has a much smaller assemblage than either of the Stono sites or the Smith Plantation site. Still, the NISP of just 20 specimens suggests a diversity in dietary contributors like that seen at the other sites. Interestingly, White-Tailed Deer make up a much larger proportion of the Ferguson Road assemblage than in the Stono "Slave Settlement" assemblage. River Otter also makes an appearance at the Ferguson Road site; it was not identified in any of the other assemblages. The presence of these species on this site and not on the others is likely due to its early date. By the mid-eighteenth century the island's deer population had noticeably dwindled (Zierden and Reitz 2009)[171]. Fish in contrast contribute very little (1.3%) at Ferguson Road,[172] which is markedly less than that of the other sites.

I normalized the NISP for Ferguson Road using the same method as the other sites; I calculated the excavation volume based on available dimensions (33 features, in this case) and divided the NISP by the estimated volume. The calculation for Ferguson Road provided approximately one remain per cubic meter (20/17.14 m^3). That is markedly less than one remain (0.03) per cubic foot. This estimate is notably less than that calculated for any of the other sites included in this study. Importantly, however only features are included in this calculation whereas both features and

[171] In contrast, official letters dated 1866 state that deer were present and were being killed and eaten on St. Catherines Island (Hayden et. al 2013).
[172] It is likely the recovery method (only part of the site was ¼" screened, none was screened with smaller mesh or floated, and the remainder was mechanically stripped) is the reason for the low number of fish bones recovered at Ferguson Road.

plowzone/general matrix are considered in the figures for the other sites. The result is an underestimate of richness for the Ferguson Road site assemblage.

The faunal MNI between the two Stono sites also appears to have increased through time, which if taken at face value would mean later residents ate more meats than their enslaved predecessors (the figures being 234 and 399 respectively). However, I suggest the difference in MNI is primarily due to the fact that oyster data was not collected during excavations of the Stono "Slave Settlement." When oysters are removed from the MNI calculations, the MNI are 93 for the Stono "Slave Settlement" and 38 for the Stono "Tenant Settlement." While this difference is not as dramatic as that identified in NISP values, it is still evidence that there is a substantial difference between the sample sizes.

Although the MNI calculated for the Ferguson Road assemblage is just 20, the animal types identified are similar to those found for the Stono sites. The Stono site animal groups with the highest MNI include oyster, domesticated cow, domesticated pig, and catfish. The Ferguson Road assemblage contained similarly high numbers of domesticated mammals. It is possible the domesticated mammal remains at these sites do not reflect the presence or consumption of entire domesticated mammals of course, either because portions were received as rations or because large animals are generally divided into multiple pieces and shared among communities. Even though the MNI for domesticated mammals is artificially inflated, the figures still suggest consumption of domesticated mammals alongside wild aquatic species for the Stono sites in particular and wild terrestrial species for all sites. Although the numbers are small, they still demonstrate a diversity of protein sources from various environments through both time and space[173].

MNE results show similarly diverse findings. Once again, for the sites for which the measure was calculated (the Stono “Slave Settlement,” Stono “Tenant Settlement,” and Ferguson Road sites) both appendicular and axial elements are present for all animal groups at all sites suggesting that entire animals were eaten and that there was little to no preference or differentiated access to particular animal parts. Residents likely ate small animals whole and whatever portion of larger animals they could obtain.

The biomass for the “Slave Settlement” assemblage is estimated at about 76 lbs whereas it is just over 3 lbs for the “Tenant Settlement.” This difference is due to fewer fragments being collected during the excavations of the latter site, or once again, a difference in sample size. In comparison to the few dozen shovel test pits and two units excavated at the Stono “Tenant Settlement,” some 128 excavation units from the Stono “Slave Settlement” are used within my analyses[174]. This is a difference of about 140 ft^3 compared to 3,200 ft^3 (or four times the amount) in terms of excavation volumes.

As demonstrated with NISP, taking excavation volume into account leads to normalization of biomass. Normalizing the Stono biomasses (131.95 lbs/3,200 ft^3 and 4.26 lbs/140 ft^3) provides averages of .04 and .03 lbs per cubic foot. In other words, the biomasses for the Stono sites are roughly equivalent. Smith Plantation contains

[173] Although it is not clear how widely applicable the results are to space due to the unavailability of Smith Planation MNI.
[174] DAACS. 2020. Context Query 2, February 2, 2020. The Digital Archaeological Archive of Comparative Slavery (http://daacsrc.org/queries/query_context_two_results#)

approximately .13 lbs/ ft^3 while Ferguson Road averages only 0.03 lbs/ ft^3. Once again, these figures are influenced by the different site locales (refuse midden versus general habitation area) and excavation techniques employed (mechanical stripping of plow zone versus inclusion of plow zones within excavation samples).

Biomass estimates for all four sites indicate highest consumption of mammals and fish. The Stono "Slave Settlement" and Smith Plantation seemingly relied most heavily upon fish whereas the Stono "Tenant Settlement" and Ferguson Road residents seemingly consumed more mammal meat. In all cases, turtle and bird were only minor dietary contributors in terms of biomass and by extrapolation, meat weight.

Butchery analyses also indicate similar practices among James Islanders. Both Stono sites and the Ferguson Road site contained relatively few butchered remains; however, among the butchered remains that do exist within the assemblages, hacked mammal bones are most common. Hacked turtle bones were also found on the two Stono sites (four probably hacked in the "Slave Settlement" assemblage and 27 hacked or probably hacked in the "Tenant Settlement" assemblage). These findings suggest little change in the mode of preparation across time among James Island's enslaved and tenant farmers.

Along the same lines, most of the burned faunal remains from the Stono sites were mammal. Turtle remains were sometimes also burned. The Stono "Tenant Settlement" assemblage also contained burned oyster shell. It is likely the same is true of the "Slave Settlement," however the data does not exist as the oysters from that area were only collected from features and none of these specimens were burned. Only mammal remains were burned within the Ferguson Road assemblage. This finding is almost certainly due to the differential collection of animal group remains and small sample size at the site.

While the comparison of faunal fragmentation among the sites is highly flawed due to differential sample sizes and excavation techniques, my interpretations suggest there was little difference in the level or intensity of plowing activities among the sites that can be identified based on the available data.

In the next chapter I discuss the findings of my analyses of all artifact groups including fauna, ceramic, glass vessels, and relevant metal objects. I then interpret those results in order to make statements about the particular foodways of each site's residents as well as the Lowcountry region as a whole.

CHAPTER 9
DISCUSSION

In this chapter I discuss the results of the statistical tests I conducted in order to provide support for my hypotheses about foodways during the period of tenancy for the residents of the Stono plantation sites including the Stono "Slave Settlement" and Stono "Tenant Settlement" sites located on James Island, South Carolina. I also discuss my analyses of the Ferguson Road, James Island and Smith Plantation, Port Royal, South Carolina assemblages. For all four sites, my analyses included investigations of ceramic, glass vessel, relevant metal objects including eating utensils, fishing-related paraphernalia, and metal can fragments, as well as faunal remains. For ceramics, these analyses included a calculation of ceramic ware type frequencies, vessel category and vessel form frequencies, manufacturing technique, as well as wear patterns, and fragmentation. For glass vessels my analyses included category and form, manufacturing technique, and fragmentation. For utensils I conducted analyses of form and relative abundance. For metal cans, fishing weights, and fishhooks I compare frequencies across sites. For faunal remains I conducted NISP, MNI, MNE, biomass, butchery, burning, and fragmentation analyses.

Here, I discuss my findings for each of these analyses in order to identify similarities and/or differences among the material records of each site. These findings are then used to provide descriptions of foodways and any transformations or continuities in them through time and across space. My findings include identification of the types of goods used by enslaved and Emancipated people and the potential uses of those goods. Differential access to goods is explored along with taste and preference. Dietary contributors are identified, and the techniques used for their acquisition, preparation, and consumption are described. I also discuss the cuisine eaten by Lowcountry. Specifically, I link the faunal remains uncovered with dishes described in cookbooks and other accounts. Taken together, my analyses show the types of foods eaten, and how they were obtained, prepared, and consumed by people who were sharecroppers and tenants Lowcountry plantations and at what relative level.

Finally, I compare land use during the tenancy era with that of the era of enslavement by comparing artifact fragmentation across sites as a proxy for plowing intensity between the two periods. Plowing intensity is important because it can be used in conjunction with other lines of evidence such as documents and published oral histories in order to identify farming practices at each site. These practices speak to the amount of agricultural work conducted at each site as well as the potential access to produce for both home consumption and marketing. Relative workloads can also be used to extrapolate relative amount of "free time," during which Lowcountry residents could have hunted, fished, collected, traded, purchased, or otherwise obtained foodstuffs and related goods. These activities and the amounts of time spent on them provides vital information about the daily practices and lifeways of people. My comparisons enable readers to see how these lifeways may or may not have changed through time in conjunction with changes in labor regimes, industrialization, and human behaviors including cultural norms related to food.

Ceramic Analyses

In this section I discuss the results of my ceramic analyses including ware types and the relative frequencies of each type within and among the four study sites. I also compare ceramic vessel categories and forms in order to identify the types of vessels being used during which time periods and with what frequencies. Specifically, I seek to identify the presence and by extrapolation the use of large hollow vessels that might have been used in the production of large, communal meals. I also seek to identify the use of bowls and plates relative to one another through space and time in order to determine whether the types of meals eaten within the Lowcountry might have shifted after Emancipation and with industrialization. I also look at wear patterns to identify how common the use of knives, forks, and spoons were. Finally, I compare fragmentation rates in order to determine how impactful plowing might have been on the material records of each site, how the intensity of plowing might have varied across the Lowcountry, and how these differences (if any) are expressed within the foodways of Lowcountry residents.

Ware Type. My ceramic analyses include a comparison of ware types and relative diversity among the comparison sites. The Stono "Slave Settlement" ceramic assemblage is comprised of 44 different ware types; however, 12 types make up the majority of the assemblage. The three most prevalent types are colonoware, creamware, and pearlware. This is interesting because colonoware is a locally and/or regionally produced low-fired coarse earthenware whereas creamware and pearlware are refined earthenwares produced en masse in England. Thus, the enslaved inhabitants of the Stono site had access to both local, relatively inexpensive goods as well as imported wares (although the particular ceramic objects uncovered at the site are expensive compared to colonoware, they are not considered "luxurious" in general terms[175]).

The Stono "Tenant Settlement" ceramic ware type assemblage contained 25 types with 11 being rare (comprising only a few sherds) within the assemblage. While the majority of the earlier assemblage was comprised of three wares, at this, later settlement area, just one ware, whiteware, made up the majority of the assemblage. The omnipresence of whiteware indicates increased use of mass-produced ceramic wares. These whitewares were could have been shipped from England, from the northeastern United States, or a combination of both sources. Regardless, the indication is an increased reliance upon industry rather than local economy and its products.

The Smith Plantation ceramic ware type assemblage is primarily pearlware, but also contains more than 10% each of colonoware, creamware, and whiteware. This suggests that like the Stono "Slave Settlement," its residents utilized both locally/regionally produced and imported wares during the era of enslavement.

The Ferguson Road site is comprised of a similar variety of wares with about 35% being wares identified by TRC analysts as coarse earthenwares or Native American

[175] However, some more "luxurious" wares such as hand-painted porcelains were uncovered.

coarse earthenwares, followed by pearlware and creamware in terms of prevalence. While I did not perform the ceramic analyses on the Ferguson Road assemblage, the lines drawn between colonoware, indigenous wares, and other coarse earthenwares are blurred at best, so it is likely the four ceramic assemblages are more similar than even my study suggests.

Ceramic Vessel Category and Form. The majority of ceramic vessel forms in the Stono “Slave Settlement” assemblage are hollow. Few vessels are definitively flat and many are unidentifiable in terms of their hollowness or flatness. Few specific classes such as teaware, tableware, or utilitarian wares could be identified within the hollow or flat form categories and even fewer could be identified as a particular vessel type such as a dinner plate, for example. Only about 4% of the assemblage is identifiable as having once belonged to a bowl; the same figure was calculated for plates. This finding suggests that both plates and bowls were in use by enslaved residents alongside milk pans, colanders, cups, bottles, mugs, jars, and teapots, which comprised very little of the assemblage. Most ceramic sherds on this site and all of the study sites are too small to identify at a level that enables meaningful interpretations of vessel types in use.

The Stono “Tenant Settlement” ceramic assemblage was similar to the earlier Stono assemblage in terms of hollow to flat form ratios. Here, even fewer sherds are identifiable as a particular form. Once again though it is clear that plates and bowls were in use alongside platters, bottles, mugs, and teacups. Again, unidentified teawares, tablewares, and utilitarian wares make up most of the assemblage based on sherd analyses.

Within the Smith Plantation assemblage even fewer specific ceramic vessel forms are identified. Only cups and bowls were found, and these comprise only a fraction of a percent each. Unid teawares, tablewares, and utilitarian wares once again abound. More hollow vessels are identified here than at the Stono sites; however, a similar percentage of flat vessels makes up the assemblage. This difference is possibly the result of an over-estimate of hollow vessels that might as readily have been categorized as unidentifiable.

Vessel forms for Ferguson Road are not identified; however, the diversity of ware types suggests a diversity of form types as well. Specifically, the presence of porcelain suggests the use of teawares. Whiteware, pearlware, and creamware suggest the use of tablewares[176]. Coarse earthenwares also suggest tablewares as well as utilitarian wares. Thus, for all sites in this study a variety of ceramic vessel forms were in use both before and after Emancipation. These results suggest there was no transition from communal one-pot meals eaten from bowls to plated cuts of meat and drier vegetable dishes.

Wear. I analyzed data for wear use patterns including abrasions caused by knives, abrasions and wear of unidentifiable origins, and partially missing surfaces. Few definitive cutlery-induced marks are present on the sherds of any site. Between 10% and 80% of sherds at each site have partially missing surfaces and abrasions and wear of unidentified cause. This is a large portion of each assemblage. To further break it down, the Stono "Slave Settlement" assemblage contained more than 30% worn/abraded

[176] Although pearlware and creamware are also found in teaware forms.

sherds and just over 20% of its sherds have partially missing surfaces. The later Stono assemblage contained a very similar percentage of sherds with partially missing surfaces, but more than three-quarters of its sherds are worn/abraded. Smith Plantation contained only 12% partially missing surface sherds, but nearly 50% of its sherds were worn/abraded.

While no wear data was recorded for the ceramic assemblage from Ferguson Road, the analyses I conducted do not suggest a clear, linear pattern between partially missing surfaces and worn/abraded surfaces among the assemblages. Clearly, both Stono sites and the Smith Plantation site contain sherds that have been impacted by various disturbances, one of which is plowing. However, the intensity of plowing among the sites does not seem to be identifiable save to say that it occurred to some extent at each site. That fact is clearly supported by the land use histories of the sites.

Additionally, there is little I can say about the intensiveness of utensil use at each site as only 1, 2, and 7 utensil marks were identified within the assemblages. As with the ceramic vessel form data, all I can safely extrapolate is that various utensils were used in conjunction with various ware forms.

Fragmentation. For the Stono "Slave Settlement," Stono "Tenant Settlement," and Smith Plantation sites, ceramic sherd size fell between 15 and 30 mm. This fact, when taken with the analysis of wear patterns above suggests no discernable difference within the plowing activities can be identified among the three sites.

Maximum sherd size was not measured for the Ferguson Road ceramic assemblage; however, analysis of average sherd weights indicates Ferguson Road sherds are more than twenty times the weight of those at either Smith Plantation or the Stono "Slave Settlement" and double that of the Stono "Tenant Settlement." This difference in average weight is due to the fact that most Ferguson Road ceramics came from beneath rather than in the plowzone. Taken together, analysis of fragmentation and wear patterns indicate no discernable difference in plowing activities among the sites and thus, no interpretations about access to produce and differences therein can be made.

Glass Vessel Analyses

As with ceramics, my glass vessel analyses include identifying relative frequencies of category and form among the comparison sites. With the rise of industrialization came not only increased quantities of inexpensive mass-produced ceramics, but also machine-made glass containers including tablewares and storage containers. Differences in the prevalence of these goods within the assemblages of earlier and later sites might suggest a shift from locally made ceramics to more widely produced, essentially globalized glass goods. As with ceramic analyses, a shift in form toward flat glass tablewares might suggest a preference for plated meals rather than stew-based, bowl-consumed meals in more recent times. In this section, I also continue the discussion thread of fragmentation analyses in order to see if I can find differences or similarities that might be tied to varying levels of plowing activities among the inhabitants of the sites.

Glass Vessel Category and Form. Almost all of the Stono "Slave Settlement" glass vessel assemblage was comprised of hollow vessels, most notably olive-colored wine-style bottles. Other bottle types and containers were also identified. Very few flat vessels or tablewares in general were found.

While there were similarly few flat vessels identified in the Stono "Tenant Settlement" assemblage, the incidence of olive-colored wine-style glass bottles dramatically decreased. Other bottle and container types, in contrast, increased. The number of forms also increased through time on the Stono site from 11 at the "Slave Settlement" (including beer bottles, liquor bottles, mineral water/soda bottles, wine-style bottles, pharmaceutical bottles/vials, drinking glasses, jars, lid liners, bottle stoppers, stemware, and tumblers) to 14 at the Stono "Tenant Settlement" (including beer bottles, case bottles, food bottles, liquor bottles, mineral water/soda bottles, wine-style bottles, pharmaceutical bottles/vials, bowls, drinking glasses, flasks, jars, lid liners, stemware, and tumblers).

The "new" forms are case bottles, food bottles, and bowls. It is likely that case bottles are present in both assemblages, but were not identified in the earlier one due to fragmentation. So, the presence of food bottles and bowls are the only discernable difference in forms between the periods. The appearance of these items is related to the rise of industrialization and the ease of mold and machine-based manufacture that meant creating such objects was easier and less expensive, which made them more accessible to all people including Lowcountry tenant farmers.

The Smith Plantation glass vessel assemblage is not dissimilar from those of the Stono sites. While only five specific form types were identified, they are the same as those found at Stono including wine-style bottles, pharmaceutical bottles/vials, case bottles, stemware, and jars. As with the Stono sites, the majority of glass fragments are not identifiable as any particular form and nearly all of them are from hollow vessels.

The Ferguson Road assemblage also contains wine-style bottles, stemware, pharmaceutical bottles/vials, and case bottles. Although this assemblage is markedly smaller than the others (just over 800 fragments compared to roughly 1,400 at Smith and more than 2,600 at each Stono site), it demonstrates a similar variety of vessel types, as well as a preponderance of hollow vessels and unidentifiable vessel forms.

Fragmentation. The fragmentation of glass vessels is similar to that found for ceramic sherds. Fragments of glass ranged from 15 to 30 mm for the Smith Plantation and both Stono sites. The maximum sherd size was not recorded for the glass fragments at Ferguson Road; however, the average size calculations I conducted demonstrate that while the average weight for Ferguson Road was 8.25 g. (or 5.63 g. excluding outliers), it was only 2.12 g. for Smith plantation and under 1 g. for both Stono sites.

These findings suggest that once again there is no discernable difference in plowing activities that can be identified based on artifact fragmentation. Similarly, there is no apparent shift from handmade hollow vessels to machine-made flat vessels as far as tableware goes. Hollow glass vessel forms are most common across all sites and through time.

Metal Artifact Analyses

The metal artifact category I utilize here is more of a catchall for an assortment of objects that are made of metal rather than a grouping that following DAACS protocol or any similarity in function. It encompasses utensils, iron pot fragments, can fragments, and fishing-related items including fishhooks and fishing net weights. Each of these artifact groups from each of the four study sites is compared in this dissertation in order to identify any shifts that may have occurred in the use of utensils such as my hypothesized spoon to knife and fork transition that might have accompanied a transformation in preferred meal styles from stew-based, which would have most likely been consumed from bowls to meat-and-three, which would have been more likely served on plates.

I compare the prevalence of cans and can fragments across sites and through time in order to see if there was a shift toward prepared, purchased foodstuffs and away from fresh, locally caught, gathered, and grown foods. An example of such a shift might be seen in a decline of fishing-related artifact presence and an increase in cans and can fragments if tenant farmers were less likely to fish and more likely to purchase canned goods like oysters and tinned meats. In order, to determine whether or not such a shift occurred, I also compare relative frequencies of fishing net weights and fishhooks with the assemblages of the Stono “Slave Settlement,” Stono “Tenant Settlement,” Smith Plantation, and Ferguson Road sites. Finally, I compare the numbers of iron pot fragments among the sites’ assemblages. Any difference in occurrence rates might suggest differences among preparation methods amidst Lowcountry plantation residents.

Utensils. While the Stono “Slave Settlement” artifact assemblage contains 37 utensils only some of these are identifiable as a particular utensil form including one spoon, six forks, and 16 knives. Only 11 utensils were identified in the Stono “Tenant

Settlement" assemblage. These include one fork, two spoons, and eight unidentified utensils. This later sample is too small to be of much use for interpreting foodways such as consumption modes. The assemblage from Smith Plantation contains similarly low numbers including just two forks and one knife, along with nine unidentified utensils. The Ferguson Road assemblage likewise contain only one knife and one fork fragment. Taken together these ratios suggest that various types of utensils were used throughout the Lowcountry. It is possible that there was a decrease in spoon use through time as the only site with spoons was the Stono "Slave Settlement;" however, such a statement would veer toward conjecture. I find it more reasonable to say only that various types of utensils were used, which makes sense considering the fact that various vessels types were used on all sites and during all periods under consideration.

Metal Cans. Metal cans and fragments thereof are rare in the Stono "Slave Settlement" assemblage. Only one definitive can fragment and one can key are identified in that artifact assemblage. The later Stono settlement in contrast contains nearly 400 can fragments and six can keys for an MNI of six cans. The excavations at Smith Plantation uncovered only four can fragments, while no cans or can fragments were collected at Ferguson Road. There is little I can say about shifts in foodways based on these small numbers.

Fishing-related Items. While there is only one fishhook in the Stono "Slave Settlement" assemblage, 26 fishing weights were identified. In contrast, only one fishing weight was found at the Stono "Tenant Settlement," along with between six and 32 fishhooks (the fragmentary nature of the wire made identification difficult). No fishing-related objects were collected at Ferguson Road.

The Smith Plantation assemblage contains four fishing weights, one fishhook, and one gig. No fishing-related items were found at Ferguson Road. Although these figures suggest there may have been a shift toward hook-and-line fishing and away from cast net fishing, historical evidence and the Smith Plantation archaeological evidence suggests this did not occur. Instead, it appears that fishing using both methods has existed within the Lowcountry for centuries. The relatively large number of fishing weights at the Stono “Slave Settlement” is likely due to a complete net being disposed of at that site. The potentially high number of fishhooks at the Stono “Tenant Settlement” is suspect due to the poor preservation of the artifacts, which may have led to misidentification. Bent wire can be many things and as such, the hooks identified as possible or potential fishhooks should probably not be counted as such.

Pots and Pans. Metal pot and pan fragments were only uncovered at the Smith Plantation and Stono “Tenant Settlement” sites. This suggests that there is neither a temporal (pre- versus post-Emancipation) or geographical (James Island versus Port Royal) dimension to their presence. Only three definite fragments are identified in the Stono “Tenant Settlement” assemblage compared with seven in the Smith Plantation collection. These numbers are too small to make any broad interpretations.

In summary, the comparison of metal objects from the study sites indicates that canned goods were probably eaten, but not in substantial enough quantities that they subsumed other categories of food. Indeed, cans are used to store non-edible and inedible items as well as foods so many of the cans may not even be related to resident foodways.

Fishhooks and fishing weights were present in three of the four assemblages and most likely would have been found at Ferguson Road had excavations included plowzone recoveries. So, while it is clear that fishing was practiced at all sites and in both study periods, nothing can be said in regard to shifts within fishing practices based on the artifacts present within these assemblages.

The small numbers of utensils and pot and pan fragments identified within the assemblages also hinder any interpretations related to shifts in cooking or consumption techniques through time. However, when taken with the ceramic and glass vessel evidence above, it appears likely that all manner of vessels were used across time and space and hence, that there was no shift in preparation technique or meal style such as they hypothesized stew to meat-and-three shift. The same is likely true of utensils, they were probably continually in use at all sites. There is not sufficient evidence to say more.

Faunal Analyses

One of the most important components of this dissertation are the extensive faunal analyses I conducted. These measures enabled me to identify the dietary contributors for the residents of each study site and to compare them through time in order to determine whether any shifts in protein bases, procurement methods, and preparation techniques occurred either among Lowcountry locales or in relation to time. I particularly wanted to determine whether there was a “loss” of rationing after Emancipation or if the practice continued as part of the sharecropping/tenancy arrangement at Stono. I also sought to understand whether and how much the practice might vary across the Lowcountry. In conjunction, I wanted to know whether hunting[177], fishing, and gathering/collecting wild animals increased or decline through time and whether or not any such change was related to rationing.

I also wondered whether the consumption of fresh meats might have decreased through time in tandem with the rise of wage labor and increased access to industrialized, commercially produced goods that came with post-Emancipation technological innovations. A wage-based economy might also have meant an increased ability to purchase such goods within the formal market. Further, with the rise of a wage-based economy, more time might have been spent in the production of crops intended for sale rather than home consumption. Additionally, I wanted to know whether husbandry and butchery practices might have changed such that a plantation butcher disappeared to be replaced by a purchased meat cuts or a decline in domesticated animal consumption.

Finally, if there was a shift from stew-based meals toward meat-cut-based meals, it would be visible in the archaeological record based on faunal fragmentation and modifications upon faunal remains. These lines of evidence might also provide support for plowing intensity and the use of utensils as discussed relative to other artifact groups. In order to address these questions, I calculated NISP, MNI, MNE, and biomass. I

[177] I did not look at hunting as there is a dearth of ammunition that can be directly connected to hunting activities on the sites. Hunting did not (and does not) typically occur around households, where these assemblages derive. Further, ammunition on the sites may be related to the Civil and Revolutionary wars or shooting as recreation rather than hunting for food.

also determined relative frequencies of modifications associated with particular butchery and consumption practices as well as burning, which speaks to preparation techniques.

NISP. The number of identified specimens in the Stono "Slave Settlement" faunal assemblage is 7,785. This figure includes more than 1,500 that could be identified at the species level. These 1,500 specimens comprise 25 distinct species, which belong to fish, turtle, bird, mammal, and gastropod groups. The other roughly 6,000 were identified at higher taxonomic levels. Most of these are mammal and among those discernable as either domesticates or wild, most were domesticates. The Stono "Tenant Settlement" faunal assemblage contains only six identifiable species, made up of 942 specimens. That assemblage, however, is comprised of only about 1,300 specimens in comparison to the nearly 8,000 present in the earlier Stono assemblage. The same animal groups are represented in both assemblages (although no turtle was identified at the species level in the Stono "Tenant Settlement" assemblage due to scarcity and fragmentation).

The Smith Plantation NISP was not calculated at the species level as discussed in Chapter 8. However, like the Stono collections, it included specimens from mammal, fish, bird, reptile, and invertebrate groups. It contains approximately 4,400 specimens, most of which are unidentified vertebrates. Mammal and fish once again make up the bulk of identified remains. In fact, fish comprise a greater portion of the Smith Plantation assemblage by percent than was seen for the Stono sites. The reason for this is likely the deep waters surrounding Port Royal, which do not exist near James Island.

The Ferguson Road assemblage similarly contains all of the animal groups mentioned above, with most of its specimens being domesticated cows and unidentified mammals. The relative lack of fish at this site is likely related to excavation techniques rather than any difference among the foodways of its past residents. The NISP for Ferguson Road is only 231, which is so many fewer than the other sites to make further interpretations conjectural.

In order to make up for the sampling size bias demonstrated by the vast NISP among the sites, I normalized the NISP using the estimated volume of excavations. This calculation provided numbers ranging from 0.03 to 10. The Fergusson Road site averaged less than one faunal remain per cubic foot excavated, while the Stono "Slave Settlement" contained an average of 2.5 remains per cubic foot excavated. The Smith Plantation site contained an average of 8 remains per cubic foot excavated and the later Stono "Tenant Settlement" assemblage contained 10 remains per cubic meter. Note, the Smith Plantation average is inflated because the assemblage came from a refuse midden rather than general living area, which was the provenience of the other three assemblages. Conversely, the Ferguson Road average is an underestimate as it includes only feature material rather than features combined with general matrix.

MNI. The minimum number of individuals calculated for the Stono "Slave Settlement" site is just under 300. Most of these are oysters, followed by domesticated animals including cow, pig, and chicken. Multiple species and groups of fish also contain more than one individual. For the Stono "Tenant Settlement" assemblage, oyster, pig, and cow are the most common species followed by groups of fish, domesticated birds, and artiodactyls. Nearly 250 MNI were identified though the vast majority of those are oyster. No MNI was calculated for Smith Plantation as discussed in the previous chapter; however, the Ferguson Road assemblage contained mostly domesticated mammals, primarily cow and pig. Although MNI is suspect for animals there were portioned such as cows, the evidence provided by MNI in general, agrees with that of NISP.

MNE. In order to get away from the bias of MNI toward whole animals, I calculated MNE or the minimum number of elements/skeletal parts for each study site with the appropriate data. The MNE data for the Stono "Slave Settlement" shows that various skeletal parts of nearly all animals contained in the assemblages were present including heads and vertebra of fish, carapaces and limbs of turtles, limbs and vertebra of birds, and crania, phalanges, long bones, and axial elements (like ribs and vertebra) for mammals.

The MNEs for the Stono "Tenant Settlement" and Ferguson Road are similarly diverse, with various axial and appendicular elements present for most animal groups. No MNE calculation is possible based on the data that exists for the Smith Plantation faunal assemblage. The variety of body parts consumed within the assemblage of each site indicates no preference for particular cuts of meat. It also indicates all parts of animals were consumed including whole (rather than fileted) fish as well as the heads and feet of domesticated mammals. However, the consumption of domesticated animals was not limited to these "lower quality" cuts of meat (Schulz and Gust 1983) but include the muscles that would have been present on humeri and femora as well.

Biomass. My calculations of biomass indicate that for all sites, mammals much of the bulk of the meat in terms of mass. This makes sense as mammals, and particularly domesticated mammals, are larger than most other animals both in general and in terms of the assemblages under consideration in this dissertation. Interestingly, fish also contributed much to the meat masses consumed by site residents and in some cases such as the Stono "Tenant Settlement" and at Smith Plantation, fish contributed more to the total biomass than mammals. This suggests that either fish were supplied as rations (for which there is no documentary or oral-historical evidence)[178] or that site residents supplemented their shares of domesticated meats substantially with wild resources most notably fish. The only site for which mammals dramatically outweigh fish is at Ferguson Road; however, this is likely an artificial situation created by the excavation techniques employed at that site as already discussed elsewhere.

Taken together, NISP, MNI, MNE, and biomass suggest that domesticated mammals, fish, and oysters were invaluable for the diets of Lowcountry residents across time and space including among enslaved people and tenant farmers living on James Island and Port Royal. Turtles were seemingly more important a resource for the enslaved residents of Stono, where they comprise more than 2% of the total biomass; although, 2% is not all that much, it is markedly higher than the fractions-of-percents that turtle comprised of the biomass for the other sites or that birds comprised at any site. The same reliance upon domesticated mammals' meats and wild-caught fish is

[178] Although Otto (1975:291) states rations at Cannon's Point, St. Simons Island, Georgia, were issued salt fish and beef as well as corn, rice, sweet potatoes, flour, and molasses on a weekly basis.

likely true for many individuals within the region that did not directly contribute to the material records utilized in the analyses of this study.

Butchery. Only 3% of the remains from the Stono “Slave Settlement” assemblage have signs of butchery, while 16% of the Stono “Tenant Settlement” has such signs. Once again, no data for butchery is available for the Smith Plantation assemblage. Notably, more than half of the Ferguson Road assemblage shows signs of butchery. Yet, this high figure is once again most likely explained by the excavation techniques employed at that site, which enabled only large faunal remains to be recovered. Large faunal remains are more likely to be mammal and more likely to be large mammal due to the size and density of large mammal bones relative to other bone types. For the same reasons, mammal bones are also more likely to retain butchery marks than other animal bone types. The majority of all butchery-related marks across the three relevant sites were hack marks. This finding suggests a similar mode of preparation upon the same types of animals among James Islanders during both pre- and post-Emancipation periods.

While only 1% and 2% of the Stono sites’ faunal assemblages were cut, 14% of the Ferguson Road assemblage contained cut or probable cut marks. Again, the last figure is likely an overestimate related to excavation techniques employed there. The small percentages seen here suggest the consumption of meats with knife and fork would have been rare at Stono and likely uncommon at all sites.

Burning. Burning is most prevalent among the remains uncovered at the Stono “Tenant Settlement” site; however, this fact is likely due to the fact that much of that assemblage came from a unit containing a trash burn pit. Thus, the burned bones are probably evidence of discard behaviors rather than food preparation practices. The Stono “Slave Settlement” and Ferguson Road assemblages contain only about 8% and 10% burned faunal remains, respectively.

Fragmentation. In terms of fragmentation, no maximum size was recorded for any of the remains from any of the sites. The Ferguson Road assemblage’s average specimen weight is once again artificially inflated due to the excavation methods utilized there. The Stono “Tenant Settlement” average specimen weight is nearly 6 g. while the Stono “Slave Settlement” and Smith Plantation sites average less than 1 g. The later Stono assemblage may be biased by its small sample size. I suggest that small faunal remains are the truly representative remnants. Taken with the interpretations I have made based on the other artifact groups considered in this study, it appears that stew-like meals containing fragments of meat and consumed from bowls based on a household cooking routine were the main cuisine among Lowcountry residents during the eras of enslavement and tenancy.

Overall Study Limitations

There are numerous limitations for my study as a whole. Truly, the limitations of zooarchaeological faunal analyses alone are numerous. They include the effects of taphonomic processes such as fragmentation related to land uses such as plowing, as well as density-mediated attrition (the fact that denser bones fare better than lighter, more fragile bones during gnawing, weathering, soil compaction, etc.) Another issue is the inability of an analyst to reliably differentiate between closely related species such as sheep and goat, various rat species, and pigeons and doves (Landon 2005:7). Although some of the Stono "Slave Settlement" remains were identified at such a precise level by Betsy Reitz, none of the remains I identified were differentiated in this way.

An additional major limitations of faunal analyses of all kinds is interdependence, it is nigh impossible to know whether or not two elements came from different individuals or how many different individuals (Grayson 1979:202); MNI is particularly presumptuous in this regard because the pairing of sided elements used in the calculation of MNI is based on the presumption that the two sides came from a single animal.

Limitations of NISP. NISP is problematic for a host of reasons. First, it is affected by butchering patterns. Namely, animals are less well represented as fragmentation increases both because the fragments are not recovered and because identifying them increases in difficulty inversely with their size. Further, NISP estimates tend to vary among species because larger animals are generally easier to identify at a lower taxonomic level purely because they are easier to examine. In addition, NISP assumes all specimens have an equal chance of breakage; they are not equal either naturally or culturally because larger animals are more often cut into smaller pieces than are small animals. Other issues with NISP as well; it may differentially exaggerate sample sizes across taxa, it supports fewer analytic procedures than other methods (namely MNI), element interdependence invalidates further statistical testing, and the nature of the context as a unit does not allow for valid intersite comparisons (Grayson 1973:432, 1979:201, 1984). I normalized NISP by calculating the average number of specimens for each assemblage in terms of the total volume excavated at each site.

A final issue with NISP and one that directly impacts this study, is related to the field methodology employed during excavations. The contexts from which fauna are uncovered may be affected by differential preservation and collection technique, but any such effects are not taken into account during lab analyses and later results interpretations. It is important to note that the while flotation samples were taken and analyzed for the Stono and Smith Plantations sites, only features were analyzed from the Ferguson Road excavations and these were screened through ⅛-inch mesh. Flotation samples were taken, but these were not available for me to analyze. This means that a large number of fish bones that would have increased the proportional contribution of marine dietary sources at that site are not present in this study.

Limitations of MNI. In fact, both NISP and MNI both suggest domesticated and wild species contributed to diet. However, MNI is problematic because it tends to exaggerate the importance of rarer animals within assemblages (Grayson 1978:55 and 1979). This issue is particularly salient in small samples (Grayson 1978:59), such as the sample of taxa identified at the species level in this assemblage. While NISP, MNI, and biomass all have limitations, using them in combination as I have done here is the best approach to obtaining the most accurate data.

Other limitations are more obvious and not specific to particular analyses. For instance, it is not certain that the bones uncovered at any of these sites were deposited by the residents of that site after consumption of meat. Nor can I know for certain that the residents who may have discarded the bones in question were in fact tenant farmers, sharecroppers, or enslaved workers who lived at the sites. Perhaps most glaringly is the difference among sample sizes compared. Steen (2019 SEAC session discussant comments) asks "Can you directly compare the results of years of testing, block and feature excavations done by Ron Anthony in the slave settlement to a few shovel test[s] and five foot squares in the tenant area?" I suggest that yes, I can directly compare such results by using percentages within assemblages rather than counts and noting that limitations such as possible differences among discard practices, sampling errors and biases that may have missed materials, and differential preservation that exist within such a comparison.

It is likely that increasing the smaller sample sizes (namely, those from the Stono "Tenant Settlement" and Ferguson Road sites) would increase the diversity or "richness" of species and elements[179] (Grayson 1984, Lyman 2008:180). A rarefaction test would calculate means and statistical confidence levels thereof for each sample size and graph a best-fit line through the resultant scatter plot. Samples that were not sufficiently comparable in terms of richness would appear as outliers (Lyman 2008:162). However, such tests are affected by the same biases as NISP or MNI including aggregation and interdependence. I suggest that because the Stono sites and Ferguson Road in particular are potentially impacted by issues of interdependence due to their physical proximity to one another, rarefaction would be moot.

[179] This is true particularly for faunal remains but potentially for other artifact groups as well.

Further, all specimens involved in a comparison of richness using rarefaction must be identified at the same taxonomic level (Lyman 2008:174), which the assemblages in this study are not. Additionally, the lower that level (species rather than family, for example) the better the results (Lyman 2008). The high degree of fragmentation at all sites under consideration here indicates that much of a larger sample would not in fact be useful for rarefaction. It is clear that the assemblages are different sizes, yet to undertake excavations that would equal those of the Stono "Slave Settlement" or even Smith Plantation sites is simply not practical based on the realities of time and funding available for such projects. I did, however, normalize NISP by taking excavation volume into account when calculating NISP as discussed above.

Differences among laboratory analysis techniques also impacts the study. The Ferguson Road collection (except for the fauna) were analyzed by TRC staff, while I analyzed the other materials from the other sites. Even within my own analyses however there are differences in my training and expertise levels through time, meaning identifications may have between and within assemblages because of the long periods of time involved (Smith Plantation and each Stono site took up to a year each to catalog and my expertise rose over that period).

Specific Study Limitations

Perhaps the greatest limitation to my analyses of the Smith Plantation assemblage are related to the faunal collection. I analyzed the zooarchaeological materials as a non-expert because of DAACS directives and because I did not have access to a comparative collection. As a result, the osteological data for that site is sparse. No species-based comparisons or assessments related to modifications of any kind can be made.

Still, Unlike Stono and Ferguson Road, the Smith Plantation is located outside of James Island. This fact places it a few to many hours distance from the other sites, depending on the mode of travel. Such a distance might mean the Smith site is be less similar than closer sites would be on a number of points including foodways. Moreover, Port Royal was the location of thousands of refugees during the Civil War, many of whom were enslaved (Hayden et. al 2013). Thus, the land usage and population of the Smith site were for a time, different from either Stono or Ferguson Road, something that I (incorrectly) thought may be reflected in the average sherd size and average sherd weights.

In addition, Smith Plantation, unlike Ferguson Road, is in DAACS. In fact, I cataloged the material assemblage into the database. As a result, the site is useful for comparison because the data formatting is the same and because of its physical and social distance from Stono. While the two sites are far enough away to be definitively separated, the Smith and Stono plantation sites have similar social and cultural histories as well as physical environments,[180] making them a good case for regional study.

Along the same lines, the Smith plantation site abuts a naval hospital and an early eighteenth century fortification (Smith et. al 2017:iv), which is decisively different from either Stono or Ferguson Road. Indeed, Port Royal has an extensive history as a

[180] They are both sea islands and thus part of a region that shares a common history (Steen and Barnes 2010)

military base that could have made a period during lives of its residents different from those of the people living at Stono and Ferguson Road. These factors make the life histories of the sites differ substantially, but do not necessarily impact the foodways of the enslaved peoples and refugees who inhabited the site. As it turned out that Smith Plantation did have more fish remains than the other sites, a fact that indicates its physical location did impact its foodways and make them different from those of the other sites in terms of dietary component ratios.

In my analyses, I aggregated features and plowzone materials as well as different recovery techniques. Specifically, I combined data from ¼" screen, ⅛" screen, and flotation samples when available. I did separate flotation samples out after obtaining results from my aggregate method to ensure I had not missed any important differences among site assemblages due to sampling bias. Results from these analyses suggest that more fish bones were uncovered within flotation samples than within dry screened samples. Thus, the overall contribution of fish among the site assemblages is underemphasized for the Stono "Tenant Site" in my aggregated results. On most levels however, the results were similar across all sites, which is important for demonstrating the commonalities of Lowcountry foodways.

Another issue is that arises because the Ferguson Road data is not in DAACS, is the difficulty in performing detailed analyses particularly in terms of fragmentation (which can be easily obtained in DAACS by using the maximum size measurement for ceramics and length, width, and diameter for other artifact types). I have attempted to remedy this limitation by calculating average fragments weights.

Further, because the Ferguson Road data is not in DAACS, the terminology used and attributes recorded will vary more widely than they would for an inter-DAACS comparison. Making Ferguson Road data comparable to the Stono data I entered in DAACS required some massaging; however, some variation in identification and categorization is always to be expected among methodologies and analysts.

The average MCD places the Ferguson Road occupation more closely matched in time with the Stono “Slave Settlement” than with the Stono “Tenant Settlement” site, again making Ferguson Road an imperfect site for comparison for use as a means of broadening the overall findings about changes in foodways. At the same time, it is only about a decade earlier than both the Stono “Slave Settlement” and the Smith Plantation occupation, making it particularly useful for broadening my argument about regionality during the era of enslavement. The Ferguson Road site is most useful here for providing a more reliable understanding of community and/or regional foodways during that particular era. Including additional sites from the tenant-era would be a great next step in the line of research initiated in this dissertation.

Further limitations that impact my study are related to different excavators and excavations techniques, particularly in terms of sampling. Specifically, no float samples taken at Ferguson Road were able to be analyzed in this study. In addition, of the float samples taken from a midden at Smith Plantation only remains greater than ⅛” in size were analyzed (Smith et. al 2017:44). The differences in sampling techniques among the comparison sites means that recovery and identification of recovered materials may have led to under-identification of particular types of remains. For example, small bones such as those from fish might have been missed completely in the materials recovered from Ferguson Road as I did not have the chance to analyze them, and overlooked in the floats conducted on the Smith Plantation materials as items smaller than ⅛" were not analyzed.

At the same time, the high density of artifacts at the Stono sites means that many small fragments from that site were not collected and analyzed during the fieldwork[181]. Specifically, no fragments[182] of any kind that were smaller than 15mm (smaller than a dime) were kept during the "Tenant Settlement" excavations. For unidentifiable metal fragments and other non-diagnostic, unidentifiable fragments the minimum size collected was 25mm (about the size of a quarter). For oysters, only complete shells were collected, except in the case of burned oysters, which followed the 15mm rule mentioned above. Less rigorous, non-standardized criteria were used during the "Slave Settlement" excavations, which were dependent upon the particular excavation and the unique choices of the various participants and directors. These differences in collection methodology potentially impacted the interpretations of plowing activity as well as the estimates of various artifact group fragments including metal objects such as cans, ceramics, glass, and shellfish.

While the limitations of my study are indeed many, my results indicate that the foodways of enslaved and tenant farmers at Stono Plantation, Ferguson Road, and Smith Plantation were quite similar. They all seem to have utilized hollow form vessels

[181] Except for the soil samples from which I obtained the float samples.
[182] All complete, non-fragmented artifacts were collected regardless of size.

most often. Among ceramics the ware type changed through time. Glass vessels usage also increased through time; however, as with ceramics, hollow vessels remained common. Storage seems to have been the main use of glass vessels on all sites.

All types of utensils were used on all sites, although few exist in the archaeological record. Iron pots were seemingly rarely used on all sites. It is possible that utensils and pots were rarely discarded rather than rarely used, of course. Canned goods were seemingly rarely consumed.

Fishing occurred on both Stono sites and on Smith Plantation. It was likely practiced by residents of Ferguson Road too although no archaeological evidence exists for it. Though the archaeological evidence is sparse, both cast net and hook-and-line fishing probably took place on all sites based on the faunal remains from different types of fish and the methods used to catch those fish according to historical documents and interviews.

Domesticated mammals were commonly consumed on all sites. The fragmentation of these animal remains along with the commonness of hollow vessels and lack of flat tablewares on sites suggests that stew-type meals were consumed through time across the Lowcountry. Historical documents support this finding as does the prevalence of stew-type meals within the region today

Cuisine

As discussed in Chapter 3, dishes containing protein, starch, and vegetables such as pilaf and pilau were and are common in Lowcountry cuisine. Archaeological evidence and historical accounts show that all types of proteins are used in such dishes. For example, Robinson (2007:8) notes that there were always big pots of food on the stoves of Gullah people during the mid-twentieth century. These pots would have contained such dishes as gumbo[183] made with okra, shrimp, and rice; or boiled crabs, which would have been paired with stewed okra and tomatoes (Robinson 2007:8).Other dishes included shrimp and grits with bacon, onions, and green bell peppers (Robinson 2007:28).

Grits were eaten at nearly every meal and accompanied fish such as mullet, whiting, flounder, catfish, croaker, trout, yellow tail, bass, sheepshead, and even eel. These fish were fried, smothered, grilled, broiled, baked, and barbequed (Robinson 2007:34). Oysters were steamed or roasted; conch were steamed. Lowcountry boils (tubs full of steamed shrimp, sausage, corn, and potatoes, typically) were also prepared. Prior to refrigeration they were smoked for preservation (Robinson 2007:106).

Corn was also used in the form of meal, which they used to make cornbread (Robinson 2007). Other baked goods included muffins, cakes, pies, dumplings, and cobblers. These were made with pears, peaches, plums, figs, apples, blackberries, and wild grapes (Robinson 2007:36). The same fruits were used for wine making as were persimmons (Robinson 2007:81). Wild-picked fruits such as these were preserved in jars[184] using the boiling method alongside squash, tomatoes, beans, peas, and okra (Robinson 2007:34).

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183 Carney (1996:159) refers to gumbo as aa "key African diaspora dish" due to its ingredients coming by way of the Atlantic slave trade alongside the people who prepared and consumed it.

184 Jars were also used to store "spoon meat," meat which has been boiled until it falls from the bone (Fairbanks 1984:3). Such meat was commonly consumed during the mid-

Other starches consumed included oatmeal and biscuits made from flour (Robinson 2007). Biscuits were a common food served alongside chicken, pea, or bean soup, or beef stew; soups were eaten several times a week (Robinson 2007:60). Beef was also used for meatballs (Robinson 2007). Turkeys, ducks, geese, and guinea fowl were kept for meat and eggs (Robinson 2007:62). Eggs were eaten fried, scrambled, and boiled, the latter of which were consumed in egg salad (Robinson 2007). Hog meat could be consumed as ham, but also tended to be used for crackling and lard (Robinson 2007:50). Pig tail and neckbones were simmered with collards in order to make potlikker (Edge 2017:1). Pork also appears in Edge (2017:1) as fried pork chops, served with red rice and collards; such a plate might well have been served during the tenant-era and even earlier.

Larger meals were eaten on Sundays. These could include red rice (discussed as creolized food earlier) or crab rice, collard greens, fried chicken, or ribs, macaroni and cheese, shrimp and potato salad, and desserts such as bread pudding, sweet potato pie or bread, lemon meringue pie, apple or pear pie or bread, blackberry dumplings, peach cobbler, potato bread, banana pudding, and/or fresh fruit with ice cream (Robinson 2007:115). Families who could not afford such foods created similar dishes with meat they hunted, raised, and fished along with government cheese, and canned goods such as pork, turkey, beef, and powdered eggs and milk (Robinson 2007:31).

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to late-twentieth century and likely before (Fairbanks 1984:3). This preparation method was often used on raccoon meat, a fact which in conjunction with environmental changes and species scarcity, might clarify the apparent lack of wild game among the faunal assemblage of the Stono "Tenant Settlement."

Mama Doonk's Gullah Recipes (Hilliard 2018) contains a plethora of recipes that contain ingredients identified in the archaeological assemblages analyzed in this dissertation. These include baked ox tail, barbeque pigs feet and ribs, smothered yard bird, stewed chicken necks and backs, fried porkchops, smothered porkchops, pork roast, hog head cheese, turkey necks and legs, turtle soup (aka Cudda' Soup), roast duck, deer stew, opossum stew, raccoon stew, baked rabbit, fried oysters, oyster fritters, crab cakes, crab casserole, fried fish, fried shrimp, shrimp creole, shrimp and grits, nut cake, and nut cookies[185].

While no archaeological evidence is present for the following foodstuffs, documentary evidence indicates they may also have been eaten throughout the Lowcountry including on the sites discussed in this dissertation. They are: cabbage soup, fried cabbage, two recipes for collard greens, okra and shrimp and okra soup, black eye peas, cow peas (aka field peas) and ox tail, green butter beans, lima beans, pork and beans, string beans and potatoes, hominy both baked and boiled, jambalaya, squash casserole, apple pie, bread pudding, candied yam, sweet potato pie and pone, potato salad, shrimp salad, biscuits, corn fritters and muffins, cracklings, crackling corn bread, spoon bread, and various fruit preserves (Hilliard 2018).

Archaeological evidence for the consumption of "traditional Lowcountry" foods at the Stono "Tenant Settlement" include catfish, croaker, cow, pig, conch, oysters, and

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[185] Pecan shells were found at both Stono sites, although their provenance may be attributed to the trees currently present on the site. Regardless of the archaeological evidence, documentary evidence states pecans were eaten during the early to mid-twentieth century (Robinson 2007). They were likely consumed prior to that period as well.

crab. The earlier settlements also contained species identified as food stuffs by Robinson (2007). For the Stono "Slave Settlement" included catfish, croaker, mullet, turkey, chicken, pig, cow, oysters, shrimp, and crab. Fish, cow, pig, and bird were also identified in the Ferguson Road assemblage, while mammals, fish, birds, and crustaceans were identified at Smith Plantation.

While not detailed in my analyses, 30 peach pits and 14 unidentified seeds were uncovered in the Stono "Tenant Settlement" assemblage. This reinforces the idea that the diets of late nineteenth and early twentieth century tenant farmers were similar to those of their descendants. Although no seeds were cataloged for the other sites considered within this study, seed-bearing fruits and vegetables were almost certainly eaten by the inhabitants of those sites.

CHAPTER 10
CONCLUSIONS

In this dissertation I compared the foodways of a group of enslaved people and their Emancipated successors living and working at Stono plantation, James Island, South Carolina. I also compared a neighboring archaeological site, Ferguson Road, and another Lowcountry plantation site, Smith Plantation in order to identify differences and similarities among the foodways of people living on those sites with the practices of Stono residents. MCD and historical documents show that the Ferguson Road site is the earliest among the sites compared in this study. The Stono "Slave Settlement" and Smith Plantation sites were inhabited about a decade later, making them well suited for comparison. The Stono "Tenant Settlement" dates to at least 60 years after the MCDs for the other sites.

As a result of my comparative analyses, I conclude that there were few changes within the diets and preparation techniques of Lowcountry residents through time. The only evidence I found for cross-regional transformations are related to the manufacturing techniques used for making the material culture possessed by enslaved people and their tenant farming descendants. The manufacturing-related changes include a shift from handmade, locally produced vessels used in tandem with imported goods to the use of primarily mass-produced goods. These changes were brought about by technological innovations that occurred as part of the Industrial Revolution and the concurrent rise of capitalism as a global economic force, and potentially a shift in labor systems from task-based slave labor to wage labor through which access to formal markets was increased.

Continuities in Diet and Procurement at Stono Plantation

The diets of enslaved people and their tenant farming successors differed little. The Ferguson Road, Stono "Slave Settlement," and Smith Plantation sites contain a prevalence of domesticated mammals (cow and pig) within the faunal assemblages. Wild animals[186] make up a relatively small proportion of all site assemblages. These parallel findings suggest that sea island residents had similar rationing and supplementation schemes. In addition, the prevalence and types of butchery and burning were quite similar among the three faunal assemblages, suggesting that preparation and cooking practices for the two groups were comparable.

The Stono "Tenant Settlement" assemblage also contained quite a bit of domesticated mammal remains. This suggests that the diet of sea islanders remained relatively stable through time and across sites. The indication, then, is that there may not have been very much rationing during the era of enslavement, a rationing scheme may have continued into the tenant-era, or both.

The NISP was markedly lower for the Stono "Tenant Settlement" relative to the earlier Stono site. Although at first blush it may seem that the number and types of meats eaten decreased through time, the difference in dietary richness is more likely

[186] However, the species of wild animals identified differ between the two sites.

related to the disparate sample sizes of the Stono sites' faunal assemblages. My normalization calculations for NISP indicate that the later site actually has a richer assemblage than the earlier site. Importantly though, this may be a factor of sampling bias as the later site assemblage contained many remains from a trash pit feature whereas the larger Stono "Slave Settlement" sample was primarily general matrix. The trash feature may be swaying the data. A larger sample containing more general matrix from the Stono "Tenant Settlement" would be useful in helping to parse out the situation.

It is possible that wild mammals may actually have been less of a contributor to the diets of tenant farmers than they had been for enslaved people on the same land as indicated by my analyses. I say this because there was a decrease in the prevalence of wild mammals living on James Island during the latter part of the nineteenth century. The cause for the decrease in wild mammals was environmental pressure including the transformation of woodlands into agricultural land combined with competition for grazing land with livestock[187] (Swanson 2011, Zierden and Reitz 2009). Likely animals such as dogs and hogs that rose alongside agriculturalists came into conflict with foxes, opossums, and raccoons for resources thus contributing to the decline in wildlife. Last, more than a century of hunting decreased the number of wild animals in the region (Hanson and Karstad 1959, Nyhus 2016, Swanson 2011). In addition to these factors,

[187] Specifically, white tailed deer competed with free-range cattle for grazing land (Zierden and Reitz 2009).

tenants' ability to legally trap animals was taken away in 1927 (Breck 1934:10, Gentile 1987)[188].

The loss of wild mammal protein sources seems to have led tenant farmers at Stono to rely more heavily on domesticated mammals[189] than wild animals. This loss might have been compounded by tenants' inability to afford to acquire and raise livestock intended for home consumption. Indeed, Robinson (2007) notes that wild animal consumption continued among poorer families in the Lowcountry during the middle part of the twentieth century. As noted by Reitz et. al (1985:183), however, the rates at which such resources were exploited are not documented. It is possible that wild animals continued to be captured and were prepared into "spoon meats," which involved intensive boiling. This boiling would have negatively impacted the long-term preservation of faunal remains; that is, boiled bones will disintegrate more quickly than nonboiled bones and would thus not be present in the archaeological record (Tuma 2006).

My NISP and MNI calculations suggest tenants at Stono seem to have relied more heavily upon aquatic resources such as fish and shellfish as well as semi-aquatic species of turtle more than mammals either wild or domesticated. However, MNE suggests that all parts of animals continued to be eaten even after Emancipation and

[188] A decrease in wild species related to the loss of time to put towards hunting and fishing, which translated to increased reliance on store bought goods has been cited elsewhere (Holland 1990, Scott 2001). This situation may also have been the case at Stono.

[189] Increased reliance upon domesticated meats during the post-Emancipation era has been noted elsewhere. See Singleton 1996.

the rise of tenancy and wage payments. Further, twentieth century accounts note the common practice of keeping chickens (Frazier 2006, 2010 and WPA interviews 1937). Archaeological evidence, in contrast, indicates these birds were not one of the main food sources for tenants. This discrepancy may be related to differential preservation (in which bird bones do not preserve as readily as mammal and reptile bones). It could also suggest that chickens and other poultry were raised for their eggs rather than their meat. Their eggs and/or meat may have been sold for income rather than consumed at home, which would explain the lack of remains within the faunal assemblages.

Similarly, oral and written histories indicate that cows were rarely kept, but when they were, they were primarily used for their milk rather than meat (Frazier 2006 and 2010, WPA interviews 1937). Hogs also continued to be raised, but were perhaps fewer in number than during the earlier period. The loss of foraging land related to the overwhelming installation of agriculture is one reason hogs were less common on James Island as a whole (Zierden and Reitz 2009). It is also possible that acquiring live hogs was difficult or impossible for tenant farmers on the island. This inability may have been due to price and/or a lack of feral hogs remaining on the island after the Civil War (Berlin and Morgan 1993). Yet, my results indicate that both beef and pork were consumed through time and across sites.

My analyses also indicate that the consumption of shellfish increased after Emancipation. This finding though is quite likely a reflection of sampling bias. Many more shells were kept from the Stono “Tenant Settlement” site than the other sites considered here. Still, it is possible that the consumption of shellfish actually did increase during the post-Emancipation period. If this is true, oysters are clearly the first preference based on faunal analyses; however, clams, whelks, conchs, and other mollusks also appear in the "Tenant Settlement" assemblage. The primacy of oysters makes sense as they are very common in the region immediately surrounding the plantation (as well as in the Lowcountry in general)[190] and are easy to collect.

I suggest, though, it is more likely that shellfish consumption remained relatively steady through time. The results of my analyses are heavily impacted by the decision to not collect oyster shell by those who excavated the Ferguson Road, Stono "Slave Settlement," and Smith Plantation assemblages. These decisions were made due to the prevalence of oyster within excavation sediments and the inability to firmly identify them as food sources or construction materials used in tabby and road bedding, or as fertilizer.

Regardless, oysters were consumed through time and across the region (WPA interviews, Robinson 2007, Zierden and Reitz 2009). The shellfish began to be commercially collected, shucked, and canned during the late nineteenth century (Burrell Jr. 2003, Fields-Black 2018, Swanson 2011). They are immensely popular today and have even become a tourist attraction (e.g. https://www.mayriveroyster.com/farm-tour). So, it seems most reasonable that residents of the Lowcountry continued to collect their own shellfish in combination with obtaining them from commercial sources.

There is a difference between the study sites in terms of biomass. For example, Stono "Slave Settlement" and "Tenant Settlement" are 76 lbs and just 3 lbs,

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[190] Personal observation.

respectively. While it is possible that this difference may be a reflection of actual differences in consumption, it is more likely due to the smaller sample size of the faunal assemblage collected during “Tenant Settlement” excavations (the later assemblage is only one-quarter the size of the earlier assemblage). Normalizing biomass calculations led to the conclusion that the Stono sites and the Ferguson Road site all contained less than one pound of biomass per cubic foot of excavation. This finding suggests that the site residents consumed similar amount of food through time.

It is possible, however, that the consumption of fresh animals decreased through time because of the increase in commercialized goods and decrease in on site butchery. That is, because Stono tenants would have eaten more canned animal products than their enslaved predecessors, fewer faunal remains are available for biomass calculations. However, this idea is not supported by the number of can fragments identified on the later Stono site. In fact, few cans were found on any site considered in this study. Further, the normalization of biomass puts three of the four sites relatively close to one another in terms of biomass and by proxy, meat consumption.

Smith Plantation is a bit of an outlier because the biomass for that site is roughly double that for the other sites. This finding though is related to sampling bias. The Smith Plantation assemblage is from a refuse midden whereas the other sites are from general living areas. Thus, the Smith Plantation biomass estimate is falsely inflated relative to the comparison sites. It is mostly likely that all site residents consumed similar amount of meat through time. This conclusion is supported by historical documents that mention meat consumption through time and across the region. Smith Plantation residents did, however, consume more large fish than other site residents as discussed in previous sections.

Based on preliminary analyses, I originally hypothesized that hook and line fishing might supplanted cast net fishing. However, I found the apparent increase in hooks and decrease in fishing weights does not actually indicate a change in practice. It is more likely that the large number of fishing weights in the earlier Stono assemblage is from the loss or discard of a cast net. No other site has nearly as many weights as the Stono “Slave Settlement” assemblage suggesting the relatively large number of net weights uncovered there is an anomaly. Further, the apparent increase in fishing hook use through time indicated by the relatively high number of fishhooks at the Stono “Tenant Settlement” relative to the earlier Stono site and the Smith Plantation is likely false. It is likely that many of the artifacts identified as fishhooks or potential fishhooks in the “Tenant Settlement” assemblage are not fishhooks, but are simply bent wire.

It is conceivable that tenants did switch from cast net fishing to hook and line fishing using a shore and/or watercraft-based fishing method. However, if they did so they may still have needed cast nets to catch bait for hook and line fishing. It is also possible that a shift to commercially obtained fish might have occurred just as the fishing industry took off during the late nineteenth century with the rise of the Mosquito Fleet (Burrell Jr. 2003, Shields 2015, Zierden and Reitz 2009). Yet the commonness of fishing among Lowcountry residents today and throughout the twentieth century suggests there likely was no such shift. Tenant farmers probably continued to catch their own fish and obtain fish through the formal marketplace and/or informal market. A combination of fish procurement methods was also identified through the archaeological assemblage uncovered at Witherspoon Island, located approximately 140 miles northwest of the Stono sites (Fogel 2015). Otto and Burns (1983:190), noted that hook and line could be used for all fish in the estuaries of Georgia except for mullet, which are net caught.

Moreover, historical documents and interviews indicate that different species of fish were caught using different methods. Interviews conducted by Frazier and published in his 2010 book identifies at least three Sol Legare plantation[191] descendants who fished throughout the twentieth century in order to obtain subsistence; one even commercialized his endeavor. Famed twentieth century Charleston blacksmith Philip Simmons recalled his grandfather and other Daniels' Islanders[192] line fishing for fun and to obtain fish for home consumption in contrast to cast net fishing, which was done in order to obtain fish which would be sold at market (Vlach 1992:6). In fact, different gauges of net weaves were used to capture different species of fish (smaller holes enabled smaller fish to be captured) (Colleton 1992, Vlach 1992). A similar comment about catching mullet in the creek "by the tubful" and stringing them together for sale at market is made by McClellanvillian[193] Colleton (1992:29).

According to a member of the extant Gullah community, subsistence seafoods like crab and mullet are caught with nets, while hook and line fishing is used for

[191] Sol Legare is just five miles south of the Stono Plantation sites.
[192] Daniels Island is located 30 miles north of James Island, on the north side of Charleston.
[193] McClellanville is 45 miles north of James Island.

recreational fishing (Ellis et. al 2014:1165, Jones-Jackson 1987). In addition to mullet and crabs, shrimp were net-caught (Gregory et. al 2013, Washington et. al 2013). As noted in Chapter 8, flounder were gigged (speared with a large gauge hook) (Gregory et. al 2013).

Crabs in addition to being netted, were also caught by “bogging;” that is, being provoking them into clamping onto a stick with their claw and then pulling them out of the water or their burrows (Colleton 1992, Jones-Jackson 1987). Another method was tying a chicken neck to a string, waiting for the crab to grab it, then pulling it and capturing the crab (Washington et. al 2013). Hooks are cited as having been used for catching bass, and eel (Washington et. al 2013). The hooks were tied to strings, which would be tied to a sink and held until a pull was felt (Washington et. al 2013). Dogfish, sharks, and porpoises were inadvertently caught using hook and line (Jones-Jackson 1987).

For contemporary Lowcountry residents fishing remains both a subsistence activity and serves as a recreational activity:

> “When asked about the role that fishing plays in the sea island community, one urban participant responded, ‘Well, I would say fishing, what it plays in the culture of the African [American] community, it is a source of food. It is a…type of therapy. It’s very relaxing.’ (Ellis et. al 2014:1164)”

In fact, fishing is for the Gullah, “a way of life” (Ellis et. al 2014:1164). Fishing exists as a facet of Gullah culture because it has been passed down from ancestors who relied upon it (Ellis et. al 2014). Fishing after church and holding community fish fries have also been a staple of Gullah culture (Ellis et. al 2014:1165). As all archaeological sites discussed here contained species that are caught using nets and species that are caught using hook-and-line, I suggest all types of fish have been caught and consumed through time and across the region.

Note, as previously discussed, Smith Plantation residents consumed much more fish and more larger fish than the inhabitants of the Ferguson Road and Stono "Slave Settlement" sites. This difference is most likely due to the deep waters surrounding Smith Plantation enabling more fish and more larger fish to be caught than were readily available to people fishing the estuaries of James Island[194]. This finding serves as a reminder that among so much commonality there is variation.

Even so, the bird and turtle groups were minor contributors in terms of biomass as well as NISP, MNI, and MNE at all sites. Thus, in terms of protein contributors Lowcountry diets were overall similar across time and space. More specifically, they incorporated various groups of animals that were butchered (primarily domesticated mammals, followed by fish, then shellfish, then reptiles, birds, and wild mammals in smaller numbers) so as to be fragmented for use in stews and similar dishes.

No meaningful decrease in butchery marks on faunal remains exists, suggesting there was no move away from obtaining cuts of large domesticated animals and toward commercially prepared products. Stono's on-site butcher (Calhoun 1986) likely

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[194] See https://charts.noaa.gov/BookletChart/11516_BookletChart.pdf, accessed August 28, 2019 and https://www.charts.noaa.gov/PDFs/11522.pdf for a comparison of water depths.

dispatched domesticated mammals during the era of enslavement using a cleaver or other hacking tool (as well as rarely, a saw) to create pieces provided to enslaved people as rations[195]. Those pieces were likely hacked further in order to create one-pot, stew-like meals by site residents (Ferguson 1992, Samford 2006, Wallman 2014). Although fewer mammal bones with butchering marks present exist in the Stono "Tenant Settlement" assemblage, those that are present and have indication of butchery are all hacked. Further, both axial and appendicular bones are contained within all assemblages. This finding suggests a continuation in processing technique to include hacking of whatever parts were available.

Burned faunal remains can indicate a direct-flame cooking such as roasting (Newman 2010, Tuma 2006, Wallman 2014)[196]. However, the limited number for burned faunal remains on any of the study sites suggests that roasting was never a common food preparation method at Stono or in the Lowcountry more generally. The fact that nearly all of the burned fauna from the sites are tiny fragments is more indicative of trash disposal than of food preparation (Kenneth G. Kelly, personal communication).

In sum, it appears foodways changed little in through time in terms of diet or cuisine. This conclusion is well supported in the literature (Harris 2011, Shields 2015) as well as by any visitor to the Lowcountry who consumes pilau or "perlow"

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[195] Lev Tov (2014) notes that saw marks suggest "professional" butchering and thus are presumed to be evidence of rationing, as planters would have had greater access to professionally butchered meat than enslaved people would have had.
[196] Although Crader (1990 and 1994) argues that roasting would rarely char bones as the meat would insulate the bone from the flame and that burned bones result from other types of activities such as sweeping debris into hearths.

(https://www.nps.gov/ethnography/research/docs/ggsrs_book.pdf). Lowcountry cuisine was created through the creolization process, the entanglement of African, European, and indigenous traditions that came together in the Lowcountry due to the trans-Atlantic slave trade. The process continued through enslavement and tenancy with the implementation and perpetuation of cultivation techniques, preparation methods, and cultural preferences of sea islanders. It continues today as cooking becomes increasingly globalized, or "fusion" cuisine continues to evolve. Nevertheless, the persistence of cuisine within the foodways of Lowcountry people are apparent in the present day in the hallmark stew-style meals consumed across the region. This persistence is result of the close ties of Lowcountry peoples with their ancestral lands and waters in the region and beyond in combination with the lifeways passed onto them by their predecessors and from them to their descendants.

Transformations in Consumption and Storage

Study site inhabitants used a wide variety of ceramic ware types, the majority of which were either unidentifiable in form or have been identified as bowls. The variety of ware types present prior to the late nineteenth century suggest that the ceramics used by enslaved people were relatively simple, inexpensive, imported, mass produced wares (in the case of creamware and pearlware) alongside locally or regionally produced handmade coarse earthenwares (in the case of colonoware, redware, and probably unidentified coarse earthenwares)[197]. This suggests that both imported refined

[197] The Ferguson Road ceramic assemblage is equal in terms of the number of ware types to the Stono; however, the type lists do not match exactly. This finding makes sense if the inhabitants were being provided rationed ceramics[197] as ceramic rations

earthenwares and locally produced coarse earthenwares were used to contain the stew-like meals consumed by site residents[198].

Analyses of the ceramic assemblage from the Stono "Tenant Settlement" suggests that ceramic diversity decreased through time. While the earlier sites contained a greater variety of ware types, most of the "Tenant Settlement" ceramic assemblage was comprised of just one ware type, whiteware. As with the earlier sites' creamware and pearlware, whiteware was an inexpensive, mass produced, imported refined earthenware. In regard to vessel form change during the transition from enslavement to tenancy, there seems to have been little change. Approximately half of the "Tenant Settlement" ceramics were hollow vessels. Taken together, these findings indicate that both enslaved people and tenant farmers at Stono had cheap wares that did not reflect conspicuous consumption or luxury, and that their choice of ceramic ware types was fairly limited. Further, most meals seem to have been consumed from bowls during both periods suggesting little change in the form of meals.

Few utensils were uncovered at any site making interpretations of utensil use difficult; however, spoons, forks, and knives seem to have been used. These were all probably used in conjunction with all forms of ceramic vessels present. While it is likely spoons were used with bowls and knives and forks with plates, it is possible and not

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were often used goods (Wilkie 2000). It also makes sense if site inhabitants exercised choice in the ceramics they acquired and used (Farnsworth 1999). Ceramic forms at Ferguson Road seem to be a mix of utilitarian wares, tablewares, and teawares as was the case with the Stono assemblages.

[198] The combination of fragmented faunal remains and bowls uncovered on archaeological sites has been linked with stews and stew-like dishes (Landon 2005, Samford 1996, Wallman 2014).

completely uncommon to use forks with bowls or spoons with plates today. The same may have been true then. It is also possible to eat without the use of utensils at all and tenant farmers may have used their hands to convey food to their mouths just as their ancestors did and just as Lowcountry residents (and indeed, most of us) sometimes do today.

Glass production technology took off during the late nineteenth century (Jones and Sullivan 1989), a fact which is reflected in the increased diversity of glass containers in the Stono “Tenant Settlement” assemblage as compared to the “Slave Settlement” assemblage. While glass was primarily used in the form of olive colored wine style bottles during the earlier era[199], it contributed just over one percent to the later assemblage. Unidentified bottles and containers made up about a third of the “Slave Settlement” glass vessels and more than half of the “Tenant Settlement” glass vessels. These findings suggest that although olive wine style bottle use decreased through time, the general use of glass bottles and hollow containers to store foodstuffs remained common.

Glass tableware and stemware use increased through time, which makes sense based on the innovations in glass making that made it less expensive to purchase in more recent times, but the increase is not particularly dramatic suggesting glasswares were not commonly used for food consumption purposes in the Lowcountry. In fact, few glass vessels or fragments of glass vessels were uncovered at the Smith Plantation,

[199] Wine style bottles were the most common glass vessel identified at Ferguson Road; the same is true for the Stono “Slave Settlement” glass assemblage.

evidence for the use of ceramics over glass for food consumption purposes within the Lowcountry.

Can, glass vessel, and ceramic analyses indicate that the reliance upon commercially produced storage containers increased through time alongside technological innovations that enabled decreased prices for such goods[200]. The availability of such goods is reflected in the large numbers of mass-produced goods as compared with handmade goods that increased through time. It is likely these goods were brought to James Island from Charleston via ferry and/or other boats, which would have been used for informal marketing and transport (Anthony 2012a, Calhoun 1986, Egerton 2006, Kane and Keeton 1994, Pyszka and Hays 2016, WPA interviews 1937, Zierden and Reitz 2009).

My analyses indicate that there was no major shift in protein sources between the period of legal enslavement and the tenant era on the Stono Plantation or in the Lowcountry more generally. While colonoware and other handmade ceramics did fall of out of production and use through time, hollow vessels appear to have continued as the primary vessel form. This transformation suggests that while localized production decreased in favor of mass-produced goods, there was no major change in food preparation or consumption practices.

Lowcountry residents were part of an increasingly globalized world and participated in this change through their participation in the industrialized formal and

[200] The replacement of colonoware with imported, mass produced ceramics has been documented elsewhere (Ferguson 1992, Singleton 1995).

perhaps informal, market(s). Thus, there is no evidence for assimilation to the knife, fork, and plate-based meat-and-three diet that arose during the middle and latter part of the twentieth century. In fact, it seems such a diet arose in urban areas, especially in the upper and inland South such as Atlanta, Memphis, and Nashville (Edge 2017, Rhew 2016, Yates 2017:11).

There seems to also have been no formalized program of rationing that can be identified in the archaeological record for any particular time period. All sites and, thus, all time periods, show diversity among the species consumed and the portions of animals consumed. I would expect more patterning among MNEs than the assemblages contain if there had been systematic rationing as is seen in the data at Monticello (Crader 1990, Tuma 2006). Furthermore, the diversity of ceramic ware types and vessel forms also points away from the rationing of ceramic goods. Moreover, literature suggests heavy supplementation of rations among enslaved groups ranging from upland South Carolina to Tennessee, Virginia, and Maryland to Martinique to Brazil (Barickman 1994, Farrish 2015, Fennell 2011, Fogle 2015, Forrett 2004, Kern 2005, Thomas 1998, Wallman 2014) as well as in the Lowcountry (Agha et. al 2012, Fairbanks 1984, Isenbarger 2006). Such supplementation may have a masking effect on any patterns present in my data sets or there might be no such patterns at all.

Transformations in Markets and Access

While it is clear that possession and by proxy, use of mass-, commercially produced goods was much higher among Stono's tenant residents than among their enslaved predecessors, it is not clear how such goods were acquired. I suggest here that people enslaved at Stono received goods and food through rations provided by plantation owners, which they supplemented with foodstuffs and locally made goods either produced on-site or were acquired through local and/or regional markets.

In contrast, early twentieth century farm tenants received pay (either cash or tokens[201]) with which they purchased goods from a farm store[202]. The transition between the receipt of rations and access to store bought goods is not well defined[203], but it is likely that rations disappeared in favor of direct purchases as the wage economy came to supplant the slave economy (Edge 2017, Oakes 1990). This shift is seen most readily in the changes in ceramic assemblages between the two periods as well as in the increased presence of glass vessels through time.

At the same time, the "slave economy" of internal production and exchange (Isenbarger 2006, Schweninger 1992, Wood 1995) continued in some realms including subsistence gardens and the collection of fish and shellfish (Frazier 2006 and 2010, WPA interviews 1937). During both periods the informal and formal economies were entangled (Crook 2001, Delle 2017, Morris 1998, Wood 1995); however, the nature of this entanglement changed. Specifically, the ratio of products created and exchanged within local markets as compared with cross-Atlantic markets shifted toward the latter as time went on and the Atlantic World became increasingly capitalistic and globalized (Allen 2010, McCusker 2005, Mintz 1985, Oakes 1990, Orser 2012, Wolf 1982).

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[201] See earlier discussion of Frazier interviews 2006 and 2010.
[202] Although it is possible that James Islanders in general and Stono workers in particular continued to receive rations after Emancipation (Dill Labor Contract dated 1866, Hayden et. al 2013, Shields 2015).

In conjunction with globalization was a shift toward wage-labor (Piersen 1996, Wolf 1984, Marx and Engels 1848). Emancipation took away the free-labor resource that had been available to planters' agricultural endeavors, which required a replacement (Morse 1926, Oakes 1990, Reid 1973, Pyszka and Hays 2016). Wage-based labor took hold of the post-Emancipation economy through tenant farming[204] (Crook 2001, Morris 1998, Prunty 1955, Pyszka and Hays 2016, Reid 1973, Williamson 1965). By 1940 nearly all plantations operated on a wage-based, rather than tenant system; however, crop sharing still occurred (Van Auken 1950).

Hypothetically, the ability to earn wages made tenant farmers economically free (a sign of their Emancipation)[205]. In reality, economic freedom was stymied by low wages (Armstrong 2011, Baptists 2014, Hayden et. al 2013, Kane and Keeton 1994, Reid Jr. 1973, Zinn 2015), wage theft (Blackmon 2008, Montrie 2008, Stoesz 2016), indebtedness (Armstrong 2011, Hayden et. al 2013, Stoesz 2016), inadequate purchasing power related to blocked access to goods and land (Kelly et. al 2011, Tyson et. al 2013), blackmail including requiring work that extended beyond contracted terms (Williamson 1965) as well as structural events such as the Depression (Elias 2012) and continued systemic racism (Foner 1988, Du Bois as cited in McInnis 2016).

[204] Of course, wage labor existed prior to Emancipation for both free and in some cases, enslaved people (Berlin 1993, Fields-Black 2018, Williamson 1965, Zierden and Reitz 2009) and it did provide some degree of economic independence (Berlin 1993, Isenbarger 2006); however it was not the general economic situation for most enslaved people (Schweninger 1992) and there is no record of enslaved people earning wages at Stono .

[205] Crook 2001, Foner 1988, Hayden et. al 2013, Schweninger 1992

Wage-earning tenants were situated at the lower rung of the plantation hierarchy, just as their enslaved predecessors had been (Blackmon 2008, Brown and Cooper 1990, Holland 1990, Jackson 2011, Kane and Keeton 1994). Indeed, wage stagnation and the blocking of access to particular types of loans, credit, and other rights (or privileges, depending upon one's perspective) such as landownership, healthcare, and social security, continues to oppress people today (Blackmon 2008, Rothstein 2017, Stoesz 2016, Thomas 2019). A quote from Jacoby (2016:103) plainly states the situation of the Emancipation era's "great unacknowledged paradox; the United States' dependence on black labor for much of its prosperity, even as the nation persisted in denying civil rights to this essential workforce."

At the same time, the collective experience of oppression and marginalization that occurred Lowcountry plantations like Stono enabled the creolization of culture in general (Barnes and Steen 2012, Crook 2001, Donnan undated, Fields-Black 2018, Jones-Jackson 1987) and foodways specifically (Joseph 2016, Kaufman 2011, Robinson 2007, Steen and Barnes 2010). Neither enslaved people nor their tenant farming descendants were completely powerless; they resisted the inequities that surrounded them by overt and covert resistance including violent revolt, "lying out" of work, breaking tools, running away, and forming and nurturing their own communities and cultural practices including language, arts, and foodways (Donnan undated, Egerton 2006, Fennell 2011, Fields-Black 2018, Howson 1990, Lockley and Doddington 2012, Mullins 2008, Singleton 2001, Zierden and Reitz 2009 and others). They also fought for legal status as citizens and once that was achieved, they fought (and continue to fight) for social equity (Steen and Barnes 2012, Stoesz 2016, Thomas 2019). This fight of course, has not occurred without resistance from the former plantocracy and other (mostly white) people who imagine their power to be threatened by political, social, and economic equality (Baptist 2014, Creel 1988, Edgar 1998, Edge 2017, Foner 1988, Weisbrot 1991, Williamson 1965, Woody 1931, WPA interviews 1937).

Indeed, after Emancipation:

> Southern Whites built monuments to the defeated generals of their war for slavery, memorialized the old days of the plantation, and wrote histories that insisted that the purpose of the war had been to define their political rights against an oppressive state. They were successful in the last goal that they eventually convinced a majority of white Americans, including most historians, that slavery had been benign and that 'states' rights' had been the cause of the Civil War (Baptist 2014:409).

It is my intent that this dissertation will do one small part in righting this wrong by condemning Revisionist history and working toward a more honest look at history through archaeology.

The first step toward that goal is stating that yes, Emancipation was a change in legal status; however, Freedpeople did not experience immediate, complete liberty. They still lived within a biased, racist system, which is reflected in the fact that they were forced to work long hours for low wages that did not enable them to feed themselves using the resources that might otherwise have been available to them including the raising and home consumption of domesticated meats and the accumulation of luxury goods including ceramics, glass vessels, and wild meats (which had become rare on the island). They continued to grow subsistence gardens both as a means of self-defining, but also out of necessity (Frazier 2006 and 2010, WPA interviews)[206].

They were not only economically oppressed through blocked access to goods, but also through being forced to purchase within a system that ensured their continued accrual of debt (Baptist 2014, Blackmon 2008, Du Bois 1903, Gates 2019, Hayden et. al 2013, Kane and Keeton 1994, Lichtenstein 1998, Van Auken 1950, Weisbrot 1991, Williamson 1965, WPA interviews 1937). This system of debt slavery kept them from gaining the power that their population majority should have held under supposed American values that tell us every vote counts and that anyone can be successful if they simply work hard and spend frugally.

The economic system that prevented equity also reinforced the structural racism that grew out of chattel slavery. The trans-Atlantic slave trade thrived on the notion that Africans and African Americans[207] were a lesser people than Whites and that they thus should not enjoy the same human rights as Whites (Armstrong 2008, Brandon and Davidson 2005, Curran 2009, Mullins 2008, Orser 2007 and 2012, Rugemer 2013). This

[206] Although Van Auken (1950) states that tenant farmers often did not have garden plots, but were dependent upon plantation commissaries.
[207] Along with other non-whites/people of color (González-Tennant 2011, Sunseri 2015, Voss 2005).

fundamental belief still resonates throughout the Atlantic World (González-Tennant 2011, Graden 2014, Hauser 2009), the South (Bletzer 2004), and the Lowcountry today (Orser 2010, Raskin 2019) through the continued existence of poverty (Weisbrot 1991) and unequal access to social programs (Bletzer 2004, Rothstein 2017, Stoesz 2016, Wilson 2000), employment (Alexander 2012, Daniel 2013, Kane and Keeton 1994), legal ownership, and foodways including access to affordable, healthful foods (Alexander 2012, Brones 2018), the time and ability to cultivate (Beriss 2018, Daniel 2013), prepare and consume them, as well as the education (Brones 2018, Rothstein 2017) and worldview that encourages the consumption of healthful and ethically-based food choices (Bailey 2007, Nettles-Barcelona et. al 2015) and which foods are stereotyped as "Black" foods (Beriss 2018, Henderson 2007, Mintz and Du Bois 2002, Ruiz 2008).

Continuation of Creolization

This dissertation provides evidence that Emancipation did free enslaved people, but it did very little to impact their daily lives or improve their overall social and economic conditions. Little about their foodways seems to have changed in relation to Emancipation and the related shift from enslavement to tenant farming. This finding is not all that surprising considering the abundance of scholars who identify continuities within the cultural practices of African American Lowcountry peoples through time (see various works by Agha, Barnes, Ferguson, Joseph, Isenbarger, and Steen for examples). These continuities are not at odds with creolization as I see it.

Creolization is a (re)blending of cultural practices, values, and identity that functions as resistance to dominant institutions (Baumann 2004, Cusick 2000, Ferguson and Goldberg 2019). Such a collective is seen among the Gullah people of the Lowcountry (Barnes and Steen 2012, personal observation). At the same time, the enslaved and tenant farmers of the Lowcountry (as well as their twenty-first century descendants) are part of the society that has ostracized them through literal objectification (slaves were property), Black Codes, Jim Crow Laws, and unequal access to jobs, education, and other opportunities through systemic oppression that continues into the present (Goldberg 2014).

At the same time, the creolization process is not viewable through the data sets analyzed in this dissertation; no transformative foodways are identified through time. That is, the creolized foodways of enslaved Lowcountry residents continued to exist among their tenant farming descendants. It seems the continued existence of the Gullah people, and similarities among this group with non-Gullah identifying descendants of Stono Planation, Smith Plantation, and Ferguson Road residents serves as evidence that such a process occurred. As a process without end (Kaye 2009), it is likely that creolization continues to occur; we simply cannot observe it as it is primarily an ontological construct with material correlates that only sometimes and only partially serve as evidence of the process (Lucas 2014, Silliman 2012).

In terms of the Diasporan framework discussed in Chapter 3, the individuals who left behind the materials I analyzed in my dissertation research certainly count as members of the African Diaspora. While the identification with the Diaspora per se did not exist for the enslaved and tenant farmers at Stono Plantation, Smith Planation, or Ferguson Road because the concept was not yet in use, they definitely fall within the parameters of African Diaspora as defined here. These parameters include diaspora as a stance that theorizes, documents, and strives to understand the movement of black peoples from their ancestral homelands to a variety of host-lands, but goes beyond migration to social, psychic, political, cultural, and economic meanings of black movement and the interrelationships maintained among diasporans, their hosts, and their homelands (Vinson 2006:7).

In this dissertation I strive to understand the foodways of people who were taken captive, enslaved, and then later forced into a "second slavery" (Kaye 2009). Indeed, rather than situating the continuities and changes in material manufacturing techniques that arose with industrialization, I have identified continuities between "Africans" and the people of color with African ancestry living in the Lowcountry today. These continuities include consumption of stew-like meals typically composed of grain, vegetables, and proteins consumed from bowls. The particular ingredients and vessels used vary through time and space, but I argue, have roots within the African Diaspora of the Atlantic World. For example, rice and the processes used to grow and process it, was brought by Africans from African during the trans-Atlantic slave trade (Carney 1996) and continued until the rise of mechanization[208]. Related, is the practice of butchering meats into small fragments for use in such stews (Jones-Jackson 1987, Tuma 2006), a tradition

[208] Although the processes still exist in historical memory as discussed in Frazier (2006 and 2010) and can be witnessed in film and through material culture at the Charleston Museum or in person during living history events and tours at places such as Magnolia Plantation and Gardens or Boone Hall.

that also continues in parts of west African such as Guinea (Kelly Goldberg personal communication).

Another correlate of creolization among Lowcountry diasporans related to my research include fishing cast net production and use, which occurred until the construction of nets became mechanized. Still, the nets themselves are still in use today and their roots go back to African practices (Reitz 1994, Wood 1996). Of course, contemporary practices in Guinea and elsewhere are not definitively the source of butchery practices among eighteenth, nineteenth, and twentieth century Lowcountry inhabitants; there is variation within West Africa across the Atlantic World and among members of the Diaspora through space and time. Yet, I feel that acknowledging all influences for human practices is vital. While some elements of foodways on James Island such as cuisine persisted through time, others changed with the rise of modernization, industrialization, globalization, and capitalism. However, not all of these "progressions" created positive change. Racism was transformed through Emancipation and the Civil Rights Movement.

In order to illuminate the racism insidious in the Lowcountry, South, United States, Atlantic World, and planet Earth, and change it, it is necessary to identify the contributions of all human groups that contribute to our daily practices and worldviews. For Lowcountry residents identifying the "Black Majority" (Wood 1994) and "Black Rice" (Carney 1996) are steps toward reaching this goal. I hope that this dissertation contributes to our understanding of the experience of Black people at Stono Plantation, on James Island, and throughout the Lowcountry using archaeology such that we might all be "good people" (Ferguson 1975).

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APPENDIX A:
JAMES ISLAND LAND SALES BY ELEANOR (RIVERS) DILL: 1873 – 1878

1873	1874	1875	1876	1877	1878
Caesar Smith (et al.)	Ansell Fraser	Willie Brown	George Brown	Sandy Brown	Compton Bowman
	Jacob Farr (et al.)			Isaac Ferguson	Caesar Smith (et al.)
				Isaac Hamilton	

APPENDIX B:
JAMES ISLAND LAND SALES BY JOSEPH T. DILL: 1869 - 1888

1869	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1888	Illegible Year
Edward M. Froeben [?]	William G. Hinson	Amos Waters	Caesar Smith (et al.)	George Brown	Caesar Smith (et al.)	F. W. Wagoner H.	F. W. Wagoner H.	Compton - Bowman	A. Hamilton Jenkins	Henry Drayton	John Rivers	A. C. Rich-mond
	B. J. Whaley (et al.)	Sampson Fraser	J. E. M. Mitchell	Jacob Farr (et al.)		Francis M. Whaley (et al.)	Isaac Ferguson	Willie Brown	Adam Giles	Joseph E. La Roche		Alexan-der Pinckney
		Ephraim M. Clarke (et al.)	John A. Selby	Ansell Fraser		J. S. Thomas	Isaac Ferguson		Daniel Whaley	Nancy smith		Benjamin A. Deal (et al.)
			A. la Seabrook	Rawlins R. Royall		James G. Seabrook (et al.)	Isaac Hamilton		Dianna Fraser	Paul Drayton		Clindler [?] Masters [?]
			Daniel Glen	Robert Simmons			James Bradley, Sr.		Ezekiah Capers	Robert Holmes		Daniel Whaley

			Ceasar Smith (et al.)	Prosper Fladd			Ned White		George W. Hills	Sandy McDaniel		E. C. Clarke
				Ansell Fraser (et. al)			Peter Brown		H. H. Hunter			Edward - Whaley
				Jacob Farr (et al.)			Richard Logan		Issac Hamilton			Eleanor S. Wilem
							Robert Richards on		Jack Gadeden			Geo. F. Marstella (et al.)
							Sandy Brown		Jack Gadsden			Henry Mash (et al.)
							Sandy Brown		Jacob Brown			John Graysum
							Will Deas		January Singleton			John H. Sams (et al.)
							William McKelly (et al.)		Jim Fell			John H. Sams (et al.)

									Les[?] M. Conkey			Paris Ladson
									Morris Scott			Wallace Lawton (et al.)
									Paul Gertrude			William E. Pripptin [?]
									Peter Brown			William Fludd
									Peter Johnston			
									Renty Wash-ington			
									Sam Simmons			
									Sampson Roseman			

									Sarah B. Rivers			
									Scipio Singleton			
									Thomas Legare			
									Will Deas			
									William B. Hills			

APPENDIX C:
TENANTS CROSS-LISTED ON LEGAL DOCUMENTS WITH JOSEPH T. DILL

Lessor	Deed	Date	Bo ok	Pag e	Description of Property
Rivers, John	Conveyance	15 February 1855	H1 3	595	James Island
Legare, Solomon	(Illegible) Conveyance	31 January 1860	A11 1	361	James Island
Froeben, Edward M.	Lien on Crop	31 May 1869	B15	610	
Brown, George	Lease	October 1870	K16	518	James Island
Hinson, William G.	Conveyance	16 February 1871	W1 5	208	James Island
Whaley, B. J. et. al		1871			
Clarket, Ephraim M. et. al		1872			
Fraser, Sampson	Bill of Sale	1872	D	350	Illegible
Waters, Amos		1872			
Smith, Caesar et. al	Conveyance	March 1873	J16	303	James Island
Glen, Daniel		1873			
Mitchell, J. E. M.		1873			
Seabrook, A. la		1873			
Selby, John A.		1873			
Brown, Willie	Conveyance	01 February 1874	R16	155	James Island
Farr, Jacob et. al	Conveyance	01 February 1874	R16	96	James Island
Fraser, Ansell et. al	Conveyance	01 February 1874	R16	92	James Island
Sams, John H.	Lien on Crop	10 March 1874	L11	407	
Brown, George		1874			

Farr, Jacob et. al	Conveyance	1874			James Island
Fladd, Prosper		1874			
Fraser, Ansell		1874			
Royall, Rawlins R.		1874			
Simmons, Robert		1874			
Smith, Caesar et. al	Conveyance	1874	S16	194	James Island
Feguson, Isaac	Conveyance	01 December 1875	J17	158	James Island
Hamilton, Isaac	Conveyance	01 December 1875	J17	128	James Island
Compton & Bowman	Conveyance	11 July 1876	O17	106	James Island
Brown, Sandy	Conveyance	01 December 1876	J17	156	
Wagoner, F. W. H.	Bill of Sale	30 October 1877	K17	129	James Island
Wagoner, F.W.	Bill of Sale	30 October 1877	K17	129	
Bradley, James, Sr.		1877			
Brown, Peter		1877			
Brown, Sandy	Mortgage	1877	D	350	Illegible
Brown, Sandy	Mortgage	1877	D	350	Illegible
Deas, Will	Bill of Sale	1877	D	350	James Island
Ferguson, Isaac		1877			
Ferguson, Isaac		1877			
Hamilton, Isaac		1877			
Logan, Richard		1877			
McKelly, William, et. al	Conveyance	1877	D	350	James Island
Richardson, Robert	Mortgage	1877	D	350	St. John's Island
White, Ned		1877			
Royale, (Illegible)	Bill of Sale	20 February 1878	C18	28	James Island
Brown, Willie	Conveyance	1878			James Island

Compton-Bowman	Convey-ance	1878			James Island
Hills, William B.	Bill of Sale	21 January 1879	S17	95	
Legare, Thomas	Bill of Sale	21 January 1879	S17	93	
Hills, George W.	Bill of Sale	27 January 1879	S17	94	
Capers, Ezekiah	Bill of Sale	7 February 1879	S17	110	
Hester, H.H.	Bill of Sale	10 February 1879	S17	119	
Simmons, Sam	Bill of Sale	10 February 1879	S17	110	
Scott, Morris	Bill of Sale	20 February 1879	S17	200	
Brown, Jacob	(Illegible)	21 February 1879	S17	203	
Hill, Jim	Bill of Sale	21 February 1879	S17	202	
Deas, Will	Bill of Sale	25 February 1879	S17	199	
Singleton, Scipio	Bill of Sale	25 February 1879	S17	190	
Washington, Renty	Bill of Sale	25 February 1879	S17	111	
Whaley, Daniel	Bill of Sale	25 February 1879	S17	197	
Gertrude, Paul	Bill of Sale	07 March 1879	X17	210	
Moultry, Amos	Bill of Sale	11 March 1879	X17	211	
Fossett, William	Bill of Sale	19 March 1879	X17	221	
Jenkins, Robert	Bill of Sale	19 March 1879	X17	219	
Mash, Guy	Bill of Sale	23 April 1879	X17	239	
Conkey, Les M.	Agreement	05 May 1879	V17	212	
Reid, James	Bill of Sale	(Illegible) 1879	X17	217	
Brown, Peter		1879			
Fell, Jim	Bill of Sale	1879	D	350	James Island
Fraser, Dianna		1879			

Gadeden, Jack		1879			
Gadeden, Jack		1879			
Giles, Adam		1879			
Hamilton, Isaac		1879			
Hunter, H. H.		1879			
Rivers, Sarah E.		1879			
Roseman, Sampson		1879			
Singleton, January		1879			
Whaley, Daniel		1879			
Drayton, Henry	Conveyance	1880	D	350	James Island
Drayton, Paul	Conveyance	1880	D	350	James Island
Holmes, Robert		1880			
La Roche, Joseph E.		1880			
McDaniel, Sandy		1880			
Smith, Nancy	Conveyance	1880	D	350	James Island
Waters, Amos	Bill of Sale	08 January 1880	X17	253	
Gadsden, Prince	Bill of Sale	28 January 1880	X17	264	
Brown, Sandy	Bill of Sale	29 January 1880	X17	265	
Jenkins, Abram	Bill of Sale	04 February 1880	X17	254	James Island
Hills, George W.	Bill of Sale	05 February 1880	X17	267	
Simmons, April	Bill of Sale	07 February 1880	X17	274	
Brown, Cuffy	Bill of Sale	11 February 1880	X17	278	
Jenkins, Robert IV	Bill of Sale	12 February 1880	X17	268	
Fraser, Sampson	Bill of Sale	26 February 1880	X17	298	
Coapem, John	Bill of Sale	27 February 1880	X17	309	
Singleton, Scipio	Bill of Sale	29 March 1880	X17	320	
Rivers, Virgil	Bill of Sale	06 April 1880	X17	329	

Heyward, A.R.	Bill of Sale	19 April 1880	X17	33 9	
Conkey, James	Lien on Crop	6 May 1880	E18	18 4	
Brown, Sandy	Bill of Sale	20 May 1880	X17	34 3	
Singleton, Andrew	Bill of Sale	20 May 1880	X17	34 5	
Rivers, John	Conveyanc e	1888	P13		James Island
Jenkins, A Hamilton	Bill of Sale	13 Feb (illegible)	S17	12 0	
Johnston, Peter	Bill of Sale	25 February (illegible)	S17	20	
Richman, Richard	Bill of Sale	illegible	X7	24 8	
Waters, Thomas	Bill of Sale	illegible	S17	87	
Clarke, E. C.		illegible			
Deal, Benjamin A., et. al		illegible			
Edward-Whaley		illegible			
Fludd, William		illegible			
Graysum, John		illegible			
Ladson, Paris		illegible			
Lawton, Wallace, et. al		illegible			
Marstella, Geo. F., et. al		illegible			
Mash, Henry, et. al		illegible			
Masters, Clindler		illegible			
Pinckney, Alexander		illegible			
Pripptin, William E.		illegible			
Richmond, A. C.		illegible			
Sams, John H., et. al		illegible			
Sams, John H., et. al		illegible			
Wilem, Eleanor S.		illegible			

APPENDIX D:
CERAMIC WARE TYPES

1. Agate, refined (Whieldon-type): A dense, highly-fired earthenware covered with a transparent lead glaze. Marbling from the mixture of red and buff clays is visible on the surface and in cross-section. In some cases, white sprig molding or bands were applied. It was made in tableware and teaware vessel forms. There is also “laid agate,” which was made by press-molding agatized clay dyed in multiple colors, generally in hollow teaware forms, but this type is far less common and has not been uncovered at Stono. Date Range: 1740-1775.

2. American Stoneware: This “ware type” has a dense clay body and is light brown to brown, or medium to dark grey in color. Its surfaces are usually salt-glazed. It includes nineteenth century wares with the dark, glossy brown enrobe known as “Albany slip” and alkaline-glazed stonewares produced in the southern states, which are characterized by thick, runny translucent or milky glazes. Decorations include hand painted or stenciled designs without color or in cobalt blue, which are usually simple floral or stylized motifs; many vessels are undecorated. They are generally utilitarian wares such as storage jars and bottles, butter churns, bowls, and chamber pots. Date Range: 1750-1920.

3. Astbury Type: This ware is a dense, red-bodied, highly-fired earthenware covered with a clear lead glaze. The paste color can range from a pale pink/buff to dull red and is dense, almost stoneware like. The exterior color is often described as “ginger” and is more light brown than the red or dark red seen on “Redware, refined”. Astbury often has a white-slipped rim. It is often found with white spring molding and engine-turned decoration. The ware was typically used for tea services and bowls. Date Range: 1727-1750.

4. Bennington/Rockingham: Though some recognize this type as merely a variant of Yellow Ware (described below), DAACS identifies Bennington/Rockingham as a distinct ware type with characteristics of a buff refined earthenware paste and a lead glaze with inclusions of clear manganese that creates a “runny,” caramel-spotted effect. Date Range: 1830-1900.

5. Black Basalt: “Black Basalt” is Wedgwood’s name for a dry-bodied (unglazed), black to charcoal-gray stoneware; however, Black Basalt was made by a number of Staffordshire potteries.. The ware is also sometimes referred to as “Dry-Bodied Black Stoneware.” It is very dense and relatively thin-walled. It is essentially the same ware as Rosso Antico (discussed below) except that it had manganese added to produce the black clay body. Vessels of Black Basalt usually have sprigged decoration and are sometimes molded or engine-turned, or hand-painted in polychrome colors or gilding. The most common vessel forms are tea services, pitchers, and vases. Date Range: 1750-1820.

6. Bristol Glaze Stoneware: Bristol glaze refers to vessels, typically bottles (sometimes referred to as “Ginger Beer Bottles,” personal observation), with a two-toned surface,

the bottom half being white, and the top half a yellow to brown. The white surface is an allover opaque glaze, often applied to both the interior and exterior. The top half is a rendered brown by manganese oxide, iron oxide, or both. The glaze may be alkaline or alkaline-lead, so “Alkaline-Lead” is the default in DAACS. Although the first Bristol-glazed stoneware was produced in England in the nineteenth century, the ware was immensely popular and the glazing process was adopted by American potters by the 1880s. Date Range: post 1835.

7. British Stoneware: The term “British Stoneware” is used in DAACS to encompass any stonewares that are identifiable as British, but unidentifiable as any specific types such as Fulham[209].

8. Buckley-type: Produced in the Buckley district of Wales, and in other parts of what is now Great Britain. Buckley-type has a distinctive, two-toned “marbled” body composed of brick red clay amended with buff-colored clay and is typically highly-fired. It sometimes contains quartz, hematite, and white inclusions. The type is most often glazed with a very dark brown or black opaque or nearly opaque lead glaze. Milk pans are common and quite distinctive in form when made in this ware, having a thick rim that has a double-lipped exterior. Date rage: 1720-1775.

9. Canary Ware: Canary Ware was a white-bodied type of refined earthenware with a bright yellow glaze, produced in England and Wales. Luster decoration, transfer printing, and mottos are types of decoration commonly seen on Canary Ware. It is possible to

[209] For the Stono project, it most often refers to stonewares with cream colored paste and brown salt glazed exteriors (and sometimes interiors).

differentiate Canary Ware from the yellow-bodied, clear-glazed earthenwares known as Yellow Ware by its distinctive bright color, thin body, and less fine paste. Date Range: 1780-1835.

10. Coarse Earthenware, unid: This ware type is used for ceramic sherds identified as coarse earthenware, but that cannot be identified as a particular type such as Staffordshire slipware, that may fall into the Redware category but do not match the prescribed Redware Pantone colors as established by DAACS, or that cannot be identified as colonoware or indigenous.

11. Colonoware: Colonoware is an unglazed, low-fired ceramic. It varies in its appearance regionally; vessels in the Coastal Plain generally range from tan to gray in color. DAACS uses the ware type term "Colonoware" for wares produced after European contact and "Native American, prehistoric" to encompass ceramics produced prior to contact.

12. Distinguishing between pre-contact Native American pottery and Colonoware can be difficult because both "ware types" are relatively low-fired, are coil/slab built, have no glaze, are likely comprised of locally available clays, are sometimes shell-tempered, and have some overlap in common vessel forms[210].

13. Creamware: Creamware was first successfully marketed by Josiah Wedgwood as "Queen's Ware." It has a cream-colored body covered by a clear lead glaze that, in

[210] To differentiate colonoware from wares of indigenous production, I rely upon my years of experience and training from Drs. Kathleen Deagan and Chester DePratter, as well as Ron Anthony, Jim Legg, Tammy Herron, Heathley Johnson, Carl Halbirt and scpottery.com.

puddled areas such as foot rings appears yellow or olive-yellow. Early creamware tends overall to be a deeper yellow or darker cream color than in later years. Decoration types include molded rims, including “Feather Edge” and neoclassical borders, are common decorative techniques in early vessels; hand painted overglaze enamel colors, over and underglaze transfer printing, and annular style decoration are also seen, particularly in later years. Engine-turned bodies and sprig molding are seen throughout the span of this ware type. Date Range: (overall) 1762-1820.

14. Delftware, Dutch/British: The term “Delftware” collectively refers to tin-enameled ware from England and the Netherlands. Delftware has a very soft clay body that is most often buff or pinkish-buff in color, but it can range from salmon to pale yellow. Delft from the Stono site tends to have buff-colored paste. The tin glaze of Delft is opaque white glaze that usually has a pale blue tint, but it can also be a grayish-white. It is fragile and readily flakes off. Cobalt-blue, hand-painted designs are most frequent, but polychrome hand-painted decoration is not uncommon. Date Range: 1600-1800.

15. Faience: Faience is a French, tin-enameled earthenware. Its grainy body is most often buff in color, but like most tin-enameled wares it can range from deep salmon to nearly cream. It is most often seen in platters, bowls, and mugs, although it can come in very thick body forms, with a narrow blue and black border on interior rims. Date Range: 1700-1800. Specific faience types uncovered in this study were identified based on FLMNH guidelines.

16. German Stoneware: This “type” is used in DAACS to encompass any stonewares that are identifiable as German due to their fine gray paste, but unidentifiable as any specific types such as Westerwald.

17. Iberian Ware: Iberian vessels (also referred to as “(Spanish) Olive Jar,” personal observation) are most often seen in the form of very large, undecorated storage jars used to transport olive oil and dried goods. The body is thick with obvious potting rings on interior surfaces. The paste color ranges from dusty red to pinkish brown to beige in color and usually includes granules of a white, chalk-like temper or, less often, sand. Exterior surfaces are not glazed, but often have traces of what appears as a chalky, white wash. Low, crescent-shaped handles can be found on the shoulders. Interior surfaces are sometimes treated with a dark brown lead glaze (indicating that the vessel was used to transport liquids); this glaze is almost always heavily spalled on sherds that have been uncovered archaeologically. Iberian jars have wide mouths with thick rims (sometimes referred to as “donuts” via personal observation), no neck, and expand at the shoulder and taper to a flat or conical base. Lids are unglazed slabs of clay that are roughly circular. Date Range: 1600-1800. For my research, particulars about period of production based on form follow guidelines set by FLMNH.

18. Ironstone/White Granite: Ironstone and White Granite are later forms of whiteware. They can be distinguished from whitewares by their dense white paste, that will occasionally be light grey to slight blue in color. Ironstone and White Granite wares have harder, less porous clay bodies than whitewares. The alkaline-lead glazes generally had whiteners and opacifiers such as calcium, zinc, or tin added. Ironstone/White Granite

comes in a wide range of vessel forms, which are often heavier, with vessel body thicknesses greater than whiteware vessels[211]. Date Range: post 1840.

19. Jackfield Type: Jackfield has a dense, purplish-black to gray refined earthenware body, high-fired, with a glossy black lead glaze. Molded spouts and handles are common; some vessels have oil gilded designs over the glaze. Thomas Whieldon's Jackfield wares had a slightly redder body than those of other producers. Forms include tea wares and pitchers. Date Range: 1745-1790.

20. Majolica: Majolica is a tin-enameled earthenware that was produced primarily in Spain and Mexico. The paste color is highly variable, depending on the type, with an overall white or pale blue tin-enamel glaze. The decoration may be a single color, such as blue and white, but is more commonly polychrome. Botanical motifs are common, and much of the painting has a soft, impressionistic quality, in contrast to the sharper scenic or representational decorations on tin glazed wares such as Delft. Tablewares such as plates and assorted hollow forms are the most common vessel forms for the ware type. Date Range: 1540-1800, although narrower ranges possible depending on Tin Enamel Types represented. Specific majolica types were identified based on FLMNH typologies.

21. Native American: DAACS employs an attribute-based system for cataloging of prehistoric Native American ceramics. This system was developed so that historical archaeologists, possibly unfamiliar with prehistoric Native American ceramics could

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[211] For the Stono site, most ironstones are grayish in color rather than pure white and/or do not have the high density crazing of whitewares.

catalog these ceramics in a way that, although simple, would provide descriptive information that archaeologists studying the Woodland and Contact Periods could use. As mentioned, distinguishing prehistoric Native American ceramics from Colonoware (which may in some cases be produced or influenced by Indian potting traditions) and small fragments of other coarse earthenwares can prove quite difficult. Generally though, those sherds identified as “Native American” ceramics are hollow forms such as storage jars and have either no surface treatment or are surface treated with textile impressions (net impressed, fabric impressed), simple stamping, cord-marking, or punctuate designs near the rim.

I have taken DAACS guidelines and numerous other typologies[212] into consideration when differentiating between Native American and colonowares. Some of the sherds I have identified as Native American, could be considered colonowares and some of the sherds I have identified as colonowares could be identified as Native American by other analysts. It is beyond the scope of this project to tease apart typologies that have been under study for decades and remain “muddy”[213].

22. North Devon: This coarse earthenware exhibits surface and interior reduction from uneven firing conditions. The body ranges in color from salmon pink or orange to dark gray. There are two primary types of North Devon Ware, plain and gravel tempered.

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[212] Anthony 2009, Baumann 2004, Brilliant 2011, Fairbanks 1984, Ferguson 1992, Isenbarger 2006, Mullins 2008, Singleton 1995, Steen and Barnes 2010, Weik 2009, Wheaton and Garrow 1985. Also, scpottery.com for specific indigenous produced ceramic typologies.

[213] The difficulties of creating typologies for handmade ceramics are well known. See Bloch 2018: https://sha.org/blog/2018/02/

These are differentiated by the presence or absence of gravel in the paste. In both variants the lead glaze is transparent or translucent, ranging from bright yellow to olive green or brown in appearance, depending on the degree of reduction. Occasionally an allover white slip is present beneath the glaze. The most common forms are large shallow plates, bowls, milk pans, and storage jars. Date range: 1600 to 1710 (plain), 1775 (gravel tempered).

23. Nottingham: Nottingham is an English brown stoneware with an even, lustrous or metallic brown slipped exterior. A thin white layer that can be seen only in cross-section lies between the brown exterior and the tan, compact clay body. The ware is salt-glazed, though the characteristic pitted effect of salt-glazing is not evident. Bands of rustication (fragments of clay applied to exterior surfaces, resulting in an appearance similar to grated coconut) are a common decorative technique. It is seen in finely-potted tavern vessels such as mugs, tankards, pitchers, as well as bowls, coffee and tea pots. Date Range: 1700-1810.

24. Pearlware: Pearlware has an off-white clay body with a clear lead glaze that has a slightly bluish tint, most evident where the glaze has built up, as in foot rings, etc. Decorations include molded rims, with "Shell Edge" the most common. These rims were painted blue and, to a slightly lesser extent, green. Blue and polychrome hand-painted designs, transfer printed patterns, and annular, common cable, and dendritic motifs are common and are sometimes seen in combination with engine-turned bodies and sprig-molded elements. Date Range: (overall) 1775-1830.

25. Porcelain, Chinese: Chinese porcelain is a hard-paste porcelain. It has an extremely dense body that is white in color. The hard, very glossy, transparent glaze is fused to the body and has a bluish or light gray tint. Blue underglaze hand-painted floral and landscape designs are most common. Overglaze paint is also common and colors include red, black, green, pink, pale green, and gilding, and are often used in combination with underglaze blue[214]. Later vessel forms were often quite thick, and designs had a heavy-handed quality. Date Range: post 1690.

26. Porcelain, unidentifiable: This category is used for porcelains that cannot be identified as Chinese, Japanese, or Hard Paste (Porcellaneous). Most unid porcelains from the Stono site are probably either European or American manufacture based on their bright white appearance but are potentially of twentieth century production and so have not been categorized as Porcellaneous.

27. Porcelain, Japanese: Japanese porcelain became available early in the eighteenth century. From 1690-1720, Japanese porcelains tend to be heavier and thicker than most contemporary Chinese porcelains. Sherds may also have small, pimple-like blemishes, which are found on the bases of Japanese porcelains, but not other types due to a unique firing technique. The glaze on Japanese porcelain also tends to be thicker than on Chinese porcelain. Common decorations include underglaze and overglaze painting, as well as transfer printing as on Chinese porcelains, but the blue color used in underglaze painting on Japanese porcelain is grayer in hue than the typical Chinese blue.

[214] Other decoration techniques are also seen as described in the *DAACS Cataloging Manual: Ceramics*, but these were not uncovered on the Stono or Smith Plantation sites.

The designs are also usually less-sharp than on Chinese porcelain, as the glaze on Japanese porcelain tends to run.

28. Porcellaneous/Hard Paste: Porcelains produced during the later nineteenth and twentieth centuries in England, America, and elsewhere are fired to hard-paste consistency but are usually referred to as "Porcellaneous" wares. Porcellaneous wares and English hard-paste porcelains have very dense, hard porcelain bodies and are translucent. Vessels are dead white in color and the clear glaze is glassy in appearance. Molded forms, sprig molding, transfer printed designs, and hand-painting are all seen, but twentieth-century vessels are almost exclusively decorated over the glaze with decalcomania and liquid gold. Date Range: post 1820[215].

29. Red Agate, coarse: This ware is a wheel thrown, coarse-grained earthenware initially introduced in Staffordshire during the third quarter of the eighteenth century. The paste was formed by wedging two or more clays together (usually red and white/yellow). Forms are primarily tablewares and frequently have rouletted bands or white slip decorations. The distinction between "Red Agate, Coarse" and "Red Agate, Refined" is often difficult at the sherd level. The designation is based primarily on decoration, thickness and, form. Vessel forms are mainly utilitarian. Date range: 1750-1800.

30. Red Agate, refined: This ware type has a fine-grained clay body, that is often wheel thrown. Like Red Agate, coarse it has a two-color paste that is the result of wedging two different clays (red and white/yellow) together. It's glaze is clear and lead-fluxed. Forms

[215] Some of the porcelains cataloged as porcelain, unid from the Stono assemblage may fit into this category, but I decided against this due to their potential modernity, which means they could have been produced nearly anywhere.

are primarily teawares, mugs, and bowls. The distinction between “Red Agate, Coarse” and “Red Agate, Refined” is often difficult at the sherd level. The designation is based primarily on decoration, thickness and, form. Date range: 1750-1800.

31. Redware: “Redware” is a generic name sometimes used for red-bodied coarse earthenwares. In DAACS, Redwares have been defined as those wares whose body color (as viewed along the broken edge of the sherd) falls into one of the following four color chip categories found in the Redware Color Range section of the DAACS Color Book: Pantone 718, 722, 55 7412 or 7592. These strict guidelines mean that some sherds that other scholars (FLMNH, for example) would identify as “Redware” have not in this study been identified as such, but rather as “Coarse Earthenware, unid.”

32. Redware, refined: “Redware, refined” is used to describe fine-pasted, thin-walled red bodied earthenwares that date to the first three decades of the nineteenth century. It was most commonly made in hollow vessel forms, especially creamers and small pitchers, which tend to have a clear lead glaze. Common decorative types include a variety of luster colors, rustication, yellow transfer print/portebello, and underglaze painting. A white slip on the interior of red-bodied refined ware, especially one with exterior luster decoration, is not uncommon. As with “Redware,” Redware Refined must match one of the four Pantone colors (718, 722, 7412 or 7592) prescribed by DAACS in order to be cataloged as this particular type.

33. Refined Earthenware, modern: DAACS defines modern refined earthenwares as any refined earthenware type that post-dates 1900. I use the term only when I cannot

identify a ware as whiteware or other refined earthenware due to its late production period as based on attributes such as brightly colored solid painted finishes.

34. Refined Earthenware, unidentifiable: As with Stoneware, unidentifiable, this ware type is only used for refined earthenwares that cannot be positively identified as a particular ware type such as Creamware, Pearlware, or Whiteware.

35. Refined Stoneware, unidentifiable: This category is used only for refined stonewares that cannot be identified as a particular type such as White Salt Glazed Stoneware.

36. Staffordshire Brown Stoneware: Staffordshire Brown is virtually identical to Nottingham stoneware except for the absence of an underlying white slip. The clay body is tan to medium gray in color; forms are the same as in Nottingham. Date Range: 1700-1800.

37. Rosso Antico: "Rosso Antico" is Wedgwood's name for a dry-bodied (unglazed), red stoneware, that is very dense and thinly potted. However, it was produced by a number of Staffordshire potters who sometimes referred to it as "Dry-Bodied Red Stoneware." It is sometimes referred to as "Ellersware" (Honerkamp 2008 and personal observation). Decorations include sprigged, molded, and/or engine turned incising or cordoning (inset bands encircling vessel). It is primarily seen in tea and coffee services. Date Range: 1700-1772.

38. Slipware, North Midlands/Staffordshire: This type is a distinctive yellow coarse earthenware that is sometimes referred to as "combed," "combed and dotted," or "dotware." The lead-glazed, buff body includes a sparse peppering of dark inclusions; it is covered with a white slip (appearing yellow beneath the transparent glaze) into which

trails and/or dots of red slip (appearing brown beneath the glaze) have been introduced. The lead glaze usually does not extend to the foot. The most common forms are combed platters and shallow bowls, produced using press molding, usually having crimped edges, and handled cups or mugs. The latter usually have dotted rims (the dots are about 1 cm in diameter) with several thin, parallel trails of slip encircling the bulbous bodies. Flat form vessels usually have crimped rims. Dotwares range from 1700-1770, and combed dishes from 1670-1795.

39. Staffordshire Mottled Glaze: This finely-potted ware has a caramel brown lead glaze with evenly-dispersed, dark purplish-brown flecks and streaks of manganese; the flecks are generally small in size. The dense clay body has a grainy texture and is light tan in color. The most common forms are small tankards, bowls, and other tavern ware. These forms are sometimes cordoned above the base. Date Range: 1680-1780.

Stoneware, unidentifiable: In keeping with DAACS protocol, this ware type is used only when a sherd can be identified as stoneware, but not as a particular type such as Bristol or Westerwald or even to a particular regional style such as “British.”

40. Tin-Enameled, unid: These wares are those that are tin enameled but cannot be identified as Delft, Faience, or Majolica.

41. Westerwald/Rhenish: Westerwald is a German salt-glazed stoneware with a very dense clay body, light to medium gray in color. It is decorated with incised and stamped flower motifs, checks, and abstract designs that are usually filled with a rich cobalt blue. Manganese (purple) is found along with the cobalt blue in earlier vessels. Sprig molding is also common but has not been uncovered at the Stono site. Tankards and mugs are

usually cordoned above the base and below the rim. Most often seen in tankards, mugs, chamber pots, and, in earlier contexts, cordoned, cylindrical-necked serving jugs. Date Range: post 1600-c.1775; blue and purple: 1650-c.1725.

42. Whieldon-type Ware: Whieldon Ware is associated with Thomas Whieldon's factory in England. It is early refined earthenware that has a lead glaze splashed with translucent colors. Decorations include molded vessel rims, which may be borrowed from the white salt-glazed repertoire. Most vessels of this type were teawares and tablewares. Date Range: 1740-1775.

43. White Salt Glaze: White salt-glazed stoneware is an English stoneware with a nearly white, dense clay body. The salt glaze produces a finely pitted surface. White salt-glazed stoneware could be finely potted on a wheel or press molded. It was used extensively for table and tea wares, as well as for tavern ware and chamber pots. Molded vessel rims, including a distinctive repertoire of plate rims, are very common as are sprigged decorations. Overglazed polychrome enamel colors are also seen. Date Range: 1720-1805.

44. Whiteware: Whiteware is refined earthenware that more or less evolved from pearlware. The body is very dense and white with a clear glaze that often appears thick and glassy, with overall, large-patterned crazing. When puddled, whiteware glazes sometimes appear blue-tinted, but note that the overall surface is white. Glazes on whitewares were either lead or more commonly alkaline-lead. Visually distinguishing glaze type is nearly impossible, therefore DAACS requires recording the glaze as "Alkaline-Lead." Whiteware vessels can be "thick and clunky." Indeed, later forms of

whiteware may be identified as Ironstone and/or White Granite wares due to their thick walls. Many whiteware vessels were undecorated. Transfer printed designs are the most commonly seen form of decoration.

APPENDIX E:
FERGUSON ROAD TAXA IDENTIFIED AT LOWEST POSSIBLE LEVEL

Artifact ID	Count	Category	Taxon English	Taxon Latin	Element	Bone Weight (g.)
53.30-31.3	1	Vertebrate	Vertebrate	unid	skull	2.0
38.18-5	1	Vertebrate	Vertebrate	unid	unid	1.5
53.62-10.3	2	Vertebrate	Vertebrate	unid	unid	3.8
53.62-10.4	23	Vertebrate	Vertebrate	unid	unid	26.1

53.62-10.5	16	Vertebrate	Vertebrate	unid	unid	15.1
53.62-16.2	2	Vertebrate	Vertebrate	unid	unid	2.4
36.12	3	Vertebrate	Vertebrate	unid	unid	1.1
53.30-37	1	Vertebrate	Vertebrate	unid	unid	0.6
32.32-3	2	Vertebrate	Vertebrate	unid	unid	0.7
36.22-1	1	Fish	fish	unid	vertebra	0.3
NONE	2	Fish	fish	unid	vertebral spines	0.3

53.30-23	1	Fish	fish	unid	operculum	6.1
36.22-2	8	Reptile/Amphibian	turtle	unid	carapace/plastron	5.5
36.12	1	Reptile/Amphibian	turtle	unid	carapace/plastron	0.1
46.23-3	1	Reptile/Amphibian	turtle	unid	carapace/plastron	1.2
39.29-1	1	Reptile/Amphibian	turtle	unid	carapace/plastron	1.3
26.9	8	Bird	bird	unid	various long bones	3.3
32.27-8	1	Mammal	Mammal	unid	skull	2.7

46.12-6	1	Mammal	Mammal	unid	tooth	0.5
38.18-2	1	Mammal	Mammal	unid	tooth	3.3
53.30-30	1	Mammal	Mammal	unid	tooth	0.6
32.27-4.1	1	Mammal	Mammal	unid	tooth root	0.3
53.30-8	1	Mammal	Mammal	unid	tooth root	0.5
39.29-2	1	Mammal	Mammal	unid	scapula	0.7
38.18-3	1	Mammal	Mammal	unid	scapula	22

51.17-6	1	Mammal	Mammal	unid	vertebra	27.2
45.9	7	Mammal	Mammal	unid	vertebra	31.1
53.30-19	1	Mammal	Mammal	unid	vertebra	9.3
51.17-5	1	Mammal	Mammal	unid	rib	15.1
50.17-2	1	Mammal	Mammal	unid	rib	17.1
50.17-5	1	Mammal	Mammal	unid	rib	4.6
46.23-2	1	Mammal	Mammal	unid	rib	0.2

46.12-2	1	Mammal	Mammal	unid	rib	27.1
46.12-5	1	Mammal	Mammal	unid	rib	22
46.12-7	1	Mammal	Mammal	unid	rib	0.3
46.12-8	1	Mammal	Mammal	unid	rib	0.3
38.18-7	1	Mammal	Mammal	unid	rib	7.5
38.18-8	1	Mammal	Mammal	unid	rib	5.2
38.9-1	1	Mammal	Mammal	unid	rib	28.7

38.9-2	1	Mammal	Mammal	unid	rib	4.5
36.22-2	1	Mammal	Mammal	unid	rib	4.1
36.12	1	Mammal	Mammal	unid	rib	3.9
36.12	1	Mammal	Mammal	unid	rib	0.6
32.27-16	5	Mammal	Mammal	unid	rib	22.1
53.30-16	1	Mammal	Mammal	unid	rib	20.5
53.30-17	1	Mammal	Mammal	unid	rib	21.1

53.30-18	7	Mammal	Mammal	unid	rib	38.5
53.30-19	1	Mammal	Mammal	unid	rib	15.7
36.22-6	1	Mammal	Mammal	unid	radius	10.8
32.27-15	1	Mammal	Mammal	unid	tibia	8.5
33.5-1.1	4	Mammal	Mammal	unid	tibia	20.7
31.19-5	1	Mammal	Mammal	unid	tibia	16.3
38.9-4	1	Mammal	Mammal	unid	unid	16.7

32.27-13	1	Mammal	Mammal	unid	unid	1.6
32.27-14.2	1	Mammal	Mammal	unid	unid	2.3
32.27-14.3	9	Mammal	Mammal	unid	unid	11.8
33.5-2	6	Mammal	Mammal	unid	unid	3.5
31.19-1	3	Mammal	Mammal	unid	unid	1.4
31.19-2.2	2	Mammal	Mammal	unid	unid	0.7
31.19-2.3	1	Mammal	Mammal	unid	unid	0.5

53.30-23	12	Mammal	Mammal	unid	unid	31.1
53.30-45.1	1	Mammal	Mammal	unid	unid	0.5
53.30-45.2	2	Mammal	Mammal	unid	unid	2
49-10-2	5	Mammal	Mammal	unid	unid	5.3
52.11-2	10	Mammal	Mammal	unid	unid	17.6
51.17-8	1	Mammal	Mammal	unid	unid	3.1
51.17-8	15	Mammal	Mammal	unid	unid	44.3

51.17-8	7	Mammal	Mammal	unid	unid	11
51.17-8	7	Mammal	Mammal	unid	unid	4.1
50.17-3	2	Mammal	Mammal	unid	unid	2.3
50.17-4	1	Mammal	Mammal	unid	unid	16.2
46.23-1	4	Mammal	Mammal	unid	unid	1.4
46.12-3	6	Mammal	Mammal	unid	unid	5.4
46.12-3	6	Mammal	Mammal	unid	unid	0.1

43.26-1	3	Mammal	Mammal	unid	unid	2.1
43.13-2	1	Mammal	Mammal	unid	unid	5.7
43.13-2	7	Mammal	Mammal	unid	unid	5.3
39.29-5	1	Mammal	Mammal	unid	unid	4.1
39.29-5	1	Mammal	Mammal	unid	unid	1.2
39.29-5	3	Mammal	Mammal	unid	unid	2.7
38.18-8	6	Mammal	Mammal	unid	unid	13.6

38.18-8	5	Mammal	Mammal	unid	unid	4.7
38.9-2	1	Mammal	Mammal	unid	unid	1.7
38.9-3	8	Mammal	Mammal	unid	unid	6.4
36.22-2	3	Mammal	Mammal	unid	unid	3.3
36.12	1	Mammal	Mammal	unid	unid	7.9
36.12	5	Mammal	Mammal	unid	unid	7.3
32.18-	10	Mammal	Mammal	unid	unid	25.4

32.18-	1	Mammal	Mammal	unid	unid	0.4
32.32-3	1	Mammal	Mammal	unid	unid	5.5
53.30-18	1	Mammal	Mammal	unid	unid	12.3
53.30-21	36	Mammal	Mammal	unid	unid	43.8
53.30-21	36	Mammal	Mammal	unid	unid	13.2
31.19-2.1	1	Mammal	river otter	*Lontra canadensis*	mandible	1.3
32.27-7	1	Mammal	pig	*Sus scrofa*	premaxilla with unerupted incisor	9.2

32.27-3	1	Mammal	pig	*Sus scrofa*	maxilla and molar	5.4
36.22-3	2	Mammal	pig	*Sus scrofa*	mandible	23.8
32.18-1	1	Mammal	pig	*Sus scrofa*	mandible	4.1
32.18-2	1	Mammal	pig	*Sus scrofa*	mandible	5.1
32.18-	1	Mammal	pig	*Sus scrofa*	mandible	4.3
49.10-1	1	Mammal	pig	*Sus scrofa*	mandible, tooth	5.7
32.27-2	1	Mammal	pig	*Sus scrofa*	molar	5.2

53.62-8	1	Mammal	pig	*Sus scrofa*	premolar (lower)	1.4
32.27-9	1	Mammal	pig	*Sus scrofa*	premolar	2.2
32.27-10	1	Mammal	pig	*Sus scrofa*	premolar	0.9
53.30-29	1	Mammal	pig	*Sus scrofa*	premolar	1.4
32.27-11	1	Mammal	pig	*Sus scrofa*	incisor	0.4
52.11-3	1	Mammal	pig	*Sus scrofa*	tooth	0.9
46.18-1	1	Mammal	pig	*Sus scrofa*	tooth	0.9

46.12-3	1	Mammal	pig	*Sus scrofa*	tooth	0.9
32.18-3	1	Mammal	pig	*Sus scrofa*	tooth	1.3
32.27-12	1	Mammal	pig	*Sus scrofa*	tooth	0.5
31.19-4	1	Mammal	pig	*Sus scrofa*	tooth	2.1
32.27-4.2	1	Mammal	pig	*Sus scrofa*	tooth root	1.2
36.22-5	1	Mammal	pig	*Sus scrofa*	humerus	13.8
32.32-2	1	Mammal	pig	*Sus scrofa*	radius	10.6

32.32-1	1	Mammal	pig	*Sus scrofa*	phalanx, medial (2)	1.5
38.18-1	1	Mammal	deer	*Odocoileus virginianus*	tooth	5.1
43.13-1	1	Mammal	deer	*Odocoileus virginianus*	femur	41.3
24.1	1	Mammal	deer	*Odocoileus virginianus*	metatarsal	48.1
24.2	1	Mammal	deer	*Odocoileus virginianus*	phalanx, proximal	5.8
53.30-23	6	Mammal	cow	*Bos taurus*	cranium	43.7
53.30-23	1	Mammal	cow	*Bos taurus*	frontal bone	5.6

53.30-23	1	Mammal	cow	*Bos taurus*	frontal bone	3.8
53.30-23	1	Mammal	cow	*Bos taurus*	palatine bone	7.8
53.30-41.2	7	Mammal	cow	*Bos taurus*	palatine bones	23.6
53.30-23	1	Mammal	cow	*Bos taurus*	zygomatic	9.8
53.30-23	1	Mammal	cow	*Bos taurus*	zygomatic	11.6
53.30-39	1	Mammal	cow	*Bos taurus*	zygomatic	8.1
53.30-40	1	Mammal	cow	*Bos taurus*	zygomatic	12.8

32.27-5	5	Mammal	cow	*Bos taurus*	maxilla and molars	20.5
53.30-9	1	Mammal	cow	*Bos taurus*	maxilla, teeth	59.5
53.30-22	1	Mammal	cow	*Bos taurus*	maxilla, teeth	11.4
53.62-14.1	1	Mammal	cow	*Bos taurus*	skull (area of zygomatic arch and supraorbital process)	11.7
53.62-14.2	1	Mammal	cow	*Bos taurus*	skull (orbital)	6.3
53.62-12	1	Mammal	cow	*Bos taurus*	supraorbital process	8.8
31.19-2.5	7	Mammal	cow	*Bos taurus*	skull	10.3

53.30-36	1	Mammal	cow	*Bos taurus*	skull	3.8
53.30-41.3	1	Mammal	cow	*Bos taurus*	skull	4
53.30-41.4	1	Mammal	cow	*Bos taurus*	skull	8.8
53.62-14.4	2	Mammal	cow	*Bos taurus*	skull	19.9
32.27-6	1	Mammal	cow	*Bos taurus*	mandible	17.1
53.62-14.5	1	Mammal	cow	*Bos taurus*	mandible	6.6
53.62-14.3	1	Mammal	cow	*Bos taurus*	mandiblular ramus	6.1

53.62-6	1	Mammal	cow	*Bos taurus*	molar (probable lower)	1.8
31.19-3	1	Mammal	cow	*Bos taurus*	molar	12.3
53.30-24	1	Mammal	cow	*Bos taurus*	molar	4.3
53.62-4	1	Mammal	cow	*Bos taurus*	premolar (lower)	1.5
53.62-5	1	Mammal	cow	*Bos taurus*	premolar (lower)	5.3
53.30-25	1	Mammal	cow	*Bos taurus*	premolar	2.9
53.6-1	1	Mammal	cow	*Bos taurus*	premolar	7.9

53.30-27	1	Mammal	cow	*Bos taurus*	cheek tooth	1.5
53.62-7	1	Mammal	cow	*Bos taurus*	incisor	2.3
49.10-3	1	Mammal	cow	*Bos taurus*	tooth	6.7
49.10-4	1	Mammal	cow	*Bos taurus*	tooth	4.5
51.17-2	1	Mammal	cow	*Bos taurus*	tooth	10.5
51.17-3	1	Mammal	cow	*Bos taurus*	tooth	15.5
50.17-1	1	Mammal	cow	*Bos taurus*	tooth	10.1

53.30-1	1	Mammal	cow	*Bos taurus*	tooth	17.8
53.30-2	1	Mammal	cow	*Bos taurus*	tooth	11
53.30-3	1	Mammal	cow	*Bos taurus*	tooth	13.9
53.30-4	1	Mammal	cow	*Bos taurus*	tooth	6.5
53.30-5	1	Mammal	cow	*Bos taurus*	tooth	2.1
53.30-6	1	Mammal	cow	*Bos taurus*	tooth	3
53.30-7	1	Mammal	cow	*Bos taurus*	tooth	2.7

53.30-26	1	Mammal	cow	*Bos taurus*	tooth	1.3
36.22-4	1	Mammal	cow	*Bos taurus*	vertebra	19.1
31.19-6	1	Mammal	cow	*Bos taurus*	vertebra	8.1
53.30-23	2	Mammal	cow	*Bos taurus*	vertebra	75.7
53.30-31.1	1	Mammal	cow	*Bos taurus*	vertebra	1.8
53.30-48	1	Mammal	cow	*Bos taurus*	vertebra	12.1
32.27-14.1	1	Mammal	cow	*Bos taurus*	rib	2.9

53.62-10.2	1	Mammal	cow	*Bos taurus*	rib	3.1
53.62-10.1	1	Mammal	cow	*Bos taurus*	scapular neck	6.6
53.62-16.1	1	Mammal	cow	*Bos taurus*	glenoid fossa	4.4
51.17-9	1	Mammal	cow	*Bos taurus*	humerus	16.1
32.27-1	1	Mammal	cow	*Bos taurus*	humerus	178.6
53.62-11	1	Mammal	cow	*Bos taurus*	coronoid process	17.6
46.12-1	1	Mammal	cow	*Bos taurus*	radius	97.9

53.30-41.1	2	Mammal	cow	*Bos taurus*	ulna	9.6
53.30-32	1	Mammal	cow	*Bos taurus*	ilium	64.9
53.30-42	1	Mammal	cow	*Bos taurus*	ilium	35
53.30-43	1	Mammal	cow	*Bos taurus*	ilium	31.3
39.29-3	1	Mammal	cow	*Bos taurus*	pelvis (ilium)	24.4
53.30-20	1	Mammal	cow	*Bos taurus*	pelvis (ilium)	62.6
51.17-10	1	Mammal	cow	*Bos taurus*	pelvis (acetabulum)	21.3

53.62-15.1	1	Mammal	cow	*Bos taurus*	pelvis	9.6
53.30-38.1	1	Mammal	cow	*Bos taurus*	femur, distal condyle	6
49.12-1	1	Mammal	cow	*Bos taurus*	tibia	45.2
53.62-13	1	Mammal	cow	*Bos taurus*	long bone	14.9
31.19-2.4	1	Mammal	cow	*Bos taurus*	long bone	3.5
53.30-15	1	Mammal	cow	*Bos taurus*	metapodial	54.8
53.30-28	1	Mammal	cow	*Bos taurus*	metapodial	57.6

53.30-46	1	Mammal	cow	*Bos taurus*	metapodial	3.9
53.30-47	1	Mammal	cow	*Bos taurus*	metapodial	1.4
53.62-9	1	Mammal	cow	*Bos taurus*	metapodial	15.7
53.6-2	1	Mammal	cow	*Bos taurus*	metapodial	26.3
53.30-14	1	Mammal	cow	*Bos taurus*	metacarpal	81.8
53.30-13	1	Mammal	cow	*Bos taurus*	metatarsal	96
51.17-1	1	Mammal	cow	*Bos taurus*	phalanx	30.6

53.30-10	1	Mammal	cow	*Bos taurus*	phalanx	18
53.30-11	1	Mammal	cow	*Bos taurus*	phalanx	20.5
53.30-12	1	Mammal	cow	*Bos taurus*	phalanx	17.2
53.30-19	1	Mammal	cow	*Bos taurus*	phalanx	12.7
53.62-2	1	Mammal	cow	*Bos taurus*	proximal phalanx	16
53.62-3	1	Mammal	cow	*Bos taurus*	medial phalanx	14.3
53.30-33	1	Mammal	cow	*Bos taurus*	distal phalanx	5.1

53.30-44	1	Mammal	cow	*Bos taurus*	carpal	7.9
53.30-34.1	1	Mammal	cow	*Bos taurus*	radial carpal	9.4
53.30-34.2	1	Mammal	cow	*Bos taurus*	ulnar carpal	5.5
53.62-15.2	1	Mammal	cow	*Bos taurus*	unid	3.8
31.19-2.6	8	Mammal	cow	*Bos taurus*	unid	7.5
53.30-31.2	1	Mammal	cow	*Bos taurus*	unid	11.1
53.30-31.4	4	Mammal	cow	*Bos taurus*	unid	36.8

53.30-31.5	4	Mammal	cow	*Bos taurus*	unid	28.5
53.30-31.6	1	Mammal	cow	*Bos taurus*	unid	5.5
53.30-38.2	1	Mammal	cow	*Bos taurus*	unid	1.6
53.62-14.6	1	Mammal	cow	*Bos taurus*	unid	3.3
53.62-14.7	4	Mammal	cow	*Bos taurus*	unid	5.6
53.6-3	1	Mammal	cow	*Bos taurus*	unid	8.2
53.62-14.8	3	Mammal	cow	*Bos taurus*	unid	4.2

APPENDIX F:
STONO "SLAVE SETTLEMENT" TAXA IDENTIFIED AT LOWEST POSSIBLE LEVEL

Artifact ID	Count	Taxon Category	Taxon English	Taxon Latin	Element	Bone Weight (g.)
1308-2001-DRS--00005	1	Mollusks	Mollusk	Phylum Mollusca	Shell	219
1308-2160-DRS--00003	1	Mollusks	Mollusk	Phylum Mollusca	Shell	0.1
1308-1249-DRS--00006	1	Mollusks	Snails, Limpets, and Slugs	Class Gastropoda	Shell	1.4
1308-1815-DRS--00024	1	Mollusks	Snails, Limpets, and Slugs	Class Gastropoda	Shell	237.6
1308-1221-DRS--00004	6	Mollusks	American Oyster	*Crassostrea virginica*	Shell	31.7

1308-1243-DRS--00006	1	Mollusks	American Oyster	*Crassostrea virginica*	Shell	28
1308-1249-DRS--00005	3	Mollusks	American Oyster	*Crassostrea virginica*	Shell	83.6
1308-1335-DRS--00091	1	Mollusks	American Oyster	*Crassostrea virginica*	Shell	38.2
1308-1934-DRS--00001	81	Mollusks	American Oyster	*Crassostrea virginica*	Shell	817.2
1308-1969B-DRS--00001	72	Mollusks	American Oyster	*Crassostrea virginica*	Shell	1398.2
1308-1969B-DRS--00002	5	Mollusks	American Oyster	*Crassostrea virginica*	Shell	3.6
1308-1969-DRS--00001	223	Mollusks	American Oyster	*Crassostrea virginica*	Shell	882.5

1308-1969-DRS--00002	7	Mollusks	American Oyster	*Crassostrea virginica*	Shell	18.3
1308-2000-DRS--00001	2	Mollusks	American Oyster	*Crassostrea virginica*	Shell	107.5
1308-2160-DRS--00002	2	Mollusks	American Oyster	*Crassostrea virginica*	Shell	0.2
1308-1791-DRS--00014	1	Crustacean	Shrimp, Lobster, Crab	Order Decapoda	Claw	0.1
1308-1802-DRS--00003	1	Crustacean	Shrimp, Lobster, Crab	Order Decapoda	Claw	0.4
1308-1813-DRS--00008	1	Crustacean	Shrimp, Lobster, Crab	Order Decapoda	Claw	0.2
1308-1243-DRS--00004	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5

1308-1243-DRS--00005	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	1
1308-1249-DRS--00003	3	Vertebrate	Vertebrate	Phylum Chordata	Unid	1
1308-1252-DRS--00005	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1260-DRS--00003	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1270-DRS--00005	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	1
1308-1306-DRS--00004	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.5
1308-1316-DRS--00014	30	Vertebrate	Vertebrate	Phylum Chordata	Unid	11.5

1308-1324-DRS--00027	6	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.5
1308-1325-DRS--00155	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1325-DRS--00156	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5
1308-1329-DRS--00011	11	Vertebrate	Vertebrate	Phylum Chordata	Unid	3
1308-1335-DRS--00031	48	Vertebrate	Vertebrate	Phylum Chordata	Unid	11
1308-1339-DRS--00023	7	Vertebrate	Vertebrate	Phylum Chordata	Unid	3
1308-1344-DRS--00021	9	Vertebrate	Vertebrate	Phylum Chordata	Unid	2.5

1308-1349-DRS--00016	123	Vertebrate	Vertebrate	Phylum Chordata	Unid	24.7
1308-1352-DRS--00018	22	Vertebrate	Vertebrate	Phylum Chordata	Unid	5
1308-1356-DRS--00022	57	Vertebrate	Vertebrate	Phylum Chordata	Unid	14
1308-1356-DRS--00023	9	Vertebrate	Vertebrate	Phylum Chordata	Unid	2.5
1308-1356-DRS--00059	6	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.1
1308-1364-DRS--00022	64	Vertebrate	Vertebrate	Phylum Chordata	Unid	12
1308-1374-DRS--00007	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5

1308-1382-DRS--00029	214	Vertebrate	Vertebrate	Phylum Chordata	Unid	51.3
1308-1383-DRS--00027	32	Vertebrate	Vertebrate	Phylum Chordata	Unid	3.8
1308-1389-DRS--00010	5	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.2
1308-1390-DRS--00016	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1390-DRS--00017	19	Vertebrate	Vertebrate	Phylum Chordata	Unid	5
1308-1392-DRS--00023	79	Vertebrate	Vertebrate	Phylum Chordata	Unid	12.5
1308-1392-DRS--00024	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5

1308-1393B-DRS--00011	36	Vertebrate	Vertebrate	Phylum Chordata	Unid	1
1308-1393-DRS--00017	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	3
1308-1393-DRS--00031	31	Vertebrate	Vertebrate	Phylum Chordata	Unid	2.5
1308-1394-DRS--00030	4	Vertebrate	Vertebrate	Phylum Chordata	N/R	1.5
1308-1400-DRS--00009	5	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.2
1308-1400-DRS--00010	5	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.4
1308-1410-DRS--00015	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.5

1308-1410-DRS--00016	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	1
1308-1411-DRS--00009	3	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1412-DRS--00008	4	Vertebrate	Vertebrate	Phylum Chordata	N/R	1
1308-1414-DRS--00009	9	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.2
1308-1415-DRS--00012	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1415-DRS--00013	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1427-DRS--00007	3	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5

1308-1428B-DRS--00013	6	Vertebrate	Vertebrate	Phylum Chordata	Unid	2
1308-1428B-DRS--00014	1	Vertebrate	Vertebrate	Phylum Chordata	Claw	0.5
1308-1428-DRS--00009	22	Vertebrate	Vertebrate	Phylum Chordata	Unid	3.6
1308-1429-DRS--00012	4	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1430-DRS--00018	6	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.6
1308-1435-DRS--00014	2	Vertebrate	Vertebrate	Phylum Chordata	N/R	1
1308-1436-DRS--00148	25	Vertebrate	Vertebrate	Phylum Chordata	N/R	3

1308-1441-DRS--00034	7	Vertebrate	Vertebrate	Phylum Chordata	N/R	2
1308-1442-DRS--00007	4	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.7
1308-1443-DRS--00005	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5
1308-1444-DRS--00004	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1469-DRS--00006	4	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.4
1308-1469-DRS--00007	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1470-DRS--00007	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1

1308-1496-DRS--00021	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1499-DRS--00016	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.2
1308-1500-DRS--00115	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1501-DRS--00015	5	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.6
1308-1514-DRS--00010	16	Vertebrate	Vertebrate	Phylum Chordata	Unid	4.2
1308-1521-DRS--00008	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.3
1308-1522-DRS--00019	14	Vertebrate	Vertebrate	Phylum Chordata	Unid	2.3

1308-1533-DRS--00017	9	Vertebrate	Vertebrate		Phylum Chordata	Unid	1.8
1308-1534-DRS--00013	7	Vertebrate	Vertebrate		Phylum Chordata	Unid	0.3
1308-1536-DRS--00023	3	Vertebrate	Vertebrate		Phylum Chordata	Unid	0.9
1308-1548-DRS--00023	3	Vertebrate	Vertebrate		Phylum Chordata	Unid	0.8
1308-1561-DRS--00009	8	Vertebrate	Vertebrate		Phylum Chordata	Unid	2.1
1308-1564-DRS--00012	9	Vertebrate	Vertebrate		Phylum Chordata	Unid	1.4
1308-1565-DRS--00012	6	Vertebrate	Vertebrate		Phylum Chordata	Unid	1.6

1308-1580-DRS--00020	8	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.2
1308-1580-DRS--00021	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.7
1308-1586-DRS--00008	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.4
1308-1592-DRS--00021	7	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.7
1308-1594-DRS--00006	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1596-DRS--00018	8	Vertebrate	Vertebrate	Phylum Chordata	Unid	3
1308-1599-DRS--00016	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1

1308-1602-DRS--00013	5	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.1
1308-1613-DRS--00012	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5
1308-1619-DRS--00015	9	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.9
1308-1621-DRS--00018	6	Vertebrate	Vertebrate	Phylum Chordata	Unid	1
1308-1621-DRS--00019	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1644-DRS--00012	5	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.9
1308-1644-DRS--00013	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.8

1308-1656-DRS--00006	3	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.4
1308-1657-DRS--00008	9	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.6
1308-1684-DRS--00007	12	Vertebrate	Vertebrate	Phylum Chordata	Unid	2.9
1308-1686-DRS--00007	4	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.8
1308-1694-DRS--00004	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1711-DRS--00013	3	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.6
1308-1717-DRS--00010	12	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.9

1308-1717-DRS--00011	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5
1308-1718-DRS--00012	5	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.8
1308-1721-DRS--00014	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.3
1308-1724-DRS--00008	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.3
1308-1740-DRS--00008	9	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.4
1308-1770-DRS--00004	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.2
1308-1783-DRS--00006	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	1

1308-1789-DRS--00012	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.7
1308-1789-DRS--00014	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5
1308-1791-DRS--00011	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.4
1308-1791-DRS--00012	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.2
1308-1791-DRS--00019	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1793-DRS--00001	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1796-DRS--00010	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1

1308-1815-DRS--00019	8	Vertebrate	Vertebrate	Phylum Chordata	Unid	2.5
1308-1817-DRS--00006	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.6
1308-1817-DRS--00007	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5
1308-1879-DRS--00008	4	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5
1308-1882-DRS--00004	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	1
1308-1888-DRS--00004	3	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1890-DRS--00002	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5

1308-1890-DRS--00003	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.3
1308-1895-DRS--00002	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1895-DRS--00004	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1902-DRS--00001	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	2.4
1308-1902-DRS--00002	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5
1308-1906-DRS--00003	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-1907-DRS--00009	4	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.1

1308-1907-DRS--00010	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.1
1308-1939-DRS--00011	4	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.7
1308-1945-DRS--00004	3	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.6
1308-1960-DRS--00002	5	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.2
1308-1991-DRS--00004	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.5
1308-2001-DRS--00004	4	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.4
1308-2032-DRS--00005	14	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.1

1308-2050-DRS--00002	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.4
1308-2066-DRS--00003	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.3
1308-2160-DRS--00008	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.1
1308-2160-DRS--00011	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	1.6
1308-2249-DRS--00003	4	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.4
1308-2347-DRS--00008	9	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.3
1308-2348-DRS--00005	5	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.7

1308-2351-DRS--00005	2	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.3
1308-2384-DRS--00006	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.2
1308-2450-DRS--00002	1	Vertebrate	Vertebrate	Phylum Chordata	Unid	0.4
1308-2451-DRS--00008	1	Vertebrate	Vertebrate	Phylum Chordata	N/R	0.1
1308-1409-DRS--00009	1	Fish	Cartilagenous Fish	Class Chondrichthyes	Vertebra	0.1
1308-1499-DRS--00019	1	Fish	Cartilagenous Fish	Class Chondrichthyes	Vertebra	0.1
1308-1522-DRS--00018	3	Fish	Cartilagenous Fish	Class Chondrichthyes	Vertebra	0.1

1308-1533-DRS--00013	1	Fish	Cartilagenous Fish	Class Chondrichthyes	Vertebra	0.1
1308-1578-DRS--00017	2	Fish	Cartilagenous Fish	Class Chondrichthyes	Vertebra	0.5
1308-1280-DRS--00007	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1280-DRS--00008	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1329-DRS--00010	2	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1335-DRS--00026	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1356-DRS--00028	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1

1308-1364-DRS--00021	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1364-DRS--00029	3	Fish	Bony Fish	Class Osteichthyes	Unid	0.5
1308-1382-DRS--00041	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1383-DRS--00032	7	Fish	Bony Fish	Class Osteichthyes	Unid	0.4
1308-1392-DRS--00033	7	Fish	Bony Fish	Class Osteichthyes	Unid	2
1308-1393B-DRS--00016	10	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1393-DRS--00026	6	Fish	Bony Fish	Class Osteichthyes	Unid	0.5

1308-1414-DRS--00016	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1416-DRS--00010	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1418-DRS--00024	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1430-DRS--00017	3	Fish	Bony Fish	Class Osteichthyes	Unid	0.3
1308-1640-DRS--00008	4	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1500-DRS--00120	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1514-DRS--00016	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1

1308-1621-DRS--00031	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.2
1308-1561-DRS--00015	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1740-DRS--00013	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1791-DRS--00024	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1794-DRS--00018	2	Fish	Bony Fish	Class Osteichthyes	Unid	0.5
1308-1894-DRS--00004	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
1308-1580-DRS--00019	6	Fish	Bony Fish	Class Osteichthyes	Unid	0.8

1308-1619-DRS--00020	1	Fish	Bony Fish	Class Osteichthyes	Cranium	0.1
1308-1621-DRS--00030	1	Fish	Bony Fish	Class Osteichthyes	Otolith	0.1
1308-1382-DRS--00039	1	Fish	Bony Fish	Class Osteichthyes	Preopercular	0.1
1308-1393-DRS--00033	1	Fish	Bony Fish	Class Osteichthyes	Cleithrum	4
1308-1394-DRS--00029	1	Fish	Bony Fish	Class Osteichthyes	Cleithrum	1
1308-1364-DRS--00028	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1496-DRS--00020	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1

1308-1533-DRS--00014	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1536-DRS--00020	2	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.3
1308-1561-DRS--00014	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1564-DRS--00014	2	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.2
1308-1578-DRS--00016	4	Fish	Bony Fish	Class Osteichthyes	Vertebra	1
1308-1580-DRS--00018	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1586-DRS--00007	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.2

1308-1592-DRS--00019	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1596-DRS--00020	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.2
1308-1599-DRS--00015	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.2
1308-1629-DRS--00006	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1636-DRS--00005	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1668-DRS--00012	3	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.6
1308-1711-DRS--00014	2	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1

1308-1718-DRS--00013	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1724-DRS--00013	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1727-DRS--00007	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1791-DRS--00022	2	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.2
1308-2384-DRS--00005	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1382-DRS--00040	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
1308-1382-DRS--00044	2	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.2

1308-1394-DRS--00035	3	Fish	Bony Fish	Class Osteichthyes	N/R	0.1
1308-1329-DRS--00008	4	Fish	Gar Pike	Order Lepisosteiformes	Scale	0.5
1308-1390-DRS--00015	1	Fish	Gar Pike	Order Lepisosteiformes	Scale	0.1
1308-1374-DRS--00022	1	Fish	Gar Pike	Family Lepisosteidae	Unid	0.1
1308-1392-DRS--00028	1	Fish	Gar Pike	Family Lepisosteidae	Unid	1.5
1308-1392-DRS--00029	1	Fish	Gar Pike	Family Lepisosteidae	Unid	0.5
1308-1392-DRS--00030	1	Fish	Gar Pike	Family Lepisosteidae	Unid	0.1

1308-1392-DRS--00032	24	Fish	Gar Pike	Family Lepisosteidae	Scale	3
1308-1393B-DRS--00015	3	Fish	Gar Pike	Family Lepisosteidae	Scale	0.1
1308-1393-DRS--00027	1	Fish	Gar Pike	Family Lepisosteidae	Scale	0.1
1308-1394-DRS--00032	1	Fish	Gar Pike	Family Lepisosteidae	Scale	0.5
1308-1500-DRS--00118	1	Fish	Gar Pike	Family Lepisosteidae	Scale	0.1
1308-1374-DRS--00020	1	Fish	Gar Pike	Family Lepisosteidae	Opercular	0.1
1308-1436-DRS--00153	1	Fish	Gar Pike	Family Lepisosteidae	Vertebra	0.1

1308-1374-DRS--00021	1	Fish	Gar Pike	Family Lepisosteidae	Vertebra	0.1
1308-1392-DRS--00031	4	Fish	Gar Pike	Family Lepisosteidae	Vertebra	1.5
1308-1383-DRS--00033	4	Fish	Gar	Lepisosteus spp.	Unid	0.5
1308-1349-DRS--00024	24	Fish	Gar	Lepisosteus spp.	Scale	3.2
1308-1352-DRS--00022	1	Fish	Gar	Lepisosteus spp.	Scale	0.1
1308-1356-DRS--00025	1	Fish	Gar	Lepisosteus spp.	Scale	0.1
1308-1364-DRS--00032	8	Fish	Gar	Lepisosteus spp.	Scale	0.5

1308-1382-DRS--00042	4	Fish	Gar	Lepisosteus spp.	Scale	0.2
1308-1400-DRS--00014	1	Fish	Gar	Lepisosteus spp.	Scale	0.1
1308-1418-DRS--00023	1	Fish	Gar	Lepisosteus spp.	Scale	0.1
1308-1533-DRS--00012	2	Fish	Gar	Lepisosteus spp.	Scale	0.2
1308-1548-DRS--00020	1	Fish	Gar	Lepisosteus spp.	Scale	0.1
1308-1613-DRS--00013	1	Fish	Gar	Lepisosteus spp.	Scale	0.1
1308-1656-DRS--00008	1	Fish	Gar	Lepisosteus spp.	Scale	0.1

1308-1892-DRS--00003	1	Fish	Gar	Lepisosteus spp.	Scale	0.1
1308-1894-DRS--00003	1	Fish	Gar	Lepisosteus spp.	Scale	0.1
1308-2451-DRS--00009	1	Fish	Gar	Lepisosteus spp.	Scale	0.1
1308-1364-DRS--00031	1	Fish	Gar	Lepisosteus spp.	Vertebra	0.5
1308-1382-DRS--00043	4	Fish	Gar	Lepisosteus spp.	Vertebra	1
1308-1416-DRS--00009	1	Fish	Gar	Lepisosteus spp.	Vertebra	0.2
1308-1349-DRS--00023	2	Fish	Gar	Lepisosteus spp.	Vertebra	1

1308-2018-DRS--00002	1	Fish	Gar	Lepisosteus spp.	Vertebra	0.1
1308-1960-DRS--00014	1	Fish	Long-Nosed Gar	*Lepisosteus osseus*	Cranium	0.3
1308-1960-DRS--00015	40	Fish	Long-Nosed Gar	*Lepisosteus osseus*	Cranium	5.6
1308-1960-DRS--00006	1	Fish	Long-Nosed Gar	*Lepisosteus osseus*	Cranium	3
1308-1960-DRS--00004	1	Fish	Long-Nosed Gar	*Lepisosteus osseus*	Dentary	3.5
1308-1960-DRS--00005	1	Fish	Long-Nosed Gar	*Lepisosteus osseus*	Dentary	2.9
1308-1960-DRS--00008	1	Fish	Long-Nosed Gar	*Lepisosteus osseus*	Dentary	1.6

1308-1960-DRS--00011	1	Fish	Long-Nosed Gar	*Lepisosteus osseus*	Dentary	1.4
1308-1960-DRS--00012	1	Fish	Long-Nosed Gar	*Lepisosteus osseus*	Dentary	1.2
1308-1960-DRS--00013	1	Fish	Long-Nosed Gar	*Lepisosteus osseus*	Palatine	0.8
1308-1960-DRS--00007	1	Fish	Long-Nosed Gar	*Lepisosteus osseus*	Parietal	1.4
1308-1960-DRS--00010	1	Fish	Long-Nosed Gar	*Lepisosteus osseus*	Parietal	1
1308-1960-DRS--00009	1	Fish	Long-Nosed Gar	*Lepisosteus osseus*	Vomer	0.7
1308-1596-DRS--00019	1	Fish	Bowfin	*Amia calva*	Vertebra	0.2

1308-1815-DRS--00021	1	Fish	Bowfin	*Amia calva*	Vertebra	0.1
1308-1316-DRS--00012	2	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.1
1308-1335-DRS--00017	1	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.1
1308-1352-DRS--00024	1	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.1
1308-1356-DRS--00026	1	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.1
1308-1392-DRS--00037	6	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	1
1308-1393B-DRS--00012	7	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.5

1308-1393-DRS--00025	4	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	1
1308-1394-DRS--00033	1	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.1
1308-1409-DRS--00008	1	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.1
1308-1412-DRS--00009	1	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.1
1308-1418-DRS--00026	2	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.1
1308-1436-DRS--00155	2	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.5
1308-1500-DRS--00119	1	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.5

1308-1619-DRS--00023	1	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.1
1308-1684-DRS--00009	2	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.1
1308-1717-DRS--00014	1	Fish	Sea Catfish or Pout	Order Siluriformes	Vertebra	0.1
1308-1329-DRS--00009	1	Fish	Sea Catfish	Family Ariidae	Unid	0.1
1308-1339-DRS--00022	1	Fish	Sea Catfish	Family Ariidae	Unid	0.1
1308-1344-DRS--00018	1	Fish	Sea Catfish	Family Ariidae	Unid	0.1
1308-1392-DRS--00038	5	Fish	Sea Catfish	Family Ariidae	Unid	1

1308-1393B-DRS--00013	2	Fish	Sea Catfish	Family Ariidae	Unid	0.1
1308-1442-DRS--00009	1	Fish	Sea Catfish	Family Ariidae	Unid	0.5
1308-1500-DRS--00122	10	Fish	Sea Catfish	Family Ariidae	Unid	2
1308-1500-DRS--00125	7	Fish	Sea Catfish	Family Ariidae	Unid	1.7
1308-1602-DRS--00019	1	Fish	Sea Catfish	Family Ariidae	Unid	0.4
1308-1882-DRS--00005	1	Fish	Sea Catfish	Family Ariidae	Unid	0.1
1308-1306-DRS--00003	1	Fish	Sea Catfish	Family Ariidae	Otolith	1.5

1308-1316-DRS--00010	3	Fish	Sea Catfish	Family Ariidae	Otolith	1.5
1308-1364-DRS--00030	7	Fish	Sea Catfish	Family Ariidae	Otolith	3.5
1308-1374-DRS--00018	2	Fish	Sea Catfish	Family Ariidae	Otolith	1.5
1308-1389-DRS--00011	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.6
1308-1393B-DRS--00014	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.1
1308-1394-DRS--00040	1	Fish	Sea Catfish	Family Ariidae	Otolith	1
1308-1409-DRS--00007	2	Fish	Sea Catfish	Family Ariidae	Otolith	2

1308-1411-DRS--00010	1	Fish	Sea Catfish	Family Ariidae	Otolith	1.6
1308-1412-DRS--00010	2	Fish	Sea Catfish	Family Ariidae	Otolith	2
1308-1414-DRS--00014	1	Fish	Sea Catfish	Family Ariidae	Otolith	1.2
1308-1429-DRS--00013	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.4
1308-1430-DRS--00016	4	Fish	Sea Catfish	Family Ariidae	Otolith	1.2
1308-1435-DRS--00015	1	Fish	Sea Catfish	Family Ariidae	Otolith	1
1308-1514-DRS--00014	1	Fish	Sea Catfish	Family Ariidae	Otolith	1.2

1308-1514-DRS--00015	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.3
1308-1580-DRS--00015	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.7
1308-1596-DRS--00022	1	Fish	Sea Catfish	Family Ariidae	Otolith	1.5
1308-1596-DRS--00023	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.6
1308-1596-DRS--00024	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.5
1308-1596-DRS--00025	1	Fish	Sea Catfish	Family Ariidae	Otolith	1
1308-1599-DRS--00013	1	Fish	Sea Catfish	Family Ariidae	Otolith	1.3

1308-1599-DRS--00014	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.7
1308-1602-DRS--00020	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.4
1308-1602-DRS--00021	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.3
1308-1637-DRS--00011	1	Fish	Sea Catfish	Family Ariidae	Otolith	1.5
1308-1637-DRS--00012	1	Fish	Sea Catfish	Family Ariidae	Otolith	1.2
1308-1668-DRS--00011	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.4
1308-1711-DRS--00015	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.2

1308-1721-DRS--00015	1	Fish	Sea Catfish	Family Ariidae	Otolith	1.4
1308-1721-DRS--00016	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.8
1308-1721-DRS--00017	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.4
1308-1791-DRS--00020	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.4
1308-1791-DRS--00021	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.3
1308-1815-DRS--00022	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.4
1308-1815-DRS--00023	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.4

1308-2032-DRS--00002	1	Fish	Sea Catfish	Family Ariidae	Otolith	0.1
1308-1335-DRS--00027	1	Fish	Sea Catfish	Family Ariidae	Spine	0.1
1308-1394-DRS--00041	1	Fish	Sea Catfish	Family Ariidae	Spine	0.1
1308-1316-DRS--00011	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-1324-DRS--00030	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-1335-DRS--00018	2	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-1349-DRS--00018	7	Fish	Hardhead Catfish	*Arius felis*	Unid	1

1308-1352-DRS--00021	3	Fish	Hardhead Catfish	*Arius felis*	Unid	0.5
1308-1356-DRS--00024	5	Fish	Hardhead Catfish	*Arius felis*	Unid	0.5
1308-1364-DRS--00027	5	Fish	Hardhead Catfish	*Arius felis*	Unid	0.5
1308-1374-DRS--00019	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-1382-DRS--00038	14	Fish	Hardhead Catfish	*Arius felis*	Unid	2.7
1308-1383-DRS--00029	4	Fish	Hardhead Catfish	*Arius felis*	Unid	0.6
1308-1389-DRS--00012	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1

1308-1392-DRS--00036	11	Fish	Hardhead Catfish	*Arius felis*	Unid	1.5
1308-1393-DRS--00029	5	Fish	Hardhead Catfish	*Arius felis*	Unid	0.5
1308-1400-DRS--00012	2	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-1410-DRS--00014	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-1418-DRS--00021	4	Fish	Hardhead Catfish	*Arius felis*	Unid	0.4
1308-1423-DRS--00135	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.5
1308-1430-DRS--00015	4	Fish	Hardhead Catfish	*Arius felis*	Unid	0.4

1308-1447-DRS--00009	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-1469-DRS--00008	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-1500-DRS--00121	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-1521-DRS--00009	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.3
1308-1561-DRS--00012	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-2032-DRS--00001	4	Fish	Hardhead Catfish	*Arius felis*	Unid	0.5
1308-1619-DRS--00024	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.2

1308-1673-DRS--00008	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.2
1308-1684-DRS--00008	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-1812-DRS--00013	3	Fish	Hardhead Catfish	*Arius felis*	Unid	0.2
1308-1993-DRS--00001	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-1260-DRS--00005	1	Fish	Hardhead Catfish	*Arius felis*	Unid	0.1
1308-1619-DRS--00021	1	Fish	Hardhead Catfish	*Arius felis*	Otolith	0.3
1308-1619-DRS--00022	1	Fish	Hardhead Catfish	*Arius felis*	Otolith	0.5

1308-1629-DRS--00005	1	Fish	Hardhead Catfish	*Arius felis*	Otolith	1.8
1308-1794-DRS--00023	1	Fish	Hardhead Catfish	*Arius felis*	Articular	0.1
1308-1580-DRS--00016	1	Fish	Hardhead Catfish	*Arius felis*	Basioccipital	0.2
1308-1564-DRS--00016	1	Fish	Hardhead Catfish	*Arius felis*	Ceratohyal	0.1
1308-1580-DRS--00024	1	Fish	Hardhead Catfish	*Arius felis*	Ceratohyal	0.1
1308-1324-DRS--00029	1	Fish	Hardhead Catfish	*Arius felis*	Cleithrum	0.5
1308-1352-DRS--00020	1	Fish	Hardhead Catfish	*Arius felis*	Cleithrum	0.1

1308-1364-DRS--00025	2	Fish	Hardhead Catfish	*Arius felis*	Cleithrum	0.1
1308-1382-DRS--00037	1	Fish	Hardhead Catfish	*Arius felis*	Cleithrum	0.1
1308-1383-DRS--00028	1	Fish	Hardhead Catfish	*Arius felis*	Cleithrum	0.1
1308-1794-DRS--00017	1	Fish	Hardhead Catfish	*Arius felis*	Cleithrum	0.2
1308-1794-DRS--00020	1	Fish	Hardhead Catfish	*Arius felis*	Cleithrum	0.2
1308-1812-DRS--00014	1	Fish	Hardhead Catfish	*Arius felis*	Cleithrum	0.2
1308-1812-DRS--00016	1	Fish	Hardhead Catfish	*Arius felis*	Cleithrum	0.5

1308-1815-DRS--00020	1	Fish	Hardhead Catfish	*Arius felis*	Cleithrum	0.2
1308-1817-DRS--00005	1	Fish	Hardhead Catfish	*Arius felis*	Cleithrum	0.5
1308-1879-DRS--00010	1	Fish	Hardhead Catfish	*Arius felis*	Cleithrum	0.2
1308-1390-DRS--00011	1	Fish	Hardhead Catfish	*Arius felis*	Frontal	0.1
1308-1390-DRS--00012	1	Fish	Hardhead Catfish	*Arius felis*	Frontal	0.1
1308-1580-DRS--00017	1	Fish	Hardhead Catfish	*Arius felis*	Frontal	0.1
1308-1586-DRS--00006	1	Fish	Hardhead Catfish	*Arius felis*	Frontal	0.2

1308-1656-DRS--00009	1	Fish	Hardhead Catfish	*Arius felis*	Frontal	0.3
1308-1812-DRS--00017	1	Fish	Hardhead Catfish	*Arius felis*	Frontal	0.1
1308-1596-DRS--00021	1	Fish	Hardhead Catfish	*Arius felis*	Hyomandibular	0.3
1308-1794-DRS--00021	1	Fish	Hardhead Catfish	*Arius felis*	Hyomandibular	0.2
1308-1596-DRS--00028	1	Fish	Hardhead Catfish	*Arius felis*	Interopercular	0.3
1308-1668-DRS--00009	1	Fish	Hardhead Catfish	*Arius felis*	Interopercular	0.1
1308-1394-DRS--00034	1	Fish	Hardhead Catfish	*Arius felis*	Lacrimal	0.1

1308-1644-DRS--00016	1	Fish	Hardhead Catfish	*Arius felis*	Opercular	0.2
1308-1596-DRS--00029	1	Fish	Hardhead Catfish	*Arius felis*	Preopercular	0.3
1308-1794-DRS--00022	1	Fish	Hardhead Catfish	*Arius felis*	Preopercular	0.1
1308-1812-DRS--00015	1	Fish	Hardhead Catfish	*Arius felis*	Quadrate	0.1
1308-1668-DRS--00010	1	Fish	Hardhead Catfish	*Arius felis*	Coracoid	0.1
1308-1789-DRS--00017	1	Fish	Hardhead Catfish	*Arius felis*	Coracoid	0.1
1308-1436-DRS--00156	1	Fish	Hardhead Catfish	*Arius felis*	Spine	0.5

1308-1436-DRS--00157	8	Fish	Hardhead Catfish	*Arius felis*	Spine	1.5
1308-1349-DRS--00017	2	Fish	Hardhead Catfish	*Arius felis*	Pectoral spine	0.3
1308-1364-DRS--00026	3	Fish	Hardhead Catfish	*Arius felis*	Pectoral spine	1
1308-1382-DRS--00035	3	Fish	Hardhead Catfish	*Arius felis*	Pectoral spine	0.1
1308-1392-DRS--00034	1	Fish	Hardhead Catfish	*Arius felis*	Pectoral spine	0.5
1308-1400-DRS--00011	1	Fish	Hardhead Catfish	*Arius felis*	Pectoral spine	0.1
1308-1414-DRS--00013	2	Fish	Hardhead Catfish	*Arius felis*	Pectoral spine	0.1

1308-1442-DRS--00010	1	Fish	Hardhead Catfish	*Arius felis*	Pectoral spine	0.1
1308-1447-DRS--00008	1	Fish	Hardhead Catfish	*Arius felis*	Pectoral spine	0.1
1308-1586-DRS--00005	1	Fish	Hardhead Catfish	*Arius felis*	Pectoral spine	0.1
1308-1648-DRS--00017	1	Fish	Hardhead Catfish	*Arius felis*	Pectoral spine	0.1
1308-2066-DRS--00002	1	Fish	Hardhead Catfish	*Arius felis*	Pectoral spine	0.3
1308-1382-DRS--00036	1	Fish	Hardhead Catfish	*Arius felis*	Dorsal spine	0.1
1308-1392-DRS--00035	4	Fish	Hardhead Catfish	*Arius felis*	Dorsal spine	0.5

1308-1393-DRS--00028	1	Fish	Hardhead Catfish	*Arius felis*	Dorsal spine	0.1
1308-1418-DRS--00020	2	Fish	Hardhead Catfish	*Arius felis*	Dorsal spine	0.1
1308-1621-DRS--00027	1	Fish	Hardhead Catfish	*Arius felis*	Dorsal spine	0.2
1308-1637-DRS--00010	1	Fish	Hardhead Catfish	*Arius felis*	Dorsal spine	0.2
1308-1789-DRS--00016	1	Fish	Hardhead Catfish	*Arius felis*	Dorsal spine	0.1
1308-2066-DRS--00001	1	Fish	Hardhead Catfish	*Arius felis*	Dorsal spine	0.1
1308-1441-DRS--00035	2	Fish	Hardhead Catfish	*Arius felis*	N/R	1

1308-1324-DRS--00028	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.1
1308-1335-DRS--00016	2	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.5
1308-1349-DRS--00021	8	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	2.6
1308-1352-DRS--00023	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.5
1308-1356-DRS--00029	6	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	1
1308-1364-DRS--00024	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.1
1308-1382-DRS--00034	7	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	1.4

1308-1383-DRS--00030	2	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.6
1308-1393B-DRS--00018	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.1
1308-1393-DRS--00030	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.1
1308-1400-DRS--00013	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.1
1308-1414-DRS--00015	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.2
1308-1430-DRS--00014	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.1
1308-1514-DRS--00013	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.2

1308-1533-DRS--00011	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.2
1308-1536-DRS--00021	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.1
1308-1548-DRS--00021	2	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.1
1308-1592-DRS--00020	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.1
1308-1656-DRS--00007	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.3
1308-1717-DRS--00013	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.1
1308-1724-DRS--00010	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Unid	0.2

1308-1812-DRS--00018	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Cranium	0.3
1308-1621-DRS--00028	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Otolith	0.3
1308-1621-DRS--00029	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Otolith	0.4
1308-1724-DRS--00011	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Otolith	0.7
1308-1823-DRS--00007	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Otolith	0.5
1308-1770-DRS--00007	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Otolith	0.4
1308-1430-DRS--00013	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Cleithrum	0.2

1308-1349-DRS--00020	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Cleithrum	0.2
1308-1392-DRS--00039	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Cleithrum	0.5
1308-1500-DRS--00126	3	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Frontal	0.3
1308-1529-DRS--00021	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Frontal	0.1
1308-1812-DRS--00012	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Frontal	0.3
1308-1533-DRS--00015	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Frontal	0.2
1308-1602-DRS--00018	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Frontal	0.4

1308-1640-DRS--00007	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Frontal	0.2
1308-1644-DRS--00017	2	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Frontal	0.4
1308-1663-DRS--00007	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Frontal	0.2
1308-1724-DRS--00012	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Frontal	0.1
1308-1740-DRS--00011	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Frontal	0.3
1308-1740-DRS--00015	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Hyomandibular	0.1
1308-1416-DRS--00008	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Postcleithrum 1 (upper)	0.2

1308-1740-DRS--00014	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Preopercular	0.1
1308-1740-DRS--00012	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Quadrate	0.1
1308-1382-DRS--00033	2	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Spine	0.2
1308-1390-DRS--00013	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Pectoral spine	0.5
1308-1418-DRS--00022	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Pectoral spine	0.1
1308-1349-DRS--00019	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Pectoral spine	0.1
1308-1442-DRS--00008	2	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Pectoral spine	0.6

1308-1457-DRS--00008	1	Fish	Gaff-Topsail Catfish	*Bagre marinus*	Pectoral spine	0.1
1308-1394-DRS--00039	3	Fish	Gaff-Topsail Catfish	*Bagre marinus*	N/R	2.5
1308-1412-DRS--00011	2	Fish	Gaff-Topsail Catfish	*Bagre marinus*	N/R	1
1308-1390-DRS--00014	1	Fish	Perch-like Fish	Order Perciformes	Tooth	0.5
1308-1436-DRS--00154	1	Fish	Perch-like Fish	Order Perciformes	Vertebra	0.1
1308-1356-DRS--00027	1	Fish	Black Sea Bass	*Centropristis ocyurus*	Unid	0.1
1308-1339-DRS--00021	1	Fish	Jack or Pompano	Family Carangidae	Cleithrum	2

1308-1352-DRS--00017	1	Fish	Jack or Pompano	Family Carangidae	Cleithrum	1
1308-1770-DRS--00008	1	Fish	Jack or Pompano	Family Carangidae	Cleithrum	0.7
1308-1564-DRS--00013	1	Fish	Croaker or Drum	Family Sciaenidae	Unid	0.3
1308-1561-DRS--00013	1	Fish	Croaker or Drum	Family Sciaenidae	Pharyngeal plate	0.1
1308-2351-DRS--00006	1	Fish	Croaker or Drum	Family Sciaenidae	Tooth	0.1
1308-1356-DRS--00031	2	Fish	Black Drum	*Pogonias cromis*	Unid	1
1308-1414-DRS--00012	1	Fish	Black Drum	*Pogonias cromis*	Unid	0.7

1308-1364-DRS--00023	1	Fish	Black Drum	*Pogonias cromis*	Pharyngeal plate	0.1
1308-1349-DRS--00022	1	Fish	Black Drum	*Pogonias cromis*	Tooth	0.1
1308-1418-DRS--00027	1	Fish	Mullet	Family Mugilidae	Vertebra	0.1
1308-1418-DRS--00025	1	Fish	Flounder or Sole	Order Pleuronectiformes	Vertebra	0.1
1308-1602-DRS--00017	1	Fish	Righteye Flounder	Family Pleuronectidae	Vertebra	0.1
1308-1383-DRS--00031	1	Fish	Skates or Rays	Order Rajiformes	Spine	0.1
1308-1329-DRS--00006	1	Turtle	Turtle	Order Testudines	Unid	1

1308-1335-DRS--00030	1	Turtle	Turtle	Order Testudines	Unid	0.1
1308-1364-DRS--00020	3	Turtle	Turtle	Order Testudines	Unid	0.1
1308-1414-DRS--00017	1	Turtle	Turtle	Order Testudines	Unid	0.1
1308-1427-DRS--00005	1	Turtle	Turtle	Order Testudines	Unid	0.1
1308-1429-DRS--00015	2	Turtle	Turtle	Order Testudines	Unid	0.1
1308-1470-DRS--00008	1	Turtle	Turtle	Order Testudines	Unid	0.1
1308-1499-DRS--00018	2	Turtle	Turtle	Order Testudines	Unid	0.9

1308-1501-DRS--00016	2	Turtle	Turtle	Order Testudines	Unid	0.5
1308-1580-DRS--00014	5	Turtle	Turtle	Order Testudines	Unid	1.8
1308-1596-DRS--00027	2	Turtle	Turtle	Order Testudines	Unid	0.6
1308-1602-DRS--00015	1	Turtle	Turtle	Order Testudines	Unid	0.2
1308-1791-DRS--00018	1	Turtle	Turtle	Order Testudines	Unid	0.2
1308-1960-DRS--00003	4	Turtle	Turtle	Order Testudines	Unid	1
1308-1221-DRS--00002	2	Turtle	Turtle	Order Testudines	Carapace or plastron	1

1308-1260-DRS--00002	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1
1308-1280-DRS--00006	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1
1308-1316-DRS--00013	3	Turtle	Turtle	Order Testudines	Carapace or plastron	0.5
1308-1325-DRS--00157	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1
1308-1329-DRS--00007	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1
1308-1335-DRS--00020	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1
1308-1335-DRS--00028	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1

1308-1339-DRS--00019	3	Turtle	Turtle	Order Testudines	Carapace or plastron	1.5
1308-1349-DRS--00026	3	Turtle	Turtle	Order Testudines	Carapace or plastron	0.5
1308-1349-DRS--00027	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1
1308-1352-DRS--00025	12	Turtle	Turtle	Order Testudines	Carapace or plastron	2.5
1308-1356-DRS--00030	4	Turtle	Turtle	Order Testudines	Carapace or plastron	1
1308-1364-DRS--00034	2	Turtle	Turtle	Order Testudines	Carapace or plastron	0.5
1308-1374-DRS--00023	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.5

1308-1382-DRS--00046	4	Turtle	Turtle	Order Testudines	Carapace or plastron	1
1308-1382-DRS--00047	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1
1308-1383-DRS--00035	6	Turtle	Turtle	Order Testudines	Carapace or plastron	1
1308-1390-DRS--00010	2	Turtle	Turtle	Order Testudines	Carapace or plastron	1
1308-1392-DRS--00027	10	Turtle	Turtle	Order Testudines	Carapace or plastron	3
1308-1393-DRS--00021	2	Turtle	Turtle	Order Testudines	Carapace or plastron	1
1308-1410-DRS--00012	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.5

1308-1436-DRS--00160	4	Turtle	Turtle	Order Testudines	Carapace or plastron	1.5
1308-1442-DRS--00012	2	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1
1308-1443-DRS--00008	3	Turtle	Turtle	Order Testudines	Carapace or plastron	2
1308-1499-DRS--00017	2	Turtle	Turtle	Order Testudines	Carapace or plastron	0.5
1308-1500-DRS--00124	2	Turtle	Turtle	Order Testudines	Carapace or plastron	0.5
1308-1522-DRS--00017	3	Turtle	Turtle	Order Testudines	Carapace or plastron	1.1
1308-1529-DRS--00022	3	Turtle	Turtle	Order Testudines	Carapace or plastron	0.8

1308-1587-DRS--00025	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.5
1308-1592-DRS--00018	4	Turtle	Turtle	Order Testudines	Carapace or plastron	0.6
1308-1596-DRS--00026	2	Turtle	Turtle	Order Testudines	Carapace or plastron	0.4
1308-1621-DRS--00026	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.3
1308-1629-DRS--00007	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.2
1308-1637-DRS--00013	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.2
1308-1640-DRS--00005	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1

1308-1640-DRS--00006	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1
1308-1656-DRS--00011	2	Turtle	Turtle	Order Testudines	Carapace or plastron	0.5
1308-1718-DRS--00014	2	Turtle	Turtle	Order Testudines	Carapace or plastron	0.3
1308-1727-DRS--00006	3	Turtle	Turtle	Order Testudines	Carapace or plastron	0.9
1308-1735-DRS--00006	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1
1308-1740-DRS--00010	4	Turtle	Turtle	Order Testudines	Carapace or plastron	0.6
1308-1794-DRS--00019	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.5

1308-1892-DRS--00002	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.1
1308-1907-DRS--00008	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.5
1308-1945-DRS--00003	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.2
1308-2050-DRS--00001	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.6
1308-2160-DRS--00004	1	Turtle	Turtle	Order Testudines	Carapace or plastron	0.4
1308-2249-DRS--00002	3	Turtle	Turtle	Order Testudines	Carapace or plastron	0.8
1308-1496-DRS--00019	1	Turtle	Turtle	Order Testudines	Carapace	0.9

1308-1533-DRS--00016	1	Turtle	Turtle	Order Testudines	Carapace	0.4
1308-1548-DRS--00022	1	Turtle	Turtle	Order Testudines	Carapace	1.4
1308-1561-DRS--00011	1	Turtle	Turtle	Order Testudines	Carapace	0.3
1308-1657-DRS--00009	1	Turtle	Turtle	Order Testudines	Carapace	0.1
1308-1663-DRS--00006	1	Turtle	Turtle	Order Testudines	Carapace	0.2
1308-2028-DRS--00001	1	Turtle	Turtle	Order Testudines	Carapace	0.2
1308-1791-DRS--00016	1	Turtle	Turtle	Order Testudines	Hypoplastron	0.4

1308-1500-DRS--00123	1	Turtle	Turtle	Order Testudines	Plastron	1
1308-1684-DRS--00011	1	Turtle	Turtle	Order Testudines	Plastron	0.1
1308-1717-DRS--00012	1	Turtle	Turtle	Order Testudines	Plastron	0.1
1308-1789-DRS--00015	1	Turtle	Turtle	Order Testudines	Plastron	0.4
1308-2001-DRS--00003	1	Turtle	Turtle	Order Testudines	Scute	0.1
1308-1339-DRS--00020	2	Turtle	Turtle	Order Testudines	Vertebra	1
1308-1656-DRS--00010	1	Turtle	Turtle	Order Testudines	Vertebra	0.2

1308-1335-DRS--00029	1	Turtle	Turtle	Order Testudines	Long bone	0.1
1308-1364-DRS--00035	1	Turtle	Turtle	Order Testudines	Long bone	0.1
1308-1960-DRS--00016	1	Turtle	Turtle	Order Testudines	Tibia	0.4
1308-1960-DRS--00017	1	Turtle	Turtle	Order Testudines	Tibia	0.4
1308-1791-DRS--00017	1	Turtle	Turtle	Order Testudines	Phalanx	0.2
1308-1392-DRS--00025	1	Turtle	Mud Turtle	*Kinosternon subrubrum*	Unid	0.1
1308-1324-DRS--00031	1	Turtle	Mud Turtle	*Kinosternon subrubrum*	Carapace or plastron	1

1308-1349-DRS--00025	2	Turtle	Mud Turtle	*Kinosternon subrubrum*	Carapace or plastron	0.1
1308-1364-DRS--00033	2	Turtle	Mud Turtle	*Kinosternon subrubrum*	Carapace or plastron	0.5
1308-1393-DRS--00023	2	Turtle	Mud Turtle	*Kinosternon subrubrum*	Carapace or plastron	1
1308-1394-DRS--00031	1	Turtle	Mud Turtle	*Kinosternon subrubrum*	Carapace or plastron	0.5
1308-1436-DRS--00159	1	Turtle	Mud Turtle	*Kinosternon subrubrum*	Carapace or plastron	0.1
1308-1602-DRS--00016	1	Turtle	Mud Turtle	*Kinosternon subrubrum*	Carapace	0.2
1308-1684-DRS--00010	1	Turtle	Mud Turtle	*Kinosternon subrubrum*	Plastron	0.5

1308-1392-DRS--00026	1	Turtle	Mud Turtle	*Kinosternon subrubrum*	Humerus	0.1
1308-1791-DRS--00015	1	Turtle	Mud Turtle	*Kinosternon subrubrum*	Coracoid	1.1
1308-1429-DRS--00014	1	Turtle	Box or Water Turtle	Family Emydidae	Unid	0.2
1308-1410-DRS--00013	1	Turtle	Box or Water Turtle	Family Emydidae	Carapace or plastron	1
1308-1435-DRS--00016	1	Turtle	Box or Water Turtle	Family Emydidae	Carapace or plastron	0.1
1308-1436-DRS--00158	1	Turtle	Box or Water Turtle	Family Emydidae	Carapace or plastron	1.5
1308-1344-DRS--00017	3	Turtle	Box Turtle	*Terrapene carolina*	Carapace or plastron	2

1308-1393-DRS--00022	1	Turtle	Box Turtle	*Terrapene carolina*	Carapace or plastron	0.1
1308-1443-DRS--00007	5	Turtle	Box Turtle	*Terrapene carolina*	Carapace or plastron	5.1
1308-1447-DRS--00010	1	Turtle	Box Turtle	*Terrapene carolina*	Carapace or plastron	0.3
1308-1536-DRS--00022	1	Turtle	Box Turtle	*Terrapene carolina*	Carapace or plastron	0.4
1308-1991-DRS--00003	1	Turtle	Box Turtle	*Terrapene carolina*	Carapace or plastron	0.4
1308-2250-DRS--00002	4	Turtle	Box Turtle	*Terrapene carolina*	Carapace or plastron	2.6
1308-1344-DRS--00016	2	Turtle	Box Turtle	*Terrapene carolina*	Carapace	3

1308-1644-DRS--00015	1	Turtle	Box Turtle	*Terrapene carolina*	Carapace	0.5
1308-2347-DRS--00010	1	Turtle	Box Turtle	*Terrapene carolina*	Carapace	1.2
1308-1536-DRS--00065	1	Turtle	Box Turtle	*Terrapene carolina*	Plastron	1
1308-1335-DRS--00019	1	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace or plastron	0.1
1308-1352-DRS--00026	4	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace or plastron	2
1308-1356-DRS--00032	2	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace or plastron	1
1308-1382-DRS--00045	5	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace or plastron	1.8

1308-1383-DRS--00034	3	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace or plastron	1.9
1308-1393-DRS--00024	1	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace or plastron	0.5
1308-1409-DRS--00010	1	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace or plastron	0.1
1308-1418-DRS--00028	1	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace or plastron	0.6
1308-1442-DRS--00011	1	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace or plastron	0.3
1308-1470-DRS--00009	1	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace or plastron	0.3
1308-1374-DRS--00024	1	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace	1

1308-1427-DRS--00006	1	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace	0.5
1308-1564-DRS--00015	1	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace	1.5
1308-1813-DRS--00007	1	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace	2.9
1308-1939-DRS--00012	1	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Carapace	0.7
1308-1879-DRS--00009	2	Turtle	Diamondback Terrapin	*Malaclemys terrapin*	Plastron	5.6
1308-1894-DRS--00002	1	Vertebrate	Bird/Small Mammal	Class Aves/Mammalia III	Unid	0.2
1308-1999-DRS--00001	1	Vertebrate	Bird/Small Mammal	Class Aves/Mammalia III	Unid	0.3

1308-1335-DRS--00025	2	Bird	Bird	Class Aves	Unid	0.5
1308-1339-DRS--00018	2	Bird	Bird	Class Aves	Unid	0.1
1308-1364-DRS--00019	3	Bird	Bird	Class Aves	Unid	1
1308-1392-DRS--00022	1	Bird	Bird	Class Aves	Unid	0.1
1308-1414-DRS--00011	1	Bird	Bird	Class Aves	Unid	0.2
1308-1428B-DRS--00012	2	Bird	Bird	Class Aves	Unid	1.5
1308-1436-DRS--00150	1	Bird	Bird	Class Aves	Unid	0.5

1308-1442-DRS--00006	2	Bird	Bird	Class Aves	Unid	0.1
1308-1536-DRS--00019	1	Bird	Bird	Class Aves	Unid	0.1
1308-1580-DRS--00013	2	Bird	Bird	Class Aves	Unid	0.5
1308-1791-DRS--00013	4	Bird	Bird	Class Aves	Unid	0.3
1308-1794-DRS--00014	2	Bird	Bird	Class Aves	Unid	0.5
1308-1812-DRS--00011	2	Bird	Bird	Class Aves	Unid	0.3
1308-1907-DRS--00007	1	Bird	Bird	Class Aves	Unid	0.1

1308-2336-DRS--00003	1	Bird	Bird	Class Aves	Unid	0.1
1308-2347-DRS--00009	1	Bird	Bird	Class Aves	Unid	0.2
1308-2348-DRS--00004	1	Bird	Bird	Class Aves	Unid	0.1
1308-1249-DRS--00001	2	Bird	Bird	Class Aves	Vertebra	1.5
1308-1393-DRS--00020	1	Bird	Bird	Class Aves	Vertebra	0.1
1308-1394-DRS--00038	1	Bird	Bird	Class Aves	Vertebra	0.1
1308-1428-DRS--00010	1	Bird	Bird	Class Aves	Vertebra	0.1

1308-1441-DRS--00029	1	Bird	Bird	Class Aves	Vertebra	0.1
1308-1529-DRS--00023	1	Bird	Bird	Class Aves	Vertebra	0.3
1308-1602-DRS--00014	1	Bird	Bird	Class Aves	Vertebra	0.1
1308-1619-DRS--00018	1	Bird	Bird	Class Aves	Vertebra	0.7
1308-1249-DRS--00002	2	Bird	Bird	Class Aves	Long bone	1.5
1308-1344-DRS--00020	1	Bird	Bird	Class Aves	Long bone	0.1
1308-1352-DRS--00019	2	Bird	Bird	Class Aves	Long bone	0.5

1308-1356-DRS--00021	2	Bird	Bird	Class Aves	Long bone	0.5
1308-1382-DRS--00030	2	Bird	Bird	Class Aves	Long bone	0.7
1308-1441-DRS--00030	1	Bird	Bird	Class Aves	Long bone	0.5
1308-1619-DRS--00019	2	Bird	Bird	Class Aves	Long bone	0.6
1308-1621-DRS--00024	1	Bird	Bird	Class Aves	Long bone	0.2
1308-1721-DRS--00013	1	Bird	Bird	Class Aves	Long bone	0.3
1308-1750-DRS--00005	1	Bird	Bird	Class Aves	Long bone	0.3

1308-1907-DRS--00006	1	Bird	Bird	Class Aves	Long bone	3.4
1308-1908-DRS--00005	1	Bird	Bird	Class Aves	Long bone	0.5
1308-1794-DRS--00013	1	Bird	Bird	Class Aves	Humerus	0.1
1308-1393-DRS--00019	1	Bird	Bird	Class Aves	Tarsometatarsus	0.1
1308-1621-DRS--00023	1	Bird	Bird	Class Aves	Tarsometatarsus	0.8
1308-1392-DRS--00040	1	Wild Bird	Hawk or Eagle	Family Accipitridae	Claw	1.5
1308-1724-DRS--00009	1	Domestic Bird	Turkey	*Meleagris gallopavo*	Radius	0.9

1308-1418-DRS--00019	2	Domestic Bird	Chicken	*Gallus gallus*	Unid	0.2
1308-1447-DRS--00007	2	Domestic Bird	Chicken	*Gallus gallus*	Unid	0.1
1308-1382-DRS--00032	1	Domestic Bird	Chicken	*Gallus gallus*	Coracoid	0.4
1308-1393B-DRS--00010	1	Domestic Bird	Chicken	*Gallus gallus*	Scapula	0.1
1308-1418-DRS--00017	2	Domestic Bird	Chicken	*Gallus gallus*	Long bone	0.2
1308-1441-DRS--00033	1	Domestic Bird	Chicken	*Gallus gallus*	Long bone	0.1
1308-1500-DRS--00117	1	Domestic Bird	Chicken	*Gallus gallus*	Long bone	0.1

1308-1619-DRS--00016	1	Domestic Bird	Chicken	*Gallus gallus*	Humerus	1
1308-1393-DRS--00032	1	Domestic Bird	Chicken	*Gallus gallus*	Ulna	0.1
1308-1619-DRS--00017	1	Domestic Bird	Chicken	*Gallus gallus*	Ulna	0.5
1308-1392-DRS--00021	1	Domestic Bird	Chicken	*Gallus gallus*	Femur	0.5
1308-1394-DRS--00021	1	Domestic Bird	Chicken	*Gallus gallus*	Femur	2
1308-1514-DRS--00011	1	Domestic Bird	Chicken	*Gallus gallus*	Femur	1.3
1308-1534-DRS--00012	1	Domestic Bird	Chicken	*Gallus gallus*	Femur	1.4

1308-1621-DRS--00022	1	Domestic Bird	Chicken	*Gallus gallus*	Femur	1.6
1308-1441-DRS--00031	1	Domestic Bird	Chicken	*Gallus gallus*	Metatarsal	1
1308-1441-DRS--00032	1	Domestic Bird	Chicken	*Gallus gallus*	Metatarsal	0.1
1308-1382-DRS--00031	1	Domestic Bird	Chicken	*Gallus gallus*	Tibiotarsus	1.3
1308-1561-DRS--00010	1	Domestic Bird	Chicken	*Gallus gallus*	Tibiotarsus	0.5
1308-1324-DRS--00025	1	Domestic Bird	Chicken	*Gallus gallus*	Tibiotarsus	0.1
1308-1344-DRS--00019	1	Domestic Bird	Chicken	*Gallus gallus*	Tarsometatarsus	1.5

1308-1418-DRS--00018	1	Domestic Bird	Chicken	*Gallus gallus*	Tarsometatarsus	0.2
1308-1436-DRS--00151	1	Domestic Bird	Chicken	*Gallus gallus*	Tarsometatarsus	0.3
1308-1500-DRS--00116	1	Domestic Bird	Chicken	*Gallus gallus*	Tarsometatarsus	0.1
1308-1514-DRS--00012	1	Domestic Bird	Chicken	*Gallus gallus*	Tarsometatarsus	0.3
1308-1621-DRS--00020	1	Domestic Bird	Chicken	*Gallus gallus*	Tarsometatarsus	0.4
1308-1621-DRS--00021	1	Domestic Bird	Chicken	*Gallus gallus*	Tarsometatarsus	0.4
1308-1436-DRS--00152	1	Domestic Bird	Chicken	*Gallus gallus*	Phalanx	0.1

1308-1935-DRS--00015	1	Wild Bird	Pigeon or Dove	Family Columbidae	Coracoid	0.1
1308-1436-DRS--00139	1	Wild Bird	Pigeon	*Columba fasciata*	Femur	11.5
1308-1436-DRS--00140	1	Wild Bird	Pigeon	*Columba fasciata*	Femur	11.5
1308-1243-DRS--00003	1	Mammal	Mammal	Class Mammalia	Unid	1
1308-1252-DRS--00004	2	Mammal	Mammal	Class Mammalia	Unid	2
1308-1306-DRS--00002	1	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-1324-DRS--00024	17	Mammal	Mammal	Class Mammalia	Unid	6

1308-1330-DRS--00011	5	Mammal	Mammal	Class Mammalia	Unid	3.5
1308-1330-DRS--00012	1	Mammal	Mammal	Class Mammalia	Unid	0.5
1308-1335-DRS--00015	8	Mammal	Mammal	Class Mammalia	Unid	7.5
1308-1339-DRS--00017	5	Mammal	Mammal	Class Mammalia	Unid	2
1308-1344-DRS--00012	2	Mammal	Mammal	Class Mammalia	Unid	1
1308-1344-DRS--00015	2	Mammal	Mammal	Class Mammalia	Unid	0.5
1308-1349-DRS--00015	12	Mammal	Mammal	Class Mammalia	Unid	2.9

1308-1349-DRS--00149	1	Mammal	Mammal	Class Mammalia	Unid	0.2
1308-1352-DRS--00016	86	Mammal	Mammal	Class Mammalia	Unid	23
1308-1356-DRS--00019	9	Mammal	Mammal	Class Mammalia	Unid	3
1308-1356-DRS--00020	12	Mammal	Mammal	Class Mammalia	Unid	7
1308-1356-DRS--00057	36	Mammal	Mammal	Class Mammalia	Unid	6.4
1308-1356-DRS--00235	1	Mammal	Mammal	Class Mammalia	Unid	0.5
1308-1364-DRS--00016	11	Mammal	Mammal	Class Mammalia	Unid	6

1308-1364-DRS--00017	3	Mammal	Mammal	Class Mammalia	Unid	1.5
1308-1374-DRS--00014	26	Mammal	Mammal	Class Mammalia	Unid	6.5
1308-1382-DRS--00028	32	Mammal	Mammal	Class Mammalia	Unid	24
1308-1383-DRS--00016	143	Mammal	Mammal	Class Mammalia	Unid	42.4
1308-1383-DRS--00017	2	Mammal	Mammal	Class Mammalia	Unid	0.9
1308-1389-DRS--00008	14	Mammal	Mammal	Class Mammalia	Unid	8.5
1308-1389-DRS--00009	3	Mammal	Mammal	Class Mammalia	Unid	0.8

1308-1390-DRS--00006	2	Mammal	Mammal	Class Mammalia	Unid	0.5
1308-1393-DRS--00016	84	Mammal	Mammal	Class Mammalia	Unid	35.5
1308-1400-DRS--00008	5	Mammal	Mammal	Class Mammalia	Unid	6.8
1308-1409-DRS--00005	21	Mammal	Mammal	Class Mammalia	Unid	12.8
1308-1410-DRS--00009	2	Mammal	Mammal	Class Mammalia	Unid	0.5
1308-1410-DRS--00010	2	Mammal	Mammal	Class Mammalia	Unid	1
1308-1411-DRS--00008	2	Mammal	Mammal	Class Mammalia	Unid	0.5

1308-1412-DRS--00006	1	Mammal	Mammal	Class Mammalia	Unid	1.5
1308-1415-DRS--00010	9	Mammal	Mammal	Class Mammalia	Unid	1.6
1308-1416-DRS--00007	1	Mammal	Mammal	Class Mammalia	Unid	0.2
1308-1416-DRS--00046	1	Mammal	Mammal	Class Mammalia	Unid	0.4
1308-1418-DRS--00016	34	Mammal	Mammal	Class Mammalia	Unid	11.7
1308-1428B-DRS--00010	5	Mammal	Mammal	Class Mammalia	Unid	2
1308-1428-DRS--00007	6	Mammal	Mammal	Class Mammalia	Unid	4.4

1308-1428-DRS--00008	1	Mammal	Mammal	Class Mammalia	Unid	1.2
1308-1429-DRS--00009	4	Mammal	Mammal	Class Mammalia	Unid	3.7
1308-1429-DRS--00010	1	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-1430-DRS--00009	24	Mammal	Mammal	Class Mammalia	Unid	5.9
1308-1430-DRS--00010	1	Mammal	Mammal	Class Mammalia	Unid	1.6
1308-1442-DRS--00005	15	Mammal	Mammal	Class Mammalia	Unid	3.8
1308-1443-DRS--00004	3	Mammal	Mammal	Class Mammalia	Unid	1.1

1308-1447-DRS--00006	11	Mammal	Mammal	Class Mammalia	Unid	6.4
1308-1457-DRS--00007	9	Mammal	Mammal	Class Mammalia	Unid	5.4
1308-1470-DRS--00004	1	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-1470-DRS--00006	19	Mammal	Mammal	Class Mammalia	Unid	3
1308-1496-DRS--00017	8	Mammal	Mammal	Class Mammalia	Unid	2.8
1308-1496-DRS--00018	2	Mammal	Mammal	Class Mammalia	Unid	0.3
1308-1499-DRS--00015	6	Mammal	Mammal	Class Mammalia	Unid	1.9

1308-1500-DRS--00110	43	Mammal	Mammal	Class Mammalia	Unid	16.5
1308-1500-DRS--00114	1	Mammal	Mammal	Class Mammalia	Unid	1
1308-1501-DRS--00014	19	Mammal	Mammal	Class Mammalia	Unid	3.8
1308-1501-DRS--00017	4	Mammal	Mammal	Class Mammalia	Unid	8.1
1308-1514-DRS--00009	24	Mammal	Mammal	Class Mammalia	Unid	12.3
1308-1518-DRS--00009	5	Mammal	Mammal	Class Mammalia	Unid	3.3
1308-1521-DRS--00007	3	Mammal	Mammal	Class Mammalia	Unid	1.3

1308-1522-DRS--00016	22	Mammal	Mammal	Class Mammalia	Unid	5.6
1308-1529-DRS--00019	17	Mammal	Mammal	Class Mammalia	Unid	4.7
1308-1529-DRS--00020	2	Mammal	Mammal	Class Mammalia	Unid	0.7
1308-1533-DRS--00009	12	Mammal	Mammal	Class Mammalia	Unid	3.1
1308-1533-DRS--00010	1	Mammal	Mammal	Class Mammalia	Unid	0.2
1308-1534-DRS--00009	1	Mammal	Mammal	Class Mammalia	Unid	0.8
1308-1534-DRS--00010	9	Mammal	Mammal	Class Mammalia	Unid	3.2

1308-1534-DRS--00011	3	Mammal	Mammal	Class Mammalia	Unid	2
1308-1536-DRS--00017	34	Mammal	Mammal	Class Mammalia	Unid	5.3
1308-1536-DRS--00018	1	Mammal	Mammal	Class Mammalia	Unid	0.6
1308-1546-DRS--00006	1	Mammal	Mammal	Class Mammalia	Unid	0.2
1308-1548-DRS--00004	1	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-1548-DRS--00019	1	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-1550-DRS--00010	1	Mammal	Mammal	Class Mammalia	Unid	0.6

1308-1564-DRS--00010	1	Mammal	Mammal	Class Mammalia	Unid	0.2
1308-1564-DRS--00011	9	Mammal	Mammal	Class Mammalia	Unid	5.1
1308-1565-DRS--00010	4	Mammal	Mammal	Class Mammalia	Unid	0.5
1308-1565-DRS--00011	2	Mammal	Mammal	Class Mammalia	Unid	0.6
1308-1578-DRS--00014	1	Mammal	Mammal	Class Mammalia	Unid	1.5
1308-1578-DRS--00015	1	Mammal	Mammal	Class Mammalia	Unid	1.5
1308-1580-DRS--00012	19	Mammal	Mammal	Class Mammalia	Unid	10.5

1308-1587-DRS--00021	2	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-1592-DRS--00015	1	Mammal	Mammal	Class Mammalia	Unid	0.2
1308-1592-DRS--00016	13	Mammal	Mammal	Class Mammalia	Unid	6
1308-1594-DRS--00005	5	Mammal	Mammal	Class Mammalia	Unid	1.2
1308-1596-DRS--00016	1	Mammal	Mammal	Class Mammalia	Unid	0.3
1308-1596-DRS--00017	14	Mammal	Mammal	Class Mammalia	Unid	5.5
1308-1599-DRS--00012	3	Mammal	Mammal	Class Mammalia	Unid	0.9

1308-1602-DRS--00010	23	Mammal	Mammal	Class Mammalia	Unid	5.8
1308-1602-DRS--00011	1	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-1613-DRS--00011	10	Mammal	Mammal	Class Mammalia	Unid	1.7
1308-1620-DRS--00008	5	Mammal	Mammal	Class Mammalia	Unid	0.5
1308-1621-DRS--00017	19	Mammal	Mammal	Class Mammalia	Unid	4.2
1308-1629-DRS--00004	4	Mammal	Mammal	Class Mammalia	Unid	1.6
1308-1636-DRS--00004	1	Mammal	Mammal	Class Mammalia	Unid	0.2

1308-1637-DRS--00009	5	Mammal	Mammal	Class Mammalia	Unid	1.6
1308-1640-DRS--00004	2	Mammal	Mammal	Class Mammalia	Unid	1
1308-1644-DRS--00011	3	Mammal	Mammal	Class Mammalia	Unid	1.2
1308-1648-DRS--00016	17	Mammal	Mammal	Class Mammalia	Unid	8.5
1308-1668-DRS--00007	12	Mammal	Mammal	Class Mammalia	Unid	2.6
1308-1673-DRS--00007	9	Mammal	Mammal	Class Mammalia	Unid	1.6
1308-1684-DRS--00006	2	Mammal	Mammal	Class Mammalia	Unid	1.3

1308-1694-DRS--00003	6	Mammal	Mammal	Class Mammalia	Unid	1.5
1308-1698-DRS--00005	1	Mammal	Mammal	Class Mammalia	Unid	0.3
1308-1705-DRS--00003	2	Mammal	Mammal	Class Mammalia	Unid	1.4
1308-1711-DRS--00012	22	Mammal	Mammal	Class Mammalia	Unid	6.6
1308-1717-DRS--00009	8	Mammal	Mammal	Class Mammalia	Unid	3.8
1308-1724-DRS--00007	3	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-1727-DRS--00005	3	Mammal	Mammal	Class Mammalia	Unid	1

1308-1733-DRS--00002	1	Mammal	Mammal	Class Mammalia	Unid	1.2
1308-1735-DRS--00005	1	Mammal	Mammal	Class Mammalia	Unid	0.6
1308-1750-DRS--00004	13	Mammal	Mammal	Class Mammalia	Unid	2.6
1308-1755-DRS--00002	1	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-1770-DRS--00003	3	Mammal	Mammal	Class Mammalia	Unid	0.6
1308-1796-DRS--00007	1	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-1796-DRS--00009	1	Mammal	Mammal	Class Mammalia	Unid	0.5

1308-1812-DRS--00010	1	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-1813-DRS--00009	1	Mammal	Mammal	Class Mammalia	Unid	0.7
1308-1813-DRS--00011	29	Mammal	Mammal	Class Mammalia	Unid	3.8
1308-1815-DRS--00008	1	Mammal	Mammal	Class Mammalia	Unid	0.2
1308-1822-DRS--00003	1	Mammal	Mammal	Class Mammalia	Unid	0.5
1308-1823-DRS--00005	2	Mammal	Mammal	Class Mammalia	Unid	0.5
1308-1827-DRS--00001	10	Mammal	Mammal	Class Mammalia	Unid	1.1

1308-1879-DRS--00007	9	Mammal	Mammal	Class Mammalia	Unid	1.8
1308-1880-DRS--00005	6	Mammal	Mammal	Class Mammalia	Unid	0.9
1308-1895-DRS--00003	1	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-1897-DRS--00001	1	Mammal	Mammal	Class Mammalia	Unid	0.8
1308-1899-DRS--00001	4	Mammal	Mammal	Class Mammalia	Unid	4.6
1308-1900-DRS--00004	1	Mammal	Mammal	Class Mammalia	Unid	0.7
1308-1900-DRS--00005	8	Mammal	Mammal	Class Mammalia	Unid	4.8

1308-1906-DRS--00001	1	Mammal	Mammal	Class Mammalia	Unid	0.9
1308-1960-DRS--00001	1	Mammal	Mammal	Class Mammalia	Unid	0.8
1308-1993-DRS--00002	1	Mammal	Mammal	Class Mammalia	Unid	0.4
1308-1995-DRS--00001	1	Mammal	Mammal	Class Mammalia	Unid	0.3
1308-2001-DRS--00002	1	Mammal	Mammal	Class Mammalia	Unid	0.8
1308-2002-DRS--00001	2	Mammal	Mammal	Class Mammalia	Unid	5.1
1308-2009-DRS--00001	1	Mammal	Mammal	Class Mammalia	Unid	0.6

1308-2160-DRS--00006	1	Mammal	Mammal	Class Mammalia	Unid	2
1308-2160-DRS--00007	1	Mammal	Mammal	Class Mammalia	Unid	2.5
1308-2160-DRS--00009	1	Mammal	Mammal	Class Mammalia	Unid	0.5
1308-2160-DRS--00010	1	Mammal	Mammal	Class Mammalia	Unid	1.1
1308-2218-DRS--00002	1	Mammal	Mammal	Class Mammalia	Unid	0.3
1308-2325-DRS--00003	1	Mammal	Mammal	Class Mammalia	Unid	0.2
1308-2347-DRS--00007	1	Mammal	Mammal	Class Mammalia	Unid	0.6

1308-2348-DRS--00003	1	Mammal	Mammal	Class Mammalia	Unid	0.3
1308-2351-DRS--00002	5	Mammal	Mammal	Class Mammalia	Unid	2.7
1308-2351-DRS--00004	1	Mammal	Mammal	Class Mammalia	Unid	0.4
1308-2384-DRS--00004	1	Mammal	Mammal	Class Mammalia	Unid	0.2
1308-2424-DRS--00002	2	Mammal	Mammal	Class Mammalia	Unid	0.1
1308-2450-DRS--00001	2	Mammal	Mammal	Class Mammalia	Unid	0.9
1308-2451-DRS--00005	10	Mammal	Mammal	Class Mammalia	Unid	0.4

1308-1789-DRS--00013	1	Mammal	Mammal	Class Mammalia	Cranium	1.3
1308-1888-DRS--00003	2	Mammal	Mammal	Class Mammalia	Cranium	2.5
1308-1907-DRS--00005	1	Mammal	Mammal	Class Mammalia	Bulla tympanica	3.4
1308-1325-DRS--00149	2	Mammal	Mammal	Class Mammalia	Tooth	0.1
1308-1329-DRS--00005	4	Mammal	Mammal	Class Mammalia	Tooth	0.1
1308-1352-DRS--00008	4	Mammal	Mammal	Class Mammalia	Tooth	1
1308-1364-DRS--00018	2	Mammal	Mammal	Class Mammalia	Tooth	0.5

1308-1410-DRS--00005	1	Mammal	Mammal	Class Mammalia	Tooth	1
1308-1414-DRS--00010	1	Mammal	Mammal	Class Mammalia	Tooth	1
1308-1415-DRS--00011	2	Mammal	Mammal	Class Mammalia	Tooth	0.5
1308-1428B-DRS--00011	1	Mammal	Mammal	Class Mammalia	Tooth	0.1
1308-1430-DRS--00011	1	Mammal	Mammal	Class Mammalia	Tooth	0.1
1308-1496-DRS--00016	5	Mammal	Mammal	Class Mammalia	Tooth	1.4
1308-1657-DRS--00007	1	Mammal	Mammal	Class Mammalia	Tooth	0.1

1308-1668-DRS--00008	1	Mammal	Mammal	Class Mammalia	Tooth	0.5
1308-1673-DRS--00006	3	Mammal	Mammal	Class Mammalia	Tooth	0.5
1308-1935-DRS--00005	2	Mammal	Mammal	Class Mammalia	Tooth	1.5
1308-2232-DRS--00001	2	Mammal	Mammal	Class Mammalia	Tooth	0.4
1308-1475-DRS--00001	1	Mammal	Mammal	Class Mammalia	Ungual phalanx	0.1
1308-1702-DRS--00001	4	Mammal	Mammal	Class Mammalia	Ungual phalanx	1.3
1308-1892-DRS--00001	1	Mammal	Mammal	Class Mammalia	Ungual phalanx	0.2

1308-1238-DRS--00004	4	Mammal	Mammal	Class Mammalia	N/R	2
1308-1392-DRS--00017	46	Mammal	Mammal	Class Mammalia	N/R	20
1308-1392-DRS--00018	8	Mammal	Mammal	Class Mammalia	N/R	4
1308-1394-DRS--00025	3	Mammal	Mammal	Class Mammalia	N/R	0.5
1308-1394-DRS--00028	3	Mammal	Mammal	Class Mammalia	N/R	4
1308-1412-DRS--00007	10	Mammal	Mammal	Class Mammalia	N/R	4.5
1308-1423-DRS--00131	1	Mammal	Mammal	Class Mammalia	N/R	0.5

1308-1423-DRS--00134	6	Mammal	Mammal	Class Mammalia	N/R	2
1308-1435-DRS--00012	2	Mammal	Mammal	Class Mammalia	N/R	1
1308-1435-DRS--00013	12	Mammal	Mammal	Class Mammalia	N/R	8.5
1308-1441-DRS--00028	12	Mammal	Mammal	Class Mammalia	N/R	2.5
1308-1935-DRS--00013	12	Mammal	Mammal	Class Mammalia	N/R	6
1308-1935-DRS--00014	2	Mammal	Mammal	Class Mammalia	N/R	1.5
1308-2451-DRS--00007	3	Mammal	Mammal	Class Mammalia	N/R	2.1

1308-1418-DRS--00011	1	Mammal	Small Mammal	Class Mammalia III	Bulla tympanica	0.9
1308-1436-DRS--00146	1	Mammal	Small Mammal	Class Mammalia III	Caudal vertebra	0.1
1308-1260-DRS--00004	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.1
1308-1270-DRS--00004	5	Mammal	Small Mammal	Class Mammalia III	Unid	0.5
1308-1316-DRS--00009	4	Mammal	Small Mammal	Class Mammalia III	Unid	1
1308-1324-DRS--00023	7	Mammal	Small Mammal	Class Mammalia III	Unid	2
1308-1330-DRS--00010	3	Mammal	Small Mammal	Class Mammalia III	Unid	1

1308-1335-DRS--00023	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.5
1308-1335-DRS--00024	14	Mammal	Small Mammal	Class Mammalia III	Unid	3
1308-1339-DRS--00015	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.1
1308-1339-DRS--00016	11	Mammal	Small Mammal	Class Mammalia III	Unid	3
1308-1344-DRS--00014	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.5
1308-1349-DRS--00011	7	Mammal	Small Mammal	Class Mammalia III	Unid	3
1308-1349-DRS--00013	5	Mammal	Small Mammal	Class Mammalia III	Unid	1.6

1308-1352-DRS--00014	9	Mammal	Small Mammal	Class Mammalia III	Unid	2.5
1308-1352-DRS--00015	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.5
1308-1356-DRS--00017	19	Mammal	Small Mammal	Class Mammalia III	Unid	8
1308-1356-DRS--00018	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.5
1308-1364-DRS--00014	16	Mammal	Small Mammal	Class Mammalia III	Unid	8
1308-1364-DRS--00015	3	Mammal	Small Mammal	Class Mammalia III	Unid	0.5
1308-1374-DRS--00009	3	Mammal	Small Mammal	Class Mammalia III	Unid	1

1308-1374-DRS--00016	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.1
1308-1382-DRS--00026	7	Mammal	Small Mammal	Class Mammalia III	Unid	2
1308-1382-DRS--00027	10	Mammal	Small Mammal	Class Mammalia III	Unid	7
1308-1383-DRS--00014	44	Mammal	Small Mammal	Class Mammalia III	Unid	17.7
1308-1409-DRS--00003	6	Mammal	Small Mammal	Class Mammalia III	Unid	1.2
1308-1409-DRS--00004	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.6
1308-1411-DRS--00007	5	Mammal	Small Mammal	Class Mammalia III	Unid	1.7

1308-1415-DRS--00008	4	Mammal	Small Mammal	Class Mammalia III	Unid	1.2
1308-1416-DRS--00005	6	Mammal	Small Mammal	Class Mammalia III	Unid	3.2
1308-1418-DRS--00014	26	Mammal	Small Mammal	Class Mammalia III	Unid	8.5
1308-1418-DRS--00015	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.5
1308-1428B-DRS--00009	4	Mammal	Small Mammal	Class Mammalia III	Unid	1
1308-1428-DRS--00005	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.7
1308-1429-DRS--00008	4	Mammal	Small Mammal	Class Mammalia III	Unid	1

1308-1430-DRS--00008	20	Mammal	Small Mammal	Class Mammalia III	Unid	6
1308-1442-DRS--00004	8	Mammal	Small Mammal	Class Mammalia III	Unid	3.1
1308-1443-DRS--00003	3	Mammal	Small Mammal	Class Mammalia III	Unid	0.3
1308-1444-DRS--00003	8	Mammal	Small Mammal	Class Mammalia III	Unid	2
1308-1447-DRS--00003	3	Mammal	Small Mammal	Class Mammalia III	Unid	0.4
1308-1469-DRS--00005	3	Mammal	Small Mammal	Class Mammalia III	Unid	1
1308-1470-DRS--00005	2	Mammal	Small Mammal	Class Mammalia III	Unid	1

1308-1498-DRS--00003	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.4
1308-1499-DRS--00014	3	Mammal	Small Mammal	Class Mammalia III	Unid	1.2
1308-1500-DRS--00109	20	Mammal	Small Mammal	Class Mammalia III	Unid	8.5
1308-1500-DRS--00113	3	Mammal	Small Mammal	Class Mammalia III	Unid	1
1308-1501-DRS--00012	23	Mammal	Small Mammal	Class Mammalia III	Unid	6.2
1308-1501-DRS--00013	2	Mammal	Small Mammal	Class Mammalia III	Unid	1.1
1308-1514-DRS--00007	5	Mammal	Small Mammal	Class Mammalia III	Unid	2.2

1308-1514-DRS--00008	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.9
1308-1518-DRS--00008	5	Mammal	Small Mammal	Class Mammalia III	Unid	1.5
1308-1529-DRS--00017	12	Mammal	Small Mammal	Class Mammalia III	Unid	4.1
1308-1529-DRS--00018	8	Mammal	Small Mammal	Class Mammalia III	Unid	1.9
1308-1533-DRS--00008	18	Mammal	Small Mammal	Class Mammalia III	Unid	3.3
1308-1536-DRS--00014	5	Mammal	Small Mammal	Class Mammalia III	Unid	1.1
1308-1536-DRS--00015	4	Mammal	Small Mammal	Class Mammalia III	Unid	1.3

1308-1546-DRS--00005	2	Mammal	Small Mammal	Class Mammalia III	Unid	1.2
1308-1548-DRS--00018	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.4
1308-1561-DRS--00007	9	Mammal	Small Mammal	Class Mammalia III	Unid	2.4
1308-1564-DRS--00008	4	Mammal	Small Mammal	Class Mammalia III	Unid	0.8
1308-1564-DRS--00009	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.2
1308-1565-DRS--00009	6	Mammal	Small Mammal	Class Mammalia III	Unid	1.2
1308-1586-DRS--00004	5	Mammal	Small Mammal	Class Mammalia III	Unid	1.4

1308-1587-DRS--00020	3	Mammal	Small Mammal	Class Mammalia III	Unid	1
1308-1592-DRS--00013	13	Mammal	Small Mammal	Class Mammalia III	Unid	3.7
1308-1592-DRS--00014	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.5
1308-1594-DRS--00004	18	Mammal	Small Mammal	Class Mammalia III	Unid	2.1
1308-1596-DRS--00015	4	Mammal	Small Mammal	Class Mammalia III	Unid	1.2
1308-1599-DRS--00011	6	Mammal	Small Mammal	Class Mammalia III	Unid	2.1
1308-1602-DRS--00009	38	Mammal	Small Mammal	Class Mammalia III	Unid	7.6

1308-1613-DRS--00010	21	Mammal	Small Mammal	Class Mammalia III	Unid	6.5
1308-1619-DRS--00013	4	Mammal	Small Mammal	Class Mammalia III	Unid	1.2
1308-1619-DRS--00014	20	Mammal	Small Mammal	Class Mammalia III	Unid	6
1308-1620-DRS--00007	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.5
1308-1621-DRS--00016	13	Mammal	Small Mammal	Class Mammalia III	Unid	2.8
1308-1637-DRS--00006	8	Mammal	Small Mammal	Class Mammalia III	Unid	5.2
1308-1640-DRS--00003	3	Mammal	Small Mammal	Class Mammalia III	Unid	1.2

1308-1644-DRS--00010	8	Mammal	Small Mammal	Class Mammalia III	Unid	2.1
1308-1656-DRS--00003	18	Mammal	Small Mammal	Class Mammalia III	Unid	4.4
1308-1657-DRS--00006	4	Mammal	Small Mammal	Class Mammalia III	Unid	0.6
1308-1663-DRS--00005	4	Mammal	Small Mammal	Class Mammalia III	Unid	1.2
1308-1668-DRS--00006	6	Mammal	Small Mammal	Class Mammalia III	Unid	1.4
1308-1673-DRS--00005	4	Mammal	Small Mammal	Class Mammalia III	Unid	0.5
1308-1684-DRS--00005	4	Mammal	Small Mammal	Class Mammalia III	Unid	1.5

1308-1686-DRS--00005	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.5
1308-1711-DRS--00010	12	Mammal	Small Mammal	Class Mammalia III	Unid	3.2
1308-1711-DRS--00011	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.9
1308-1717-DRS--00008	7	Mammal	Small Mammal	Class Mammalia III	Unid	1.8
1308-1718-DRS--00009	3	Mammal	Small Mammal	Class Mammalia III	Unid	1.1
1308-1721-DRS--00011	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.4
1308-1721-DRS--00012	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.4

1308-1724-DRS--00005	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.2
1308-1724-DRS--00006	6	Mammal	Small Mammal	Class Mammalia III	Unid	1.8
1308-1756-DRS--00006	4	Mammal	Small Mammal	Class Mammalia III	Unid	1.2
1308-1789-DRS--00011	3	Mammal	Small Mammal	Class Mammalia III	Unid	1.4
1308-1812-DRS--00008	9	Mammal	Small Mammal	Class Mammalia III	Unid	2.5
1308-1812-DRS--00009	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.2
1308-1815-DRS--00006	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.2

1308-1815-DRS--00014	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.2
1308-1815-DRS--00015	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.4
1308-1817-DRS--00004	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.7
1308-1822-DRS--00002	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.1
1308-1882-DRS--00003	2	Mammal	Small Mammal	Class Mammalia III	Unid	1
1308-1888-DRS--00002	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.2
1308-1908-DRS--00004	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.5

1308-1939-DRS--00010	2	Mammal	Small Mammal	Class Mammalia III	Unid	0.4
1308-2336-DRS--00002	1	Mammal	Small Mammal	Class Mammalia III	Unid	0.3
1308-2347-DRS--00006	14	Mammal	Small Mammal	Class Mammalia III	Unid	3.2
1308-2451-DRS--00004	6	Mammal	Small Mammal	Class Mammalia III	Unid	2.8
1308-1522-DRS--00021	1	Mammal	Small Mammal	Class Mammalia III	Maxilla	0.3
1308-1349-DRS--00012	1	Mammal	Small Mammal	Class Mammalia III	Tooth	0.1
1308-1815-DRS--00004	1	Mammal	Small Mammal	Class Mammalia III	Premolar or molar	0.2

1308-1813-DRS--00002	1	Mammal	Small Mammal	Class Mammalia III	Molar	0.4
1308-1686-DRS--00006	1	Mammal	Small Mammal	Class Mammalia III	Vertebra	0.3
1308-1802-DRS--00001	1	Mammal	Small Mammal	Class Mammalia III	Vertebra	1.3
1308-1815-DRS--00017	1	Mammal	Small Mammal	Class Mammalia III	Vertebra	0.3
1308-1908-DRS--00003	1	Mammal	Small Mammal	Class Mammalia III	Vertebra	0.5
1308-1815-DRS--00016	1	Mammal	Small Mammal	Class Mammalia III	Caudal vertebra	0.2
1308-1418-DRS--00012	1	Mammal	Small Mammal	Class Mammalia III	Vertebra, centrum	0.1

1308-1280-DRS--00005	1	Mammal	Small Mammal	Class Mammalia III	Long bone	0.5
1308-1389-DRS--00007	2	Mammal	Small Mammal	Class Mammalia III	Rib	0.6
1308-1414-DRS--00008	3	Mammal	Small Mammal	Class Mammalia III	Rib	1.2
1308-1415-DRS--00009	1	Mammal	Small Mammal	Class Mammalia III	Rib	0.1
1308-1416-DRS--00006	1	Mammal	Small Mammal	Class Mammalia III	Rib	0.9
1308-1418-DRS--00013	3	Mammal	Small Mammal	Class Mammalia III	Rib	2.5
1308-1430-DRS--00007	1	Mammal	Small Mammal	Class Mammalia III	Rib	1.2

1308-1578-DRS--00010	2	Mammal	Small Mammal	Class Mammalia III	Rib	3
1308-1815-DRS--00018	1	Mammal	Small Mammal	Class Mammalia III	Rib	0.1
1308-1374-DRS--00008	2	Mammal	Small Mammal	Class Mammalia III	Rib, body	3.5
1308-1594-DRS--00003	1	Mammal	Small Mammal	Class Mammalia III	Rib, body	1
1308-2160-DRS--00005	1	Mammal	Small Mammal	Class Mammalia III	Rib, body	0.2
1308-1813-DRS--00005	2	Mammal	Small Mammal	Class Mammalia III	Long bone	2.3
1308-2424-DRS--00001	1	Mammal	Small Mammal	Class Mammalia III	Long bone	0.5

1308-1621-DRS--00025	1	Mammal	Small Mammal	Class Mammalia III	Ulna	2.5
1308-1436-DRS--00144	2	Mammal	Small Mammal	Class Mammalia III	Phalanx	0.5
1308-1546-DRS--00007	1	Mammal	Small Mammal	Class Mammalia III	Phalanx	0.4
1308-1561-DRS--00008	1	Mammal	Small Mammal	Class Mammalia III	Phalanx	0.3
1308-1238-DRS--00003	1	Mammal	Small Mammal	Class Mammalia III	Second phalanx	0.1
1308-1392-DRS--00016	27	Mammal	Small Mammal	Class Mammalia III	N/R	13
1308-1394-DRS--00024	26	Mammal	Small Mammal	Class Mammalia III	N/R	9

1308-1423-DRS--00133	3	Mammal	Small Mammal	Class Mammalia III	N/R	0.5
1308-1435-DRS--00009	2	Mammal	Small Mammal	Class Mammalia III	N/R	0.5
1308-1436-DRS--00143	14	Mammal	Small Mammal	Class Mammalia III	N/R	4.5
1308-1441-DRS--00027	1	Mammal	Small Mammal	Class Mammalia III	N/R	0.5
1308-1243-DRS--00001	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.1
1308-1252-DRS--00002	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5
1308-1252-DRS--00003	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5

1308-1260-DRS--00001	5	Mammal	Medium Mammal	Class Mammalia II	Unid	3
1308-1270-DRS--00003	7	Mammal	Medium Mammal	Class Mammalia II	Unid	3
1308-1316-DRS--00007	3	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5
1308-1316-DRS--00008	11	Mammal	Medium Mammal	Class Mammalia II	Unid	5.5
1308-1324-DRS--00019	11	Mammal	Medium Mammal	Class Mammalia II	Unid	14
1308-1324-DRS--00020	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5
1308-1325-DRS--00151	4	Mammal	Medium Mammal	Class Mammalia II	Unid	2.5

1308-1325-DRS--00152	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.1
1308-1325-DRS--00153	2	Mammal	Medium Mammal	Class Mammalia II	Unid	0.5
1308-1325-DRS--00154	6	Mammal	Medium Mammal	Class Mammalia II	Unid	2.5
1308-1329-DRS--00003	3	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5
1308-1329-DRS--00004	4	Mammal	Medium Mammal	Class Mammalia II	Unid	2.5
1308-1330-DRS--00008	8	Mammal	Medium Mammal	Class Mammalia II	Unid	6.6
1308-1330-DRS--00009	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.5

1308-1335-DRS--00012	6	Mammal	Medium Mammal	Class Mammalia II	Unid	8.5
1308-1335-DRS--00014	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1
1308-1335-DRS--00022	17	Mammal	Medium Mammal	Class Mammalia II	Unid	12.5
1308-1339-DRS--00013	12	Mammal	Medium Mammal	Class Mammalia II	Unid	11
1308-1339-DRS--00014	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1
1308-1344-DRS--00013	9	Mammal	Medium Mammal	Class Mammalia II	Unid	6
1308-1349-DRS--00009	7	Mammal	Medium Mammal	Class Mammalia II	Unid	4.7

1308-1349-DRS--00010	7	Mammal	Medium Mammal	Class Mammalia II	Unid	9.1
1308-1352-DRS--00012	5	Mammal	Medium Mammal	Class Mammalia II	Unid	2.5
1308-1352-DRS--00013	26	Mammal	Medium Mammal	Class Mammalia II	Unid	24
1308-1356-DRS--00014	6	Mammal	Medium Mammal	Class Mammalia II	Unid	3.5
1308-1356-DRS--00016	27	Mammal	Medium Mammal	Class Mammalia II	Unid	28.5
1308-1364-DRS--00011	3	Mammal	Medium Mammal	Class Mammalia II	Unid	1
1308-1364-DRS--00013	22	Mammal	Medium Mammal	Class Mammalia II	Unid	13

1308-1374-DRS--00011	8	Mammal	Medium Mammal	Class Mammalia II	Unid	6
1308-1374-DRS--00017	6	Mammal	Medium Mammal	Class Mammalia II	Unid	2
1308-1382-DRS--00024	26	Mammal	Medium Mammal	Class Mammalia II	Unid	43.5
1308-1382-DRS--00025	9	Mammal	Medium Mammal	Class Mammalia II	Unid	3.5
1308-1383-DRS--00012	4	Mammal	Medium Mammal	Class Mammalia II	Unid	1.4
1308-1383-DRS--00013	33	Mammal	Medium Mammal	Class Mammalia II	Unid	62.4
1308-1390-DRS--00004	9	Mammal	Medium Mammal	Class Mammalia II	Unid	9.5

1308-1390-DRS--00005	3	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5
1308-1393-DRS--00013	34	Mammal	Medium Mammal	Class Mammalia II	Unid	31.5
1308-1393-DRS--00014	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.5
1308-1393-DRS--00015	27	Mammal	Medium Mammal	Class Mammalia II	Unid	8.5
1308-1400-DRS--00006	5	Mammal	Medium Mammal	Class Mammalia II	Unid	2.1
1308-1400-DRS--00007	2	Mammal	Medium Mammal	Class Mammalia II	Unid	0.7
1308-1409-DRS--00002	11	Mammal	Medium Mammal	Class Mammalia II	Unid	8.9

1308-1411-DRS--00005	4	Mammal	Medium Mammal	Class Mammalia II	Unid	3.8
1308-1411-DRS--00006	6	Mammal	Medium Mammal	Class Mammalia II	Unid	3.2
1308-1414-DRS--00006	4	Mammal	Medium Mammal	Class Mammalia II	Unid	3.3
1308-1414-DRS--00007	14	Mammal	Medium Mammal	Class Mammalia II	Unid	6.6
1308-1415-DRS--00007	6	Mammal	Medium Mammal	Class Mammalia II	Unid	4.2
1308-1416-DRS--00003	7	Mammal	Medium Mammal	Class Mammalia II	Unid	5.1
1308-1416-DRS--00004	5	Mammal	Medium Mammal	Class Mammalia II	Unid	2.3

1308-1418-DRS--00009	21	Mammal	Medium Mammal	Class Mammalia II	Unid	18.4
1308-1427-DRS--00004	3	Mammal	Medium Mammal	Class Mammalia II	Unid	2.5
1308-1428B-DRS--00007	3	Mammal	Medium Mammal	Class Mammalia II	Unid	2
1308-1428B-DRS--00008	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1
1308-1429-DRS--00006	12	Mammal	Medium Mammal	Class Mammalia II	Unid	10.9
1308-1430-DRS--00005	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.6
1308-1430-DRS--00006	11	Mammal	Medium Mammal	Class Mammalia II	Unid	12.5

1308-1443-DRS--00002	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.4
1308-1447-DRS--00004	3	Mammal	Medium Mammal	Class Mammalia II	Unid	4.5
1308-1457-DRS--00005	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.6
1308-1457-DRS--00006	5	Mammal	Medium Mammal	Class Mammalia II	Unid	4
1308-1469-DRS--00004	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.6
1308-1470-DRS--00002	6	Mammal	Medium Mammal	Class Mammalia II	Unid	7
1308-1470-DRS--00003	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1.3

1308-1496-DRS--00010	10	Mammal	Medium Mammal	Class Mammalia II	Unid	6
1308-1496-DRS--00011	4	Mammal	Medium Mammal	Class Mammalia II	Unid	5.3
1308-1498-DRS--00002	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.4
1308-1499-DRS--00010	7	Mammal	Medium Mammal	Class Mammalia II	Unid	5.7
1308-1499-DRS--00011	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1.4
1308-1500-DRS--00108	15	Mammal	Medium Mammal	Class Mammalia II	Unid	13.5
1308-1500-DRS--00112	7	Mammal	Medium Mammal	Class Mammalia II	Unid	3

1308-1501-DRS--00011	16	Mammal	Medium Mammal	Class Mammalia II	Unid	19.7
1308-1518-DRS--00007	3	Mammal	Medium Mammal	Class Mammalia II	Unid	2.2
1308-1520-DRS--00025	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1
1308-1521-DRS--00005	4	Mammal	Medium Mammal	Class Mammalia II	Unid	2.5
1308-1521-DRS--00006	5	Mammal	Medium Mammal	Class Mammalia II	Unid	3.9
1308-1529-DRS--00015	13	Mammal	Medium Mammal	Class Mammalia II	Unid	11.4
1308-1529-DRS--00016	7	Mammal	Medium Mammal	Class Mammalia II	Unid	4.3

1308-1533-DRS--00004	4	Mammal	Medium Mammal	Class Mammalia II	Unid	1.6
1308-1533-DRS--00005	15	Mammal	Medium Mammal	Class Mammalia II	Unid	5.2
1308-1534-DRS--00007	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1
1308-1536-DRS--00012	10	Mammal	Medium Mammal	Class Mammalia II	Unid	14.7
1308-1536-DRS--00013	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.5
1308-1546-DRS--00002	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5
1308-1546-DRS--00003	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.5

1308-1548-DRS--00016	10	Mammal	Medium Mammal	Class Mammalia II	Unid	6.3
1308-1548-DRS--00017	2	Mammal	Medium Mammal	Class Mammalia II	Unid	0.9
1308-1550-DRS--00009	6	Mammal	Medium Mammal	Class Mammalia II	Unid	6.9
1308-1561-DRS--00006	3	Mammal	Medium Mammal	Class Mammalia II	Unid	2.5
1308-1564-DRS--00007	8	Mammal	Medium Mammal	Class Mammalia II	Unid	7.8
1308-1565-DRS--00007	3	Mammal	Medium Mammal	Class Mammalia II	Unid	4.8
1308-1565-DRS--00008	8	Mammal	Medium Mammal	Class Mammalia II	Unid	4

1308-1578-DRS--00012	3	Mammal	Medium Mammal	Class Mammalia II	Unid	2
1308-1580-DRS--00010	10	Mammal	Medium Mammal	Class Mammalia II	Unid	21
1308-1580-DRS--00011	7	Mammal	Medium Mammal	Class Mammalia II	Unid	4.7
1308-1586-DRS--00003	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.4
1308-1587-DRS--00019	3	Mammal	Medium Mammal	Class Mammalia II	Unid	1
1308-1592-DRS--00010	3	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5
1308-1592-DRS--00011	11	Mammal	Medium Mammal	Class Mammalia II	Unid	7.4

1308-1596-DRS--00006	4	Mammal	Medium Mammal	Class Mammalia II	Unid	2.3
1308-1596-DRS--00014	7	Mammal	Medium Mammal	Class Mammalia II	Unid	3.9
1308-1599-DRS--00008	3	Mammal	Medium Mammal	Class Mammalia II	Unid	1.9
1308-1599-DRS--00009	4	Mammal	Medium Mammal	Class Mammalia II	Unid	1.9
1308-1602-DRS--00007	15	Mammal	Medium Mammal	Class Mammalia II	Unid	14.1
1308-1602-DRS--00008	3	Mammal	Medium Mammal	Class Mammalia II	Unid	1.4
1308-1613-DRS--00007	12	Mammal	Medium Mammal	Class Mammalia II	Unid	13.2

1308-1619-DRS--00011	13	Mammal	Medium Mammal	Class Mammalia II	Unid	14.9
1308-1619-DRS--00012	2	Mammal	Medium Mammal	Class Mammalia II	Unid	2.1
1308-1620-DRS--00005	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1
1308-1620-DRS--00006	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.5
1308-1621-DRS--00013	16	Mammal	Medium Mammal	Class Mammalia II	Unid	23
1308-1621-DRS--00014	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.6
1308-1636-DRS--00002	3	Mammal	Medium Mammal	Class Mammalia II	Unid	3.5

1308-1636-DRS--00003	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.4
1308-1637-DRS--00005	5	Mammal	Medium Mammal	Class Mammalia II	Unid	2.9
1308-1640-DRS--00002	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.8
1308-1644-DRS--00009	5	Mammal	Medium Mammal	Class Mammalia II	Unid	5.4
1308-1648-DRS--00014	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5
1308-1648-DRS--00015	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.5
1308-1656-DRS--00002	12	Mammal	Medium Mammal	Class Mammalia II	Unid	11.8

1308-1657-DRS--00005	4	Mammal	Medium Mammal	Class Mammalia II	Unid	2.2
1308-1663-DRS--00004	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1.3
1308-1668-DRS--00005	4	Mammal	Medium Mammal	Class Mammalia II	Unid	1.9
1308-1673-DRS--00003	6	Mammal	Medium Mammal	Class Mammalia II	Unid	3.4
1308-1684-DRS--00004	2	Mammal	Medium Mammal	Class Mammalia II	Unid	2.5
1308-1686-DRS--00003	3	Mammal	Medium Mammal	Class Mammalia II	Unid	6.4
1308-1686-DRS--00004	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.8

1308-1694-DRS--00002	6	Mammal	Medium Mammal	Class Mammalia II	Unid	2.6
1308-1698-DRS--00004	3	Mammal	Medium Mammal	Class Mammalia II	Unid	4.5
1308-1711-DRS--00009	4	Mammal	Medium Mammal	Class Mammalia II	Unid	3.3
1308-1717-DRS--00007	3	Mammal	Medium Mammal	Class Mammalia II	Unid	9.5
1308-1718-DRS--00006	11	Mammal	Medium Mammal	Class Mammalia II	Unid	9
1308-1718-DRS--00007	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.3
1308-1721-DRS--00006	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.4

1308-1721-DRS--00007	8	Mammal	Medium Mammal	Class Mammalia II	Unid	6.5
1308-1735-DRS--00004	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.7
1308-1740-DRS--00006	21	Mammal	Medium Mammal	Class Mammalia II	Unid	19.2
1308-1740-DRS--00007	4	Mammal	Medium Mammal	Class Mammalia II	Unid	2.7
1308-1750-DRS--00002	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.5
1308-1756-DRS--00005	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.8
1308-1770-DRS--00002	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.8

1308-1783-DRS--00004	4	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5
1308-1783-DRS--00005	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5
1308-1789-DRS--00008	6	Mammal	Medium Mammal	Class Mammalia II	Unid	6.2
1308-1791-DRS--00006	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.2
1308-1791-DRS--00007	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.2
1308-1794-DRS--00011	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1
1308-1796-DRS--00006	2	Mammal	Medium Mammal	Class Mammalia II	Unid	2.5

1308-1796-DRS--00008	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5
1308-1802-DRS--00004	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.7
1308-1812-DRS--00006	4	Mammal	Medium Mammal	Class Mammalia II	Unid	2.5
1308-1812-DRS--00007	15	Mammal	Medium Mammal	Class Mammalia II	Unid	20.9
1308-1813-DRS--00006	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.5
1308-1815-DRS--00012	3	Mammal	Medium Mammal	Class Mammalia II	Unid	2.5
1308-1815-DRS--00013	2	Mammal	Medium Mammal	Class Mammalia II	Unid	0.8

1308-1817-DRS--00003	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.6
1308-1822-DRS--00001	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.8
1308-1879-DRS--00005	12	Mammal	Medium Mammal	Class Mammalia II	Unid	15.3
1308-1879-DRS--00006	3	Mammal	Medium Mammal	Class Mammalia II	Unid	3.3
1308-1880-DRS--00004	3	Mammal	Medium Mammal	Class Mammalia II	Unid	3.6
1308-1888-DRS--00001	1	Mammal	Medium Mammal	Class Mammalia II	Unid	2
1308-1900-DRS--00002	2	Mammal	Medium Mammal	Class Mammalia II	Unid	1.5

1308-1907-DRS--00004	4	Mammal	Medium Mammal	Class Mammalia II	Unid	2.2
1308-1908-DRS--00002	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1
1308-1925-DRS--00003	2	Mammal	Medium Mammal	Class Mammalia II	Unid	0.5
1308-1939-DRS--00006	4	Mammal	Medium Mammal	Class Mammalia II	Unid	4.2
1308-1945-DRS--00002	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1.2
1308-1990-DRS--00001	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.8
1308-1991-DRS--00001	1	Mammal	Medium Mammal	Class Mammalia II	Unid	4

1308-1991-DRS--00002	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1.7
1308-1996-DRS--00001	2	Mammal	Medium Mammal	Class Mammalia II	Unid	2.1
1308-2032-DRS--00004	2	Mammal	Medium Mammal	Class Mammalia II	Unid	3.2
1308-2032-DRS--00006	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.1
1308-2218-DRS--00001	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.3
1308-2249-DRS--00001	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1
1308-2250-DRS--00001	5	Mammal	Medium Mammal	Class Mammalia II	Unid	5.4

1308-2336-DRS--00001	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.6
1308-2347-DRS--00003	5	Mammal	Medium Mammal	Class Mammalia II	Unid	5.6
1308-2348-DRS--00002	3	Mammal	Medium Mammal	Class Mammalia II	Unid	3
1308-2384-DRS--00001	1	Mammal	Medium Mammal	Class Mammalia II	Unid	2.8
1308-2451-DRS--00003	1	Mammal	Medium Mammal	Class Mammalia II	Unid	1.9
1308-1243-DRS--00002	1	Mammal	Medium Mammal	Class Mammalia II	Unid	0.1
1308-1522-DRS--00015	2	Mammal	Medium Mammal	Class Mammalia II	Maxilla	0.9

1308-1428B-DRS--00006	1	Mammal	Medium Mammal	Class Mammalia II	Mandible	0.1
1308-1823-DRS--00001	2	Mammal	Medium Mammal	Class Mammalia II	Mandible	5
1308-1356-DRS--00015	2	Mammal	Medium Mammal	Class Mammalia II	Tooth	1
1308-1374-DRS--00013	7	Mammal	Medium Mammal	Class Mammalia II	Tooth	4
1308-1565-DRS--00006	1	Mammal	Medium Mammal	Class Mammalia II	Incisor	0.4
1308-1442-DRS--00002	2	Mammal	Medium Mammal	Class Mammalia II	Rib	1.4
1308-1733-DRS--00001	1	Mammal	Medium Mammal	Class Mammalia II	Rib	3.3

1308-2347-DRS--00004	1	Mammal	Medium Mammal	Class Mammalia II	Rib	2.4
1308-1324-DRS--00013	1	Mammal	Medium Mammal	Class Mammalia II	Rib, body	2.5
1308-1441-DRS--00025	1	Mammal	Medium Mammal	Class Mammalia II	Rib, body	2
1308-1324-DRS--00014	5	Mammal	Medium Mammal	Class Mammalia II	Vertebra	5
1308-1324-DRS--00016	2	Mammal	Medium Mammal	Class Mammalia II	Vertebra	2
1308-1428B-DRS--00004	1	Mammal	Medium Mammal	Class Mammalia II	Vertebra	5
1308-1428B-DRS--00005	1	Mammal	Medium Mammal	Class Mammalia II	Vertebra	1

1308-1441-DRS--00024	1	Mammal	Medium Mammal	Class Mammalia II	Vertebra	2
1308-1500-DRS--00097	1	Mammal	Medium Mammal	Class Mammalia II	Vertebra	3.5
1308-1587-DRS--00017	1	Mammal	Medium Mammal	Class Mammalia II	Vertebra	8
1308-1823-DRS--00002	1	Mammal	Medium Mammal	Class Mammalia II	Vertebra	2.6
1308-1324-DRS--00015	2	Mammal	Medium Mammal	Class Mammalia II	Vertebra, centrum	1.5
1308-1325-DRS--00150	1	Mammal	Medium Mammal	Class Mammalia II	Vertebra, centrum	0.5
1308-1382-DRS--00023	2	Mammal	Medium Mammal	Class Mammalia II	Vertebra, centrum	1

1308-1428-DRS--00006	1	Mammal	Medium Mammal	Class Mammalia II	Vertebra, centrum	0.1
1308-1534-DRS--00008	1	Mammal	Medium Mammal	Class Mammalia II	Vertebra, centrum	0.2
1308-1794-DRS--00009	1	Mammal	Medium Mammal	Class Mammalia II	Vertebra, centrum	0.1
1308-1794-DRS--00012	1	Mammal	Medium Mammal	Class Mammalia II	Vertebra, centrum	1
1308-1324-DRS--00017	3	Mammal	Medium Mammal	Class Mammalia II	Long bone	10.5
1308-1335-DRS--00008	1	Mammal	Medium Mammal	Class Mammalia II	Long bone	19
1308-1410-DRS--00008	2	Mammal	Medium Mammal	Class Mammalia II	Long bone	1.5

1308-1429-DRS--00007	1	Mammal	Medium Mammal	Class Mammalia II	Long bone	3.3
1308-1442-DRS--00003	1	Mammal	Medium Mammal	Class Mammalia II	Long bone	9.1
1308-1587-DRS--00016	1	Mammal	Medium Mammal	Class Mammalia II	Long bone	2.5
1308-1789-DRS--00009	1	Mammal	Medium Mammal	Class Mammalia II	Long bone	6
1308-1789-DRS--00010	1	Mammal	Medium Mammal	Class Mammalia II	Long bone	2.7
1308-2347-DRS--00005	1	Mammal	Medium Mammal	Class Mammalia II	Long bone	3.8
1308-1306-DRS--00001	1	Mammal	Medium Mammal	Class Mammalia II	Tibia	5

1308-1339-DRS--00012	1	Mammal	Medium Mammal	Class Mammalia II	Carpal or tarsal	0.5
1308-1718-DRS--00008	1	Mammal	Medium Mammal	Class Mammalia II	Carpal or tarsal	0.9
1308-1447-DRS--00005	1	Mammal	Medium Mammal	Class Mammalia II	Phalanx	0.4
1308-1550-DRS--00008	1	Mammal	Medium Mammal	Class Mammalia II	Phalanx	0.6
1308-1392-DRS--00015	24	Mammal	Medium Mammal	Class Mammalia II	N/R	21
1308-1392-DRS--00019	2	Mammal	Medium Mammal	Class Mammalia II	N/R	4.5
1308-1394-DRS--00023	8	Mammal	Medium Mammal	Class Mammalia II	N/R	12.5

1308-1394-DRS--00027	1	Mammal	Medium Mammal	Class Mammalia II	N/R	1
1308-1423-DRS--00132	7	Mammal	Medium Mammal	Class Mammalia II	N/R	5
1308-1435-DRS--00008	3	Mammal	Medium Mammal	Class Mammalia II	N/R	2
1308-1436-DRS--00141	5	Mammal	Medium Mammal	Class Mammalia II	N/R	5
1308-1436-DRS--00142	65	Mammal	Medium Mammal	Class Mammalia II	N/R	58.5
1308-1436-DRS--00147	3	Mammal	Medium Mammal	Class Mammalia II	N/R	2
1308-1441-DRS--00026	4	Mammal	Medium Mammal	Class Mammalia II	N/R	3.5

1308-1724-DRS--00003	5	Mammal	Medium Mammal	Class Mammalia II	N/R	4.4
1308-1935-DRS--00010	2	Mammal	Medium Mammal	Class Mammalia II	N/R	1.5
1308-1935-DRS--00011	2	Mammal	Medium Mammal	Class Mammalia II	N/R	4
1308-1935-DRS--00012	2	Mammal	Medium Mammal	Class Mammalia II	N/R	1.5
1308-1227-DRS--00001	2	Mammal	Large Mammal	Class Mammalia I	Unid	1
1308-1238-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Unid	2.5
1308-1261-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Unid	2.5

1308-1270-DRS--00001	2	Mammal	Large Mammal	Class Mammalia I	Unid	1.5
1308-1270-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Unid	1
1308-1280-DRS--00004	2	Mammal	Large Mammal	Class Mammalia I	Unid	1
1308-1316-DRS--00005	3	Mammal	Large Mammal	Class Mammalia I	Unid	5.5
1308-1316-DRS--00006	1	Mammal	Large Mammal	Class Mammalia I	Unid	1
1308-1324-DRS--00021	2	Mammal	Large Mammal	Class Mammalia I	Unid	3.5
1308-1324-DRS--00022	1	Mammal	Large Mammal	Class Mammalia I	Unid	0.5

1308-1330-DRS--00002	3	Mammal	Large Mammal	Class Mammalia I	Unid	6
1308-1335-DRS--00011	6	Mammal	Large Mammal	Class Mammalia I	Unid	26
1308-1344-DRS--00010	5	Mammal	Large Mammal	Class Mammalia I	Unid	18
1308-1344-DRS--00011	1	Mammal	Large Mammal	Class Mammalia I	Unid	1
1308-1349-DRS--00006	4	Mammal	Large Mammal	Class Mammalia I	Unid	13.1
1308-1349-DRS--00008	2	Mammal	Large Mammal	Class Mammalia I	Unid	0.2
1308-1352-DRS--00010	7	Mammal	Large Mammal	Class Mammalia I	Unid	30

1308-1352-DRS--00011	3	Mammal	Large Mammal	Class Mammalia I	Unid	4.5
1308-1356-DRS--00012	9	Mammal	Large Mammal	Class Mammalia I	Unid	20.5
1308-1356-DRS--00013	6	Mammal	Large Mammal	Class Mammalia I	Unid	14
1308-1364-DRS--00008	8	Mammal	Large Mammal	Class Mammalia I	Unid	20
1308-1364-DRS--00009	6	Mammal	Large Mammal	Class Mammalia I	Unid	6
1308-1374-DRS--00012	8	Mammal	Large Mammal	Class Mammalia I	Unid	16.5
1308-1374-DRS--00015	3	Mammal	Large Mammal	Class Mammalia I	Unid	1.5

1308-1382-DRS--00021	5	Mammal	Large Mammal	Class Mammalia I	Unid	31
1308-1382-DRS--00022	4	Mammal	Large Mammal	Class Mammalia I	Unid	4.5
1308-1383-DRS--00010	11	Mammal	Large Mammal	Class Mammalia I	Unid	63.3
1308-1383-DRS--00011	2	Mammal	Large Mammal	Class Mammalia I	Unid	1.5
1308-1389-DRS--00006	8	Mammal	Large Mammal	Class Mammalia I	Unid	29.6
1308-1390-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Unid	6
1308-1390-DRS--00003	2	Mammal	Large Mammal	Class Mammalia I	Unid	3

1308-1393-DRS--00012	4	Mammal	Large Mammal	Class Mammalia I	Unid	15.5
1308-1400-DRS--00004	1	Mammal	Large Mammal	Class Mammalia I	Unid	8.9
1308-1400-DRS--00005	1	Mammal	Large Mammal	Class Mammalia I	Unid	0.5
1308-1411-DRS--00004	1	Mammal	Large Mammal	Class Mammalia I	Unid	7.1
1308-1412-DRS--00004	1	Mammal	Large Mammal	Class Mammalia I	Unid	3
1308-1412-DRS--00005	1	Mammal	Large Mammal	Class Mammalia I	Unid	4
1308-1414-DRS--00005	1	Mammal	Large Mammal	Class Mammalia I	Unid	1

1308-1415-DRS--00005	1	Mammal	Large Mammal	Class Mammalia I	Unid	8.2
1308-1415-DRS--00006	1	Mammal	Large Mammal	Class Mammalia I	Unid	0.5
1308-1416-DRS--00002	2	Mammal	Large Mammal	Class Mammalia I	Unid	4.7
1308-1418-DRS--00008	7	Mammal	Large Mammal	Class Mammalia I	Unid	53.4
1308-1418-DRS--00010	2	Mammal	Large Mammal	Class Mammalia I	Unid	2
1308-1427-DRS--00002	2	Mammal	Large Mammal	Class Mammalia I	Unid	4.5
1308-1427-DRS--00003	1	Mammal	Large Mammal	Class Mammalia I	Unid	2

1308-1428B-DRS--00003	6	Mammal	Large Mammal	Class Mammalia I	Unid	25
1308-1428-DRS--00004	5	Mammal	Large Mammal	Class Mammalia I	Unid	48.5
1308-1430-DRS--00003	3	Mammal	Large Mammal	Class Mammalia I	Unid	36.6
1308-1430-DRS--00004	2	Mammal	Large Mammal	Class Mammalia I	Unid	3
1308-1443-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Unid	3
1308-1447-DRS--00002	2	Mammal	Large Mammal	Class Mammalia I	Unid	19.5
1308-1457-DRS--00003	1	Mammal	Large Mammal	Class Mammalia I	Unid	2.6

1308-1457-DRS--00004	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.4
1308-1496-DRS--00008	7	Mammal	Large Mammal	Class Mammalia I	Unid	33.4
1308-1496-DRS--00009	1	Mammal	Large Mammal	Class Mammalia I	Unid	0.6
1308-1499-DRS--00006	3	Mammal	Large Mammal	Class Mammalia I	Unid	3.4
1308-1499-DRS--00007	3	Mammal	Large Mammal	Class Mammalia I	Unid	4.7
1308-1500-DRS--00107	8	Mammal	Large Mammal	Class Mammalia I	Unid	17.5
1308-1500-DRS--00111	8	Mammal	Large Mammal	Class Mammalia I	Unid	10

1308-1501-DRS--00004	6	Mammal	Large Mammal	Class Mammalia I	Unid	11.9
1308-1501-DRS--00005	1	Mammal	Large Mammal	Class Mammalia I	Unid	0.7
1308-1514-DRS--00006	3	Mammal	Large Mammal	Class Mammalia I	Unid	14.4
1308-1518-DRS--00004	3	Mammal	Large Mammal	Class Mammalia I	Unid	11.5
1308-1520-DRS--00024	1	Mammal	Large Mammal	Class Mammalia I	Unid	0.5
1308-1521-DRS--00003	3	Mammal	Large Mammal	Class Mammalia I	Unid	7.2
1308-1521-DRS--00004	1	Mammal	Large Mammal	Class Mammalia I	Unid	0.6

1308-1522-DRS--00003	9	Mammal	Large Mammal	Class Mammalia I	Unid	12.9
1308-1529-DRS--00005	10	Mammal	Large Mammal	Class Mammalia I	Unid	29.3
1308-1529-DRS--00006	7	Mammal	Large Mammal	Class Mammalia I	Unid	6.5
1308-1533-DRS--00002	11	Mammal	Large Mammal	Class Mammalia I	Unid	19.4
1308-1533-DRS--00003	3	Mammal	Large Mammal	Class Mammalia I	Unid	2.1
1308-1534-DRS--00006	1	Mammal	Large Mammal	Class Mammalia I	Unid	2.5
1308-1546-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Unid	2.7

1308-1548-DRS--00015	4	Mammal	Large Mammal	Class Mammalia I	Unid	14.5
1308-1550-DRS--00006	1	Mammal	Large Mammal	Class Mammalia I	Unid	2.8
1308-1561-DRS--00003	6	Mammal	Large Mammal	Class Mammalia I	Unid	25.5
1308-1564-DRS--00005	6	Mammal	Large Mammal	Class Mammalia I	Unid	18.8
1308-1564-DRS--00006	4	Mammal	Large Mammal	Class Mammalia I	Unid	3.2
1308-1565-DRS--00002	2	Mammal	Large Mammal	Class Mammalia I	Unid	17.9
1308-1565-DRS--00003	4	Mammal	Large Mammal	Class Mammalia I	Unid	4.7

1308-1578-DRS--00011	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.5
1308-1578-DRS--00013	1	Mammal	Large Mammal	Class Mammalia I	Unid	3.5
1308-1580-DRS--00004	5	Mammal	Large Mammal	Class Mammalia I	Unid	21.9
1308-1580-DRS--00006	2	Mammal	Large Mammal	Class Mammalia I	Unid	4.1
1308-1586-DRS--00001	3	Mammal	Large Mammal	Class Mammalia I	Unid	7.8
1308-1587-DRS--00015	7	Mammal	Large Mammal	Class Mammalia I	Unid	11
1308-1587-DRS--00018	3	Mammal	Large Mammal	Class Mammalia I	Unid	2.5

1308-1592-DRS--00008	10	Mammal	Large Mammal	Class Mammalia I	Unid	41.2
1308-1592-DRS--00009	5	Mammal	Large Mammal	Class Mammalia I	Unid	10.8
1308-1594-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Unid	3.9
1308-1594-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.4
1308-1596-DRS--00004	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.6
1308-1596-DRS--00005	4	Mammal	Large Mammal	Class Mammalia I	Unid	7.1
1308-1599-DRS--00006	25	Mammal	Large Mammal	Class Mammalia I	Unid	42.9

1308-1599-DRS--00007	6	Mammal	Large Mammal	Class Mammalia I	Unid	11.4
1308-1602-DRS--00006	7	Mammal	Large Mammal	Class Mammalia I	Unid	22.4
1308-1613-DRS--00006	5	Mammal	Large Mammal	Class Mammalia I	Unid	11.2
1308-1619-DRS--00009	2	Mammal	Large Mammal	Class Mammalia I	Unid	5.1
1308-1619-DRS--00010	6	Mammal	Large Mammal	Class Mammalia I	Unid	14.7
1308-1620-DRS--00004	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.5
1308-1621-DRS--00012	6	Mammal	Large Mammal	Class Mammalia I	Unid	16.6

1308-1629-DRS--00003	3	Mammal	Large Mammal	Class Mammalia I	Unid	4.5
1308-1637-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.5
1308-1644-DRS--00006	5	Mammal	Large Mammal	Class Mammalia I	Unid	11.4
1308-1648-DRS--00013	1	Mammal	Large Mammal	Class Mammalia I	Unid	4
1308-1656-DRS--00001	5	Mammal	Large Mammal	Class Mammalia I	Unid	10.4
1308-1657-DRS--00003	4	Mammal	Large Mammal	Class Mammalia I	Unid	5.9
1308-1657-DRS--00004	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.4

1308-1668-DRS--00004	6	Mammal	Large Mammal	Class Mammalia I	Unid	35.4
1308-1673-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Unid	0.8
1308-1684-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.7
1308-1698-DRS--00002	3	Mammal	Large Mammal	Class Mammalia I	Unid	12.6
1308-1711-DRS--00004	6	Mammal	Large Mammal	Class Mammalia I	Unid	18.5
1308-1711-DRS--00005	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.4
1308-1717-DRS--00006	3	Mammal	Large Mammal	Class Mammalia I	Unid	15.1

1308-1721-DRS--00004	3	Mammal	Large Mammal	Class Mammalia I	Unid	6.5
1308-1721-DRS--00005	2	Mammal	Large Mammal	Class Mammalia I	Unid	4.6
1308-1724-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Unid	2
1308-1727-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.9
1308-1740-DRS--00005	9	Mammal	Large Mammal	Class Mammalia I	Unid	18.8
1308-1755-DRS--00001	2	Mammal	Large Mammal	Class Mammalia I	Unid	8.3
1308-1756-DRS--00003	1	Mammal	Large Mammal	Class Mammalia I	Unid	0.9

1308-1770-DRS--00001	2	Mammal	Large Mammal	Class Mammalia I	Unid	5
1308-1770-DRS--00009	2	Mammal	Large Mammal	Class Mammalia I	Unid	6.8
1308-1783-DRS--00003	1	Mammal	Large Mammal	Class Mammalia I	Unid	1
1308-1789-DRS--00004	1	Mammal	Large Mammal	Class Mammalia I	Unid	4.6
1308-1794-DRS--00010	1	Mammal	Large Mammal	Class Mammalia I	Unid	2
1308-1812-DRS--00001	7	Mammal	Large Mammal	Class Mammalia I	Unid	56.1
1308-1812-DRS--00002	2	Mammal	Large Mammal	Class Mammalia I	Unid	6.5

1308-1815-DRS--00005	1	Mammal	Large Mammal	Class Mammalia I	Unid	2.1
1308-1815-DRS--00010	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.3
1308-1817-DRS--00001	2	Mammal	Large Mammal	Class Mammalia I	Unid	7.1
1308-1817-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Unid	0.6
1308-1879-DRS--00004	5	Mammal	Large Mammal	Class Mammalia I	Unid	22.2
1308-1880-DRS--00010	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.8
1308-1882-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Unid	1

1308-1900-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Unid	2.3
1308-1907-DRS--00003	2	Mammal	Large Mammal	Class Mammalia I	Unid	8.7
1308-1925-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.4
1308-1939-DRS--00004	2	Mammal	Large Mammal	Class Mammalia I	Unid	13.3
1308-2001-DRS--00001	2	Mammal	Large Mammal	Class Mammalia I	Unid	3.4
1308-2325-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Unid	3
1308-2347-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Unid	12.4

1308-2351-DRS--00003	1	Mammal	Large Mammal	Class Mammalia I	Unid	2.4
1308-2442-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Unid	1.4
1308-1791-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Vertebra	3.5
1308-1444-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Vertebra, centrum	3.5
1308-1935-DRS--00009	4	Mammal	Large Mammal	Class Mammalia I	Indeterminate	4.5
1308-1356-DRS--00051	1	Mammal	Large Mammal	Class Mammalia I	Cranium	10.9
1308-1356-DRS--00052	1	Mammal	Large Mammal	Class Mammalia I	Cranium	4

1308-1356-DRS--00053	1	Mammal	Large Mammal	Class Mammalia I	Cranium	1
1308-1356-DRS--00054	1	Mammal	Large Mammal	Class Mammalia I	Cranium	0.9
1308-1356-DRS--00055	1	Mammal	Large Mammal	Class Mammalia I	Cranium	0.5
1308-1356-DRS--00056	1	Mammal	Large Mammal	Class Mammalia I	Cranium	0.6
1308-1619-DRS--00007	1	Mammal	Large Mammal	Class Mammalia I	Cranium	12.1
1308-1939-DRS--00003	1	Mammal	Large Mammal	Class Mammalia I	Cranium	8.5
1308-1221-DRS--00003	1	Mammal	Large Mammal	Class Mammalia I	Bulla tympanica	2.4

1308-1815-DRS--00009	1	Mammal	Large Mammal	Class Mammalia I	Mandible	5.1
1308-1238-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Tooth	1
1308-1356-DRS--00058	1	Mammal	Large Mammal	Class Mammalia I	Tooth	0.4
1308-1364-DRS--00010	1	Mammal	Large Mammal	Class Mammalia I	Tooth	1.5
1308-1410-DRS--00011	3	Mammal	Large Mammal	Class Mammalia I	Tooth	1.5
1308-1668-DRS--00003	2	Mammal	Large Mammal	Class Mammalia I	Tooth	0.4
1308-1724-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Tooth	0.6

1308-1812-DRS--00003	2	Mammal	Large Mammal	Class Mammalia I	Tooth	2.2
1308-2347-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Tooth	0.8
1308-1356-DRS--00011	1	Mammal	Large Mammal	Class Mammalia I	Rib	13.5
1308-1382-DRS--00020	1	Mammal	Large Mammal	Class Mammalia I	Rib	4
1308-1389-DRS--00005	1	Mammal	Large Mammal	Class Mammalia I	Rib	3.4
1308-1393-DRS--00011	1	Mammal	Large Mammal	Class Mammalia I	Rib	16.5
1308-1469-DRS--00003	2	Mammal	Large Mammal	Class Mammalia I	Rib	12.9

1308-1565-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Rib, body	10.1
1308-1410-DRS--00007	1	Mammal	Large Mammal	Class Mammalia I	Long bone	7
1308-1444-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Long bone	7
1308-1484-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Long bone	1.5
1308-1880-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Long bone	8.6
1308-1890-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Long bone	3.4
1308-1895-DRS--00001	1	Mammal	Large Mammal	Class Mammalia I	Long bone	2.4

1308-1935-DRS--00008	1	Mammal	Large Mammal	Class Mammalia I	Long bone	3.5
1308-1939-DRS--00005	1	Mammal	Large Mammal	Class Mammalia I	Metapodial	3.4
1308-2451-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Metapodial	1.4
1308-1390-DRS--00002	1	Mammal	Large Mammal	Class Mammalia I	Carpal or tarsal	5
1308-1900-DRS--00003	1	Mammal	Large Mammal	Class Mammalia I	Phalanx	0.6
1308-2032-DRS--00003	1	Mammal	Large Mammal	Class Mammalia I	Sesamoid	1.5
1308-1392-DRS--00014	20	Mammal	Large Mammal	Class Mammalia I	N/R	41.5

1308-1394-DRS--00022	4	Mammal	Large Mammal	Class Mammalia I	N/R	9
1308-1394-DRS--00026	1	Mammal	Large Mammal	Class Mammalia I	N/R	4.5
1308-1423-DRS--00129	5	Mammal	Large Mammal	Class Mammalia I	N/R	20
1308-1423-DRS--00130	2	Mammal	Large Mammal	Class Mammalia I	N/R	2
1308-1435-DRS--00007	3	Mammal	Large Mammal	Class Mammalia I	N/R	5.5
1308-1435-DRS--00010	2	Mammal	Large Mammal	Class Mammalia I	N/R	1.5
1308-1435-DRS--00011	1	Mammal	Large Mammal	Class Mammalia I	N/R	0.1

1308-1418-DRS--00006	1	Wild Mammal	Opossum	*Didelphis virginiana*	Maxilla	1.5
1308-1522-DRS--00010	1	Wild Mammal	Opossum	*Didelphis virginiana*	Maxilla	0.3
1308-1522-DRS--00011	1	Wild Mammal	Opossum	*Didelphis virginiana*	Premolar	0.1
1308-1522-DRS--00012	1	Wild Mammal	Opossum	*Didelphis virginiana*	Upper molar 2	0.1
1308-1522-DRS--00013	1	Wild Mammal	Opossum	*Didelphis virginiana*	Upper molar 3	0.1
1308-1364-DRS--00004	2	Wild Mammal	Opossum	*Didelphis virginiana*	Vertebra	1.5
1308-1382-DRS--00018	1	Wild Mammal	Opossum	*Didelphis virginiana*	Vertebra	1.5

1308-1383-DRS--00024	1	Wild Mammal	Opossum	*Didelphis virginiana*	Vertebra	0.2
1308-1383-DRS--00025	1	Wild Mammal	Opossum	*Didelphis virginiana*	Humerus	0.6
1308-1382-DRS--00019	1	Wild Mammal	Opossum	*Didelphis virginiana*	Ulna	1.5
1308-1393B-DRS--00001	2	Wild Mammal	Opossum	*Didelphis virginiana*	Phalanx	0.1
1308-1418-DRS--00007	1	Wild Mammal	Opossum	*Didelphis virginiana*	Phalanx	0.1
1308-1441-DRS--00023	1	Wild Mammal	Opossum	*Didelphis virginiana*	Phalanx	0.1
1308-1393B-DRS--00009	1	Commensal	Shorttail Shrew	*Blarina brevicauda*	Mandible	0.1

1308-1443-DRS--00006	1	Commensal	Eastern Mole	*Scalopus aquaticus*	Unid	0.8
1308-1791-DRS--00023	1	Commensal	Eastern Mole	*Scalopus aquaticus*	Femur	0.1
1308-1499-DRS--00020	1	Commensal	Eastern Mole	*Scalopus aquaticus*	Femur	0.1
1308-1733-DRS--00004	1	Mammal	Hare or Rabbit	Order Lagomorpha	Lumbar vertebra	0.4
1308-1733-DRS--00003	1	Mammal	Hare or Rabbit	Order Lagomorpha	Sacrum	0.8
1308-1249-DRS--00004	1	Mammal	Rodent	Order Rodentia	Upper incisor	0.5
1308-1791-DRS--00010	1	Mammal	Rodent	Order Rodentia	Innominate	0.1

1308-1791-DRS--00009	1	Mammal	Rodent	Order Rodentia	Tibia	0.1
1308-1324-DRS--00010	1	Wild Mammal	Old World Rat or Mouse	Family Muridae	Unid	0.1
1308-1393B-DRS--00003	1	Wild Mammal	Old World Rat or Mouse	Family Muridae	Mandible	0.1
1308-1393B-DRS--00004	1	Wild Mammal	Old World Rat or Mouse	Family Muridae	Mandible	0.1
1308-1393B-DRS--00005	1	Wild Mammal	Old World Rat or Mouse	Family Muridae	Mandible	0.1
1308-1436-DRS--00149	1	Wild Mammal	Old World Rat or Mouse	Family Muridae	Innominate	0.1
1308-1393B-DRS--00006	1	Wild Mammal	Old World Rat or Mouse	Family Muridae	Femur	0.1

1308-1393B-DRS--00007	1	Wild Mammal	Old World Rat or Mouse	Family Muridae	Femur	0.1
1308-1393B-DRS--00008	1	Wild Mammal	Old World Rat or Mouse	Family Muridae	Femur	0.1
1308-1393B-DRS--00017	1	Wild Mammal	Old World Rat or Mouse	Family Muridae	Calcaneus	0.1
1308-1802-DRS--00002	1	Commensal	Rats	Rat spp.	Femur	0.2
1308-1335-DRS--00007	1	Commensal	Old World Rat	Rattus spp.	Innominate	0.5
1308-1522-DRS--00014	1	Commensal	Old World Rat	Rattus spp.	Maxilla	0.1
1308-1592-DRS--00017	1	Commensal	Old World Rat	Rattus spp.	Femur	0.4

1308-1324-DRS--00026	1	Commensal	Norway Rat	*Rattus norvegicus*	Maxilla	0.1
1308-1383-DRS--00026	1	Commensal	Norway Rat	*Rattus norvegicus*	Humerus	0.1
1308-1394-DRS--00020	1	Commensal	Norway Rat	*Rattus norvegicus*	Mandible	1
1308-1469-DRS--00002	1	Commensal	Norway Rat	*Rattus norvegicus*	Mandible	0.1
1308-1393B-DRS--00002	1	Commensal	Roof Rat	*Rattus rattus*	Mandible	0.1
1308-1815-DRS--00001	1	Wild Mammal	Raccoon	*Procyon lotor*	Mandible	9.6
1308-1613-DRS--00009	1	Wild Mammal	Raccoon	*Procyon lotor*	Maxilla	2.5

1308-1637-DRS--00008	1	Wild Mammal	Raccoon	*Procyon lotor*	Maxilla	1.1
1308-1352-DRS--00003	1	Wild Mammal	Raccoon	*Procyon lotor*	Premolar or molar	0.1
1308-1364-DRS--00007	1	Wild Mammal	Raccoon	*Procyon lotor*	Canine	0.5
1308-1514-DRS--00004	1	Wild Mammal	Raccoon	*Procyon lotor*	Upper molar 1	0.4
1308-1580-DRS--00009	1	Wild Mammal	Raccoon	*Procyon lotor*	Upper molar 3	1
1308-1602-DRS--00005	1	Wild Mammal	Raccoon	*Procyon lotor*	Upper molar 3	0.2
1308-1750-DRS--00003	1	Wild Mammal	Raccoon	*Procyon lotor*	Upper molar 3	0.3

1308-1637-DRS--00007	1	Wild Mammal	Raccoon	*Procyon lotor*	Upper canine	0.6
1308-1499-DRS--00012	1	Wild Mammal	Raccoon	*Procyon lotor*	Lower molar 2	0.2
1308-1813-DRS--00001	1	Wild Mammal	Raccoon	*Procyon lotor*	Lower molar 2	0.5
1308-1499-DRS--00013	1	Wild Mammal	Raccoon	*Procyon lotor*	Lower molar 3	0.2
1308-1613-DRS--00008	1	Wild Mammal	Raccoon	*Procyon lotor*	Lower molar 3	0.7
1308-1815-DRS--00002	1	Wild Mammal	Raccoon	*Procyon lotor*	Lower canine	0.7
1308-1815-DRS--00007	1	Wild Mammal	Raccoon	*Procyon lotor*	Caudal vertebra	0.3

1308-1813-DRS--00010	1	Wild Mammal	Raccoon	*Procyon lotor*	Innominate	0.7
1308-1644-DRS--00014	1	Wild Mammal	Raccoon	*Procyon lotor*	Humerus	1.4
1308-1436-DRS--00145	1	Wild Mammal	Weasel or Skunk	Family Mustelidae	Thoracic vertebra	0.5
1308-1823-DRS--00006	1	Wild Mammal	Striped Skunk	*Mephitis mephitis*	Mandible	0.2
1308-1522-DRS--00020	1	Wild Mammal	Red Fox	*Vulpes vulpes*	Maxilla	0.6
1308-2451-DRS--00006	1	Wild Mammal	Red Fox	*Vulpes vulpes*	Ulna	0.4
1308-1536-DRS--00016	1	Wild Mammal	Grey Fox	*Urocyon cinereoargenteus*	Ulna	0.5

1308-1383-DRS--00019	3	Mammal	Even-Toed Ungulate	Order Artiodactyla	Unid	3.7
1308-1457-DRS--00002	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Unid	1.3
1308-1410-DRS--00006	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Bulla tympanica	3
1308-1316-DRS--00004	5	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	2.5
1308-1324-DRS--00018	3	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	5
1308-1325-DRS--00148	4	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.5
1308-1330-DRS--00007	11	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	8.5

1308-1335-DRS--00006	51	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	5
1308-1335-DRS--00013	5	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.5
1308-1335-DRS--00021	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.5
1308-1339-DRS--00006	9	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	5
1308-1344-DRS--00009	5	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	3.5
1308-1349-DRS--00007	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.1
1308-1349-DRS--00014	8	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	3.8

1308-1352-DRS--00002	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	2
1308-1364-DRS--00006	10	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	4.5
1308-1382-DRS--00016	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.1
1308-1383-DRS--00015	8	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	3.9
1308-1389-DRS--00004	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.7
1308-1409-DRS--00006	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.8
1308-1412-DRS--00003	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.1

1308-1423-DRS--00128	6	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	2.5
1308-1427-DRS--00001	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.5
1308-1429-DRS--00011	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.2
1308-1430-DRS--00012	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.5
1308-1435-DRS--00005	3	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	2
1308-1436-DRS--00138	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.5
1308-1496-DRS--00015	3	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	2.5

1308-1498-DRS--00001	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.2
1308-1499-DRS--00004	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.9
1308-1499-DRS--00005	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.4
1308-1500-DRS--00106	7	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	3.5
1308-1521-DRS--00002	4	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.7
1308-1529-DRS--00014	17	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	7.1
1308-1533-DRS--00006	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.2

1308-1536-DRS--00011	4	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	2.5
1308-1546-DRS--00004	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.8
1308-1548-DRS--00002	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.8
1308-1548-DRS--00010	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.3
1308-1550-DRS--00005	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.6
1308-1564-DRS--00004	41	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.9
1308-1592-DRS--00007	5	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.6

1308-1596-DRS--00003	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.7
1308-1620-DRS--00010	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.5
1308-1644-DRS--00007	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.3
1308-1656-DRS--00005	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.3
1308-1684-DRS--00003	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.6
1308-1721-DRS--00003	8	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	3.8
1308-1740-DRS--00004	3	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.2

1308-1783-DRS--00001	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.5
1308-1791-DRS--00008	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.7
1308-1813-DRS--00003	3	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.3
1308-1815-DRS--00011	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.4
1308-1823-DRS--00004	5	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.9
1308-1906-DRS--00002	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.3
1308-1907-DRS--00002	3	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.8

1308-1939-DRS--00007	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	1.7
1308-1994-DRS--00001	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.1
1308-2009-DRS--00002	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.3
1308-2384-DRS--00002	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Tooth	0.3
1308-1339-DRS--00005	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Premolar or molar	4
1308-1280-DRS--00003	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Premolar or molar	0.5
1308-1382-DRS--00017	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Premolar or molar	0.1

1308-1390-DRS--00009	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Premolar or molar	0.5
1308-1411-DRS--00003	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Premolar or molar	1.3
1308-1415-DRS--00004	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Premolar or molar	1.6
1308-1550-DRS--00007	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Premolar or molar	0.7
1308-1587-DRS--00022	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Premolar or molar	2.5
1308-1908-DRS--00001	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Premolar or molar	2.5
1308-1636-DRS--00001	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Lower molar 3	1.4

1308-1382-DRS--00015	2	Mammal	Even-Toed Ungulate	Order Artiodactyla	Long bone	3.5
1308-1383-DRS--00018	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Metapodial	2.1
1308-2384-DRS--00003	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Third phalanx	0.4
1308-1410-DRS--00004	1	Mammal	Even-Toed Ungulate	Order Artiodactyla	Sesamoid	2.5
1308-1374-DRS--00006	2	Mammal	Sheep, Goat, Deer, or Pig	Order Artiodactyla I	Tooth	1.5
1308-1410-DRS--00001	2	Mammal	Sheep, Goat, Deer, or Pig	Order Artiodactyla I	Tooth	1.5
1308-1621-DRS--00011	1	Mammal	Sheep, Goat, or Deer	Order Artiodactyla II	Tooth	0.5

1308-1392-DRS--00013	1	Mammal	Sheep, Goat, Deer, or Pig	Order Artiodactyla I	Humerus	2.5
1308-1435-DRS--00006	1	Mammal	Sheep, Goat, Deer, or Pig	Order Artiodactyla I	Phalanx	0.1
1308-1522-DRS--00007	11	Domestic Mammal	Domestic Pig	*Sus scrofa*	Unid	5.9
1308-1727-DRS--00004	5	Domestic Mammal	Domestic Pig	*Sus scrofa*	Unid	5.1
1308-1324-DRS--00012	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Bulla tympanica	2.5
1308-1329-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Bulla tympanica	2
1308-1364-DRS--00012	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Bulla tympanica	1.5

1308-1879-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Maxilla	5.5
1308-1324-DRS--00011	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Mandible	6
1308-1335-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Mandible	3.5
1308-1344-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Mandible	16
1308-1344-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Mandible	4
1308-1356-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Mandible	2.5
1308-1383-DRS--00020	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Mandible	3.4

1308-1394-DRS--00036	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Mandible	5
1308-1501-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Mandible	13
1308-1501-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Mandible	8.8
1308-1330-DRS--00006	2	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	1.5
1308-1344-DRS--00006	2	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	1
1308-1364-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.5
1308-1392-DRS--00011	2	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	1.5

1308-1418-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.1
1308-1429-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.1
1308-1496-DRS--00014	4	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	1.9
1308-1501-DRS--00010	3	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	1.7
1308-1534-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.4
1308-1536-DRS--00010	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.5
1308-1316-DRS--00003	2	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	2

1308-1325-DRS--00147	3	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	2
1308-1596-DRS--00013	21	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.9
1308-1637-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.6
1308-1673-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.4
1308-1711-DRS--00008	2	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.9
1308-1718-DRS--00011	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.4
1308-1721-DRS--00010	3	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	1.5

1308-1724-DRS--00004	2	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.6
1308-1756-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.3
1308-1812-DRS--00004	2	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	1.5
1308-1815-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	0.4
1308-1935-DRS--00007	5	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	6
1308-2351-DRS--00001	2	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tooth	1.1
1308-1335-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	1

1308-1339-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	1
1308-1344-DRS--00005	3	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	2
1308-1382-DRS--00014	3	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	2.5
1308-1389-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.2
1308-1390-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	1.5
1308-1393-DRS--00010	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	1.5
1308-1411-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.4

1308-1415-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.2
1308-1423-DRS--00127	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.1
1308-1429-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.8
1308-1430-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.5
1308-1436-DRS--00134	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	1
1308-1469-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.4
1308-1499-DRS--00009	6	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	2.1

1308-1500-DRS--00104	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	1
1308-1500-DRS--00105	2	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	1
1308-1529-DRS--00011	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.4
1308-1529-DRS--00013	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.5
1308-1548-DRS--00014	3	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	1.6
1308-1587-DRS--00023	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.5
1308-1592-DRS--00006	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.9

1308-1619-DRS--00005	4	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	2.5
1308-1621-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.3
1308-1770-DRS--00006	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.5
1308-1783-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	1
1308-1925-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.4
1308-1939-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar or molar	0.8
1308-1330-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Molar	1.5

1308-1496-DRS--00012	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Molar	2.7
1308-1514-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Molar	1.5
1308-1548-DRS--00012	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Molar	1.9
1308-1564-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Molar	1.6
1308-1599-DRS--00010	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Molar	3.5
1308-1613-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Molar	0.5
1308-1663-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Molar	0.6

1308-1684-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Molar	0.7
1308-1718-DRS--00010	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Molar	0.6
1308-1989-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Molar	1.7
1308-1374-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar	1.5
1308-1518-DRS--00006	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar	0.2
1308-1522-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Premolar	0.1
1308-1252-DRS--00001	2	Domestic Mammal	Domestic Pig	*Sus scrofa*	Incisor	1.5

1308-1561-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Canine	0.5
1308-1644-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Canine	0.8
1308-1663-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Canine	1.2
1308-1813-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Canine	0.3
1308-1344-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Incisor	0.1
1308-1374-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Incisor	1
1308-1436-DRS--00133	3	Domestic Mammal	Domestic Pig	*Sus scrofa*	Incisor	3.5

1308-1496-DRS--00013	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Incisor	0.5
1308-1533-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Incisor	1.1
1308-1534-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Incisor	0.5
1308-1564-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Incisor	1.6
1308-2018-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Incisor	0.6
1308-1521-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 1	1.5
1308-1522-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 1	1.7

1308-1621-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 1	0.2
1308-1694-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 1	0.5
1308-1727-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 1	2
1308-1548-DRS--00011	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 2	4.4
1308-1596-DRS--00012	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 2	1.1
1308-1656-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 2	3.8
1308-1356-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 3	2

1308-1529-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 3	3.8
1308-1580-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 3	1.1
1308-1721-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 3	3.5
1308-1770-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 3	5.2
1308-1939-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 3	2.1
1308-2348-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper molar 3	4.6
1308-1280-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 1	1.5

1308-1374-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 2	1
1308-1414-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 2	1
1308-1514-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 2	0.5
1308-1518-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 2	0.6
1308-1522-DRS--00006	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 2	0.4
1308-1740-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 2	0.5
1308-1324-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 3	2

1308-1390-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 3	0.5
1308-1496-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 3	1.5
1308-1711-DRS--00006	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 3	1.1
1308-1324-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 4	2.5
1308-1711-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 4	2.5
1308-1727-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper premolar 4	1.8
1308-1789-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper canine	1.8

1308-1325-DRS--00162	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper incisor 1	1
1308-1429-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper incisor 1	1.5
1308-1352-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper incisor 2	1
1308-1392-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper incisor 2	1.5
1308-1392-DRS--00010	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper incisor 2	1.5
1308-1415-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper incisor 2	0.1
1308-1500-DRS--00103	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper incisor 2	1

1308-1619-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper incisor 2	0.2
1308-1352-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper incisor 3	1
1308-1352-DRS--00006	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper incisor 3	0.5
1308-1382-DRS--00013	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Upper incisor 3	1
1308-1578-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 1	1
1308-1945-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 1	1.6
1308-1339-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 2	3.5

1308-1522-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 2	4.2
1308-1529-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 2	1.5
1308-1529-DRS--00010	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 2	0.7
1308-2442-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 2	5.4
1308-1339-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 3	4.5
1308-1344-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 3	8
1308-1435-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 3	3.5

1308-1514-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 3	11.1
1308-1529-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 3	3.5
1308-1534-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 3	6.3
1308-1564-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 3	1.5
1308-1565-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 3	2.7
1308-1596-DRS--00011	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 3	1.6
1308-1721-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 3	2.2

1308-1935-DRS--00006	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower molar 3	7
1308-1548-DRS--00013	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower premolar	0.2
1308-1522-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower premolar 1	0.2
1308-1596-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower premolar 1	0.6
1308-1717-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower premolar 1	0.3
1308-1596-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower premolar 2	0.3
1308-1717-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower premolar 2	0.2

1308-1580-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower premolar 3	1.7
1308-1596-DRS--00010	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower premolar 4	0.4
1308-1717-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower premolar 4	0.5
1308-1280-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	1
1308-1330-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	1.5
1308-1339-DRS--00010	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	0.5
1308-1382-DRS--00012	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	1.5

1308-1383-DRS--00021	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	2.1
1308-1393-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	3
1308-1411-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	0.2
1308-1423-DRS--00126	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	5
1308-1501-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	5.4
1308-1529-DRS--00012	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	0.3
1308-1548-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	0.6

1308-1602-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	0.7
1308-1602-DRS--00012	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	0.5
1308-1621-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	0.9
1308-1668-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	2
1308-1789-DRS--00006	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower canine	0.9
1308-1352-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor	0.5
1308-1383-DRS--00022	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor	0.3

1308-1335-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor 2	0.5
1308-1349-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor 2	1
1308-1394-DRS--00019	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor 2	0.5
1308-1416-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor 2	0.5
1308-1418-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor 2	0.5
1308-1592-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor 2	2.2
1308-1613-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor 2	0.7

1308-1499-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor 3	1.2
1308-1587-DRS--00024	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor 3	0.5
1308-1620-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor 3	0.5
1308-1812-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Lower incisor 3	0.5
1308-1324-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Thoracic vertebra	2
1308-1393-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Thoracic vertebra	7
1308-1335-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Scapula	7.5

1308-1441-DRS--00022	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Innominate	24.5
1308-1580-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Innominate	3
1308-1382-DRS--00010	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Long bone	20
1308-1325-DRS--00163	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Humerus	15.5
1308-1382-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Humerus	5.5
1308-1392-DRS--00006	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Humerus	39.5
1308-1418-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Humerus	18.4

1308-1791-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Radius	2.6
1308-1429-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Ulna	7.6
1308-1374-DRS--00010	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Femur	2
1308-1324-DRS--00006	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tibia	9
1308-1324-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tibia	6
1308-1374-DRS--00005	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tibia	3
1308-1592-DRS--00012	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tibia	0.8

1308-1756-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Tibia	9.2
1308-1791-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Carpal or tarsal	2.2
1308-1392-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Metapodial	1.5
1308-1382-DRS--00011	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Metacarpal IV	5.5
1308-1389-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Phalanx	1.5
1308-1392-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Phalanx	1
1308-1393-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Phalanx	1.5

1308-1418-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Phalanx	0.5
1308-1324-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	First phalanx	2.5
1308-1324-DRS--00009	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	First phalanx	0.5
1308-1414-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	First phalanx	1.1
1308-1596-DRS--00007	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	First phalanx	3.9
1308-1394-DRS--00018	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Second phalanx	1
1308-1414-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Second phalanx	0.5

1308-1428-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Second phalanx	1.9
1308-1436-DRS--00135	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Second phalanx	1
1308-1470-DRS--00001	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Second phalanx	1.3
1308-1791-DRS--00004	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Second phalanx	0.4
1308-1418-DRS--00002	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Third phalanx	0.6
1308-1428-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Third phalanx	1.6
1308-1621-DRS--00010	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Third phalanx	0.1

1308-1330-DRS--00003	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Calcaneus	4.5
1308-1382-DRS--00008	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Astragalus	4
1308-1383-DRS--00023	1	Domestic Mammal	Domestic Pig	*Sus scrofa*	Sesamoid	2
1308-1935-DRS--00004	1	Mammal	Sheep, Goat, or Deer	Order Artiodactyla II	Tooth	1
1308-1394-DRS--00037	1	Wild Mammal	White-Tailed Deer	Odocoileus virginianus	Rib	4.5
1308-1441-DRS--00021	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Thoracic vertebra	3.5
1308-1592-DRS--00003	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Molar	1.2

1308-1324-DRS--00001	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Upper molar 1	2
1308-1717-DRS--00005	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Upper molar 1	4.2
1308-1392-DRS--00012	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Upper premolar 1	1
1308-1580-DRS--00022	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Upper premolar 1	0.5
1308-1592-DRS--00004	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Upper premolar 1	0.4
1308-1717-DRS--00004	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Upper premolar 1	1.8
1308-1619-DRS--00006	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Lower molar 1	0.7

1308-1602-DRS--00004	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Lower premolar 1	0.4
1308-1580-DRS--00023	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Lower premolar 2	0.5
1308-1791-DRS--00005	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Lower incisor 2	0.6
1308-1436-DRS--00137	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Metapodial	1
1308-1356-DRS--00010	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Carpal or tarsal	1
1308-1436-DRS--00136	1	Domestic Mammal	Domestic Sheep or Goat	Ovis aries/Capra hircus	Astragalus	6
1308-1339-DRS--00004	7	Domestic Mammal	Domestic Cow	*Bos taurus*	Unid	15

1308-1393-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Unid	1
1308-1536-DRS--00008	14	Domestic Mammal	Domestic Cow	*Bos taurus*	Unid	32.1
1308-1536-DRS--00009	3	Domestic Mammal	Domestic Cow	*Bos taurus*	Unid	2.9
1308-1750-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Unid	1
1308-1794-DRS--00008	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Unid	1
1308-1794-DRS--00016	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Unid	8.5
1308-1882-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Temporal	5

1308-1349-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Mandible	55.8
1308-1325-DRS--00161	3	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	3
1308-1374-DRS--00001	2	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	4
1308-1392-DRS--00005	5	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	11
1308-1414-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	0.1
1308-1429-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	0.2
1308-1457-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	1

1308-1496-DRS--00006	3	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	2.3
1308-1496-DRS--00007	3	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	2.4
1308-1500-DRS--00100	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	2
1308-1501-DRS--00006	10	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	6.4
1308-1518-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	0.8
1308-1533-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	0.4
1308-1548-DRS--00007	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	3.4

1308-1548-DRS--00008	3	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	2.6
1308-1565-DRS--00004	8	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	7.4
1308-1580-DRS--00003	4	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	6.4
1308-1586-DRS--00002	4	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	2.1
1308-1592-DRS--00002	3	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	4.5
1308-1599-DRS--00005	2	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	1.9
1308-1613-DRS--00003	13	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	8.2

1308-1619-DRS--00008	2	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	1.6
1308-1621-DRS--00015	5	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	2.6
1308-1629-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	0.2
1308-1637-DRS--00003	3	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	1.1
1308-1657-DRS--00002	2	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	1.6
1308-1705-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	1.4
1308-1711-DRS--00003	7	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	6.5

1308-1718-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	0.9
1308-1718-DRS--00005	4	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	1.5
1308-1721-DRS--00002	2	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	2.7
1308-1735-DRS--00003	3	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	3.7
1308-1789-DRS--00005	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	0.7
1308-1823-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	1.3
1308-1935-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Tooth	3

1308-1335-DRS--00002	2	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	10.5
1308-1349-DRS--00003	4	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	7.4
1308-1364-DRS--00003	3	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	6.5
1308-1382-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	1.5
1308-1393-DRS--00005	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	7.5
1308-1409-DRS--00001	2	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	6.6
1308-1412-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	1.5

1308-1415-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	0.5
1308-1436-DRS--00132	4	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	7
1308-1496-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	6.4
1308-1518-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	1.6
1308-1520-DRS--00023	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	2.5
1308-1529-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	11.2
1308-1534-DRS--00002	2	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	11.3

1308-1580-DRS--00005	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	5
1308-1619-DRS--00003	2	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	4.8
1308-1629-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	2.7
1308-1673-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	0.9
1308-1907-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	6.3
1308-1939-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	1.9
1308-2052-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Premolar or molar	1.5

1308-1316-DRS--00002	2	Domestic Mammal	Domestic Cow	*Bos taurus*	Molar	13.5
1308-1356-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Molar	17.5
1308-1548-DRS--00009	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Molar	1
1308-1561-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Molar	1.7
1308-1602-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Molar	1.4
1308-1613-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Molar	5.8
1308-1621-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Molar	1.8

1308-1644-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Molar	5.9
1308-1711-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Molar	3.9
1308-1324-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	1
1308-1325-DRS--00160	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	3
1308-1344-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	1
1308-1364-DRS--00002	3	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	3
1308-1382-DRS--00007	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	3.5

1308-1383-DRS--00008	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	3.2
1308-1392-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	2.5
1308-1393-DRS--00006	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	3
1308-1412-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	1
1308-1435-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	0.5
1308-1436-DRS--00130	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	2
1308-1496-DRS--00005	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	1.6

1308-1500-DRS--00101	2	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	2.5
1308-1514-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	2.1
1308-1518-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	2
1308-1529-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	1.4
1308-1548-DRS--00006	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	2.5
1308-1596-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	1.6
1308-1621-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	0.3

1308-1644-DRS--00005	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	1.1
1308-1657-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	2.8
1308-1698-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	0.9
1308-1705-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	0.7
1308-1711-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Incisor	1.6
1308-1221-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar	11
1308-1410-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar	7.5

1308-1550-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar	9.7
1308-1621-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar	3.4
1308-1621-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar	1.7
1308-1735-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar	5.9
1308-1349-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 1	11.2
1308-1382-DRS--00005	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 1	14.5
1308-1536-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 1	14.3

1308-1619-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 1	9.3
1308-1668-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 1	2.1
1308-1935-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 1	8.5
1308-1382-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 2	26
1308-1382-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 2	29
1308-1501-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 2	28.7
1308-1613-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 2	21.3

1308-1686-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 2	33.1
1308-1894-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 2	21
1308-1325-DRS--00158	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 3	34
1308-1335-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 3	34.5
1308-1382-DRS--00006	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 3	28.5
1308-1536-DRS--00005	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper molar 3	27.7
1308-1501-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar	6.5

1308-1325-DRS--00159	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 1	5
1308-1356-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 1	6
1308-1364-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 1	6
1308-1430-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 1	5.1
1308-1592-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 1	3.8
1308-1599-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 1	3.6
1308-1718-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 1	4.2

1308-1356-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 2	10
1308-1499-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 2	5.9
1308-1529-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 2	6
1308-1550-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 2	5.4
1308-1663-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 2	9.4
1308-1740-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 2	10.7
1308-1435-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 3	10

1308-1496-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 3	12.6
1308-1599-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Upper premolar 3	13.4
1308-1500-DRS--00102	3	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar or molar	8
1308-1330-DRS--00001	2	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar	10.5
1308-1550-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar	1.8
1308-1686-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar	4.1
1308-1534-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar 1	8

1308-1599-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar 1	6.5
1308-1735-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar 1	4.5
1308-1718-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar 1 or 2	4.7
1308-1316-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar 2	15
1308-1392-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar 2	20
1308-1619-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar 2	13.9
1308-1436-DRS--00131	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar 2 or 3	17.5

1308-1500-DRS--00098	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar 3	39.5
1308-1596-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower molar 3	9.5
1308-1352-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 1	1.5
1308-1383-DRS--00009	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 1	1
1308-1410-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 1	1.5
1308-1499-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 1	1.2
1308-1580-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 1	1.1

1308-1602-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 1	1.3
1308-1718-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 1	1.7
1308-1939-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 1	2.3
1308-1499-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 2	1.8
1308-1536-DRS--00007	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 2	4.1
1308-1548-DRS--00005	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 2	5.5
1308-1721-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 2	5.4

1308-1339-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 3	6.5
1308-1536-DRS--00006	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Lower premolar 3	10.5
1308-1329-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Vertebra	13.5
1308-1339-DRS--00011	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Cervical vertebra	3.5
1308-2451-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Rib	24.5
1308-1349-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Scapula	33.7
1308-1794-DRS--00015	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Innominate	7.5

1308-1796-DRS--00005	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Innominate	5
1308-1648-DRS--00012	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Femur	22.5
1308-1339-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	10.5
1308-1352-DRS--00009	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	14.5
1308-1356-DRS--00007	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	3.5
1308-1383-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	20.8
1308-1383-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	14

1308-1383-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	7.5
1308-1536-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	104.8
1308-1536-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	36.1
1308-1548-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	12
1308-1620-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	3
1308-1621-DRS--00005	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	2.8
1308-1644-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	9

1308-1644-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metapodial	21.1
1308-1339-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metacarpal	30
1308-1382-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metacarpal	16.6
1308-1392-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metacarpal	100.5
1308-1400-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metacarpal	53
1308-1428B-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metacarpal	9
1308-1442-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metacarpal	37.3

1308-1640-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metacarpal	92.3
1308-1335-DRS--00010	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Carpal or tarsal	7.5
1308-1501-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Carpal or tarsal	4.1
1308-1550-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Carpal or tarsal	7.5
1308-1500-DRS--00099	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Fused carpal 2 + 3	4
1308-1789-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Intermediate carpal	10.4
1308-1789-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Radial carpal	11.5

1308-1393-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metatarsal	30
1308-1620-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metatarsal	3.5
1308-1620-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metatarsal	4
1308-1880-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Metatarsal	3.3
1308-1879-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Main metatarsal	84.2
1308-1522-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Calcaneus	15.5
1308-1529-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Calcaneus	5.6

1308-1428-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Phalanx	7.8
1308-1644-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Phalanx	6.3
1308-1880-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Phalanx	2.3
1308-1383-DRS--00007	1	Domestic Mammal	Domestic Cow	*Bos taurus*	First phalanx	9.2
1308-1392-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	First phalanx	17
1308-1428B-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	First phalanx	7
1308-1436-DRS--00125	1	Domestic Mammal	Domestic Cow	*Bos taurus*	First phalanx	13

1308-1436-DRS--00126	1	Domestic Mammal	Domestic Cow	*Bos taurus*	First phalanx	16.5
1308-1447-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	First phalanx	10
1308-1561-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	First phalanx	25
1308-1698-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	First phalanx	6
1308-1393-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Proximal sesamoid	2
1308-1599-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Proximal sesamoid	2.8
1308-1344-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	4.5

1308-1356-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	11.5
1308-1356-DRS--00006	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	6
1308-1383-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	7.2
1308-1383-DRS--00005	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	5
1308-1383-DRS--00006	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	5
1308-1389-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	9.5
1308-1394-DRS--00016	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	16

1308-1400-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	12.1
1308-1496-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	10.5
1308-1522-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	13.3
1308-1536-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	6.1
1308-1561-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	8.2
1308-1621-DRS--00006	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	4.6
1308-1637-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	2.7

1308-1705-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	2.9
1308-1740-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	7
1308-1756-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	5.6
1308-1789-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	9.8
1308-1796-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	11
1308-2325-DRS--00001	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Second phalanx	0.9
1308-1356-DRS--00005	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Third phalanx	13.5

1308-1436-DRS--00127	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Third phalanx	11
1308-1436-DRS--00128	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Third phalanx	2.5
1308-1436-DRS--00129	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Third phalanx	1
1308-1740-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Third phalanx	4.1
1308-1879-DRS--00002	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Third phalanx	5.7
1308-1393-DRS--00004	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Sesamoid	3
1308-1400-DRS--00003	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Sesamoid	1.9

1308-1394-DRS--00017	1	Domestic Mammal	Domestic Cow	*Bos taurus*	Distal sesamoid	1.5
Total	**7785**	**-**	**-**	**-**	**-**	**11299.8**

APPENDIX G:
SMITH PLANTATION TAXA IDENTIFIED AT LOWEST POSSIBLE LEVEL

Artifact ID	Count	Taxon Category	Taxon English	Taxon Latin	Element	Bone Weight (g.)
3001-F03-DRS-S-19--00027	44	Unid	Unid	Unid	Unid	16.8
3001-F01-DRS--00004	9	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1.5
3001-F01-DRS--00005	1	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.3
3001-F02A-FLT-S-01--00011	7	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.8
3001-F02A-FLT-S-01--00012	4	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1
3001-F02A-FLT-S-02--00012	32	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	7.9
3001-F02A-FLT-S-12--00013	26	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1.3
3001-F02A-FLT-S-12--00014	7	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.5
3001-F02A-FLT-S-30--00011	30	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	2

3001-F02A-FLT-S-30--00012	7	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.7
3001-F02B-FLT-S-16--00005	5	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.2
3001-F02C-FLT-S-03--00011	30	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1.1
3001-F02C-FLT-S-03--00012	4	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.2
3001-F03-DRS-S-19--00008	4	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.1
3001-F03-FLT-S-04--00006	7	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.6
3001-F03-FLT-S-11--00014	6	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.4
3001-F03-FLT-S-11--00015	64	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1.9
3001-F03-FLT-S-23--00011	6	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.8
3001-F03-FLT-S-23--00012	1	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.4
3001-F03-FLT-S-25--00021	37	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.9
3001-F03-FLT-S-25--00022	5	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.3
3001-F04C-FLT-S-10--00011	83	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1.3

3001-F04C-FLT-S-10--00012	5	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1.9
3001-F04C-FLT-S-31--00008	16	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.4
3001-F04C-FLT-S-31--00009	1	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.1
3001-F04C-PSR-S-27--00016	20	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	4.2
3001-F04C-PSR-S-27--00018	3	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.3
3001-F05-FLT-S-39--00008	6	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1.4
3001-F06A-FLT-S-33--00007	12	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.6
3001-F06A-FLT-S-33--00008	1	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.1
3001-F10-FLT-S-07--00007	7	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.2
3001-F10-FLT-S-18--00008	13	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.8
3001-F10-FLT-S-18--00009	15	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.3
3001-F10-FLT-S-21--00007	6	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.1
3001-F10-FLT-S-21--00008	20	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.3
3001-F10-FLT-S-34--00006	8	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.2

3001-F10-PSR--00014	1	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1
3001-F11-DRS--00009	31	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	5.3
3001-F12-FLT-S-28--00008	6	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.1
3001-F12-FLT-S-28--00009	2	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.1
3001-F13-FLT-S-40--00011	16	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	2.6
3001-F13-FLT-S-40--00012	3	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.5
3001-F14-DRS--00002	4	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	5
3001-U1L2-DRS--00007	78	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	28.7
3001-U1L2-DRS--00008	2	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.3
3001-U1L3-DRS--00009	69	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	36.4
3001-U2L2-DRS--00007	97	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	24.8
3001-U2L2-DRS--00008	7	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	5.7
3001-U2L3-DRS--00007	67	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	17.2
3001-U2L3-DRS--00008	4	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	6

3001-U3L2-DRS--00008	275	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	59.2
3001-U3L2-DRS--00009	10	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	8.6
3001-U3L3-DRS--00014	140	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	31.2
3001-U4L2-DRS--00009	57	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	17.7
3001-U4L2-DRS--00010	11	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	4.7
3001-U5L1-DRS--00002	4	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	2.6
3001-U5L1-DRS--00003	4	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	2.5
3001-U5L2-DRS--00002	58	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	21.9
3001-U5L2-DRS--00003	59	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	24.9
3001-U5L2-DRS--00006	3	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1.1
3001-U5L2-DRS--00010	16	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	5.9
3001-U5L2-FLT-S-13--00006	19	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1.6
3001-U5L2-FLT-S-13--00007	68	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	3.8
3001-U5L2-FLT-S-17--00005	48	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	5.8

3001-U5L2-FLT-S-17--00006	19	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1.9
3001-U6L1AND2-DRS--00001	1	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.2
3001-U6L1-DRS--00001	2	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.6
3001-U6L2-DRS--00013	295	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	98.7
3001-U6L2-DRS--00014	5	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1.6
3001-U6L2-DRS--00015	56	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	14.5
3001-U6L2-FLT-S-20--00009	14	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	2.2
3001-U6L2-FLT-S-20--00010	157	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	5.6
3001-U6L2-FLT-S-20--00011	128	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	2
3001-U6L2-FLT-S-32--00005	37	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	2.3
3001-U6L2-FLT-S-32--00006	4	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.2
3001-U6L3-DRS--00020	45	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	11.5
3001-U6L3-DRS--00021	62	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	12.5
3001-U6L3-DRS--00029	15	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	5.9

3001-U7L1AND2-DRS--00001	7	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	4.1
3001-U7L1-DRS--00001	11	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	7.9
3001-U7L1-DRS--00002	1	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	0.7
3001-U7L2-DRS--00012	136	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	45.6
3001-U7L2-DRS--00013	13	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	4.7
3001-U7L2-DRS--00014	4	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1
3001-U7L2-DRS--00015	49	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	23
3001-U7L2-FLT-S-38--00005	149	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	6.1
3001-U7L2-FLT-S-38--00006	37	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	1.9
3001-U7L3-DRS--00002	11	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Unid	2.6
3001-U5L2-DRS--00004	2	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Vertebra	1
3001-F10-FLT-S-07--00008	1	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Tooth	0.1
3001-F10-FLT-S-07--00009	1	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Tooth	0.3
3001-U5L1-DRS--00004	1	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Tooth	1

3001-U5L2-FLT-S-08--00005	31	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Tooth	1.6
3001-U5L2-FLT-S-08--00006	14	Vertebrate	Unid Vertebrate	Subphylum Vertebrata	Tooth	1.8
3001-F01-DRS--00003	2	Fish	Bony Fish	Class Osteichthyes	Unid	0.5
3001-F02A-FLT-S-01--00009	13	Fish	Bony Fish	Class Osteichthyes	Unid	0.7
3001-F02A-FLT-S-02--00010	7	Fish	Bony Fish	Class Osteichthyes	Unid	1
3001-F02A-FLT-S-12--00011	10	Fish	Bony Fish	Class Osteichthyes	Unid	0.2
3001-F02A-FLT-S-30--00009	18	Fish	Bony Fish	Class Osteichthyes	Unid	0.3
3001-F02C-FLT-S-03--00006	1	Fish	Bony Fish	Class Osteichthyes	Unid	1.2
3001-F02C-FLT-S-03--00008	7	Fish	Bony Fish	Class Osteichthyes	Unid	0.3
3001-F03-FLT-S-11--00010	2	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
3001-F03-FLT-S-23--00009	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
3001-F03-FLT-S-25--00019	28	Fish	Bony Fish	Class Osteichthyes	Unid	2.8
3001-F04C-FLT-S-10--00009	10	Fish	Bony Fish	Class Osteichthyes	Unid	0.3
3001-F04C-PSR-S-27--00017	11	Fish	Bony Fish	Class Osteichthyes	Unid	1.1

3001-F06A-FLT-S-33--00006	5	Fish	Bony Fish	Class Osteichthyes	Unid	0.2
3001-F11-DRS--00007	2	Fish	Bony Fish	Class Osteichthyes	Unid	0.3
3001-F11-DRS--00008	3	Fish	Bony Fish	Class Osteichthyes	Unid	6.7
3001-F13-FLT-S-40--00010	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
3001-F14-DRS--00001	2	Fish	Bony Fish	Class Osteichthyes	Unid	0.8
3001-U1L3-DRS--00005	9	Fish	Bony Fish	Class Osteichthyes	Unid	1.2
3001-U2L2-DRS--00003	30	Fish	Bony Fish	Class Osteichthyes	Unid	12.2
3001-U2L3-DRS--00004	13	Fish	Bony Fish	Class Osteichthyes	Unid	4.8
3001-U3L2-DRS--00005	29	Fish	Bony Fish	Class Osteichthyes	Unid	8.7
3001-U3L3-DRS--00008	3	Fish	Bony Fish	Class Osteichthyes	Unid	0.5
3001-U3L3-DRS--00012	18	Fish	Bony Fish	Class Osteichthyes	Unid	7.2
3001-U4L2-DRS--00006	12	Fish	Bony Fish	Class Osteichthyes	Unid	3.8
3001-U5L2-DRS--00007	39	Fish	Bony Fish	Class Osteichthyes	Unid	13.7
3001-U5L2-FLT-S-08--00003	8	Fish	Bony Fish	Class Osteichthyes	Unid	0.5

3001-U5L2-FLT-S-13--00003	22	Fish	Bony Fish	Class Osteichthyes	Unid	1
3001-U5L2-FLT-S-13--00005	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.4
3001-U5L2-FLT-S-17--00003	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.6
3001-U5L2-FLT-S-17--00004	8	Fish	Bony Fish	Class Osteichthyes	Unid	0.7
3001-U6L2-DRS--00010	11	Fish	Bony Fish	Class Osteichthyes	Unid	17.2
3001-U6L2-DRS--00012	54	Fish	Bony Fish	Class Osteichthyes	Unid	10.6
3001-U6L2-FLT-S-20--00005	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.4
3001-U6L2-FLT-S-20--00006	1	Fish	Bony Fish	Class Osteichthyes	Unid	0.1
3001-U6L2-FLT-S-20--00008	7	Fish	Bony Fish	Class Osteichthyes	Unid	0.2
3001-U6L2-FLT-S-32--00004	2	Fish	Bony Fish	Class Osteichthyes	Unid	0.4
3001-U6L3-DRS--00023	6	Fish	Bony Fish	Class Osteichthyes	Unid	1.8
3001-U6L3-DRS--00025	4	Fish	Bony Fish	Class Osteichthyes	Unid	2.7
3001-U7L2-DRS--00008	2	Fish	Bony Fish	Class Osteichthyes	Unid	2.6
3001-U7L2-FLT-S-38--00003	2	Fish	Bony Fish	Class Osteichthyes	Unid	0.4

3001-U7L2-FLT-S-38--00004	5	Fish	Bony Fish	Class Osteichthyes	Unid	0.2
3001-U1L2-DRS--00004	1	Fish	Bony Fish	Class Osteichthyes	Otolith	0.3
3001-U4L2-DRS--00007	1	Fish	Bony Fish	Class Osteichthyes	Otolith	0.2
3001-U5L2-DRS--00008	3	Fish	Bony Fish	Class Osteichthyes	Otolith	8.8
3001-F02A-FLT-S-12--00012	10	Fish	Bony Fish	Class Osteichthyes	Scale	0.1
3001-F03-FLT-S-11--00011	1	Fish	Bony Fish	Class Osteichthyes	Scale	0.1
3001-F03-FLT-S-25--00018	6	Fish	Bony Fish	Class Osteichthyes	Scale	0.1
3001-F04C-FLT-S-10--00010	1	Fish	Bony Fish	Class Osteichthyes	Scale	0.1
3001-F10-FLT-S-18--00007	2	Fish	Bony Fish	Class Osteichthyes	Scale	0.1
3001-U3L3-DRS--00011	1	Fish	Bony Fish	Class Osteichthyes	Scale	0.1
3001-F02A-FLT-S-01--00007	2	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
3001-F02A-FLT-S-12--00010	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
3001-F02A-FLT-S-30--00008	3	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
3001-F02C-FLT-S-03--00009	3	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1

3001-F03-FLT-S-25--00017	8	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
3001-F06A-FLT-S-33--00005	2	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
3001-U3L3-DRS--00010	2	Fish	Bony Fish	Class Osteichthyes	Vertebra	3.7
3001-U6L2-FLT-S-20--00007	4	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
3001-U6L2-FLT-S-32--00003	3	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
3001-U6L3-DRS--00024	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
3001-U7L2-DRS--00004	1	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.2
3001-U7L2-DRS--00005	6	Fish	Bony Fish	Class Osteichthyes	Vertebra	2.7
3001-U7L2-FLT-S-38--00002	5	Fish	Bony Fish	Class Osteichthyes	Vertebra	0.1
3001-F02A-FLT-S-01--00008	1	Fish	Bony Fish	Class Osteichthyes	Tooth	0.1
3001-F02A-FLT-S-12--00009	1	Fish	Bony Fish	Class Osteichthyes	Tooth	0.1
3001-F02C-FLT-S-03--00007	15	Fish	Bony Fish	Class Osteichthyes	Tooth	0.7
3001-F03-FLT-S-11--00012	1	Fish	Bony Fish	Class Osteichthyes	Tooth	0.1
3001-F03-FLT-S-23--00008	1	Fish	Bony Fish	Class Osteichthyes	Tooth	0.6

3001-F03-FLT-S-25--00016	2	Fish	Bony Fish	Class Osteichthyes	Tooth	0.4
3001-F04C-FLT-S-10--00008	4	Fish	Bony Fish	Class Osteichthyes	Tooth	0.2
3001-U1L2-DRS--00005	21	Fish	Bony Fish	Class Osteichthyes	Tooth	5.4
3001-U1L2-DRS--00009	1	Fish	Bony Fish	Class Osteichthyes	Tooth	0.1
3001-U1L3-DRS--00006	1	Fish	Bony Fish	Class Osteichthyes	Tooth	0.1
3001-U2L2-DRS--00004	4	Fish	Bony Fish	Class Osteichthyes	Tooth	1
3001-U2L3-DRS--00003	2	Fish	Bony Fish	Class Osteichthyes	Tooth	0.6
3001-U3L2-DRS--00006	3	Fish	Bony Fish	Class Osteichthyes	Tooth	1
3001-U3L3-DRS--00013	4	Fish	Bony Fish	Class Osteichthyes	Tooth	1.1
3001-U4L2-DRS--00008	2	Fish	Bony Fish	Class Osteichthyes	Tooth	0.5
3001-U5L1-DRS--00005	1	Fish	Bony Fish	Class Osteichthyes	Tooth	0.1
3001-U5L2-DRS--00011	3	Fish	Bony Fish	Class Osteichthyes	Tooth	0.7
3001-U5L2-FLT-S-08--00004	4	Fish	Bony Fish	Class Osteichthyes	Tooth	0.4
3001-U5L2-FLT-S-13--00004	3	Fish	Bony Fish	Class Osteichthyes	Tooth	0.2

3001-U5L2-FLT-S-17--00002	3	Fish	Bony Fish	Class Osteichthyes	Tooth	0.2
3001-U6L2-DRS--00009	28	Fish	Bony Fish	Class Osteichthyes	Tooth	7.9
3001-U6L2-FLT-S-20--00004	3	Fish	Bony Fish	Class Osteichthyes	Tooth	0.4
3001-U6L2-FLT-S-32--00002	2	Fish	Bony Fish	Class Osteichthyes	Tooth	0.3
3001-U6L3-DRS--00026	7	Fish	Bony Fish	Class Osteichthyes	Tooth	2.4
3001-U7L2-DRS--00009	1	Fish	Bony Fish	Class Osteichthyes	Tooth	0.3
3001-U7L2-FLT-S-38--00001	2	Fish	Bony Fish	Class Osteichthyes	Tooth	0.2
3001-U7L3-DRS--00003	1	Fish	Bony Fish	Class Osteichthyes	Tooth	0.3
3001-U6L2-DRS--00011	1	Fish	Bony Fish	Class Osteichthyes	Maxilla	0.1
3001-U1L2-DRS--00003	3	Reptile / Amphibian	Reptile	Class Reptilia	Unid	2.1
3001-U2L2-DRS--00002	2	Reptile / Amphibian	Reptile	Class Reptilia	Unid	0.5
3001-U2L3-DRS--00005	1	Reptile / Amphibian	Reptile	Class Reptilia	Unid	0.2
3001-U3L2-DRS--00007	2	Reptile / Amphibian	Reptile	Class Reptilia	Unid	0.6
3001-U3L3-DRS--00009	1	Reptile / Amphibian	Reptile	Class Reptilia	Unid	0.3

3001-U4L2-DRS--00005	2	Reptile / Amphibian	Reptile	Class Reptilia	Unid	0.7
3001-U5L2-DRS--00009	8	Reptile / Amphibian	Reptile	Class Reptilia	Unid	2.5
3001-U6L2-DRS--00003	1	Reptile / Amphibian	Reptile	Class Reptilia	Unid	2.1
3001-U7L2-DRS--00010	1	Reptile / Amphibian	Reptile	Class Reptilia	Unid	0.9
3001-U7L2-DRS--00011	2	Reptile / Amphibian	Reptile	Class Reptilia	Unid	0.4
3001-F01-DRS--00002	2	Bird	Bird	Class Aves	Unid	0.1
3001-F11-DRS--00006	1	Bird	Bird	Class Aves	Unid	0.3
3001-U1L3-DRS--00004	5	Bird	Bird	Class Aves	Unid	1.1
3001-U2L3-DRS--00006	2	Bird	Bird	Class Aves	Unid	0.1
3001-U3L2-DRS--00004	19	Bird	Bird	Class Aves	Unid	5.1
3001-U3L3-DRS--00007	5	Bird	Bird	Class Aves	Unid	0.8
3001-U4L2-DRS--00004	1	Bird	Bird	Class Aves	Unid	0.7
3001-U5L2-DRS--00005	5	Bird	Bird	Class Aves	Unid	1.4
3001-U6L2-DRS--00004	8	Bird	Bird	Class Aves	Unid	2.4

3001-U6L3-DRS--00022	4	Bird	Bird	Class Aves	Unid	0.5
3001-U7L2-DRS--00007	5	Bird	Bird	Class Aves	Unid	1.4
3001-U4L2-DRS--00003	1	Bird	Bird	Class Aves	Vertebra	0.3
3001-U6L2-DRS--00005	2	Bird	Bird	Class Aves	Vertebra	0.3
3001-U7L2-DRS--00006	2	Bird	Bird	Class Aves	Vertebra	0.7
3001-F01-DRS--00001	3	Mammal	Mammal	Class Mammalia	Unid	2.8
3001-F02A-FLT-S-02--00009	1	Mammal	Mammal	Class Mammalia	Unid	2.8
3001-F02A-FLT-S-12--00007	2	Mammal	Mammal	Class Mammalia	Unid	5.9
3001-F03-FLT-S-11--00008	1	Mammal	Mammal	Class Mammalia	Unid	0.1
3001-F03-FLT-S-11--00009	5	Mammal	Mammal	Class Mammalia	Unid	6.4
3001-F03-FLT-S-25--00012	1	Mammal	Mammal	Class Mammalia	Unid	0.1
3001-F03-FLT-S-25--00015	1	Mammal	Mammal	Class Mammalia	Unid	0.3
3001-F04C-PSR-S-27--00015	1	Mammal	Mammal	Class Mammalia	Unid	2.1
3001-F10-PSR--00012	5	Mammal	Mammal	Class Mammalia	Unid	2.7

3001-F11-DRS--00002	1	Mammal	Mammal	Class Mammalia	Unid	30.4
3001-F11-DRS--00003	20	Mammal	Mammal	Class Mammalia	Unid	40.9
3001-F11-DRS--00005	1	Mammal	Mammal	Class Mammalia	Unid	1.7
3001-F14-DRS--00009	1	Mammal	Mammal	Class Mammalia	Unid	450.3
3001-U1L1-DRS--00002	4	Mammal	Mammal	Class Mammalia	Unid	5.4
3001-U1L2-DRS--00001	18	Mammal	Mammal	Class Mammalia	Unid	80.9
3001-U1L2-DRS--00002	1	Mammal	Mammal	Class Mammalia	Unid	15.6
3001-U1L3-DRS--00002	1	Mammal	Mammal	Class Mammalia	Unid	5.6
3001-U1L3-DRS--00003	8	Mammal	Mammal	Class Mammalia	Unid	35.7
3001-U2L2-DRS--00001	22	Mammal	Mammal	Class Mammalia	Unid	32.1
3001-U2L3-DRS--00001	29	Mammal	Mammal	Class Mammalia	Unid	51.4
3001-U3L1-DRS--00001	4	Mammal	Mammal	Class Mammalia	Unid	6.1
3001-U3L2-DRS--00001	142	Mammal	Mammal	Class Mammalia	Unid	299.8
3001-U3L3-DRS--00001	1	Mammal	Mammal	Class Mammalia	Unid	40.1

3001-U3L3-DRS--00003	4	Mammal	Mammal	Class Mammalia	Unid	2.2
3001-U3L3-DRS--00004	32	Mammal	Mammal	Class Mammalia	Unid	81.2
3001-U3L3-DRS--00005	5	Mammal	Mammal	Class Mammalia	Unid	11.8
3001-U4L1-DRS--00001	3	Mammal	Mammal	Class Mammalia	Unid	0.5
3001-U4L2-DRS--00001	31	Mammal	Mammal	Class Mammalia	Unid	31.3
3001-U5L1-DRS--00001	1	Mammal	Mammal	Class Mammalia	Unid	1.8
3001-U5L2-DRS--00001	11	Mammal	Mammal	Class Mammalia	Unid	11.5
3001-U5L2-FLT-S-08--00001	1	Mammal	Mammal	Class Mammalia	Unid	1.6
3001-U5L2-FLT-S-13--00001	1	Mammal	Mammal	Class Mammalia	Unid	0.6
3001-U6L2-DRS--00001	1	Mammal	Mammal	Class Mammalia	Unid	5.4
3001-U6L2-DRS--00002	55	Mammal	Mammal	Class Mammalia	Unid	100.1
3001-U6L2-FLT-S-20--00001	2	Mammal	Mammal	Class Mammalia	Unid	2.7
3001-U6L3-DRS--00019	17	Mammal	Mammal	Class Mammalia	Unid	57.8
3001-U6L3-DRS--00028	3	Mammal	Mammal	Class Mammalia	Unid	2.7

3001-U7L2-DRS--00001	1	Mammal	Mammal	Class Mammalia	Unid	1.3
3001-U7L2-DRS--00002	34	Mammal	Mammal	Class Mammalia	Unid	98.3
3001-U7L3-DRS--00001	3	Mammal	Mammal	Class Mammalia	Unid	7.3
3001-F03-DRS-S-19--00009	1	Mammal	Mammal	Class Mammalia	Tooth	0.1
3001-F03-FLT-S-25--00014	1	Mammal	Mammal	Class Mammalia	Tooth	0.6
3001-F04C-PSR-S-27--00013	1	Mammal	Mammal	Class Mammalia	Tooth	38.5
3001-F04C-PSR-S-27--00014	1	Mammal	Mammal	Class Mammalia	Tooth	0.8
3001-F11-DRS--00004	3	Mammal	Mammal	Class Mammalia	Tooth	1.6
3001-F13-FLT-S-40--00009	1	Mammal	Mammal	Class Mammalia	Tooth	0.7
3001-U1L1-DRS--00001	1	Mammal	Mammal	Class Mammalia	Tooth	3
3001-U1L2-DRS--00006	3	Mammal	Mammal	Class Mammalia	Tooth	5.5
3001-U1L3-DRS--00008	8	Mammal	Mammal	Class Mammalia	Tooth	11.1
3001-U2L2-DRS--00005	21	Mammal	Mammal	Class Mammalia	Tooth	14.5
3001-U2L3-DRS--00002	13	Mammal	Mammal	Class Mammalia	Tooth	11.1

3001-U3L2-DRS--00003	20	Mammal	Mammal	Class Mammalia	Tooth	28
3001-U3L3-DRS--00006	10	Mammal	Mammal	Class Mammalia	Tooth	11
3001-U4L1-DRS--00002	1	Mammal	Mammal	Class Mammalia	Tooth	0.6
3001-U4L2-DRS--00002	9	Mammal	Mammal	Class Mammalia	Tooth	12.3
3001-U5L2-DRS--00012	12	Mammal	Mammal	Class Mammalia	Tooth	10.9
3001-U5L2-FLT-S-08--00002	2	Mammal	Mammal	Class Mammalia	Tooth	0.5
3001-U5L2-FLT-S-13--00002	1	Mammal	Mammal	Class Mammalia	Tooth	0.1
3001-U5L2-FLT-S-17--00001	2	Mammal	Mammal	Class Mammalia	Tooth	3.5
3001-U6L2-DRS--00008	37	Mammal	Mammal	Class Mammalia	Tooth	29.2
3001-U6L2-FLT-S-20--00003	8	Mammal	Mammal	Class Mammalia	Tooth	0.6
3001-U6L2-FLT-S-32--00001	3	Mammal	Mammal	Class Mammalia	Tooth	1.5
3001-U6L3-DRS--00027	14	Mammal	Mammal	Class Mammalia	Tooth	9.1
3001-U7L1-DRS--00003	1	Mammal	Mammal	Class Mammalia	Tooth	1.2
3001-U7L2-DRS--00003	12	Mammal	Mammal	Class Mammalia	Tooth	7.8

3001-U3L2-DRS--00002	2	Mammal	Mammal	Class Mammalia	Tooth row	0.5
3001-U6L2-DRS--00006	1	Mammal	Mammal	Class Mammalia	Tooth row	0.8
3001-U6L2-FLT-S-20--00002	1	Mammal	Mammal	Class Mammalia	Tooth row	1
3001-U6L2-DRS--00007	1	Mammal	Mammal	Class Mammalia	Mandible	0.4
3001-F11-DRS--00001	1	Mammal	Mammal	Class Mammalia	Rib	20.1
3001-U1L3-DRS--00001	2	Mammal	Mammal	Class Mammalia	Rib	9.6
3001-U3L3-DRS--00002	2	Mammal	Mammal	Class Mammalia	Rib	14.4
3001-F03-FLT-S-25--00013	1	Mammal	Mammal	Class Mammalia	Claw	0.1
3001-F02A-FLT-S-01--00010	5	Crustacean	Crustacean	Class Crustacea	Claw	0.8
3001-F02A-FLT-S-02--00011	2	Crustacean	Crustacean	Class Crustacea	Claw	0.7
3001-F02A-FLT-S-12--00008	1	Crustacean	Crustacean	Class Crustacea	Claw	0.1
3001-F02A-FLT-S-30--00010	3	Crustacean	Crustacean	Class Crustacea	Claw	0.1
3001-F02C-FLT-S-03--00010	5	Crustacean	Crustacean	Class Crustacea	Claw	0.3
3001-F03-FLT-S-11--00013	7	Crustacean	Crustacean	Class Crustacea	Claw	0.7

3001-F03-FLT-S-23--00010	4	Crustacean	Crustacean	Class Crustacea	Claw	0.4
3001-F03-FLT-S-25--00020	1	Crustacean	Crustacean	Class Crustacea	Claw	0.3
3001-F10-FLT-S-18--00010	1	Crustacean	Crustacean	Class Crustacea	Claw	0.1
3001-U1L3-DRS--00007	1	Crustacean	Crustacean	Class Crustacea	Claw	0.3
Totals	**4409**	-	-	-	-	**2609.1**

APPENDIX H:
STONO "TENANT SETTLEMENT" TAXA IDENTIFIED AT LOWEST POSSIBLE LEVEL

Artifact ID	Count	Taxon Category	Taxon Latin	Taxon English	Element	Bone Weight (g.)
1308-T2552-DRS--00373	1	Mollusks	Phylum Mollusca	Snails, Limpets, and Slugs	Shell	0.2
1308-T2555-DRS--00002	1	Mollusks	Phylum Mollusca	Snails, Limpets, and Slugs	Shell	0.3
1308-T2556-DRS--00421	1	Mollusks	Phylum Mollusca	Snails, Limpets, and Slugs	Shell	1
1308-T2557-DRS--00964	1	Mollusks	Phylum Mollusca	Snails, Limpets, and Slugs	Shell	0.5
1308-T2553-DRS--00003	1	Mollusks	Class Gastropoda	Snails, Limpets, and Slugs	Shell	27.5
1308-T2556-DRS--00263	1	Mollusks	Phylum Mollusca	Mollusk	Shell	391.3
1308-T2556-DRS--00420	1	Mollusks	Phylum Mollusca	Mollusk	Shell	7.7
1308-T2556-DRS--00738	1	Mollusks	Phylum Mollusca	Mollusk	Shell	2.5
1308-T2556-DRS--01109	1	Mollusks	Phylum Mollusca	Mollusk	Shell	2.2
1308-T2557-DRS--00196	1	Mollusks	Phylum Mollusca	Mollusk	Shell	0.7

1308-T2557-DRS--00456	1	Mollusks	Phylum Mollusca	Mollusk	Shell	0.9
1308-T2557-DRS--00593	1	Mollusks	Phylum Mollusca	Mollusk	Shell	4.1
1308-T2557-DRS--00836	1	Mollusks	Phylum Mollusca	Mollusk	Shell	3.3
1308-T2567-DRS--00001	1	Mollusks	Phylum Mollusca	Mollusk	Shell	125.1
1308-T2607-FLT--00021	0	Mollusks	Phylum Mollusca	Mollusk	Shell	0.1
1308-T2566-DRS--00002	1	Mollusks	Family Veneridae	Quahog	Shell	1.6
1308-T2557-DRS--00316	1	Mollusks	Family Veneridae	Quahog	Shell	5.2
1308-T2557-DRS--00455	1	Mollusks	Family Veneridae	Quahog	Shell	3.2
1308-T2552-DRS--00384	4	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.4
1308-T2556-DRS--00117	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.6
1308-T2556-DRS--01108	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2556-DRS--01438	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.4
1308-T2556-DRS--01439	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2556-DRS--01441	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.4

1308-T2556-DRS--01442	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.2
1308-T2556-DRS--01443	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2556-DRS--01444	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.3
1308-T2556-DRS--01445	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2556-DRS--01446	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2556-DRS--01447	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2556-DRS--01448	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2556-DRS--01449	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2556-DRS--01450	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2556-DRS--01451	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2557-DRS--00362	4	Vertebrate	Phylum Chordata	Vertebrate	Unid	1
1308-T2559-DRS--00041	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.6
1308-T2569-DRS--00003	3	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.7
1308-T2571-DRS--00004	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1

1308-T2601-FLT--00023	9	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.2
1308-T2601-FLT--00024	5	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.2
1308-T2602-FLT--00003	0	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2603-FLT--00005	1	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2604-FLT--00003	6	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2605-FLT--00001	2	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2606-FLT--00003	7	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2607-FLT--00003	6	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.2
1308-T2608-FLT--00002	0	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.3
1308-T2610-FLT--00001	5	Vertebrate	Phylum Chordata	Vertebrate	Unid	0.1
1308-T2556-DRS--01390	1	Fish	Class Osteichthyes	Bony Fish	Cranium	0.3
1308-T2556-DRS--01391	1	Fish	Class Osteichthyes	Bony Fish	Cranium	0.1
1308-T2556-DRS--01392	1	Fish	Class Osteichthyes	Bony Fish	Cranium	0.1
1308-T2556-DRS--01393	1	Fish	Class Osteichthyes	Bony Fish	Cranium	0.1

1308-T2556-DRS--01394	1	Fish	Class Osteichthyes	Bony Fish	Cranium	0.1
1308-T2556-DRS--01395	1	Fish	Class Osteichthyes	Bony Fish	Cranium	0.1
1308-T2556-DRS--01396	1	Fish	Class Osteichthyes	Bony Fish	Cranium	0.1
1308-T2556-DRS--01397	1	Fish	Class Osteichthyes	Bony Fish	Cranium	0.1
1308-T2612-FLT--00002	1	Fish	Class Osteichthyes	Bony Fish	Pectoral spine	0.1
1308-T2557-DRS--00357	7	Fish	Class Osteichthyes	Bony Fish	Scale	0.1
1308-T2562-DRS--00003	1	Fish	Class Osteichthyes	Bony Fish	Scale	0.1
1308-T2601-FLT--00027	8	Fish	Class Osteichthyes	Bony Fish	Scale	0.1
1308-T2601-FLT--00028	5	Fish	Class Osteichthyes	Bony Fish	Scale	0.1
1308-T2602-FLT--00001	0	Fish	Class Osteichthyes	Bony Fish	Scale	0.1
1308-T2603-FLT--00003	4	Fish	Class Osteichthyes	Bony Fish	Scale	0.1
1308-T2604-FLT--00004	0	Fish	Class Osteichthyes	Bony Fish	Scale	0.1
1308-T2606-FLT--00004	4	Fish	Class Osteichthyes	Bony Fish	Scale	0.1
1308-T2557-DRS--00363	1	Fish	Class Osteichthyes	Bony Fish	Unid	0.4

1308-T2559-DRS--00162	1	Fish	Class Osteichthyes	Bony Fish	Unid	0.2
1308-T2559-DRS--00163	1	Fish	Class Osteichthyes	Bony Fish	Unid	0.1
1308-T2601-FLT--00021	1	Fish	Class Osteichthyes	Bony Fish	Unid	0.1
1308-T2556-DRS--01225	1	Fish	Class Osteichthyes	Bony Fish	Unid	0.1
1308-T2556-DRS--01342	1	Fish	Class Osteichthyes	Bony Fish	Unid	0.1
1308-T2602-FLT--00002	0	Fish	Class Osteichthyes	Bony Fish	Unid	0.1
1308-T2556-DRS--01398	1	Fish	Class Osteichthyes	Bony Fish	Vertebra	0.1
1308-T2601-FLT--00022	1	Fish	Class Osteichthyes	Bony Fish	Vertebra	0.1
1308-T2604-FLT--00001	1	Fish	Class Osteichthyes	Bony Fish	Vertebra	0.1
1308-T2607-FLT--00002	1	Fish	Class Osteichthyes	Bony Fish	Vertebra	0.1
1308-T2556-DRS--01386	1	Fish	Family Ariidae	Sea Catfish	Otolith	0.5
1308-T2559-DRS--00161	1	Fish	Family Ariidae	Sea Catfish	Cleithrum	0.1
1308-T2553-DRS--00173	1	Fish	Arius felis	Hardhead Catfish	Otolith	1.4
1308-T2556-DRS--01399	1	Fish	Arius felis	Hardhead Catfish	Cranium	0.1

1308-T2556-DRS--01389	1	Fish	Arius felis	Hardhead Catfish	Cleithrum	0.1
1308-T2557-DRS--00359	1	Fish	Arius felis	Hardhead Catfish	Cleithrum	0.1
1308-T2557-DRS--00360	1	Fish	Arius felis	Hardhead Catfish	Cleithrum	0.1
1308-T2557-DRS--00361	1	Fish	Arius felis	Hardhead Catfish	Lateral ethmoid	0.4
1308-T2556-DRS--01387	1	Fish	Arius felis	Hardhead Catfish	Frontal	0.2
1308-T2557-DRS--00358	1	Fish	Arius felis	Hardhead Catfish	Frontal	0.5
1308-T2559-DRS--00165	1	Fish	Bagre marinus	Gaff-Topsail Catfish	Otolith	0.2
1308-T2557-DRS--00364	1	Fish	Bagre marinus	Gaff-Topsail Catfish	Unid	0.1
1308-T2556-DRS--01388	1	Fish	Family Percidae	Perch	Preopercular	0.3
1308-T2608-FLT--00003	2	Fish	Family Sciaenidae	Croaker or Drum	Tooth	0.1
1308-T2556-DRS--01453	1	Bird	Class Aves	Bird	Unid	0.2
1308-T2556-DRS--01454	1	Bird	Class Aves	Bird	Unid	0.5
1308-T2556-DRS--01455	1	Bird	Class Aves	Bird	Unid	0.1
1308-T2556-DRS--01456	1	Bird	Class Aves	Bird	Unid	0.3

1308-T2556-DRS--01457	1	Bird	Class Aves	Bird	Unid	0.1
1308-T2556-DRS--01458	1	Bird	Class Aves	Bird	Unid	0.1
1308-T2556-DRS--01459	1	Bird	Class Aves	Bird	Unid	0.2
1308-T2556-DRS--01460	1	Bird	Class Aves	Bird	Unid	0.1
1308-T2556-DRS--01461	1	Bird	Class Aves	Bird	Unid	0.1
1308-T2556-DRS--01462	1	Bird	Class Aves	Bird	Unid	0.1
1308-T2556-DRS--01463	1	Bird	Class Aves	Bird	Unid	0.1
1308-T2557-DRS--00352	1	Bird	Class Aves	Bird	Unid	0.2
1308-T2557-DRS--00354	1	Bird	Class Aves	Bird	Unid	0.3
1308-T2557-DRS--00355	3	Bird	Class Aves	Bird	Unid	0.4
1308-T2560-DRS--00006	1	Bird	Class Aves	Bird	Unid	0.2
1308-T2557-DRS--00353	1	Bird	Class Aves	Bird	Rib	0.1
1308-T2557-DRS--00351	1	Bird	Class Aves	Bird	Phalanx	0.1
1308-T2558-DRS--00003	4	Bird	Class Aves	Bird	Eggshell	0.1

1308-T2557-DRS--00349	1	Chicken	Gallus gallus	Domestic Bird	Furculum	0.1
1308-T2557-DRS--00350	1	Chicken	Gallus gallus	Domestic Bird	Furculum	0.1
1308-T2556-DRS--01465	1	Turtle	Order Testudines	Turtle	Unid	1.6
1308-T2556-DRS--01466	1	Turtle	Order Testudines	Turtle	Unid	0.7
1308-T2556-DRS--01467	1	Turtle	Order Testudines	Turtle	Unid	0.3
1308-T2556-DRS--01468	1	Turtle	Order Testudines	Turtle	Unid	0.5
1308-T2556-DRS--01471	1	Turtle	Order Testudines	Turtle	Unid	0.4
1308-T2556-DRS--01472	1	Turtle	Order Testudines	Turtle	Unid	0.1
1308-T2556-DRS--01473	1	Turtle	Order Testudines	Turtle	Unid	0.1
1308-T2556-DRS--01059	1	Turtle	Order Testudines	Turtle	Carapace or plastron	0.5
1308-T2556-DRS--01106	1	Turtle	Order Testudines	Turtle	Carapace or plastron	0.1
1308-T2556-DRS--01474	1	Turtle	Order Testudines	Turtle	Carapace or plastron	0.3
1308-T2556-DRS--01475	1	Turtle	Order Testudines	Turtle	Carapace or plastron	0.4
1308-T2556-DRS--01476	1	Turtle	Order Testudines	Turtle	Carapace or plastron	0.1

1308-T2556-DRS--01477	1	Turtle	Order Testudines	Turtle	Carapace or plastron	0.1
1308-T2556-DRS--01478	1	Turtle	Order Testudines	Turtle	Carapace or plastron	0.1
1308-T2556-DRS--01479	1	Turtle	Order Testudines	Turtle	Carapace or plastron	0.1
1308-T2557-DRS--00366	2	Turtle	Order Testudines	Turtle	Carapace or plastron	0.7
1308-T2557-DRS--00367	11	Turtle	Order Testudines	Turtle	Carapace or plastron	2.3
1308-T2556-DRS--01469	1	Turtle	Order Testudines	Turtle	Carapace	0.6
1308-T2556-DRS--01470	1	Turtle	Order Testudines	Turtle	Carapace	0.3
1308-T2556-DRS--01481	1	Turtle	Order Testudines	Turtle	Carapace	1.1
1308-T2557-DRS--00365	1	Turtle	Order Testudines	Turtle	Carapace	1
1308-T2556-DRS--01482	1	Turtle	Order Testudines	Turtle	Plastron	0.5
1308-T2556-DRS--01483	1	Turtle	Order Testudines	Turtle	Plastron	0.4
1308-T2556-DRS--01484	1	Turtle	Order Testudines	Turtle	Plastron	0.2
1308-T2557-DRS--00001	1	Turtle	Order Testudines	Turtle	Plastron	0.7
1308-T2600-DRS--00003	1	Turtle	Order Testudines	Turtle	Plastron	1.1

1308-T2556-DRS--01480	1	Turtle	Order Testudines	Turtle	Vertebra	0.1
1308-T2556-DRS--01464	1	Turtle	Family Kinosternidae	Musk or Mud Turtle	Plastron	5.4
1308-T2556-DRS--01485	1	Box or Water Turtle	Family Emydidae	Turtle	Plastron	0.3
1308-T2552-DRS--00005	2	Mammal	Class Mammalia	Mammal	Unid	1.7
1308-T2552-DRS--00006	4	Mammal	Class Mammalia	Mammal	Unid	0.8
1308-T2552-DRS--00007	1	Mammal	Class Mammalia	Mammal	Unid	0.9
1308-T2552-DRS--00008	1	Mammal	Class Mammalia	Mammal	Unid	0.4
1308-T2552-DRS--00009	1	Mammal	Class Mammalia	Mammal	Unid	0.2
1308-T2552-DRS--00010	1	Mammal	Class Mammalia	Mammal	Unid	0.2
1308-T2552-DRS--00378	1	Mammal	Class Mammalia	Mammal	Unid	0.5
1308-T2552-DRS--00379	1	Mammal	Class Mammalia	Mammal	Unid	0.2
1308-T2552-DRS--00380	1	Mammal	Class Mammalia	Mammal	Unid	0.2
1308-T2552-DRS--00381	1	Mammal	Class Mammalia	Mammal	Unid	0.2
1308-T2552-DRS--00382	1	Mammal	Class Mammalia	Mammal	Unid	0.3

1308-T2552-DRS--00383	2	Mammal	Class Mammalia	Mammal	Unid	0.4
1308-T2552-DRS--00390	1	Mammal	Class Mammalia	Mammal	Unid	0.3
1308-T2553-DRS--00174	1	Mammal	Class Mammalia	Mammal	Unid	0.6
1308-T2554-DRS--00004	2	Mammal	Class Mammalia	Mammal	Unid	0.5
1308-T2556-DRS--01105	1	Mammal	Class Mammalia	Mammal	Unid	0.4
1308-T2556-DRS--01107	1	Mammal	Class Mammalia	Mammal	Unid	0.3
1308-T2556-DRS--01433	1	Mammal	Class Mammalia	Mammal	Unid	0.1
1308-T2556-DRS--01434	1	Mammal	Class Mammalia	Mammal	Unid	0.1
1308-T2556-DRS--01435	1	Mammal	Class Mammalia	Mammal	Unid	0.1
1308-T2556-DRS--01437	1	Mammal	Class Mammalia	Mammal	Unid	0.2
1308-T2557-DRS--00594	1	Mammal	Class Mammalia	Mammal	Unid	0.3
1308-T2557-DRS--00597	1	Mammal	Class Mammalia	Mammal	Unid	0.4
1308-T2559-DRS--00088	1	Mammal	Class Mammalia	Mammal	Unid	0.3
1308-T2559-DRS--00153	1	Mammal	Class Mammalia	Mammal	Unid	0.8

1308-T2559-DRS--00154	1	Mammal	Class Mammalia	Mammal	Unid	0.3
1308-T2559-DRS--00155	1	Mammal	Class Mammalia	Mammal	Unid	0.3
1308-T2559-DRS--00156	1	Mammal	Class Mammalia	Mammal	Unid	0.2
1308-T2559-DRS--00157	1	Mammal	Class Mammalia	Mammal	Unid	0.3
1308-T2559-DRS--00158	1	Mammal	Class Mammalia	Mammal	Unid	0.2
1308-T2559-DRS--00159	1	Mammal	Class Mammalia	Mammal	Unid	0.3
1308-T2559-DRS--00160	1	Mammal	Class Mammalia	Mammal	Unid	0.1
1308-T2560-DRS--00005	4	Mammal	Class Mammalia	Mammal	Unid	1
1308-T2563-DRS--00001	1	Mammal	Class Mammalia	Mammal	Unid	0.2
1308-T2569-DRS--00017	2	Mammal	Class Mammalia	Mammal	Unid	0.5
1308-T2569-DRS--00018	1	Mammal	Class Mammalia	Mammal	Unid	1.5
1308-T2569-DRS--00019	1	Mammal	Class Mammalia	Mammal	Unid	1.3
1308-T2573-DRS--00001	1	Mammal	Class Mammalia	Mammal	Unid	0.5
1308-T2574-DRS--00023	1	Mammal	Class Mammalia	Mammal	Unid	0.3

1308-T2575-DRS--00001	1	Mammal	Class Mammalia	Mammal	Unid	0.8
1308-T2588-DRS--00018	1	Mammal	Class Mammalia	Mammal	Unid	0.1
1308-T2588-DRS--00019	1	Mammal	Class Mammalia	Mammal	Unid	0.3
1308-T2588-DRS--00020	1	Mammal	Class Mammalia	Mammal	Unid	0.2
1308-T2588-DRS--00023	4	Mammal	Class Mammalia	Mammal	Unid	0.5
1308-T2594-DRS--00002	1	Mammal	Class Mammalia	Mammal	Unid	0.5
1308-T2600-DRS--00048	1	Mammal	Class Mammalia	Mammal	Unid	0.7
1308-T2600-DRS--00049	1	Mammal	Class Mammalia	Mammal	Unid	0.1
1308-T2604-FLT--00002	1	Mammal	Class Mammalia	Mammal	Unid	0.1
1308-T2609-FLT--00009	2	Mammal	Class Mammalia	Mammal	Unid	0.1
1308-T2611-FLT--00004	2	Mammal	Class Mammalia	Mammal	Unid	0.1
1308-T2612-FLT--00001	1	Mammal	Class Mammalia	Mammal	Unid	0.1
1308-T2556-DRS--01412	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.5
1308-T2556-DRS--01413	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.2

1308-T2556-DRS--01414	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2556-DRS--01415	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2556-DRS--01416	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2556-DRS--01417	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.2
1308-T2556-DRS--01419	1	Mammal	Class Mammalia III	Small Mammal	Unid	2.4
1308-T2556-DRS--01420	1	Mammal	Class Mammalia III	Small Mammal	Unid	1.6
1308-T2556-DRS--01421	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.9
1308-T2556-DRS--01422	1	Mammal	Class Mammalia III	Small Mammal	Unid	1.5
1308-T2556-DRS--01423	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.8
1308-T2556-DRS--01424	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.4
1308-T2556-DRS--01425	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.3
1308-T2556-DRS--01426	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.3
1308-T2556-DRS--01427	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2556-DRS--01428	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.4

1308-T2556-DRS--01429	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.3
1308-T2556-DRS--01430	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2556-DRS--01431	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2556-DRS--01432	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2557-DRS--00329	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.4
1308-T2557-DRS--00330	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.3
1308-T2557-DRS--00331	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.4
1308-T2557-DRS--00339	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2557-DRS--00340	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2557-DRS--00341	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2557-DRS--00342	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.2
1308-T2557-DRS--00343	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2557-DRS--00344	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.2
1308-T2557-DRS--00356	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.4

1308-T2557-DRS--00965	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.4
1308-T2557-DRS--01238	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.6
1308-T2559-DRS--00087	2	Mammal	Class Mammalia III	Small Mammal	Unid	0.3
1308-T2559-DRS--00164	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2569-DRS--00002	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.2
1308-T2600-DRS--00004	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.7
1308-T2607-FLT--00004	1	Mammal	Class Mammalia III	Small Mammal	Unid	0.1
1308-T2609-FLT--00008	1	Mammal	Class Mammalia III	Small Mammal	Tooth	0.1
1308-T2556-DRS--01418	1	Mammal	Class Mammalia III	Small Mammal	Lumbar vertebra	6.7
1308-T2603-FLT--00004	1	Mammal	Class Mammalia III	Small Mammal	Rib, body	0.2
1308-T2552-DRS--00004	1	Mammal	Class Mammalia III	Small Mammal	Innominate	0.1
1308-T2552-DRS--00376	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.2
1308-T2556-DRS--01401	1	Mammal	Class Mammalia II	Medium Mammal	Unid	3.7
1308-T2556-DRS--01403	1	Mammal	Class Mammalia II	Medium Mammal	Unid	1.8

1308-T2556-DRS--01404	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.6
1308-T2556-DRS--01405	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.6
1308-T2556-DRS--01407	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.5
1308-T2556-DRS--01408	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.3
1308-T2556-DRS--01409	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.8
1308-T2556-DRS--01410	1	Mammal	Class Mammalia II	Medium Mammal	Unid	1.4
1308-T2556-DRS--01411	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.5
1308-T2557-DRS--00067	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.4
1308-T2557-DRS--00321	1	Mammal	Class Mammalia II	Medium Mammal	Unid	3.1
1308-T2557-DRS--00322	1	Mammal	Class Mammalia II	Medium Mammal	Unid	2
1308-T2557-DRS--00323	1	Mammal	Class Mammalia II	Medium Mammal	Unid	1.1
1308-T2557-DRS--00324	1	Mammal	Class Mammalia II	Medium Mammal	Unid	1.9
1308-T2557-DRS--00325	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.9
1308-T2557-DRS--00326	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.5

1308-T2557-DRS--00327	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.9
1308-T2557-DRS--00328	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.3
1308-T2557-DRS--00332	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.9
1308-T2557-DRS--00333	1	Mammal	Class Mammalia II	Medium Mammal	Unid	1.2
1308-T2557-DRS--00334	1	Mammal	Class Mammalia II	Medium Mammal	Unid	1.6
1308-T2557-DRS--00335	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.7
1308-T2557-DRS--00336	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.6
1308-T2557-DRS--00337	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.4
1308-T2557-DRS--00338	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.2
1308-T2557-DRS--00345	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.7
1308-T2557-DRS--00346	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.6
1308-T2557-DRS--00347	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.1
1308-T2559-DRS--00152	1	Mammal	Class Mammalia II	Medium Mammal	Unid	5.8
1308-T2569-DRS--00041	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.7

1308-T2571-DRS--00001	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.5
1308-T2574-DRS--00007	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.7
1308-T2574-DRS--00008	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.6
1308-T2574-DRS--00009	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.4
1308-T2574-DRS--00010	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.3
1308-T2574-DRS--00011	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.3
1308-T2574-DRS--00012	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.8
1308-T2578-DRS--00003	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.4
1308-T2578-DRS--00004	1	Mammal	Class Mammalia II	Medium Mammal	Unid	1.1
1308-T2578-DRS--00005	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.7
1308-T2578-DRS--00006	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.1
1308-T2588-DRS--00021	1	Mammal	Class Mammalia II	Medium Mammal	Unid	0.7
1308-T2588-DRS--00022	1	Mammal	Class Mammalia II	Medium Mammal	Unid	1
1308-T2557-DRS--00348	1	Mammal	Class Mammalia II	Medium Mammal	Tooth	0.2

1308-T2552-DRS--00375	1	Mammal	Class Mammalia I	Large Mammal	Unid	2.6
1308-T2556-DRS--01104	1	Mammal	Class Mammalia I	Large Mammal	Unid	1.3
1308-T2557-DRS--00197	1	Mammal	Class Mammalia I	Large Mammal	Unid	0.9
1308-T2557-DRS--00457	1	Mammal	Class Mammalia I	Large Mammal	Unid	1.3
1308-T2574-DRS--00005	1	Mammal	Class Mammalia I	Large Mammal	Unid	2.6
1308-T2574-DRS--00006	1	Mammal	Class Mammalia I	Large Mammal	Unid	2.8
1308-T2588-DRS--00016	1	Mammal	Class Mammalia I	Large Mammal	Vertebra	16.5
1308-T2588-DRS--00017	1	Mammal	Class Mammalia I	Large Mammal	Vertebra	19.6
1308-T2552-DRS--00377	4	Mammal	Class Mammalia I	Large Mammal	Tooth	3
1308-T2557-DRS--00889	1	Mammal	Class Mammalia I	Large Mammal	Tooth	0.1
1308-T2559-DRS--00166	1	Mammal	Class Mammalia I	Large Mammal	Tooth	1
1308-T2574-DRS--00003	1	Mammal	Class Mammalia I	Large Mammal	Tooth	0.6
1308-T2574-DRS--00004	1	Mammal	Class Mammalia I	Large Mammal	Tooth	1
1308-T2557-DRS--00319	1	Mammal	Class Mammalia I	Large Mammal	Premolar or molar	0.8

1308-T2552-DRS--00003	1	Commensal	Family Talpidae	Mole	Maxilla	0.1
1308-T2552-DRS--00001	1	Commensal	Family Talpidae	Mole	Humerus	0.1
1308-T2552-DRS--00002	1	Commensal	Family Talpidae	Mole	Humerus	0.1
1308-T2559-DRS--00086	1	Mammal	Rabbit spp.	Rabbit	Innominate	0.8
1308-T2552-DRS--00374	1	Mammal	Rabbit spp.	Rabbit	Humerus	0.1
1308-T2560-DRS--00003	1	Mammal	Rabbit spp.	Rabbit	Humerus	0.2
1308-T2556-DRS--01440	1	Commensal	Rat spp.	Rats	Maxilla	0.1
1308-T2556-DRS--01436	1	Commensal	Rat spp.	Rats	Mandible	0.1
1308-T2600-DRS--00005	1	Wild Mammal	Family Mustelidae	Weasel or Skunk	Mandible	0.1
1308-T2556-DRS--01406	1	Domestic Mammal	Sus scrofa	Domestic Pig	Bulla tympanica	0.5
1308-T2556-DRS--01452	1	Domestic Mammal	Sus scrofa	Domestic Pig	Mandible	1.1
1308-T2557-DRS--00318	3	Domestic Mammal	Sus scrofa	Domestic Pig	Premolar or molar	0.8
1308-T2557-DRS--00317	1	Domestic Mammal	Sus scrofa	Domestic Pig	Upper molar 1	1.1
1308-T2556-DRS--01400	1	Domestic Mammal	Sus scrofa	Domestic Pig	Upper molar 2	0.5

1308-T2554-DRS--00003	1	Domestic Mammal	Sus scrofa	Domestic Pig	Upper molar 3	0.6
1308-T2559-DRS--00151	1	Domestic Mammal	Sus scrofa	Domestic Pig	Lower molar 1	0.4
1308-T2560-DRS--00004	1	Domestic Mammal	Sus scrofa	Domestic Pig	Lower molar 1	1.1
1308-T2588-DRS--00015	1	Domestic Mammal	Sus scrofa	Domestic Pig	Lower molar 1	1.4
1308-T2556-DRS--01103	1	Domestic Mammal	Sus scrofa	Domestic Pig	Lower premolar 4	0.4
1308-T2554-DRS--00002	1	Domestic Mammal	Sus scrofa	Domestic Pig	Upper canine	4
1308-T2557-DRS--00320	1	Domestic Mammal	Sus scrofa	Domestic Pig	Humerus	4.9
1308-T2578-DRS--00002	1	Domestic Mammal	Ovis aries/Capra hircus	Domestic Sheep or Goat	Cranium	10.8
1308-T2569-DRS--00015	1	Domestic Mammal	Bos taurus	Domestic Cow	Cranium	3.6
1308-T2569-DRS--00016	1	Domestic Mammal	Bos taurus	Domestic Cow	Cranium	1.4
1308-T2570-DRS--00001	1	Domestic Mammal	Bos taurus	Domestic Cow	Lower molar 2	4.7
1308-T2556-DRS--00116	1	Domestic Mammal	Bos taurus	Domestic Cow	Premolar	0.7
1308-T2556-DRS--01486	1	Vertebrate	Homo sapiens	Human	Upper molar 1 or 2	2.2
Totals	**413**	**-**	**-**	**-**	**-**	**797.9**