CHANGING ENVIRONMENTS AND ECONOMIES: A COMPREHENSIVE ZOOARCHAEOLOGICAL STUDY OF THE EASTERN PEQUOT

A Thesis Presented

by

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ABSTRACT

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August 2014

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This zooarchaeological study examines the recovered faunal remains from five household sites, dating from the early 18th to mid-19th centuries, on the Eastern Pequot reservation in North Stonington, Connecticut. The results of this study indicate the residents' incorporations of European-introduced practices and resources with traditional subsistence practices. Archaeological sites on the Eastern Pequot reservation have yielded a mixture of faunal remains from domesticated and wild species. Over the course of the 18th century, the residents came to rely on Europeanintroduced domesticated animals, off-reservation employment, their connections to the coast, and local trade for English goods, but all the while, into the mid-19th century, archaeological evidence suggests residents continued the use of traditional subsistence practices (such as hunting, shellfish collection, the use of stone tools, and sea fishing). The selection and combination of foodways practices allowed residents

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to maximize their resources and persist throughout the challenges and hardships that resulted from European colonization.

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CHAPTER 1

INTRODUCTION

Food is essential and matters greatly to human life (Belasco 2008). It is "intrinsically social," and "social relationships are defined and maintained through food" (Gumerman 1997:106). Because it is so social and integral to life, food "touches everything" (Couihan and Van Esterik 1997:1). Food can show how people connect to social processes, such as rituals, symbols, and belief systems (Mintz and DuBois 2002). Since food is greatly tied to social processes, it is also significantly entangled with peoples' personal identities (Belasco 2008). By examining the complex social processes of foodways, the cross-cultural variations within them, and the changes of those processes over time, we can improve our understandings of past peoples' lives (Couihan and Van Esterik 1997; Gumerman 1997; Mintz and DuBois 2002:111). Through studies of food remains recovered from archaeological sites, like zooarchaeology (the study of faunal specimens acquired from a site), archaeologists are writing more about food and negotiations of social identities during the colonial era, and this zooarchaeological study hopes to add to such literature by examining the impacts of European colonization on Native foodways on the Eastern Pequot reservation from the early 18th century to the mid-19th century.

Anthropologists are increasingly recognizing colonists as "agents of dietary change" (Mintz and DuBois 2002:105). The search for food and resources partly

motivated colonial conquest (Belasco 2008:2). More importantly, food is a common factor among all people and provides information on the differences between societies, because like any other cultural material, food can serve to solidify or differentiate groups (Mintz and DuBois 2002). Hence, archaeologists are using food studies, such as zooarchaeology, to delve into the complexities of colonialism (Twiss 2012). Food was "centrally important to the articulation of indigenous and colonial societies and the construction of identity and...understanding the role of food in these situations is crucial to understanding the operation of colonialism" (Dietler 2007:219). Archaeological studies suggest both Native American and European subsistence practices and human-environmental relationships were altered by colonialism (Deagan 2008; Twiss 2012). Colonialism is "about relations of power and the negotiation of identity between intrusive and indigenous groups" (Lev-Tov and deFrance 2010:x), and colonial and indigenous groups sometimes used food to gain control over the other (Dietler 2007). Zooarchaeological studies that have examined faunal remains from colonial sites reveal much about how people asserted their agency and negotiated their identities during the colonial period on their own terms. During the colonial period, indigenous peoples had to negotiate changes within their local environments and economies to include Europeans and their food products, like European-introduced domesticated animals (i.e. cattle, pig, sheep, and goat), in order to subsist.

Archaeological research and findings from the Eastern Pequot reservation in southeastern Connecticut reveal the residents experienced such changes and negotiations. Four household sites (Site 102-123, Site 102-124, Site 102-116, and

Site 102-113) dating from the early 18th to the mid-19th century and their recovered faunal remains have already been identified, analyzed, and interpreted. I have recently examined the faunal assemblage from a fifth household site (Site 102-126), which was investigated in 2011. There, a faunal assemblage of 3,184 bones was recovered within the remnants of a mid- to late-18th century house and nearby midden (i.e. trash pit) (Silliman et al. 2013). Through zooarchaeological study and statistical analyses, the assemblage was identified, analyzed, and interpreted to observe animals' possible roles on the reservation. This research examines animal husbandry, hunting, and fishing practices on Site 102-126 to further explore the use of domesticated and wild animals by the Eastern Pequot. By integrating the resulting faunal data from Site 102-126 with the region's previous faunal studies, social and cultural variations between household sites' faunal assemblages are investigated to understand the possible long-term economic and communal functions of animals on the reservation.

The zooarchaeological study of Site 102-126 is combined with the previous faunal analyses of the other four sites (Cipolla 2005, 2008; Cipolla et al. 2007; Fedore 2008; Hunter 2012) to answer questions about the impacts of colonialism on Native communities' economies and subsistence practices from the mid-18th to mid-19th century: After the onset of colonialism, how did the Eastern Pequot incorporate European-introduced domesticated animals into their daily lives? Do some species of European-introduced animals appear to be more compatible with the Eastern Pequot's environment, culture, and economy than others? If so, were these domesticated animals raised for profit, local consumption, or both? Likewise, why were hunting

and fishing practices (like shellfish gathering and sea fishing) maintained for some wild species more so than others (such as deer hunting), and were those wild species hunted for consumption or exchange? Moreover, how did colonialism and English settlement in southeastern New England impact the Eastern Pequot's choices of food consumption and exchange from the early 18th to the mid-19th century?

This study attempts to understand the impacts of colonialism on the residents' foodways and the animals' roles in daily activities on the Eastern Pequot reservation. To accomplish this, first, the relationship between zooarchaeology and colonial contexts are explored to uncover the ways zooarchaeology can contribute to studies of colonialism. Then, the historical background of southeastern New England and the Eastern Pequot peoples is outlined in order to contextualize the impacts of European colonization on their foodways and how they chose to negotiate the challenges and hardships of 18th and 19th centuries. Next, the methodology and the results of my zooarchaeological study are presented, and archaeological data from previous faunal analyses (Cipolla 2008; Cipolla et al. 2007; Fedore 2008; Hunter 2012) are summarized to provide a comparative framework for my own data from Site 102-126. This comparison contributes to studies of the Eastern Pequot by highlighting and discussing the social, cultural, and historical aspects of the recovered faunal remains from the Eastern Pequot reservation. Ultimately, this study shows how residents used foodways to negotiate and navigate through the hardships and effects of colonization while maintaining their identities and persisting as a community.

CHAPTER 2

ZOOARCHAEOLOGY AND COLONIALISM

Introduction

Contemporary studies of colonialism emphasize creating multiscalar, complex narratives of histories that center on the experience and struggles of individuals within a community (Silliman 2010). Environmental reconstruction of past lives helps archaeologists and historians alike to better understand the individual experience and agency within the colonial era (Reitz and Wing 2008; Shackley 1982; Wilkinson and Stevens 2003). A major part of any archaeological site's environmental reconstruction, zooarchaeology typically looks at animal remains to understand past human behaviors and human-environmental relationships (Davis 1987; Hesse and Wapnish 1984; Klein and Uribe 1984). Yet within the scope of colonialism, not only can zooarchaeology inform about past peoples' behaviors but also the interactions between them and what the colonizers and the colonized learned and took from each other in this 'New World' (Campana 2010; Landon 2009; Lapham 2005; Reitz and Scarry 1985; Scott 2008).

In this chapter, I discuss the importance of zooarchaeological studies set within colonial contexts and their relevance to this thesis. First, I outline the purpose of zooarchaeological studies in the realm of historical archaeology. Then, I show how zooarchaeological studies of colonial sites are represented in recent discussions

within archaeologies of colonialism. Finally, I lend my own discussion on what zooarchaeology can contribute to studies of colonial contexts and conclude what ways these contributions can be applied to my own study.

Zooarchaeological Studies

Zooarchaeology combines facets of biology with archaeology and anthropology that can help determine daily practices and speak to how past peoples lived and negotiated identities during colonial times. The goal of zooarchaeology is to study animal remains to learn about past environments and human behaviors (Davis 1987). In zooarchaeological studies, faunal assemblages collected from archaeological sites are identified, analyzed, and interpreted (Grayson 1984; Klein and Uribe 1984; Reitz and Wing 2008). The cataloguing and analysis of faunal assemblages allow archaeologists to interpret the data and examine past social and cultural variations within archaeological sites (Landon 2009).

Social and cultural variations at a site can reveal what activities that were carried out and where they took place (Davis 1987:31). Faunal remains often lend the most data to understanding past foodways, such as diet, subsistence practices, animal husbandry, food distribution, etc. (Landon 2009). Other noted social variations addressed in zooarchaeological studies include ritual, religion, status, identity, gender, age, and much more (Reitz and Wing 2008). Faunal remains can potentially lend as much to discussions of past peoples as any other artifacts found on site. Zooarchaeologists are "able to integrate multiple sources of data and apply them to key interpretive issues in historical archaeology" (Landon 2009:79). Studies of

zooarchaeological evidence at colonial sites often address the concerns of colonial issues and acknowledge the agency of past peoples.

Studies of Zooarchaeology and Colonialism

Zooarchaeology has become valuable for studying colonial contexts. Faunal analyses show the ways past peoples have used animals for food and other primary and secondary products, and hence, zooarchaeological studies can reveal how both indigenous and settler diets changed because of colonialism (Campana 2010). Animal remains can convey the lives of past communities, household, and individuals, reflecting economic status, ideologies, and social perspectives and meanings (deFrance 2009). Because animals are related to everyday lives and practices, "food has often been a means by which dominating groups have tried to complete their cultural conquests, consciously or not" (Lev-Tov and deFrance 2010:x). In fact, several studies of faunal remains find that "goods, and especially foods, have not only been appropriated and indigenized but they have also been used by both parties in colonial situations to attempt to control the other" (Dietler 2007). A summary of findings from zooarchaeological studies of colonial sites helps illustrate this approach.

There are zooarchaeological studies that work to show the impact of colonialism on the local environment and consequently peoples' subsistence practices. Many often focus on how indigenous peoples incorporated European-introduced animals into their daily lives (Pavao-Zuckerman 2007; Pavao-Zuckerman and LaMotta 2007; Pavao-Zuckerman and Reitz 2006, 2010). These European-

introduced animals include horses, pigs, cows, sheep, goats, and chickens, all of which are domesticated animals. Often, these animals did not replace indigenous resources; however, "they were adopted and used in concert with indigenous resources only to the extent that they were compatible with local environmental and cultural settings and offered an economic benefit" (Pavao-Zuckerman and Reitz 2006:485). Animal husbandry did not always replace hunting as the primary source of meat, but it provided new exchange opportunities with the domesticated animals' meat and the secondary products (Pavao-Zuckerman 2007; Pavao-Zuckerman and Reitz 2010). Indigenous economies shifted to incorporate European products, so often animal husbandry was adopted for both economic and subsistence purposes (Pavao-Zuckerman and LaMotta 2007).

Even when animal husbandry was forced on indigenous peoples, it did not always replace indigenous traditional practices and resources entirely. One zooarchaeological study of the Pimeria Alta missions in southeastern North America shows missionaries sought to introduce domesticated animals to Native peoples (Pavao-Zuckerman 2010). Missionaries wanted to make missions profitable to support other future missions and colonies, so they attempted to introduce domesticated animals to indigenous groups. Most missions were important resources, providing food, soap, wax, cloth, leather, etc. for the colonial market. Zooarchaeological evidence from the missions suggests some animal husbandry with continued reliance on indigenous vertebrate resources, supplemented by smaller domesticated livestock. Though European animals were integrated into indigenous

subsistence practices, the Spanish colonists were more likely to change their subsistence strategies than Native Americans (Pavao-Zuckerman 2010).

Another study of sites in southeastern North America, "The Adoption and Use of Domesticated Animals at Zuni," has similar findings on the colonists' effects (Tarcan and Driver 2010). The Zuni adopted domesticated animals into their economy but maintained their identity by continuing traditional practices of hunting birds and large mammals. They saw the economic value of sheep and goats for their secondary products (i.e. wool and milk), which led them to abandon raising domestic turkeys. Traditionally, the Zuni boiled meats before butchering to make it easier to cut into the bones later on as opposed to sawing right through bones like the Anglo-Americans, and zooarchaeological evidence proves they did not adopt such European butchery practices because less than 1% of the recovered bones were sawn (Tarcan and Driver 2010:166). Hence, the Zuni retained aspects of their traditional identities through traditional hunting and butchery practices.

More zooarchaeological studies are showing that indigenous groups were not the only ones to change their subsistence patterns after colonization. Most times the colonists changed their practices even more to adjust to the new environment. For example, after analyzing 16th-century subsistence practices in Spanish Florida, it was found that the traditional Spanish diet was not suited to Florida's ecological conditions (Reitz and Scarry 1985). 'Old World' livestock and crops had yet to adapt to the area, so they raised 'Old World' domestic animals that could survive the new environment without much attention, like cow, pig, and chicken. Thus, the colonists had to adapt new dietary practices that were similar to indigenous peoples, which

included the consumption of wild fauna, such as deer and fish. Another study reveals the French colonists in North America adopted more aspects of Native American subsistence practices the more isolated their outposts were (Landon 2009:87). The colonists had to combine indigenous practices with their own traditional practices in order to survive. Both colonial and indigenous peoples had their own agency and identities they wanted to preserve while taking on new dietary practices that were more potentially advantageous for the changing environments and economies.

Discussion

Zooarchaeological studies of colonial sites have enriched the study and understanding of colonialism. They often assert indigenous peoples had their own agency and maintained aspects of their identity through traditional practices. Culinary traditions are "some of the most important ways in which ethnicity is expressed" (Campana 2010:129), and indigenous peoples were not the only ones continuing to express their identity through foodways (Reitz and Scarry 1985; Scott 2008). The colonists maintained their identities through the continued use of domesticated animals. In order to adapt to the changing environments with the addition of invasive and domestic species from Europe and economy (i.e. exchange between the settlers and natives), both incorporated facets of each other's subsistence practices into their daily lives that worked to their advantage, creating new hybridized identities. Some indigenous peoples choose to use European-introduced animals, practices, or tools, while some colonists choose to use indigenous animals, practices, or tools. Indigenous and colonial peoples were all groups, families, and individuals

who made personal choices when navigating their way through a complex colonial world to sometimes use the available resources around them for their own purposes and benefits. Zooarchaeology has much to impart about past histories and animal remains can communicate much about past peoples as we continue to develop certain perspectives and ideas about colonialism, zooarchaeology, and how they can be integrated to better our understandings of the past.

Zooarchaeology can contribute to the historical record by continuing to evaluate faunal remains and explore the relationships between foodways and colonization. Zooarchaeological studies show the persistence of traditional practices and hence the persistence of indigenous identities over time. No matter how greatly colonialism changed the "New World," indigenous peoples often managed to maintain aspects of their identities through traditional subsistence practices while selectively incorporating the advantages of the new technologies brought over by the colonists.

These are the themes that drive the later discussions within this thesis (see Chapter 6). After merging the faunal data from Site 102-126 with previously gathered data (Cipolla 2005; Fedore 2008; Hunter 2012), we can see the impacts of colonialism on the Eastern Pequot community's economy and subsistence practices from the early 18th to early 19th century. European-introduced animals were integrated into their economy and were an integral part of their daily lives on the reservation, but to the extent their difficult situation would allow, the residents managed to continue some of their traditional subsistence practices, such as hunting, fishing, and shellfishing, as well. Historical and archaeological records show the

Eastern Pequots consumed and exchanged both wild and domesticated species while dealing the difficulties of impoverishment, constant settler encroachment onto their land, and many other challenging and complex problems following European colonization, all of which are the subject of the following chapter.

CHAPTER 3

THE HISTORY AND ARCHAEOLOGY OF THE EASTERN PEQUOT RESERVATION

This chapter describes the history and archaeology of the Eastern Pequot, focusing on the development of subsistence practices and the cultural negotiations indigenous communities faced during the 18th and 19th centuries. First, a brief history of the Eastern Pequot is recounted. It starts in the late 17th century from the creation of the Eastern Pequot reservation, where the examined sites are located, and it ends in the mid-19th century, the latest time period of the examined sites. Then, the archaeology of the Eastern Pequot, Site 102-126, and all previous and relevant findings are briefly summarized. This background serves to illustrate the many challenges to their foodways and survival the Eastern Pequot continuously encountered even long after initial colonization.

A Brief History of the Eastern Pequot

The Eastern Pequot are descended from the Pequot tribe who were the dominant power in southeastern New England in the 1600's. Following the Pequot War in 1637, when the English and their allies massacred hundreds of Pequot peoples, the surviving Pequots were assigned to other tribes in the region, namely the Narragansett in the east and the Mohegan in the west (Orr 1980). Those who left the Narragansett gathered together and settled in North Stonington, Connecticut, in the 1670s.

Around the mid- to late-17th century, indigenous peoples used less domesticated animals and Europeans had little influence on Native foodways (Bennet 1955). One archaeological excavation of a colonial-era Mohegan midden revealed that cattle, horses, pigs, and sheep accounted for only 26% of mammal remains between 1650 and 1700, "a pattern consistent with studies of other nearby Indian sites" (Silverman 2003:15). During the early reservation period (1666-1720), Pequot foodways seem to have consisted of traditional gathering, hunting, and fishing, and documents indicate the only European-introduced foods used were mostly pigs and apples (McBride 1990). Traditional diets were based in mobility and seasonality, which limited early contact between indigenous peoples and colonial settlers.

In 1676, the defeat of "King Phillip," or the leader Metacom of the Wampanoag tribe, was "the final blow to Native sovereignty," leading to "curtailment of Native territories, severe population loss, and the decline in the importance of sachemships," which were Native communities recognized by English law (Bragdon 2009:7). There were 24 military expeditions the Pequot participated with Connecticut colonial militia during King Phillip's War (Vasta 2007:110). In King Phillip's War, Momoho was the Pequot sachem, or leader, and had 60 men and served the English during the war (Den Ouden 2005:71). After Momoho's passing, his wife Mary Momoho took over as the head of the Eastern Pequot community (Den Ouden 2005:71). Accordingly, from the old Momoho sachem, the Momoho community had recognized rights to land (Den Ouden 2005:70). The Colony of Connecticut finally

granted the Eastern Pequot their own land in 1683, which became known as the Eastern Pequot reservation.

King Phillip's War and the ever-growing expansion of European settlers created a considerable amount of change for indigenous communities. The colonists sought to isolate them. The legacy of King Phillip's War drove beliefs of "Indian treachery" (Den Ouden 2005:76). Most towns that were meant to Christianize and teach natives how to act "European" were abandoned after King Phillip's War in the 1670s (Mrozowski et al. 2005:15), and indigenous peoples in Connecticut, Maine, and Rhode Island were set apart from other peoples in those colonies by law and moved onto smaller reservation lands (Mandell 2007:2).

Because indigenous communities were being moved to smaller lands, they faced increasing difficulties to maintain it. In the early 18th century, the Eastern Pequot noted in a petition to the General Assembly of Connecticut, "When wee have Wore out our Planting Land; Wee must always be breaking up new Land; So that a Small Quantity of Land will Starve us!" (Den Ouden 2005:73). Their subsistence strategies were limited to small parcels of poor farming land, and though they tried to make the best use of it, the English settlers made food production challenging for indigenous communities.

With the encroaching settlers and rapid deforestation, wild animal populations declined in the 18th century (Cronon 1983:126). In 1715, a deer-hunting season was imposed. Heavy fines were instituted for hunting off the reservation, and if caught, the already poor could risk further impoverishment (Den Ouden 2005:80-82). As the English claimed more land, they "dammed the passage of fish and fenced off Indian

access to fresh planting fields, hunting grounds, fishing stations, clam banks, and thoroughfares," and Native peoples soon realized they could "no longer live without substantial adjustments to their economy" (Silverman 2003:7). By the 18th century, vegetable and domestic meat production increased and became more widely available, "deseasonalizing" diets and making wild game unnecessary (McMahon 1985:47). Fishing and hunting by indigenous peoples were considered as "savagery" to the English settlers, though the settlers practiced hunting and fishing as well (Den Ouden 2005:56). Also, as European coastal towns grew, Natives "faced the threat of trespassing when attempting to access traditional coastal and hunting grounds" (Den Ouden 2005: 24). Consequently, by the beginning of the 18th century, Natives were experimenting with animal husbandry (Cronon 1983:103).

During the late 17th and early to mid-18th centuries, European-introduced domesticated animals mainly served to supplement traditional subsistence practices in indigenous communities. Connecticut tribes primarily adopted animal husbandry after King Phillip's War; archaeological research at Mashantucket Pequot sites recovered evidence of animal husbandry in the later 18th- and 19th-century sites (McBride 1990:108). Other archaeological evidence across southern New England suggests that Native Americans "raised sheep, kept horses, and maintained small gardens," but shellfish remained an important food and wild animals were hunted for both exchange and consumption (Bragdon 2009:141,147). Archaeological research on the Mashantucket reservation revealed the presence of shellfish, fish, and bird remains in 18th- and 19th-century household sites, suggesting seasonal movements were still important to Mashantucket subsistence practices (McBride 1993:72)

The Pequot continued the tradition of honoring the wild game by burning their remains, but they never honored the bones of domesticated animals in such ways; "domestic livestock was not an agent of radical change but a supplement to the Indians' economy and culture" (Silverman 2003:15). One missionary recorded his observations of Pequot cooking preparations of wild game, writing:

they frequently boil in this pottage fish and flesh of all sorts...they cut in pieces, bones and all, and boil them in the aforesaid pottage...I have wondered many time that they were not in danger of being choked with fish bones; but they are so dexterous to separate the bones from the fish in their eating thereof that they are in no hazard. Also they boil in this furmenty all sorts of flesh, they take in hunting...cutting this flesh in small pieces, and boiling it as aforesaid

(Gookin 1972:20)

In keeping with traditional practices, tributes were still given to the leader of the community or the "sachem," and "food and wealth served symbolically to reinforce the social order" (Bragdon 2009:95). This leader would distribute these tributes and continuously return wealth and food to his followers; this was a practice that continued well into 18th century (Bragdon 2009:95). Communal sharing and support appeared to major play a role in the survival of indigenous communities.

Though indigenous communities were granted their own lands that did not stop the colonists from trying to take advantage of their situation. English merchants often coerced Native peoples into debt to gain their services, and Native peoples became more dependent on merchants to fulfill their basic needs of food and clothing (Silverman 2001:625). Such debts also drove many Natives into indentured servitude. Many were bound out to English settlers as children "because their parents sold them to fend off creditors and litigants" (Silverman 2005:203). Timothy Dwight, an English visitor on the reservation, noted that many Pequots placed their children "in English families as servants," and these indentured children "probably performed farm and domestic labor" (Mandel 2007:28). Designated guardians of the Eastern Pequot arranged apprenticeships or guardianships for Native children and took many of them as domestic servants; these "guardians" provided assistance only when Eastern Pequot individuals were "infirm or near death" (Bragdon 2009:129). Not many of the Pequot were in contact with the guardians and most of the reservation's residents were "self-sufficient" and "self-governing" (Bragdon 2009:129).

The lack of government protection for Native reservations was a serious issue for many indigenous communities (Den Ouden 2005:75). They often faced problems of animal and settler encroachment from nearby English farms. Several cases document English animals trespassing onto Native fields, falling into deer traps, or being killed while grazing on hunting land (Anderson 2004:608). English settlers would even claim reservation land as their own, justifying it by saying the indigenous residents lacked property rights as evidenced by "the absence of fences" (Den Ouden 2005:43). On the Eastern Pequot reservation, the English set animals on Pequot crops while they were off-site (Silverman 2003:15). In fact, the Eastern Pequot reservation was engaged in a legal battle in the 18th century over the sale and theft of reservation land "as well as damage done by domesticated animals set to graze on reservation lands" (Silliman and Witt 2010:51; Silverman 2003).

After Connecticut bought the 280-acre reservation for the Eastern Pequot from English settler William Wheeler, Wheeler declared "the whole benefit of their fields for my cattle horses" (Den Ouden 2005:243). In the early 18th century, Eastern Pequot leader Mary Momoho sent a petition to the General Assembly about the

threats posed to her community by encroaching English settlers and inform them that more of her people were surviving than the English claimed (Den Ouden 2005:70). In 1723, Momoho stated the population was 130 plus indentured children who would soon attain their freedom (Den Ouden 2005: 71). Momoho made sure to point out the indentured children were no different than English children and bound out to the English for learning and education (Den Ouden 2005:72). Reportedly, William Wheeler allowed the Eastern Pequot to plant corn but not the keeping of cow, sheep, or pigs, and the overseeing committee did conclude that the Eastern Pequot's rights had been violated but did not act against the Wheeler family (Den Ouden 2005:74).

The General Assembly was slow to respond to another petition by Mary Momoho in 1750 about two encroaching settlers, Williams and Crery. Williams and Crery committed several criminal acts against the Eastern Pequot. They put up an unwanted fence across the reservation, cut down trees on the Eastern Pequot's land, let their animals eat and destroy Pequot crops, stole the Eastern Pequot's corn, and forced the Pequot to plant in small enclosures and only grow corn in a large pasture (Den Ouden 2005:75). When the Pequot attempted to fence in and protect their land, Williams and Crery beat them and threw down their fence (Den Ouden 2005:75). Ultimately, the General Assembly decided Williams and Crery would get some of the reservation land that they had claimed but would have to pay the damages their animals did the Eastern Pequot's crops (Den Ouden 2005:76). Other reported encroachment occurred in the mid-18th century when another English settler, Isaac Wheeler, purchased the Eastern Pequot Reservation land "for" the Eastern Pequot peoples so he could make use of it as pastureland (DeForest 1964:432).

So unfortunately, the impacts of colonialism on indigenous communities and their economies did not diminish after the 17th century but continued long after (Silliman and Witt 2010). The New England economy was disrupted by many wars and political upheavals in the 18th century, such as the American Revolution and the French and Indian War, and did not dramatically change until the 19th century (Silliman and Witt 2010:51). Throughout the 18th and 19th centuries, many indigenous individuals, including the Eastern Pequot were employed off reservations (Den Ouden 2005; Mandell 2007). Several Eastern Pequot men were employed as sailors or soldiers and could have been away from the reservation and their families for years at a time. Even after King Phillip's War and over the course of the 18th century, Pequot peoples were recruited to fight in the colonial militia (Silverman 2005:113). The Pequot played a role in many colonial wars in the 18th century: King William's War (1689-96), Queen Anne's War (1703-13), King George's War (1744-48) and the French and Indian Wars (1755-61). Eastern Pequot men were also regularly at sea where they served alongside other Native Americans, often within the whaling and maritime industries (Bragdon 2009:228). In the early to mid-18th century, the Pequot population declined as men left to look for work in whaling or as farm laborers. In the early 18th century, 19 or 31 Mashantucket Pequot males worked for and lived with English families (Silverman 2005:208). By working seasonal jobs, the Native men were able to acquire food and goods for credit from local merchants and farmers (Cipolla et al. 2007:44; Silliman and Witt 2010; Witt 2007). Hence, the Eastern Pequot lived an independent and mobile existence with people coming and going from the reservation (Bragdon 2009:129).

By 1749, only 38 persons were supposedly living on the reservation, and most of them were females, most likely because many Eastern Pequot males were living and employed off the reservation (DeForest 1964:431). The Eastern Pequot reservation community probably had "more adult women than men at the time, but Mary Momoho's petition does not suggest she had achieved her political authority by default" (Den Ouden 2005:71). The role of women was very important within reservation communities in southern New England. They gathered and processed food, especially shellfish, wild plants, berries, corn, nuts, etc. (Bragdon 2009:143), but people on the reservation were mostly reliant on English goods. Most food purchases were of fresh meat in the fall and winter and grain for growing crops in the spring (Bragdon 2009:148).

There is some documentary evidence of the Eastern Pequot's exchanges for English goods. Jonathan Wheeler, a colonial merchant in Connecticut, made records of exchanges and exchanges with Eastern Pequot members (Silliman and Witt 2010; Witt 2007). Wheeler lived three miles south of the Eastern Pequot and "dealt with foodstuffs such as pork, beef, apples, cider, molasses, and rye as well as in livestock such as sheep and pigs" (Silliman and Witt 2010:54). The two probable Eastern Pequot members Wheeler engaged with are George Toney and James Nead. Toney was a fisherman and in one instance sold fish to Wheeler (Silliman and Witt 2010:55). Nead sold wool to Wheeler in the 1750s and regularly used wool to pay off debts and as a means of exchange, and in 1760, Nead sold 37 lb. of bass in exchange for food (Silliman and Witt 2010:56; Witt 2007:65-66). From their purchases, Toney and Nead had access to agricultural land and marine resources (Witt 2007:62,101).

Toney's wife Mary is also in Wheeler's records and seemed to handle agricultural production and exchange while her husband was away (Witt 2007:63). Both Toney and Nead went into military service during the French and Indian War in which Toney died and Nead either gave up "the raising of sheep and crops or lost the capacity to engage in these activities then died soon after" (Silliman and Witt 2010:56; Witt 2007:97).

Late spring and early summer was probably "the period of greatest scarcity" for indigenous communities and when they relied most on coastal and aquatic resources, such as shellfish and freshwater and saltwater fish (Bragdon 2009:146; Hunter 2012), but without exchange goods and foods, the Pequot lived in utter impoverishment. According to Isaac Wheeler, after many of the Eastern Pequot men were killed in the French and Indian War during the late 18th century and died of disease, "the women and children at home were well nigh reduced to starvation" (Den Ouden 2005:174). Without the men traveling and working, exchange and exchange for English goods perhaps became more difficult for the Eastern Pequot. One extreme example of their impoverishment comes from a case in 1786 where a twelveyear-old Pequot girl killed a six-year-old girl for taking her strawberries (Channing 1786:31). For subsistence, indigenous communities sometimes stole the colonists' land or animals, especially if those animals happen to be encroaching on reservation land (Silverman 2003). Though if they were caught or even accused of it, they were harshly punished. In 1785, two likely Pequot residents of Stonington were "fined for fencing stolen property but unable to pay the fine were both sentenced to be whipped and bound for two and a half years to the man who lodged the complaint" (Mandell

2007:27). In 1788, the Eastern Pequot spoke again to Connecticut's General

Assembly, informing them:

that they had been without overseers for many years and were suffering from 'confusion' in their 'public affairs'...a decade later the community found itself increasingly 'intruded on by the White People, and by Negros, and others' and again asked for 'the assistance of some Discreet Overseers'

(Mandell 2007:73)

These issues of encroachment and impoverishment continued on the Eastern

Pequot reservation into the early 19th century. When Timothy Dwight visited

Stonington in 1807, he scorned the Pequots for it, writing with overdone negativity:

The whole body of these Indians are a poor, degraded, miserable race of human beings. The former, proud, heroic spirit of the Pequot, terrible even to the other proud heroic spirits around him, is shrunk into the tameness and torpor of reasoning brutism. All the vice of the original is left. All its energy has vanished.

(Dwight 1822:27)

Dwight also noted their once decreasing population "has been check by their cohabitation with blacks" (Mandell 2007:49). By 1820, 53 people were living on the now 240-acre reservation, and the reservation's rocky soils combined with the detrimental effects of grazing animals made farming difficult (Burgess et al. 1998:35). Throughout the 18th and 19th centuries, the Eastern Pequot experienced numerous challenges imposed by colonialism and the recent archaeology on the reservation reflects this.

Archaeology of the Eastern Pequot

Starting in 2003, Dr. Stephen W. Silliman, in collaboration with the Eastern Pequot Tribal Nation, has conducted nine field seasons on the Lantern Hill reservation (Silliman and Sebastian Dring 2008). Since its establishment in 1683, members of the Eastern Pequot community have continuously occupied the reservation. Thus, uncovered sites have given much insight into past indigenous lives throughout the 17th-19th centuries. Both domesticated and wild species have been identified in early to late 18th-century faunal assemblages, suggesting the Eastern Pequot made use of domesticated animals while continuing traditional hunting and fishing practices (Fedore 2008). More recent faunal assemblages collected from two 19th-century Eastern Pequot households included fewer wild species and were mostly identified as domesticated European-introduced mammals (Cipolla 2005). The 19thcentury remains were so intensely processed that it suggests an impoverished group making the most of their resources by taking advantage of all possible nutritional resources (Cipolla et al. 2007). Even with the increase of animal domestication, Native characteristics can still be observed. Stone and metal tools were used for butchering, indicating the persistence of traditional practices among the Eastern Pequot (Cipolla 2008).

Because the reservation boundaries are not along a bay, the numerous shellfish from midden contexts support the idea that the Eastern Pequot practiced shellfish gathering and took periodic trips to the coast to gather food (Hunter 2012). Analysis of recovered pollen remains suggests the harvesting of trees for sale outside of the reservation and flexibility in resource strategies through the use of European plants (Jacobucci, Trigg, and Silliman 2007). There is also documentation of Natives engaging in economic interactions with the colonists that incorporated the selling of fish and domesticated animals (Silliman and Witt 2010). The varieties of ceramics

found on Eastern Pequot sites shows residents "actively engaged in consumer exchanges with their neighbors" (Silliman and Witt 2010:63). Hence, these previous studies show that while adapting to the colonial world in the 18th and 19th century, the Eastern Pequot community managed to complement European-introduced resources with traditional practices.

Other faunal studies of nearby Native sites from this period, such as those at the Mashantucket Pequot reservation in Ledyard, Connecticut and a former Nipmuc residence, Sarah Boston's Farmstead, in Grafton, Massachusetts show colonialism's similar impacts on indigenous foodways (Allard 2010; Farley 2012; McBride 1993; Vasta 2007). Like these studies, my present examination of mid- to late 18th-century faunal remains from Site 102-126 and all other previously assessed faunal specimens from the Eastern Pequot reservation attempts to help further understand changing economies, environments, subsistence practices, and the intersections between foodways and colonialism.

Site 102-126

In 2011, surface surveys of Site 102-126 (Figure 1) showed the remains of a household (Silliman et al. 2013). After STP (shovel test pit) surveys revealed Site 102-126 as a potential house site, 26 1.0-x-1.0-m and 1 0.5-x-1.0-m units were strategically placed around the site. This site exists within a large rock fence enclosure and is surrounded by multiple circular rock piles that cluster around the northern and eastern areas of the site. One of these rock piles (Unit N106/E651) was excavated. Surface and subsurface investigations also uncovered a collapsed rock
chimney (Units Q, F, and E) with small features outside of the hearth. Within the house area, a deep sediment-filled cellar (Units L, D, K, and S) was found. Along the southern edge (Units M, T, G, H, and P) of the house, a stone foundation was unearthed, but the northern (Units C, B, J, R, N, and A) and eastern (Units U and V) edges lack any clear corresponding foundations. A dense midden pit (Units X, \$, W, Y, and Z) was discovered a few meters southeast of the house. The presence of window glass, several cut nails, and the collapsed chimney suggest that the building was a framed wooden-plank house. The large collection of ceramics, bottle glass, metal objects, clay pipe fragments, objects of personal adornment (e.g., buttons, buckles, beads, jewelry), lithics, and food remains (e.g., mammals, birds, fish, and shellfish) certainly reflect resident living and occupation. Ceramic analysis dates the residence to the mid- to late 18th century, around the 1760s-1780s (Hunter 2012:69; Silliman et al. 2013:15).



Figure 1: Map of excavation units and associated site features for Site 102-126 (Silliman et al. 2013)

A total of 3,184 recovered faunal specimens from Site 102-126 are analyzed in this study. Approximately 2,198 (69%) of the bones originated from the midden, and the other 986 (33%) were scattered along the edges of the house and in its cellar, meaning refuse was purposely disposed of directly outside the household. The midden existed to the south of the house, and south edge of the house has the second greatest number of recovered bones (15%). Hence, bones recovered from along the house's southern edge may have been thrown out a window or dropped when taking bones to be discarded into the nearby midden. Unidentified remains, which are often small or heavily fragmented, make up 85% of recovered faunal remains scattered outside of the midden, so the bones deposited outside of the midden may have been randomly tossed out, accidently dropped, or disposed of along the other edges, cellar, chimney, and rock pile. The distribution of recovered faunal remains is exhibited below in Table 1.

Area	NISP	Percentage	NISP/m ²
Rock Pile	23	0.72%	23.00
Midden	2198	69.03%	439.60
South Edge	476	14.95%	79.33
Chimney	72	2.26%	24.00
East Edge	28	0.88%	14.00
Cellar	282	8.86%	70.50
North Edge	105	3.30%	17.50

Table 1: Spatial Distribution of Recovered Faunal Remains, Site 102-126

In a previous study of Site 102-126, a midden profile (Figure 2) was made (Hunter 2012), and a majority of the faunal specimens were recovered from the dark grey "Midden Area" (69%). Since the residents deliberately deposited these specimens, Site 102-126's recovered faunal remains can serve as a representative sample of the residents' foodways and therefore have great potential for zooarchaeological analysis. Most of the butchered remains (92%) came from the midden, suggestive of onsite processing. All of the recovered bird remains and most of the fish remains (99%) originated from the midden. These more delicate bones may have survived due to the great amount of shell also recovered from the midden, since the shells' basic components would counteract acidic substances. The shell is displayed as the grey "Shell Deposit" in the profile of the midden below. Because of such great preservation, this faunal assemblage can provide a glimpse into the residents' day-to-day lives on the Eastern Pequot reservation during the mid- to late-18th century.



2011 Midden East Wall Profile

Figure 2: Midden Profile, Site 102-126 (Hunter 2012)

Concluding Thoughts

Level Lin

Since no historical accounts or documents have been directly linked to the examined sites, the archaeology is imperative for learning about the lives of these past

peoples, and zooarchaeology can play a major part in that. Zooarchaeologists are realizing that "the social and symbolic functions of animals and meat may often be of equal or even greater importance than their dietary role" (Russell 2012:7). Studying animal remains can mean more than just looking at foodways. By examining these bones, we can see the anthropological functions and roles of animals in the Eastern Pequot's daily lives. Zooarchaeological studies may reveal cultural negotiations of identity on the Eastern Pequot reservation during the colonial era. Hence, it is important to understand their struggles and individual "lived" experiences through the cultural meanings these bones may represent (Loren 2008). These next two chapters show how recovered faunal remains from Eastern Pequot sites were analyzed, what animals may have existed on these sites, and what meanings they may represent.

CHAPTER 4

THE METHODOLOGY AND RESULTS OF SITE 102-126'S FAUNAL ANALYSIS

Methodology

The faunal remains from Site 102-126 were identified, quantified, and recorded (Davis 1995; Grayson 1984; Klein and Uribe 1984; O'Connor 2000; Reitz and Wing 2008) in the Fiske Center for Archaeological Research's Zooarchaeology Laboratory at the University of Massachusetts Boston. Specifically, the specimen number, context, quantity, classification, taxon, bone type, bone weight, descriptions, and human and natural taphonomic modifications (weathering, cut marks, tooth marks, etc.) were documented when possible on a spreadsheet.

After the remains were identified, they were quantified, and a specimen count, or NISP (number of identified specimens), was made. Then, an MNI (minimum number of individuals) analysis was conducted to determine the smallest number of individuals that must have been present to account for the specimens in the assemblage. Finally, using the allometric relationships between skeletal weight and total weight, the remains' estimated biomasses (or total masses) were calculated (Reitz and Wing 2008).

From these data, statistical analyses were carried out through the use of Microsoft Excel. To determine whether identified animals were raised and butchered

onsite, approximate ages were profiled and skeletal part representations were considered (Sportman et al. 2007). Elemental representations of animal skeletons show which parts were recovered (Cipolla et al. 2007; Fedore 2008; Helmer 1987). Furthermore, fragmented unidentified remains were scrutinized for signs of intensive processing and boiling (Heinrich 2012). Refer to the Appendix for the complete records of this faunal analysis.

Results

From the 3,184 faunal remains examined, 16 taxa were identified (Table 2). Written summaries of these results include taphonomy, identified mammals, birds, fish, and reptiles as well as the age profiles and skeletal part representations of the identified domesticated mammal taxa.

Taphonomy

Taphonomy is the depositional and preservation processes of faunal remains within the archaeological record. These taphonomic processes are either natural or cultural occurrences, which contributed to the present state of the bone, such as weathering, scavenging, burning, butchering, etc. Any signs of these events were observed and recorded during identification.

Common Name	Taxon	NISP	% NISP	MNI	% MNI	WT (g)	% WT	Biomass (kg)	% of Biomass
Cattle	Bos taurus	66	2.1%	3	11.5%	1647.5	43.2%	16.0	42.8%
Pig	Sus scrofa	85	2.7%	2	7.7%	596.4	15.6%	6.4	17.2%
Caprine (Goat/ Sheep)	Capra hircus/Ovis aries	19	0.6%	5	19.2%	225.1	5.9%	2.7	7.1%
Sheep	Ovis aries	1	0.0%			17.3	0.5%	0.3	0.7%
Dog	Canis <i>lupus</i> familiaris	1	0.0%	1	3.8%	34.2	0.9%	0.5	1.3%
Skunk	Metaphitidae sp.	13	0.4%	1	3.8%	6.7	0.2%	0.1	0.3%
Squirrel	Sciuridae sp.	4	0.1%	1	3.8%	0.8	0.0%	0.0	0.0%
Weasel Family	Mustela sp.	1	0.0%	1	3.8%	1.7	0.0%	0.0	0.1%
Rat	Rattus sp.	5	0.2%	1	3.8%	0.4	0.0%	0.0	0.0%
Small Mammal		38	1.2%			23.1	0.6%	0.3	0.9%
Medium Mammal		236	7.4%			417.6	10.9%	4.6	12.5%
Large Mammal		55	1.7%			364.8	9.6%	4.1	11.0%
Unidentified Mammal		257	8.1%			116.9	3.1%	1.5	4.0%
TOTAL MAMMAL		781	24.5%	15	57.7%	3452.5	90.4%	36.5	98.0%
Chicken	Gallus gallus	7	0.2%	1	3.8%	4.1	0.1%	0.1	0.2%
Passenger Pigeon	Ectopistes migratorious	53	1.7%	3	11.5%	11.9	0.3%	0.2	0.4%
Unidentified Bird		155	4.9%			16.8	0.4%	0.2	0.6%
TOTAL BIRD		215	6.8%	4	15.4%	32.8	0.9%	0.4	1.2%
Bluefish	Pomatomus saltatrix sp.	5	0.2%	1	3.8%	5	0.1%	0.1	0.2%
Drums	Sciaenidae <i>Cynoscion</i> sp.	43	1.4%	3	11.5%	3.45	0.1%	0.1	0.2%
Cod	Gadidae sp.	1	0.0%	1	3.8%	0.4	0.0%	0.0	0.0%
Herring	Clupeidae sp.	1	0.0%	1	3.8%	0.1	0.0%	0.0	0.1%
Seabass	Serranidae sp.	1	0.0%	1	3.8%	1.2	0.0%	0.0	0.1%
Unidentified Fish		189	6.0%			9.65	0.3%	0.1	0.4%
TOTAL FISH		240	7.6%	7	26.9%	19.8	0.5%	0.3	0.9%
Unidentified Vertebrate		1948	61.2%			312.3	8.2%		
TOTAL		3184	100.0%	26	100.0%	3817.4	100.0%	37.3	100.0%

Table 2: Summary Table, Site 102-126

*NISP is the number of specimens, MNI is the minimum number of individuals, and WT is weight in grams

Some bones (4.31%) had markings indicative of natural damages. Very few were weathered. Weathering occurs when the bone is bleached or damaged due to exposure to natural elements, like wind and rain. Using Behrensmeyer's (1978) five weathering stages, all recorded weathered specimens were damaged enough to meet stage 2 or higher, stage 5 being the most severe. Merely 9 specimens or 0.28% of the 3,184 remains were weathered, so rarely were any of the remains from this assemblage exposed on the surface. Other natural damage occurred from scavenging animals, particularly rodents and carnivores, gnawing on the bones. Just 1 specimen or 0.03% had scrape marks from being gnawed on by rodents. In contrast, carnivore tooth marks existed on 127 specimens or 3.99% of the assemblage. The carnivore marks is the most prevalent natural taphonomic process observed within this assemblage. The majority of the chewed bones were from medium and large-sized mammals (3.21% or 102 bones). This suggests perhaps the presence of scavenging carnivores and/or domesticated dogs on site. Because there are not many indications of natural damages, these bones were most likely quickly deposited into their respective contexts.

More than half of the assemblage, 57.65% or 1834 bones, have modifications suggestive of human activities. About half of the assemblage, 1572 bones (or 49.42%), showed signs of burning. Most of the burnt bones were unidentified vertebrate fragments (47.31% or 1505 specimens). Such burning and fragmentation could have resulted from intensive processing. Thirty bone fragments (0.94%) were polished, meaning that they were possibly boiled and intensively processed as well.

Also, 8.24% or 262 bones were butchered with a total of 109 cut marks, 261 chop marks, 49 shear marks, and 12 saw marks.

Lastly, it is important to acknowledge that denser bones are more likely to survive destructive forces within archaeological contexts, and hence they are more frequent in assemblages (Lyman 1994). This may explain why there were more unidentified remains (81.64%) and fragmented portions (89.5%) within the assemblage than intact and identified bones, especially since there are few identified fish, bird, and reptile taxa compared to the many identified mammal taxa.

Mammals

Mammal remains made up 24.55% of the total NISP and 97.8% of the total biomass. Identified mammals included cattle (*Bos taurus*), pig (*Sus scrofa*), caprine (possibly sheep or goat), sheep (*Ovis aries*), dog (*Canis lupus familiaris*), squirrel (*Sciuridae* sp.), skunk (*Mephitidae* sp.), a member of the weasel family (*Mustela* sp.) and rat (*Rattus* sp.). Primarily consisting of domesticated animals, the assemblage's cattle, pig, caprine, and sheep remains comprised 87.18% of the identified mammal taxa. Previous studies have revealed the incorporation of European introduced-domesticated animals (i.e. cattle, pig, goat, sheep, etc.) at other excavated mid-18th-century households on the Eastern Pequot reservation (Fedore 2008). Thus, due to the strong presence of domesticated mammals, this mid-18th century household assemblage is consistent with the other household sites of its time and explains why many unidentified medium and large mammals (37.26% of the total mammal NISP) also existed within the contexts. There was one jawbone specimen identified as a

dog, which may have been feral or domesticated, and it had a series of cut marks on it indicative of butchering. Though the purpose of its death remains a mystery, dogs in southern New England were used to assist with hunting but are also a known emergency food source (Den Ouden 2005:82; Snyder and Leonard 2011:534).

Identified wild species consisted of rat, squirrel, skunk, and a member of the weasel family, and they only constituted 12.31% of the identified mammal taxa. Of the wild species, skunk had the only taphonomic markings. The skunk had puncture marks from the incisors of a carnivore going through its skull, indicating that it was perhaps killed by some variety of Canidae (i.e. dog, wolf, coyote, etc.). The recovered wild animals without butchery marks (rat, squirrel, and a member of the weasel family) may have been killed somehow while scavenging for trash within the midden contexts, possibly for consumption, or might have died naturally at the site. From the identified mammal specimens, the minimum number of individual mammals was established (Figure 3).



Figure 3: Minimum Number of Individual Mammals, Site 102-126

Birds

There were 215 bird remains, which encompassed 6.8% of the total NISP and 1.2% of the total biomass. The identified bird taxa included chicken (*Gallus gallus*) and pigeon (*Columbidae*). The raising of fowl was a popular practice on farms in southern New England (Sportman, Cipolla, and Landon 2007:132), and because the Eastern Pequot were integrating European-introduced domesticated animals into their subsistence practices, the chickens were probably raised for their meat and eggs. Chicken were only 11.67% of the identified bird taxa, while the pigeon were 88.33% of the identified bird taxa.

The recovered pigeon bones were smaller than the common pigeon, which is also known as the rock dove (*Columba livia*). This suggested the bones might have come from the now extinct passenger pigeon (*Ectopistes migratorious*). The more complete pigeon bones from the assemblage aligned exactly with measurements given in studies of passenger pigeon bones (Driver and Hobson 1992; Schorger 1955:239), and after comparing the specimens to the passenger pigeon skeletons in Harvard University's Zooarchaeological Collections, it was confirmed that they were actually passenger pigeon bones. The passenger pigeon was a bird that migrated in enormous flocks until hunting and habitat destruction led to its extinction by the early 20th century.

Before and after European colonization, the passenger pigeon was an important source of food for people in North America. Netting passenger pigeons was practiced regularly, and if nesting areas were discovered, sometimes "an entire tribe would move to the site and feast on the squabs," or young pigeons (Schorger

1955:133-134). One ornithologist once estimated that a flock consisted of two billion birds, so the birds were common and widespread (Ehrlich et al. 1988). Consequently, passenger pigeons became cheap and affordable sources of protein. Juveniles were the most sought after since they were thought to have tasted the best, followed by those fattened in captivity (Schorger 1955:129). The passenger pigeon's fat was often stored in large quantities and could be used as a form of butter (Schorger 1955:131). Fifty-three passenger pigeon specimens were identified, indicating that the pigeons were regularly processed on site. The household's residents may have held them captive on site or frequently obtained them through hunting or local exchange. From the identified bird specimens, the minimum number of individual birds was established (Figure 4).



Figure 4: Minimum Number of Individual Birds, Site 102-126

Fish

Fish comprised 7.5% of the total NISP with 240 specimens were recovered. The identified species were all saltwater fish. This is indicative of residents' trips to the coast and/or exchange. Sciaenidae Cynoscion sp. (drums) was 84% of the identified fish specimens. The only species within this genus that inhabit the southern New England waters are saltwater fish: Cynoscion regalis and Cynoscion nebulous (Robins et al. 1999). There are no freshwater varieties of this genus in New England (Page and Burr 1991). Both of these saltwater species typically live in shallow coastal waters with sandy bottoms and seasonally migrate in the summer to river estuaries for spawning (Gillium 2002; Hill 2005). The other 16% of identified fish consisted of Gadidae sp. (cod), Pomatomus saltatrix sp. (bluefish), Clupeidae sp. (herring), and Serranidae sp. (sea bass). Herring is another coastal fish while bluefish, sea bass, and cod are found in deeper waters (Robins et al. 1999), suggesting that the residents may have practiced both shore and deep-water fishing or obtained some fish in exchange. From the identified fish specimens, the minimum number of individual fish was established (Figure 5).



Figure 5: Minimum Number of Individual Fish, Site 102-126

In a previous study of Site 102-126's shellfish by Ryan Hunter, a total of 1332 shells were identified with a weight of 14,441.6 grams (Hunter 2012:47). Hunter based part of his interpretation on the midden profile (Figure 2). He claimed it shows the initial heavy consumption of shellfish early on at the site, which could suggest that shellfish were initially the residents' primary source of protein. Hunter proposed that there was an apparent return to shellfish consumption later on in the midden profile. This could:

indicate that coastal ties and a need or desire to consume shellfish persisted and may indicate a resurgence in subsistence needs, economic hardship, seasonal patterns, or correspond to a visit to an off-reservation, coastal community

(Hunter 2012:71)

From his examination of the shellfish, Hunter was able to determine that the shellfish were primarily harvested during the summer season (Hunter 2012:70). The presence

of saltwater fish and shellfish at Site 102-126 may support the idea of continued ties to the coastal regions, either through forms of exchange, continued subsistence practices, or seasonal excursions.

<u>Reptiles</u>

Since no reptile specimens were identified, it is difficult to interpret the role of reptiles at Site 102-126. Again, the absence of these species in the archaeological record may be due to poor preservation, light bone densities, and the bones' lesser abilities to endure harsher environments (Lyman 1994). Approximately, 61.2% of the total NISP or 1948 specimens were unidentified vertebrates, and perhaps, other unknown species may have been present within the assemblage.

Age Profiles

In younger vertebrates, bones have not fully grown, calcified, and fused together, so by examining the bone fusions of identified taxa in an assemblage, the consumption of younger animals can potentially be observed. Among the identified mammals, there were young, unfused specimens for cattle and pig. There were three notable unfused specimens from a young cow: one unfused distal metatarsal, which would approximately age to less than 27-36 months, and two unfused proximal second phalanges, which would approximately age to less than 18 months. There was one notable unfused proximal phalanx of a young pig, which would approximately age to less than 12-24 months old (Reitz and Wing 2008). Hence, the presence of juvenile pig and cattle can be observed little (.001%) within the assemblage. Usually,

younger domesticated mammals are represented in assemblages where the animals were raised primarily for consumption and not secondary products (e.g. wool, milk) (Sportman, Cipolla, and Landon 2007:134).

Tooth wear can give the estimated age for animals, and the tooth wear of pigs, caprines, and cows have been studied in depth (Hillson 2005). After observing and recording the tooth wear of pigs and cows from Site 102-162, I was able to estimate the ages from some of the recovered intact dentaries. Unfortunately, no caprine teeth were recovered for analysis. Five of the recovered cattle teeth had approximately aged more than three years, and the remaining two teeth were between two and three years of age. Since most of the recovered cattle teeth were greater than three years old, it is likely that the residents often raised cattle to adulthood. Pigs appeared to have been slaughtered while they were still young. Seven of the recovered pig teeth aged greater than 4-10 months, while the other five teeth were estimated to be greater than 16 months old. Because at least one young pig is represented within the collection of recovered teeth, it is probable that a young pig was slaughtered onsite in its prime for its meat. The cattle were probably kept alive longer for their secondary products (e.g. milk, cheese, butter, and other diary products), and the pigs were most likely raised, maybe fattened, and butchered early on for their best meat.

Skeletal Part Representations

In terms of meat production, different skeletal parts can be separated into certain categories depending on the physical distributions of the animal (Sportman, Cipolla, and Landon 2007:135-137). The head, feet, and lower limbs can be

classified as the bone heavy areas with less meat, while the midsection and upper limbs can be classified as the lighter bones with more meat. If these animals were being raised, killed, and consumed at this household, then the recovered skeletal parts represented for each species would be expected to be from all parts of the skeleton from the head, feet, body, to the limbs. If animal parts were being purchased, they would probably come more so from the body and limbs.

The recovered skeletal part distributions and representations for each species were separated in five categories: head, feet, lower limbs, upper limbs, and body. The percentages and distributions of these categories were then compared. Since goat and sheep are so similar in form and both are edible, the sheep and caprine skeletal parts were combined for a more statistically significant analysis. The remains' skeletal part representations and percentages are shown for cattle (Figure 6), pig (Figure 7), and caprine (Figure 8).



Figure 6: Skeletal Part Representation of Recovered Cattle Remains, Site 102-126



Figure 7: Skeletal Part Representation of Recovered Pig Remains, Site 102-126



Figure 8: Skeletal Part Representation of Recovered Caprine Remains, Site 102-126

Since the recovered pig and cattle parts originate from various areas across the skeleton, from upper limbs, lower limbs, feet, head, to the midsection, pig and cattle were probably raised and killed onsite, while the recovered caprine skeletal parts chiefly come from the upper and lower limbs, suggesting the purchase of some possible sheep parts. Skeletal diagrams of a cow (Figure 9), pig (Figure 10), and caprine (Figure 11) further represent the parts recovered at Site 102-126 (all diagrams were adapted from Helmer 1987). The shaded areas show the specimens present in the assemblage. Many of the bones represented have butchery marks on them, suggesting some of these recovered domesticated animal remains (particularly pig and cattle) may have been processed and butchered on site. Taphonomic processes may have also determined that denser parts were more greatly represented in the assemblage. Large, medium, and unidentified mammal parts were also uncovered and may have originated from these species as well.



Figure 9: Skeletal Representation of Cattle Remains found at Site 102-126, adapted from (Helmer 1987)



Figure 10: Skeletal Representation of Pig Remains found at Site 102-126, adapted from (Helmer 1987)



Figure 11: Skeletal Representation of Caprine Remains found at Site 102-126, adapted from (Helmer 1987)

Conclusion

These results yield evidence of local consumption and processing on site as well as evidence of exchange. The presence of young and old cattle suggests the residents incorporated these European-introduced animals for the benefit of their meat and secondary products (i.e. milk, wool, etc.). The presence of young pig indicates that they were killed early on for their prime meat. Representations of recovered domesticated mammals' skeletal parts show cattle and pigs were raised and killed onsite while caprine parts were suggestive of exchange, perhaps on or off of the reservation. The large quantities of shell and saltwater fish suggest seasonal trips to the coast were made, and residents may have profited from exchanging and working along the coast. The inhabitants may have had domesticated dogs and passenger pigeons as well, but most likely, they hunted the widespread passenger pigeons for their meat and consumed dogs if needed. Meat from hunting and fishing could have also been exchanged for profit. The fragmented remains were primarily burnt, which is indicative of intensive processing, so the residents may have been making the most of their resources. Both traditional and European-introduced subsistence practices and resources were used on Site 102-126, further revealing the processes of cultural negotiation and persistence experienced by the Eastern Pequot on the reservation during the mid- to late-18th century.

CHAPTER 5

A COMPARTIVE ANAYSIS OF FAUNAL DATA

Introduction

All faunal data from the Eastern Pequot reservation were combined and statistically compared over time to observe social and cultural variations in subsistence practices. In this chapter, faunal data from previous studies are reviewed (Cipolla 2005, 2008; Cipolla et al. 2007; Fedore 2008; Hunter 2012). Fedore's study examined two 18th-century faunal assemblages, while Cipolla analyzed two early to mid-19th-century faunal assemblages. The faunal assemblage from Site 102-126, analyzed in the previous chapter, dates between those studies in the mid- to late-18th century. Hunter's study focused on the shellfish found across all faunal assemblages recovered from the Eastern Pequot reservation. These faunal assemblages were all recovered from household sites. Summaries of all the assessed sites and their assemblages are arranged in their historical and chronological order.

Data pertaining to other faunal assemblages outside of Site 102-126 were obtained, and for unknown reasons, discrepancies were found between the archived digital data and the original analyses from Fedore's study of recovered fauna from two 18th-century sites (Site 102-123 and Site 102-124) and Cipolla's study of the faunal remains two 19th-century households (Site 102-113 and Site 102-116). More identified specimens are included in the archived digital data than in the original

analyses. Most likely, these additional bones were examined and added to their records after Fedore and Cipolla presented their respective theses. Thus, I have reviewed their results and offer here a brief reinterpretation.

Their summary tables have been modified to reflect this and are redisplayed. I have excluded the number of recovered shellfish from the sites' faunal counts since they have already been analyzed in great depth (see Hunter 2012). I have also excluded the number of recovered snail specimens, because those identified were observed as modern intrusions into the faunal collection (Cipolla 2005:59). Though Site 102-113's and Site 102-116's faunal remains were previously combined (due to their contemporaneity), I have separately analyzed each site's remains in order to individually understand them before integrating them into broad data sets. Additionally, I have evaluated the skeletal part representations of the domesticated mammals only in faunal assemblages in which their sample size was greater than fifty parts. Skeletal part representations, resulting from substantial data, may help to further understand the role of domesticated animals and whether they were raised and butchered onsite. Then, each site's data are compared and combined to see possible developing patterns over time. Finally, the results of this comparative analysis examine the residents' diets, the role of European-introduced domesticated animals, the role of traditional hunting of wild species, and the potential indications of exchange in food products that may have occurred on the Eastern Pequot reservation during the 18th and 19th centuries.

Site 102-124 Summary and Faunal Data

Fieldwork for Site 102-124 was conducted in 2007. The remains of this site were all underground and featured three ovular pits containing various quantities of animal bone (Fedore 2008). Artifacts included little architectural material, like window glass and some nails. There were few surface features, so the site may represent a possible wigwam (Hayden 2012). Recovered ceramics indicate the site was inhabited around 1740 to 1760 (Hayden 2012). The earlier manufacturing dates of some ceramics suggest Site 102-124 was occupied before another uncovered mid-18th-century site, Site 102-123 (Fedore 2008; Silliman and Witt 2010). A total of 1,590 faunal remains were recovered.

Most of the assemblage's specimens were documented as fragmented portions (92.5%) and unidentified remains (92.4%). Over a half of the assemblage (52.4%) was burnt. Fragmented and burnt remains could be indicative of residents making the most of their resources. Only 9 bones or 0.57% of the recovered remains have butchery marks, and those were all mammal remains: cattle, pig, caprine, and a small mammal. Mammals made up most of the assemblage's total biomass (94.1%) and total bone weight (72.7%). The remains of dog, squirrel, mouse, pigeon, saltwater fish (flounder and tautog) and shellfish (soft-shell clam, quahog, and oyster) were also identified. Wild animals, like pigeon and squirrel, may be suggestive of local hunting. The presence of shellfish and saltwater fish reveal continued fishing practices and ties to the coast, but shells and fish only contributed to a small portion of the residents' diet, which mainly relied on the consumption of vertebrates (Hunter 2012:73). The assemblage's combination of wild and domesticated animals show the

residents of Site 102-124 had integrated the use of traditional resources with European-introduced resources by the early 18th century (Fedore 2008). The summary table (Table 3) for Site 102-124's assemblage is redisplayed. (Refer to Fedore 2008 for a more detailed analysis of recovered fauna from Site 102-123.)

Site 102-123 Summary and Faunal Data

Fieldwork for Site 102-123 was conducted in 2005 and 2006. Excavation revealed it was a house site with two collapsed chimneys, a cellar, a large depression, stone enclosures, and a shell midden (Fedore 2008). Artifacts included European ceramics, metal objects, glass, animal bone, shell, and some stone tools and flakes. It is unclear how many buildings may have been onsite. Recovered ceramics indicate the site was occupied during the early to mid-18th century (as early as 1720), and archaeological evidence suggests this occupation ended the somewhere around the late 18th century (~1780-1790) (Fedore 2008; Hollis 2013; Silliman and Witt 2010). Exactly 2,876 faunal remains were uncovered.

Common			%	MN		WT		Biomass	% of
Name	Taxon	NISP	NISP	Ι	% MNI	(g)	% WT	(kg)	Biomass
Cattle	Bos taurus	23	1.4%	1	9.1%	242.9	37.2%	2.8	41.2%
Pig	Sus scrofa	18	1.1%	3	27.3%	90.8	13.9%	1.2	17.0%
	Capra								
Probable	hircus/Ovis								
Caprine	aries	1	0.1%	1	9.1%	9.9	1.5%	0.2	2.3%
_	Canis lupus								
Dog	familiaris	1	0.1%	1	9.1%	6.5	1.0%	0.1	1.6%
~ • •	Sciuridae		0.00/		0.40/	1.0	0.00/		o = 0 (
Squirrel	sp.	12	0.8%	1	9.1%	1.8	0.3%	0.0	0.5%
	Muridae	•	0.40/		0.10/		0.00/		0.40/
Mouse	Mus sp.	2	0.1%	1	9.1%	0.2	0.0%	0.0	0.1%
Small		10	0 (0/			• •	0.40/	0.1	0.70/
Mammal		10	0.6%			2.8	0.4%	0.1	0.7%
Medium		27	2 20/			55.0	0 (0/	0.9	11.00/
Mammai		3/	2.3%			55.9	8.0%	0.8	11.0%
Large		o	0.50/			12 2	6 6 0/	0.6	9 70/
Unidentified		0	0.370			43.2	0.0 /0	0.0	0.770
Mammal		86	5.4%			55.6	8.5%	0.8	10.9%
TOTAL							01070		1000 / 0
MAMMAL		198	12.5%	8	72.7%	509.6	78.0%	6.5	94.1%
	Columbidae								
Pigeon	sp.	2	0.1%	1	9.1%	0.4	0.1%	0.0	0.1%
Unidentified	•								
Bird		13	0.8%			1.6	0.2%	0.0	0.4%
TOTAL BIRD		15	0.9%	1	9.1%	2	0.3%	0.0	0.5%
_	Pleuronectid								
Flounder	-ae sp.	1	0.2%	1	9.1%	0.6	0.1%	0.0	0.3%
	Tautoga								
Tautog	orvitis sp.	6	0.7%	1	9.1%	1.7	0.3%	0.0	0.6%
Unidentified									
Fish		542	34.1%			19.5	3.0%	0.4	5.5%
TOTAL FISH		549	34.5%	2	18.2%	21.8	3.3%	0.4	5.5%
Unidentified									
Vertebrate		828	52.1%			120	18.4%		
TOTAL		1590	100.0%	11	100.0%	653.4	100.0%	6.9	100.0%

Table 3: Summary Table, Site 102-124 (Fedore 2008)*

*NISP is the number of specimens, MNI is the minimum number of individuals, and WT is weight in grams

Many of the site's faunal remains were recorded as unidentified remains (86.2%), fragmented portions (95.8%), and burnt (68.9%). Again, this is possibly indicative of inhabitants intensively processing fauna to get the most out of their resources. Merely 21 of the recovered faunal remains (.007%) had noticeable butchery marks. The identified butchered animals included cattle, large mammals, medium mammals, and unidentified vertebrates. The assemblage mainly consisted of mammal remains, which made up much of the total bone weight (86.6%) and total biomass (99.5%). Deer, rabbit, and snapping turtle remains suggest hunting of local wild animals. Caprine, pig, a member of the rodent family, rat, eastern chipmunk, three species of saltwater fish (sea trout, sea bass, and porgy), one species of freshwater fish (largemouth bass), and several shellfish (soft-shell clam, quahog, mussel, and oyster) were identified (Fedore 2008).

According to Hunter and his analysis of the midden, shellfish "went from contributing significantly to the household diet to playing a relatively minor role in this instance around the turn of the nineteenth century" (Hunter 2012:65). Fish were only heavily present in levels with the largest quantities of shellfish. These high quantities of shellfish also marked a drop in the number of faunal bone remains (Hunter 2012:66). Though shellfish were greatly consumed at times, the layers of faunal remains surrounding shellfish deposits suggest shellfish were not a consistent element in the inhabitants' diets (Hunter 2012:74).

"Burning and crushing appears to have impacted" this assemblage (Fedore 2008:59). The presence of wild and domesticated animals on Site 102-123 shows that the use of traditional resources (i.e. local fishing, hunting, shellfish collection,

saltwater fishing, and/or exchange connections to the coast) with Europeanintroduced resources (i.e. the raising of domesticated animals) continued into the late 18th century. The summary table (Table 4) for this assemblage is redisplayed below. (Refer to Fedore 2008 for a more detailed analysis of recovered fauna from Site 102-123.)

Site 102-123 had more than fifty recovered specimens identified as cattle and pig and met the requirements for analyses of their skeletal part representations. The recovered cattle remains were mostly came from the bone heavy areas, namely the head (Figure 12). Almost all of the identified pig remains originated from the head as well (Figure 13). Destructive taphonomic processes could have deposed of possible lighter bones, leaving the denser bones behind. The cattle skeletal parts derived from all areas of the skeleton, while the pig skeletal parts chiefly came from the head. The dominant presence of cranial portions for both species is perhaps indicative of onsite butchering or preferential use of the head.

									% of
Common	Taxon		%		%			Biomass	Biomas
Name		NISP	NISP	MNI	MNI	WT (g)	% WT	(kg)	S
Cattle	Bos taurus	127	4.4%	2	13.3%	1051.8	55.1%	10.7	58.3%
Pig	Sus scrofa	76	2.6%	2	13.3%	139.2	7.3%	1.7	9.4%
	Capra								
	hircus/Ovis								
Caprine	aries	3	0.1%	1	6.7%	1.1	0.1%	0.0	0.1%
Probable									
Caprine		1	0.0%			5.6	0.3%	0.1	0.5%
Deer	Cervidae sp.	1	0.0%	1	6.7%	0.7	0.0%	0.0	0.1%
Rodent	Cricetidae sp.								
Family		1	0.0%	1	6.7%	0.4	0.0%	0.0	0.0%
Rat	Rattus spp	2	0.1%	1	6.7%	0.3	0.0%	0.0	0.0%
Rabbit	Sylvilagus sp.	3	0.1%	1	6.7%	1.5	0.1%	0.0	0.2%
Eastern	Tamias								
Chipmunk	striatus	1	0.0%	1	6.7%	0.1	0.0%	0.0	0.0%
Medium									
Mammal		140	4.9%			146.3	7.7%	1.9	10.2%
Large									
Mammal		35	1.2%			150.1	7.9%	1.8	10.1%
Unidentified									
Mammal		263	9.1%			155.9	8.2%	1.9	10.5%
TOTAL									
MAMMAL		653	22.7%	10	66.7%	1653	86.6%	18.2	99.5%
Unidentified									
Bird		1	0.0%			0.5	0.0%	0.0	0.0%
TOTAL									
BIRD		1	0.0%	0	0.0%	0.5	0.0%	0.0	0.0%
Seatrout	Cynoscion sp.	1	0.0%	1	6.7%	0.1	0.0%	0.0	0.0%
Largemouth	Micropterus								
Bass	salmoides	1	0.0%	1	6.7%	0.1	0.0%	0.0	0.0%
Sea Bass	Serranidae sp.	1	0.0%	1	6.7%	0.1	0.0%	0.0	0.0%
Porgy	Sparidae sp.	1	0.0%	1	6.7%	0.1	0.0%	0.0	0.0%
Unidentified						• •			0.404
Fish		40	1.4%			2.9	0.2%	0.1	0.4%
TOTAL			1 = 6 /		a <i>c</i> - a <i>c</i>		0.004	0.1	0 10 1
FISH		44	1.5%	4	26.7%	3.3	0.2%	0.1	0.4%
Snapping			0.001		<i></i>	0.1	0.001	0.0	0.001
Turtle		1	0.0%	1	6.7%	0.1	0.0%	0.0	0.0%
TOTAL			0.001	-		0.5	0.004	0.0	0.001
REPTILE		1	0.0%	1	6.7%	0.1	0.0%	0.0	0.0%
Unidentified							10.00/		
Vertebrate		2176	75.7%			251.8	13.2%		
							100.0		
TOTAL		2876	100.0%	15	100.0%	1908.7	%	18.3	100.0%

 Table 4: Summary Table, Site 102-123 (Fedore 2008)



Figure 12: Skeletal Part Representation of Recovered Cattle Remains, Site 102-123



Figure 13: Skeletal Part Representation of Recovered Pig Remains, Site 102-123

Site 102-126 Summary and Faunal Data

Fieldwork for Site 102-123 was conducted in 2011. Excavation revealed it was another probable house site with a collapsed chimney, a deep cellar, parts of a stone foundation, and a dense midden pit. This site is situated inside a large rock-fence enclosure. Artifacts included window glass, cut nails, ceramics, bottle glass, metal objects, clay pipe fragments, lithics, and objects of personal adornment (i.e. button, buckles, beads, and jewelry). Recovered ceramics "place the occupation of this house was somewhere in the final two or three decades of the 18th century," more specifically between the 1760s and 1780s (Hunter 2012:69; Silliman et al. 2013:15). A total of 3,184 faunal remains were recovered from the site (see Chapter III, Table 1 for Site 102-126's Summary Table).

As previously discussed to a greater extent in Chapter 3, many unidentified remains (81.6%) and fragmented portions (89.5%) were documented, and about half of the assemblage (49%) was burnt. Two hundred and sixty-two bones (8.2%) had butchery marks. Identified butchered remains included: vertebrates, bird, fish, pigeon, small mammals, medium mammals, large mammals, pig, cattle, and caprine. Mammals made up most of the assemblage's total biomass (94.1%) and total bone weight (72.7%). The remains of sheep, dog, squirrel, skunk, a member of the weasel family, rat, saltwater fish (herring, cod, bluefish, and seatrout), and many shellfish (soft-shell clam, quahog, and oyster) were also identified. Again, the results of this site almost show the continued use of traditional and European-introduced subsistence practices.

Site 102-116 Summary and Faunal Data

Fieldwork for Site 102-116 was conducted in 2004 and exists only 200 m from Site 102-113 (Lane 2013). This site also had a stone chimney, subfloor pit, and a dense midden (Cipolla et al. 2007:46). Artifacts included many faunal remains, ceramics, glass, clay pipe bowls and stem, metal objects, and some stone tools (Cipolla et al. 2007:47). Recovered ceramics and pipe stems suggest the site was inhabited around the early to mid-19th century at the same time as Site 102-113 (Cipolla 2005:36). Two hundred and ninety-nine faunal remains were retrieved from Site 102-116.

Many unidentified remains (84.3%) and fragmented portions (95.9%) were noted, and over half of the assemblage (54.8%) was burnt. Only 5 bones or 1.7% of the recovered remains have butchery marks, and those were all mammal remains: cattle, caprine, and unidentified mammals. Mammals made up most of the assemblage's total biomass (99%) and total bone weight (98.9%). The remains of pig, medium mammals, large mammals, bird, and shellfish (soft-shell clam, quahog, and unidentified bivalves) were also identified (Cipolla 2005). The presence of shellfish again "suggests that either the Eastern Pequot peoples were leaving the reservation or exchanging with other groups" (Cipolla 2005:101). The summary table (Table 5) for Site 102-116's assemblage is redisplayed. (Refer to Cipolla 2005, Cipolla et al. 2007, and Cipolla 2008 for more detailed analyses of recovered fauna from Site 102-116.)

Common			%					Biomass	% of
Name	Taxon	NISP	NISP	MNI	% MNI	WT (g)	% WT	(kg)	Biomass
Cattle	Bos taurus	15	5.0%	1	33.3%	312.8	70.7%	3.6	66.1%
Pig	Sus scrofa	6	2.0%	1	33.3%	13.8	3.1%	0.2	4.0%
	Capra								
	hircus/Ovis								
Caprine	aries	1	0.3%	1	33.3%	0.5	0.1%	0.0	0.2%
Medium									
Mammal		2	0.7%			0.3	0.1%	0.0	0.1%
Large									
Mammal		23	7.7%			57.4	13.0%	0.8	14.4%
Unidentified									
Mammal		241	80.6%			56.6	12.8%	0.8	14.2%
TOTAL									
MAMMAL		288	96.3%	3	100.0%	441.4	99.8%	5.4	99.0%
Unidentified									
Bird		1	0.3%			0.1	0.0%	0.1	1.0%
TOTAL BIRD		1	0.3%	0	0.0%	0.1	0.0%	0.1	1.0%
Unidentified									
Vertebrate		10	3.3%			0.9	0.2%		
TOTAL		299	100.0%	3	100.0%	442.4	100.0%	5.4	100.0%

Table 5: Summary Table, Site 102-116 (Cipolla 2005)

Site 102-113 Summary and Faunal Data

Fieldwork for Site 102-113 was conducted in 2004. Excavation revealed the "remnants of a framed house, an exterior trash pit, general sheet midden scatter, a small rock enclosure, and nearby piles of stones" (Cipolla et al. 2007:46). Uncovered architectural material included window glass, cut nails, and a large stone chimney, so the building was most likely a stone-ender (a house with one wall made entirely of stone) (Cipolla et al. 2007:46-47). Recovered artifacts included many faunal remains, ceramics, glass, clay pipe bowls and stem, metal objects, and some stone tools (Cipolla et al. 2007:47). Recovered ceramics indicate the site was inhabited around the early to mid-19th century (more specifically the first 30-40 years) and is
"contemporaneous" with Site 102-116 (Cipolla 2005:36; Silliman 2009:221). A total of 1,524 faunal remains were recovered.

The majority of the assemblage's specimens were recorded as unidentified remains (80.2%) and fragmented portions (91.5%), and many of the remains were burnt (44.2%). One hundred and ten bones (7.2%) were noticeably butchered. The butchered remains included: unidentified mammals, medium mammals, large mammals, pig, cattle, caprine, and chicken. Mammals comprised most of the assemblage's total biomass (97.9%) and total bone weight (93.0%). Whitetail deer, cat, groundhog, cottontail rabbit, rat, a member of the weasel family (*Mustela* sp.), meadow vole, small mammals, goose, a member of pheasant family (Phasianidae sp.), duck, turkey, unidentified turtle, freshwater fish (pickerel and perch), saltwater fish (porgy), and shellfish (eastern oyster, ribbed mussel, quahog, soft-shell clam, and unidentified bivalves) were also observed within this assemblage. The high quantity of identified wild animals (deer, rabbit, groundhog, duck, a member of pheasant family, freshwater fish, etc.) shows the use of local hunting and fishing practices on the reservation, and the shellfish and saltwater fish reveal continuing coastal connections into the early to mid-19th century. The summary table (Table 6) for Site 102-113's assemblage is redisplayed below. (Refer to Cipolla 2005, Cipolla et al. 2007, and Cipolla 2008 for more detailed analyses of recovered fauna from Site 102-113.)

			%		%			Biomass	% of
Common Name	Taxon	NISP	NISP	MNI	MNI	WT (g)	% WT	(kg)	Biomass
Cattle	Bos taurus	29	1.9%	2	8.7%	348.7	25.5%	3.9	24.5%
Pig	Sus scrofa	54	3.5%	4	17.4%	316.6	23.1%	3.6	22.5%
	Capra								
	hircus/Ovis								
Caprine	aries	5	0.3%	2	8.7%	17.1	1.2%	0.3	1.6%
	Odocoileus								
Whitetail Deer	virginianus	2	0.1%	1	4.3%	6.2	0.5%	0.1	0.7%
Caprine/Deer		1	0.1%			1	0.1%	0.0	0.1%
	Felis								
Cat	familiaris	1	0.1%	1	4.3%	0.5	0.0%	0.0	0.1%
	Marmota								
Groundhog	monax	1	0.1%	1	4.3%	0.2	0.0%	0.0	0.0%
Cottontail Rabbit	Sylvilagus sp.	4	0.3%	1	4.3%	4.4	0.3%	0.1	0.5%
Rat	Rattus sp.	2	0.1%	1	4.3%	0.7	0.1%	0.0	0.1%
Weasel Family	Mustela sp.	1	0.1%	1	4.3%	0.1	0.0%	0.0	0.0%
	Microtus								
Meadow Vole	pennsylvanicus	1	0.1%	1	4.3%	0.1	0.0%	0.0	0.0%
Small Mammal		3	0.2%			0.5	0.0%	0.0	0.1%
Medium Mammal		85	5.6%			111.9	8.2%	1.4	8.8%
Large Mammal		98	6.4%			258.8	18.9%	3.0	18.7%
Unidentified									
Mammal		1158	76.0%			281.1	20.5%	3.3	20.2%
TOTAL MAMMAL		1445	94.8%	15	65.2%	1347.9	98.4%	15.8	97.9%
Chicken	Gallus gallus	3	0.2%	1	4.3%	4.9	0.4%	0.1	0.4%
Goose	Anerinae sp.	1	0.1%	1	4.3%	1	0.1%	0.0	0.1%
	Phasianidae								
Pheasant Family	sp.	2	0.1%	1	4.3%	2	0.1%	0.0	0.2%
Duck	Anas sp.	1	0.1%	1	4.3%	0.4	0.0%	0.0	0.0%
	Meleagrididae								
Turkey	gallopavo	1	0.1%	1	4.3%	1.6	0.1%	0.0	0.2%
Unidentified Bird		23	1.5%			3.6	0.3%	0.1	0.3%
TOTAL BIRD		31	2.0%	5	21.7%	13.5	1.0%	0.2	1.3%
Pickerel	Esox niger	1	0.1%	1	4.3%	0.2	0.0%	0.0	0.0%
	Perca								
Perch	flavescens	2	0.1%	1	4.3%	0.3	0.0%	0.0	0.0%
Porgy	Sparidae sp.	1	0.1%	1	4.3%	0.9	0.1%	0.0	0.1%
Unidentified Fish		18	1.2%			2.2	0.2%	0.1	0.4%
TOTAL FISH		22	1.4%	3	13.0%	3.6	0.3%	0.1	0.6%
	Chelydridae								
Turtle	sp.	3	0.2%	1	4.3%	2.6	0.2%	0.0	0.3%
TOTAL REPTILE		3	0.2%	1	4.3%	2.6	0.2%	0.0	0.3%
Unidentified									
Vertebrate		23	1.5%			2.1	0.2%		
					100.0				
TOTAL		1524	100.0%	23	%	1369.7	100.0%	16.1	100.0%

Table 6: Summary Table, Site 102-113 (Cipolla 2005)

Site 102-113 had more than fifty recovered specimens identified as pig and thus met the requirements for skeletal part representation and analysis. The recovered pig remains were mostly came from the head, a bone heavy area (Figure 14). Again, taphonomic processes could have destroyed lighter bones, causing the denser bones to be more significantly represented within the assemblage. Because the recovered skeletal parts represent all areas of the skeleton and mostly originated from the head, pigs were most likely butchered onsite.



Figure 14: Skeletal Part Representation of Recovered Pig Remains, Site 102-123

Intersite Comparison

With individual variations between household sites' assemblages noted, the faunal data can be compared. Taphonomically, the faunal assemblages from Site 102-123, Site 102-124, Site 102-126, Site 102-113, and Site 102-116 are similar and consistent with each other. Not much changes between the recovered remains from

the early 18th century to the mid-19th century. Barely any of the specimens at each site were weathered, had gnaw marks, or indications of other natural taphonomic processes. Site 102-126 was the only site with some specimens (3.99%) containing carnivore tooth marks. Which bones were recovered may be due to preservation or the residents' treatment of the remains. The majority of these assemblages consisted of burnt, fragmented, and unidentified remains. Across all assemblages, at least 80% were recorded as unidentified, 89% were documented as fragmented, and about half were noted as burnt.

All assemblages included a strong presence of mammal species, especially European-introduced animals (i.e. cattle, pig, and caprine), and some species of bird and fish. Mammals always compromised at least 90% of the total biomass (Figure 15) and about 80% of the total bone weight (Figure 16). There is a slight decrease in the number of identified bones and a possible increase in total mammal biomass over time, but the changes are not drastic enough to be statistically significant. Yet there is a significant increase in the total bone weight of mammals within the assemblages over time, suggesting perhaps more mammals may have been incorporated into the residents' foodways as time progressed or taphonomic processes may have destroyed the smaller animal bones.



Figure 15: Taxon Biomass Distribution in Faunal Assemblages Over Time





Domesticated animals, particularly cattle, pig, and caprine, were consistently present within each assemblage. The existence of two possible dog specimens may indicate the presence of domesticated dogs on Site 102-124 and Site 102-126. The taxa of identified wild animals varied. Most seem to be scavengers or the results of

local hunting. Compared to the recovered mammal, the bird, fish, and reptile distribution are far more variable and dependent on individual sites, yielding no clear patterns. Most likely these wild species were acquired by the Eastern Pequot and served as dietary supplements to the larger mammal meat obtained through exchange or husbandry practices.



Figure 17: Taxon Weight Distribution in Faunal Assemblages Over Time (Including Shellfish)

Though the faunal assemblages initially seem similar, once the recovered shellfish from these middens are included into the taxon weight distribution (Figure 17), there are some drastic changes. Based on the this distribution, it is evident that

the assemblages included a strong presence of shellfish and mammal species, especially European-introduced mammals (such as cattle, pig, and caprine), and few species of bird and fish. The strong presence of shellfish compared to the other faunal remains suggests its significance to residents' subsistence. However, the presentation of data in this chart may be skewed towards the shellfish, as shellfish naturally weigh more than smaller animal bones, and unlike bone, shell cannot be boiled or crushed for additional nutrition. Also, shellfish provide less meat than most of the other identified taxa in these assemblages, meaning several would have to be gathered in order to make a decent contribution to the residents' diets, but even with the potential biases towards shellfish in this chart, there is again a significant increase in the total bone weight of mammals within the assemblages, further showing the increased use of European-introduced domesticated animals over time.

By the mid-18th century, the assemblages appear somewhat more indicative of onsite butchering (Figure 17). Site 102-124, Site 102-126, and Site 102-113 had the remains of juvenile pig (Cipolla 2005:97; Fedore 2008:54). Site 102-126 had the recovered remains from juvenile cattle and pig; so, domesticated animals were at times being slaughtered in their prime. Across all sites, the majority of the cattle, caprine, and pig skeletal parts originated from bone heavy areas of their respective skeletons. The presence of bone heavy remains may be due to the fact that denser bones are more likely to survive taphonomic processes. Most of the recovered skeletal parts represented within the faunal assemblages were cranial portions, which are suggestive of onsite butchering.



Figure 18: Percentage of Butchered Bones in Faunal Assemblages Over Time

Fedore suggests that his early to mid-18th-century sites may have some remains that were purchased from nearby exchangers (Fedore 2008:70-73), while Cipolla writes that his early to mid-19th-century sites' "evidence suggests that cattle and pigs were raised on the reservation or purchased as live animals rather than being bought in parts from a butcher" (Cipolla 2005:98). Perhaps, over the course of the 18th century, the impoverished residents on the reservation were initially purchasing some inexpensive meat from nearby merchants to supplement their foodstuffs, as exhibited in the Wheeler accounts, but eventually (especially by late 18th and early 19th centuries), the residents probably became more reliant on the products from their own domesticated animals.

Some of these sites also have spatial similarities. Many have stone enclosures and middens. Several of these stone enclosures are yet to be dated, but the few that have been dated were constructed in the later 19th century (Hasho 2012:76). Site 102-123 was the only one with small animal-sized enclosures with the potential to be animal pens (Hollis 2013). More is known about the middens uncovered on these sites. Site 102-126 and Site 102-113's middens were directly outside and to the south of their respective households (Silliman et al. 2013). Site 102-124 also had refuse and faunal remains deposited to the north of the proposed wigwam structure (Hayden 2012:60-66), while Site 102-123's midden was to the east of the house (Hollis 2013). From these broad patterns, it can be inferred refuse, such as faunal remains, was typically deposited outside the household and perhaps the stone enclosures served at some point to contain domesticated animals and crops or keep out encroaching animals and people.

Conclusion

Analyses of faunal assemblages from Site 102-124, Site 102-123, Site 102-126, Site 102-113, and Site 102-116 suggest the persistence of traditional Eastern Pequot practices along with the use of domesticated animals in the 18th and 19th centuries. There is an identified mix of domesticated animals (cows, pigs, chickens, etc.) and shellfish, with few other wild animals (deer, rabbit, fish, etc.), indicating traditional practices certainly supplemented the use of European-introduced resources.

Many of the remains were recorded as unidentified and extremely fragmented, suggesting that residents throughout the 18th century and 19th century were making the most of their resources and continuing intensive processing practices (Cipolla et

al. 2007; Fedore 2008). Middens and refuse pits outside the household served as deposits for the remainders of these butchering processes. By examining synchronic and diachronic variations across sites, this study can provide a more holistic perspective of the Eastern Pequot's changing economies and cultural negotiations throughout the colonial period, and this archaeological data is explored in further depth, more thoroughly discussed, and interpreted in the following chapter through serious consideration of the data within its historical contexts.

CHAPTER 6

DISCUSSION

Introduction

The archeological findings from sites on the Eastern Pequot reservation reveal the struggles and experiences of Eastern Pequot peoples at five house sites, dating from the early 18th to the mid-19th century. By focusing on the anthropological implications of recovered animal bones, zooarchaeological studies of this collection show several cultural and social variations that took place at these archaeological sites. These bones suggest some potential aspects of Eastern Pequot foodways, such as diet, identity, gender, age, exchange, and economy. In this chapter, these aspects are summarized and explored in depth to understand the ways in which zooarchaeology brings together the anthropological studies of food, colonialism, and identity and informs the history of the Eastern Pequot.

Anthropological and Historical Aspects of Eastern Pequot Faunal Remains

Before delving into the potential implications of these bones, I believe it is important to note that: "The decision to live on the reservation was a political one, an enactment of residence within the Native world and one that placed the people on the reservation in a position to construct the reservation as a Native space through their residence" (Hollis 2013:25). At the reservation, the Eastern Pequot constructed their own place and space and managed to make it their home, even with the challenges they faced. In southeastern New England "it was essential for people who wanted to persist in a colonial-dominated region to learn how to run an English-style farm and speak English" (Silverman 2005:221), and though Eastern Pequot members who worked off the reservation as laborers and indentured domestic servants most likely learned English farming practices, these faunal assemblages suggest the Eastern Pequot persisted and maintained connections to their identities as Native people through the continued use of practices (e.g. shellfish gathering, hunting, fishing, etc.).

Thus, the bones recovered from Eastern Pequot household sites are primarily great indicators of diet. By the mid-18th century, the Eastern Pequot chose to incorporate European-introduced domesticated animals into their foodways (Fedore 2008). The remains of pig, cow, sheep, goat, and chicken have been identified. Pigs and cattle were the most prevalent across these household sites. Indigenous groups usually adopted European resources when it fit with the local environment and culture and offered economic benefit (Pavao-Zuckerman and Reitz 2006), and the residents of these particular households decided to benefit from the additional resources and integrate mainly domesticated cattle and pigs into their culture.

On the Eastern Pequot reservation, cattle were the most common of all the recovered faunal remains. Since the remains were found in a well-preserved midden, where bones are directly deposited after use, cattle were probably raised and used by residents during the 18th and 19th centuries on a regular basis. The skeletal part representations and estimated younger and older ages of the recovered cattle remains

suggest when residents had cattle that they were used for both their meat and secondary products.

Also, the presence of cattle remains on Eastern Pequot sites is not exactly consistent with the ethnohistory. According to historians, during the 18th and 19th centuries, indigenous communities did not normally keep cattle (Bragdon 2009:147). There have been other documented nearby sites in New England, specifically Sarah Boston's Farmstead in Grafton, Massachusetts, where indigenous peoples probably used cattle for both dairying and meat (Allard 2010:92). Perhaps, like Sarah Boston, the Eastern Pequot deliberately chose to acquire and raise cattle, or maybe even the presence of cattle, as historic documents indicate, could have also been the result of encroachment, but either way the incorporation of cattle suggests residents on the Eastern Pequot reservation were making the choices they saw best for themselves and their community.

After cattle, pig was the second most commonly found animal on Eastern Pequot sites. Historians claim indigenous communities commonly incorporated pigs into their foodways (Bragdon 2009:147). Pigs are inexpensive to raise and could be turned out into the woods and survive alone for months at a time (Vasta 2007:85). Because they are easy to care for, it is unsurprising that the Eastern Pequot choose to keep them as a food resource.

Surprisingly, not very many caprine remains were recovered, but the Wheeler accounts indicate a Pequot member, Nead, raised sheep (Silliman and Witt 2010; Witt 2007). Considering the recovered faunal assemblages, caprines were probably not integral to these residents' diets; however their presence has been identified across

most sites, suggesting their exchange either (like at Site 102-126 and Site 102-113) between other households or off of the reservation.

The presence of birds on these sites was typical, since birds, like the recovered chicken, geese, and duck, were often "used for home consumption or market" and "widely available and economical" (Vasta 2007:86). The passenger pigeon also fits these criteria. Site 102-126, which dates from the mid- to late 18th century, had a significant amount of passenger pigeon. During the 18th century, passenger pigeons were grouped by the billions, easy to catch, and could be used for exchange and the making of secondary products, particularly butter (Schroger 1955).

Besides being indicators of diet, these faunal remains may have been of other historical importance. Historical records illustrate the issues the Eastern Pequot had with animals and settlers encroaching onto their lands. Domesticated animal remains, such as cattle, pig, goat, sheep, chicken, dog, etc., recovered from the sites may not only have been animals the Eastern Pequot bought or raised, but they may have been animals that encroached onto the residents' lands. The stone enclosures found on these sites may have been due to the constant encroachment the Eastern Pequot faced (Den Ouden 2005:70-78), and when protecting their land, the Eastern Pequot have possibly killed or simply taken the potentially destructive animals as their own.

Due to the small area of land the Eastern Pequot had for agriculture and animal husbandry (other than the English goods they relied on), wild game was most likely a critical supplement to their diet. Historical records note that the Eastern Pequot were an impoverished people, and though not many remains from wild species were recovered from archaeological sites, any additional nourishment was

probably necessary to their survival. Notably, among the recovered wild game, the passenger pigeon, deer, various fresh and saltwater fish, and several shellfish have been conclusively identified. The recovered dog specimens could have been wild, encroaching, or domestic, but dog has been considered a noteworthy emergency food for Native peoples, which could be additionally exhibitive of the residents' level of impoverishment (Snyder and Leonard 2011). Hence, traditional practices may have been essential to helping the residents subsist through difficult times.

Out of thousands of animal bones from these household sites only a few deer bones have been recovered, so the traditional hunting of deer may have rarely occurred from the early 18th century to the mid-19th century. Colonization vastly decreased the deer population (Cronon 1983), and European-introduced domesticated animals may have replaced the need for regular hunting. Heavy fines for hunting and closed off hunting grounds may have made hunting increasingly difficult for the Eastern Pequot (Den Ouden 2005; Silverman 2003). Perhaps for these reasons, hunting "decreased dramatically sometime between King Phillip's War and the late 18th century" (Hunter 2012:94). Consequently, hunting may have only happened on special occasions. The residents might have continued traditional Pequot practices of honoring and burning the remains of wild animals; domesticated animal remains did receive such deference and treatment and were more likely to be thrown away or tossed to the dogs (Silverman 2003:528). The Eastern Pequot may have continued to uphold their traditional beliefs and performed this practice, but of course, it cannot be assumed whether the fragmented remains uncovered on these sites are wild or domesticated (Fedore 2008:64).

Due to the significant amount of shellfish collected from the households dating from the early to late 18th century, shellfish gathering was certainly an important subsistence practice for these residents. Drawing upon ethnohistories, a study of the shell from Eastern Pequot sites revealed that shellfish may have been gathered by women, children, and the elderly while the men were fighting in wars or underway on maritime ships, meaning they would have had to make trips to the coast during the spring and summer seasons (Hunter 2012). Placed within their mid- to late-18th century contexts, Site 102-126, Site 102-124, and Site 102-123 may have been vacated due to their overlap with the French and Indian War and the American Revolution, "when significant numbers of Native American men served in colonial militias" (Hunter 2012:82). Eastern Pequot residents were probably part of the militia at the time as evidenced by a recovered military button at the mid- to late 18th-century site, Site 102-126 (Silliman et al. 2013). Unexpectedly, most of the fish found on Eastern Pequot sites were saltwater, which could be indicative of Eastern Pequot members' employment off the reservation or residents' connections to the coast.

Cipolla's analysis of the early to mid-19th century faunal assemblages indicates the Eastern Pequot were hunting or exchanging marine resources from habitats five or six miles from the reservation (Cipolla 2008:203). Therefore, as the evidence of shellfish and saltwater fish suggests, whether the Pequot's time away from the reservation was for employment or seasonal trips, the Eastern Pequot residents maintained their social ties to the coast throughout the 18th and 19th centuries and would often bring back food for people on the reservation (Hunter 2012:91). The decline in shellfish by the early to mid-19th century may be due to

"environmental impacts on various shell species populations or newly restricted or opened land access" (Hunter 2012:75). Still, the great amount of recovered shellfish and some saltwater fish bring in further potential for discussing gender and age divisions within past foodways on the Eastern Pequot reservation.

Besides hunting and fishing, zooarchaeological studies of the Eastern Pequot show the persistence of other traditional practices that maximized their scarce food resources. One of Cipolla's studies examines the two early to mid-19th-century households' faunal assemblages from the Eastern Pequot reservation (Cipolla et al. 2007). In this study, using statistical analyses of these data and ethnohistorical sources, the authors interpret the potential diets and food preparation practices. The remains were so intensely processed through butchering and boiling that it is believed the inhabitants were impoverished and thus making the most of their resources (Cipolla et al. 2007). Since many of the recovered bones were documented as fragmented and unidentified from all of the household sites, it shows that the Eastern Pequot may really have been making the most of their resources by crushing and boiling the bones from the early 18th to mid-19th century (Cipolla et al. 2007; Fedore 2008). Mashantucket sites have also recovered heavily burnt and calcined bone that is very fragmented, which suggests intensive processing on other Native sites in southeastern New England as well (McBride 1993:73)

Historical records show boiling and crushing as a common Native practice in southeastern New England (Gookin 1972:20; Raine 1997). Perhaps, practices like the production and collection of bone grease (which is prepared by crushing and boiling bones) were involved. Bone grease is a traditional Native American practice in

Northeastern America that allows fat to be collected, preserved, and stored for longterm use, especially during the winter season (Saint-Germaine 2005). Previous studies have also shown that meat with low lipid and protein ratios, particularly animals like deer, goat, and rabbit, are more likely to be boiled to make the meat easier to digest (Wandsnider 1997). Thus, the food preparation practices that may have fragmented these bones could have been a valuable subsistence practice as well as a possible sign of continuing traditional practices. Moreover, previously examined faunal specimens have both stone and metal tool marks on them, revealing the continuing use of stone tools among the Eastern Pequot into the mid-19th century. Past studies have argued that the persistence of traditional butchery practices may have bound members together by emphasizing a social memory and strengthened a sense of community (Cipolla 2008).

The European-introduced animals found on the Eastern Pequot reservation could have also been integrated for political and economic reasons. As previously discussed, European-introduced domesticated animals were often incorporated into Native American life for economic purposes to exchange with the Europeans (Pavao-Zuckerman 2006), and in northeastern America, animal husbandry was sometimes politically motivated and used to establish property lines in the eyes of the English, helping to protect their property and resources (Silverman 2003). The Eastern Pequot may have used such a pragmatic strategy to help offset settler encroachment and economically benefit from the animals. Past archaeological studies show that the Eastern Pequot were "actively engaged in consumer exchanges with their neighbors"

(Silliman and Witt 2010). Thus, aspects of exchange and economy can be observed in the recovered faunal remains.

During the reservation period, Native people were constantly engaging with the colonial economy (Hollis 2013:25; Silliman and Witt 2010). They were reliant on purchased or exchanged goods. Archaeology shows the Eastern Pequot used imported ceramics, metal implements, green bottles, clear glass tumblers, metal buttons, iron kettles, livestock, and local coin currency (Silliman 2012:124). Though market goods may not have had the same cultural meanings as others made in residential or nonmarket contexts (e.g. gifting, bartering), market goods "did facilitate economic and cultural survival through such strategies as giving the appearance of assimilation, helping to create new changes of social memory, or simply serving as useful items in everyday life" (Silliman and Witt 2010:65). Animal products could have crossed the boundaries between market and nonmarket contexts on the Eastern Pequot reservation.

As described in Chapter 3, the Wheeler accounts provide an example of how the reservation's residents may have dealt with market goods and local merchants. The Pequot, who exchanged with Wheeler, Toney and Nead, used bass and sheep products to purchase goods and foodstuffs and pay off debts (Silliman and Witt 2010; Witt 2007). Archaeological evidence confirms the presence of these animals on the reservation. Caprine (with one definite sheep specimen from Site 102-126) and fish (with identified sea bass remains from Site 102-124 and Site 102-126) were uncovered at sites dating from the early 18th century to the mid-19th century.

Exchange and communal sharing and distribution of goods was probably also taking place on the reservation between residents. Skeletal representations of pig, cow, and caprine across sites revealed primarily bone heavy parts were recovered from sites. In his study of skeletal parts on the early to mid-19th-century sites, Cipolla found possible evidence of communal sharing. One house site had more bone light parts, while the other house site had more bone heavy parts. On this, Cipolla comments: "Most interesting is that there is virtually no overlap of the skeletal elements represented from both assemblages, a characteristic that suggests possible communal food sharing between households" (Cipolla 2005:90). Thus, communal sharing and distribution could explain why some sites have more bone heavy parts than others, but one study of Native diets in California discovered that the equal representation of skeletal elements suggests Native individuals exhibited no preference between different skeletal parts (Silliman 2004: 160). So perhaps, the concepts of differing skeletal elements do not even apply to the faunal remains found on the Eastern Pequot reservation. If they preferred both bone heavy and bone light parts equally, the dichotomy could not pertain to these sites, but nonetheless, communal sharing often occurred amongst Native people in the Northeast. In times of scarcity, they often established a "common pot" where "all the inhabitants of the pot were fed from the pot and were part of the pot" (Brooks 2008:4-5), and traditionally, the sachem would get tributes and redistribute the goods amongst the community (Bragdon 2009:95). Most likely, food and animal products were being traditionally shared, especially within a struggling community where residents had to rely on goods and members outside of the reservation in order to survive.

For future studies of foodways on the Eastern Pequot reservation, there are a few possible research routes I would recommend. Since, by the early 19th century, Timothy Dwight and others have documented that the Pequot checked their once declining population by accepting blacks into the reservation community (Den Ouden 2005; Dwight 1822), if more 19th century sites are uncovered, I would suggest looking at the potential integration of African foodways into Eastern Pequot subsistence practices. Also, if possible, I would recommend asking living descendants about food in their oral traditions and any recipes that have been passed down or are considered ancestral.

Most notably, I would highly recommend another study of these faunal assemblages, which focuses on the level of the specimens' fragmentation. In my study, bones were only documented as fragmented portions with no additional examinations. This method of documentation can be subjective depending on who is evaluating the bones, and because I did not inspect all of these bones, if possible, I suggest someone review and examine the specimens more in depth, creating a system which can gauge their fragmentation. Then, the reported heavy fragmentation across these sites can be proved through quantifiable data. Such a study could further investigate the residents' use of their resources and whether they truly were making the most of their resources as hypothesized by Fedore, Cipolla, and myself, possibly clarifying the extent of each household's impoverishment or preparation and consumption of these resources.

CHAPTER 7

CONCLUSION

Archaeology has the potential to engage long-term indigenous histories, and thus, it can uncover much about indigenous peoples who were subordinated by colonialism (Lightfoot 1995). Through archaeology, people, like the Eastern Pequot, who have been poorly represented by biased histories can be given a voice (Liebmann 2008; Loren 2008; Silliman 2010). Looking at the short-term and long-term processes can help us see the "full implications of colonialism's consequences" (Lightfoot 1995:210). Archaeological findings from the Eastern Pequot reservation show the residents were not simply static with the options to change or continue to stay the same (Silliman 2009), but they were in a constant state of change even while they continued. If archaeologists can view change and continuity as the same process, we can focus on studying the aspects of everyday life at a site to determine the struggles of individual undergoes in colonialism (Silliman 2005, 2009). Examining the "temporalities of social actions" can help us to recognize the roles of daily practices play in maintaining or negotiating identities (Silliman 2010:157), and the recovered faunal remains from the Eastern Pequot reservation expose 18th- and 19th-century residents' day-to-day cultural negotiations and struggles through their use of continued subsistence practices and their decisions to incorporate Europeanintroduced subsistence practices.

The variations between sites' faunal assemblages reveal the subsistence activities individuals and households employed. Each household made their own decisions and faced their own struggles. Individual residents "maintained certain practices, adapted old ones, and adopted new ones to serve the needs of their communities within certain boundaries forced by colonialism" (Hunter et al. 2014:22). With European colonization, Eastern Pequot's choices in subsistence practices became increasingly more limited. Their farming practices were confined to small parcels of unhealthy, rocky land that were often encroached upon, disturbing the agricultural practices taking place on the reservation. Hunting became restricted to certain seasons and lands, which if trespassed came at the risk of heavy fines. In the face of these constraints, the Eastern Pequot opted to make use of off reservation employment, coastal access for fishing and shellfish gathering, and the colonial economy. The variations between the identified taxa from household sites are further proof of the deliberate choices residents were making in their foodways.

Ultimately, the residents of the Eastern Pequot reservation chose how they were going to adapt to their new environment and how they would make use of their limited resources. After the onset of colonialism and over the course of the early to mid-18th century, the Eastern Pequot appear to have started raising Europeanintroduced domesticated animals of their own (particularly pig, cattle, and caprine) on the reservation. Their ability to raise these animals seems to have somewhat stabilized by the late 18th and early 19th centuries after the men presumably returned from the colonial militias. Throughout these times, traditional practices, like hunting, sea fishing, and shellfish gathering, surely supplemented their use of domesticated

animal products. Wild and domesticated animal products were at times exchanged for goods, like foodstuffs, clothing, ceramics, etc., on and off of the reservation. Furthermore, off reservation employment, as soldiers, indentured servants, maritime workers, farm laborers, etc., and seasonal trips to the coast provided vital economic support to families living on the reservation. Such off-reservation employment may have created gender and age divisions within the community. Children and men were historically more likely to be employed elsewhere, while women and the elderly probably stayed on the reservation, cared for the land and animals, and dealt with local exchange. Amid the great impacts of colonialism and English settlement in southeastern New England and tremendous changes to local economies and environments, the Eastern Pequot members successfully negotiated through colonial restraints and decided to engage more with animal husbandry practices and the colonial economy to subsist and persist together as a community.

Today, Eastern Pequot Tribal Nation continues to act together as a close community. Members actively engage with the archaeology, and the archaeological findings on the reservation materialize their history in the present. Through these findings, the previously silenced voices of past members can be heard and provide insight into their everyday lives and improve our understandings of the struggles individuals and households endured in colonialism and the choices and negotiations they made to persist as a community. Archaeological studies of recovered remains can help us learn more about peoples' past and let their voices echo into the present to give their history a future.

APPENDIX

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
109/645-6A-P	1	1	М	Cow	PHA1	CO	F	F	LL			1	1	1					24.8
EPTN-11-																			
109/645-6A-P	2	1	М	Cow	ATL	HFL	F	F	LR			1		3		1			47.6
EPTN-11-																			
109/645-6A-P	3	1	М	Cow	ATL	FR			LR			1	5						0.3
EPTN-11-																			
109/645-6A-P	4	1	Μ	Cow	CRA	INF		U	Α			1	4	2				1	33.6
EPTN-11-																			
109/645-6A-P	5	1	Μ	Cow	TTH	CO						1	2						5.3
EPTN-11-																			
109/645-6A-P	6	1	М	Pig	TTH	CS						1		1					6.2
EPTN-11-																			
109/645-6A-P	7	1	М	Cow	RIB	PSE			L		1	1		2					10.7
EPTN-11-																			
109/645-6A-P	8	1	Μ	Caprine	TIB	SH			R			1	1	3				1	6.9
EPTN-11-																			
109/645-6A-P	9	1	Μ	Caprine	TIB	SH			R			1	1	2				1	5.6
EPTN-11-																			
109/645-6A-P	10	1	М	Pig	RIB	SH			L			1	1	2					2.8
EPTN-11-																			
109/645-6A-P	11	1	Μ	Caprine	RIB	SH			R			1		2					1.6
EPTN-11-																			
109/645-6A-P	12	1	Μ	Cow	RIB	SH			R			1		1				1	8.3
EPTN-11-																			
109/645-6A-P	13	1	М	Cow	PHA2	CO	U	F	LL			1		1					15.4
EPTN-11-																			
109/645-6A-P	14	1	М	Cow	TIB	DSE			R			1		1				1	18.5
EPTN-11-																			
109/645-6A-P	15	1	М	Large	VRT	FR						1				1			6.4
		-										-							
EPTN-11-																			
109/645-6A-P	16	1	F	Bluefish	DENT	FR			R			1	1	1					1.5

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
108.5/646-7A	18	5	В	Unidentified	NIB	FR					1	1		1					0.6
EPTN-11-																			
108.5/646-7A	19	1	В	Unidentified	RIB	PSE			R			1		1					0.1
EPTN-11-																			
108.5/646-7A	20	3	V	Unidentified	NIB	FR						1		2					0.4
EPTN-11-																			
108.5/646-7A	21	8	V	Unidentified	NIB	FR					8	2		2					2
EPTN-11-																			
108.5/646-7A	22	1	М	Medium	CRA	FR			Α			1		2					1.7
EPTN-11-																			
108.5/646-9	23	3	V	Unidentified	NIB	FR					2	2		3					0.8
EPTN-11-				Sciaenidae															
108.5/646 5-7	24	2	F	Cynoscion	VRT	CO			Α										0.1
EPTN-11-																			
108.5/646 5-7	25	2	F	Unidentified	NID	FR													0.4
EPTN-11-																			
108.5/646 5-7	26	2	В	Unidentified	LBN	FR					1								0.1
EPTN-11-																			
108.5/646 5-7	27	9	V	Unidentified	NIB	FR					2	1		1					2.5
EPTN-11-				Passenger															
108.5/646 5-7	28	1	В	Pigeon	HUM	DS			R		1	1		1					0.1
EPTN-11-																			
108.5/646 5-7	29	1	В	Unidentified	NID	FR													0.2
EPTN-11-																			
108.5/646-7A-P	30	1	Μ	Cow	PHA2	CO	U	F	LR										15.1
EPTN-11-																			
108.5/646-7A-P	31	1	М	Cow	FEM	DSE			L			1	3	2		1			90.3
EPTN-11-																			
108 5/646-9A	32	3	F	Unidentified	NIB	FR													0.1
	52	5	-		1,115	110													0.1
EPIN-II-	22	10	X 7	TT:: 1															2.2
108.5/646-9A	55	10	V	Unidentified	NIB	FK													3.2
EPTN-11-																			
108.5/646-9A	34	27	В	Unidentified	NIB	FR													1.4

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
108.5/646-9A	36	1	F	Clupeidae	VRT	СО													0.1
EPTN-11-				F															
108.5/646-9A	37	1	М	Pig	MET	СО	U	F											0.3
EPTN-11-																			
108.5/646-9A	38	1	М	Cow	RIB	PS	U		L	1	1	1		2					3.7
EPTN-11-																			
108.5/646-9A	39	1	Μ	Large	RIB	SH					1	1		2				1	5.6
EPTN-11-																			
108.5/646-9AP	40	1	М	Pig	DENT	HFL			L			1	2	2	3			1	132.4
EPTN-11-																			
108.5/646-9AP	41	4	М	Pig	TTH	CO			L			1		1					2.1
EPTN-11-				Passenger															
108.5/646-7A-P	42	1	В	Pigeon	INN	MID			R										0.1
EPTN-11-																			
108.5/646-7A-P	43	1	М	Medium	SCP	PSE			L		1	1		2				1	10.4
EPTN-11-																			
108.5/646-7A-P	44	2	М	Large	LBN	SH						2		4	1			2	30.8
EPTN-11-																			
108.5/646-8	45	19	V	Unidentified	NIB	FR													2.6
EPTN-11-				Passenger															
108.5/646-8	46	1	В	Pigeon	HUM	DS		F	R			1		1					0.1
EPTN-11-																			
108.5/646-8	47	9	V	Unidentified	NIB	FR					9	3		5					0.3
EPTN-11-				a 11	LIDT														0.1
108.5/646-8	48	1	М	Small	VRT	FR			A			l		I					0.1
EPTN-11-																			
108 5/646-8	49	5	F	Unidentified	NIB	FR													0.1
EPTN_11_	.,	~	-																
108 5/646-8	50	1	м	Medium	RIR	SH						1		3					23
FPTN_11_	50	1	141		KID	511						1		5					2.5
									1		I			_					10

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
109/645-5(P)	53	1	Μ	Cow	CAR	CO			R			1		1	1				10.5
EPTN-11-																			
109/645-5(P)	54	1	Μ	Cow	RIB	SH						1	1	2				1	7.3
EPTN-11-																			
109/645-5(P)	55	1	Μ	Medium	RIB	FR						1	1	1					1
EPTN-11-																			
109/645-5(P)	56	2	V	Unidentified	NIB	FR						1		1					0.1
EPTN-11-																			
109/645-5(P)	57	1	М	Cow	CER	HFL			R			1		2		1		1	30.1
EPTN-11-																			
109/645-5(P)	58	1	M	Cow	CRA	HFL			LL			1		4				1	31.3
EPTN-11-				G .	TID	DOLL	-												
109/645-5(P)	59	1	Μ	Caprine	TIB	PSH	F		R			l		2	2			I	31.5
EPTN-11-	60	1	N	D.		DOLL	г		D			1		1				1	17
109/645-5(P)	60	1	M	Pig	ULN	PSH	F		K			I		I				I	1/
EPIN-II-	61	1	м	Cours	MC	DV						1	2					1	5 1
109/043-3(P)	01	1	IVI	Cow	MC	ΓΛ						1	2					I	3.1
EPIN-11- 100/645-6	62	1	м	Com	DID	сц						1	2	1				1	16.9
EDTN 11	02	1	IVI	COW	KID	511						1	5	1				1	10.0
109/645_6	63	1	м	Cow	ΡΗΔ1	CO			TT			1	3						191
FPTN-11-	05	1	IVI	COW	111/11	0						1	5						17.1
109/645-6	64	3	М	Medium	VRT	FR					2	3		4					16
EPTN-11-	0.	5			,						_	-							1.0
109/645-6	65	3	F	Unidentified	NIB	FR						1		1					0.3
EPTN-11-		_																	
109/645-6	66	6	М	Large	NIB	FR					6	5		5					23.1
EPTN-11-																			
109/645-6	67	1	М	Large	RIB	SH					1	1		2				1	10.6
EPTN-11-																			
109/645-6	68	22	М	Medium	LBN	FR					12	8		8				1	18
1071010 0					2011						12								10
EPTN-11-																			
109/645-6	69	20	V	Unidentified	NIB	FR					8	5		6		1		1	3.4

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
109/645-6	71	1	Μ	Medium	FEM	PX		U											0.7
EPTN-11-																			
109/645-6	72	1	Μ	Cow	TTH	CO													2
EPTN-11-																			
109/645-6	73	2	Μ	Medium	TTH	FR						1		1					2.3
EPTN-11-																			
109/645-6	74	13	М	Skunk	CRA	ANT			Α			2		2				1	6.7
EPTN-11-																			
109/645-6	75	5	М	Pig	DENT	HFL			LR			4		3	1			2	131.2
EPTN-11-																			
109/645-6	76	1	М	Cow	RIB	SH			L			1		2					14
EPTN-11-																			
109/645-6	77	2	М	Medium	LBN	FR						2		4					4.1
FPTN-11-																			
109/645-6	78	3	м	Unidentified	NIB	FR						2		2					03
EPTN-11-	10	5		Childentinieu	THE	110													0.5
109/645-6	79	1	М	Cow	INN	DSE			R			1		2					106.3
EPTN-11-																			
109/645-6	80	1	М	Medium	SCP	DS		U	L			1		2				1	3.1
EPTN-11-																			
109/645-6	81	1	Μ	Caprine	RAD	PSH	F		R			1		1				1	11.3
EPTN-11-																			
109/645-6	82	1	Μ	Caprine	TIB	SH			R		1	1	2	2				1	21.4
EPTN-11-																			
109/645-6	83	1	М	Caprine	FEM	SH			R		1	1		2				1	17
EPTN-11-																			
110/645-6	84	1	F	Unidentified	NIB	FR													0.1
EPTN-11-																			
110/645-6	85	2	Μ	Medium	RIB	FR					2	2		3				1	10.1
EPTN-11-												_							
110/645-6	86	4	M	Unidentified	NIB	FR					1	3	1	5					1.3
EPTN-11-												_		_					
110/645-6	87	19	M	Unidentified	NIB	FR					9	5		7					9.5

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
110/645-6	89	1	Μ	Small	TTH	SH						1		1				1	0.1
EPTN-11-																			
110/645-6	90	1	В	Chicken	FEM	PSH			R			1		1				1	1
EPTN-11-																			
110/645-6	91	1	М	Medium	LBN	SH						1	1	2				1	6
EPTN-11-																			
110/645-6	92	1	М	Pig	PHA2	CO			LR			1		1					2
EPTN-11-																			
110/645-6	93	1	М	Pig	TTH	SH						1		1					3.2
EPTN-11-																			
108.5/645-6A	94	4	М	Small	LBN	SH						3		4				1	6.2
EPTN-11-																			
108.5/645-6A	95	3	Μ	Small	RIB	SH						1		1					4
EPTN-11-																			
108.5/645-6A	96	14	М	Unidentified	NIB	FR						2	2	1				1	6.4
EPTN-11-																			
108.5/645-6A	97	13	М	Unidentified	LBN	FR						12	3		3				6.3
EPTN-11-																			
108.5/645-6A	98	80	V	Unidentified	NIB	FR													4.2
EDTN 11																			
EPIN-11- 108 5/645 6A	00	24	v	Unidentified	NID	ED					24	1		1					4.1
108.3/043-0A	99	54	v	Unidentified	NID	ГК					54	1		1					4.1
LP I N-11- 108 5/645 6A	100	14	р	Unidentified	NID	ED													0.8
EDTN 11	100	14	D	Unidentified	NID	TK													0.8
108 5/645-64	101	5	в	Unidentified	I BN	SH													0.5
FPTN-11-	101	5	D	Onidentified	LDI	511													0.5
108 5/645-6A	102	85	F	Unidentified	NIB	FR													37
EPTN-11-	102	05	1	Olifacititiea	THE	IR													5.7
108.5/645-6A	103	2	F	Unidentified	VRT	FR													0.05
EPTN-11-				Sciaenidae															
108.5/645-6A	104	1	F	Cynoscion	OTH	FR													0.1
EPTN-11-																			
108.5/645-6A	105	3	М	Pig	TTH	SH							1		1				8.5

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
108.5/645-6A	107	1	Μ	Pig	MC	CD													3
EPTN-11-				Passenger															
108.5/645-6A	108	1	В	Pigeon	HUM	CD		F	R										0.4
EPTN-11-																			
109/645-5	109	10	М	Medium	NIB	FR						1	1		1				18
EPTN-11-																			
109/645-5	110	7	В	Unidentified	LBN	SH													2
EPTN-11-																			
109/645-5	111	64	V	Unidentified	NIB	FR					24								18.2
EPTN-11-																			
109/645-5	112	21	M	Unidentified	NIB	FR						20							12.6
EPTN-11-			_																
109/645-5	113	4	F	Unidentified	NIB	FR													0.1
EPTN-11-				D1 (1)	L ID T	- DD													
109/645-5	114	1	F	Bluefish	VRT	FR													1.4
EPTN-II-	115	1		G 11	DID	ED							1	•					0.5
109/645-5	115	I	М	Small	RIB	FR							I	2					0.5
EPIN-II-	110	1	D	Passenger		CD		г	т										0.4
109/645-5	116	1	В	Pigeon	HUM	CD		F	L										0.4
EPIN-11-	117	1	м	Mallan	DID	CII						1	1		2				2
109/645-5	11/	1	M	Medium	KIB	SH						I	I		2				2
EPIN-11-	110	10	м	Madium	LDN	CII						7	7		0				16
109/043-3	118	10	IVI	Medium	LDIN	бп						/	/		0				40
EPTN-II-	110	1	Б	0 111	CD 4	T													0.4
109/645-5	119	1	F	Gadidae	CRA	L													0.4
EPTN-11-				Passenger															
109/645-5	120	1	В	Pigeon	COR	CO	F	F	L										0.3
EPTN-11-																			
109/645-5	121	2	М	Cow	CRA	ANT			А										16.4
EPTN-11-				Passenger															
109/645-5	122	2	В	Pigeon	SAC	MID			А										0.6
EPTN-11-																			
109/645-5	123	1	Μ	Pig	PHA2	CP						1		1					1.6

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
109/645-11A	125	1	F	Unidentified	RIB	SH													0.1
EPTN-11-																			
109/645-11A	126	3	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
109/645-11A	127	3	Μ	Unidentified	LBN	SH					1	3		4					2.6
EPTN-11-																			
109/645-8	128	1	Μ	Large	LBN	SH						1	3	1					2.6
EPTN-11-																			
109/645-8	129	1	М	Unidentified	NIB	FR					1								0.3
EPTN-11-																			
109/645-8	130	1	М	Medium	NIB	FR													0.6
EPTN-11-											_								
109/645-8A	131	4	М	Unidentified	NIB	FR					2	1		1					0.8
EPTN-11-	100				DID	au													
109/645-8A	132	1	Μ	Medium	RIB	SH					I	I		1					2.4
EPTN-II-	122	1	N	0	TTI	00													0
109/645-8A	133	1	M	Cow	TIH	CO													8
EPIN-11-	124	1	м	D	TTI	00													2.2
109/645-8A	134	1	M	Pig	IIH	0													2.3
EPIN-II-	125	5	17	TT:::1(:C::1	NID	гр					2								07
108.3/040-0	135	5	V	Unidentified	NIB	ГK					2								0.7
EPIN-11- 110/645 0	126	1	v	Unidentified	NID	ED					1								0.1
EDTN 11	130	1	v	Unidentified	NID	TK					1								0.1
109/645_74	137	3	F	Unidentified	NIR	FR													0.1
FPTN_11_	157	5	1	Onidentified	NID	IK													0.1
109/645-74	138	7	м	Unidentified	NIR	FR					2								17
	150	/	141	Ollidentified	TTLD						2								1.7
EPTN-II-	120	-	D			FD													0.4
109/645-7A	139	5	В	Unidentified	NIB	FK													0.4
EPTN-11-																			
109/645-7A	140	1	Μ	Large	LBN	FR													3.5
EPTN-11-																			
109/645-7A	141	1	М	Cow	TTH	HFL													1

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
109/645-6(P)	143	1	Μ	Large	NIB	FR													3.8
EPTN-11-																			
110/645-7A	144	1	Μ	Small	LBN	FR					1								0.5
EPTN-11-																			
110/645-7A	145	1	Μ	Small	VRT	SH					1								0.1
EPTN-11-																			
109/645-8A	146	1	Μ	Cow	OTH	SH			R			1		1					2.2
EPTN-11-110/645																			
(Wall)	147	2	Μ	Unidentified	NIB	FR					2								1.1
EPTN-11-																			
110/645-3	148	3	Μ	Medium	LBN	SH						1		1				1	1.8
EPTN-11-																			
110/645-3	149	10	Μ	Unidentified	NIB	FR					8	1		1					2.8
EPTN-11-				Sciaenidae															
109/645-9A	150	1	F	Cynoscion	VRT	SH													0.1
EPTN-11-																			
109/645-9A	151	1	Μ	Large	NIB	FR													3.2
EPTN-11-																			
109/645-9A	152	7	Μ	Unidentified	NIB	FR					4								2.7
EPTN-11-																			
110/645-2	153	1	В	Unidentified	COR	SH						1		1					0.5
EPTN-11-																			
110/645-2	154	1	Μ	Medium	LBN	SH						1	1						2
EPTN-11-																			
110/645-2	155	14	М	Unidentified	NIB	FR					6								4
EPTN-11-																			
109/645-7	156	1	М	Pig	TTH	СО													0.4
EDTN 11				8															
EFIN-11- 100/645-7	157	2	Б	I Inidantifia d	NID	ED													0.1
109/043-/	15/	2	Г	Unidentified	INIB	ГК													0.1
EFIN-11-	150	7	м	I Ini doutifie d	NID	ED					4								1.0
109/043-/	158	/	IVI	Unidentified	INIR	FK					4								1.9
EPIN-11-	150	1	р	TT.: 1	DID	DV													0.1
109/645-7	159	1	В	Unidentified	KIB	PX													0.1

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
109/645-7	161	1	Μ	Large	RIB	SH						1	1	1				1	10.6
EPTN-11-																			
109/645-7	162	1	В	Chicken	FEM	CD			R			1	1						1.4
EPTN-11-																			
109/645-7	163	2	Μ	Medium	LBN	SH												2	3.6
EPTN-11-																			
109/645-7	164	3	М	Unidentified	NIB	FR					1	1		1					3
EPTN-11-																			
109/645-7	165	1	М	Pig	MC	HFL						1		1					1.2
EPTN-11-																			
110/645-4	166	1	F	Unidentified	VRT	CO													0.3
EPTN-11-																			
110/645-4	167	7	М	Pig	TTH	FR						1		1					2.4
EPTN-11-			-																
110/645-4	168	3	В	Unidentified	LBN	FR													1.4
EPTN-11-	1.60	1.0		TT 1	NHE	ED													
110/645-4	169	10	Μ	Unidentified	NIB	FR													4.6
EPTN-II-	170	2		a 11	DENT	DOG			n										0.1
110/645-4	170	3	М	Small	DENT	POS			ĸ										0.1
EPIN-11-	171	45	X7	11.1.1	NID	гр					20								2.7
110/645-4	1/1	45	V	Unidentified	NIB	FK					28								3./
EPIN-11-	172	1	м	Com	DID	DCE			т			1		2					176
110/043-4 EDTN 11	1/2	1	IVI	Cow	RID	PSE			L			1		Z					17.0
LF I IN-11- 110/645 5	172	5	D	Unidentified	IDN	ED					1								1 1
110/043-3	175	5	D	Unidentified	LDIN	TK					1								1.1
EPTN-11-																			
110/645-5	174	1	В	Unidentified	NIB	FR													0.1
EPTN-11-																			
110/645-5	175	34	V	Unidentified	NIB	FR					17							2	3.8
EPTN-11-											- /								2.0
110/645-5	176	1	М	Large	NIB	FR						1		1					3.2
EPTN-11-				U	1	1													
110/645-5	177	1	Μ	Medium	RIB	SH												1	0.7

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
110/645-5	179	1	М	Large	TTH	FR						1	1	1					0.3
EPTN-11-																			
110/645-5	180	11	М	Medium	CRA	FR			А			2							8.8
EPTN-11-																			
110/645-5	181	1	Μ	Small	CRA	FR			А				1		1				0.9
EPTN-11-																			
110/645-5	182	1	M	Medium	CRA	ANT			А				1		1				2.3
EPTN-11-																			
109/645-7A	183	1	M	Caprine	TIB	PSE			L				1		1			1	22.6
EPTN-11-																			
109/645-7A	184	3	M	Unidentified	NIB	FR						1		1					0.7
EPTN-11-	105				L ID T	-													
109/645-7/A	185	I	Μ	Medium	VRT	FR			A									I	1.5
EPTN-11-	100	1		6	CED	TIPI							1		1				24.0
109/645-/A	186	1	М	Cow	CER	HFL			A				1		1				24.9
EPIN-11-	107	1	м	C.	DENT	ANT			тт				1		1	1			516
109/645-/A	18/	1	M	Cow	DENI	ANI			LL				1		I	1			54.6
EPIN-II-	100	2	м	I Inidentified	NID	ED													0.4
110/045-5(P)	188	3	IVI	Unidentified	NIB	FK													0.4
EPIIN-II- 110/645 5(D)	190	2	м	Madium	IDN	сц							1		r			1	111
110/043-3(r)	169	3	IVI	Ivieuluiii	LDIN	эп							1		2			1	11.1
EFIN-11- 110/645-5(P)	190	1	м	Cow	CER	HEI			Δ				1			1			60
FPTN-11-	170	1	111	COW	CLK				Π				1			1			00
110/645-5(P)	191	1	М	Cow	DEN	POS			LR				1	3	2				13.5
EPTN-11-																			
110/645-5(P)	192	3	Μ	Large	NIB	FR							1		1			1	12.6
FPTN-11-																			
110/645-5(P)	193	1	м	Cow	CRA	MID			LR				1	2	2			1	17.6
	175	1	171	2011									1	-	-			1	17.0
EPIN-II-	104	1	м	Constant	CED		TT	TT			1	1		1					0.2
110/645-5(P)	194	1	M	Caprine	CER	MID	U	U	А		1	1		1					9.3
EPTN-11-																			
110/645-5(P)	195	2	Μ	Large	CRA	FR			А			1			1				16.7

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
109/645-6P	197	1	Μ	Pig	DENT	HFL			LL				1		1				94.8
EPTN-11-																			
109/645-6P	198	1	Μ	Cow	FEM	DSE			L				1		1			1	126.8
EPTN-11-																			
109/645-6P	199	1	Μ	Cow	DENT	POS			LL				1	1	1			1	146.9
EPTN-11-				Passenger															
108.5/645-6A	200	1	В	Pigeon	COR	POS	F		R				1	1	1				0.2
EPTN-11-				Passenger															
108.5/645-6A	201	1	В	Pigeon	RAD	CD		F	R										0.1
EPTN-11-			_	Passenger															
108.5/645-6A	202	1	В	Pigeon	ULN	СР		U	R										0.2
EPTN-11-	• • •		P	TT 1	DID	CD	* *		-										0.1
108.5/645-6A	203	1	В	Unidentified	RAD	СР	U		L										0.1
EPTN-11-	204			a 11	CD 4	ED									1				0.0
109/645-/A	204	1	M	Small	CRA	FK			A				I		1				0.9
EPIN-11-	205	2	м	Constant	VDT	ГD												1	0.6
110/045-5	205	2	M	Caprine	VKI	FK			A									I	0.6
EPIN-11-	200	2	N/	I Inidentified	NID	ED													0.4
110/045-5 EDTN 11	206	2	V	Unidentified	NIB	ГK		1											0.4
EPIN-II-	207	1	м	Sauimal	ININI	CD		Б	р										0.2
108.3/043-0A	207	1	IVI	Squillei	IININ	CD		Г	ĸ										0.2
108 5/6/6 7	208	3	F	Unidentified	NIR	FD													0.1
EPTN 11	200	5	Г	Ondentified	MID	TK													0.1
108.5/646-7A	209	8	F	Unidentified	NIB	FR													0.2
EPTN-11-		-	-																
108.5/646-7A	210	14	V	Unidentified	NIB	FR					2								0.7
EDTN 11																			
EPIN-11- 110/645 7	211	1	м	Madium	CDA	ED							1		1				20
110/043-7	211	1	11/1	wieululli	UNA	ГK			A				1		1				2.0
EPTN-11-				Passenger															
109/645/7A	212	1	В	Pigeon	STE	MID			A										0.1
EPTN-11-				Passenger															
108.5/645-6A	213	1	В	Pigeon	TBT	SH			R				1		1				0.1
Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
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EPTN-11-				Passenger															
108.5/645-6A	215	1	В	Pigeon	HUM	DS		F	L										0.1
EPTN-11-																			
108.5/645-6A	216	1	В	Unidentified	RAD	PX													0.1
EPTN-11-				Passenger															
108.5/645-6A	217	1	В	Pigeon	THO	MID			А										0.1
EPTN-11-				Passenger															
108.5/645-6A	218	1	В	Pigeon	STE	MID			А										0.1
EPTN-11-				-															
108.5/645-6A	219	1	В	Unidentified	TMT	DS		F	L										0.1
EPTN-11-																			
108.5/645-6A	220	3	В	Chicken	STE	FR			А										1.1
EPTN-11-				Passenger															
108.5/645-6A	221	5	В	Pigeon	STE	FR			А										0.9
EPTN-11-				<u> </u>															
108.5/645-6A	222	2	В	Unidentified	CAR	FR													0.2
EPTN-11-				Passenger															
108.5/645-6A	223	1	В	Pigeon	INN	MID			L										0.1
EPTN-11-																			
108.5/645-6A	224	4	В	Unidentified	STE	FR			А										0.4
EPTN-11-																			
108.5/646-7A	225	1	В	Chicken	STE	POS			А			1	1		1				0.1
EPTN-11-				Passenger															
108.5/646-7A	226	1	В	Pigeon	SCP	SH			L										0.1
EPTN-11-				Passenger															
108.5/646-7A	227	1	В	Pigeon	PHA2	CO	F	F	L										0.1
EPTN-11-																			
117/652-3	228	1	V	Unidentified	NIB	FR					1								0.1
EDTN 11																			
EFIN-11- 117/651 7	220	1	v	Unidentified	NID	ED					1								0.1
11//031-/	229	1	v	Unidentified	INID	ГК					1								0.1
EPTN-11-																			
119/650-1-8	230	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
117/652-4	231	1	V	Unidentified	NIB	FR					1								0.1

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
117/650-5A	233	7	V	Unidentified	NIB	FR					7								0.5
EPTN-11-																			
116/652-15	234	3	V	Unidentified	NIB	FR													0.1
EPTN-11-																			
117/650-4A	235	2	V	Unidentified	NIB	FR					2								0.3
EPTN-11-																			
117/650-7A	236	2	V	Unidentified	NIB	FR					2								0.1
EPTN-11-																			
118/652-7A	237	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
118/653-6	238	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
115.5/656-3	239	2	V	Unidentified	NIB	FR					2								0.2
EPTN-11-																			
118/653-8	240	8	V	Unidentified	NIB	FR					8								0.3
EPTN-11-			• •	TT 11		ED													0.0
115.5/656-5	241	4	V	Unidentified	NIB	FK					4								0.8
EIPN-11-	2.42	2	X 7	TT 1 (C 1		ED					~								0.4
119/650-3	242	2	V	Unidentified	NIB	FK					2								0.4
EIPN-11-	242	1	X 7	TT.: 1	NID	ГD					1								0.1
118/030-1 EDTN 11	243	1	V	Unidentified	NIB	FK					1			1					0.1
EPIN-11- 119/650-2	244	1	v	Unidentified	NID	ED					1								0.2
EDTN 11	244	1	v	Unidentified	NID	TK					1								0.5
119/650-1	245	1	V	Unidentified	NIR	FR					1								0.1
FPTN-11-	245	1	v	Ondentified	MID	IK					1								0.1
117/650-8	246	1	v	Unidentified	NIB	FR					1								0.1
EPTN-11-	210	-	•	Childentinieu	THE	110					1								0.1
117/651-3	247	1	V	Unidentified	NIB	FR					1								0.1
		-									-			1					
EPTN-11-																			
115.5/655-2	248	2	V	Unidentified	NIB	FR					2								0.4
EPTN-11-																			
115/650-3	249	4	V	Unidentified	NIB	FR					4								1.6

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
115.5/656-2	251	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
118/651-3	252	3	V	Unidentified	NIB	FR					3								1.3
EPTN-11-																			
117/652-5	253	2	V	Unidentified	NIB	FR					2								0.5
EPTN-11-																			
117/652-5	254	3	M	Medium	TTH	FR					1								0.8
EPTN-11-																			
116/652-21	255	6	V	Unidentified	NIB	FR					6								0.4
EPTN-11-		_																	
116/652-21	256	3	M	Medium	TTH	FR													0.5
EPTN-11-		1.2	• •	TT 11							1.2								
119/650-4	257	13	V	Unidentified	NIB	FR					13								1.2
EPIN-11-	259	1	м	D'.	TTU	ГЪ													0.4
119/030-4 EDTN 11	258	1	M	Pig	IIH	FK													0.4
EPIN-II- 117/650 6A	250	1	v	Unidentified	NID	FD					1								0.2
EDTN 11	239	1	v	Unidentified	NID	ГК					1								0.2
LF IN-II- 110/650-5	260	1	V	Unidentified	NIR	FR					1								0.1
EPTN 11	200	1	v	Undentified	NID	TK					1								0.1
119/650-5	261	1	м	Ρίσ	ттн	FR													0.6
EPTN-11-	201	1	101	115	1111	IR													0.0
115.5/656-6	262	2	V	Unidentified	NIB	FR					2								0.1
EPTN-11-																			
117/650-8A	263	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
118/653-1	264	1	V	Unidentified	NIB	FR					1								0.4
EPTN-11-																			
115.5/656-1	265	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
116/651-5	266	3	V	Unidentified	NIB	FR					3								0.3
EPTN-11-																			
116/651-5	267	1	Μ	Medium	TTH	FR													0.3

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
118/653-2	268	3	V	Unidentified	NIB	FR					3								0.1
EPTN-11-																			
117/652-Rock																			
Clean-108-113	269	1	V	Unidentified	NIB	FR													0.1
EPTN-11-																			
115.5/655-1	270	2	V	Unidentified	NIB	FR					2								0.5
EPTN-11-																			
111/651-6	271	14	V	Unidentified	NIB	FR					13								1.6
EPTN-11-																			
111/651-6	272	1	Μ	Pig	CER	FR			А		1						1		1.9
EPTN-11-																			
114/649-7	273	6	V	Unidentified	NIB	FR					6								0.6
EPTN-11-																			
111/651-4	274	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
117/652-10A	275	2	V	Unidentified	NIB	FR					2								0.2
EPTN-11-																			
114/649-wall																			
clean	276	3	V	Unidentified	NIB	FR					3								0.2
EPTN-11-																			
114/649-wall																			
clean	277	1	Μ	Pig	CAR	CO			L		1								2.7
EPTN-11-																			
116/652-6 Rock																			
Clean-out	278	1	V	Unidentified	NIB	FR					1								0.1
EPTN 11																			
114/649_14	279	1	v	Unidentified	NIR	FR					1								0.4
	21)	1	v	Ondentified	MID	IK					1								0.4
EPIN-11-																			
11//652-Feature	200	1	3.7	Unidertified	NID	ED					1								0.1
Cleanout 30	280		V	Unidentified	NIB	FK					1								0.1
EPIN-II-																			1
110/052-SE Kock	201	1	X 7	TT. 1															0.2
Cleanout	281		V	Unidentified	NIB	ΓK	1	1											0.5

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-	202	1		TT ' 1 ('C' 1		ED					1								0.1
106/651-10	283	1	V	Unidentified	NIB	FK					1								0.1
EPIN-11-	201	2	V	Unidentified	NID	ED					2								0.1
110/032-0 EDTN 11	284	2	v	Unidentified	NID	гк					2								0.1
EPIN-11- 116/652 6	285	1	м	Large	NIR	FR													4.5
EPTN_11_	203	1	101	Large	NID	TK													4.3
114/650-9	286	2	М	Squirrel	CRA	FR			А										0.5
EPTN-11-	200	-		Squiiter	Clur	110													0.0
114/650-9	287	1	М	Squirrel	ULN	СО			R										0.1
EPTN-11-				1															
114/650-9	288	3	М	Small	VRT	FR			А										0.1
EPTN-11-																			
114/650-9	289	1	Μ	Small	LBN	SH													0.1
EPTN-11-																			
117/652-7	290	8	V	Unidentified	NIB	FR					8								1.3
EPTN-11-																			
111/651-5A	291	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
117/652-6R under																			
rock	292	1	V	Unidentified	NIB	FR					1								0.1
EPTN-II-																			
117/652-Rock	202	1	N/	I In i dontified	NID	ED					1								0.2
Clean-88-95	293	1	V	Unidentified	NIB	FK					1								0.3
EPTN-11-																			
118/652-5	294	2	V	Unidentified	NIB	FR					2								0.4
FPTN_11_																			
116/652-19	295	1	М	Pig	ТТН	СО													1.8
EDTN 11		-		6															
EF 1 N - 11 - 116/652 = 10	206	1	v	Unidentified	NID	ED					1								0.1
EDTN 11	290	1	v	Unidentified	INID	ГК					1								0.1
117/652-Rock																			
Clean-103-108	297	1	М	Caprine	ULN	MID			R									1	2.9

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
116/652-7	299	5	V	Unidentified	NIB	FR					5								0.6
EPTN-11-																			
116/652-10	300	5	Μ	Medium	LBN	FR						1		1				1	6.8
EPTN-11-																			
116/652-10	301	1	Μ	Medium	NIB	FR				1									2
EPTN-11-																			
116/652-10	302	4	V	Unidentified	NIB	FR					2								0.1
EPTN-11-																			
116/652-11	303	15	V	Unidentified	NIB	FR					14	1		1					1.4
EPTN-11-																			
111.5/649-7	304	3	V	Unidentified	NIB	FR					3								0.1
EPTN-11-	205	10	x 7		NUD	ED					10								1.0
116/652-9	305	12	V	Unidentified	NIB	FK					10								1.3
EPIN-II-	200	2	м	Madian	TTU	ED													0.4
110/052-9 EDTN 11	300	Z	IVI	Medium	IIH	FK													0.4
EPIN-11- 116/652 0	207	4	м	Madium	NID	ED													2
EDTN 11	307	4	IVI	Medium	NID	ГК			-				ł – –						2
LF IN-II- 116/652 0	308	1	м	Cow	RIB	DSE				1									12
EPTN 11	508	1	101	COW	KID	TSE				1									4.2
111/650-4	309	1	м	Ρίσ	ттн	CO													41
FPTN-11-	507	1	191	115	1111	0							ł – –						7.1
111/650-4	310	19	V	Unidentified	NIB	FR					10								33
EPTN-11-	510	17	•	Childentinea	THE						10								0.0
117/650-4B	311	8	V	Unidentified	NIB	FR					8								1
EPTN-11-	_	-									-								
111/651-3	312	5	V	Unidentified	NIB	FR					5								0.9
EDTN 11																			
LF IN-II- 112/650 3B	313	1	м	Medium	I BN	FR					1								20
112/030-3D	515	1	111	wicului	LDN	TIX					1								2.9
EPTN-11-			* *			ED.													
112/650-3B	314	3	V	Unidentified	NIB	FR					3								0.1
EPTN-11-																			
106/651-6	315	5	V	Unidentified	NIB	FR					5								0.5

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
106/651-6	317	1	М	Cow	TTH	CO					1								8.3
EPTN-11-																			
112/651-10	318	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
111.5/649-9	319	3	V	Unidentified	NIB	FR					3								0.5
EPTN-11-																			
112/650-6B	320	5	V	Unidentified	NIB	FR					5								1
EPTN-11-																			
112/650-6B	321	1	М	Medium	RIB	SH												1	2.6
EPTN-11-																			
111/650-rock 1	322	2	М	Medium	LBN	FR						1		1				1	2.3
EPTN-11-																			
111/650-rock 1	323	21	V	Unidentified	NIB	FR					18								5.8
EPTN-11-																			
112/650-4A	324	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
106/651-7	325	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
114/650-Floor																			
Clean up	326	1	М	Rat	HUM	CO			R										0.1
EPTN-11-																			
114/650-Floor																			
Clean up	327	2	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
111/650-8	328	2	V	Unidentified	NIB	FR					2								0.1
EPTN-11-																			
106/651-8	329	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
114/650-6 Wall																			
Clean	330	1	F	Unidentified	VRT	FR					1								0.1
EPTN-11-																			
106/651-5	331	6	V	Unidentified	NIB	FR					6								0.7
EPTN-11-																			
106/651-3	332	1	V	Unidentified	NIB	FR					1								0.2

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
114/650-7	333	8	V	Unidentified	NIB	FR					8								1
EPTN-11-																			
112/651-3	334	23	V	Unidentified	NIB	FR					23	2		2					5.1
EPTN-11-																			
116/652-12	335	2	Μ	Medium	NIB	FR												1	3.8
EPTN-11-																			
116/652-12	336	15	V	Unidentified	NIB	FR					8								2.7
EPTN-11-																			
116/652-12	337	1	Μ	Medium	TTH	FR													0.1
EPTN-11-																			
119/650-N Wall																			
Clean	338	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
112/651-6	339	11	V	Unidentified	NIB	FR					11								1.2
EPTN-11-																			
112/651-6	340	1	Μ	Large	LBN	SH						1		1				1	7.7
EPTN-11-																			
112/651-1	341	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
111/651-6A	342	2	V	Unidentified	NIB	FR					2								0.1
EPTN-11-																			
117/652-Feature																			
Cleanout 20	343	1	Μ	Pig	TTH	CO													1
EPTN 11																			
117/652-Feature																			
Cleanout 20	344	1	м	Cow	МТ	SH												1	13.1
EPTN-11-	511	1	101	001	1011	511												1	15.1
106/651-4	345	3	v	Unidentified	NIB	FR					3								0.1
FPTN-11-	545	5	•	Ondentified	INID	IK					5								0.1
106/651-(1-8)																			
Wall Clean	346	1	v	Unidentified	NIB	FR					1								0.1
	2.0	-			1,12						-								
EPTN-11-																			
112/651-7	347	12	V	Unidentified	NIB	FR		1			12								2.9

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
115.5/655	348	5	V	Unidentified	NIB	FR					5								1.6
EPTN-11-																			
111.5/649-5	349	3	Μ	Medium	LBN	FR													2.9
EPTN-11-																			
111.5/649-5	350	5	V	Unidentified	NIB	FR					5								1.1
EPTN-11-																			
118/652-7A	351	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
118/652-1	352	6	Μ	Pig	TTH	FR													3.4
EPTN-11-																			
118/652-1	353	2	V	Unidentified	NIB	FR					2								0.7
EPTN-11-				Sciaenidae															
108/645-8A	354	1	F	Cynoscion	CRA	FR													0.1
EPTN-11-																			
108/645-8A	355	4	F	Unidentified	NIB	FR													0.2
EPTN-11-																			
108/645-8A	356	2	M	Medium	LBN	SH					1	1	1	1					4.3
EPTN-11-																			
108/645-8A	357	1	В	Unidentified	LBN	SH						1	1						0.2
EPTN-11-																			
108/645-8A	358	6	V	Unidentified	NIB	FR					3								0.3
EPTN-11-																			
111.5/649-2	359	2	M	Medium	CRA	FR			A			1		1					4.1
EPTN-11-		_									_								
111.5/649-2	360	9	V	Unidentified	NIB	FR					9								1.5
EPTN-11-		_									_								
112/651-2	361	7	V	Unidentified	NIB	FR					7								2.2
EPTN-11-				D .	LIDT		* *												
112/651-2	362	1	M	P1g	VRT	MID	U				1								2
FPTN_11_																			
114/649_8	363	1	V	Unidentified	NIR	FR					1								0.1
FPTN_11_	505	1	v		TAID						1								0.1
114/649-8	364	1	F	Unidentified	VRT	FR					1								0.1

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
110/645-B STP	365	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
113/651-5	366	5	V	Unidentified	NIB	FR					5								0.5
EPTN-11-																			
114/649-650-																			
Profile cleanup	367	2	V	Unidentified	NIB	FR					2								0.1
EPTN-11-																			
114/649-650-																			
Profile cleanup	368	1	Μ	Medium	LBN	SH													3.1
EPTN-11-																			
117/650-3	369	2	V	Unidentified	NIB	FR					2								0.3
EPTN-11-																			
114/649-10	370	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
108.5/646-1&2																			
West Bulk Clean	371	2	V	Unidentified	NIB	FR					2								0.1
EPTN-11-																			
108.5/646-1&2																			
West Bulk Clean	372	1	В	Unidentified	LBN	SH													0.3
EPTN-11-																			
108.5/646-1&2																			
West Bulk Clean	373	1	Μ	Small	LBN	FR												1	0.3
EPTN-11-																			
108/645-9A(P)	374	1	М	Caprine	TIB	SH			L			1	3	1					4.4
EPTN-11-																			
112/651-5	375	1	М	Pig	TTH	CO													0.8
EPTN-11-																			
112/651-5	376	1	М	Medium	NIB	FR					1								1.3
EPTN-11-																			
112/651-5	377	15	V	Unidentified	NIB	FR					15								2
EPTN-11-																			
114/650-3	378	1	М	Medium	MET	FR													0.3
EPTN-11-																			
116/652-14	379	9	V	Unidentified	NIB	FR					9								0.4

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
108/645-6A	380	1	Μ	Cow	TTH	FR													1.7
EPTN-11-				Passenger															
108/645-6A	381	1	В	Pigeon	SYN	MID			Α										0.5
EPTN-11-																			
113/651-6	382	3	V	Unidentified	NIB	FR					3								0.1
EPTN-11-																			
112/650-7A	383	4	V	Unidentified	NIB	FR					2								0.1
EPTN-11-																			
112/650-7A	384	5	М	Unidentified	NIB	FR					1							2	3.1
EPTN-11-																			
114/650-6	385	6	М	Unidentified	NIB	FR					4	2		2					3
EPTN-11-																			
112/650-1	386	6	V	Unidentified	NIB	FR					6								1.7
EPTN-11-																			
114/650-5	387	10	V	Unidentified	NIB	FR					10								4
EPTN-11-																			
114/649-2	388	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
108.5/646-12P	389	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
111/651-8	390	3	V	Unidentified	NIB	FR					3								0.1
EPTN-11-																			
111/651-8	391	1	М	Small	RIB	FR					1								0.4
EPTN-11-																			
108.5/645 Unit																			
X,Y,W Corner																			
Cleanup	392	3	V	Unidentified	NIB	FR					3								0.1
.																			
EDTNI 11																			
EPIN-II-																			
108.5/645 Unit																			
A, Y, W Corner	202	1	м	Mustala	DENT	TIEL			TD										17
Uleanup	1 373		I IVI	iviustera	LDENL	I HFL	1	1	LK	1	1								1.7

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
108.5/645 Unit																			
X,Y,W Corner																			
Cleanup	394	1	Μ	Pig	SCP	PSE						1		1				1	7.5
EPTN-11-																			
112/650-5B	395	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
114/650-4	396	2	V	Unidentified	NIB	FR					2								0.1
EPTN-11-																			
111/650-3	397	17	V	Unidentified	NIB	FR					17								2.3
EPTN-11-																			
111/650-3	398	3	Μ	Pig	TTH	CO													5.2
EPTN-11-																			
114/650-WEST																			
WALL CLEAN	399	2	М	Unidentified	LBN	FR					1								2.3
EPTN-11-																			
114/650-WEST																			
WALL CLEAN	400	2	V	Unidentified	NIB	FR					2								0.1
EPTN-11-																			
111/650-5	401	12	V	Unidentified	NIB	FR					12								1.1
EPTN-11-																			
114/649-11c	402	3	V	Unidentified	NIB	FR					3								0.4
EPTN-11-																			
114/649-11c	403	3	М	Medium	CRA	FR			A			3	1	2		1			5.5
EPTN-11-																			
116/651-8-SE																			
quad	404	1	М	Cow	TTH	FR													2.6
EPTN-11-																			
116/651-8-SE																			
quad	405	3	М	Unidentified	LBN	FR													0.7
$\frac{\text{EPIN-II}}{116/651} = 0.000$																			
110/031-0-SE	106	1	V	Unidentified	NID	ED					1								0.1
uuau	1 400		v		IND	I I'IN	1	1	1		1 1	1	1	1				1	U.I

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
116/651-8-SE																			
quad	407	2	Μ	Medium	NIB	FR													3.1
EPTN-11-																			
116/651-8-SE																			
quad	408	1	Μ	Large	TIB	SH												1	6.5
EPTN-11-																			
115/650-1	409	1	V	Unidentified	NIB	FR					1								1.3
EPTN-11-																			
116/652-20	410	2	V	Unidentified	NIB	FR					2								0.1
EPTN-11-																			
115.5/656-4	411	2	V	Unidentified	NIB	FR					2								0.2
EPTN-11-																			
108/645-feature																			
South Wall Clean				Sciaenidae															
up	412	1	F	Cynoscion	NIB	FR													0.1
EPTN-11-																			
108/645-feature																			
South Wall Clean											_								
up	413	6	V	Unidentified	NIB	FR					5								0.8
EPTN-11-																			
108,109/645-																			
Below feature																			
clen for profile	41.4	1	X 7	TT ' 1 ('C' 1		ED													0.1
Units X, Y	414	1	V	Unidentified	NIB	FK													0.1
EPIN-II-	415	C	17	I Inidentified	NID	ED					(0.5
111/030-FOCK 3	415	0	v	Unidentified	NIB	FK					0								0.5
EPIN-II-	416	2	V	Unidentified	NID	ED													1
108.3/040-3	410	3	v	Unidentified	NID	ГК													1
EFIN-11- 108 5/6/6 2	417	1	м	Madium	NID	ED												1	1.5
EDTN 11	41/	1	11/1	wiedium	INID	ГК												1	1.3
108 5/6/6 1	118	1	V	Unidentified	NID	ED													0.7
EDTN 11	410	1	v	Unidentified	INID	ГК													0.7
112/651 2	410	1	V	Unidentified	NID	ED					1								0.1
113/031-3	419	1	V	Unidentified	INID	гк					1								0.1

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
118/653-5	420	5	V	Unidentified	NIB	FR					5								0.4
EPTN-11-																			
108/645-2	421	8	V	Unidentified	NIB	FR					4								1.8
EPTN-11-																			
108.5/646-2	422	8	V	Unidentified	NIB	FR					6								2
EPTN-11-																			
108.5/646-2A	423	18	V	Unidentified	NIB	FR					8								4.9
EPTN-11-																			
108.5/646-2A	424	1	Μ	Large	TTH	FR													0.6
EPTN-11-																			
116/652-East																			
Wall Cleanup	425	2	V	Unidentified	NIB	FR					2								0.4
EPTN-11-																			
113/651-2	426	5	V	Unidentified	NIB	FR					5								0.3
EPTN-11-																			
113/651-8	427	1	V	Unidentified	NIB	FR					1								0.1
EPTN-11-																			
113/651-5-7																			
WALL CLEAN																			
NW	428	2	V	Unidentified	NIB	FR					2								0.1
EPTN-11-																			
108.5/646-12	429	17	V	Unidentified	NIB	FR					17								2.1
EPTN-11-																			
108.5/646-12	430	1	Μ	Medium	TTH	FR													0.6
EPTN-11-																			
108.5/646-12	431	1	M	Medium	MET	CO	U												1.4
EPTN-11-																			
108.5/646-12	432	3	F	Unidentified	NIB	FR													0.1
EPTN-11-																			
108.5/646-12	433	1	M	Rat	PHA1	CO	F	F											0.1
EPTN-11-																			
108.5/646-12	434	3	В	Unidentified	NIB	FR													0.1
EPTN-11-				Passenger															
108.5/646-12	435	1	В	Pigeon	CMC	CO			L										0.2

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
109/644.5-3	436	5	Μ	Cow	TTH	FR													3.3
EPTN-11-																			
109/644.5-3	437	1	В	Unidentified	FEM	PSH			L									1	0.1
EPTN-11-																			
109/644.5-3	438	7	V	Unidentified	LBN	FR						1		1				2	6.1
EPTN-11-																			
109/644.5-3	439	19	V	Unidentified	NIB	FR					11								2.4
EPTN-11-																			
109/644.5-3	440	1	Μ	Medium	LBN	SH				1								1	3.3
EPTN-11-																			
109/644.5-3	441	1	Μ	Cow	DEN	ANT						1		1				1	13.6
EPTN-11-																			
106/651-2	442	1	M	Cow	TIB	SH			R			1	6	1	1			1	42.7
EPTN-11-					TID	DC													<i>.</i> .
106/651-2	443	1	Μ	Cow	TIB	DS		U										1	6.1
EPTN-11-																			
114/649-5 Matrix		1		G 11	LDU	DOLL												1	0.1
	444	1	M	Small	LBN	DSH												1	0.1
EPIN-11-	445	10	X 7	TT.: 1	NID	ГЪ					0								2.6
108/645-5	445	12	V	Unidentified	NIB	FK					9								2.6
EPIN-11-	116	1	м	Com	MET	DEII		Б											<u>80 1</u>
EDTN 11	440	1	IVI	Cow	IVIE I	DSH		Г	-										<u>80.1</u>
LF IN-II- 108 5/646 5A	447	1	м	Madium	SCP	MID					1								4.2
EDTN 11	44 /	1	11/1	Wiedlum	SCI	WIID					1								4.2
108 5/646-54	448	1	м	Medium	RIB	SH													14
EPTN_11_	770	1	IVI	Wiedium	KID	511													1.7
108 5/646-5A	449	6	v	Unidentified	LBN	SH					2								78
EPTN-11-	,	Ŭ	,	onidentinied	LDI	511													7.0
108.5/646-5A	450	5	F	Unidentified	NIB	FR													0.9
EPTN-11-		-	-		1,12						1								0.2
108.5/646-5A	451	2	М	Unidentified	NIB	FR													1.5
EPTN-11-							1												
108.5/646-5A	452	6	В	Unidentified	LBN	FR					1								0.7

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
108.5/646-5A	453	4	В	Unidentified	NIB	FR													0.4
EPTN-11-																			
108.5/646-5A	454	1	В	Unidentified	COR	SH													0.2
EPTN-11-				Passenger															
108.5/646-5A	455	1	В	Pigeon	HUM	DSH			R										0.5
EPTN-11-				Passenger															
108.5/646-5A	456	2	В	Pigeon	INN	FR			L										0.2
EPTN-11-				Passenger															
108.5/646-5A	457	1	В	Pigeon	TIB	SH													0.1
EPTN-11-				Passenger															
108.5/646-5A	458	1	В	Pigeon	RAD	DSH			R										0.1
EPTN-11-				Passenger															
108.5/646-5A	459	1	В	Pigeon	TMT	CO			L										0.1
EPTN-11-				Passenger															
108.5/646-5A	460	1	В	Pigeon	SCP	PSH			R										0.1
EPTN-11-				Passenger															
108.5/646-5A	461	1	В	Pigeon	THO	MID			Α										0.2
EPTN-11-																			
108.5/646-5A	462	1	Μ	Pig	RIB	PSE			L									1	1.2
EPTN-11-																			
108.5/646-5A	463	1	Μ	Pig	THO	HFL			Α									1	2.1
EPTN-11-																			
108.5/646-5A	464	75	V	Unidentified	NIB	FR					42								14.1
EPTN-11-																			
108/645-7A(P)	465	1	Μ	Large	LBN	SH												1	5.7
EPTN-11-																			
108/645-7A(P)	466	2	Μ	Cow	MET	DS		U										1	62.5
FPTN-11-																			
108/645-7A(P)	467	1	м	Caprine	FEM	SH			R			1		1				1	16.3
	107	1	171	Cuprine	1 12111	511						1		1				1	10.5
EPTN-II-	100		Б			ED													0.0
108.5/646-10A	468	4	F	Unidentified	NIB	FK													0.2
EPTN-11-																			
108.5/646-10A	469	3	В	Unidentified	LBN	SH													0.6

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
108.5/646-10A	470	2	М	Unidentified	NIB	FR													1.5
EPTN-11-																			
108.5/646-10A	471	60	V	Unidentified	NIB	FR					28								10.1
EPTN-11-																			
108.5/646-10A	472	2	М	Large	LBN	SH						1		1				1	54.1
EPTN-11-																			
108.5/646-10A	473	2	М	Cow	TIB	DSH		U	L			1	1	1					72
EPTN-11-																			
117/652-5-North																			
Wall Clean up	474	9	V	Unidentified	NIB	FR					2								2.2
EPTN-11-																			
117/652-5-North																			
Wall Clean up	475	1	М	Cow	FEM	SH			L			1		1					70.7
EPTN-11-																			
115.5/649-1	476	1	М	Cow	TTH	CO													13.2
EPTN-11-																			
115.5/649-1	477	3	Μ	Unidentified	NIB	FR					2	1		1					0.1
EPTN-11-																			
111.5/649-3	478	3	Μ	Pig	TTH	FR													5.2
EPTN-11-																			
111.5/649-3	479	22	М	Unidentified	NIB	FR					14								10.3
EPTN-11-																			
111/650-2	480	3	V	Unidentified	NIB	FR					2								0.6
EPTN-11-																			
108/645-2A	481	2	Μ	Pig	TTH	FR													0.8
EPTN-11-																			
108/645-2A	482	1	Μ	Medium	LBN	FR												1	1.3
EPTN-11-																			
108/645-2A	483	27	V	Unidentified	NIB	FR					16								3.8
EPTN-11-																			
109/644 5-4	484	2	V	Unidentified	NIB	FR					1								0.2
EPTN-11-	101		•	Sindentified							-								0.2
108 109/645-																			
Feature Clean up	485	1	F	Unidentified	NIB	FR													0.1

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
111.5/649-6	487	2	М	Medium	LBN	FR												1	3.1
EPTN-11-																			
111.5/649-6	488	2	V	Unidentified	NIB	FR					2								0.5
EPTN-11-																			
116/651-7	489	15	V	Unidentified	NIB	FR					25								2.6
EPTN-11-																			
108,109,110/645																			
(Units X,Y,Z)																			
East Profile Clean	490	15	V	Unidentified	NIB	FR					9								2.6
EPTN-11-																			
108,109,110/645																			
(Units X,Y,Z)																			
East Profile Clean	491	2	Μ	Medium	LBN	FR						1		1					2.4
EPTN-11-																			
108,109,110/645																			
(Units X,Y,Z)				Passenger															
East Profile Clean	492	1	В	Pigeon	ULN	CO			L										0.4
EPTN-11-																			
108,109,110/645																			
(Units X,Y,Z)				Passenger															
East Profile Clean	493	1	В	Pigeon	SYN	MID			Α										0.6
EPTN-II-	10.1			D.	GAD														1.0
108.5/646-13	494	1	Μ	Pig	CAR	CO													1.9
EDTN 11																			
112/650 AP	405	11	V	Unidentified	NID	ED					11								2.2
EDTN 11	495	11	v	Unidentified	NID	TK					11								2.2
EFIIN-II- 109/645 1 4A																			
108/045-1-4A Cleanun under																			
root near feature																			
interface	106	3	V	Unidentified	NIR	FR					2								0.5
FPTN 11	470	5	v	Unidentified	INID	TK					2								0.5
108/645-5A	497	1	М	Pig	ТТН	FR													0.1

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
108/645-5A	499	3	Μ	Small	RIB	SH						1	1	1				1	2.7
EPTN-11-																			
108/645-5A	500	24	V	Unidentified	NIB	FR					18								4.4
EPTN-11-				Passenger															
108/645-5A	501	1	В	Pigeon	SCP	CO			L									1	0.1
EPTN-11-				Passenger															
108/645-5A	502	1	В	Pigeon	INN	HFL			R										0.2
EPTN-11-				Passenger															
108/645-5A	503	1	В	Pigeon	COR	DSH			L										0.1
EPTN-11-																			
108/645-5A	504	1	Μ	Small	INN	DSE													0.1
EPTN-11-																			
111/651-5	505	7	V	Unidentified	NIB	FR					7								0.3
EPTN-11-																			
116/652-13	506	5	М	Medium	LBN	FR					3								7.8
EPTN-11-																			
116/652-13	506	36	V	Unidentified	NIB	FR					33								4.7
EPTN-11-																			
109/644.5-1	507	6	V	Unidentified	NIB	FR					3								1.7
EPTN-																			
1L112/650-2A	508	22	V	Unidentified	NIB	FR					22								4
EPTN 11																			
111/650-Rock																			
Level 2	509	16	V	Unidentified	NIB	FR					16								19
EPTN-11-	507	10	•	Ollidentified	THE	II					10								1.7
118/652-3	510	2	V	Unidentified	NIB	FR					2								0.7
EPTN-11-112/65-	210			Olliuchtilleu	THE	110													0.7
3A	511	13	V	Unidentified	NIB	FR					13								2.4
EPTN-11-	011	10		Chiuchten	THE						10								
108/645-12A	512	13	V	Unidentified	NIB	FR					7								2.2
EPTN-11-				Sciaenidae				1			,		1						
108/645-12A	513	2	F	Cynoscion	CRA	FR													0.1
EPTN-11-				,	-														
112/651-4	514	73	V	Unidentified	NIB	FR					69								8.2

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
108.5/645-13	516	1	В	Unidentified	RAD	PSH					1								0.1
EPTN-11-																			
117/652-8A	517	9	Μ	Medium	CRA	FR			А										4.9
EPTN-11-																			
117/652-8A	518	1	Μ	Cow	TTH	FR													17.6
EPTN-11-																			
117/652-8A	519	19	V	Unidentified	NIB	FR					4								0.7
EPTN-11-																			
111/651-2	520	9	V	Unidentified	NIB	FR					9								1.2
EPTN-11-																			
108/645-9A(P)																			
Shell																			
Concentration	521	1	Μ	Medium	LBN	SH						1	2	3					3.5
EPTN-11-																			
109/645-3	522	28	Μ	Unidentified	NIB	FR					11	1	4						10.5
EPTN-11-																			
109/645-3	523	1	В	Unidentified	NIB	FR													0.1
EPTN-11-																			
109/645-3	524	1	Μ	Pig	TTH	FR													1.8
EPTN-11-		_			NUD	- E B													0.4
108/645-9A	525	7	F	Unidentified	NIB	FR													0.4
EPTN-11-																			
108/645-9A	526	3	V	Unidentified	NIB	FR													0.1
EPTN-II-	507	1		0	DEV									2					20.5
108/645-6A(P)	527	I	M	Cow	DEN	ANT			LL			I		3					39.5
EPTN-II-	530	1		G .	TID	GII			D										15.0
108/645-6A(P)	528	l	M	Caprine	TIB	SH			R			l		I				I	15.9
EPTN-11-		10	• •		NUD														
108/645-1	529	19	V	Unidentified	NIB	FR					2								0.3
EPTN-11-					GAD														10.4
108/645-5A(P)	530	1	M	Cow	CAR	CO					1								13.4
EPTN-11-					DID	GII													
108/645-5A(P)	531	1	M	Cow	RIB	SH								1				1	24.3

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
116/651-8A	533	17	V	Unidentified	NIB	FR					17								5.7
EPTN-11-																			
116/651-8A	534	1	Μ	Cow	TAR	DSH						1			1			1	14.3
EPTN-11-																			
112/650-5A	535	1	Μ	Large	NIB	FR						1		2					9
EPTN-11-																			
112/650-5A	536	1	M	Medium	MET	FR												1	0.8
EPTN-11-																			
112/650-5A	537	10	V	Unidentified	NIB	FR					10								0.9
EPTN-11-																			
108.5/646-North																			
Wall Profile	530	1		D.															0.0
	538	1	M	Pig	IIH	CO													8.9
EPIN-11-	520	1	м	Tana	NID	гр					1							1	0.2
108/045-/A	539	1	M	Large	NIB	FK					1							1	8.2
EPIN-11-	540	4	м	I In i don tiffind	NID	ED													2.2
108/645-/A	540	4	M	Unidentified	NIB	FK													2.2
EPTN-11-																			
108/645-7A	541	16	V	Unidentified	NIB	FR													1.7
EPTN-11-																			
108/645-7A	542	4	F	Unidentified	NIB	FR													0.5
EPTN-11-				Passenger															
108/645-7A	543	1	В	Pigeon	STE	POS			А										0.2
EPTN-11-																			
116/652-16	544	1	M	Unidentified	TTH	FR													0.1
EPTN-11-																			
116/652-16	545	4	V	Unidentified	NIB	FR					1								0.7
EPTN-11-																			
116/652-16	546	5	M	Medium	LBN	FR				1		1		1				1	7.4
EPTN-11-																			
112/650-6A	547	2	Μ	Medium	RIB	SH												2	14.6
EPTN-11-																			
112/650-6A	548	5	V	Unidentified	NIB	FR					3								0.4

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
108/645-4	550	1	V	Unidentified	NIB	FR													0.1
EPTN-11-																			
108/645-8A(P)	551	1	М	Large	CRA	FR			А										6.8
EPTN-11-																			
108/645-11A(P)	552	4	М	Pig	DENT	ANT			LR										73.4
EPTN-11-																			
109/645-4	553	4	М	Large	NIB	FR					1							1	18.8
EPTN-11-																			
109/645-4	554	4	М	Medium	NIB	FR					2								4.1
EPTN-11-																			
109/645-4	555	5	V	Unidentified	LBN	FR												3	2.4
EPTN-11-																			
109/645-4	556	12	М	Medium	LBN	FR					4							2	32
EPTN_11_																			
109/645-4	557	8	М	Medium	CRA	FR			Δ		3	1	1					1	74
EPTN_11_	557	0	111	Wiedrum	CIA	IK			Π		5	1	1					1	7.7
109/645-4	558	3	в	Unidentified	NIB	FR													0.7
EPTN-11-	220	5		Cintucintineu	THE	Î													0.7
109/645-4	559	109	V	Unidentified	NIB	FR					61	1		1					22.9
EPTN-11-																			
109/645-4	560	1	М	Pig	TAR	HFL					1							1	3.2
EPTN-11-																			
109/645-4	561	1	F	Unidentified	NIB	FR													0.1
EPTN-11-				Passenger															
109/645-4	562	2	В	Pigeon	SYN	MID			Α										0.7
EPTN-11-				Passenger															
109/645-4	563	1	В	Pigeon	STE	POS			А			1	1						0.3
EPTN-11-				Passenger															
109/645-4	564	1	В	Pigeon	COR	CO			R										0.3
EPTN-11-				Passenger															
109/645-4	565	1	В	Pigeon	SCP	PSH			L										0.1
EPTN-11-	1			Passenger															
109/645-4	566	1	В	Pigeon	SCP	PSH			R										0.1

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
108.5/646 11a	568	1	Μ	Small	RIB	SH													0.1
EPTN-11-																			
108.5/646 11a	569	6	В	Unidentified	LBN	FR					2								0.2
EPTN-11-																			
108.5/646 11a	570	75	V	Unidentified	NIB	FR					26								4.5
EPTN-11-																			
108.5/646 11a	571	33	F	Unidentified	NIB	FR													0.8
EPTN-11-																			
108.5/646 11a	572	6	Μ	Medium	NIB	FR					4	1		1					5.4
EPTN-11-																			
108.5/646 11a	573	3	Μ	Medium	LBN	FR					1	1	1					1	4.1
EPTN-11-																			
108.5/646 11a	574	1	Μ	Pig	TTH	CO													13.2
EPTN-11-				Passenger															
108.5/646 11a	575	1	В	Pigeon	FEM	PSH			L										0.1
EPTN-11-																			
108.5/646 11a	576	1	В	Unidentified	RAD	PSH	U												0.1
EPTN-11-																			
108.5/646 11a	577	1	В	Unidentified	RAD	DSH		F											0.1
EPTN-11-																			
108.5/646 11a	578	1	В	Unidentified	SCP	DSH												1	0.1
EPTN-11-				Passenger															
108.5/646 11a	579	1	В	Pigeon	ULN	DSH		F	R										0.2
EPTN-11-																			
108.5/646 11a	580	1	В	Chicken	COR	PSH	F		L									1	0.5
EPTN-11-																			
108.5/646 11a	581	2	Μ	Rat	TTH	FR													0.1
FPTN_11_																			
108 5/646 11a	582	1	м	Small	VRT	CO													0.1
100.J/040 114	562	1	141	Sinan	VICI														0.1
EPTN-11-		_		-								_							
110/645-A STP	583	7	M	Large	CRA	FR		<u> </u>	A			2	1	1				4	23.6
EPTN-11-																			
110/645-A STP	584	1	M	Pig	PHA	PS	U												0.8

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	CH	SH	SW	RD	CN	WT
EPTN-11-																			
110/645-A STP	586	14	V	Unidentified	NIB	FR					9								3.8
EPTN-11-																			
108/645-3A	587	60	V	Unidentified	NIB	FR					27	1	4						9.6
EPTN-11-																			
108/645-3A	588	4	М	Pig	TTH	FR													1.4
EPTN-11-																			
108/645-3A	589	1	М	Medium	LBN	SH						1		1				1	1.9
EPTN-11-																			
108/645-3A	590	5	М	Medium	CRA	FR			Α			2		2					13.7
EPTN-11-																			
111.5/649-4	591	3	М	Pig	TTH	FR					3	1		1					8.3
EPTN-11-																			
111.5/649-4	592	5	М	Medium	NIB	FR				1	2	1		1					4
EPTN-11-																			
111.5/649-4	593	2	М	Medium	CRA	FR			Α		2							2	2.7
EPTN-11-																			
111.5/649-4	594	1	М	Medium	LBN	SH				1	1								2.3
EPTN-11-																			
111.5/649-4	595	29	V	Unidentified	NIB	FR					29								3.4
EPTN-11-																			
111.5/649-4	596	1	Μ	Pig	PHA1	CO												1	4.7
EPTN-11-																			
108/645-4A	597	30	V	Unidentified	NIB	FR					30								2.4
EPTN-11-																			
108/645-4A	598	2	М	Medium	LBN	SH				1	1							1	6
EPTN-11-																			
108/645-4A	599	1	М	Small	LBN	SH					1								0.7
EPTN-11-																			
108/645-4A	600	8	В	Unidentified	NIB	FR													0.4
EPIN-11-	(01	4	Б	11.11.1.6.1	LDM	CII					2	1		1				1	1 1
108/645-4A	601	4	В	Unidentified	LBN	SH					2	1		1				1	1.1
EPIN-II-	600		P	Passenger	COD	DC			D										0.1
108/645-4A	602	1	В	Pigeon	COR	DS			ĸ										0.1

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
108/645-4A	604	5	Μ	Medium	CRA	FR			Α			1		1				1	7.3
EPTN-11-																			
116/652-8	605	9	V	Unidentified	NIB	FR					9								1.2
EPTN-11-																			
116/652-8	606	2	Μ	Large	CRA	FR			А			1		1				2	10.9
EPTN-11-				Passenger															
108.5/646-4	607	1	В	Pigeon	SYN	MID			А										0.9
EPTN-11-																			
108.5/646-4	608	3	В	Unidentified	NIB	FR													0.1
EPTN-11-																			
108.5/646-4	609	1	М	Cow	TTH	CO													4.1
EPTN-11-																			
108.5/646-4	610	1	F	Unidentified	NIB	FR													0.1
EPTN-11-																			
108.5/646-4	611	1	Μ	Caprine	FEM	SH			R			1		1				1	10.5
EPTN-11-																			
108.5/646-4	612	1	М	Medium	RIB	SH													1.8
EPTN-11-																			
108.5/646-4	613	7	Μ	Medium	CRA	FR			А			1		1					8.9
EPTN-11-																			
108.5/646-4	614	50	V	Unidentified	NIB	FR					48								7.2
EPTN-11-																			
108.5/646-4	615	1	В	Unidentified	RAD	PSH												1	0.3
EPTN-11-																			
117/652-6	616	7	М	Unidentified	NIB	FR					7								2.4
EPTN-11-																			
117/652-6	617	1	М	Cow	MET	SH												1	10
EPTN-11-	017	-				511												-	10
109/644.5-2	618	1	М	Rat	TTH	FR													0.1
EDTN 11		-				1													
EF 1 N - 1 I - 100/644 5 2	610	1	м	Com	TTH	ED													0.0
109/044.3-2	019	1	IVI	COW	IIH	гк													9.8
EF 1 N - 1 I - 100/(AA - 5 - 2)	(20)	6	м	I Inidentified	NID	ED					1								27
109/644.3-2	620	0	IVI	Unidentified	INIB	FK			1		1		I						5.1

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
109/644.5-2	622	16	V	Unidentified	NIB	FR					80								3.2
EPTN-11-																			
109/645-4(P)	623	4	Μ	Large	CRA	FR			Α									2	17.4
EPTN-11-																			
109/645-4(P)	624	1	М	Sheep	RAD	PSH	F		L			1		1				1	17.3
EPTN-11-																			
109/645-4(P)	625	1	М	Caprine	FEM	SH			L									1	32.6
EPTN-11-																			
109/645-4(P)	626	1	М	Cow	FEM	SH			L									1	42.4
EPTN-11-																			
108.5/646-5P	627	2	М	Large	CRA	FR			А			1				1			33.1
EPTN-11-																			
108.5/646-5P	628	1	М	Medium	LBN	SH												1	1.8
EPTN-11-																			
108.5/646-5P	629	1	М	Medium	RIB	SH			L			1	2	1					4.2
EPTN-11-				Passenger															
108.5/646-5P	630	1	В	Pigeon	STE	POS			А										0.4
EPTN-11-																			
108.5/646-5P	631	1	F	Bluefish	VRT	FR													1.5
EPTN-11-																			
108.5/646-5P	632	1	Μ	Caprine	INN	MID												1	11.6
EPTN-11-																			
108/645-5A(P)																			
Shell				Passenger															
Concentration 1	633	1	В	Pigeon	SYN	MID			А										0.4
EPTN-11-																			
108/645-5A(P)																			
Shell	(24	2			DID	CII												2	
Concentration I	634	3	Μ	Medium	RIB	SH												3	4.4
EPTN-11-																			
108/645-5A(P)																			
Shell																			
Concentration 1	635	1	М	Ρίσ	THO	HFL	U	U	А			1				1			59

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-																			
109/644.5-4aP	637	1	F	Unidentified	NIB	FR													0.3
EPTN-11-																			
109/644.5-4aP	638	1	В	Unidentified	RAD	PSH													0.1
EPTN-11-																			
109/644.5-4aP	639	2	M	Large	CRA	FR			A			1				1			24.8
EPTN-11-				_					-				_						
109/644.5-4aP	640	1	M	Dog	DENT	HFL			L			1	5						34.2
EPTN-11-	6.4.1			D.															0.0
108.5/646-7	641	1	M	Pig	MEI	0													0.6
EPIN-11-	(12)	1	м	D.	MET	TILL						1				1			0.4
108.5/646-/	642	1	M	Pig	MEI	HFL			1			1				I			0.4
$\frac{\text{EPIN-II}}{109.5}$	(12	11	р	I In i dontified	NID	ED													0.4
108.3/043-0A	043	11	D	Saiaamidaa	NID	ГК													0.4
EPIN-11- 109 5/645 6A	611	1	Б	Schaemdae	VDT	ED													0.05
EDTN 11	044	1	Г	Cynoscion	VKI	ГК													0.03
108.5/646-5A	645	1	F	Bluefish	DENT	FR			L										0.3
EPTN-11-				Sciaenidae															
108.5/646-5A	646	3	F	Cynoscion	OTH	FR													0.3
EPTN-11-				-															
108.5/646-5A	647	1	F	Bluefish	OTH	FR													0.3
EPTN-11-				Sciaenidae															
108.5/646 11a	648	10	F	Cynoscion	NIB	FR													0.6
EPTN-11-				Sciaenidae															
108.5/646 11a	649	2	F	Cynoscion	DENT	FR			R										0.1
EPTN-11-				Sciaenidae															
108.5/646 11a	650	1	F	Cynoscion	DENT	FR			L										0.1
EPTN-11-				Sciaenidae															
109/645-5	651	1	F	Cynoscion	CRA	FR													0.1
EPTN-11-			_	Sciaenidae															
109/645-5	652	1	F	Cynoscion	DEN	FR			Ĺ										0.1
EPTN-11-			-	Sciaenidae															
108/645-9A	653	4	F	Cynoscion	NIB	FR	1												0.5

Catalog Number	Ext	Qty	С	Taxon	BP	POR	PF	DF	SYM	WE	BN	BT	СТ	СН	SH	SW	RD	CN	WT
EPTN-11-				Sciaenidae															
109/645-6	655	4	F	Cynoscion	OTH	FR													0.4
EPTN-11-				Sciaenidae															
108.5/646-12	656	1	F	Cynoscion	DENT	FR			R										0.1
EPTN-11-				Sciaenidae															
108.5/646-12	657	1	F	Cynoscion	DEN	FR			R										0.1
EPTN-11-				Sciaenidae															
108.5/646-12	658	1	F	Cynoscion	DENT	FR			L										0.1
EPTN-11-				Sciaenidae															
108.5/645-6A	659	2	F	Cynoscion	DENT	FR			L										0.1
EPTN-11-				Sciaenidae															
108.5/645-6A	660	1	F	Cynoscion	DENT	FR			R										0.1
EPTN-11-																			
109/645-4	661	1	F	Serranidae	VRT	FR			А										1.2

WORKS CITED

Adams, Bradley and Pam Crabtree

2011 Comparative Osteology: A Laboratory and Field Guide of Common North American Animals. Academic Press, New York.

Allard, Amelie

 2010 Foodways, Commensality and Nipmuc Identity: An Analysis of Faunal Remains from Sarah Boston's Farmstead, Grafton, MA, 1790-1840.
 Master's thesis, Historical Archaeology Program, University of Massachusetts, Boston, MA.

Atalay, Sonya

2012 Community-Based Archaeology: Research with, by, and for Indigenous and Local Communities. University of California Press, Berkeley.

Anderson, Virginia DeJohn

2004 Creatures of Empire: How Domestic Animals Transformed Early America. New York: Oxford University Press.

Behrensmeyer, A.K.

1987 "Taphonomic and Ecologic Information from Bone Weathering." *Paleobiology* 4(2):150-162.

Bennet, M.K.

1955 "The Food Economy of the New England Indians, 1605-1675." *The Journal of Political Economy* 63(5):369-97.

Belasco, Warren James

2008 Food: the Key Concepts. English ed. Oxford: Berg. Print.

Bragdon, Kathleen J.

2009 *Native People of Southern New England, 1650-1775.* University of Oklahoma Press, Norman.

Brooks, Lisa

2008 *The Common Pot: The Recovery of Native Space in the Northeast.* University of Minnesota Press, Minneapolis.

Burgess, Kim, Kathleen J. Bragdon, Barbara Madison, William S. Simmons, and William Starna

1998 Eastern Pequot Indians of Connecticut: Petition for Federal Acknowledgement as an American Indian Tribe, edited by Kathleen J. Bragdon and William S. Simmons. Eastern Pequot Tribal Nation, North Stonington.

Campana, Douglas V.

2010 "Archaeozoology and Colonialism: An Introduction." In Anthropological Approaches to Zooarchaeology: Colonialism, Complexity, and Animal Transformations, edited by Douglas V. Campana, Pamela Crabtree, S. D. de France, Justin Lev-Tov, and A. M. Choyke, pp. 129-130. Oxbow Books, Oakville, CT.

Channing, Henry

1786 A Sermon Preached at New London, December 20th, 1786 Occasioned by the Execution of Hannah Ocusih, a Mulatto Girl, Aged 12 and 9 months. T. Green, New London.

Cipolla, Craig N.

2008 "Signs of Identity, Signs of Memory." *Archaeological Dialogues* 15(2):196-215.

Cipolla, Craig N., Stephen W. Silliman, and David B. Landon.

2007 "'Making Do': Nineteenth-Century Subsistence Practices on the Eastern Pequot Reservation." *Northeast Anthropology* 74:41-64.

Counihan, Carole and Penny Van Esterik

1997 "Introduction." In *Food and Culture: A Reader*, edited by Carole Counihan and Penny Van Esterik, pp. 1-8. Routledge, New York.

Cronon, William

1983 *Changes in the Land: Indians, Colonists, and the Ecology of New England.* Hill and Wang, New York.

Davis, Simon J. M.

1987 The Archaeology of Animals. Yale University Press, New Haven.

Deagan, Kathleen A.

2008 "Environmental Archaeology and Historical Archaeology." In Case Studies in Environmental Archaeology, edited by Elizabeth Reitz, C. Margaret Scarry, and Sylvia J. Scudder, pp. 21-42. Springer, New York.

DeForest, John W.

1964 *History of the Indians of Connecticut: From the Earliest Known Period to 1850.* Archon Books.

deFrance, Susan D.

2009 Zooarchaeology in Complex Societies: Political Economy, Status, and Ideology. *Journal of Archaeological Research* 17:105-168.

Den Ouden, Amy E.

2005 Beyond Conquest: Native Peoples and the Struggle for History in New England. University of Nebraska Press, Lincoln.

Dietler, Michael

2007 "Culinary Encounters: Food, Identity, and Colonialism." In *The Archaeology of Food and Identity* edited by K. Twiss, pp. 218-242.Illinois University, Carbondale.

Driver, Jonathan C. Driver and Keith A. Hobson

1992 "A 10 500-Year Sequence of Bird Remains from the Southern Boreal Forest Region of Western Canada." *Arctic* 42(2):105-110.

Dwight, Timothy

1822 Travels in New England and New York, Volume III. Google Books.

Ehrlich, Paul R., David S. Dobkin, and Darryl Wheye

1988 "The Passenger Pigeon." Stanford University. Retrieved January 9, 2014.

http://www.stanford.edu/group/stanfordbirds/text/essays/Passenger_Pigeon.html

Farley, William A.

2012 Subsistence in the Shrinking Forest: Native and Euro-American Practice in 19th- Century Connecticut. Master's thesis, Historical Archaeology Program, University of Massachusetts, Boston, MA.

Fedore, Michael A.

2008 Consumption and Colonialism: A Zooarchaeological Analysis of Two Eighteenth-Century Sites on the Eastern Pequot Reservation. Master's thesis, Historical Archaeology Program, University of Massachusetts, Boston, MA.

Fisher, John W. Jr.

1995 "Bone Surface Modifications in Zooarchaeology." *Journal of Archaeological Method and Theory 2*(1):7-68.

Gillium, F.

2002 "Cynoscion regalis." Animal Diversity Web. University of Michigan. http://animaldiversity.ummz.umich.edu/accounts/Cynoscion regalis/

Gookin, Daniel

1972 *Historical Collections of the Indians in New England*. Arno Press, New York.

Grayson, Donald K.

1984 *Quantitative Zooarchaeology: Topics in the Analysis of Archaeological Faunas.* Academic Press, Inc., New York.

Gumerman, George IV

1997 "Food and Complex Societies." *Journal of Archaeological Method and Theory* 4(2):105-139.

Hasho, Sarah

2012 Bound in Stone: A Landscape and Architectural Analysis of the Eastern Pequot Tribal Nation Reservation, Connecticut. Master's thesis, Historical Archaeology Program, University of Massachusetts, Boston, MA.

Hayden, Anna K.

2012 Household Spaces: 18th and 19th Century Spatial Practices on the Eastern Pequot Reservation. Master's thesis, Historical Archaeology Program, University of Massachusetts, Boston, MA.

Hill, K.

2005 "Cynoscion nebulosus." Smithsonian Marine Station. http://www.sms.si.edu/irlspec/Cynosc nebulo.htm

Hillson, Simon.

- 1992 Mammal Bones & Teeth: An Introductory Guide to Methods of Identification. University of London Institute of Archaeology, London.
- 2005 Teeth. Cambridge University Press, New York.

Helmer, Daniel

1987 "Fiches D'Osteologie Animale Pour L'Archeologie: Mammiferes." In *Fiches Descriptives Pour Les Releves D'Ensembles Osseux Animaux*, edited by Jean Desse and Nathalie Desse-Berset. Centre de Recherches Archeologiques du CNRS.

Hesse, Brian and Paula Wapnish

1985 Animal Bone Archaeology: From Objectives to Analysis. University of Alabama-Birmingham and Smithsonian Institution, Taraxacum, WA.

Heinrich, Adam R.

2012 "Some Comments on the Archaeology of Slave Diets and the Importance of Taphonomy to Historical Faunal Analyses." *Journal of African Diaspora* 1(1): 9-40.

Hillson, Simon.

- 1992 Mammal Bones & Teeth: An Introductory Guide to Methods of Identification. University of London Institute of Archaeology, London.
- 2005 *Teeth.* Cambridge University Press, New York

Hollis, Timothy D.

 2013 Architectural Debris and Construction Sequencing at an 18th-Century Rural Native American Household in Connecticut. Master's thesis, Historical Archaeology Program, University of Massachusetts, Boston, MA.

Hunter, Ryan

2012 Coastal Connections and Reservation Contexts: Eastern Pequot Collection and Consumption of Shellfish in the Eighteenth and Nineteenth Centuries. Master's thesis, Historical Archaeology Program, University of Massachusetts, Boston, MA.

Hunter, Ryan, Stephen W. Silliman, and David B. Landon

2014 "Shellfish Collection and Community Connections in Eighteenth Century Native New England." Unpublished Manuscript.

Jacobucci, Susan, Heather Trigg, and Stephen W. Silliman

2007 "Vegetation and culture on the Eastern Pequot Reservation: Interpreting millennia of pollen and charcoal in southeastern Connecticut." *Northeast Anthropology* 74:13-39.

Jordan, Kurt A.

2009 "Colonies, colonialism, and cultural entanglement: The archaeology of Postcolumbian intercultural relations." In *International Handbook of Historical Archaeology*, edited by Teresita Majewski and David Gaimster, pp. 31-59. Springer, New York.

Klein, Richard G., and Kathryn Uribe.

1984 *The Analysis of Animal Bones from Archeological Sites*. University of Chicago Press, Chicago.

Landon, David B.

2009 "An update on Zooarchaeology and Historical Archaeology: Progress and Prospects." *International Handbook of Historical Archaeology*, edited by T. Majewski and D. Gaister, pp. 77-104. Springer, New York. Lapham, Heather A.

2005 *Hunting for Hides: Deerskins, Status, and Cultural Change in the Protohistoric Appalachians.* The University of Alabama Press, Tuscaloosa.

Lev-Tov, Justin and Susan D. deFrance

2010 "Animals and Complexity: How Zooarchaeologists Contribute to the Study of Complex Society in the New and Old Worlds." In *Anthropological Approaches to Zooarchaeology: Colonialism, Complexity, and Animal Transformations*, edited by Douglas V. Campana, Pamela Crabtree, S. D. de France, Justin Lev-Tov, and A. M. Choyke, pp. x-xii. Oxbow Books, Oakville, CT.

Liebmann, Matthew

2008 "Introduction: The intersections of archaeology and postcolonial theory." In *Archaeology and the Postcolonial Critique*, edited by Matthew Liebmann and Uzma Z. Rizvi, pp. 1-20. AltaMira Press, Washington D.C. Kindle Edition.

Lightfoot, Kent G.

1995 "Culture contact studies: Redefining the relationship between prehistoric and historical archaeology." *American Antiquity* 60(2):199-217.

Loren, Diana DiPaolo

2008 In Contact: Bodies and Spaces in the Sixteenth- and Seventeenth-Century Eastern Woodlands. Rowan & Littlefield, Washington D.C.

Lyman, R. Lee

1994 Vertebrate Taphonomy. Cambridge University Press, Cambridge, UK.

Mandell, Daniel R.

2007 *Tribe, Race, History: Native Americans in Southern New England,* 1780-1880. The John Hopkins University Press, Baltimore.

McBride, Kevin A.

- 1990 "The Historical Archaeology of the Mashantucket Pequots, 1637-1990: A Preliminary Analysis." In *The Pequots of Southern New England: The Fall and Rise of an American Indian Nation*, edited by Lawrence M. Hauptman and James D. Wherry, pp. 96-117. University of Oklahoma Press, Norman and London.
- 1993 "'Ancient and Crazie': Pequot Lifeways during the Historic Period." *The Dublin Seminar for New England Folklife Annual Proceedings 1991*, pp. 63-75. Boston University, Boston.

McMahon, Sarah F.

 A Comfortable Subsistence: The Changing Composition of Diet in Rural New England, 1620-1840. *The William and Mary Quarterly* 42(3): 26-65.

Mintz, Sidney W. and Christine M. Du Bois

- 2002 The Anthropology of Food and Eating. *Annual Review of Anthropology* 31:99-119. Annual Reviews.
- Mrozowski, Stephen A., Holly Herbster, David Brown, and Kathrine L. Priddy
 2005 Magunkaquog: Native American Conversion and Cultural Persistence. In *Eighteenth Century Native Communities of Southern New England in the Colonial Contexts*, edited by Jack Campisi, pp. 57-71. Occasional Paper No. 1, Mashantucket Pequot Museum and Research Center, Mashantucket, CT.

O'Connor, Terry

2000 *The Archaeology of Animal Bones*. Texas A&M University Anthropology Series, Texas A&M University Press, College Station, TX.

Orr, Charles

1980 The Pequot War. AMS Press, New York.

Page, Lawrence M. and Brooks M. Burr

1991 *A Field Guide to Freshwater Fishes: North America North of Mexico.* Houghton Mifflin Harcourt, New York.

Patterson, Thomas

2008 "A brief history of postcolonial theory and implications for archaeology." In *Archaeology and the Postcolonial Critique*, edited by Matthew Liebmann and Uzma Z. Rizvi, pp. 21-34. AltaMira Press, Washington D.C. Kindle Edition.

Pavao-Zuckerman, Barnet

- 2000 "Vertebrate Subsistence in the Mississippian-Historic Transition." Southeastern Archaeology 19(2):135-144.
- 2007 "Deerskins and Domesticates: Creek Subsistence and Economic Strategies in the Historic Period." *American Antiquity* 72(1):5-33.

- 2010 "Animal Husbandry at Pimeria Alta Missions: El Ganado en el Sudoeste de Norteamerica." In Anthropological Approaches to Zooarchaeology: Colonialism, Complexity, and Animal Transformations, edited by Douglas V. Campana, Pamela Crabtree, S. D. de France, Justin Lev-Tov, and A. M. Choyke, pp. 150-158. Oxbow Books, Oakville, CT.
- 2011 "Rendering Economies: Native American Labor and Secondary Animal Products in the Eighteenth-Century Pimeria Alta." *American Antiquity* 76(1):3-23.

Pavao-Zuckerman, Barnet, and Vincent M. LaMotta

- 2007 "Missionization and Economic Change in the Pimeria Alta: The Zooarchaeology of San Agustin de Tuscon." *International Journal of Historical Archaeology* 11(3):241-268.
- Pavao-Zuckerman, Barnet and Elizabeth J. Reitz
 - 2006 "Introduction and Adoption of Animals from Europe." In *Handbook* of North American Indians, Vol. 3: Environment, Origins, and Population, edited by Douglas Ubelakers, P. 485-491. Smithsonian Institution Press, Washington DC.
 - 2011 "Eurasian domesticated livestock in Native American economies." In *The Subsistence Economies of Indigenous North American Societies: A Handbook*, edited by Bruce D. Smith, pp. 577-591. Smithsonian Institution Press, Washington D.C.

Raine, Carolyn

1997 *A Woodland Feast: Native American Foodways of the* 17th & 18th *Centuries.* Penobscot Press, Stonington, ME.

Reitz, Elizabeth J. and C. Margaret Scarry

- 1985 Reconstructing Historic Subsistence with an Example from Sixteenth-Century Spanish Florida. The Society for Historical Archaeology, Ann Arbor, MI.
- Reitz, Elizabeth J. and Elizabeth S. Wing. 2008 Zooarchaeology. Cambridge University Press, New York
- Robins, C. Richards, G. Carelton Ray, and John Douglass

1999 *A Field Guide to Atlantic Coast Fishes of North America*. Houghton Mifflin Harcourt, New York.
Russell, Nerissa

2012 *Social Zooarchaeology: Humans and Animals in Prehistory.* Cambridge University Press, Cambridge, UK.

Saint-Germaine, Claire

2005 "Animal fat in the cultural world of the Native Peoples of Northeastern America." In *The Zooarchaeology of Fats, Oils, Milk and Dairying*, edited by Jacqui Mulville, pp. 107-113. Oxbow Books Limited, Oakville, CT.

Scott, Elizabeth M.

2008 "Who Ate What? Archaeology Food Remains and Cultural Diversity." In *Case Studies in Environmental Archaeology*, edited by Elizabeth Reitz, C. Margaret Scarry, and Sylvia J. Scudder, pp. 357-374. Springer, New York.

Schorger, A. W.

1955 *The Passenger Pigeon: its natural history and extinction.* University of Oklahoma Press, Norman.

Shackley, Myra

1982 Environmental Archaeology. Unwin Hyman, New York.

Silliman, Stephen W.

- 2001 "Agency, Practical Politics, and the Archaeology of Culture Contact." *Journal of Social Archaeology* 1(2):184-204.
- 2005 "Culture contact or colonialism? Challenges in the archaeology of Native North America." *American Antiquity* 70(1):55-74.
- 2009 "Change and continuity, practice and memory: Native American persistence in colonial New England." *American Antiquity* 74(2):211-230.
- 2010 "Writing new archaeological narratives: Indigenous North America." In *Research Handbook on Postcolonialism and Archaeology*, edited by Uzma Rizvi and Jane Lydon, pp. 145-164. World Archaeological Congress Research Handbooks in Archaeology Series. Left Coast Press, Walnut Creek, California.
- 2012 "Between the Longue Durée and the Short Purée: Postcolonial Archaeologies of Indigenous History in Colonial North America." *Decolonizing Indigenous Histories: Exploring Prehistoric/Colonial Transitions in Archaeology*, Maxine Oland, Siobhan M. Hart, and Liam Frink, editors, P.113-131.

Silliman, Stephen W. and Katherine H. Sebastian Dring

2008 Working on Pasts for Futures: Eastern Pequot Field School Archaeology in Connecticut. Collaboration at the Trowel's Edge: Teaching and Learning in Indigenous Archaeology, Stephen W. Silliman, editor, P. 67-87. Amerind Studies in Archaeology #2. University of Arizona Press, Tucson.

 Silliman, Stephen W., Keely B. Lewis, Meredith Luze, and Theodor Maghrak
2013 Archaeological Investigations of Site 102-126, Eastern Pequot Reservation, North Stonington, Connecticut. Report Submitted to Connecticut State Historic Preservation Office, Connecticut Office of State Archaeology, and the Eastern Pequot Tribal Nation. University of Massachusetts, Boston.

Silliman, Stephen W. and Thomas A. Witt

2010 The Complexities of Consumption: Eastern Pequot Cultural Economies in Eighteenth-Century New England. *Historical Archaeology* 44(4):46-68.

Silliman, Stephen W. and Katherine H. Sebastian Dring

 2008 Working on Pasts for Futures: Eastern Pequot Field School Archaeology in Connecticut. *Collaboration at the Trowel's Edge: Teaching and Learning in Indigenous Archaeology*, Stephen W.
Silliman, editor, P. 67-87. Amerind Studies in Archaeology #2. University of Arizona Press, Tucson.

Silverman, David J.

- 2001 "The Impact of Indentured Servitude on the Society and Culture of Southern New England Indians, 1680-1810." *The New England Quarterly* 74(4):622-666.
- 2003 "We chuse to be bounded": Native American animal husbandry in colonial New England. *William & Mary Quarterly* 60(3):511-548.
- 2005 Faith and Boundaries: Colonists, Christianity, and Community among the Wampanoag Indians of Martha's Vineyard, 1600-1871. Cambridge University Press, Cambridge.

Sportman, Sarah, Craig Cipolla, and David Landon

2007 "Zooarchaeological Evidence for Animal Husbandry and Foodways at Sylvester Manor." *Northeast Historical Archaeology* 36:127-142.

Synder, Lynn M. and Jennifer A. Leonard

 2011 "The Diversity and Origin of American dogs." In Subsistence Economies of Indigenous North American Societies, edited by Bruce D. Smith, pp. 520-538. Smithsonian Institution Scholarly Press, Washington DC.

Tarcan, Carmen and Jonathan Driver

2010 "The Adoption and Use of Domesticated Animals at Zuni." In Anthropological Approaches to Zooarchaeology: Colonialism, Complexity, and Animal Transformations, edited by Douglas V. Campana, Pamela Crabtree, S. D. de France, Justin Lev-Tov, and A. M. Choyke, pp. 159-167. Oxbow Books, Oakville, CT.

Twiss, Katheryn

2012 "The Archaeology of Food and Social Diversity." *Journal of Archaeological Research* 20:357-395. Springer, New York.

Vasta, Meredith Laine

 2007 What ails them? : the changing faunal utilization at the Mashantucket Pequot Reservation from the late woodland to the early 19th century. Doctoral dissertation, Department of Anthropology, University of Connecticut at Storrs. University Microfilms International, Ann Arbor, MI.

Wandsnider, LuAnn

1997 "The Roasted and the Boiled: Food Composition and Heat Treatment with Special Emphasis on Pit-Hearth Cooking." *Journal of Anthropological Archaeology* 16:1-48. Elsevier, New York.

Wilkinson, Keith and Chris Stevens

2003 Environmental Archaeology: Approaches, Techniques, and Applications. Tempus, Stroud, UK.

Witt, Thomas A.

2007 Negotiating Colonial Markets: A Look at the Navigation of Colonial Economies by the Eastern Pequot in the 18th Century. Master's thesis, Historical Archaeology Program, University of Massachusetts, Boston, MA.