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Entangled By Salt: Historical Archaeology of Seafarers and Things in the Venezuelan Caribbean, 1624–1880

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Entangled by Salt: Historical Archaeology of Seafarers and Things in the Venezuelan
Caribbean, 1624–1880

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of The College of William & Mary in Candidacy for the Degree of
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APPROVAL PAGE

This Dissertation is submitted in partial fulfillment of
the requirements for the degree of

Doctor of Philosophy



Konrad A. Antczak

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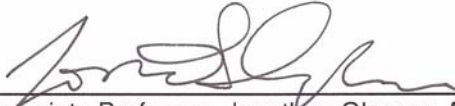


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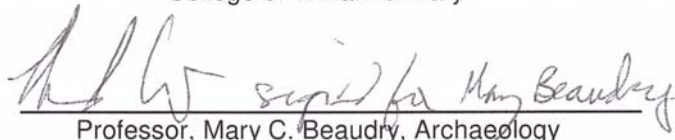
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ABSTRACT

This doctoral dissertation is aimed at determining changes in seafarer-thing relationships—which I define as entanglements—from 1624 to 1880 at two saltpans on two islands of the Venezuelan Caribbean. Three sites with four occupational phases will be discussed: one site with two occupational phases (Dutch, 1624–1638; Anglo-American, 1638–1781) on the island of La Tortuga, and two sites each comprising one occupational phase (multi-component, c. 1700–1800; Dutch Antillean/US American, 1810s–1880) on the island of Cayo Sal, in the Los Roques Archipelago. More specifically, this research seeks to determine how the development of European capitalism and consumerism impacted entanglements involving seafarers and things during short-term and seasonal events of salt cultivation and raking at the saltpans, while concomitantly exploring how seafarers navigated and shaped such multi-faceted phenomena. To answer this research question, a multiscale spatiotemporal framework is formulated, which involves three spatial scales: the local, regional and supra-regional; and three temporal scales: the short-term, medium-term and long-term. As regards the theoretical framework, the spatial characteristics of entanglements beyond the site are primarily analyzed by developing and operationalizing the concept of itineraries of things. Diachronic change through time in entanglements will be explored by means of the concept of assemblages of practice. As an interdisciplinary historical archaeological project, this dissertation research employs the documentary record, oral sources and an analysis of the archaeological remains and their depositional contexts systematically excavated at the saltpan sites of Punta Salinas (TR/S) on La Tortuga Island, as well as Uespen de la Salina (CS/A) and Los Escombros (CS/B) on Cayo Sal. The archaeological excavations at these seasonal and temporary salt-raker campsites have brought to light the diverse material belongings of 17th- through 19th-century seafarers from Anglo-America, France, the Netherlands Antilles, Bermuda, and the Low Countries, among others. The exhaustive vessel-level analysis of the thousands of recovered things combined with the examination of written descriptions of personal possessions and practices at sea, aids in understanding where these items came from (their itineraries) and, more importantly, how assemblages of practice (involving seafarers and things) were enmeshed in the everyday practices of salt cultivation, fishing, dining and drinking. By inserting the assemblages of practice into the three-scale perspective of space and time and by critically comparing them, this dissertation endeavors to diversify our understanding of the recursive relationship between everyday seafarer-thing entanglements evidenced in assemblages of practice and the “big given” of the large-scale and long-term phenomena of capitalism and the attendant growth of consumerism.

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For from him and through him and for him are all things.
To him be the glory forever! Amen.
— Romans 11:36

Para mi Venezuela, “Tierra de Gracia”

Llevo en mi sangre la espuma del mar,
y tu horizonte en mis ojos.

— PABLO HERRERO & JOSÉ LUÍS ARMENTEROS, “Venezuela”

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CHAPTER 1

INTRODUCTION:

HISTORICAL ARCHAEOLOGY OF SEAFARERS AND THINGS AT THE SALTPANS OF THE VENEZUELAN ISLANDS

SCOPE OF DISSERTATION

Since the sixteenth century, the Venezuelan Caribbean beckoned seafarers from near and distant shores, luring them not only with the lucrative promise of gold, pearls and contraband cacao and mules, but also, with sodium chloride—the salty mineral precipitate born from the marriage of sun and sea. The study of Venezuelan solar sea salt offers an entryway into the hitherto unknown maritime itineraries and daily lives of a miscellany of seafarers who camped at insular saltpans from 1624 to 1880, cultivating and raking the white crystal. Unlike excavations of shipwrecks entombed underwater following sudden and disastrous events, my excavations at the campsites by the saltpans reveal the plethora of material remains left behind by seafarers during their seasonal and temporary salt campaigns on the Venezuelan islands.

This doctoral dissertation is aimed at determining changes in seafarer-thing relationships—which I define as entanglements—from 1624 to 1880 at two saltpans on two islands of the Venezuelan Caribbean. Three sites with four occupational phases will be discussed: one site with two occupational phases (Dutch, 1624–1638; Anglo-American,

1638–1781) on the island of La Tortuga, and two sites each comprising one occupational phase (multi-component, c. 1700–1800; Dutch Antillean/US American, 1810s–1880) on the island of Cayo Sal, in the Los Roques Archipelago. More specifically, this research seeks to determine how the development of European capitalism and consumerism impacted entanglements involving seafarers and things during short-term and seasonal events of salt cultivation and raking at the saltpans, while concomitantly exploring how seafarers navigated and shaped such multi-faceted phenomena.

To answer this research question, a multiscalar spatiotemporal framework is formulated, which involves three spatial scales: the local, regional and supra-regional; and three temporal scales: the short-term, medium-term and long-term. As regards the theoretical framework, the spatial characteristics of entanglements beyond the site are primarily analyzed by developing and operationalizing the concept of itineraries of things. Diachronic change through time in entanglements will be explored by means of the concept of assemblages of practice. As an interdisciplinary historical archaeological project, this dissertation research employs the documentary record, oral sources and an analysis of the archaeological remains and their depositional contexts systematically excavated at the saltpan sites of Punta Salinas (TR/S) on La Tortuga Island, as well as Uespen de la Salina (CS/A) and Los Escombros (CS/B) on Cayo Sal. The archaeological excavations at these seasonal and temporary salt-raker campsites have brought to light the diverse material belongings of 17th- through 19th-century seafarers from Anglo-

America, France, the Netherlands Antilles, Bermuda, and the Low Countries, among others. The exhaustive vessel-level analysis of the thousands of recovered things combined with the examination of written descriptions of personal possessions and practices at sea, aids in understanding where these items came from (their itineraries) and, more importantly, how assemblages of practice (involving seafarers and things) were enmeshed in the everyday practices of salt cultivation, fishing, dining and drinking.

Retracing the *itineraries of things* through the examination of independent documentary evidence to aid in provenancing (Joyce 2012b) certain types of material things opens the possibilities to infer where people went, where they acquired things and how these ended up in the archaeological record. To elucidate and understand change in the relationship between seafarers and things across the 256-year period covered by this dissertation, the concept of *assemblages of practice* will be developed. An assemblage of practice involves a grouping of things that is dynamically entangled with a human community in events and through the practices of everyday life. By operationalizing these two concepts, my research aims to identify change in the *assemblages of practice*, composed of seafarer-thing entanglements, reassembled by way of contextual archaeological associations and independent evidence provided by documentary and oral historical sources. By inserting the *assemblages of practice* into the three-scale perspective of space and time and by critically comparing them, this dissertation endeavors to diversify our understanding of the recursive relationship between everyday

human-thing entanglements evidenced in *assemblages of practice* and the “big given” of the large-scale and long-term phenomena of capitalism and the growth of consumerism (Beaudry 2005: 305).

Before turning to discuss the three scales of space and time employed in this dissertation I first provide a synthesis of the current state of Venezuelan historical archaeology and the contribution of this dissertation to this burgeoning field of study in the country.

HISTORICAL ARCHAEOLOGY IN VENEZUELA AND IN THE VENEZUELAN CARIBBEAN

Historical archaeology in Venezuela is often referred to as archaeology of the colonial- and republican-era (post-independence period, after 1811) by Venezuelan archaeologists. This is done as a means to distance colonial- and republican-era archaeology in the country from the contentious and debated adjective “historical” that has many critics in the discipline who argue it renders pre-contact societies in the Americas as ahistorical (Vargas 2014).¹ The establishment of historical archaeology in Venezuela as a discipline dates to the decade of the 1950s. The earliest excavations of colonial-era sites in the country were undertaken by José María Cruxent in the 1950s as part of his foundational archaeological survey of Venezuela. It was at the time that Cruxent along with foreign archaeologists such as John Goggin initiated excavations in the

¹ Although I am aware of these tensions and agree with many of the arguments against using the adjective “historical” in conjunction with “archaeology”, I nonetheless resort to using the term in this dissertation given its widespread usage in the Anglophone world and beyond for the past half century.



Fig. 1.1. Contemporary map of Venezuela indicating the numerous colonial- and republican-era archaeological sites and islands mentioned in this introductory chapter.

1528 Spanish city of Nueva Cádiz on the island of Cubagua (Fig. 1.1) (Cruxent 1955; Cruxent and Rouse 1958; Cruxent and Rolando 1961). Cruxent often encountered colonial-era contexts during his archaeological survey of Venezuela, with an example being his excavations in the early 17th-century indigenous Cumanagoto site of Maurica in eastern Venezuela (Rouse and Cruxent 1963: 138–140). In the late 1960s, social

archaeologists Iraida Vargas and Mario Sanoja initiated excavations at the site of Los Castillos de Guayana on the right bank of the Orinoco River in the state of Delta Amacuro (Fig. 1.1) (Sanoja 1978; Sanoja and Vargas 1970, 2005). In the following decades, they further developed their colonial- and republican-era archaeological investigations by expanding the excavations in the region to include the city of San Tomé de Guayana and the Catalan Capuchin missions (Fig. 1.1) (Sanoja and Vargas 2005). They also undertook extensive excavations in the historic center of Caracas (Sanoja and Vargas 2002), at such historic landmarks as the Convento de San Francisco/Palacio de Las Academias (Sanoja and Vargas 1996), Teatro Ayacucho (Vargas 1994), Teatro Municipal (Vargas et al. 1998), Escuela de Música José Ángel Lamas (Sanoja et al. 1998), Cuartel San Carlos (Sanoja and Vargas 1998), as well as the urban center of the city of Maracaibo (Sanoja 2008).²

Archaeological investigations in Caracas and its peripheries have also been undertaken by Sanoja and Vargas' student Rodrigo Navarrete (2014), and other archaeologists and anthropologists such as Luis Molina (2005, 2010a, 2010b) and Emanuele Amodio (1997) (for an excellent summary of these investigations see Molina 2014a). Numerous investigations started as rescue archaeology projects initiated by the IPC (Instituto del Patrimonio Cultural) [Institute of Cultural Heritage], the institutional body governing heritage legislation and preservation in the country. Various of these rescue archaeology excavations by the IPC, however, have never been published and have

² For a recent summary of their investigations see Sanoja and Vargas (2014).

remained at the level of institutional reports inaccessible to the general public. Other projects such as Hans Rheinheimer Key's investigations at the early 19th-century Scottish colony of El Topo, close to Caracas were not undertaken by an archaeologist but included limited excavations (Rheinheimer Key 1986). Whereas metropolitan Caracas and its peripheries have received the focus of historical archaeological attention in recent decades, a small but growing number of investigations have been undertaken in other parts of the country. In the early 1990s, Alberta Zucchi from the Department of Anthropology of IVIC (the Venezuelan Institute for Scientific Studies), excavated three successive 17th- through 19th-century cemeteries within the Spanish settlement on the island of San Carlos at the entrance to Maracaibo Lake (Fig. 1.1) (Zucchi 1997). She continued archaeological investigations of colonial- and republican-era mortuary practices at the Church of San Francisco in Coro, Falcón State (Fig. 1.1) (Zucchi 2010, 2006). Zucchi also undertook excavations at the colonial Franciscan Mission of San Bernardino de Güertecuar, in Anzoátegui State, founded in the late 17th century to evangelize the local Cumanagoto indigenous people (Zucchi 2013). In recent years, archaeologist Carlos Alberto Martín of the UCV (Venezuelan Central University) Escuela de Antropología (School of Anthropology) has also been undertaking excavations in the historic center of the city of Coro (Carlos Alberto Martín, pers. comm. 2014).

Other studies include that of Molina (2014b) who performed historical, architectural and archaeological investigations of the sugar haciendas of the Turbio,

Yaracuy and Tocuyo River valleys in the region of Barquisimeto in western central Venezuela (Fig. 1.1). IVIC archaeologist Liliam Arvelo (2000) investigated the 16th- through 19th-century indigenous settlement patterns in the Quíbor Valley to the southwest of Barquisimeto (Fig. 1.1). In 2006 and 2007, Cuban archaeologist Lisette Roura Alvarez (2010) and her team undertook archaeological excavations in the historic center of Puerto Cabello (Fig. 1.1). Navarrete and Ana Cristina Rodríguez explored the late prehispanic and contact-period indigenous *Palenque* settlements in the region of the lower Unare River in the states of Guárico and Anzoátegui (Fig. 1.1) (Navarrete 2014a, 2005). Navarrete (2014b) also undertook a long-term and multi-sited project of historical and archaeological research at early 19th-century sites and structures associated to Simón Bolívar, including the Hacienda San Mateo/Ingenio Bolívar (San Mateo, Aragua State), the Hacienda Los Palacios (Capaya, Miranda State), the Casa San Isidro and the old Palacio Arzobispal (Ciudad Bolívar, Bolívar State), the Casa El Balcón (Soledad, Anzoátegui State), and the Mines of Aroa (Aroa, Yaracuy State) (Fig. 1.1). Yara Altez and Pedro Rivas have undertaken archaeological excavations at colonial sites in Caruaó Parish on the central Venezuelan coast as part of their long-term anthropological and archaeological community project among the local Afro-descendant communities (Fig. 1.1) (Altez and Rivas 2002; Rivas 2000). In the Venezuelan Andean state of Mérida, Lino Meneses and Gladys Gordones performed survey and excavations of the 17th-century mission settlement of San Antonio de Mucuñó (Fig. 1.1) (Meneses 2000; Meneses and Gordones

2014). Following a rescue archaeology project initiated in 2004 at the Casa Monagas in the city of Barcelona, in Anzoátegui State, archaeologist Ana Cristina Rodríguez teamed up with British historical archaeologist Alasdair Brooks and published three papers on the early 19th-century ceramics from the elite Republican-era household (Fig. 1.1) (Brooks and Rodríguez 2012; Rodríguez and Brooks 2014, 2012).

Over the past two decades, the historical archaeological investigations of Kay and Franz Scaramelli have offered a promising path for Venezuelan historical archaeology as a discipline with a growing voice within Latin American and global historical archaeology. The Scaramelli's historical archaeological investigations at various colonial- and republican-era sites in the Venezuelan Middle Orinoco (Scaramelli and Scaramelli 2005), have sought to highlight the role not of elites but of the indigenous people outside or on the fringes of colonial power structures, rendered invisible in the documentary record. They have engaged with various topics including production and consumption of ceramics (Scaramelli, K. 2006); commensality and culinary practices (Scaramelli and Scaramelli 2012; Scaramelli, K. 2008); colonialism, identity and ethnogenesis (Scaramelli 2005, Scaramelli and Scaramelli 2011, 2006); religion and missionization (Scaramelli and Scaramelli 2004); indigenous burial practices (Scaramelli and Scaramelli 2000); gender (Scaramelli, K. 2012); and commodity production and technological change (Rodríguez-Alegría et al. 2015; Scaramelli and Scaramelli 2015). Their comprehensive studies have

powerfully illuminated native agency at the confluence of local and global colonial and post-colonial processes.

Finally, Venezuelan archaeologists Andrzej and Maria Magdalena Antczak began their pioneering archaeological survey of the more than 60 Venezuelan offshore islands in 1982. By applying the post-processual method and theory of systematic and contextual archaeology (Hodder 1986) they sought to bring this peripheral insular area of the country into the regional panorama of prehispanic, colonial- and republican-era human activities and look beyond the tired Venezuelan culture-historical and processual approaches preoccupied with typologies and structural laws, and largely devoid of flesh-and-blood peoples of the past (Antczak and Antczak 2006). The colonial- and republican-era sites that were discovered and initially surveyed by the Antczaks in the 1980s and 90s include the site of Punta Salinas (TR/S) on La Tortuga island and the sites of Uespen de La Salina (CS/A) and Los Escombros (CS/B) on the island of Cayo Sal in the Los Roques Archipelago which will be discussed in this dissertation (Fig. 1.1). The Antczaks also encountered colonial- and republican-era sites, strata and contexts at numerous other locations throughout the Venezuelan islands including the Los Testigos Archipelago, La Orchila, La Blanquilla, numerous islands of the Los Roques Archipelago, the archipelagos of Las Aves de Barlovento and Sotavento, and the islands of Margarita, Coche and Cubagua (Fig. 1.1) (Antczak and Antczak 2017, 2015a, 2015b, 2006, 1989, 1988, 1986). From 2009 to 2014 the sites of Punta Salinas, Uespen de la Salina and Los Escombros were revisited by a team

of archaeologists led by me, and the earlier survey excavations undertaken there were substantially and systematically expanded in light of new research questions driven, in part, by the discovery of abundant documentary evidence.

Much of the archaeology undertaken in Venezuela belongs to the school of Latin American social archaeology, and the colonial- and republican-era archaeology within it by and large has strong ties to historical materialism and orthodox Marxist theoretical currents (Tantaleán and Aguilar 2012; Vargas 1990). In a number of cases, this Marxist archaeology is also deeply entwined with recent Venezuelan socialist politics (for a critique of this stance see, Scaramelli 2016; for an example of it see, Vargas 2014). In recent years, this application of a Marxist theoretical framing to Venezuelan historical archaeology has been criticized as being overly Eurocentric, and principally preoccupied with unearthing evidence of top-down imperialist and capitalist power dynamics in urban contexts, and obscuring rather than elucidating the lives of the subaltern peoples (the indigenous, the enslaved Afro-Venezuelan, the poor *mestizo*) that have been rendered invisible by historical processes of colonialism (Scaramelli 2016: 79). Furthermore, the complex and tumultuous political, economic and social situation of Venezuela during the last decade and a half has placed great constraints on archaeologists working in the country, with national and local authorities and public universities and institutes dedicating limited funding to archaeological endeavors, resulting in fewer archaeological investigations of an increasingly more limited scope (Martín et al. 2012: 5).

This doctoral study enters the relatively young field of Venezuelan historical archaeology with the goal of providing new theoretical perspectives, supplying a novel methodological toolkit, and for the first time bringing the largely overlooked colonial- and republican-era archaeology of the Venezuelan islands into the limelight of scholarly scrutiny. In this dissertation, I pursue a different path to that charted by various other Venezuelan archaeologists. This dissertation primarily concerns itself not with the class structure and internal power dynamics of colonial- and republican-Venezuelan society, but rather with the multitudes of foreign, trans- and inter-imperial and extra-national seafarers that sailed to the Venezuelan islands and their saltpans from the 17th to the 19th century. As such, my research opens a new avenue of hitherto unexplored human-thing interactions in Venezuela, where non-Venezuelan social actors receive serious scholarly attention, and are considered integral to Venezuelan history and archaeology and not merely footnoted as imperialist intruders or furtive contrabandists. As shall be discussed in this dissertation, the unpopulated Venezuelan Caribbean was never an abandoned, closed and circumscribed space, but rather it was a bustling and unbounded seascape that became the scene of vibrant local, regional and supra-regional maritime entanglements of seafarers and things. Let us now turn to discuss the spatial and temporal scales that I will be employing in this study.

SPATIOTEMPORAL FRAMEWORK

Space

Analytical scale has been an especially pressing issue for historical archaeologists since the discipline's beginnings (Orser 2010). World-Systems Theory, developed by Immanuel Wallerstein (1974) in the decade of the 1970s, was of influence in the early years of the discipline. As a Marxist framework created to explain the economic basis of the capitalist world system, it focused on the relations of dependence between economic cores and peripheries (Galaty 2011: 11). World-Systems Theory provided archaeologists with the conceptual framework to study the rise of capitalism, that unlike an empire, had no overarching political organization behind it and whose tentacles reached far and wide (Orser 1996: 79). Charles Orser (1996: 204) notably exhorted historical archaeologists to “think globally and dig locally”.³ In this same vein, Daniel Miller (2010: 10) has urged anthropologists to be extremist, defining the anthropologist as, “someone who seeks to demonstrate the consequences of the universal for the particular and of the particular for the universal by equal devotion to the empathetic understanding and encompassment of both”.

Notions of core and periphery are, nonetheless, more complex, as dependence is not the only dimension of these relationships, but rather transformative change routinely flowed from the margins to the centers (Galaty 2011: 11). Indeed, different spatial

³ more recently he has further elaborated on this statement (Orser 2016).

relationships may be nested within each other. These seemingly paradoxical instances where an event can be at once both global and local have been defined as “situated globalities” (Blok 2010: 509). It is in this light that the seascape, discussed in Chapter 4, provided a unique potential for seafarers in the age of mercantile capitalism to become cosmopolitan beings, connected across its vast surface in ways that would have been comparably more difficult and limited on land. I hypothesize that seafarers were actively being shaped at the confluence of the local and global phenomena of capitalism and the concomitantly burgeoning consumerism, in turn transforming these phenomena in a recursive relationship (Richard 2013: 43).

The three scales of study of geographical space in this dissertation are: the local, the regional and the supra-regional. The local scale is conceived of as encompassing all the islands of the Venezuelan Caribbean including the ABC islands (Aruba, Bonaire and Curaçao) and the adjacent mainland coast of Venezuela. Recently, islands have been identified by historians as especially important “loci of entanglement”, as well as, a focus on “Spanish America’s Atlantic entanglements”, and an embracing of the Atlantic from Spanish American shores is seen to have great potential in rebalancing Atlantic history (Bassi 2014). I envision the local geographic scale of this dissertation accomplishing this goal, embracing a study of Venezuelan islands and rebalancing aspects of homogenizing large-scale Atlantic history through situated and local historical archaeological research in the understudied Southeastern Caribbean region.

The regional scale of this dissertation is broadest and includes the Caribbean, the circum-Caribbean basin and the eastern coast of North America. This is similar in scope to the regional scale employed by Michael Jarvis for studying Bermuda's "Atlantic Commons" or those areas where extractive work was undertaken beyond the margins of the British Empire (in the New World) (Jarvis 2010a: 249). This scale is also much like historian Ernesto Bassi's (2016: 3–4) transimperial Greater Caribbean. In the case studies used for this dissertation, however, salt extractive practices on the Venezuelan Islands were not only undertaken by the British colonists of the east coast of North America (Anglo-Americans) but also by the Dutch as well as various local actors including Spanish subjects from the Venezuelan coast and inhabitants of the Dutch ABC islands.

The final scale is the supra-regional scale: by-and-large the scale of the Atlantic world (Bailyn 2005; Elliott 2007). Here the local and regional scales are connected to Europe and Africa, that which lies toward the east of the Atlantic, and to the regions beyond—in this research also incorporating the East Indies and China. These three scales, nonetheless, serve mainly as a heuristic for the exploration and location of phenomena, and are not intended to serve for the analytical refinement of a classificatory repertoire. In effect, as shall be seen, the reality of the Atlantic world and global capitalism in the early-modern period was one of great mobility between various scales and the common collapsing of these scales into the everyday lives of people (Richard 2013).

In recent years, historians have called for new and critical considerations of specific aspects of Atlantic history including local contingencies, trans-national and extra-national groups, cultural exchanges, the roles of nonhuman actors such as objects, and the understudied “sinew-populations” among which there are those of seafarers and salt rakers (Bassi 2014; Cañizares-Esguerra and Breen 2013; Cromwell 2014: 778). This historical archaeological dissertation is well poised to address the above-mentioned aspects. I consider that the various independent lines of evidence (archaeological, documentary and oral), when used in concert within historical archaeology, are especially effective at obtaining new insights, and the theoretical and methodological approach presented here offers a promising framework for providing novel answers to old and pressing questions of analytical scale and the bridging of method and theory within the discipline of archaeology at large. Let us now turn to discussing the temporal scales used within this dissertation.

Time

Historical archaeology has made significant contributions to our understanding of long-term historical phenomena such as the rise of capitalism, modernity, and European colonialism in the New and Old Worlds, at different spatio-temporal scales (Deetz 1996; Gosden 2004; Hall and Silliman 2006; Johnson 1996; Leone and Potter 1999; Orser 1996). The explanatory power of these contributions is due to the fact that historical archaeology addresses a range of independent evidential sources (archaeological, documentary and

oral) and has a proven capacity to engage with these sources at multiple sites and at different points in time.

The French Annales School led by historian Fernand Braudel divided time into three temporal rhythms: the event (*l'histoire événementielle*), conjuncture (*conjoncture*), and the long *durée* (Braudel 1992). Per the Annales, the nature of historical events is not separated from time but both are interdependent, as expressed in temporal scales and different events occurring at distinct temporal rhythms (Lucas 2005: 115). Braudel, however, never clearly defined the linkages between the three rhythms of time and leaned heavily on environmentally deterministic narratives derived from his studies of the long *durée* (Robb and Pauketat 2013: 12). In this dissertation, I employ the three temporal scales—the short-term, medium-term and the long-term—but do not adhere to the original Annales terminology and concepts and their often-criticized connotations in archaeology.

To deal with the aspects of micro- and macro-scale central to archaeological investigation, archaeologists inspired by the work of historian William Sewell (2005), have turned to studying the 'event' in order to move away from protracted evolutionary processes to punctuated change occurring in singular moments of history (Beck et al. 2007; Bolender 2010; Gilmore and O'Donoghue 2015; Lucas 2008). Sewell's (2005: 227) definition of an event, variously applied by archaeologists follows as, "sequences of occurrences that result in transformations of structures", with these occurrences being

mostly of relatively short duration (Beck et al. 2007; Lucas 2012: 182). In this way events mostly fall within the short-term scale of historical time. Sewell's definition (an import from sociology and history), however, does not fully relate to the materiality of the archaeological record that is multi-temporal (a palimpsest [Bailey 2007; Robin 2013: 7]). Lucas (2008: 62) succinctly expresses that archaeologists, "rather than thinking about how objects can be interpreted in terms of the event [...] ought to be thinking about how an event could be interpreted in terms of objects". The idiosyncratic event, however, may not be easily identifiable in the often ephemeral and palimpsestic archaeological record (Robin 2013: 7). Here it is important to underline that at the sites that will be studied in this dissertation, salt exploitation was a temporary and seasonal affair composed of events and sequences of occurrences, since people did not permanently inhabit -these islands nor the saltpans of the Venezuelan Caribbean.

Other archaeologists have found the meso-scale of medium-term time quite effective in eliciting change, continuity and transformations to structure through everyday life and practice (Robin 2013; Silliman 2012). Stephen Silliman has engaged with a multi-scalar approach to time and advocates for including a bridging meso-scale to not fall into the dichotomies of what he calls the "short pureé" and the long dureé (Silliman 2012). Cynthia Robin (2013), inspired by the influential works of Lefebvre (2004, 2008) and de Certeau (1984; de Certeau et al. 1998), has also proposed focusing on people's everyday lives since at this time-scale social change happens "as they [people] accept and

question, consciously or unconsciously, the meaning of existing social relations” (Robin 2013: 6, 44). Let us now turn to discuss the central question of this dissertation.

RESEARCH QUESTION AND LAYOUT OF DISSERTATION

Research Question

This dissertation seeks to answer a four-fold central question: 1) What does the study of the itineraries of things and assemblages of practice between 1624 and 1880 at the saltpans of the Venezuelan islands reveal about the qualities of the entanglements of seafarers and things during salt raking/cultivating and everyday life at the saltpan campsites? 2) Can changes in these entanglements be elucidated through time in the assemblages of practice, and if so, what changes are identifiable? 3) How does the study of 17th- through 19th-century assemblages of practice at the saltpans challenge or diversify current explanations of the development and impacts of the often a priori assumed “big given” of capitalism and consumerism on the everyday lives of seafarers? 4) Did seafarers affect these large-scale phenomena and what aspects, if any, differentiated 17th- through 19th-century seafarers as consumers from other groups of consumers?

Layout of Dissertation

This dissertation is composed of seven chapters. Chapter 2 lays the theoretical groundwork of this dissertation, introducing and explaining the concepts of *thing*, *entanglement*, *itineraries of things* and *assemblages of practice* that are employed in the following chapters. Chapter 3 traces the multifarious historical itineraries of sea salt extracted from the saltpans on the Venezuelan islands of La Tortuga (Part I) and Cayo Sal

(Part II). In this chapter the local, regional and supra-regional entanglements of the salt and the seafarers who transported it across the seas and oceans are revealed. The colonial- and republican-era history of the Venezuelan islands has never been comprehensively studied nor written and, this chapter, for the first time, compiles evidence from primary and secondary documentary sources to reveal the history of these islands and their saltpans.

Chapter 4 discusses the seafarers at the Venezuelan insular saltpans. This chapter elucidates who the seafarers were in terms of “social markers”, namely: race, gender, ethnicity and nationality, as well as providing initial remarks on social status, rank and inequalities present among them. Chapter 5 explores the socio-natural assemblages of practice involving humans, other organisms and natural phenomena on the saltpans of La Tortuga and Cayo Sal from the 17th to the 19th century. I discuss how different configurations of humans and things on the saltpans through time resulted in a variable final product conditioned by distinct market necessities. Chapter 6 delves into the different assemblages of practice at the campsites by the saltpans of La Tortuga (Part I) and Cayo Sal (Part II). Based on the evidence of hundreds of ceramic, glass and metal vessels as well as zooarchaeological remains and other things, in conjunction with documentary data, I reconstruct the provisioning of the seafarers at the campsites, and their assemblages of resource procurement, cooking, dining and drinking.

Finally, Chapter 7 critically compares and analyses the assemblages of practice at the sites, determining what these reveal about the consumer behaviors of seafarers. In this chapter I position seafarers at the confluence of such local and global phenomena and processes as the Genteel Revolution and the rise of consumerism, offering insights into the fundamental role of seafarers in their creation, appropriation and expansion.

To resume, this dissertation is aimed at exploring the changes in seafarer-thing entanglements from 1624 to 1880 at two saltpans on two islands of the Venezuelan Caribbean. By studying these entanglements, I aim to understand the role of seafarers as untethered maritime consumers of material things and the impact of their their mobilities upon the large-scale processes of capitalism and the attendant Genteel and Consumer revolutions. The following theoretical chapter outlines how the materiality of the event and that of everyday life will be approached in my doctoral research through the concepts of *thing*, *entanglement*, *itineraries of things* and *assemblages of practice*.

CHAPTER 2

THEORY AT THE SERVICE OF THINGS: CHARTING THE STUDY OF ASSEMBLAGES OF PRACTICE

THEORETICAL FRAMEWORK I: ENTANGLEMENTS AS THE POINT OF DEPARTURE

Things, not objects

Spurred by what has been termed by some a ‘material turn’ (part of a larger ‘ontological turn’) that in recent decades has gained considerable momentum in the social and human sciences, many archaeologists have shifted away from a focus on material culture, meaning and representation to engage with things, materiality, materialisms, human/non-human relationships, and object-oriented ontologies (Domanska 2006; Gosden 2005; Hicks and Beaudry 2010; Fowler and Harris 2015; Hodder 2012, 2016; Knappett and Malafouris 2008; Olsen 2003, 2007; Olsen et al. 2012; Malafouris and Renfrew 2013; Meskell 2008; Robb 2015; Shanks 2007; Skibo and Schiffer 2008; J. Thomas 2007; Tilley 2007; Webmoor 2007; Webmoor and Witmore 2008; Witmore 2007). Today most of these archaeologists would probably concede to a lesser or greater degree that archaeology is the “discipline of things par excellence” (Olsen 2010: 22).⁴ Some of the current debates in archaeological theory are centered precisely on the ontology of the

⁴ This statement by no means assumes that humans are incidental, nor am I through using it here arguing that most archaeologists subscribe to the entire corpus of ‘symmetrical archaeology’ that has been proposed in recent years (Olsen and Witmore 2015: 190). For recent criticisms of symmetrical archaeology see Hodder (2014a), Ingold (2014) and Julian Thomas (2016).

thing and its importance to the discipline (see Hillerdal and Siapkas 2016). So, what are *things*?

There has been a growing interest in the concept of the *thing* within the so-called ‘material turn.’ The concept has received wide-ranging treatment by numerous philosophers, literary and social theorists, anthropologists and archaeologists (Bennett 2010; Brown 2001, 2003; Henare et al. 2007; Hodder 2012; Knappett 2010, 2011; Latour 1993, 2005; Santos-Granero 2009; among others). Some, pertaining to the Speculative Realist movement in contemporary philosophy and subscribing to the school of thought known as Object-Oriented Philosophy (or Ontology [OOO]) have instead focused their attention on *objects* (Edgeworth 2016; Garcia 2014; Harman 2010, 2011, 2013; Bogost 2012; Shaviro 2014). The approaches follow different philosophical trajectories and the result is diminishing consensus amid the complex theoretical considerations of the ontology of *things* and *objects*. Although offering a new contribution to the definition of the *thing* is perhaps beyond the purview of this dissertation, I am strongly inclined to consider any definition of *thing* (and by extension the one I will present here) as “thing-as-heuristic” rather than “thing-as-analytic” (Henare et al. 2007: 5; Witmore 2014). In this way, any attempt at defining *things* is merely an exploration, intended to adumbrate the contours of *things* rather than tidy them by force into a predetermined and neatly-packaged taxonomy. It is precisely this open-ended approach to *things* that I believe makes the concept especially useful to this historical archaeological dissertation.

I will primarily focus on the approximations to defining *things* offered by archaeologist Ian Hodder and anthropologist Tim Ingold. To Hodder (2012: 4–5, 8), things are “flows of matter, energy and information” that come together for a period of time in a “heterogeneous bundle” and are only “stages in the process of the transformation of matter.” Hodder largely bases his definition on the work of Ingold (2012: 439) who defines things as “gatherings of materials in movement.” In turn, both Hodder and Ingold ground their conception of the *thing* on the stimulating yet often challenging writings of German philosopher Martin Heidegger and his concepts of *gathering* and the *fourfold* as well as on his distinction between *thing* and *object* (Davis 2014: 209–2010; Heidegger 1971).

As heterogeneous groupings of matter, energy and information in movement, things are interdependent and connected. They are not inert nor do they exist in isolation from one another as they depend on each other and exist in close association and relation with other things. Things are gregarious—they are entities that draw other entities together (Hodder 2016: 4). Trees grow from the soil where their root systems tap the nutrients from decaying plant and animal matter; the myriad wheels, springs and pinions of a pocket watch work in mechanical unison calibrated with international chronometric time standards; a bowl of punch brings together spirit, sugar, lime juice, water and spice, associated paraphernalia such as nutmeg graters, fancy ladles, and drinking glasses, with merry imbibing individuals (Antczak *in press*). Since many things—especially solid material things—are entities that often physically persist through time (beyond human lifespans),

they also frequently go unnoticed and fade into the background of our lives, making it easy for us to forget that they are indeed interconnected and interdependent and that they can endure (Hodder 2012: 3–7). On the other hand, things such as clouds, leaves and thoughts often have shorter and much more evanescent existences.

Things are also extremely complex as any-*thing* can itself be endlessly reduced to consecutively smaller bundles and gatherings of things (matter, energy and information) (Bennett 2010). Things can also be seen as either more or less complex depending on the vantage point from which they are perceived (Hodder 2012: 219). For this reason, an institution such as the University of Cambridge, a corporation such as Bank of America, or an organization such as Greenpeace can be termed a thing when perceived from the outside, but on closer scrutiny—or when seen from the inside out—each entity is clearly a complex and vibrant entanglement of humans and things.

Things can be anything from piglets to paddocks, clouds to convents and bluebells to bartenders (Witmore 2014: 206). Hodder (2012: 10; 2016: 5), however, clearly sets apart humans as a separate thing to be studied in order to analyze human entanglements with things other than themselves, since his goal is to explore human-thing interdependence. This separation of human and thing may be critiqued by some as arbitrary and perpetuating pervasive Cartesian dualisms, especially by those advocating for a New Materialism, a flat ontology, and symmetrical archaeology (Olsen et al. 2012; Witmore 2015). I agree that a symmetrical and flat ontological approach to the study of

things in contemporary archaeology—be they potsherds or people—is fundamental, and approaches that only treat material things as backdrops, texts, or mere conduits to meaning are partial and incomplete. Nevertheless, although some archaeologists may reject anthropocentrism, they cannot escape from the reality that archaeology *is* a discipline concerned with humanity and humanness and that for ethical and epistemological reasons this must not be ignored (Barrett 2014: 68, 2016; Lucas 2016: 190–191; Hillerdal 2016; J. Thomas 2016). In short, humans—at least, as a historically emergent phenomenon—are central to archaeology but are by no means its primary and only matter of concern (Lucas 2016: 191). I will explain my reasoning further in the section on *Entanglement*. To continue exploring the farraginous nature of things let us now turn to juxtaposing things one to another, and also to the often-confusing terms accompanying things.

It is often frustratingly the case that *thing, object, artifact* and *material culture* are interchangeably and uncritically used in the social and human sciences, and for that matter in much anthropological and archaeological literature. To begin with, an artifact is a particular type of thing—one made by a human (Dunnell 1971). The term *material culture*, on the other hand, has been criticized in recent years for arbitrarily and artificially dividing culture into “material” and “immaterial” halves thereby only deepening the rift of Cartesian dualisms haunting the social sciences today. *Material culture* moreover perpetuates the hylomorphic model that considers that during the process of making

objects (objectification) humans begin with a mental blueprint, derived from cultural understandings, that they then turn into a materialized form of that mentalization. Julian Thomas (2007) and Ingold (2012, 2007) have compellingly argued that culture is in fact never congealed but is always movement, process and doing, rather than unchanging material repetitions of frozen preconceptions. Consequently, the *material* cannot be artificially separated from the *cultural* as they are intimately and inseparably entangled, and mutually transformational.

Object is an even more pervasive term in archaeology. To many, an *object* implies its dialectic counterpart—the *subject*. This dualism harkens back to Descartes, Kant, Hegel and Marx, among others, and their foundational approaches that have structured much of Western dialectical thought. As intimated above, *object* also tows in its wake the attendant longstanding discussion on objectification (for recent discussion see Jones 2009: 98; Preucel and Meskell 2007: 14–15; Miller 2010: 54–68; J. Thomas 2007: 18–22).⁵ Shanks and Tilley (1987: 130) defined objectification as “the serial transformation of matter into cultural form,” a definition which, like *material culture*, falls within the rigid model of hylomorphism. Objectification has also been viewed as a process in which the relationship between human and object is established and continually developed (Miller 1987: 18). Both definitions are based on the tradition of sociology and social and political science (see Miller 1987: 3-82). Moreover, to some scholars, the reality of everyday life is

⁵ For a criticism of objectification see Ingold 2013: 94–96.

entirely based on the process of objectification (Berger and Luckman 1966: 50). Further complicating the task of defining *object*, to Hodder the “objectness” or “object nature” of things is the essential characteristic of the brute matter comprising certain things which empowers those to “stand up against humans,” providing affordances and potentialities to humans and entrapping them (Hodder 2012: 13, 2014: 33, 2016: 18, 81). To Speculative Realists, *objects* are all or mostly what we have just described *things* to be (Bogost 2012; Garcia 2014; Harman 2013a).⁶

The qualitative shift from *object* to *thing* can be likened to the way academic discourse has shifted from notions of *space* to those of *place*, and from the idea of environment to that of landscape (Hodder 2012: 10; Ingold 1993; Tilley 1994). Ingold (2015: 16) argues that objects exist simply as static entities whereas things *occur*—they are dynamic and vibrant (Bennett 2010). Objects are nouns, things are verbs (Ingold 2015: 16). Moreover, our world is a world of things: “Objects and subjects can exist only in a world already thrown, already cast in fixed and final forms; things, by contrast, are in the throwing – they do not exist so much as carry on” (Ingold 2013: 94). For this reason, Ingold takes a stance against OOO and proposes his view of a World Without Objects (WWO) (2015: 16).

⁶ Because of the rift between considerations of not only the nature of things but also things vs. objects, the writer, philosopher and game designer Ian Bogost argues we should move away from the terms *thing* and *object* and their philosophical baggage and turn to *unit* (Bogost 2012: 22–29). Although not in a way that is intended to shift terminology away from material culture, Miller (2010) proposes that anthropology is the study of *stuff*.

The congealed and impermeable boundedness of the concept of *object* (Harman 2013b: 29; Bogost 2012) is the aspect most difficult to reconcile with a world in constant motion. *Things*—as gatherings of matter in motion—have surfaces or interfaces that are not bounded but, rather, are constantly in flux (Ingold 2011a: 22–24; 2015: 41–45). This is evident in the organic surface of a leaf that absorbs sunlight and transpires water; the inanimate surface of a natural rock that is relentlessly weathered by mosses, water and ice; and even Leonardo DaVinci’s *Mona Lisa* which has radically changed through the centuries due to both human-induced and natural, environmental, chemical and mechanical processes (Domínguez Rubio 2016). Moreover, not only are things not impervious to physical change; they also exhibit restless and ever-itinerating lives as they move through different social, cultural, economic and ideological regimes of value. For example, the coca leaf assumes a vastly different existence when it is taken by a Peruvian highlander and used as part of a religious ceremony or masticated with lime as a stimulant. The humble coca leaf also enters vastly different regimes of value once it is processed into transgressive cocaine. Likewise, the *Mona Lisa*’s significance has changed through time as it has itinerated, and continues to do so, through changing regimes of meaning, value and power, from da Vinci’s last brushstroke to the painting’s current hyper-curated position in the Louvre (Domínguez Rubio 2016). In this way, things (including humans) are not seen as self-contained entities (objects) but as lines (Ingold 2016).

To archaeologists, objects are in fact things that have been severed from their past relational contexts and “frozen” for scientific analysis in the present as objects of study placed in an artificial object-state. Thus it can be argued that the material remnants of the past we recover through archaeological investigations all initially appear to us as objects severed from their vibrant past relational contexts. Trying to keep things in an object-state, however, is unnatural, difficult and problematic, since objects naturally tend towards inherent and unruly *thingness* (Domínguez Rubio 2016). If such objects are in reality only temporary and artificial affairs, then they must be ultimately “returned” by archaeologists to their vibrant and natural state of relational thingness and reinserted as *things* within our final archaeological interpretations—not just left as detached, orphaned and inert objects of study. This is what Ingold advocates in his call for a World Without Objects (2015: 16). Furthermore, *things*, unlike *objects*, are not mere intermediaries to something else beyond them—namely human intention and meaning. The emphasis on things once again stresses a symmetrical ontological approach to things and humans whereby archaeologists do not solely seek out objects because of what they can tell us about humans. Rather, a focus on things *as* things moves archaeologists beyond a sole interest in hermeneutics and semiotics and into the territory of the brute matter of things themselves and their dynamic trajectories and entanglements (Ingold 2007b). These multiple considerations provide the basis of my use of *things* over *objects* in this

dissertation and their use in the open-ended, fraying and relational concept of *entanglement*.

This dissertation will, on one hand, focus on reassembling the relational contexts (*assemblages of practice*) of the palpable, solid and material things archaeologists find when they dig in the ground, namely human-made things (artifacts) such as punch bowls, shoe buckles and iron hoes as well as other material things not fabricated by humans such as zooarchaeological remains. On the other hand, my emphasis on *things* as opposed to *objects* in this dissertation means that I will also engage with the entanglements of humans with things that do not fall within the limiting definition of objects, such as the sea, coral-stone dikes, algae, rum, rainclouds, tides, port cities and salt. Let us now turn to discussing *entanglements*.

Entanglement

Various conceptions in anthropology and archaeology of the non-representational relationship between humans and things have been proposed in recent years among which are *entanglement* (Hodder 2011, 2012, 2014), *assemblage* (Fowler 2013a, 2013b; Harris 2012; Harrison 2011; Lucas 2012, 2013; Normark 2010), *constellation* (Roddick and Stahl 2016a; Roddick and Stahl 2016b: 9–11; Wenger 1998: 126–127), *meshwork* (Ingold 2007a, 2011), *material engagement* (Malafouris and Renfrew 2013), *bundle* (Pauketat 2013), and *network* (Knappett 2011, 2013; Latour 1993, 2005). I consider this diversity in approaches to be very productive and agree with archaeologist Chris Fowler (2013: 237)

that each of these concepts has been created to address specific issues and each has been effective in this regard. In this dissertation, I will primarily utilize the concepts of *entanglement*, *meshwork* and *assemblage*. I will seek to tie them into a larger theoretical framework that can then be methodologically operationalized and fleshed out by means of *itineraries of things* and *assemblages of practice*. Let me begin by defining *entanglement*.

Entanglement as a metaphor and a theoretical concept that seeks to illustrate and explain the relationship between humans and things has been applied to archaeology in recent years by Hodder (2011, 2012, 2014, 2016). This concept of entanglement has its roots in anthropologist Nicholas Thomas's (1991) path-breaking study of objects (gifts and commodities) and their colonial and imperial entanglements with the West and the Oceanic world. Although Hodder's *theory of entanglement* is in many ways indebted to Thomas's study, it goes much further to propose a novel and holistic theoretical framework for the study of things in archaeology. To Hodder (2016: 5), entanglement begins with human-thing interrelations and focuses on the dependence or reliance linking humans and things and their resulting dependency or constraint. Entanglement thus explores how material things create specific practical entrapments between human and themselves.

Humans and things are relationally produced in entanglements and they become entrapped within these relations in mutual dependencies. To Hodder, dependence has a

dialectical meaning: on the one hand *dependence* (reliance and contingency) is helpful and enabling to humans; on the other, *dependency* (one-way constraint) and *co-dependency* (two-way constraint) is negative and entrapping (Hodder 2014b: 20). Naturally occurring things such as moss, glaciers and raccoons have their cycles of birth, life and death, yet human-dependent things cannot reproduce on their own. They require humans. Moreover, they often need further things to function as is the case of a ceramic pot that needs a kiln to be fired, or a boat that needs paddles or a rudder and a sail to successfully move upon the water. It is in this way that humans rely upon things and are “involved in the lives of things”, effectively becoming increasingly entrapped in new and denser entanglements from which it becomes harder to detach (Hodder 2014b: 30). We do not merely depend on things but rather “give meaning to things, use things, gain identities from things, own things” (Hodder 2012: 59). Things draw us into their trajectories. Moreover, entanglements are “open, far flung and contingent—things keep happening as the different temporalities of things collide and as things run out, break down and fall apart” and become superceded (Hodder 2012: 112). Although Figure 2.1 displays the multiple timescales employed in this dissertation, it must be made clear that entanglements may occur at different temporalities and change can be initiated by events anywhere within an entanglement (Hodder 2012: 159). Entanglements running into the past can have effects on events of entanglement occurring in the present, and may affect new entanglements into the future.

Entanglements in Space-Time

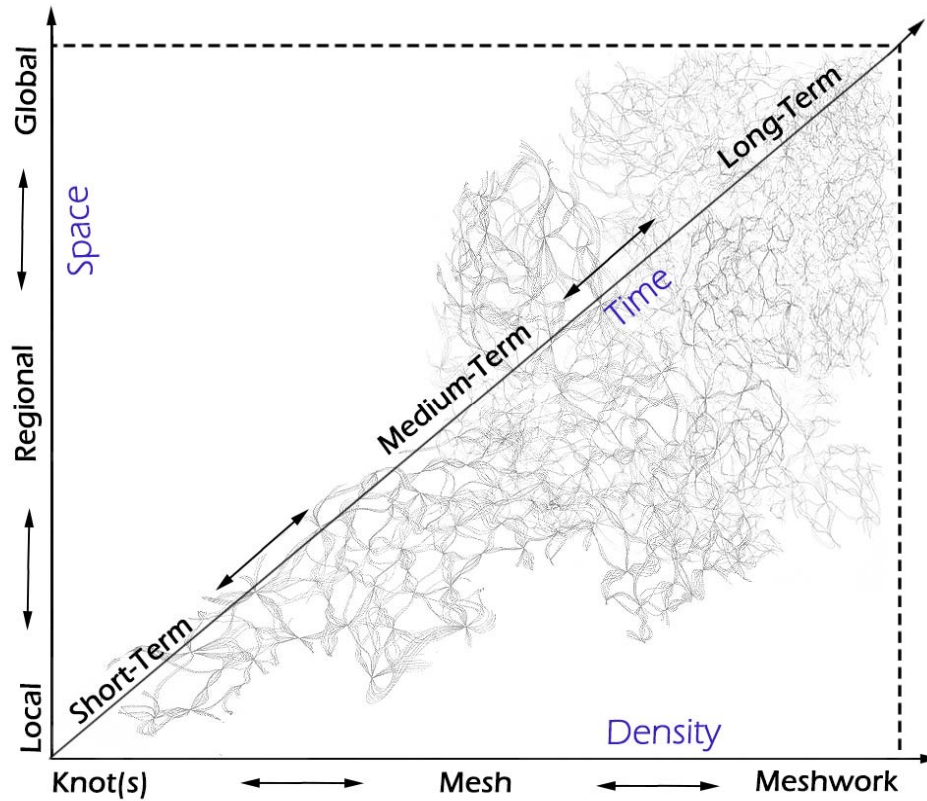


Fig. 2.1. The diagram shows the densities of entanglements of humans and things through space-time. Entanglements may increase in density with the passage of time, but their density is not necessarily contingent on their extent in space. New entanglements can form at any point in time and space, as the meshwork is frayed. The arrows show recursion, where the long-term and large-scale processes and meshwork(s) can impact new local events of knotting, and vice-versa. Thus, seemingly paradoxically, the global can also become nested within the local.

As has already been discussed, “symmetrical archaeology” or as it has been more recently termed, the “new materialisms” (Coole and Frost 2010), has sprung up within the “ontological turn” in archaeology with the intention of bringing things other-than-human to equal footing with humans (Olsen 2003, 2010; Olsen and Witmore 2015; Olsen

et al. 2012; Shanks 2007; Webmoor and Witmore 2008; Witmore 2014).⁷ Symmetrical archaeology draws heavily on the work of philosopher of science Bruno Latour who championed breaking down the dualism of humans and non-humans, making the two categories co-equals or co-actants. Latour advocated for a democratic, horizontal and flat ontology (Latour 1993). I have argued above that a symmetrical analytical approach to things and humans in archaeology is fundamental since it correctly challenges longstanding practices of treating things merely as representations of or conduits to hidden meaning. Analytical symmetry, however, is quite different from relational symmetry. Whereas at times in prehistory humans had the “upper hand” over things, in more recent human history the tide has changed as dependency crept in and the “sticky entrapments” created by things in fact made things influential and dominant in human-thing relations (Hodder 2014b: 27–30). The reality is that humans and things do not always operate on equal or symmetrical relational footing—humans can become enthralled, entrapped and obliged to become part of the “lives” of things. It follows that human-thing relations can be asymmetrical and we can become addicted and subservient to things (Harman 2014). Entanglements are therefore not only empowering, productive and beneficial but also disempowering, destructive and violently unequal as they assume

⁷ To Hodder (2012: 219), even though ideas, smells, glances, sounds and thoughts are things, they must be translated into durable form or have material consequences to become parts of entanglements and create dependency. This is debatable.

different natures when viewed from different social positions and in relation to differing interests (Hodder 2012: 214).

Densities of entanglements

The Actor Network Theory (ANT) of Latour (1993, 2005) has been widely applied and criticized as regards its usefulness in accurately representing and analyzing the complexity of social interactions (Mol 2010). One ANT critic has been Ingold (2007: 80–82; 2008; 2011: 85) who argues that life does not occur in a series of interconnected nodes, as often represented in ANT, but rather upon trails *along* which life is lived. Ingold's alternative idea of the *meshwork*, based on Lefebvre's (1991: 117) "meshwork" and Deleuze and Guattari's (2004: 290) "rhizome," is born from an organic lifeworld where relationality between humans and things (including all forms of other-than-humans) is not bounded in nodes connected by lines but rather occurs, again, *along* lines. As Ingold (2011: 87, 70) explains, "If these lines are relations they are relations not between but along," and he further adds that "things *are* their relations." In this way, while looking at Figure 2.1, the lives of humans radiate outward along multiple trails issuing from a source, through space and time, becoming tangled in knots with the lifelines of other persons and the itineraries of things. Summised succinctly by Ingold (2011: 71), "Organisms [including non-living things] and persons, then, are not so much nodes in a network as knots in a tissue of knots, whose constituent strands, as they become tied up with other strands, in other knots, comprise the meshwork." Therefore (as seen in Fig. 2.1), human lives are perceived as radiating from a center in the manner of an asterisk or a fungal mycelium (Ingold 2011a:

87; Latour 2005: 177; Pauketat 2013: 51–52). The outer edges of these tangled knots and meshes are not bounded, as these entities are not bounded in themselves; rather the knots are frayed and open, constantly “raveling here and unravelling there,” “trailing innumerable loose ends at the periphery,” and “groping towards an entanglement with other lines, in other knots” (Ingold 2011a: 71, 85, 2013: 132, 2015: 13–17, 22–25; Lefebvre 1991: 118).

To relate these concepts to this dissertation’s objective of studying changes in entanglements through the three scales of space (local, regional and supra-regional) and time (short-, medium-, and long-term), three dimensions of entanglements will be discussed regarding their quantity and complexity (Fig. 2.1) (Hodder 2012: 177; 216). Every entanglement begins with a knot. Knots of entanglement are the foundational elements of meshes and the meshwork. Knots are as Ingold (2013: 132) defines them, “places where many lines of becoming are drawn tightly together,” where—for the purposes of this study—the lines of things and humans interlace tightly to later splay and tangle anew or fray and reach a dead-end. Knots occur during events (short-term time). Because of the tautness of the entrapments produced by these knots, humans and things are caught up in relationships of enabling dependence and constraining dependency (Hodder 2012: 97). The events that create knots can be as simple as a ship captain purchasing a ceramic punch bowl in a British port, anyone inheriting an heirloom, or someone eating a meal and subsequently discarding fish or cow bones.

Meshes, then, are groupings of knots where the density of entanglements increases (Fig. 2.1). Meshes can involve small groups of people related by kinship, task or practice, usually within localized spatial contexts. A tight example of a small mesh are the seafarers onboard a ship, principally related through their seafaring occupation and confinement in space, inside their limited universe of available material things whether they be a hammock, a hogshead of salted peas or a bible. Larger meshes can grow to include the entanglements of many people and can involve specific social groups defined by relations of production, class, gender, ethnicity, religion, and the itineraries of many things weaving in and out as well as within and between these groups. Meshes may be local but can also be supra-local spanning colonies, islands and regions. Moreover, most meshes are created by chains or series of events (during the medium-term timescale) that may occur in the span of various months, years or even decades. Thus, meshes are a product of the practice of everyday life with its habitual actions, but also actions involving innovation and change (Robin 2013). As shall be discussed in the following section of this chapter, in order to identify meshes in the archaeological record, they must be fleshed out through the concept of *assemblages of practice*.

Finally, the meshwork (Ingold 2011a) is the entire skein of entanglements composed of a multiplicity of meshes and countless knots of humans and things, fraying and entwining in all directions (Fig. 2.1). The entire meshwork in its complexity can generally only be perceived and studied from the time perspective of the long term. Styles

change (Deetz 1996: 89–124), technological advances alter everyday life, empires rise and fall, philosophy and science push aside religion and begin to percolate into society at large, and the effects of mercantilism and capitalism infiltrate people’s lives directly or indirectly. The meshwork absorbs the local, regional and global spatial scales within its vast structure, bringing to light how change in the cores and peripheral parts of entanglements occurs through time (Hodder 2012: 109). Knots of humans and things created during specific events in the lifetimes of people contribute in one way or another to the creation of the entire meshwork. Yet, recursively, the meshwork affects the creation of new knotting events between humans and things on the local, regional and global spatial scales, often nested within “situated globalities” (Blok 2010: 509).

In this dissertation I am focusing on a 256-year period of meshwork, specifically on those entanglements within its enormous skein that are knotted with salt from the Venezuelan Caribbean. This dissertation will treat the seafarers and things in the Venezuelan Caribbean which were entangled by salt, examining those aspects that are quantifiable and measurable to a certain degree, namely: their density, size, and extent in time and space. In the following section I explain my approach to the qualitative aspects of entanglements, viz. how they entrap people into relations of dependence and dependency, whether the entanglements are strong or weak, how these entanglements change through time, and how such changes can be identified archaeologically (Hodder 2012: 107). However, because the abstract concept of *entanglement* must be made

analytically accessible to and operational by archaeologists, I now turn to putting flesh on the idea by discussing *itineraries of things* and *assemblages of practice*.

THEORETICAL FRAMEWORK II: FLESHING OUT ENTANGLEMENTS

Itineraries of things

The study of object biographies and their social lives came to the fore of anthropology in the 1986 seminal volume *The Social Life of Things* edited by Arjun Appadurai. The key theoretical contributions in this volume by Igor Kopytoff (1986) and Appadurai (1986), opened the way for numerous subsequent anthropological studies of the social lives and life cycles of objects (Keane 1997; Hoskins 1998; MacKenzie 1991; N. Thomas 1991).⁸ This approach was also swiftly adopted by archaeologists (Fontijn 2002; Gosden and Marshall 1999; Joy 2009; Meskell 2004; Renfrew 1986; Tilley 1996, 1999; J. Thomas 1996, 1999). The biographical approach to objects posits that not only do they possess mere *use-lives* but also *life-histories* as they are “born”, move between people, and change throughout their existence. By doing so they accumulate histories and biographies much as humans do (Gosden and Marshall 1999: 170, 174; Tringham 1995: 98). The central idea of object biographies “is that, as people and objects gather time, movement and change, they are constantly transformed, and these transformations of person and object are tied up with each other” (Gosden and Marshall 1999: 169).

⁸ For an excellent essay on the history of anthropological approaches to objects and their biographies see Hoskins 2006.

Recently, it has been proposed that the term “itinerary” is more neutral than “biography” which endows non-animate objects with the perceived qualities of self-interpretive human life (Fontijn 2013: 192; Hahn and Weiss 2013; Joyce 2012a: 124, 2012b; Joyce and Gillespie 2015: 11–12). Like humans, nevertheless, things do not necessarily feature linear life-histories; they can have simultaneous itineraries that run concurrently as they become relationally knotted with the lifelines and itineraries of other persons and things. These itineraries can extend over a series of human lifetimes (for example in the case of heirlooms) (Hahn and Weiss 2013; Hodder 2012: 5; Joy 2009: 543). Clearly, many things from the past persist within relational human-thing entanglements, changing hands, itinerating indefinitely inside the frames, cases and drawers of museums (Domínguez Rubio 2016; Fontijn 2013: 186) or acting as analogues to chronotopes in the form of a temporally-charged buildings *in* the landscape (Bakhtin 1981: 84–85; Ingold 1993: 169). Moreover, solid, material things are often reused, re-mended, reconstituted and reassembled into new and often hybrid things: copper kettle spouts can be refashioned into smoking pipes, wine bottles washed and used to store water (or their glass knapped to make flakes), and old cracked pots can be mended with copper wire to be used once more (Hodder 2012: 13; Silliman 2009: 213). Since things are only gatherings of matter in motion, they can therefore become some-*thing* else. These qualities that many things possess also mean that they play a large part in the unravelling of linear time including retarding, accelerating, or layering it. Thus, in addition to possessing biographies

or itineraries, things can also be seen as constituting palimpsests (Hodder 2012: 98; Lucas 2005: 117; Pauketat 2013).

I contend that the term *object*, as in for example ‘object biography,’ is inadequate and limiting within the field of archaeology. As has been discussed previously, *object* is a problematic term and concept towing considerable philosophical baggage. For this reason, the term *object itinerary* is replaced here with the term *itineraries of things*. First, the static and inert nature of the word *objects* stands uneasily (frankly, in opposition) to the reality that they itinerate—that they are dynamic and vibrant. A thing has a “pastness” (Holtorf 2009: 37), a perdurance that, in contrast to the simple notion of an object’s antiquity (“How far back does it go?”), extends along lines through both time and space (Ingold 2013: 81–82). Mike Anusas and Ingold argue that “we can think of the inhabited world not as a layout of interconnected *objects* but as a tapestry of interwoven *lines*” (2013: 66). Things shorn of lines atrophy and collapse “in on themselves; lineless, they reduce to ‘objects’” (Ingold 2015: 16). It thus follows that objects simply cannot have itineraries; things, however, extend lines. It is by these very lines of itineration that things can entangle in meaningful relationships with other things and the lifelines of humans. It should follow, then, that if things accumulate histories over time, and we are drawn into their lives and temporalities (Hodder 2012), the relational entanglement between people and things may be revealed by tracing the trajectories of their lines; in other words, by tracing the itineraries of things.

An approach to the itineraries of things, however, does not presume that things are constantly in physical motion (Joyce and Gillespie 2015: 11–12), whether they be a shoe buckle fastened to a sailor’s leather shoe or a wooden keg of aged rum in the hold of a sloop. Rather, things may experience protracted periods of pronounced stasis, as is the case with many archaeological artifacts we find in the ground. This physical stasis, however, does not always correlate with stasis in the raw materials themselves (Ingold 2007b, 2012). Bones in the ground may decay and disintegrate into acidic soil, an iron sword in the sand can become unrecognizably disfigured by oxidation through the centuries, and taphonomic processes and bioturbation can greatly reorganize material things within a stratigraphic profile. Even though the physical movement of such things is not visible to us, it nonetheless occurs and forms part of the itineraries of things. In addition, things offer a further category not limited to that of object. As mentioned previously, this dissertation will also embrace the itineraries of substances, things an empty glass bottle or a once unbroken pot contained, like rum and lobsouse—things that have now altogether disappeared, but the evidence for which can still be reconstructed through the documentary record. Casks of brandy, kegs of butter and linen breeches leave few to no archaeological signatures but can be retrieved from textual sources. Their itineraries through space and time can thus be preliminarily retraced.

The itineraries of things, albeit fragmented and incomplete, can be retraced through the archaeological study of material things themselves. In historical archaeology,

some scholars (Beaudry 2006; Loren and Beaudry 2006; White and Beaudry 2008; among others) have successfully explored and applied the approach to object biographies. The biographical approach has also recently been merged with that of auto-ethnography and has been termed telling “object stories” in which artifact lives are turned into narrative (Brown et al. 2015: 21; Law Pezzarossi 2015; Vitelli 2015). An approach to itineraries, quite similar to that which I propose in this section, has been recently explored in the edited 2015 volume *Things in Motion: Object Itineraries in Anthropological Practice*, edited by Rosemary Joyce and Susan Gillespie. The historical archaeological contribution to this volume by Jonathan R. Walz (2015) showcases how the historical archaeological toolkit of multiple and independent evidentiary sources can retrace such itineraries to great effect.

Historical archaeology is especially well-placed to undertake the task of tracing the itineraries of material things because things can be re-linked to their historical itineraries of ownership and use. We can trace their movements in and out of regimes of meaning, value, and power by way of documentary sources. One way to flesh out the concept of entanglement in archaeology is to trace the itineraries of excavated things by way of documentary evidence, observing how they knot with the lives of humans as they move through time and space. This dissertation will juxtapose independent sources of documentary evidence such as ship inventories, victualling lists, business letters, port records and logbooks as well as historical and comparative archaeological information on

the provenance and chronology of artifacts. Evidence can also be gleaned from oral histories and spoken narratives (Walz 2015), although not in this dissertation as its timespan extends beyond the reach of such evidentiary sources. Tracing the itineraries of things also opens up the possibility of not only inferring their movements, but also discovering where and how people moved, where they acquired things, and what they did with them subsequently.

The concept of the itineraries of things will first be employed in Chapter 3 to explore the movements and entanglements of salt through three spatial scales. In subsequent chapters, whenever the documentary evidence is sufficient, the itineraries (provenance and subsequent mobilities) of the material things—e.g. punch bowls, teapots or a bag of green tea—from seafarer campsites beside Venezuelan island saltpans will be discussed. Examples of traced itineraries will be those of small, colorful and fragile English delft punch bowls found on the Venezuelan island of La Tortuga. One such trendy bowl might have been acquired by an 18th-century sea captain in a Bristol shop, then carefully stored in a wooden sea chest aboard a New England schooner; later raised aloft with great fanfare for the admiration of thirsty salt-workers on the parched tropical island; then accidentally broken and finally, cracked or in pieces, discarded in the sand. Such exercises in “telling a story” (Joyce 2006: 61–64) through the creative use of the “archaeological imagination” (Shanks 2012) offer a view into the creation of knots of entanglement on a timescale as small as a series of specific events yet on a supra-regional

spatial scale as vast as that of the Atlantic world. Proceeding in this manner will speak to those portions of the Research Questions related primarily to space and time in the short term—how things and humans were entangled in space whether locally or supra-locally at any given point in time. However, tracing the itineraries of things is only the first step towards the goal of reconstructing larger *assemblages of practice* which are composed of vibrant things entangled with living human communities of the past. I now turn to addressing how *assemblages of practice* can be reconstructed through historical archaeology and how changes in these assemblages may occur with the passage of time.

Assemblages of practice

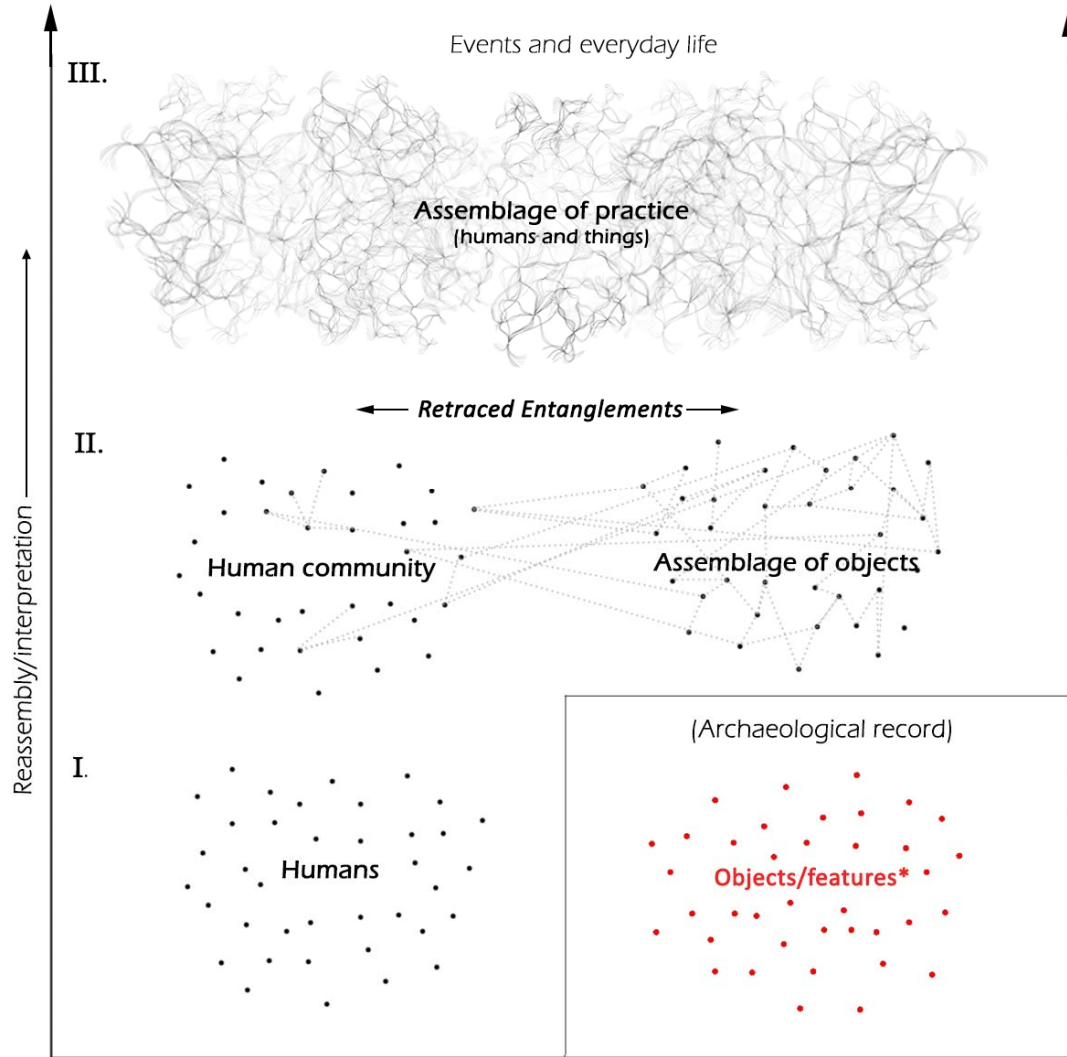
The smallest timescale at which knots of entanglement occur is that of the event. One way to connect a past event, or series of events, and the archaeological record is via the concept of assemblage which owes much of its development to French philosophers Gilles Deleuze and Félix Guattari (2004). More recently, philosophers Manuel DeLanda (2006: 12–16) and Jane Bennett (2010: 23–24) have built upon their ideas to propose assemblage theory. Assemblages and assemblage theory have in their turn been adopted in recent years by archaeologists Christopher Fowler (2013a, 2013b), Gavin Lucas (2012, 2013), and Johan Normark (2006, 2010), each with their own theoretical and methodological particularities (van Vliet 2015). Lucas (2013: 375) proposes that assemblages are “collectives or systems of usually familiar entities (which include humans, pots, arrowheads etc.) that cohere in stronger or weaker ways and for longer or shorter

durations.”⁹ I largely adhere to this definition, stressing that assemblages are not merely artificially cobbled-together lifeless bits and pieces, but rather dynamic conjunctions of corresponding things entangled through human practice (Hodder 2012; Ingold 2015, 154–158; 2011b, 90–94).

Events are the catalysts of assemblages, which in material terms can be thought of as the way in which things “come together and disperse at specific times and places.” It follows that “every object [thing] needs to be seen as a product of an event(s)” (Aldred and Lucas 2010: 191). Few such assemblages, however, leave archaeological traces. Yet as archaeologists “we must be able to situate these elements within an archaeologically discernible set of relations”, these “relations” being the entanglements between the individual humans and human communities of the past and the material things we recover (Aldred and Lucas 2010: 191) (Fig. 2.2). The reconstruction of these relations must begin with the material things themselves as Hodder (2016: 10) proposes: “If everything is relational, mixed, heterogeneous, messy, then analysis must proceed in a bottom-up way, refusing to consider things out of their contexts, always building up from the daily practices of everyday life and the mundane fixes that people find themselves in.” As archaeologists, we first observe inert objects of study in the excavation trench. We then

⁹ This concept of “assemblage” and therefore “assemblages of practice” that I will be referring to should not be confused with the more popular and largely untheorized use of the term “assemblage” in archaeology which typically has been used to refer to either a collection of associated objects clustered on the basis of their depositional or spatial context (e.g. a surface assemblage) or as a grouping of one type or category of object found within a site or an area (e.g. a zooarchaeological assemblage). For further discussion of this distinction, see Lucas 2012: 193–198.

Reassembling Assemblages of Practice



*What archaeologists recover through excavation.

Fig. 2.2. (I.) A historical archaeologist begins with objects and features excavated in the archaeological record and recovered or surveyed or both on the surface, whether the items be teapot sherds or a stone wall. The humans of the past that interacted with these now static objects and features must be largely inferred from documentary evidence and oral histories (II.). Then the historical archaeologist seeks to retrace the entanglements between objects, re-entangling them into assemblages of (still largely static) objects through contextual archaeological interpretation and documentary and oral historical evidence. Human communities must be largely reconstructed through documentary and oral historical evidence. (III.) The human community and the assemblage of objects is then reassembled by retracing the entanglements of practice in which things and humans corresponded in everyday life.

temporally *reassemble* them into interconnected assemblages of objects through contextual in situ associations—in the ground itself—as well as organize them into intra-site associations with other objects (Fig. 2.2) (Hodder 1986). Next comes the possibility, by using the historical archaeological “toolkit,” of *reassembling* assemblages of objects by means of juxtaposing independent lines of documentary evidence. These can include visual evidence (paintings, engravings, drawings, etc.), ethnography, oral history, and continuities of tradition into the present (Beaudry and Symonds 2010: xiii–xiv; Wilkie 2009: 338). For this reason, when I have recovered porcelain tea bowls as well as English delft saucers and teapots in an insular site by a saltpan and at the same time have acquired documentary evidence for the presence of green tea at that same site, I can then proceed to reassemble these separate things into a relational assemblage of tea-related objects.¹⁰

Reassembling assemblages of objects, however, is by no means the goal and end result of this dissertation. Assemblages of objects reassembled by archaeologists are merely relational associations between objects; they are in fact a bricolage of “joined up... agglutinative accretions” that form an “and ... and ... and” net of connections (Ingold 2015: 23, 154). Moreover, these assemblages are artificially and temporarily severed from the past individuals and communities which, through their practices, engaged with things (see above), not objects. Assemblages of objects are therefore only interpretive steps midway

¹⁰ I propose that network analysis, although not employed in this dissertation, is an especially powerful tool for exploring relations between things and reassembling past assemblages of objects (Hodder and Mol 2015; Knappett 2010, 2011, 2013). These networks of interconnected nodes, however, must not be the end product of such explorations as they are rigid and static and do not represent the reality of a world in flux (Ingold 2008). They must be reinserted into the vibrant social milieu of past human practice whereby the nodes give way to human lifelines and the itineraries of things.

toward *assemblages of practice* (Fig. 2.2). Practice theory has developed from the works of sociologists and anthropologists Pierre Bourdieu (1977), Sherry Ortner (1984) and Marshall Sahlins (1985), as well as Anthony Giddens (theory of structuration) (1979). Practice theory took up the challenge of bridging the opposition of structure and agency by means of its central idea, namely, that people “enact, embody and re-present traditions [structures] in ways that continuously alter those traditions [structures];” those ways being practices or “people’s actions and representations” (Pauketat 2001: 74, 79; Ortner 2006). Practice-based or historical-processual models have been used effectively in approaching the past, especially in the work of archaeologists Timothy Pauketat (2001) and Rosemary Joyce (2008; Joyce and Lopipardo 2005), as well as in Stephen Silliman’s work (2001, 2009) in historical archaeology. The concept of *communities of practice* applied in recent years to archaeology has also highlighted the *situatedness* of everyday learning in communities dedicated to particular practices (e.g. pot-making, weaving, banking, etc.) (Mills 2016; Sassaman and Rudolphi 2001).¹¹ These archaeological approaches are also concerned with events and everyday life as they are manifested in material patterns of practice (Gilmore and O’Donoughue 2012: 15). Practices do not always leave notable material traces in the archaeological record, yet I argue they can be discovered by retracing entanglements of things and humans as well as by reassembling inert assemblages of objects into vibrant assemblages of human-thing practice (Fig. 2.2).

¹¹ The original approach to *communities of practice*, however, largely elides material things as participants in these communities, a notable unbalance that my concept of *assemblages of practice* addresses (although see Roddick and Stahl 2016a for newer more integrative approaches to the first concept).

Historical archaeologist Mary Beaudry has in recent years explored the concept of “ensembles of practice” or “assemblages of practice” to describe the complex association of humans and things involved in foodways practices in 18th- and 19th-century North America. She advocates looking beyond archaeological collections composed only of reassembled objects:

We need to view an archaeological collection not just in terms of what fits back together literally and can be mended and included in a vessel count, but also to discover what fits back together in terms of practices and to attempt to comprehend what the intended outcomes of various practices might have been. This requires considering more than just the individual artifact or artifact type used, but attempting to reconstruct, for want of a better phrase, “assemblages of practice,” or perhaps, “ensembles of practice” (Beaudry 2013: 187).

In my conception, an assemblage of practice is a mesh of human-thing entanglements that correspond in stronger or weaker ways (developing relations of dependence and dependency) and for longer or shorter durations during events and in the practice of everyday life.¹² It follows that as with events, everyday life and practice can be inferred or interpreted from the archaeological record. As Stephen Silliman posits, “objects are constituents and proxies of practice” (Silliman 2009: 216). I would argue that although archaeologically recoverable material things (not objects) are certainly constituents of practice—since assemblages of practice are composed of human-thing entanglements—a thing cannot be a proxy for practice by itself, bereft of its relational entanglements with humans and with other things other-than-human.

¹² My concept of an assemblage of practice owes part of its inspiration to Ingold’s *taskscape*, but seeks to shift emphasis away from its constraining definition of a *task* to focus instead on *practice* (Ingold 1993: 158). For a historical archaeological application of the concept of *taskscape* see Antczak et al. 2015.

Assemblages of practice are not cobbled together from individual entities as if in a “cosmic bricolage” (Ingold 2014: 232). Rather, they are composed of meshes of lines where the relations between things are based on correspondence, which means they are sympathetically “with,” not additively “and” in nature (Ingold 2015: 23).¹³ Correspondence is therefore central to assemblages of practice as it constitutes the “dynamic in-between-ness of sympathetic relations” rather than the “static between-ness of articulation” (Ingold 2015: 148). The vibrant entanglement of humans and things within assemblages of practice also produces properties that often exceed their components (DeLanda 2006: 5; Witmore 2014: 207); or rather, their ingredients (see Ingold 2014: 232). Assemblages of practice are therefore theaters of correspondence. As shall be explored in Chapter 5, assemblages of practice on saltpans synergistically entangled such disparate things as humans, their tools and the structures they erected on the saltpans with the rhythms of the microorganisms, the chemical compounds, the tides, and the clouds in the practice of salt cultivation. In this way assemblages of practice deliberately blur the “conventional boundary between culture and nature, so that both ecologies and societies can, together and independently, be assemblages”, thereby dissolving pervasive Cartesian dualisms (Thomas 2015: 1294).

Assemblages of practice also entangle affective fields and the sensuous aspects of human everyday life (Harris and Sørensen 2010: 150–151). Entanglements are not only

¹³ Ingold (2015: 23–24) argues that the term *assemblage* irreconcilably entails cobbled together nodes and lines in a network rather than sympathetically entangled lines in a mesh. He thus proposed to put aside *assemblages* and instead take up the term *correspondences* (Ingold 2015: 23–24, 154–158). I propose that changing the terminology in this way can result in confusion, and argue that the term *assemblage* need not be discarded as assemblages of practice precisely embrace Ingold’s *correspondences* of lines.

knots of humans and material things. They also involve immaterial things such as ideas, thoughts, emotions, desires and sensory perceptions (Hodder 2016: 9). The practices of everyday life produce affective relations. The events of the past were “ ‘total events’ that engage[d] all the senses: sight, sound, smell, taste, touch” (Beaudry 2013: 185; Harris and Sørensen 2010: 150). It is important here to note that the human sensorium with its five distinct senses (among which sight [Thomas 2008] and hearing are considered the most important) is an Aristotelian construct and part and parcel of the Western Cartesian worldview, whereas sensuous experience is in reality always synesthetic and inter-sensorial (Hamilakis 2011: 210, 2013: 410). There has been a concerted effort in recent years to stress not only the importance of emotion and the senses in archaeology, but also how these can be studied (Day 2013; Fahlander and Kjellström 2010; Fleisher and Norman 2016; Hamilakis 2011, 2013; Harris and Sørensen 2010; Pellini et al. 2015; Loren 2008; Tarlow 2012; Mills 2014). I propose that part of reassembling assemblages of practice involves the reassembling—where possible—of emotion and sensorial perception. This must, however, be done with great caution to avoid the common pitfalls of reading contemporary emotions back into pasts where they were felt differently, if at all; and misunderstanding the historical context of emotions (ahistoricism) (Fleisher and Norman 2016: 4; Hamilakis 2011: 2008). However, the oftentimes rich contextual sources of historical information available to archaeologists makes accessing emotion in the more recent past attainable. Past emotion will appear in Chapter 3, Part I, in discussion of a song composed by a Dutch sailor upon the violent death of his comrades at the hands of the Spaniards on the La Tortuga saltpan in 1638. Although emotion is exceedingly difficult

to elicit from material remains alone, sensory experience is itself material in the sense that it “requires materiality in order to be activated” (Hamilakis 2011: 209). The assemblages of practice treated in this dissertation will include such sensory realities as the raspy sound of a wooden rake being scraped over a dry crust of salt on a saltpan, the smell of char-grilled porgies roasting over a fire pit, and the pain thousands of sandflies inflicted on the skin of salt-raking seafarers.

Returning to entanglements and to reiterate, assemblages of practice relationally knot humans and things for shorter or longer durations and create relations of dependence and dependency. Even though they express correspondences between human lifelines and the itineraries of things, these assemblages do not always prove helpful and enabling to humans. To Hodder (2012: 213), structure is produced by the knotting and subsequent entrapping of humans and things in stronger or weaker entanglements establishing relations of enabling dependence or constraining dependency or both. I argue that examining assemblages of practice has the potential to elucidate both types of entanglements because “the locus of agency is always a human-nonhuman working group (Bennett 2010: xvii).

Therefore, I aim at reassembling the assemblages of practice formed by the knots of human-thing entanglements (Fig. 2.2). Assemblages of practice, whether they involve a group of captains sharing punch at the same place every year, seafarers at work on a certain saltpan at a given moment, or a small garrison of Dutch mercenary musketeers defending that saltpan, all involve entanglements with things and various relations of dependence and dependency. How these assemblages of practice create change in

structures can be likened to a rock thrown into a pond. Some ripples quickly fade from sight while others of greater amplitude may exert transformative change on distant shores (Anderson 2015: 223). At the core of such change are entanglements between humans and things because “the conjunction of temporalities from anywhere within entanglements can produce events that elicit response and change” (Hodder 2012: 160). Consequently, entanglements transcend timescales as they enable humans. But in so doing they also pull people further into new relations of dependence and dependency. It is important to underscore that entanglements begin as practical and everyday events of knotting. As these entanglements become denser, however, it is hypothesized that not only does change accelerate; entrapment does as well. Or as Hodder puts these results, “one is entrapment [...] the other is the opportunity for change that is created by greater linking” (Hodder 2012: 177). It is these changes that I will be exploring through the diachronic comparison of assemblages of practice.

In contrast to Fowler (2013a: 53–63) who argues that assemblages can become increasingly larger (I reduce such assemblages to their constituent entanglements and term these denser and larger entanglements meshes and the meshwork [Fig. 2.1]), I maintain that they persist as principally local phenomena bounded by an event or series of events in time. Delimiting time in the past, nonetheless, as indicated above, is an enormously difficult task for archaeologists. Due to obdurate limitations constraining final resolution of available evidence (archaeological, documentary, oral historical, etc.), this dissertation will not, for the most part, treat events of a day or a week with their accompanying material residues. Instead I will examine assemblages of practice

associated with series of events, such as annual visits by seafarers to the Venezuelan insular saltpans, stretching over decades. Things—whether artifacts like ceramic plates and glass bottles, features such as walls and postholes, or even organic remains like shells and fish bones— are the portals into once dynamic assemblages of practice entangling human lifelines and itineraries of things. I am aware that no matter the extent of our efforts to present the archaeological record as a sinuous flow of constitutive events, it will always remain a fragmentary “palimpsest of residues of such events” (Lucas 2012: 183). My intention, nonetheless, is to recover those lost and broken entanglements that can be recovered, reconstruct assemblages of objects, and reinsert such entanglements and assemblages into the dynamic correspondence of past human-thing assemblages of practice. It is, after all, the “coalescence of eventful objects [things] into assemblages [that] allows us to view the practices that operated within a landscape” (Aldred and Lucas 2010: 197).

In summary, the notion of *assemblages of practice* charted in this chapter is an effort to flesh out and provide methodological rigor to recent explorations of entanglement by Hodder through broadening the promising concept of assemblage (Fowler 2013a, 2013b; Lucas 2012, 2013; Normark 2006, 2010; J. Thomas 2015: 1293–1294). As has been suggested by Joyce (2012: 128–129), the archaeological concept of materiality, developed in the 1990s and 2000s, must be reparsed into itineraries and assemblages. The concept of itineraries will help trace the mobilities and entanglements of things and people through space and time. The concept of assemblages will assist in exploring how human lifelines knot and entangle with the itineraries of things, both

material and nonmaterial, through the situated practices of everyday life. We now turn to insular Venezuela to learn what tracing the historical itineraries of salt cultivation and gathering reveals about the entanglements of “the white gold.”

CHAPTER 3 | PART I

ITINERARIES OF SEA SALT: LA TORTUGA WITHIN THE ATLANTIC WORLD

INTRODUCING ITINERARIES OF SEA SALT

Sea salt is the linchpin of this dissertation. This hard crystal of the sea—labeled white gold—was once a tremendously valuable commodity. As opposed to its now esteemed flavor-enhancing characteristic, it was sea salt’s unique preserving capability that set seafaring multitudes navigating vast expanses of sea and ocean to fill the holds of their ships with this economically vital substance. Salt itself made such long voyages possible, preserving foodstuffs far beyond their natural edibility spans. It enabled European exploration of “remote” regions and set far-flung trading ventures in motion. It expanded the boundaries of increasingly covetous early modern empires.

This chapter will trace the multifarious historical itineraries of sea salt extracted from the saltpans on the Venezuelan islands of La Tortuga (Part I) and Cayo Sal (Part II). It will also explore the entanglements of this salt on local, regional and supra-regional spatial scales. The two worksites will be geographically situated whereupon the two occupational phases of each saltpan will be discussed to seek out patterns, similarities and differences in the factors attracting seafarers from near and far to the Venezuelan Caribbean.

I commence by introducing the island of La Tortuga and exploring its two occupational phases at the Punta Salinas saltpan site (TR/S)—first that of the Dutch

(1624–1638) and second that of the Anglo-Americans (1638–1781). Analyzing primary and secondary documentary sources permits reconstructing the itineraries of the salt moved by seafarers arriving on La Tortuga during these two time periods. Part I of this chapter concludes with a discussion of the spatial scale of the itineraries of the salt extracted from the La Tortuga saltpan. Also addressed is what these reveal about the larger structural social, economic and political factors in play. Finally, I will treat the entanglements of seafarers and salt during both the Dutch and Anglo-American salt enterprises on the island throughout the 157 years of their existence.

LA TORTUGA ISLAND

La Tortuga is the largest island of the *Dependencias Federales de Venezuela* (Venezuelan Federal Dependencies). It lies some 100 km northwest of the present-day port city of Puerto la Cruz (Fig. 3.1.1) and is approximately 24 km long by 10 km wide (Fig. 3.1.2). The insular group of La Tortuga also includes three smaller islands located at its northwestern end: Tortuguillo del Este, Tortuguillo del Oeste and Cayo Herradura. La Tortuga is not an oceanic island but part of the continental shelf and is predominantly flat, with the exception of a calcareous terrace running along the southern coast rising to nearly 45 m above sea level (Maloney and Macsotay 1967:



Fig. 3.1.1. Contemporary political map of the Caribbean indicating the location of La Tortuga Island in red.



Fig. 3.1.2. Map of La Tortuga Island indicating the adjacent islands, main bays and points, location of brackish pools of rainwater and the Punta Salinas saltpan highlighted in red.

267). It is semi-arid largely supporting xeric scrubs, bushes and cacti sparsely dotting its untamed landscape. Feral rabbits and wild goats (now rarely seen) are the only mammals on the island. They were most probably introduced in the early years of the Spanish colonization of South America (Pimentel 1578 in María 1979: 331–351; Wright and van Dam 1934: 121).

Only a few coastal areas feature mangrove communities, one of which borders the Los Mogotes Lagoon on the island's southeastern corner. There, the mangroves embrace the saltpan and the adjacent Punta Salinas archaeological site (Fig. 3.1.2). The island has no permanent sources of fresh water. There are only a few seasonal pools of brackish foul-smelling rainwater at Boca de Palo on the southern coast, at Punta Tamarindo on the northwestern coast, and between the sites known as "El Olivito" and "El Mangle"¹⁴ on the northern coast (de Gel 1945: 25) (Fig. 3.1.2, Fig. 3.1.3).

La Tortuga presents various natural harbors. Carenero Bay on the island's southeastern shore derives its name from the past practice of *carenaje*, that is, careening ships on the large spit of sand at the entrance to the bay.¹⁵ Another natural port is found at Punta Delgada, also known as Punta del Este, at the northeastern tip of the island. On

¹⁴ This last location has not been verified since the visit of an expeditionary team of the Sociedad de Ciencias Naturales La Salle in 1945.

¹⁵ Careening on the Venezuelan islands probably involved the complicated operation of laying the vessel on its side on a sand bank and scrubbing, cleaning and re-tarring its hull whose wood was primarily in danger of being consumed by shipworms abounding in the tropical waters of the Caribbean (Dampier 1699: 52; Goetlet 1986). So pressing was the danger of shipworms that in 1696 the Governor of Barbados remarked "If ships in these seas are not careened every five of six months they are in danger of having their bottoms eaten out by worms." (Russell 1903b [1695]: 474).

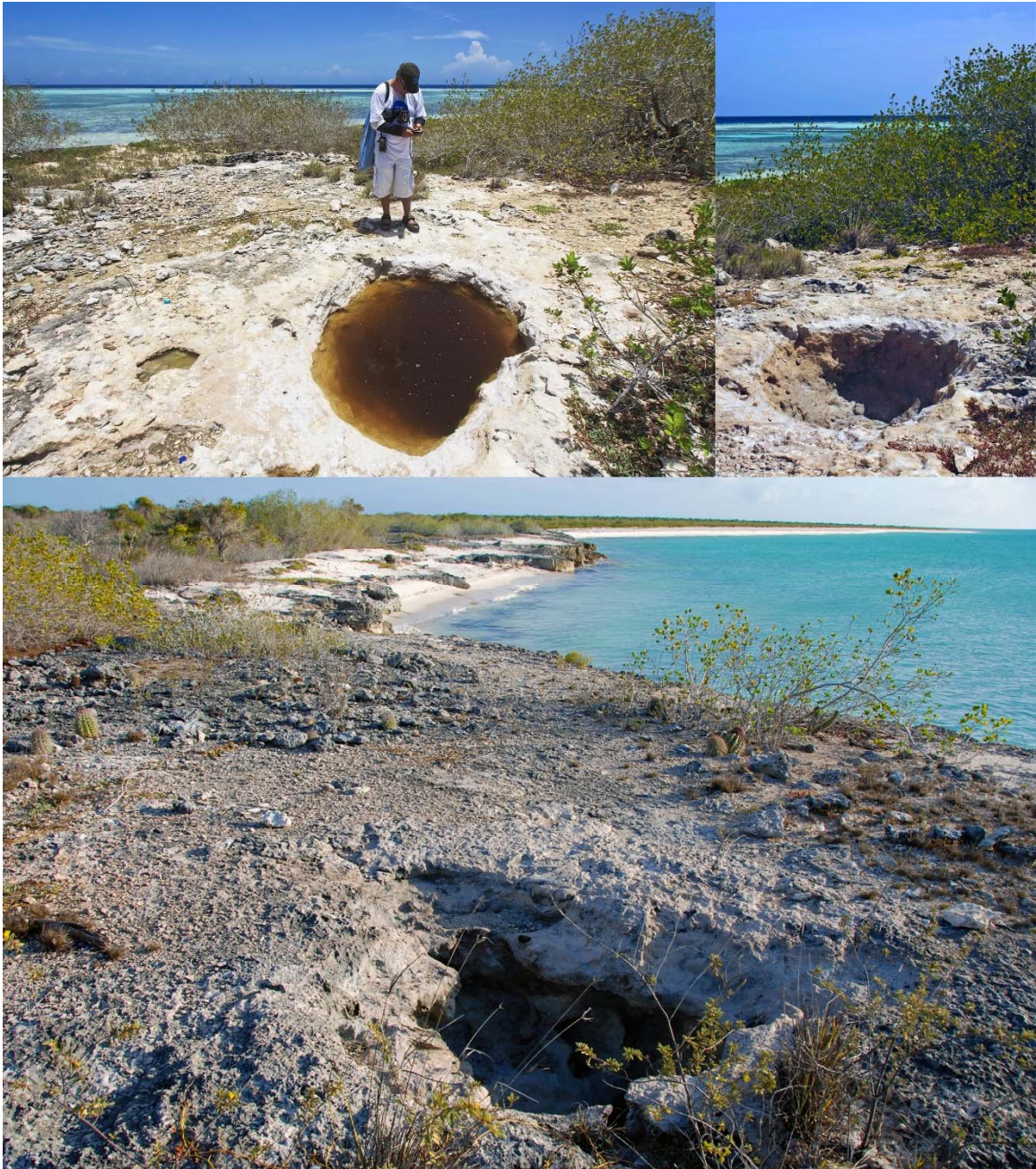


Fig. 3.1.3. Brackish pool of rainwater at Boca de Palo after rains and in the middle of dry season (*top*), as well as at Punta Tamarindo during the dry season (*bottom*). (*Top* photos by José Voglar, *bottom* by Marlena Antczak).

the western end, there is a good anchorage between the islands Tortuguillo del Este and Tortuguillo del Oeste that would have offered protection for larger ships (Blunt and Blunt 1847: 448). Finally, the Bay of Punta Salinas¹⁶ at the southeastern end of the island lies in front of the saltpan. Punta Salinas, however, is by no means an ideal anchorage. Some seventeenth-century authors such as Dutch geographer Johannes de Laet warned his countrymen that “the bay being little appropriate [for anchoring], these [ships] can dock [there] only with difficulty” (De Laet 1988: 1224–25). Others in the eighteenth century refer to the harbor as merely “tolerable” (Tuckey 1815: 286). Today, La Tortuga fishermen use this harbor only the night before departing for the mainland at dawn. Necessary know-how and experience is needed to anchor a ship or boat safely here as the currents are treacherous, seafloor descent is steep, and protection from large oceanic waves is limited. Initial underwater explorations of the bay in 2009 and 2010 coupled with aerial and satellite imagery revealed thick and extensive allochthonous stone ballast cover on the harbor floor resulting from centuries of salt loading at the adjacent saltpan (José Miguel Pérez Gómez and Jorge García, pers. comm. 2013). Clearly, most of those doing the loading were not overly concerned about the harbor’s safety.

Amerindians from the Venezuelan central coast frequented the island in pre-colonial times for its turtles, fish, and other natural resources including, in all probability, solar sea salt.¹⁷ La Tortuga allegedly received its name from the large numbers of sea

¹⁶ Punta Salinas is also known as Punta de la Salina.

¹⁷ There are no ethnohistorical references and there is no direct archaeological evidence to demonstrate that these Amerindians from the Central Coast of Venezuela knew of the preserving qualities of salt and exploited it for curing their provisions.

turtles that, to this day, come ashore nocturnally from May to October to lay their eggs on the sandy beaches (Antczak and Antczak 2006: 360; Dupouy 1945: 11). This Venezuelan island is not to be confused with Tortuga Island¹⁸ situated off the northern coast of Haiti, nor with the islands of the Dry Tortugas located at the eastern end of the Florida Keys. It is uncertain which of the earliest Spanish explorers of the New World first sighted the island because neither Alonso de Ojeda and Juan de la Cosa in 1499 nor Pedro Alonso Niño and Cristóbal Guerra, who arrived on Ojedas's heels, mention seeing the island (Dupouy 1945: 8–9). I would suggest the question is inconsequential to the history of La Tortuga. Because of La Tortuga's proximity to the mainland coast of Venezuela, it is probable that along with other Venezuelan islands such as La Blanquilla, La Orchila, and the Los Roques and Las Aves archipelagoes, the island was spotted on any number of late 15th- and early 16th-century European voyages (Fig. 3.1.4).

By circa 1537, La Tortuga was already sufficiently well-known to Spanish and probably other European sailors, to be featured, along with Los Roques (called *Roca*) and the other Venezuelan islands, in the secret Spanish navigational treatise *Espejo de Navegantes* [Mariners' Mirror]¹⁹ meant to aid in piloting Spanish ships

¹⁸ The Haitian Tortuga Island was also known to the English simply as Tortuga or as Association Island for a short time in the 1630s when it received the backing of the English Providence Island Company (Latimer 2009: 84).

¹⁹ Alonso de Chaves, Chapter VIII, Real Academia de la Historia [España], Signatura: 9/2791.

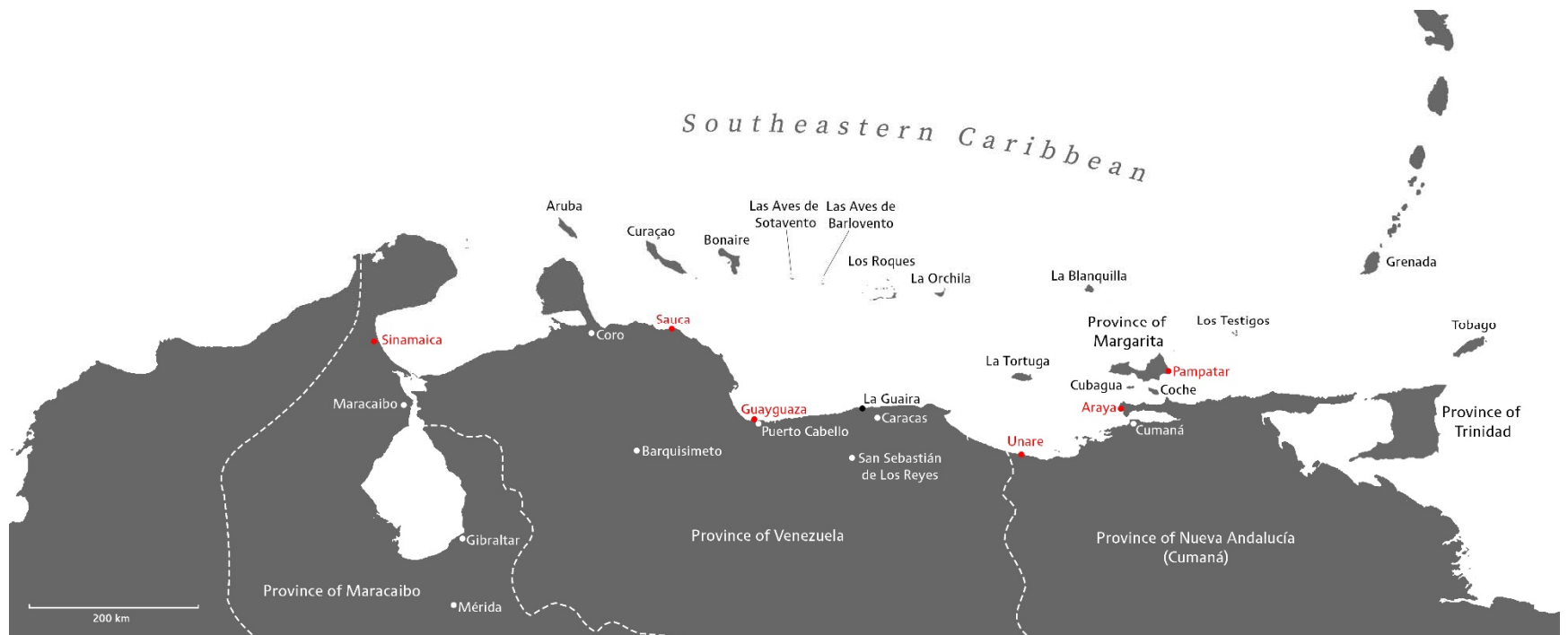


Fig. 3.1.4. Map of the Southeastern Caribbean region in the late 17th century indicating main islands and archipelagos, Spanish provinces, one insular and principal mainland saltpans in red.

in the Americas. Sometime from 1570 to 1575 the Spanish seafarer Antonio Barbudo published his memoirs and described La Tortuga as a sterile, unutilized and uninhabited island; Los Roques and Las Aves were low lying and dangerous islands, he wrote, where many people drowned (Arellano Moreno 1964: 91–92). In 1565, English privateer John Hawkins entered the Caribbean, sailed by the archipelago of Los Testigos, anchored at Margarita and then navigated between the mainland and La Tortuga which he described as a “very low Island” (Hakluyt 1599: 508). Juan de Pimentel, who was the Governor and Captain General of the Province of Venezuela from 1576 to 1583, was the first to comment in 1578, in his *Relación Geográfica y Descripción de la Provincia de Caracas y Gobernación de Venezuela* [Geographic Report and Description of the Province of Caracas and the Governorship of Venezuela] (1919: 36), that La Tortuga provided “much a sal y muy buena” [a lot of very good salt]. He wrote the following regarding the Venezuelan islands:

Las yslas que ay frontero de esta costa están como quince e veinte leguas dentro en la mar. Son la orchila e isla de aves, los roques, la tortuga y otras dos que están más al poniente. Son yslas baxas... en una e dos islas destas ay mucha sal... en todas los naturales van a ellas en los meses de bonanças por sal y pescado y por tortugas [sic] [punctuation is mine]. [The islands that are facing this coast are located about 15 or 20 leagues into the sea. These are La Orchila and the Aves Island (i.e. Archipelagos of Las Aves), Los Roques, La Tortuga and two others that are further to the west. They are low islands and not large... and on one or two of them there is a lot of salt... the natives go to these islands during the months of fair seas for salt and fish, and for turtles]²⁰ (Pimentel 1919: 39).

La Tortuga was, however, only sporadically exploited by the Spanish even though it was initially included as a part of the territory of the German Klein Venedig (Little Venice) after

²⁰ All translations are mine unless otherwise indicated.

the *Capitulación de los Welser* [Welser Capitulation] on March 27, 1528²¹, and later, after the territory returned under Spanish rule in 1546, formed part of the Province of Venezuela (Antczak and Antczak 2015: 4–5). In a second *capitulación* at the Audiencia of Santo Domingo dated June 30, 1586, La Tortuga was incorporated into the governorship of the neighboring Province of Nueva Andalucía along with the islands of Coche, Cubagua, Grenada and Trinidad (Fig. 3.1.4) (Caulín 1966: 292).

Eleven years after Pimentel's *Relación*, in September of 1589, by order of the Governor of the Province of Venezuela don Diego Osorio, the islands of Venezuela formally became possessions of the Spanish Crown. During the act of possession “[el] Gobernador tomo posesion en todas las dichas islas de Aves, Urchilla, Roques e la Tortuga... en todas las dichas islas se dijo misa y se pusieron cruces en ellas y se hicieron otros actos de posesion en nombre del Rey Nuestro Señor” [the Governor took possession of all these islands of Las Aves, La Orchila, Los Roques and La Tortuga... on all these islands Mass was celebrated and crucifixes were placed as well as other acts of possession that were carried out in name of the King Our Lord] (Ojer 1983: 523). During these official visits and acts on the islands, the Spaniards, in one canoe and three piraguas and headed by

²¹ An agreement between the Spanish Governor of Santa Marta and the two German capitulants of the Province of Venezuela, Jerónimo Saylor (Hieronymus Sailer) and Enrique Eynguer (Heinrich Ehinger), signed in Madrid a few days later stated the following:

El asiento y capitulación... sobre la población y conquista de las tierras y provincias que comienzan desde el Cabo de la Vela o del fin de los límites y términos de la dicha gobernación de Santa Marta, hasta Maracapana el este, oeste, norte y sur, de la una mar a la otra, con todas las islas que están en aquella costa. [the *asiento* and capitulation...of the populating and conquest of the lands and provinces that begin at the Cabo de la Vela or at the end of the limits and terminus of the said Governorship of Santa Marta. Towards Maracapana to the east, west, north and south, from one sea to the other, together with all of the islands that are on that coast] (Morón 1971: 51).

Captain Sancho del Villar, were assisted by “indios auxiliares” [auxiliary Indians] who probably served not only as paddlers but also as guides, drawing on their ancestral knowledge of the currents and winds on the passage to the islands as well as of the dangers that might await them there (Ojer 1983: 523; Antczak and Antczak 2006: 70–71).

Even though they were officially in possession of the islands of the Southeastern Caribbean (except for the ABC islands after 1634), the inhabitants of the Spanish mainland provinces of Maracaibo, Venezuela, Nueva Andalucía (later Cumaná), and Margarita largely disregarded La Tortuga’s salt-producing internal lagoons throughout the colonial period. They had an abundant supply of salt in the west from the saltpans of Sinamaica and Sauca to those of Guayguaza and Borburata, and in the east utilized the great salinas of Araya and the saltpan of Pampatar on Margarita Island (Fig. 3.1.4) (María 1966: 338; Ojer 1962; Sarabia Viejo 1995). Only an isolated mention in 1593 by the attorney general of the Province of Venezuela, Nicolas de Peñalosa, mentions salt being exported from La Tortuga and Araya to San Sebastián de Los Reyes, south of Caracas, where it was presumably either given to cattle, used to salt beef, or to cure hides (Vila 1980: 172). Far from frequenting it for salt, European sailors of the early colonial period probably stopped in at semi-arid La Tortuga on their way from the Lesser Antilles to the Dutch Antilles and the coast of Caracas in order to onload fresh supplies of turtle meat or re-supply with water from its brackish and seasonal pools or both for their further voyages.²²

²² One instance of catching turtles on La Tortuga comes from the account of the shipwrecked Englishman, Henry Pitman, who during his several-month-long stay on the island in 1687 survived almost exclusively on the meat of these large sea reptiles (Pitman 1903: 456–458). He also collected drinking water from the brackish pools. In another account, the Arab priest of the Chaldean Church, Elias Al-Musili, mentions that at La Tortuga in 1675 the fleet he was with encountered a small French vessel at La Tortuga in 1675. After

THE DUTCH QUEST FOR SALT

Dutch herring and Venezuelan salt (1595–1623)

On the cusp between the 16th and 17th centuries as the La Tortuga saltpan lay unutilized by the Spanish, the Dutch, impelled by a pressing need for sodium chloride to sustain their principal trade of salted herring to the Baltic countries, began to make incursions into the Venezuelan Caribbean. Dutch perseverance and industriousness in the perilous salt exploitation business led them on a Venezuelan saltpan-hopping quest that would claim dozens of lives and produce thousands of tons of salt. Dutch activity on the Venezuelan coast and islands would eventually climax in an armed confrontation with the Spanish and their Amerindian allies on La Tortuga in 1638 and at the mouth of the Unare River in 1640 (Antczak et al. 2015).²³

The Dutch quest for salt in the Venezuelan Caribbean began rather unassumingly when on the first of June 1595, two merchant ships entered the bay of Cumaná, the capital of the Spanish Province of Nueva Andalucía (today northeast Venezuela) (Fig. 3.1.4) (van Ittersum 2007: 74). Spanish provision vessels rarely appeared in this part of the New World, so Dutch merchants eagerly strove to meet desperate local demand for European goods. These seafarers formed part of the first wave of Dutch traders that headed straight from the Low Countries to the Caribbean (Castillo Hidalgo 2005: 476).

In 1598, in an effort to destroy the lucrative maritime trade comprising the economic backbone of the rebellious Dutch Republic, the Spanish Crown banned Dutch

intimidating it, its crew abandoned ship fleeing to the island. Upon capturing the vessel, Al-Musili and his companions found it was loaded with salted turtles (Al-Musili 2003: 18–19).

²³ Parts of this section on the Dutch enterprise on La Tortuga was published earlier in (Antczak et al. 2015).

ships and goods from all Iberian ports (Israel 1990: 56). This measure drastically affected the Dutch supply of salt from the saline estuaries adjacent to the ports of Setubál and Aveiro in Portugal (Antunes 2008; Klooster 2003). Salt and salt-cured herring were fundamental products of the Dutch Mother Trade, i.e. the highly lucrative commerce with the Baltic countries that provided the Netherlands with grain from Prussia, Poland and eastern Europe traded in turn for wine and salt from the Mediterranean and timber from Norway (Israel 1990: 18–24; Prak 2009: 95). In response to these Spanish measures, Dutch trade in the Caribbean, especially in the waters off the Province of Venezuela, was restructured from the ‘rich’ to the ‘bulk’ type and focused on salt (Wallerstein 1980: 48).²⁴

In 1599, merchants from West Frisian towns (mainly Hoorn, Enkhuizen and Medemblik [Bartels 2009]) sent the first specialized salt fleet—lightly armed and unescorted by warships and soldiers—to the large salina at Punta Araya (on the Peninsula of Araya) located 5 km north of Cumaná (Fig. 3.1.4) (Hulsman 2009: 54; Israel 1990: 63). From 1600 to 1605, a total of 565 salt-carrying and 51 other fluit ships (*fluitschepen*, or wide-bellied Dutch cargo vessels with two or three masts) sailed from the Low Countries to Araya and Cumaná. By 1604 the Spanish Council of the Indies had already studied ways to curb the Dutch *zoutvaerders* (salt carriers) including flooding or poisoning the Punta Araya salina. In the end, a strictly military option was selected (Varela Marcos 1980: 88–126; Vila 1980: 174). Eighteen warships of the ad hoc *Armada de Barlovento* sailed from

²⁴ The ‘rich’ trade consisted of goods small in size and weight (e.g. spices) in proportion to their value and necessitated armed merchantmen. Salt and timber were ‘bulk’ trade products where speed and efficiency was of the essence and, thus, armed convoys were unnecessary at least in the initial phases of the trade as was the case at Araya.

Lisbon in 1605 and on November 6 attacked the intruders in Araya. Thirteen Dutch ships, one French and three English vessels were captured by the Spanish. Dutch infrastructure on the salina and installations adjacent to it were destroyed. English and French interloping seafarers were taken prisoner. Dozens of Dutchmen were executed in situ or sent to Cartagena to row in the galleys (Varela Marcos 1980: 202–210).²⁵

The Araya suppression proved effective for the Spanish; *zoutvaerder* activity on the Venezuelan coast substantially diminished. During the Twelve Years' Truce (1609–1621), Iberian saltpans were reopened to Dutch merchants so pressure on the Caribbean saltpans stopped (Sluiter 1942: 35). However, in 1621 the States-General of the Low Countries granted the Charter of the Dutch West India Company (WIC hereafter) which, in addition to salt harvest at Punta Araya, permitted Caribbean profit-making from captured Spanish ships (with cargoes) as well as “informal commerce” (smuggling in the view of the Spanish Crown) with Spanish colonists (van Hoboken 1960; Boxer 1970: 25; Schmidt 2001: 194; Schnurmann 2003: 479–481).

In September 1621, *zoutvaarders* resumed operations at Araya (Israel 2002: 138). In January 1622, a large convoy of 27 vessels offloaded 500 arquebusiers and musketeers at the salina and two provisional forts were erected (Felice Cardot 1982: 113–114). But the Spanish response to this provocation was fast in coming. By the end of 1622, an imposing Spanish fort was strategically constructed at the entrance to the salina (Vázquez de Espinosa 1987 [1629]: 74). On November 28, a large fleet of 43 Hoorn-led

²⁵ The cruelty of the Spanish was vividly and emphatically described by Velius 1740 in Goslinga 1971, 123–24.

zoutvaerders, and another 41 vessels in January 1623 were easily repelled by the fort's defenses (Felice Cardot 1982: 115–117; Goslinga 1971: 127–128). By the end of 1623 a total of 106 *zoutvaerder* vessels had returned to the Dutch Republic with empty holds, 70 of them from Hoorn (Israel 2002: 138; Felice Cardot 1982: 118; Goslinga 1971: 128). In Europe, the Dutch salt business received another blow when in May of 1623 the *zoutvaerders* were again driven out of Europe's most valuable saltpans in Portugal (Israel 1977: 53).

Once the salina of Araya became effectively closed to foreign interlopers, the inconspicuous Island of La Tortuga came to the fore of Dutch interest. During Dutch campaigns to control Portuguese Brazil in 1624–1625, the WIC hired salt carriers to transport troops and military supplies from the Low Countries. Once in the Americas, fluit captains were encouraged to load salt on their return voyage so as not to arrive home empty-handed (Goslinga 1971: 129). Thus, after completing their military assignment in Brazil many fluits would enter the Caribbean to load salt from the islands of Curaçao and Bonaire facing no resistance from the small local populations of Spanish colonists and indigenous people (Rogozinski 2000: 65–66). At least three Dutch ships returned to the Netherlands with salt from Bonaire in 1624 (Goslinga 1971: 129). En route to Curaçao and Bonaire, the fluits were obliged to navigate close to La Tortuga. Therefore it is no surprise documentary sources establish that from September to October 1624, a squadron of ships returning from Brazil was loading salt at La Tortuga's saltpan (Acuña 1934 [1633]: 203). In 1625, two captains declared: "Being in the service of WIC, have sailed to Bahia [in Brazil]

and the isle of Tortuga to load salt [...].” They also added that numerous other captains were doing their utmost to obtain salt from the island (Meerhout 1625 [June 9]).

The Spanish still did not realize that La Tortuga would become a new and dangerous threat to their overseas interests. In 1626, the military engineer Juan Bautista Antonelli (the Younger) visited the island and reported that the saltpan had an approximate circumference of some 3,000 paces (c. 4,000 m). However, he noted that even during the best season for harvesting salt it was impossible to load more than three or four ships a year (Antonelli 1934 [1633]: 136–140).²⁶ Therefore, it was clear that the saltpan was not promising for large-scale exploitation. Antonelli seriously underestimated Dutch skill in increasing the size and productivity of La Tortuga’s saltpan as would soon become evident.

In the meantime, the crisis of constricted supply of salt in Europe was worsening for the Dutch. Salt prices rose drastically in Amsterdam markets from 1628 to 1630 while the WIC found itself hard-pressed to assure a reliable supply of salt from the Caribbean (Goslinga 1971: 129; see also van Deursen 1991: 46). All Dutch attention focused on the islands of La Tortuga, Curaçao, Aruba, Bonaire, and Sint Maarten. The Dutch were also attracted to saltpans located in the depression of the Unare River on the mainland coast some 115 km west of the Araya salina (Fig. 3.1.4).²⁷ By 1631, the Dutch had established a small colony at Great Bay in Sint Maarten dedicated mainly to salt harvesting from the

²⁶ It is clear from the 1626 report that the written document was accompanied by a sketch of the saltpan rendered in colors that is currently lost.

²⁷ Documentary sources attest to the interconnections between the Dutch seafarers who were targeting the saltpans of La Tortuga and Unare and the outposts at Curaçao, Sint Maarten, and others (Wright and van Dam 1934: 139, 146, 148).

Great Salt Pond on the island's southern coast (Wright and van Dam 1934: 161–178). However, the Spanish reconquered Sint Maarten two years later and Benito Arias Montano, the recently appointed governor of the Province of Nueva Andalucía, expelled the Dutch from the Unare saltpans leaving the WIC without these two sources of salt (Rogoziński 2000: 65–66; Felice Cardot 1982: 193–196). Once more the determined Dutch fought back and in January 1634 the WIC took Curaçao as well as Aruba and Bonaire two years later. Although Curaçao and Bonaire had natural saltpans, their yields had been overestimated by WIC advisers (Rogoziński 2000: 66; Goslinga 1971: 136). In the meantime, Dutch *zoutvaerders* built a fort protected by 16 cannons and 80 musketeers at Unare. Despite all these measures, an ambush led by Juan de Orpín drove them from the Unare saltpan once again in 1640 (Vila 1975: 341–145). Still, it was the saltpan on La Tortuga that featured as the focal point of the Dutch salt merchants' ambitions In the turbulent decade of the 1630s.

The La Tortuga Enterprise (1624–1638)

In 1626 when Juan Bautista Antonelli (the Younger) reported to the Spanish authorities that the La Tortuga saltpan was not productive enough to sustain large-scale salt production, the Dutch *zoutvaerders* were visiting the site only sporadically (Antonelli 1934 [1633]: 136–140). But by the early 1630s their visits had become much more regular and the complexity of their saltworks had increased significantly. The report of the Spanish shipwrecked seaman Seledón de Suasola offers a detailed account of the volume of salt harvested and loaded by the Dutch at La Tortuga's saltpan from June to August of 1630 (de Suasola 1934 [1630]: 127–128). Suasola counted c. 1,000 heaps of salt piled on the

saltpan, the result of eight days' work by the crewmembers of but one fluit which appeared a week before six others arrived. The heaps contained 10,940 wheelbarrows of salt averaging 50.5 kg each and totalling c. 553 metric tons of salt.

But the Spaniards did not permit the Dutch to extract salt from under their noses undisturbed. In 1630, Captain Benito Arias Montano, accompanied by 24 Spaniards and 50 Amerindians, set out to raid the Dutch interlopers on La Tortuga. However, arriving on the island, he found the saltpan completely abandoned (Arias Montano 1934 [1632]: 130).²⁸ A year later Arias Montano, acting on behalf of the Governor and Captain of the Province of Caracas, returned with 40 Spanish soldiers and 114 Amerindians in six piraguas (canoes).²⁹ Two Dutch fluits anchored by the saltpan with c. 152 metric tons of salt were overtaken and the installations on land were seized (Arias Montano 1934 [1632]: 131; Marley 1998: 118). The resilient Dutch, however, constructed an earthen platform uniting the jetty with the shore the following year of 1632, equipping it with “tres cañoneras , que la vna mira al surjidero de los nauios y otra a las Salinas y la otra al monte, por donde se les acometio el año pasado” [three cannon emplacements, one facing the ship anchorage, another the saltpan and the other the hill from where they {the Dutch} were attacked last year] (Núñez Meleán 1934 [1632]: 133).³⁰ In October of 1632 Jacinto de Amaya, who had accompanied Montano as a soldier in 1631, was sent

²⁸ Arias Montano financed both actions himself, donated one of the ships to the Spanish Armada and asked the King for the governorship of Caracas. He was granted the governorship of Nueva Andalucía instead, assuming it in 1633.

²⁹ The largest dugout canoe held 24 rowers (Arias Montano 1934 [1632]: 130).

³⁰ Other testimony mentions the emplacement for “gun carriages” for two or three cannons (de Amaya 1934 [1632]: 135).

back to the island. He reported that all the facilities dismantled by Montano had not only been rebuilt but also vastly improved (Núñez Meleán 1934 [1632]: 133–134). The ingenious Dutch had set up a system of pumps on the pans to aid the process of salt cultivation (de Amaya 1934 [1632]: 135). However, they had left the pumps and other facilities in place for the next harvest despite the fact they could easily be destroyed by the Spanish. In fact, soon after Amaya's visit, militias sent by the Governor of Cumaná destroyed then burned them.³¹

In July of 1633 the Governor of Margarita, Don Juan de Eulate, launched his son, Juan Alvarez, with an unknown number of Spaniards and 60 Amerindians in three piraguas against 18 Dutch fluits loading salt on La Tortuga. The Dutch were defeated; the Spanish seized one fluit, killing the captain and 17 Dutchmen (de Eulate 1932 [1633]). In September of 1633 Montano appeared again on La Tortuga, killing some Dutchmen and putting eight fluits to flight. On this occasion, Juan Bautista Antonelli (the Younger), accompanying Montano, reported that the saltpan—according to “precise measurements”—had become so transformed and artificially extended beyond its natural borders that its circumference had increased from over 3,000 paces (c. 4,000 m) in 1626 to over 7,500 paces (c. 10,000 m) (Antonelli 1934 [1633]: 137). But Antonelli had arrived on this occasion in 1633 to sabotage the enterprise through an elaborate plan to flood the saltpan, and he had the necessary work force and tools to do it.³² One hundred

³¹ A letter of Alonso Hernández de la Rosa to Francisco Núñez Meleán dated 22 October 1632 in Cumaná refers to fourteen pumps observed on La Tortuga, adding that two were brought to Cumaná together with some pine planks. The rest were burnt and dismantled in situ (Hernández de la Rosa 1933 [1632]: 136).

³² In two letters written to the King on August 2 from Cumaná (before participating in Arias Montano's defeat of the Dutch at the saltpan of Unare towards the end of August) and the second on September 15,

Cumanagoto Indians and 50 Spaniards began the work at the point in the lagoon (presumably Los Mogotes Lagoon) where the water table level reached 0.81 m to 1.09 m above the bottom of the saltpan. From there, they dug two channels to the seashore 100 m away. All men close to the beach worked in a coordinated manner to break through the last sand barriers simultaneously. The tide was high; seawater entered and inundated the entire lagoon. Antonelli calculated that even at low tide the saltpan would remain covered by roughly a meter of water and that with the larger lunar tides, water would enter and leave the lagoon through the channels “con tanta violencia como dos rios caudalosos” [with the violence of two mighty rivers] (Antonelli 1934 [1633]: 139). Due to this periodic scouring effect, the channels would perpetuate themselves as indeed they have up to the present day. In November of the same year, a new attack led by Arias Montano—newly appointed Governor of the Province of Nueva Andalucía—left an unspecified number of Dutch interlopers dead (Arias Montano 1934 [1633]: 146–147). The documents relating all three of these skirmishes in 1633 do not mention any Dutch defensive structures or cannons on land.

The year 1633 was adverse for the *zoutvaerders* not only on La Tortuga because in June the Dutch were expelled from Sint Maarten (Felice Cardot 1982: 194) and in August from Unare (Felice Cardot 1982: 166–167). The unrelenting and forceful Arias Montano excelled in all these expulsions. In light of these setbacks, in the meeting of April 6, 1634, the WIC “approved the takeover of the island of Curaçao in order to have a place

1633 (while waiting to go to La Tortuga with Arias Montano), Antonelli revealed his firm intention to flood the La Tortuga saltpan (Gasparini 2007: 234–235).

to acquire from there salt, wood and other products” (Hamelberg 1901: 18–19). However, despite substantial efforts dedicated to harvesting salt on Curaçao, the Dutch could barely supply local demand with the result (Wright and van Dam 1934: 204, 219, 225, 229, 236–237).

After directing the flooding of the Dutch saltpan in 1633, Antonelli suspected that the next Dutch seafarers to arrive would attempt to close the channels. He argued though that even if they managed to do so, their endeavour would be unproductive in the short term as the inundated saltpan would need at least six months to drain. His prediction was more than correct. The large Dutch saltpan was permanently converted into the much more biotic Los Mogotes Lagoon, the bottom of which filled with a thick mat of organic detritus. Antonelli further suggested that the governors of Margarita and Cumaná keep systematic watch to prevent the Dutch from closing the channels to the sea. If closed anyway, he recommended that six piraguas with 50 Amerindians and 20 Spaniards come to reopen them with two days’ work. Failing to maintain the inundation of the La Tortuga saltpan, Antonelli concluded, would be to waste all previous efforts to dislodge (successfully) the Dutch interlopers from Araya and Sint Maarten. At the same time, he warned that drastic measures had to be taken against the Dutch harvesting salt once again at Unare (Antonelli 1934 [1633]: 137). Meanwhile, Antonelli’s flooding operation, as noted, achieved its goal. Reports by Montano’s periodic emissaries show that large-scale Dutch exploitation ceased, not to be reattempted until a brief and violent event in

1638.³³ That episode and its aftermath resulted in new anthropogenic modifications to the saltpan and adjacent areas.

In 1638, the Dutch were back on La Tortuga and in early May of that year the Spanish were informed that eight fluits were loading salt. Soon after, a fleet of 13 piraguas with 150 soldiers and 150 Amerindian archers and rowers led by Arias Montano left Cumaná. Navigating along the leeward coast of La Tortuga, the fleet arrived unnoticed at the island's western point (Arias Montano 1934 [1638]: 140–141). But there, the attackers were spotted by a Dutch lookout ship whose crew then sailed hastily towards Punta Salinas Bay to alert their companions. Shortly thereafter, three small reconnaissance boats appeared on the windward side of the island. Arias Montano seized one while the remaining two escaped.³⁴ His new prisoners provided information about the Dutch forces on the saltpan. The next day, before dawn, Arias Montano and his companions lay in ambush just 200 paces east of the wooden fort that the Dutch had erected by the saltpan. The Spanish and their Amerindian allies attacked at sunrise. They stormed the fort (according to Montano himself) for four hours under cannon and musket fire from both the fort and the Dutch fluits.³⁵ At around 10 o'clock, before the sun's heat became

³³ After the skirmish in 1633 and until 1638, Arias Montano was sending spies to La Tortuga every four months. As late as March 1639 a few Dutch fluits approached La Tortuga, but frightened by Montano's envoy, sailed towards Cartagena (Archivo Histórico Nacional 1639).

³⁴ The data drawn from Spanish sources is confirmed by the Dutch song (Rhijnenburgh 1661). The creator of the song was apparently on board the Dutch ship King Daniel captained by Iacob Tomesz de Jongge from Medemblik which, accompanied by three boats, was fetching water at the westernmost point of La Tortuga (see Figs. 3.1.5 and 3.1.6). This ship was considered a lookout ship by the Spanish (Rhijnenburgh 1661: 7–8).

³⁵ Until this point the anonymous creator of the above-mentioned song confirms the succession of events narrated by the Spanish sources. However, he adds that the first attack of about one hour was mounted by Amerindian archers using poisoned arrows. The Dutch inside the fort fired cannons repelling the attackers causing losses among them. In the subsequent attack, some 500 to 600 [sic.!] Spaniards surrounded the



Fig. 3.1.5. Map of Dutch fort on La Tortuga under attack by Spanish and Cumanagoto Indians painted by Juan Bautista Antonelli (the Younger) in 1638 (Archivo General de Indias 1638).

unbearable, the attackers opened a breach in the wall of the fort with their axes. They entered and slaughtered the 40 men in the garrison, themselves sustaining a loss of seven soldiers and four Amerindians with 20 wounded. The following is Arias Montano's description of the Dutch defensive structure:

Era la fuerza cuadrada, hecha de tablas de media vara de grueso, y este lleno de piedras; y de veynte y un piez de alto de donde la ynfanteria peleaua, por que ocho piezas que tenia, doz en cada frente, estaban plantadas abajo en el terreno, y con una estacada al

fort making further use of the cannons ineffective. The Dutch raised the white flag and offered the besiegers all stores inside the fort in exchange for their lives. This offer was apparently accepted by the Spanish who, later, despite the verbal agreement, slaughtered the fort's defenders. Only one ship captain, Klaes Florissen from Monnickendam, his barber-surgeon, and a ship artillery master, naked and heavily injured, escaped the massacre to be rescued by their mates who had witnessed the battle from the fluits at anchor in the bay, unable to help their countrymen on land (Rhijnenburgh 1661: 12–13).

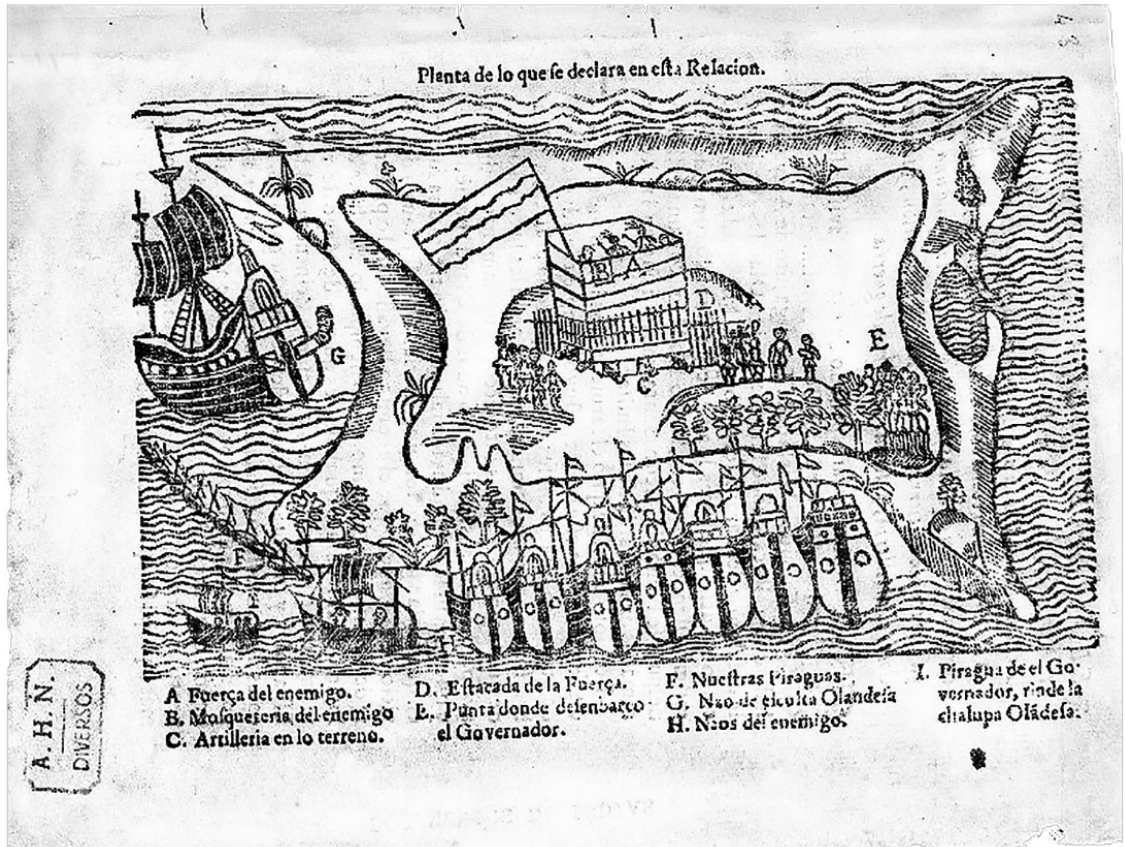


Fig. 3.1.6. La Tortuga skirmish of 1638 depicted on a map printed in Seville in 1639 (Archivo Histórico Nacional 1639).

rededor de vn estado de alto, y fuera de ella muchaz tablaz clabadaz con puyas de fierro. [The fort was a square, made with boards half a yard (c. 420 mm) thick and filled with (coral) stones; it was 21 feet high (5.84 m) from where the infantry fought; the eight cannons it had, two on each side, were planted on the ground below; and it had a stockade about one story (c. 1.95 m) high and beyond it many boards nailed with iron barbs] (Arias Montano 1934 [1638]: 141).

After the battle while the fluits hurriedly set sail and departed, Arias Montano burnt the fort and the jetty and destroyed the saltworks. Eight cannons (one of them bronze) were transported to the continent and installed in the fort at Araya. The insistent chapter of Dutch salt extraction on La Tortuga had finally come to an end.

A map and its engraved version printed in 1639 (Archivo General de Indias 1638; Archivo Histórico Nacional 1639) are the only available iconographic windows giving onto

the events of 1638 (Figs. 3.1.5 and 3.1.6). The maker of the original map, the military engineer Juan Bautista Antonelli the Younger, presents a specific conception of space, drawing attention to the saltpan area by disproportionately oversizing it in respect to the overall size of the island. We can recognize, in the tiny brushstrokes, people vividly rendered in action. They surround a wooden fort with cannons from which musketeers fire their weapons; a flag billows in the breeze. The fluits anchored in the bay also participate in the feverish fighting. The battle by the saltpan unfolds before our eyes and indeed, affects us. We can almost hear the shouts of the Spanish and the cries of the Dutch, the thunder of the cannons and the whizzing of the musket balls. In the foreground, we see piles of salt and the abandoned saltpan.

Whereas Arias Montano's letter (1934 [1638]: 140–141) to the King of Spain is formal, succinct and heroic, the Dutch song narrating the violent events of May 8, 1638 at Tortuga Island takes us into the depths of human emotion experienced by the Dutch that day:

1. Alas! what a disaster and occasion for mourning,
Which I shall not easily forget,
Even if I live for a hundred years:
Take good note of this, mates,
Who sail to the West Indies.

2. A dark cloud, a black rain shower
Has unexpectedly turned all our pleasure
into mourning,
Where we were on the Salt Island [La Tortuga],
Working diligently and hard.

3. On the eighth of May before dawn
Unsuspecting, we sent three boats
To fetch water.
But suddenly the forces of the enemy
came secretly ashore there.

4. The captain of the ship "King David"
Looked and exclaimed:
What can we do now?
Come on men, we have to set sail
Before we're done for.

5. Our men [on the ship "King David"] raised the sail,
And threw the barrels of water overboard
In order to get away more quickly
So they [the men in the boats] came, happy and sad,
Rowing back to our ships.

6. It was as clear as daylight that
Only one of the three boats missed the chance
Going forth without fear,
Until it was too late, and they have been captured
Without any way of defending themselves.

7. A sad tiding, a great loss:
But worse was to come,
Not a day later,
After we had been keeping guard all night
In a state of panic.

8. When Apollo presented the new day,
And the fortress shot the reveil
There was a terrible commotion
The army of the enemy ran out from the woods
Like fierce animals.

9 They attacked us fiercely,
Or they stood ready,
Shooting down in the meantime
From above, with treacherous weapons:
With foul poisoned arrows.

10. This lasted for about one hour,
We gave as good as we got:
And the fortress fired cannonballs
Five to six pounds in weight, which wounded many men,
Who fell down.

11. They crept away to one side,
Which gave good cheer to our men,
And made them breathe a sigh of relief,
But immediately afterwards it came to an end,
And anxious sighs were heard.

12. The Spaniards attacked
With five or six hundred men,
Wild Indians and Moors,
Our people, who had lost their nerve,
Then lost heart.

13. They nevertheless defended themselves
Although in vain, because the army
Of the enemy advanced more strongly as time went on,
The fortress was besieged, and they were prevented
From firing their cannons anymore.

14. The terrible situation of our men,
Was heartbreaking, but we could only have compassion
We were laying there, and could not
Relieve or liberate them.

15. Their forces were small, and the fortress not free,
The enemy lay around and nearby,
Gritting their teeth fiercely,
Which grieved them deeply, because
No relief was possible from the fleet.

16. The perilous situation forced them
To raise the white flag,
And pray for their lives.
The enemy shouted - and everybody trusted
That they would be allowed to leave the fortress alive.

17. Rather than giving his life
A man prefers to give all his possessions.
Which is what our mates did.
They gave them willingly but
It was a beguiling peace.

18. The murderous heart appeared,
Seeing an opportunity for revenge,
Eager to harm us:
They started killing
And there was no mercy.

19. The tyrannical decision there and then
Was not to spare our mates,
To hack down, beat and shoot [them].
Such fierce murder after a good peace treaty
Must be saddening to you, my Lord.

20. One captain, who had been on guard that night,
And his barber-surgeon managed to free themselves,
Taking valiant risks,
And one ship's artillery master, naked and bare,
With two times six injuries.

21. So I will not sail anymore to fetch salt,
For which you pay more than for gold,
And which is difficult to acquire;
Yes, indeed, in the end you have to pay for it
With your flesh and blood.

(Rhijnenburgh 1661: 5–12).³⁶

This haunting song starkly contrasts with Montano's self-aggrandizing report to the Spanish king. Although a thorough literary analysis contrasting the two accounts remains to be done, this marvelous poetic gem not only complements the grandiosity of the victorious with the pathos of the vanquished. It underscores the rawness of the often-traumatic Dutch entanglements with their La Tortuga salt enterprise of the 1630s.

ANGLO-AMERICAN THIRST FOR SALT

Early ventures (1634–c. 1700)

All the while the Dutch were involved in bloody confrontations with the Spanish at La Tortuga, the English knew of the island and had even sporadically raked salt there. The adventurer and privateer Daniell Ellffryth, who “discovered” Providence Island (also known as Old Providence, today the Colombian Isla de Providencia) for the English Crown and founded a puritan colony there in 1631, was the first Englishman to acknowledge and describe the La Tortuga saltpan that same year:

Tartoudies is a little flatt Iland Lyeinge East & West and is from Margareta 16: Leagues, and lyeth from thence west halfe a pointe Southerley, vpon the East end of this Iland ther lyeth a great salt Pan, wher you maye Layd salte, and at the Northwest end of this Iland, ther lyeth another little Iland which hath two salt pannes in it, where you maye load salt in the drye moneths. which is March, Aprill, Maye & June (Pargellis and Butler 1944: 282).

Curiously, Ellffryth's description is also the only colonial-era document to ever mention the saltpan of Tortuguillo del Este, one of the small cays off the northwest coast of La Tortuga (Fig. 3.1.2). The earliest English mention of salt raking on La Tortuga dates to 1634 when Josiah Collins, captain of the *Long Robert* of London, was instructed by the Company

³⁶ The translation of this text from 17th-century Dutch into modern English was expertly done by Antonius Harmsen and Christopher Joby and I am very grateful for their help.

of Providence Island (1860 [1634]: 189) to, among other duties, sail to the Caribbean, “take in” salt at La Tortuga and deliver it to the colony on Old Providence. Two years later, in 1636, the *Blessing* captained by John Leicester “was ordered to sail to Providence via Tortuga Salada, where a supply of salt was to be obtained, the services of the passengers she was taking out being used in the lading” (Newton 1914: 225). It is not known for certain if either of these voyages actually loaded salt at the island. Clearly, nevertheless, La Tortuga in the 1630s was known to the English for its salt. Conveniently, the island lay on the downwind route of the voyage to Old Providence.

La Tortuga, even so, would soon no longer entice “Old World” mariners but instead the new English colonists settled on the east coast of North America and the island of Bermuda. In 1638, Captain William Peirce piloting the Salem, Massachusetts Colony, Ship *Desire*³⁷ returned home via Providence Island from a salt-raking trip to La Tortuga carrying not only salt but a fragile human cargo of slaves (Newton 1914: 260).³⁸ This voyage is the first record of captive Africans brought into New England and marks the beginning of what would later become a profitable and dehumanizing trade of large proportions (Brawley 1929: 9). This voyage was also the first Anglo-American salt-raking visit to La Tortuga, opening the door to a long-standing enterprise and a vital source of salt to the New England fisheries. More than 30 years later, in early March of 1669, the

³⁷ The *Desire*, a ship of 120 tons, was the first large vessel built in New England in 1636 at the port of Marblehead, Massachusetts. She was also one of the first to trade with the West Indies (Magra 2006: 125–126).

³⁸ It can only be speculated that the *Desire* arrived at La Tortuga after the Spanish had violently ousted the Dutch in May of 1638, since it is improbable that they would have arrived in the two months preceding the confrontation, when the Dutch had their fort erected by the saltpan (keep in mind that prior to the 1751 the new year in the British Empire began on March 25th).

Bermudian ship *Samuell's Adventure* captained by Samuel Stone set out for "Salt Tartoodoes" returning on May 10 to Bermuda with a load of salt (Lefroy 1877: 735–736). Other than these references, the documentary record remains as yet sparse regarding salt-raking visits to the island before 1670. That year the General Court of Salem ruled that the town's crucial salted fish trade could be impaired by using La Tortuga salt which left "spots upon the fish, by reason of shells and trash in it," proscribing the merchandizing of such fish (Felt 1849: 212). This ruling proves that a number of ships from New England and Bermuda were visiting La Tortuga for salt between 1638 and 1670.

In subsequent decades, not only salt rakers but notable figures such as pirate naturalist William Dampier (1699: 55–57) visited the island. The prototype for Robinson Crusoe, the shipwrecked Henry Pitman (1903 [1689]: 451–463), managed to survive on La Tortuga for three months in 1687 (Antczak and Antczak 2015). During Dampier's visit to the saltpan in 1682 it was already "much frequented... by Merchant Ships, that come thither to lade Salt" (Dampier 1699: 56). Pitman hoped to be rescued by one such coming for salt but was eventually taken off by a privateer (Pitman 1903 [1689]: 454, 462). In any case, it is clear from sources that La Tortuga was well known as a prime salt destination by the 1680s. Although larger salt pans existed on other Caribbean islands (e.g., Dutch Sint Maarten, Anguilla, St. Christopher, Curaçao, Bonaire, South Caicos, and Grand Turk and Salt Cay in the Turks and Caicos Islands), one aspect set La Tortuga apart (Huntley 1948) (Fig. 3.1.7). It was uninhabited and thus unique among salt-producing islands of the



Fig. 3.1.7. Map of the late 17th- and 18th-century Caribbean highlighting the principal salt pans of the time.

Caribbean in its complete lack of tenure rights, taxes and a local labor source (Gregory 1978: 58–64; Jarvis 2010a: 196–199).

The small fishing town of Salem and port of Marblehead were the first in New England to heavily rely on La Tortuga for their salt supply. The fisheries were the mainstay of Salem’s budding international maritime commerce of merchantable cod (caught on the Grand Banks off the New England coast) with Iberia, and refuse fish and provisions with the West Indies (Bailyn 1955: 82–85; Paine 1909: 21–40; Vickers 2007: 35–47). The first record of ships arriving to Salem from La Tortuga in the latter 17th century include those of the *Waymouth Merchant*, arriving in 1676 from what was termed “Saltitudes”, and the

ship *Sea Venture* in 1679 from “Saltatudes”³⁹ (Essex Institute 1860: 231; Essex Institute 1919: 254). In 1683, the Salem ketch *Friendship* of 33 tons, ran aground off Cape Cod on its return journey from “Saltertudes” (La Tortuga) and one of the seafarers, Nathaniel Ingersoll, drowned.⁴⁰ In early 1686 young shipmaster Jeremiah Green died on “Salt Taboodas” (also La Tortuga) in unknown circumstances (Sewall 1878: 124). The following year saw a sharp spike in salt prices in New England due to foul weather flooding the saltpan on La Tortuga and dissolving the crystallized salt:

Salt is not manufactured in this Country [New England]; it is brought from the Island of Tortilla [French name for La Tortuga]. This Year, several Vessels returned from the Islands empty, for Lack of Salt and Sugar, the Rains having laid Everything waste; and the Sea made an Entrance into the Saltworks, which dissolved the whole, To that Salt, which was worth only nine Shillings the Cask, is worth at Present fourteen; and as the Vessels are beginning to leave for the Fisheries, it may be still dearer (Anonymous 1868: 41).

Clearly, when La Tortuga’s saltpan flooded over due to the impact of a tail of a hurricane or an exceptionally early and prolonged rainy season, the New England colonies suffered greatly for want of salt.

The documentary record until 1688 is scant. It is from that year onward that the Naval Office Shipping Lists (hereafter NOSL) for Salem, Boston, and Barbados begin providing more detailed information of entries into these ports. In that year 25 ships went to La Tortuga for salt, 17 of which were registered in Boston, six in Salem and two in Charlestown (MA), with the majority of them entering Boston.⁴¹ Most of these vessels were small ketches which were the most numerous 17th-century New England merchant

³⁹ The peculiarity and importance of these different English exonyms of “Salt Tortuga” will be discussed in the next section.

⁴⁰ C.O. 33/13.

⁴¹ C.O. 5/848; C.O. 33/13. A further five Salem vessels were known to have left from Barbados to La Tortuga for salt that year (C.O. 33/13).

vessels, not only used along the North American coast but also in the regional trade with the West Indies (Paine 1909: 21–40; Vickers 2007). Five vessels were armed with cannon including the 100-ton 14-gun *Elizabeth* of Boston.⁴² In subsequent years, up until the end of the 17th century, there is evidence of only 18 ships (most out of Salem) sailing to La Tortuga, but again, given the very fragmentary documentary record, it can be safely assumed that the numbers were considerably greater. Equipping a ship for a voyage to La Tortuga often seems to have combined the efforts of multiple merchants. In 1698 the richest man in New England, Salem merchant Philip English himself the owner of 22 merchant vessels, hired by means of a charter party one-third of the 50-ton brigantine *Beginning* together with John Croad of Salem who hired the other two-thirds for a voyage to Barbados and “Saltatodos” (La Tortuga) (Essex County Notarial Records 1905: 188; Paine 1909: 24). English equipped the vessel with sundry merchandise and provisions. After hiring sailors he later found the vessel to be leaky and half-rotten which he blamed on Croad, who then passed the blame onto one George Norton (Essex Institute 1905: 188).

The legality of the initially English and later Anglo-American salt-lading voyages to La Tortuga in the 17th century was somewhat ambiguous and became a contentious topic. There was in fact no clear clause in either the 1667 or 1670 Anglo-Spanish treaties that granted the English a right to rake salt on the uninhabited island. The Commercial Treaty of 1667 launched more than three decades of friendly and flourishing mercantile relations

⁴² C.O. 5/848.

between Britain and Spain meant to counter a growing French presence in the Americas and Europe (Hertslet 1878: 25–43; McLachlan 1940: 20, 84). Article VIII of the 1770 Treaty of Madrid, however, stated that the English “shall abstain and forebear to sail and trade in the ports and havens which have fortifications, castles, magazines, or warehouses, and in all other places whatsoever possessed by the other party in the West Indies” (Hertslet 1878: 45). In September of 1713, Jeremiah Dummer (1926a [1713]: 239–240), a prominent politician and Massachusetts Bay and Connecticut agent, presented a case before Queen Anne of Britain to the effect that “Your Majesty’s subjects have ever believ’d it [La Tortuga salt] to be free and common as the ocean, it having never been inhabited nor is it capable of it, inasmuch as the whole Island is either rock or barren sand, and has no fresh water on it.” One month later he further argued that “Near 100 English sail go there [La Tortuga] yearly [an exaggeration]. The Spaniards have no occupancy there at all, and even if they have a title to the Island, we have a right to go there for trade by the Treaties of 1667, and 1670” (Dummer 1923b [1713]: 244). Dummer based Britain’s right on a literal reading of the Treaty of 1770’s Article VIII whereby the uninhabited and therefore physically-unclaimed island of La Tortuga constituted common property meaning that its salt could be freely raked by the English. To provide evidence for the continuity of English salt loading at La Tortuga and the always-uninhabited nature of the island, he appended to his case a number of declarations by English captains who had gone to the island to rake salt over the previous 50 years, one of whom declared: “saw no fort, warehouse or inhabitants there, nor do I think there ever was” (Updicke 1926 [1713]: 484). La Tortuga was never inhabited and thus, to the English, legally unclaimed

by the Spanish. The Anglo-Americans thus confidently sailed to La Tortuga to rake salt relying on the friendly commercial treaties of the late 17th century. These voyages nonetheless were not without their perils.

During the golden age of Caribbean piracy in the late 17th century, lawlessness at sea thrived. A fleet of small unarmed merchant ships heading to an uninhabited island such as La Tortuga was easy prey for maritime thieves. Ships en route to La Tortuga were harassed by all manner of pirates, privateers and corsairs throughout the 17th and 18th centuries. The earliest such encounter dates from 1683 when a New England ketch and her crew were seized by Frenchmen on La Tortuga and taken to Hispaniola, only to there be captured by the infamous Spanish pirate Juan Corso and taken to Cape Verde (Lynch 1898 [1683]: 459; Marley 2010a 85–89). In 1686 Joseph Parrott was sailing to La Tortuga from Barbados in the *Lovingland* when, in sight of the island, he was taken by three Biscayans (Basques) and put on board one. He was then placed in irons for months when the corsairs finally sold his ship (Parrott 1899 [1686]: 541). In April of 1696, six New England vessels were apparently taken at “Tartooda” (La Tortuga) by an unknown pirate; several of the Englishmen were killed (Sewall 1878: 423). A particularly colorful account comes from September 1698 while Edward Hubbard was heading in his sloop to La Tortuga. On the way, he was warned by a French ship that a large periauger⁴³ had “run away” from Martinique and might try to take them. Hubbard sighted the pirate periauger on La Tortuga and “leaving a warning in a bottle, ran away” (Hubbard 1913 [1698]: 626).

⁴³ A two-masted sailing vessel with a shallow draft.

Finally, in early 1699, 18 vessels were robbed (it is unclear if the vessels themselves were stolen) at “Salt-Tertudos” (La Tortuga) by renegade privateer Captain Hyne of New York (Clatworthy 1908 [1699]: 195; Marley 2010b: 652–653; Scrogam 1908 [1699]: 195). As can be concluded from the above documentary snippets, the sea crooks preying upon defenseless Anglo-American salt ships at La Tortuga during the golden age of piracy were a motley array of extra-imperial Anglo-American, French, Spanish and Basque rogue nationals.

Constant pirate attacks and threats led to armed escorts to La Tortuga. This was first suggested by Sir Edmund Andros (1899 [1687]: 468) during his short tenure as Governor of the Dominion of New England in 1687:

Again, some convoy is necessary for ships coming from Salt Tortugas with salt for the New England fishery, and I propose that that season should be chosen for this service, and the ships at New England appointed for it instead of lying frozen up all winter.

However, it seems that at the time no official request to the English Crown or government officials was lodged by New England merchants or governors regarding this pressing issue. The salt merchants had to manage on their own and began privately paying guard ships to accompany the early fleets to La Tortuga. It is quite possible that in part due to Andros’ insistence, the following year (1688) five armed Boston merchant vessels accompanied the salt fleet, largely composed of small unarmed New England ketches. Aside from this apparent convoy, the first official call for an armed escort to La Tortuga occurred in early February of 1695 when the Governor of Barbados, Francis Russell, consented to let the *Play*, a prize, “convoy certain ships to Salt Tortudas”—but only if the masters undertook

to man the ship (Council of Barbados 1903 [1695]: 429–430). Toward the end of March, Russell wrote to the Lords of Trade and Plantations in England:

The *Play* is gone to Salt Tortudas with a convoy, including two very good merchant ships, so that I dare say that fleet is safe. If it were lost it would almost starve this Island, for so many ships have been taken that we have had little provisions from England. These ships carry salt to New England, and by that way we are supplied with provisions. She is commanded by Captain Jackson, late midshipman in the Bristol. He is a man of very good understanding, so I doubt not his care of the fleet, as he has given such proof of his courage both by sea and land that I will answer for his not losing the King's ship for fear of broken bones (Russell 1903a [1695]: 448–449).

As is evident from Governor Russell's letter, Barbadian ships participated early on in the salt raking on La Tortuga and Barbados depended almost exclusively on New England vessels for provisioning.⁴⁴ Sending the *Play* to convoy the salt ships that year proved a necessary precaution as the fleet encountered two French privateers lurking on La Tortuga:

The *Play* is returned from Salt Tortudas. She reports that on her arrival she found two French privateers waiting there, one a sloop, the other the old Snow. She chased them, but finding that they had the advantage they waited thereabouts for some days, when, finding that the man-of-war still remained with the fleet, they left the Island. Had not the man-of-war been there, the Snow and sloop would easily have picked up some of them and prevented the rest from loading their salt to New England; and then Barbados would have had no provisions (Russell 1903b [1695]: 474).

Even though at the time England was in the Nine Year's War with France, and the French privateers were in effect legally allowed to intercept English ships, war or no war, the pressing issue of an official annual convoy for the vital New England salt fleet remained.

⁴⁴ An earlier record indicates that on April 14, 1683, Captain Edward Woodman of Barbados, entered the island carrying 60 tons of salt. The Barbados records are especially fragmentary and it is probable that many more ships from Barbados and other English West Indian islands joined in with the New England salt fleet sailing to La Tortuga toward the end of the 17th and into the 18th century (C.O. 33/14). Goslinga (1985: 205) records that in 1776 one ship from St. Eustatius arrived from La Tortuga.

Soon the acute need for a convoy would reach the Governor of the colonies of New York, Massachusetts Bay and New Hampshire, namely Richard Coot, First Earl of Bellomont. In 1699, sixteen Boston merchants petitioned Bellomont asking that Capt. Crow in the H.M.S. *Arundel* convoy their ships to “Saltertudos” (Petition 1908 [1699]: 490). British naval vessels were in short supply in the English colonies as evidenced by the complaints of Bellomont and the Governor of Barbados who could not protect their shipping from pirates such as the infamous Captain Kidd (Grey 1908 [1699]: 37; Bellomont 1908a [1699]: 486).⁴⁵ Furthermore, as Bellomont (1908a [1699]: 486) complained to the Council of Trade and Plantations, the available naval vessels, especially one sixth-rate frigate (20–28 guns and 90–160 men), did not have enough firepower to outfight a pirate ship of 30 guns and 150 men. Bellomont (1908a [1699]: 486) had secured orders from the English Admiralty to send a naval vessel to escort the salt fleets but apparently, the orders did not come from high enough in the chain of command:

Capt. Crow, who commands the frigate, tells me if I positively command him he will go [to Saltertudos], but does not think the orders sent by the Admiralty will bear him and me out in that voyage. They are not large enough. I wish there were new ones sent leaving me to my liberty to send and dispose of the two ships (at New York and here) where I think fit for the King's service. I brought orders from the Admiralty from England to send the two ships every winter to Saltertudos to convoy the ships of each place, the ship from hence also to convoy the Barbados salt-ships and that from New York those of the Leeward Islands.

Shortly thereafter, Bellomont complained to the Admiralty that the orders they had given him could have offered him more flexibility in sending the ships on duties he saw fit for the service of His Majesty. In fact, when Bellomont had left England for New England in

⁴⁵ Kidd's privateering charter was actually sponsored by Bellomont who intended him to attack the French and combat piracy. When Kidd was accused of piracy himself, he was then cunningly arrested by Bellomont and hanged (Cabell et al. 2010).

1698 the Admiralty's orders to him were to send the H.M.S. *Deptford* (a fourth-rate vessel) and the H.M.S. *Fowey* (fifth-rate) frigates every winter to La Tortuga (Bellomont 1908b [1699]: 494). Meanwhile, in 1700 Governor Grey of Barbados had arranged for a Capt. Barker to convoy the ships going to La Tortuga (Grey 1910 [1700]: 43). In April of 1700, Bellomont finally received the new order from the Admiralty, giving him the power to send two men of war stationed in New England to "Saltertudos" every winter (Bellomont 1910 [1700]: 196). And so, at the brink of the 18th century, the Saltertuda Fleet was officially born.

The golden decades (c. 1700–1781)

As the 18th century began, shipping to La Tortuga was increasingly coming out of the growing Boston which eventually became the principal New England port supplying salt ships to the Saltertuda Fleet. In time, Boston would more than double the number of arrivals from La Tortuga than from Salem and Marblehead (Figure 3.1.8). Soon many other ports of the Anglo-American Atlantic world, such as New York, Philadelphia, Newport, Piscataqua (now Portsmouth, New Hampshire), New London (Connecticut), and Bermuda, among others, joined in the salt raking on La Tortuga (Table 3.1.1).

Hundreds of news references including ship arrivals, departures, and incidents concerning La Tortuga figure in the earliest newsletters published in the New England colonies such as the *Boston News-Letter* (from April 24, 1704), the *Boston Gazette* (from December 21, 1719) and the *New England Courant* (from August 7, 1721) as well as in many other Anglo-American newspapers of the 18th century. My analysis of the eighteenth-century NOSL for Massachusetts (Boston, Salem and Marblehead), New

Number of Vessels Arriving at Anglo-American Ports from La Tortuga
(Late 17th and 18th Century)

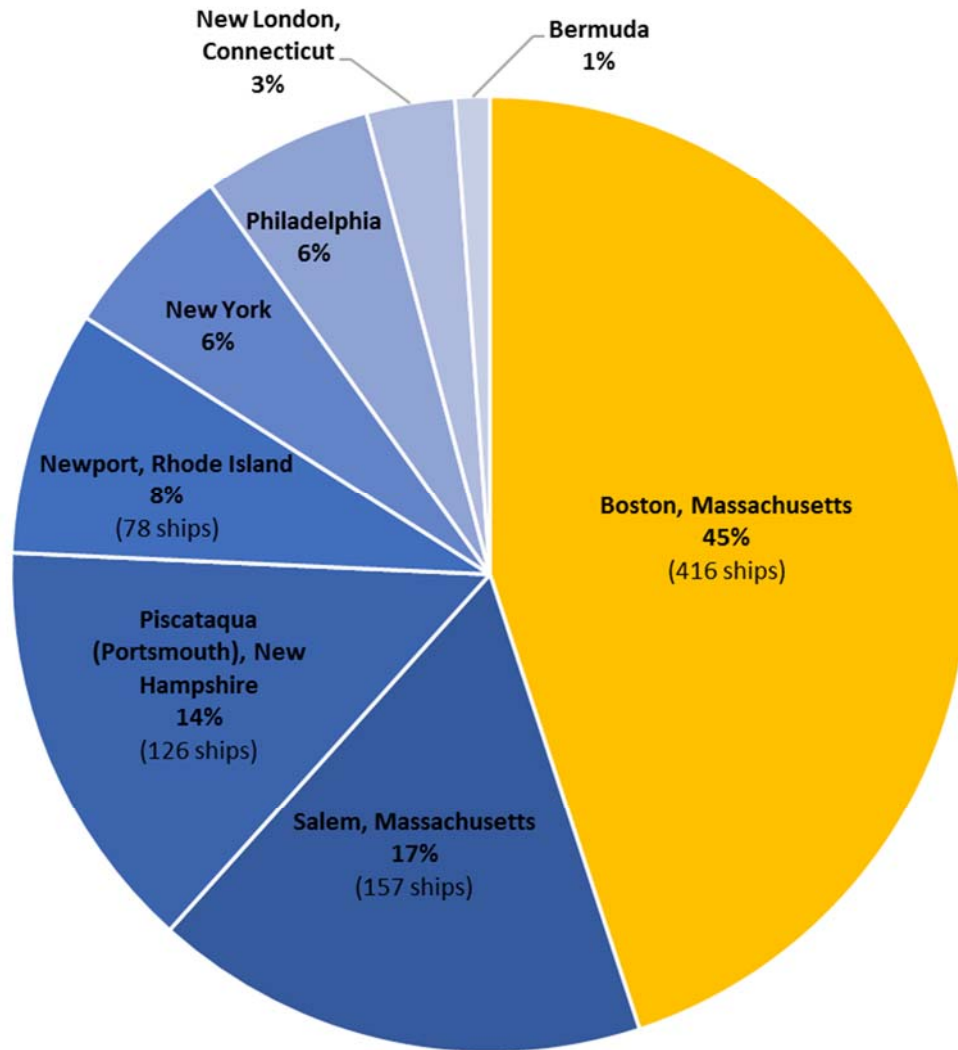


Fig. 3.1.8. Pie chart showing the total number of ship entries from La Tortuga to Anglo-American ports in the 18th century.

Table 3.1.1. Total number of vessel entries to New England ports from La Tortuga between 1634 and 1776.

Port	Number of Ships
Boston, Massachusetts	416
Salem, Massachusetts	157
Piscataqua (later Portsmouth), New Hampshire	126
Rhode Island UID (most prob. Newport)	58
New York	57
Philadelphia	54
New London, Connecticut	28
Newport, Rhode Island	20
Bermuda	11
Salem and New Hampshire UID	6
Charlestown, South Carolina	5
Portsmouth, New Hampshire	4
New Hampshire UID	2
Carolina and South Carolina UID	2
Perth-Amboy, New Jersey	2
Piscataway, New Jersey	2
Hertford, Connecticut	2
Barbados	1
London	1
Newbury, Massachusetts	1
Louisburg, prob. Nova Scotia	1
Halifax, Nova Scotia	1
Uncertain Port	1
TOTAL	958

Hampshire (Piscataqua), New York and Barbados, as well as dozens of Anglo-American newspapers, reveals that from 1700 to 1775 at least 958⁴⁶ ships entered the aforementioned Eastern Seaboard ports loaded with salt from La Tortuga.⁴⁷ Whereas the

⁴⁶ This total is derived from my database with information compiled from my research in the New England newspapers and NOSL. I, however, did not revise the NOSL for the Southeastern American States and New Jersey as Francis Carroll Huntley did in her Master's thesis (Huntley 1948). The salt import figures from La Tortuga to the Southern ports and New Jersey are, however, very small when compared to those from Massachusetts, New York and New Hampshire (Table 3.1.3). Nonetheless, research in these remaining NOSL would certainly raise the total number of vessels arriving from La Tortuga in the 18th century.

⁴⁷ The extent of Bermudian salt raking at La Tortuga is impossible to fully determine because the documentary record is incomplete. The NOSL indicate where ships were registered, and only a handful of the extant and very incomplete records demonstrate that Bermudian ships entered New England ports with salt from La Tortuga. The simpler newspaper entries do not state port of registry. Therefore, it is quite possible that more of the ships appearing in these newspaper port entries were Bermudian. As shall be discussed below, Spanish corsairs intercepted and captured three Bermudian vessels at La Tortuga in 1776, and in 1768 a Royal Navy guard ship confiscated salt from a predominantly Bermudian fleet at the island. These incidents suggest that Bermudian involvement in salt raking on La Tortuga was frequent although not nearly as intensive as that of New England vessels. Moreover, it is probable that Bermudians often chose not to sail with the Saltertuda Fleet instead venturing to the island in smaller numbers before or after the fleet's arrival.

newspaper entries in most cases mention only the name of a given captain and his vessel, and from what location it was entering a port, the NOSL records provide additional valuable information such as the port in which the vessel was registered, its owner, its burthen (displacement), the number of crew on board, and the goods it was carrying (in the case of salt the record would also list the quantity of salt on board). The NOSL are unfortunately fragmentary, and there are only a few years for which certain and relatively complete figures of salt shipped from La Tortuga exist (Table 3.1.2, Table 3.1.3).⁴⁸ In 1716, 17 vessels brought 20,400 bushels of salt (about 786 metric tons) to Salem and Boston.⁴⁹ In 1753, another 17 vessels brought 45,300 bushels (1,747 metric tons) to Salem, Boston and Piscataqua. In 1765 the figure was 19 vessels carrying 7,540 bushels (2,907 metric tons) (Table 3.1.2). There was an increase not only in the tonnage of ships employed in the La Tortuga salt trade in the second half of the 18th century from 42 to 62 tons, but also in the intensity of exploitation in the latter half of the 18th century; ship crews, however, had become smaller. During certain years depending on the productivity of the

⁴⁸ Historian Michael Jarvis (2012: 190) writes that Massachusetts alone imported “twelve hundred tons” of salt from La Tortuga in peacetime, yet it is unknown from where or how he derives this tidy figure with such certainty. The documentary record is fragmentary and my in-depth research of salt figures for La Tortuga has not been able to establish such a figure.

⁴⁹ I could not find a standard weight per bushel of coarse salt in 18th-century New England documents. I calculate one bushel of coarse salt as approximately 85 lb following the Pennsylvania Act of March 10, 1818 which establishes standard weights for foreign salt (Stroud 1847: 567). Nonetheless, this “standard” was certainly quite variable given that naturally crystallized salt like that from La Tortuga would not always be the same since it depended entirely on the whims of the weather to crystallize (to be further discussed in Chapter 5). I apply this early 19th century standard with the caution that the metric ton figures derived from the conversion must be taken as a rough estimate since a bushel of coarse salt could have been standardized to weigh as few as 70 lb (Commonwealth of Massachusetts 1894: 8). A hogshead of salt contained 10 bushels as per Huntley (1948: 79).

salt season, the La Tortuga saltpan could fill 60 small New England vessels to an average weight of 42 tons (e.g. in the year 1716, amounting to an estimated 72,000 bushels of salt

Table 3.1.2. Annual vessel numbers, average vessel tonnage, and weight of salt arriving from La Tortuga in the 18th century (derived from my own research in NOSL). Note: The rows in blue represent years for which the NOLS are complete.

Years	Average Tonnage*	Number of Known Ships in Data Base	Number of Ships in Fleet	Number of Ships with Known Amount of Salt	Volume of Salt in Hogsheads**	Weight of Salt in Metric Tons***
1700		4				
1701	49	4				
1702		4				
1704		1				
1705		6				
1706		2				
1707		3				
1708		1				
1709		4				
1710		4				
1711		26	36			
1712		12				
1713		13				
1714		9				
1715	36	22		9	1,108	427.19
1716	42	58	60	17	2,040	786.53
1717	36	9		6	1,080	416.40
1718		10				
1719	50	16		2	270	104.10
1720	43	14				
1721	44	44				
1722		9				
1723		14				
1724		19		2	500	192.78
1725		4				
1726		16				
1727		14				
1728		8				
1730		5				
1731		12	50			

1732		9				
1733		20	36			
1734		8				
1735		30	40			
1736		8				
1737		6				
1739		4				
1740		10	13			
1741		5		4	610	235.19
1742		13				
1743	52	11		6	1,870	720.99
1744	59	12		7	1,800	694.00
1746		8		4	1,400	539.77
1747		4		3	840	323.86
1748		11		1	300	115.67
1749	51	19		5	1,650	636.16
1750	69	10	30	5	1,321	509.32
1751	60	13		4	1,300	501.22
1752	60	7		4	1,300	501.22
1753	57	17		17	4,530	1,746.56
1754	53	17	35	16	3,840	1,480.53
1755	57	11		11	2,710	1,044.85
1756	53	17		15	3,950	1,522.94
1757	55	9		5	1,600	616.89
1758	56	7		6	1,920	740.26
1759	65	9		7	3,080	1,187.50
1760		1				
1761	54	17		13	2,730	1,052.56
1762	66	13		8	3,270	1,260.76
1763		6				
1764	75	10		4	1,350	520.50
1765	64	29		19	7,540	2,907.07
1766		9	20			
1767	61	28		6	1,900	732.55
1768	71	45		6	1,185	456.88
1769		7				
1770		4				
1771		1				
1772		15				
1773		4				
1774		18				

1775		4				
1776		1				

* Tonnage averages were only calculated if there were more than five ships in the database for that year.

** Many volumes were in bushels and I converted these to hogsheads per Huntley (1948: 79) who calculated that a hogshead of salt contained 10 bushels.

*** This was obtained by adhering to the standard that a bushel of coarse salt weighed 85 lb (see footnote 49).

Table 3.1.3. Annual 18th-century salt imports to Eastern Seaboard ports from La Tortuga in NOSL (derived from Huntley [1948]).

Year	Boston	Salem and Marble-head	New York	Perth Amboy	South Poto-mac	Rappa-han-nock	York	Hamp-ton	Upper James River	South Carolina
1701							35 tn			
1716			540 hh*							
1717			290 hh							
1718			660 hh							70 hh
1720			250 hh							
1721			205 hh							
1722			135 hh							
1723			173 hh							
1724			252 hh							
1725			197 hh							
1726			151 hh	50 hh				60 hh	150 hh	
1727			445 hh							
1728			350 hh							
1732			775 hh							
1733			375 hh					150 hh		
1734								20 hh		
1735			660 hh			200 hh				
1739							150 hh			
1742			525 hh							
1743								180 hh		
1750				300 hh						
1753	2480 hh	800 hh								
1754	2740 hh	200 hh								
1755	250 hh	660 hh								
1756	1500 hh						200 hh			
1759	350 hh	1,250 hh								
1761	400 hh	200 hh								
1762	500 hh	870 hh								
1764	400 hh									
1765					130 hh					

*“hh” are hogsheads and “tn” are tons.

or 2,774 metric tons).⁵⁰ An exceptionally dry season on the island could produce great quantities of salt as was the case in the years 1731 and 1743.⁵¹ Other years proved much less productive, to wit 1774.⁵²

La Tortuga salt was by no means comparable to the fine salt that was imported by the New England fisheries from the Bay of Biscay, Cadiz and Lisbon on the Iberian Peninsula (Innis 1954: 161; Lydon 2008: 205–206). The island’s salt was coarse, large-grained and reddish (Sloane 1707: lxxxviii). There was much debate as to the quality of the salt from La Tortuga in the second half of the 17th century. Some argued it damaged the fish it was used to preserve,

More salt-burnt dried cod came from New England than from Newfoundland because the Tortugas salt used at the former place was more fiery than the milder salt from Lisbon and Bay of Biscay that was in use at Newfoundland... Tortugas salt was condemned as being injurious to the best quality of cured fish (McFarland 1911: 95–96 and 66).

As mentioned in the previous section, as early as 1670 the salt was ruled unfit for curing the primary export of Salem’s fisheries—quality codfish—because it contained shells and trash (Felt 1849: 212). Some merchants in 1750, however, claimed that salt from La Tortuga was of better quality than its English counterpart and its strong characteristics made it more favorable to the curing of meat such as pork (Stock 1941: 401).⁵³ Others

⁵⁰ This figure was obtained by extrapolating the weight of salt (documented in 1716) carried by 17 vessels to the weight which could be carried by the 60 vessels known to have gone to the island.

⁵¹ “A Sloop from Tortuga advises, that the Season being so Dry there is Salt enough to load 100 Sail of Ship” (*Boston Gazette*, Mar. 22–Mar. 29, 1731). “Yesterday a Brigantine arrived here from Saltertuda, by whom we learn that she came out with 36 Sail more bound to the Northward... 'Tis said they have left Salt enough in the Ponds at Saltertuda to load some hundreds of Vessels.” (*American Weekly Mercury*, May 12–May 19, 1743). The latter reference is especially striking as the Saltertuda Fleet of 36 vessels bound for La Tortuga that year left with its fill of salt yet sailed for New England leaving an enormous quantity still on the pans.

⁵² “Peleg Brown, 29 Days from Saltertuda —Left several Vessels there—very little Prospect of a new Crop of Salt when he sail’d” (*Connecticut Gazette*, Mar. 18, 1774).

⁵³ In fact, it seems that some La Tortuga salt was used in the kitchens of well-to-do Massachusetts homes. In 1761 Mary Vial Holyoke, wife of Edward Augustus Holyoke, founder of the Massachusetts Medical

considered it had no “corrosive quality” whatsoever and cured all provisions well (Stock 1941: 402).

Regardless of the variability of opinion (the reasons for this will be discussed in Chapter 5), the consensus among New England fishing communities was that La Tortuga salt was not fit for the good-quality fish exported primarily to Iberia:

A part of the salt came from Spain and the Straits, and a part came from the island of Tortuga, where it was produced by a well-known process.... This salt, although of low grade and not usable with "merchantable" fish, was indispensable, particularly for "refuse" fish, which found ready market in the West India trade. When storms destroyed the salt beds or pirates captured the salt-bearing vessels, the New Englanders suffered great inconvenience (Colonial Society of Massachusetts 1927: 241).

Fine codfish for the palates of the Spanish, Portuguese and English was not, however, the only profitable fish export of the British North American colonies. Refuse cod, mackerel and other badly-dressed unsalable fish was salted with the coarse, fiery and free La Tortuga salt. The brigantine *Nestor* and the schooner *Boca Chica*, that set sail from Piscataqua for Jamaica and the West Indies on June 30th, 1732, carried 38 and 22 hogsheads of “fish Salt Tortuga” respectively, which was undoubtedly refuse fish salted with La Tortuga salt.⁵⁴ Instead of going to Europe as a prime commodity, as was the case with most well-salted merchantable cod, refuse salt fish was sent back to the West Indies together with lumber, horses, and various provisions (Chever 1859: 85). From the mid-18th century onwards, about half of Salem fish exports consisted of refuse fish (Innis 1954:

Society, “bought a hog that weighed 182 pounds and salted it half with Lisbon and half with Saltertudas salt” (Holyoke 1911: 49).

⁵⁴ C.O. 5/968.

162). Clearly this grade of fish, a considerable portion of which was salted with La Tortuga salt, commanded a large market in the Caribbean.

The cause of such demand for refuse fish was the rise of the plantation system in the British West Indies—especially on Barbados, the largest and most profitable British sugar island. Sugar plantations, which had taken over all the island’s arable land by the early 18th century, depended heavily on imported salted fish to feed their populations of enslaved laborers. Given the limited space, on Barbados the enslaved were rarely granted access to land on which to set up their own garden plots for subsistence needs (Handler and Wallman 2014; Innis 1954: 162–163). My research indicates, to be clear, that La Tortuga figured as New England’s most important Caribbean salt island due in large part to the provisioning of salted refuse fish to enslaved sugar workers. La Tortuga’s strategic economic importance comes through in a letter from the Council of Trade and Plantations to Queen Anne in 1714:

We take leave to lay before your Majesty, the consequence of your Majesty's subjects being prohibited to fetch salt at Tertudos, wch. will in part appear from the number of ships using that trade, being as we are informed, one year with another about 100 sail. The salt carryed from thence to New England, is used cheifly for curing fish, which is either cadelscale fish or mackrel, the former of which is the principal branch of the returns made from the continent of Great Brittain by way of Spain, Portugal and the Streights, for the woollen and other goods sent from this Kingdom thither; besides which the scale fish and mackrell are of such consequence, that the sugar islands cannot subsist without it; their negroes being cheifly supported by this fish. So that if they were not supply'd therewith from New England (which they cannot be, if your Majesty's subjects are prohibitted getting salt at Tertudos) they would not be able to carry on their sugar works. This has been confirmed to us by several considerable planters concerned in those parts (Council of Trade and Plantations 1926 [1714]: 289).

Plainly, the Queen with her diplomats and politicians in England as well as in the North American colonies understood that La Tortuga was an essential cog in the complex and growing machinery of the British sugar empire.

The British sugar islands were, however, not the only ones in desperate need of refuse fish as slave provender. The swiftly expanding French sugar plantations on Saint Domingue, Martinique and Guadeloupe offered 33% more, paid in sugar, to the New England merchants for their refuse cod and mackerel (Magra 2006: 162). Only New England could supply their ballooning slave populations with refuse cod and mackerel. In the 1760s, Edward Payne, a Boston fish merchant and member of the Society for the Encouragement of Trade and Commerce, estimated that of the 60% of fish exported from New England to the West Indies, only 20% went to the British islands, and 40% was sold extra-imperially, with the French West Indian planters being the principal buyers (Magra 2006: 157, 163). With the French West Indies soon outproducing the British by the 1770s, New England provisioning of the French islands became a contentious mercantilist practice that laid bare the inter-imperial nature of the itineraries of New England fish cured with La Tortuga salt (Magra 2006: 160, 164).

The figures expressing the amount of La Tortuga salt imported by the British North American colonies (Table 3.1.2) that I was able to collect from the NOSL are too fragmentary to compare with any certainty to the equally fragmentary figures associated with the Great Salt Pond of Sint Maarten, an 18th century Caribbean salt competitor.⁵⁵

⁵⁵ Huntley mentions that her figure for the annual average amount of salt imported from La Tortuga to North America (17,113 bushels), calculated on the basis of her analysis of the NOSL for North American ports (with the notable exception of the New Hampshire NOSL), was not as high as she had been led to believe (Huntley 1948:56–58). As demonstrated above, my analysis of port entries in Anglo-American newspapers shows that Boston was by far the port with the most arrivals from La Tortuga in the 18th century. Therefore, the largest volume of salt from La Tortuga must have been going to Boston. Huntley (1948: 92) only factored 10 years of the Boston NOSL into her average for La Tortuga imports because these were the only years that were available and complete. Huntley's annual average, consequently, cannot be considered at all reflective of the real La Tortuga salt volumes entering North America because it lacks the biggest import figures of the most important player in the Saltertuda Fleets, namely Boston.

The two islands were likely neck-and-neck, but it was La Tortuga salt that was principally used to cure refuse fish. Salt raked at La Tortuga certainly exceeded that taken from the Turks Islands (another competitor), at least before the American Revolution after which La Tortuga ceased to be exploited (Kennedy 2007: 219; Gregory 1978: 4). Even though definitive figures for annual La Tortuga salt output will probably never emerge, the importance of the uninhabited island's salt when compared to that of any other Caribbean or Atlantic saltpan centered on the fact that it was obtained for free. In 1713 the British became greatly worried that, in the course of negotiations concluding the War of the Spanish Succession, a Spanish prohibition from loading free salt at La Tortuga could result in "an unspeakable loss to them, for that then they should be obliged to buy it of the Dutch for the curing of their fish... that all the islands being supplied with fish from New England for the food of their negroes" (McLachlan 1940: 70). The only expenditure the ship owner incurred upon sending his vessel to La Tortuga for salt was paying the crew wages, providing them with wheelbarrows and bags, and victualling the ship for the extended stay on the island.⁵⁶ La Tortuga featured no permanent human settlement, thus no local population to be paid for raking salt as was the case on the Great Salt Pond of Sint Maarten, Salt Cay in the Turks and Caicos, Anguilla, St. Christopher, Exuma in the Bahamas and Bonaire and other West Indian salt islands. Moreover, salt from La Tortuga

⁵⁶ This was the case with Captain James Hudson who in 1747 was instructed by his ship's three owners to sail, "having bags and barrows and your men upon high wages for the purpose of going to that island to get a load of salt" (Pares 1956: 20). Occasionally, as shall be discussed further on, the fleets also had to pay for a private armed vessel to convoy them when a free Royal Navy man of war was not available.

was free for the taking because the takers paid no taxes, there being no one there to request or collect them.

Today a historically overlooked and forgotten island, La Tortuga and its salt was well known in the Caribbean and on the North American Eastern Seaboard in the 17th and 18th centuries. Dozens of advertisements for La Tortuga salt appeared in 18th-century newspapers in port cities such as Boston, Piscataqua, Hartford, New Haven, and Newport, advertising “very good Saltertuda Salt” and “the best of Saltertuda Rock Salt” (Fig. 3.1.9).⁵⁷ It is important to note that of the dozens of such ads I have found, nearly all refer to “Saltertuda Salt,” strongly suggesting that as with “Lisbon” and “Cadiz”, the salt from La Tortuga went by a well-established unofficial trademark name recognized by salt buyers throughout the colonies. Moreover, the island itself came to be known in the 17th- and 18th-century Atlantic world by more than 133 English exonyms which appear in Anglo-American documentary sources (e.g., Salt Tatuga, Salt Tartudas, Salt-Terrudos, Saltertuda, Saltatoodos, Saltutudoes, Tortoogoes, Tartudy and Tuda). Most derive from “Salt Tortuga”—the combined English and Spanish toponym for the island. Such a staggering number of names for such a desolate and uninhabited island is a testament to how many times it must have rolled off the tongues of Anglo-American seafarers in the age of sail.⁵⁸ The island was so entrenched in the Anglo-American collective imagination of the time that Captain Giles Seaward of Piscataqua, who sailed to La Tortuga seven times,

⁵⁷ *Boston Gazette*, Oct. 24–Oct. 31, 1720; *Boston Evening-Post*, Nov. 19, 1759.

⁵⁸ La Tortuga also garnered a lot of press attention when on the 19th of April 1721 a “negro” man on board the H.M.S. *Seahorse* (which was escorting the Saltertuda Fleet) allegedly brought the smallpox epidemic to Boston resulting in hundreds of deaths (*Boston Gazette*, Apr. 17–Apr. 24, 1721; Fritz 1911: 316).

<p align="center">***** Choice Saltatudas Salt to be Sold on Board the Brig, <i>Mc Phaedrit</i>, now lay- ing at the Long-Wharff. Enquire of <i>William Hunt</i>.</p>	<p align="center">JOHN CHANNING, <i>At the Locust Stump,</i> Takes in Flax-Seed, for which he pays Cash, Saltertuda and Liverpool Salt, or European Goods.—He has a large Assortment of European and India G O O D S, which he sells at the lowest Rates for Cash.—He has also choice V I N E G A R for Pickles, by the Keg or Gallon;—and Madeira, Teneriffe, Lisbon and sweet W I N E,—also Rum and Molasses, by the Gallon.</p>
<p align="center">To be SOLD by <i>John Tweedy,</i> CHOICE SALTERTUDA SALT, just imported in the Sloop <i>Lydia</i> : Also Beef by the Barrel.</p>	<p align="center">John White, jun. Has to SELL, The best of Saltertuda SALT, and Grenada RUM. <i>Salem, Dec 20, 1773</i></p>
<p align="center">T O B E S O L D, Best Saltertuda and Anguilla Salt, by the large or smaller Quantity, red Clover Grass Seed, choice good French Indigo, Tilloch's Snuff, white Beans by the Bushel, and sundry Sorts of English Goods, By Job Bennet, who desires all Persons that are indebted to him, either for Tickets in the Market-House Lottery, or any other Way, to settle with him soon. N. B. A few Tickets of the Fourth Part of the Sixth Class to be sold.</p>	<p>GOOD Saltertuda SALT, exchanged for FLAX-SEED; Bushel for Bushel, by <i>BENJAMIN HENSHAW,</i> at Middletown, or Rocky-Hill; who will give other West-Ind- ia or English Goods for Flax-Seed: N. B. Said Henshaw desires all indebted to him, more than 6 Months, to pay him in Flax-Seed, Pork, Beef, Grain or Cash, soon, or they may expect to be sued at November Court, without further Notice. Middletown, October 1, 1766. 95</p>
<p align="center">To be sold by <i>Henderson Inches,</i> At his Warehouse near <i>Faneuil-Hall,</i> Choice Saltertuda Salt, likewise the best of Cordage and Cables of all Sizes.</p>	<p>TO be Sold by <i>Amos Hosford,</i> in Middle- town, in the parish of Worthington, the best of Rock and Saltertuda SALT: Also, Dutch Spin- ning Wheels, made by a workman. Dec. 22, 1778,</p>
<p align="center">Choice Saltertuda Salt, just landed, to be Sold by the single Hoghead, or larger Quantity; Inquire of <i>William Torrey, jun.</i> at his House near the Draw-Bridge.</p>	<p>TO be Sold by <i>Benjamin Dolbear,</i> a Quantity of Bunches of Onions, Connecticut Bar- rel Pork, Hogheads of Stone Lime, and the best of Saltertuda Rock Salt.</p>

Fig. 3.1.9. Various advertisements for La Tortuga salt in 18th-century New England newspapers. (Left to right, top to bottom): Boston News-Letter, May 21, 1767; Newport Mercury, Sept 14–Sept. 21, 1767; Newport Mercury, Jun. 5, 1759; Essex Gazette, Dec. 14–Dec. 21, 1773; Newport Mercury, Jun. 3, 1765; Connecticut Courant, Oct. 6, 1766; Boston Evening-Post, Oct. 23, 1752; Connecticut Courant, Dec. 22, 1778; Boston Gazette, Jul. 5, 1762; Boston Evening-Post, Nov. 19, 1759.

christened his brigantine “Tortuga” and Captain Josiah Burnham of New London named his sloop “Saltatuda”.⁵⁹

Merchant ships headed to La Tortuga usually left the New England coast in early December to congregate on Barbados mid-December to mid-January (Fig. 3.1.10). Here

⁵⁹ *New-Hampshire Gazette*, Jan. 19, 1759; *Pennsylvania Gazette*, Feb. 8, 1759.

the ship captains sold the goods they brought with them, oftentimes including vital provisions for the island such as salt fish, lumber, staves, shingles, cask hoops, whale oil, candles, apples, onions and horses.⁶⁰ Some ships would also load molasses, sugar, limes and rum for their return trip.⁶¹ West Indian ships and stragglers had time to catch up with the fleet at Barbados during its few days or weeks in port before departing for La Tortuga. Some ship captains were specifically instructed to take on extra hands at Barbados for the arduous salt raking to come (Pares 1956: 20).⁶² Once the Saltertuda Fleet had assembled, and a British Navy ship—or in a few cases a private armed merchantman—was ready for escort, all vessels set sail for La Tortuga in mid-January. Upon arrival at the island, the saltpan was divided up according to ship tonnage and, depending on the weather, the crews could rake, pack and load salt for various weeks and sometimes apparently even up to 41 days (Brownrigg 1748: 24–28).⁶³ In some cases it seems seafarers would wait for the salt to crystallize again on the pans to perform a “second raking” (Extract from a Letter

⁶⁰ C.O. 33/13, 15. In 1764 the New London (Connecticut) sloop *Gull* sailed to Barbados with 8 horses. The following year she sailed with staves, shingles, cask hoops and bricks, among other goods essential to the plantations on Barbados (Ship papers of the sloop *Gull* 1761–1765).

⁶¹ C.O. 5/849, 850, 851, 967, 969.

⁶² The NOLS from 1716 corroborate this practice since various ships entering Barbados that year had one crew member less than when they later entered Salem via La Tortuga (C.O. 33/15; C.O. 5/848).

⁶³ At least on one occasion the H.M.S. *Gosport* captained by Henry Crofts was ordered to not stay at Barbados for more than six days but go to La Tortuga with the merchant ships that were accompanying him and remain at the island “to guard ships that come to load salt there until March 10” (Council of Massachusetts Bay 1910 [1701]: 669–670). In 1768, a captain mentioned that along with other ships they had been 41 days collecting salt on the island (this information must be taken with caution as it might have been exaggerated due to the fact that the salt from this captain’s ship was illegally seized by a Royal Navy escort at the island) (*Boston News-Letter* May 12, 1768). Bermudian and West Indian vessels had been gathering salt at the island for 10 days since their arrival on January 4, 1766, when they were attacked by Spanish corsairs (MHMCB 1996 [1766]: 212).

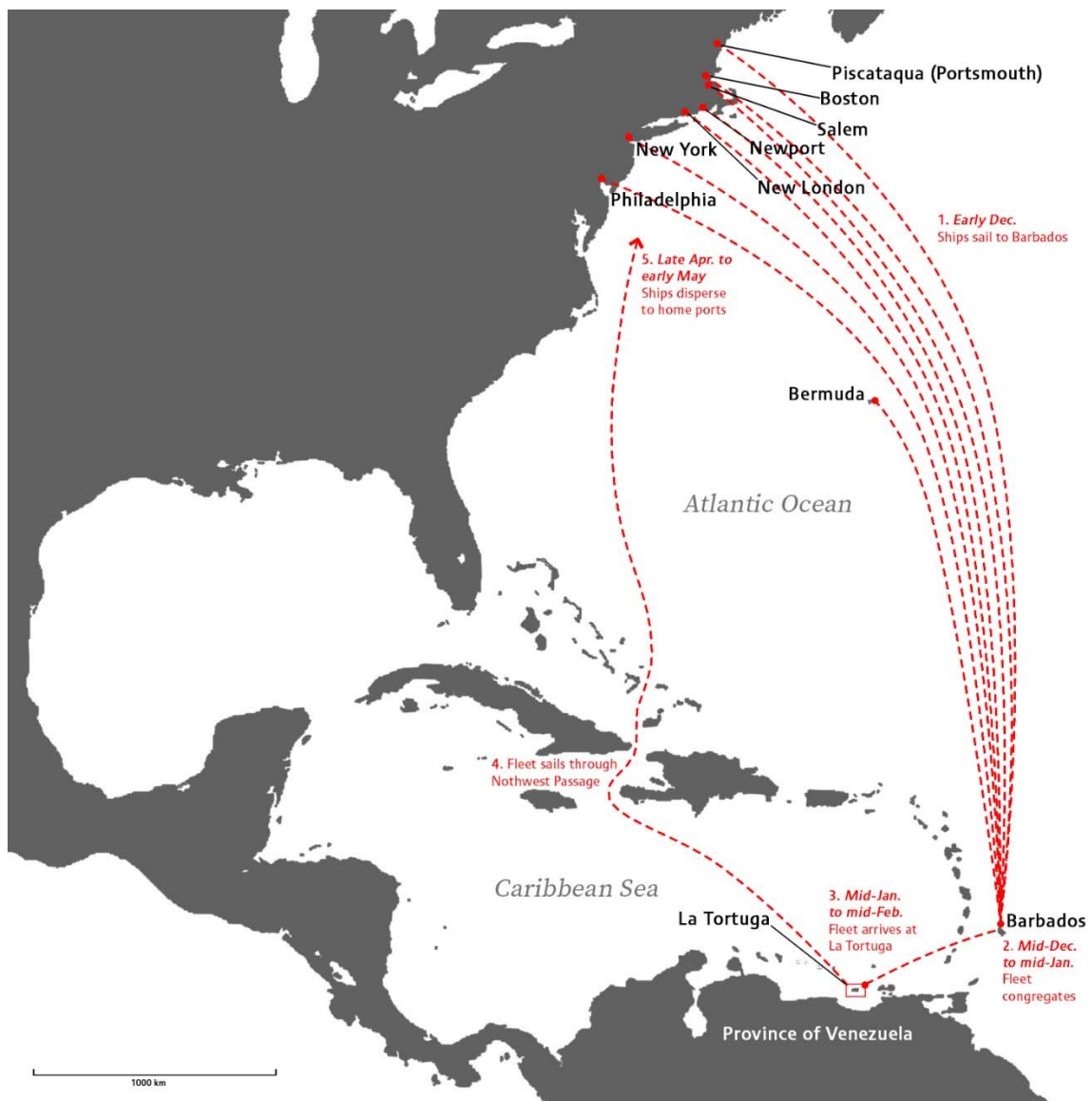


Fig. 3.1.10. Map showing the annual round of the Saltertuda Fleets heading to La Tortuga for salt via Barbados and then returning in the Spring to New England.

1768: 90).⁶⁴ Once the holds of the ships were filled, the sodium chloride would begin its northward itinerary as the fleet sailed through the Windward Passage. North of Bermuda it would disperse, each ship to its home port (Fig. 3.1.10). In late April and early May of

⁶⁴ The process of salt crystallization on the pans will be discussed in full in Chapter 5.

nearly every year, these ships arrived with the salt necessary for the New England spring fisheries (McFarland 1911: 97; Pares 1963: 631).

The institution of the annual Saltertuda Fleet did not guarantee a peaceful voyage to La Tortuga, uneventful salt raking there and a safe return to New England. The summer after the Peace of Utrecht was signed in 1713 marking the end of the long War of Spanish Succession, at least three Boston vessels including the *Marlborough* which were lading salt on La Tortuga were captured by a Spanish corsair (commissioned by the Governor of Santo Domingo). They were charged with unlawful salt loading on the Spanish island (Address of the Governor 1926 [1713]: 256). This incident raised the explicit need on the part of the British to negotiate legal and safe access to La Tortuga salt with Spain. Queen Anne was well aware of this issue as one of the various letters to her from New England and Whitehall officials shows. (Fig. 3.1.11). Two years later, the legal status of Anglo-American salt raking on the island changed from the previous vague informality to an official article in the 1715 Treaty of Commerce signed at Madrid granting England free and uninterrupted access:

ARTICLE III.

Freedom to gather Salt in the Island of Tortudos.

His Catholic Majesty allows the said subjects [of Great Britain] to gather salt in the Island of Tortudos, they having enjoyed that permission in the time of King Charles the IInd, without Interruption (Hertslet 1878: 82).

This article was a momentous victory for the Anglo-Americans in the colonies and for the British back home. It was in large part due to the efforts of English negotiator George Bubb, who remarked that this point had caused him as much trouble as if he had

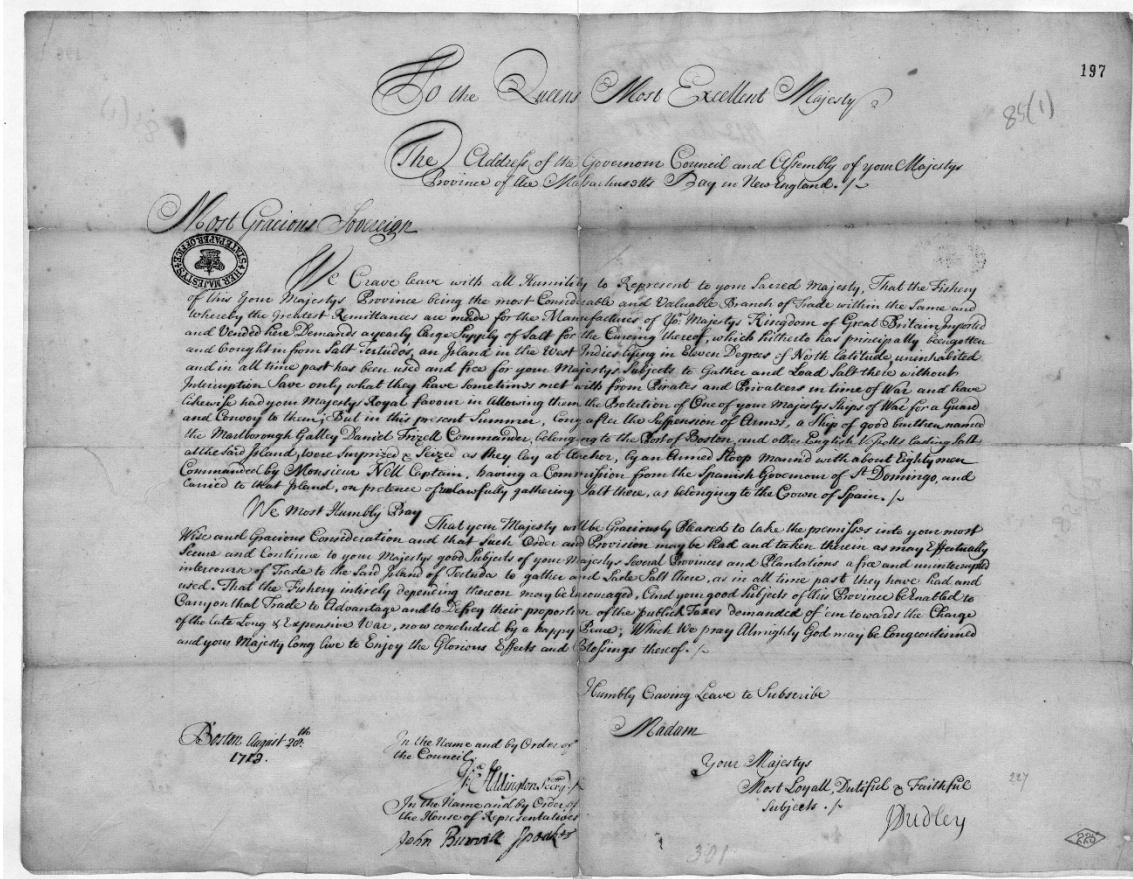


Fig. 3.1.11. Address of the Governor, Council and Assembly of the Massachusetts Bay to the Queen, Boston, Aug. 28, 1713, relating to Tertudas (C.O. 5/751. Nos. 85, 85 i.).

demanded an entire Spanish province (McLachlan 1940: 70). Being the third of only seven articles in the treaty, this clause demonstrates the vital importance of La Tortuga salt to the New England colonies and the diplomatic lengths to which the British would go in order to obtain a formal right to rake there.⁶⁵ This same article was then reiterated in Article V of the Treaty of Commerce of 1750, following the War of Jenkin's Ear (Hertslet 1878: 87).

⁶⁵ In 1720, the idea of "effectual settling" Blanco (La Blanquilla Island) and La Tortuga was floated in the British Parliament but was soon abolished and declared illegal (Mackay 1841: 94–95; Parliamentary Debates 1741: 336).

The Saltertuda Fleet is documented as sailing a minimum 26 times under the escort of a Royal Navy man of war (Table 3.1.4). Most of the time, the convoy ship was a 6th- (20 to 24 guns) or 5th- (32 to 44 guns) rate ship, and on occasion a 4th-rate ship of the line (50 to 60 guns) (Winfield 2014). The documentary record is nonetheless very fragmentary, and the only years when no merchant ships are known to have returned to New England from La Tortuga from 1700 to 1776 are 1703, 1729, 1738 and 1745 (Table 3.1.2). Such years might have occurred owing to war (1703 and 1745) or extremely bad weather ruining the salt on the pans. It is very probable that some sort of guard ship, whether naval or privately commissioned, guarded the Saltertuda Fleet every year from 1700 to the late 1760s. Numerous advertisements in New England newspapers were published in late fall of the year before the Saltertuda Fleet sailed offering protection for the trip to La Tortuga (Fig. 3.1.12). This was the case with the 6th-rate H.M.S. *Scarborough* in November of 1732: “This is to give Notice, that Capt. Thomas Durell Commander of His Majesty’s Ship Scarborough, designs to sail before Christmass to Barbados, and there will take under his Convoy all such Ships and Vessels as are bound to Saltertuga to Load with Salt. Boston, Novemb. 11, 1732.”⁶⁶ The Royal Navy escorts seem to have been offered free of charge, yet when a Royal Navy ship was not available, it seems the merchant vessel captains had to pay for a private armed ship, as was the case in 1695, 1700, 1726, 1730, 1743, and 1766 (Fairchild 1954: 108–109) (Table 3.1.4). Although this probably did not

⁶⁶ *Boston Gazette*, Nov. 27– Dec. 4, 1732.



By His EXCELLENCY,

Joseph Dudley Esq.

Captain General and GOVERNOUR in Chief, in and over Her Majesties Province of the Massachusetts-Bay in New-England, and Vice Admiral of the same.

A PROCLAMATION.

For an Embargo on Ships and Vessels bound to Barbados, and the Careby Leeward Islands.

WHEREAS Her Majesties Ship Deptford, Captain Charles Stucley Commander, is fitting and making ready speedily to sail to Barbados, and from thence to proceed to Salt-Terrudos, to Guard the Ships designed thither to take Salt for carrying on the Fishery.

I have therefore thought fit, by and with the Advice of Her Majesties Council, to Order an Embargo upon all Ships and Vessels outward bound for Barbados, or any of the Careby Leeward Islands: And that none be permitted to sail thither without my special Licence; until Her Majesties said Ship Deptford be made ready, and then to attend her and take the benefit of a good Convey.

And all Officers of the-Customs, Naval and Impost Officers, and Commanders of Castles and Forts within this Province, are hereby Commanded to take notice of this Proclamation and Conform themselves accordingly.

Given at the Council Chamber in Boston, upon Wednesday the 10th of October 1705. In the Fourth Year of the Reign of our Sovereign Lady ANNE, by the Grace of GOD of England, Scotland, France and Ireland, QUEEN, Defender of the Faith, &c.

By Order of His Excellency the Governour, with Advice of the Council, *J. DUDLEY.*
Isaac Addington, Secr.

GOD Save the Queen.

BOSTON: Printed by Bartholomew Green, Printer to His EXCELLENCY the GOVERNOUR and COUNCIL. 1705.

THIS is to give Notice, That Captain THOMAS DURRELL Commander of his Majesty's Ship Scarborough, designs to sail before Christmas to Barbados, and there will take under his Convey all such Ships and Vessels as are bound to Saltertuga to Load with Salt.
Boston, Novemb. 11. 1732

ADVERTISEMENTS

WHEREAS the Governour of the Province of the Massachusetts-Bay in New-England, signified to me the Necessity of my taking Care of the Saltertuga Trade; and as a great Number of the most considerable Merchants have requested the same of me by Letter;

I hereby give publick Notice, That I am now preparing to sail for Barbados, there to take under my Care the Saltertuga Trade of these Provinces, which may depend upon all the Assistance and Protection, his Majesty's Ship under my Command can afford. Dated on board the Success in King road, November 2d 1749.

COLVIL.

Fig. 3.1.12. Advertisements of Royal Navy men of war convoying fleets to La Tortuga. (Top to bottom): Boston News-Letter, Oct. 29-Nov. 5, 1705; Boston Gazette, Nov. 27-Dec. 4, 1732; Boston Post-Boy, Nov. 6, 1749.

happen often, paying for an armed escort ship significantly raised the costs of raking otherwise "free" salt at La Tortuga (Fairchild 1954: 108).

Table 3.1.4. List of convoyed Saltertuda Fleets in the 17th and 18th century. Ship rates derived from (Colledge 2010).

Year	Ship	Ship Rate	Captain	Number of Ships in Convoy
1695	<i>Play</i> (Barbadian-based private vessel)	N/A	Capt. Jackson	N/A
1700	N/A (prob. Barbadian-based private vessel)	N/A	Capt. Barker	N/A
1702	H.M.S. <i>Gosport</i>	5 th Rate	Capt. Henry Crofts	N/A
1706	H.M.S. <i>Deptford</i> (arrived at Barbados with fleet but was not allowed to sail to La Tortuga)	4 th Rate	Capt. Stuckey	N/A
1708	H.M.S. <i>Reserve</i>	4 th Rate	Capt. Teat	N/A
1711	H.M.S. <i>Chester</i> and <i>Enterprize</i>	5 th Rate	Capt. Matthews	36
1713	H.M.S. <i>Reserve</i>	4 th Rate	Capt. Brown	N/A
1716	"Boston Man of War"	N/A	N/A	60
1717	H.M.S. <i>Rose</i>	6 th Rate	Capt. Cayley	N/A
1720	H.M.S. <i>Squirrel</i>	6 th Rate	Capt. Smart	N/A
1721	H.M.S. <i>Seahorse</i>	6 th Rate	N/A	N/A
1723	H.M.S. <i>Seahorse</i>	6 th Rate	Capt. Thomas Durell	"divers [sic] vessels"
1724	H.M.S. <i>Sheerness</i>	5 th Rate	Capt. James Cornwall	N/A
1726	Private vessel (prob. Barbadian-based)	N/A	Capt. David Burch	N/A
1730	Private vessel (prob. Barbadian-based)	N/A	N/A	N/A
1731	H.M.S. <i>Phoenix</i>	6 th Rate	Capt. Arthur Jones	50
1733	H.M.S. <i>Scarborough</i>	6 th Rate	Capt. Thomas Durell	32–36
1734	"Barbados Man of War"	N/A	N/A	"Considerable fleet of Merchant Men"
1735	"2 Men of War"	N/A	N/A	40
1740	"Man of War of 50 Guns"	4 th Rate	N/A	13
1741	H.M.S. <i>Portland</i>	4 th Rate	N/A	N/A
1743	"large Bristol Man" (private vessel)	N/A	Capt. Gwyn	3
1743	H.M.S. <i>Gosport</i>	5 th Rate	Capt. William Ellis	36
1748	H.M.S. <i>Port-Mahon</i>	6 th Rate	N/A	N/A
1749	H.M.S. <i>Boston</i>	5 th Rate	N/A	N/A
1750	H.M.S. <i>Success</i>	6 th Rate	Lord Colvil	30
1754	H.M.S. <i>Fowey</i>	6 th Rate	Capt. Codwise	35
1759	H.M.S. <i>Rye</i>	6 th Rate	N/A	N/A
1766	"Armed Brig from St. Christopher" (private vessel)	N/A	N/A	6–7
1766	H.M.S. <i>Acteon</i>	6 th Rate	N/A	20
1768	H.M.S. <i>Scarborough</i>	6 th Rate	Capt. Robert Gregory	N/A

The Royal Navy convoys also by no means guaranteed safety or a successful salt-raking campaign. From 1686 to 1781, I have documented 15 attacks by Spanish (in most cases Basque) corsairs, also known by the English as "guarda costas" [coast guards] at La Tortuga (Table 3.1.5). In the year 1728 the Spanish Crown granted the Basque Real Compañía Guipuzcoana de Caracas a monopoly on all trade with the Venezuelan

Table 3.1.5. Vessels seized or attacked by Spanish corsairs at La Tortuga during the 17th and 18th centuries.

Year	Number of Vessels Seized/Attacked	Name of Vessels Seized	Description of Spanish (Iberian) Corsair and Attack	Seized Vessel Homeport(s)
1686	1 vessel	<i>Loving Land</i>	Taken by 3 Basques on way to Tortuga	Unknown
1696	6 vessels	Unknown	Probably Spanish although uncertain	Unknown
1713	Several, at least 3 vessels	<i>Marlborough</i> (24 guns)	80 men, commander Monsr. Nell, commissioned by Governor of St. Domingo	3 from Boston
1717	1 sloop	Sloop <i>Swallow</i>	No description	Boston
1718	1 ship, 1 sloop	<i>Mary & Elizabeth, Neptune</i>	Puerto Rican or from Sto Domingo?	Antigua
1727	3 vessels (possibly another sloop)	<i>Adventure, Catherine, Charles Town</i>	A ship and a sloop	Portsmouth, Boston and Charlestown
1733	1 ship, 3 brigantines	<i>Katherine, Hopewell, Three Brothers, Three Brothers</i>	One of 60 and the other of 70 guns, vast number of men aboard	Salem, Boston
1742	1 British Man of War	unknown, 70 guns	"Two Spanish Privateers attempted to plunder, but were repuls'd by the Crew, who had raised a Battery on the Shore."	Apparently not seized
1742	1 ship, 1 brigantine	Unknown	Took prizes to Santo Domingo, the other to Puerto Rico	Unknown
1743	1 British Man of War attacked	"Bristol Man" with 18 carriage guns and 25 men [another account: 12 carriage guns and 12 swivel guns and 90 men]	Three accounts: 1) over 3 "Pettagua's" or <i>piraguas</i> ; 2) 6 or 7 <i>piraguas</i> with "a great Number of Men"; 3) 2 "Spanish launches" with 50 men	Apparently not seized
1766	2 brigantines, 1 sloop	<i>Porgey, Roach, Polly</i>	2 Guarda Costa sloops	Bermuda
1769	1 sloop	<i>Dove</i>	1 Spanish "Guarda Costa from Laguiria", 20 guns, 12 and 9 pounders, 170 men	Bermuda
1775	1 vessel	Unknown	"Spanish armed vessel" caught them on way from Blanco [La Blanquilla] to Tortuga	Unknown
1775	1 balandra	<i>Guillermo</i> or <i>William</i>	Lancha corsaria <i>San Nicolas</i> . English crew fled from on board their ships to La Tortuga	Unknown
1781	None	None	Vicente Antonio de Icuza with 300 men arrived and kicked out 30 "Englishmen" from the island and demolished the saltpan	No vessels seized

provinces, the task of policing maritime traffic in the Venezuelan Caribbean, and preventing primarily Dutch Curaçaoan and also English and French illicit trade with the Venezuelan mainland (Hussey 1934). Clearly, no treaty could prevent the Spanish corsairs from intercepting Anglo-American ships at La Tortuga under the pretense that these were engaging in contraband with the Spanish mainland. In March 1733, two heavily armed Spanish corsair ships fired upon the fleet of 32 ships that were gathering salt at La Tortuga, and which was at the time under the supposed protection of Capt. Durell in the 6th rate *Scarborough*, and captured four New England vessels.⁶⁷ Clearly the Royal Navy 6th-rate ship, vastly outmanned and outgunned, was of no use in such a confrontation. Still, Capt. Durell's courage and skill were greatly commended:

'tis owing to his prudent Management that a far greater Number of our Vessels did not fall into the hands of the Spaniards; for as the Spanish Ships gained upon any of our Vessels, and were likely to take them, Capt. *Durell* (whose Ship was a much better Sailor than theirs) interposed, and by firing upon them, so diverted them from the Chase, that the Fleet had an Opportunity to escape.⁶⁸

The captains of the four captured vessels were then brought into the Venezuelan port of Puerto Cabello. They escaped on an arduous journey to Caracas and pleaded there with the English factor of the South Sea Company (British Asiento) to negotiate the restitution of their vessels. One of the captains died thereafter in Caracas. After a month, they could do no better than obtain passage to Curaçao and from there to Philadelphia.⁶⁹ This incident sent various shockwaves through the British diplomatic community. Soon the ministers of Spain and Britain were expressing disapproval of the occurrence and concern

⁶⁷ *Boston News-Letter*, Apr. 5–Apr. 12, 1733.

⁶⁸ *Weekly Rehearsal*, Apr. 16, 1733.

⁶⁹ *Boston Gazette*, Aug. 13–Aug. 20, 1733.

for the restitution of the said vessels.⁷⁰ Nearly six years later, and a year before the beginning of the War of Jenkin's Ear, tensions rose so high that Whig parliamentarian William Pulteney, 1st Earl of Bath, argued that the Spanish attack on the fleet was an "avowed insult upon the flag of the crown of Great Britain" and should be pursued with "immediate vengeance" (Cobbett 1812: 654). Furthermore, it was nearly reason for full-fledged war with Spain. Pulteney aggressively contended:

It is not restitution... it is not reparation that can atone for such an avowed insult; nothing can satisfy the honour of the British flag but the inflicting of a condign punishment upon those captains that committed the outrage, or upon the Spanish governor that gave the instructions. Either the one or the other must be hung up, and, I think, hung in chains too, upon the island where the outrage and robbery was committed, as a monument to British resentment. If we are negotiating... this ought to be insisted as a preliminary...and if it is not granted as a preliminary, we ought immediately to break off negotiations, and revenge ourselves upon the country, that dares to protect such criminals (Cobbett 1812: 654–655).

The incidents, nonetheless, continued accumulating, regardless of whether Britain was at war with Spain. In 1742, in the middle of the War of Jenkin's Ear and the War of the Austrian Succession, a British man of war of 70 guns was stranded "upon Tortugas" and two Spanish privateers attempted to "plunder" the vessel, but were "repuls'd by the Crew, who had raised a Battery on the Shore".⁷¹ In 1743 a private escort ship under the command of Capt. Gwyn of Boston was overtaken by a large number of Spaniards on small vessels.⁷² Another diplomatic incident of large proportions occurred when the Bermudian brigantines *Porgey* and *Roach* and the sloop *Polly* were intercepted and seized while loading salt at La Tortuga on February 18, 1766, by the Spanish corsairs *Nuestra Señora de Aranzazu* (commanded by Vicente Antonio de Icuza), and the *Santa Ana* commanded

⁷⁰ *Weekly Rehearsal*, Sept. 20, 1733.

⁷¹ *New-York Weekly Journal*, Jun. 21, 1742.

⁷² *American Weekly Mercury*, Apr. 28–May 5, 1743.

by Juan José Gamón (Boletín del Archivo General de la Nación [Caracas] 1947: 398). The Bermudian vessels were taken to La Guaira and their captains and crews imprisoned. A long legal battle ensued to free the seafarers who had been unjustly jailed under the pretense that they had been engaging in contraband with the Venezuelan coast. The Compañía Guipuzcoana had the captains Jeremiah Bassett, Willis Morgan and Benjamin Stiles draft inventories and itemize the things confiscated aboard the vessels noting the cost of every item (Minutes of His Majesty's Council, Bermuda [thereafter MHMCB] 1996 [1766]: 200–227). This matter was never satisfactorily resolved in neither the British nor the Spanish courts. A citizen pleaded to the Whig statesman the Earl of Chatham that year that he “assert, and vindicate the honour of the British nation, which hath been insolently attacked by Spaniards, the most contemptible maritime power in Europe: Not to speak the affair at Saltertuda”.⁷³ The Spanish documents themselves also refer to these various incidents, yet discussing them is beyond the scope of the current research. Nonetheless in 1771, the Captain General of Venezuela, José Carlos de Agüero, instructed the corsair captains and officers of the Compañía Guipuzcoana that “Los Ingleses tienen permiso de hacer la sal en La Tortuga pero de ninguna manera pueden levantar barracas en tierra, ni tener a su bordo ni en tierra efectos de trato con españoles” [The English have the right to make salt on La Tortuga but under no circumstances can they build shelters on land, nor have on board or on land goods from trade with the Spanish] (Aizpurua 1993: 357).

⁷³ *Gazetteer and New Daily Advertiser*, Aug. 11, 1766.

It was not, however, only the Spanish who on occasion harassed the Saltertuda Fleets. In 1705, the galley *Sarah* of Boston, running from Barbados to La Tortuga, encountered a French privateer sloop whom “they managed to ward off, killing some of the pirates, and sustaining no losses.”⁷⁴ In 1711 an unknown privateer intercepted a fleet returning from La Tortuga. One of the merchant vessels “made a stout resistance, and fought bravely before he was necessitated to yield, he kill’d the Privateer 21 men, and about as many wounded; the Captain of the Privateer was one of them that was kill’d, and the Boatswain another.”⁷⁵ Also, in 1748, a French privateer of 36 guns attacked the fleet taking two vessels “one a Bermudian the other a fine new Sloop belonging to Salem.”⁷⁶ Thomas Chalkley heard a grisly story from the Governor of Anguilla in 1734 who recounted that some days earlier a vessel had come from “Saltitudas.” When his people went on shore they saw the heads and quarters of around 20 men on the side of the path, with the slain supposed to be “Britons by their appearance” and that they were “destroyed by the Spaniards, who are known to be cruel to them” (Chalkley 1835: 379). Given the “word of mouth” and sensationalist tone of the story, it must be taken with a large grain of salt. For that matter, it is uncertain who those killed were and if it was in reality the Spanish who had committed the atrocity. If other Spanish corsair attacks on Anglo-American salt fleets resulting in no deaths created considerable international diplomatic resonance, it is improbable that such an atrocity as this would, if true, have gone unremarked.

⁷⁴ *Boston News-Letter*, Jan. 5, 1705.

⁷⁵ *Boston News-Letter*, Apr. 2–Apr. 9, 1711.

⁷⁶ *Boston Post-Boy*, May 9, 1748.

In some cases, however, dangers to the fleet were posed by the very Royal Navy men of war meant to protect them at La Tortuga. In 1726, Capt. James Cornwall, commander of the H.M.S. *Sheerness*, was involved in a scandal by taking salt from his own fleet while at the island:

...he was so far from encouraging the merchant ships under his convoy, that he sequestered and engross'd a great quantity of salt to his own use, to the great damage and discouragement of the Trade; so that the merchant ships who used to desire the Station ship here for their convoy, chose to let their vessels go without a guard ship, rather than be subjected to the impositions of the said Captain Cornwall (Memorial 1936 [1726]: 105–106).

Cornwall's actions provoked the anger of the New England merchants and government officials as well as the fear that this could adversely affect the salt supply (Memorial 1936 [1726]: 105–106). A similar incident apparently occurred in 1748 when the captain of the H.M.S. *Port Mahon* was to be tried by Court Martial for "taking on board his Ship at Saltertuda, a large Quantity of Salt, and other Offences."⁷⁷ A different scenario played out in 1768 when Capt. Robert Gregory, commanding H.M.S. *Scarborough*, arrived at La Tortuga with the fleet and encountered 35 vessels loading salt at the island. Gregory proceeded to seize the salt the vessels had loaded and some that was already raked by the saltpan. He divided it among his fleet of 10 to 12 vessels claiming to be acting under orders from Admiral Pye (Extract from a Letter 1768: 90–93).⁷⁸ An article in the *Boston Chronicle* stated: "they [Gregory's fleet] found the salt ponds nearly destroyed by the Bermudians, 35 sail of whom were there when the fleet arrived."⁷⁹ The ships he confiscated salt from, however, belonged not only to Bermudians who had 11 vessels

⁷⁷ *New-York Gazette, or Weekly Post-Boy*, Oct. 17, 1748.

⁷⁸ *Boston News-Letter*, May 12, 1768.

⁷⁹ *Boston Chronicle*, May 2–May 9, 1768.

present. They also included four from Rhode Island (one other escaped), two from Piscataqua, and one each from Hartford, Connecticut, New York, South Carolina, Carolina, Halifax and Louisburg (Extract from a Letter 1768: 93). Once Gregory left, the outraged captains sailed to Barbados seeking redress. Apparently, no settlement was ever reached.⁸⁰ Clearly, an unscrupulous Royal Navy commander could wreak havoc on the vital Saltertuda Fleet or on any other salt ships from British colonies at La Tortuga.⁸¹

Following this incident of the late 1760s, the documentary record indicates that La Tortuga salt was raked consistently up until 1776. Still in 1775, when military hostilities had begun in the North American colonies, four vessels are recorded to have arrived with salt from La Tortuga at the ports of Newport, New York and Philadelphia. One “English” vessel was also apparently seized by Spanish corsairs at La Tortuga that year.⁸² In 1776, when armed confrontations between the British and the Anglo-American colonists had escalated, Royal Navy men of war started taking “all American vessels they can lay hold off.” Among them was the vessel of Capt. Kyle from St. Kitts seized returning from La Tortuga with salt.⁸³ The last mention of a vessel entry from La Tortuga in the documentary record dates to January 5, 1776, when the sloop *Swallow* captained by George Burwell took in “great part of her load of salt” at La Tortuga and topped off at the Turks Islands

⁸⁰ *Boston News-Letter*, May 12, 1768.

⁸¹ It is possible that the incident of 1768 was also due in part to the growing tensions in the British colonies of North America following the approval of various hotly contested taxes and customs duties from 1764 to 1768 in the British Parliament. Captain Gregory as a British Naval Officer may have angered the North American and Bermudian colonists gathering salt at La Tortuga not only by his confiscation but also by dint of personifying forceful British imposition on colonial Anglo-American trade activities. This hypothesis, however, must be further investigated.

⁸² *Pennsylvania Ledger*, Dec. 30, 1775.

⁸³ *Connecticut Journal*, Mar. 6, 1776.

before returning to the port of Hampton, Virginia (Proceedings of the Convention of Delegates 1816 [1776]: 86). Two years later, in December 1778, a solitary advertisement in the *Connecticut Courant* states that Amos Hosford of Middletown, Connecticut was selling the best of “Rock and Saltertuda salt” (Fig. 3.1.9).⁸⁴ No other mention of La Tortuga in New England newspapers appeared from that day onward. In general, the silence surrounding salt-laden ships with salt from La Tortuga to New England ports after 1776 is probably due to disruption in communication and printing combined with scant and haphazard port record keeping as a consequence of the Revolutionary War. The lack of documentation, however, by no means indicates that Anglo-American ships stopped sailing to La Tortuga during the Revolutionary War. The late 1778 salt advertisement mentioned above suggests that Saltertuda Salt was still being sold which is further evidenced by the U.S.-Spain negotiations to come.

The fledgling and embattled United States of America was constantly and desperately in need of an enormous amount of salt to preserve the meat vital to the Continental army in the ongoing military campaigns (Werle 1940: 41–42, 66; Gregory 1978: 65). Upon declaring war, the Continental Congress placed an embargo on goods coming into the colonies from Britain and the British West Indies, and the British navy blockaded Anglo-American ports. Both these actions prevented vital salt from reaching the patriots (Werle 1940: 42). In late 1778, Major-General Israel Putnam wrote to statesman Richard Henry Lee in Congress expressing his worry that the movements of the

⁸⁴ *Connecticut Courant, and the Weekly Intelligencer*, Dec. 22, 1778.

revolutionary army were often “clogged and retarded” due to only having a day or two of provisions, and that necessary supplies for the following year were jeopardized by want of salt (Putnam 1847 [1778]: 159). John Jay, a Founding Father, statesman and diplomat, was appointed Minister to Spain in September of 1779. In October he was instructed by the Continental Congress to negotiate a new treaty of amity and commerce with Spain, his first and most important task being to “use [his] utmost endeavors for obtaining permission for the Citizens and Inhabitants of these States to lade and take on board their vessels Salt at the Island of Salt Tortuga” (Library of Congress 1909: 1179). The insistence of Congress on a treaty enabling the new United States citizens to access La Tortuga salt—a privilege they had enjoyed throughout the colonial period—not only reflects the historical importance of La Tortuga salt to the US in 1779. It also highlights the strategic importance that uninterrupted access to the island’s salt could have for the war effort. It is unclear, however, if these negotiations were undertaken as no further mention of La Tortuga was ever made. The American Revolution was thereafter in large part fueled by salt smuggled in by Bermudians who obtained it primarily from the Turks Islands (Gregory 1978: 64–70; Jarvis 1998: 715–716). From then on, the United States sourced its salt from the Turks Islands, Curaçao, Bonaire and, as shall be discussed in Part II of this chapter, even the Venezuelan island of Cayo Sal in the Los Roques Archipelago (Gregory 1978: 64–81, 162–172). The Revolutionary War with its chronic salt scarcity also impelled the eventual creation of new industrial salt works based at salt springs in New York and elsewhere on the East Coast. These met local demand by the end of the 18th century (Werle 1940: 85–89, 92).

The long, intense and often turbulent Anglo-American love affair with La Tortuga ended abruptly in 1781 when Spanish corsair Vicente Antonio de Icuza appeared on the island. He seized salt from 30 Englishmen, as he called them, who were raking the saltpan and ejected them from the island (de Amezaga Aresti 1966: 94). This action resulted from a plan by José de Abalos (appointed *Intendente* [Quartermaster-General] of the Army and Royal Hacienda of the Captaincy General of Venezuela in 1776) and a Royal Decree from mid-1779 stipulating that the Spanish were to proceed to “inutilizar la salina que hay en nuestra Isla de la Tortuga, con el objeto de que no se aprovechen de ella los Ingleses, y cortar el contrabando que bajo de aquella sombra practican con nuestras posesiones” [to render useless the saltpan that is found on our island of La Tortuga so that the English will not benefit from it, and so as to cut the contraband that, under its shadow, they undertake with our possessions] (Aizpurua 1993: 166, 171). It is unclear who the Englishmen that Icuza expelled were, as we know that primarily Anglo-Americans (and by that time, US Americans) were engaged in salt raking on La Tortuga. No documentary mention of this incident has been found so far in New England newspapers. Again, the explanation may be disruption caused by the Revolutionary War. Nonetheless I suggest that perhaps Icuza was not aware the “Englishmen” on La Tortuga were in fact US Americans with whom Spain had established favorable and friendly relations. Alternatively, they could have also been royalist British colonists from Barbados or another British colony in the West Indies. Icuza and his 300 men also proceeded to demolish the saltpan (although in Spanish the verb “demolió” is rather ambiguous; possibly they inundated the saltpan by cutting another channel to the sea from Los

Mogotes Lagoon). This work seems to have been so arduous that Icuza, who personally assisted in the “demolishing”, fell ill because of “el rigor del sol que en aquel paraje es terrible” [the severity of the sun that in that place is terrible] (de Amezaga Aresti 1966: 85, 108). Icuza then took the salt to La Guaira and with it covered the costs of the whole expedition including the salaries and provisions of the men who had worked with him. The Spanish Crown incurred no expense (de Amezaga Aresti 1966: 85). The saltpan was in fact rendered so useless after this event that German naturalist Alexander von Humboldt (1872: 181) remarked in 1800 that “those [saltpans] which formerly existed on the small island of Tortuga... were destroyed by order of the Spanish government. A canal was made by which the sea has free access to the salt-marshes.” Following Icuza’s “demolition”, the La Tortuga saltpan was never to be raked again by foreigners (or by local Venezuelans), producing a reliable *terminus ante quem* of 1781 for the archaeological deposits excavated there.⁸⁵

DISCUSSION

As we have seen, salt was a vital import and commodity for the 17th-century Dutch Mother Trade. Salt-cured herring was a fundamental and highly lucrative product traded for grains from Prussia, Poland and eastern Europe, for wine and salt from the Iberian Peninsula and Mediterranean and for timber from Scandinavia. Soon after Spanish-Dutch

⁸⁵ The only later mention of the La Tortuga saltpan dates from 1849 when Venezuelan General José Gregorio Monagas wrote to his brother, the President of the Republic José Tadeo Monagas, asking if he could purchase the island and its saltpan that lay abandoned. He argued that the island’s uninhabited and unutilized condition harmed the State because the salt that was being clandestinely extracted from the saltpan lowered the revenues of the government (Boletín del Archivo General de la Nación [Caracas] 1987: 268–290). After years of negotiations and deliberation, the right to purchase never seems to have been granted.

hostilities broke out with the Dutch Revolt of the late 16th century, access to the Low Countries' traditional Iberian salt supply was cut off obliging the Dutch to search for salt across the Atlantic in the warm latitudes of the Caribbean. The audacious Dutch salt enterprise on La Tortuga Island proved short-lived but highly productive. At that time, the itineraries of La Tortuga salt—for the first and only time in the island's history—traversed the Atlantic to the Low Countries. The enterprise nonetheless proved exceedingly bloody. In only the span of a decade at least four armed confrontations occurred just on this single island resulting in a heavy toll of human lives and significant damage to Dutch investment on the saltpan. The Dutch were bound up in an inevitable entanglement conjoining enabling dependence and violent dependency on the salt that fueled their mercantile capitalist ventures and much of their dawning Golden Age. The *zoutvaerders* were, however, not completely dependent on La Tortuga. Following the violent and decisive confrontation in 1638, the intrepid Dutch soon moved on to utilize other sources of salt on the freshly-conquered islands of Bonaire and Curaçao, and Sint Maarten in 1648.

The Anglo-American itineraries of La Tortuga salt in the later 17th century on through the 18th century fashioned a dynamic and clearly defined regional Caribbean and North American triangular trade pattern within the larger and famous (or rather infamous) Triangular Trade in the Atlantic world (Fig. 3.1.13). This annual trade consisted of New England vessels sailing primarily to Barbados at the beginning of the year with essential plantation provisions such as the indispensable refuse salt fish needed to sustain the enslaved sugar workers. The ships also brought other items such as candles, horses to power the sugar mills, staves and cask hoops with which to make barrels to transport



Fig. 3.1.13. Map of the Caribbean and North American regions highlighting the small 'triangular trade' created by the Saltertuda Fleets.

sugar and rum, shingles for roofing and whale oil for oil lamps. At this point some vessels loaded molasses, sugar, rum and limes for their return leg. The New England ships would then, convoyed by a Royal Navy man of war, sail as part of the Saltertuda Fleet to La Tortuga for salt. Upon filling their holds with this free commodity from the uninhabited Spanish island, occasionally raking there for up to 41 days, the fleet would once again set sail in convoy through the Windward Passage and arrive on the Eastern Seaboard in early

spring just in time to supply poor-quality sodium chloride to the New England spring fish catch. The following winter, ships with refuse fish cured with fiery La Tortuga salt would launch once more for Bardados and the West Indies, repeating the cycle.

Thus did the steady clockwise movement of this Anglo-American trade continue. Within it, La Tortuga salt itinerated for more than one and a half centuries. La Tortuga and its salt was key to the New England economy and became an essential cog in the mercantile capitalist system of the British Empire. All at once, the Anglo-Americans became entangled with the island and its free salt in a binding entanglement of tight dependence, demanding on numerous occasions that the Spanish recognize their right to rake salt there and obtaining important treaty articles which enabled them to do so. We have seen that the dangers of the annual Saltertuda Fleet voyages required armed naval escorts. Nevertheless, the price sometimes paid was the capture of Anglo-American vessels and the imprisonment of their crews, as well as inter-imperial diplomatic outrage. When the vital salt fleets were attacked by Spanish corsairs, the New England fisheries suffered. Clearly, the Anglo-Americans had become overly dependent on the salt of this uninhabited Spanish island. Nevertheless, the Spanish remained perhaps naively ignorant of its strategic importance to their on-and-off British foes. The occasional attacks on their salt ships and imprisonments of their crews was apparently a small price to pay for the Anglo-Americans dependent on La Tortuga in the larger economic panorama of the British Atlantic. Within this panorama, La Tortuga salt in the holds of small wooden vessels itinerated northward, leaving the tropics and arriving in New England to cure the fragile flesh of refuse fish. Then within that fragile flesh it itinerated once again, back to the warm

waters of the West Indies to be consumed by the slaves who constituted the driving force of Britain's sugar plantations. Thus, it may be said that La Tortuga salt fueled the muscle of empire.

Whether carried in the ample holds of Dutch fluits or those of small Anglo-American sloops, schooners and brigantines, La Tortuga salt itinerated far beyond the warm latitudes of the Venezuelan Caribbean. It swiftly made its way across seas and oceans to cure the lucrative flesh of Baltic herring as well as the cod and mackerel from the Grand Banks. So it was that Venezuelan salt became tightly entangled in both the New World regional and the Old World Atlantic economies of the 17th and 18th centuries.

CHAPTER 3 | PART II

ITINERARIES OF SEA SALT: CAYO SAL IN THE VENEZUELAN CARIBBEAN

THE LOS ROQUES ARCHIPELAGO AND CAYO SAL

The Los Roques Archipelago is part of the Dependencias Federales de Venezuela and administratively pertains to the Territorio Insular Francisco de Miranda created in 2011. Los Roques is located some 123 km north of the present-day port of Caraballeda on the central Venezuelan mainland (Fig. 3.2.1). It is an oceanic archipelago separated from the mainland by depths of more than 1000 m (Cervigón 1995: 42). The mainland Venezuelan coastal range of the Cordillera de la Costa is visible from the archipelago on rare occasions such as during calm seas or after an exceptionally strong storm (Antczak and Antczak 2006: 67).

Los Roques is composed of more than 45 low calcareous sandy cays with the exception of the island of Gran Roque which is a rocky outcrop (Schubert and Moticska 1973) (Fig. 3.2.2). Most of the islands of the archipelago are populated by black (*Avicennia germinans*) and red mangroves (*Rhizophora mangle*), buttonwood (*Conocarpus erectus*), *perejillo* [saltwort] (*Batis maritima*), *verdolaga* [shoreline purslane] (*Sesuvium portulacastrum*) and various grasses, among them *gramínea* [seashore dropseed] (*Sporobolus virginicus*) and *cadillo* [prickly sandbur] (*Cenchrus gracillimus*) (Aristeguieta 1956). The rocky island of Gran Roque has slightly different xeric vegetation growing on



Fig. 3.2.1. Contemporary political map of the Caribbean indicating the location of the Los Roques Archipelago in red.

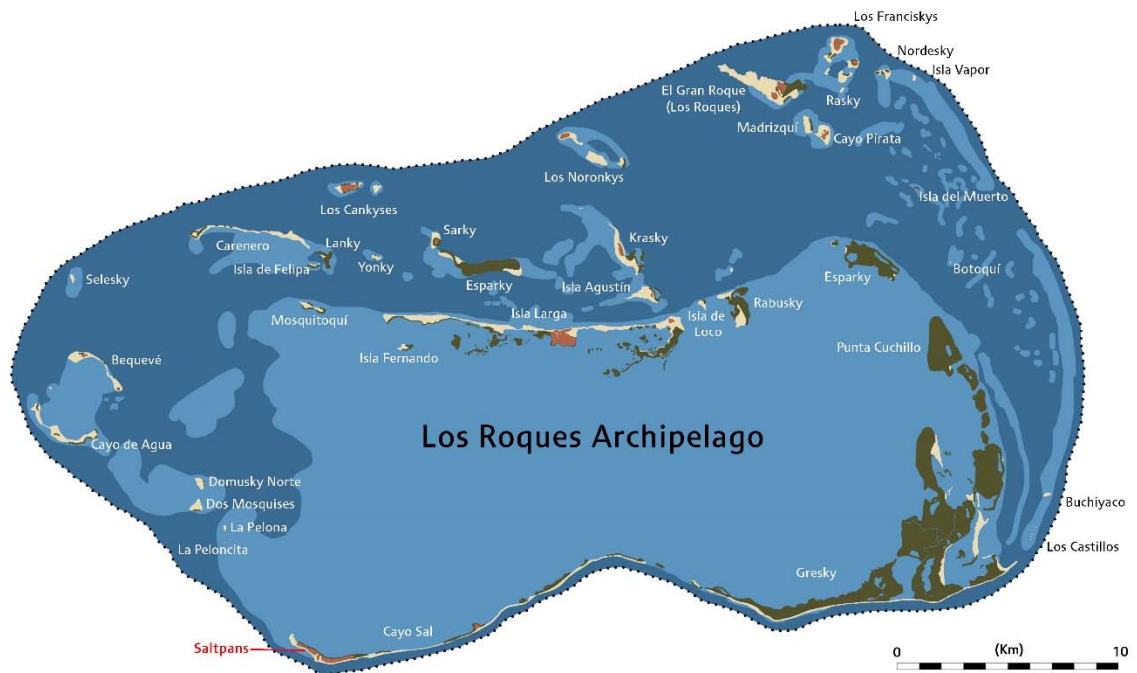


Fig. 3.2.2. Map of the Los Roques Archipelago indicating the salt pans on Cayo Sal in red.

its hills including *buche* [Turk's cap cactus] (*Melocactus caesius*). Some plants such as the coconut palm (*Cocos nucifera*), the date palm (*Phoenix dactylifera*), and the sea grape (*Coccoloba uvifera*) have been introduced in more recent centuries.

The terrestrial fauna of note consists only of a small endemic lizard species (Roze 1956) and the hermit crab. There is, however, an abundance of marine avifauna such as boobies (*Sula sp.*), pelicans (*Pelecanus occidentalis*), frigate birds (*Fregata magnificens*), and various seagulls (*Sterna sp.*). The limited biodiversity on the surface of the archipelago's cays is vastly outdone by the life teeming under its turquoise waters. The archipelago's dense mangrove forests with their sheltering root systems and expansive coral reefs and seagrass beds are a breeding ground for hundreds of species of fish, three species of sea turtles, lobsters, and numerous mollusks, among which *botuto* [queen conch] (*Lobatus gigas*) is the most significant. This abundance of fisheries, unrivalled on the mainland coast, strongly drew Amerindian visits from north-central Venezuela to the archipelago between c. A.D. 1000 and 1500 (Antczak and Antczak 2006).

The archipelago's calcareous soils are not fit for agriculture. The lack of any large and permanent source of fresh water, aside from a few sources of brackish water,⁸⁶ makes it necessary for humans to provision potable water by means of collecting rainwater or importing fresh water from sources beyond the archipelago. As a result, although it was under the jurisdiction of the Province of Venezuela during colonial times

⁸⁶ A brackish rainwater hole by one of the hills on Gran Roque had an uncertain supply of water, and this often tasted salty or as described by Dampier (1699: 53) "copperish" or "aluminous" (Hydrographic Office 1914: 313; Spence 1878: 202;). More dependable sources of water could be found when digging holes behind the high dunes on Cayo de Agua, where the water most often tasted fresh (Dampier 1699: 55; Marcano 1876: 173). These water holes are still used by fishermen today.

and belonged to the Republic of Venezuela thereafter, the archipelago was permanently settled only towards the end of the 19th century when the lack of permanent fresh water and fresh provisions was overcome thanks to the introduction of motorized vessels. During colonial times, the archipelago was occasionally visited by privateers including the pirate-naturalist William Dampier who in 1682 careened one of his ships on a sandy cay and collected brackish drinking water from Gran Roque (Dampier 1699: 52–55). It is possible that he careened his ship on the aptly named Cayo Pirata [Pirate's Cay] which has a long sandy isthmus connecting it to adjacent Madrizquí (Fig. 3.2.2). As shall be discussed later in this chapter, the large and uninhabited archipelago would have offered pirate and contraband ships (as well as other itinerating vessels) relative safety in its maze of cays and secluded coves, sheltered there from Spanish eyes and the open sea.

Once the long-standing Amerindian voyages to the Venezuelan islands ceased as a result of the Spanish Conquest, the archipelago's plentiful marine and terrestrial resources were again "discovered" in the 17th century and have been exploited ever since. A precipitous decline in queen conch populations due to aggressive fishing by temporary fishermen from Margarita Island beginning in the 1950s and continuing on through 1990s, as well as the depredation of sea turtles and marine birds, was largely halted by the creation of the Los Roques Archipelago National Park in 1972. At that time, a moratorium was placed on turtle fisheries. Conch exploitation has been prohibited since 1991 (Antczak 1999: 232; Schapira et al. 2009; Rodríguez and Posada 1994).

There has been very little specifically written about the post-Contact history of the Los Roques Archipelago, the only notable exceptions being two publications by Antczak and Antczak (1986, 1988). Throughout its history, the Los Roques archipelago has been a tempting “supermarket” brimming with marine resources ready for the picking by adventurous seafarers. Soon after taking Curaçao from the Spanish in 1634, the Dutch began forays into the adjacent Archipelagos of Las Aves and Los Roques to catch turtles. In 1643 Peter Stuyvesant, at the time director of the WIC colony of Curaçao⁸⁷, sent all of company’s slaves to Bonaire in order to rake the abundant salt on the pans found the island’s southern end. Preoccupied about the nourishment of the slaves on the arid island, Stuyvesant dispatched some soldiers in a sloop to Los Roques to turn turtles in order to provide the soldiers and slaves on Bonaire with fresh meat.⁸⁸ Los Roques probably provided turtle and fish to the Dutch, newly established on the ABC islands, on numerous other undocumented occasions during the rest of the 17th century. In the 18th and 19th centuries, fishermen from Bonaire, Curaçao and even as far north as Saba continued Dutch turtling and fishing incursions into this Spanish archipelago (Bosch 1836: 305; Anonymous 1832: 74; van Dissel 1868: 443; Anonymous 1907: 127).⁸⁹ Considerable

⁸⁷ In 1645 he would be selected by the WIC as the new Director-General of the New Netherland colony in present-day New York.

⁸⁸ Resolutions by Peter Stuyvesant et al. (14 April, 19 May, and 6 June 1643) in Gehring 2011: 23–25. Stuyvesant mentions that the turtles “come ashore in large numbers during the months of May and June,” this being prime nesting season. “Turning turtles” was the *modus operandi* for catching female turtles that had come ashore to lay their eggs. Having done so the seafarers would turn them on their backs, trapping them in situ.

⁸⁹ Ruud Stelten personal communication 2016. He mentioned that in 1787 there was a voyage from Saba to Los Roques to catch sea turtles which were subsequently sold on Saint Eustatius. This fishing trip of more than 750 km indicates the strong pull of the abundant fisheries in the archipelago. In 1818 a Spanish Naval sloop, the *Descubierta*, captured a Saban sloop that was turtling on La Orchila, 42 km to the east of Los Roques. It had live *carey* [hawksbill turtle] (*Eretmochelys imbricata*) turtles and many carapaces in its hold (Barandiarán 1989: 123–124).

quantities of lime were produced in the archipelago in the 19th century by Venezuelans and Dutch Antilleans who used the abundant coral collected from the vast storm terraces bordering the southern islands of Cayo Sal and Gresky (Bosch 1836: 305; Koloniaal Verslag 1854: 54) (Fig. 3.2.2). To this day, the circular outlines of numerous open-air lime kilns dot the windward coast of these cays (Figs. 3.2.3). The outlook for lime production was so promising that in 1876 Venezuelan natural scientist Vicente Marcano (1876: 170) reckoned, “*Toda Venezuela no consumiría en muchos años la cal que Los Roques puedan suministrar*” [All of Venezuela could not consume in many years the lime that Los Roques can offer].

The grasses of the seashore dropseed (*Sporobolus virginicus*) that densely carpet the cays of Los Roques as well as those of the adjacent Las Aves Archipelago were harvested by Curaçaoan, French and English smugglers to feed contraband mules bought on the coasts of the Spanish provinces of today’s Venezuela (Aizpurua 1993: 265). Either on their way to the mainland or on their return leg to the French or British Antilles (where the mules were sold to sugar plantations in order to power mills), the smugglers would stop at these islands to “*hacer yerba*” [*literally*: make grass] or to opportunely provision the animals with fresh fodder for the voyage ahead (Aizpurua 1988: 13; Anonymous 1832: 70).⁹⁰ During the mid-19th century, these grasses were also burned by Dutch Antilleans to produce *ceniza* (ash) that was then shipped to La Guaira and Caracas to be used in soap-

⁹⁰ One such Curaçaoan schooner, the *Jorge Jacobo*, captained by Gabriel Francisco (a free *moreno*) along with Nicolás Antonio (a free *pardo*) and Miguel Gerónimo (a free mulatto) was caught “*haciendo yerba*” in Los Roques and taken to La Guaira by the Guipuzcoan corsair ship *San Antonio* captained by Juan José Gamón in 1766 (Archivo General de la Nación [Venezuela] [hereafter AGN], Sección Compañía Guipuzcoana, Tomo XV, Folio 327; Boletín del Archivo General de la Nación [Caracas] 1947: 400–401).

making.⁹¹ Mangrove trees were cut for wood, burned for charcoal,⁹² and the bark⁹³ of the red mangrove (*Rhizophora mangle*) was also stripped and used for tanning leather—activities whose intensity, according to Marcano, had already left indelible marks on the Venezuelan islandscapes by the end of the 19th century (Barandiarán 1973; Bosch 1836:



Fig. 3.2.3. A large open-air lime kiln on the windward storm terrace of Gresky.

⁹¹ *Diario de Avisos, y Semanario de las Provincias* [from now on *Diario de Avisos*] (Caracas, Venezuela) Aug. 12, 1857.

⁹² There is abundant evidence for charcoal burning in the form of charcoal patches and large black stains visible by many of the mangrove forests on the cays of Los Roques. A 1903 newspaper mentions “Twelve men and five women, charcoal burners, on the islands of Los Roques, off the Venezuelan coast, perished of starvation as a result of the blockade” (Anonymous 1903: 204). This was a naval blockade imposed by Britain, Germany and Italy due to president Cipriano Castro’s refusal to pay Venezuela’s foreign debts with these European nations.

⁹³ Interestingly, a Spanish navigational guide from 1865 mentions that the bark from the wood cut on Los Roques must be removed because, otherwise, if stored ‘green’ within the hold of the ship it can cause “calenturas” [fevers] (Anonymous 1865: 140–141). Although red mangrove bark (including the leaves and fruit) were preferred as a tanning agent, mangle botón [buttonwood] (*Conocarpus erectus*) and mangle blanco [white mangrove] (*Laguncularia racemosa*) were also used to a lesser degree (Cunill Grau 2004: 138–139).

305; Dampier 1699: 54; Marcano 1876: 169–170). In 1871, phosphate was discovered in a green vein on one of the *cerros* [hills] of Gran Roque and was subsequently exploited by foreign entrepreneurs and companies until the early 20th century (Antczak and Antczak 1988; Hadgialy Divo 1956: 59; Marcano 1876: 172; Spence 1876: 202; Venezuela 1880: LXXXII–LXXXIII). Finally, most importantly to this present study, salt was cultivated and raked on the saltpan of the island of Cayo Sal in the 18th and 19th centuries.

The abovementioned activities indicate that seafarers from Curaçao and Bonaire indeed played a significant role in the exploitation of the natural resources of Los Roques from the 1640s through to the end of the 19th century. In fact, the Archipelagos' subsequent toponymical *mélange*, unique in the Caribbean, is a result of the mixed Dutch Antillean (Papiamentu) and Venezuelan (Spanish) heritage of the Roqueños [inhabitants of Los Roques]. Dutch Antillean seafarers knew the Archipelago like the backs of their hands. This was unsurprising as the Los Roques and Las Aves Archipelagos, uninhabited and largely beyond the economic interests of the Venezuelan mainland, were within their direct zone of influence—a “backyard” of sorts (Bosch 1836: 305). So much so, that by 1753 Dutch from the “Compañía de Curazao” [Curaçao Company] had equipped two sloops with 12 cannons and 80 men to defend the islands of Aves, Aruba, Bonaire and Los Roques from the Spanish corsairs of the Compañía Guipuzcoana de Caracas (Aizpurua 1993: 265). The company was established in 1728 to police maritime traffic in the Venezuelan Caribbean and prevent primarily Dutch Curaçaoan and also English and French illicit trade with the Venezuelan mainland (Hussey 1934).

On August 22 of 1871, Venezuelan President Antonio Guzmán Blanco halted Dutch Antillean pretensions to the Los Roques Archipelago by decreeing a new Territorio Federal Colón which was principally intended to regulate the “clandestine” extractive ventures of Dutch Antilleans to Los Roques and the other Venezuelan islands (Marcano 1876: 153–155).⁹⁴ This was more easily decreed than done. The direct power of the governor of the Territorio was diluted by initially placing the administrative seat in the mainland port of La Guaira (Barandiarán 1973). As a result, exerting control over the archipelago was hampered by distance.⁹⁵ Towards the end of the 19th century a small number of Dutch Antilleans, especially Bonaireans, who had been regularly visiting the archipelago began settling on the islands of Gran Roque and Krasky along with a number of Venezuelan fishermen.⁹⁶ These “first settlers” were joined in the 1920s by fishermen from Margarita Island who would eventually bolster the permanent population of Los Roques (Antczak and Antczak 1988). Over the past 25 years, the tourism industry in the archipelago has made the town of Gran Roque grow considerably to over 1,500 people by 2011. This has created a shift from direct resource exploitation to the population capitalizing on Los Roques’ enchanting scenery above and below water (Instituto Nacional de Estadística

⁹⁴ The August 22 decree also probably followed a few weeks after English chemist James Mudie Spence visited Los Roques sometime in late July or August of 1871 and ascertained that, “Evidences of the existence of phosphates in abundance were to be encountered on every side,” of the hills of Gran Roque (Spence 1878: 202). Venezuelan scientist Vicente Marcano also visited the island during that year and described the phosphate deposits, but it still has to be ascertained if he went after or before Spence (Marcano 1876: 172). It is probable that, in part, this important discovery impelled Guzmán Blanco to form the Territorio to protect the large phosphate deposits.

⁹⁵ The Dutch Antilleans, nonetheless, did complain that following the establishment of the Territorio Colón, access to the fisheries in the Archipelago required “a permit for 6 Guilders that they renew for 6 months”. By 1907, it became increasingly unpopular to Bonairean fishermen and Sabans no longer came (Anonymous 1907: 127).

⁹⁶ By 1895 Gran Roque had 97 inhabitants, although it is probable that many of them were seasonal fishermen (Vizcarrondo Rojas 1895: 107).

2014: 9). Now that the general historical entanglements of resource exploitation knotting the Los Roques Archipelago with the nearby islands of Bonaire and Curaçao, the Venezuelan mainland, and northern Caribbean islands such as Saba have been described, let us focus on the saltpan of Cayo Sal.

Cayo Sal is a long and narrow island of some 16 km snaking its way along the southwestern boundary of the large internal lagoon of the Los Roques Archipelago (Fig. 3.2.2). At some places such as *Los Partidos*, the island is so narrow the open sea forces its way through to the internal lagoon. The marine floor to the south of the island abruptly drops off to depths of more than 1,000 m. The rough seas battering the southern shore of the island have left enormous storm terraces of coral and shells. At the western end of Cayo Sal, nestled between the large windward storm terraces and the shallow internal lagoon on the leeward side, lie two large internal lagoons. These lagoons stretch for more than 2.2 km from east to west. They are divided nearly equally in half by a natural 100-meter-wide sandy isthmus (Fig. 3.2.4).

The western lagoon together with the eastern portion of the eastern lagoon have been modified in the past to function as a saltpan. Coral stone dikes crisscross this saltpan, dividing it into serviceable ponds and pans, indispensable to the process of salt cultivation (I will discuss this process in depth in Chapter 5). Two archaeological sites have been located by this saltpan. The archaeological site of Uespen de la Salina (the Hispanicized name for West End), designated CS/A, lies at the westernmost end of the saltpan and is located on the leeward coast (Fig. 3.2.4). My historical and archaeological investigations



Fig. 3.2.4. Aerial image of the man-made salt pans and natural internal lagoons at the western end of Cayo Sal highlighting the CS/A and CS/B sites (imagery from Google, DigitalGlobe).

have revealed that this site was probably visited between 1700 and 1800 by French and Anglo-American seafarers, Curaçaoans and the Spanish from the mainland Province of Venezuela. The second site, Los Escombros, designated CS/B, is located to the east on a sandy isthmus between the two parts of the saltpan (Fig. 3.2.4). The site was sporadically visited by salt-raking Venezuelans during the 1810s and 1820s. In 1834 the saltpan was rented out by the Venezuelan Government to a US American businessman for a period of at least eight years. After what was probably a period of disuse, salt was cultivated again on Cayo Sal in the 1860s and 1870s by L. C. Boyé, a Bonairean businessman who had settled in the archipelago. Cayo Sal's saltpan was then flooded, made unusable and abandoned in 1880 because it competed with the saltpans at Cumaná. Let us now turn to discussing in a more detailed manner the historical context of the 18th-century site of Uespen de la Salina (CS/A) and the entanglements and itineraries of the salt produced at its pans.

CAYO SAL: ISLAND AT THE CROSSROADS

Salt and Contraband (c. 1700–1800)

As was the case with La Tortuga, a documented history of the Cayo Sal saltpan had never been written. What occurred on Cayo Sal can now be unveiled through my historical and archaeological research and the bringing together of multifarious written sources in various languages. The paucity, however, of significant documentary evidence for this period makes the task of tracing the itineraries and subsequent entanglements of salt produced at this pan quite daunting. Nonetheless, by reconstructing what historical context there is of salt cultivation in the 18th and later in the 19th century on this forgotten

and uninhabited island, the itineraries of salt and its entanglements can be, for the first time, approached and explored.

As previously mentioned, the saltpans of the Venezuelan islands were undervalued and, consequently, underutilized by the administration and inhabitants of the Spanish provinces of Venezuela throughout their colonial existence. The numerous saltpans on the mainland coasts of the Province of Maracaibo and Cumaná—from Sinamaica, Sauca and Borburata in the west to Araya in the east, and Pampatar on Margarita Island—more than met the various local needs for sodium chloride: salting beef and fish, curing hides, making cheese, feeding livestock and using at the table. In fact, the Province of Nueva Andalucía had so many saltpans that when those of Araya became unusable due to flooding in the mid-18th century, the Governor of the province don José Diguja y Villagómez remarked (upon his visit to the region in 1761) that “por lo que no hace ninguna falta la pérdida de Araya... se puede decir que toda la costa es una continuada salina, pues en donde quiera que se detiene el agua, o llovediza o salada, resulta sal” [Thus, it makes no difference losing Araya... one may say that the entire coast is a continuous salina, meaning that wherever the water stops flowing, either rainwater or salt water, salt is formed] (González González 1977: 209).

In 1774, according to the governor of the Province of Venezuela Marqués de la Torre Felipe Fondeviela y Ondeano, the towns of La Guaira, Caracas and the adjacent inland regions of Valles del Tuy and Barlovento (where there were many cacao plantations) were principally supplied by the abundant saltpans in the Province of Nueva

Andalucía (also known as the Province of Cumaná). The governor mentioned that salt was also provided by “...otras [salinas] que hay en diferentes islas desiertas” [other saltpans on different deserted islands] (Sarabia Viejo 1995: 89–90). He proposed that every *fanega* (Spanish bushel [Castille] = c. 55.5 liters) weighing 8 *arrobas* (1 *arroba* = 11.5–12.5 kg) be taxed 8 *reales*, and to exert control over this the fee would be charged to the buyer at the saltpans themselves (Sarabia Viejo 1995: 89). It is possible that following this decision to tax salt, some sort of temporary or permanent post was set up on Cayo Sal to assure the payment of taxes by Venezuelan and foreign seafarers. The governor’s comment that salt was brought from “deserted islands” must have referred principally to Cayo Sal as there were no truly serviceable salt lagoons in the Las Aves Archipelago, La Orchila or La Blanquilla. La Tortuga’s saltpan was exploited legally by the Anglo-Americans up until 1781.

With the establishment of the *Capitanía General de Venezuela* [Captaincy General of Venezuela] in 1777, the Spanish Crown sought to increase income to its dwindling treasury and capitalize on salt exploitation in the Venezuelan provinces through taxation. On June 24, 1777, Charles III of Spain issued a *Real Cédula* instituting a salt tax. The tax was initially meant to charge salt production 8 *reales* for every *fanega* of salt (Sarabia Viejo 1995: 98). There was an exception, however, for salt exported from one province to another, and to stimulate commerce, a discount of 4 *reales* per *fanega* was offered (Ibid.). Since Cumaná (the capital of the Province of the same name) produced the most salt in the region, it can be assumed importing salt from there to the Province of Venezuela (and Caracas as its capital) was half as expensive as obtaining salt from Cayo Sal, although the

latter was significantly closer to Caracas. The disparity in taxes would undoubtedly have rendered Cayo Sal uninteresting to the Spanish for salt exploitation during the last quarter of the 18th century, leaving it open to furtive salt loading by the Dutch Antilleans.

Although the Spanish in the Province of Venezuela showed little interest in sodium chloride from the Cayo Sal saltpan from the 16th to the early 19th centuries, they nonetheless were concerned about it falling into Dutch hands or those of other European imperial powers. One document speaks to mixed Curaçaoan and English merchant activity on Cayo Sal. In 1775, a Spanish corsair ship of the Guipuzcoana Company seized eleven men on the Los Roques Archipelago. The men, all of African descent, included seven slaves and three freedmen from Curaçao as well as a slave from Saba. An English captain had left them on Los Roques to fish and gather salt. The expedition had been arranged jointly by Dutch and English merchants as well as by the widow of an Englishman residing in Curaçao. The Dutch Antilleans, *ranchados* [camped] in a makeshift shelter (Amézaga 1966: 220), labored for a week in the archipelago supervised by an unarmed white mariner (Cromwell 2012: 257; Declaraciones 1775). Although no further information on direct Curaçaoan involvement with the Cayo Sal saltpan during the 18th century has been found,⁹⁷ I suggest that the foregoing might have been the *modus operandi* throughout the 18th century for Curaçaoans—Los Roques was, after all, their “back yard.” The limited nature of documentary evidence also obscures where such Cayo Sal salt itinerated after it had been shipped back to Curaçao or Bonaire. Most of the salt raked by Curaçaoan

⁹⁷ Relevant material probably exists in Dutch archives on Curaçao and in the Netherlands.

slaves on the saltpans of Bonaire would have been used for local consumption and fish salting with the remainder going to the Netherlands (Goslinga 1990: 121–134). Cayo Sal salt raked by Dutch Antilleans during the 18th century probably found use on both sides of the Atlantic.

Although likely the most frequent 18th-century visitors to Los Roques, Curaçaoan seafarers were not the only ones. The same Bermudians lured by La Tortuga salt during the last quarter of the 17th and over most of the 18th century were also no strangers. They apparently considered most of the Venezuelan Leeward Antilles (the “Maroon Islands” as they termed them, including the Los Testigos Archipelago, La Blanquilla, La Orchila, and the Los Roques and Las Aves Archipelagos) within their sphere of influence—their “commons”—and engaged there in salt raking, turtle fishing and wrecking (salvaging goods from shipwrecks) (Jarvis 1998: 445). As we have already seen from their involvement with La Tortuga, Bermudians were not mariners inclined to defer to the armed Saltertuda Fleet but preferred to freely rove where and when they pleased. As a result, it is not surprising that while in the Venezuelan Caribbean they loaded salt at La Tortuga and Cayo Sal, most often independently from the New England salt fleet.⁹⁸

⁹⁸ Bermudians also knew about Los Roques. The archipelago was frequented by English vessels as indicated by the deposition of William Gibbs, a Bermudian whose sloop *Polly* was taken with two other Bermudian vessels by corsairs as the former were loading salt on La Tortuga in 1766. The crews were taken prisoner to La Guaira. Some time later Gibbs applied to leave aboard a vessel owned by a Frenchman and a Spaniard that was loading mules and about to leave for the Windward Islands. He did not obtain permission to leave from the Spanish Commandant in La Guaira but boarded nonetheless and was deposited on the “Keys of Arrocas” (Los Roques) where he met and got on an English vessel thereby securing his freedom (Minutes of His Majesty’s Council 1996: 225–226). Benjamin Stiles, commander of one of the other sloops, received an offer from a Spanish officer (as did the other two captains) that with their agreement they could be taken to the “Arrocas Keys” or Curaçao instead of being sent to jail. They declined the clearly deceitful offer understanding that it sought their swift removal to prevent them from pressing charges against the corsairs (Ibid.: 214).

Moreover, other Anglo-Caribbean seafarers including from Anguilla and Nevis visited Los Roques during the 18th century for turtling.⁹⁹ Although it cannot be ruled out, it is less likely that individual Anglo-American ships of the Saltertuda Fleet made their way on solitary voyages to Los Roques as they were required to stay with the fleet until they had reached the relatively safe waters north of the Bahamas. Unlike most Bermudian sloops, these small New England vessels were unarmed.

Salt and fishing, however, were not the only lures into the bountiful waters of Los Roques. Given the archipelago's proximity to the continental coast, the potential for illicit commerce with the Spanish mainland made Los Roques an ideal haunt for roving seafarers looking to trade with the Venezuelan provinces whose provisioning and access to manufactured goods was greatly limited by the Spanish Empire's strict and exclusive commercial laws. During the late 17th and throughout the 18th century, Venezuela was one of the leading producers of cacao in the Americas. Its cacao was considered to be of the best quality by Europeans, Anglo-Americans and Mexicans alike, its principal consumers (Arcila Farias 1950: 42; Gay and Clark 2009: 637). During the 17th and especially the 18th century, Curaçao's merchant seafarers were deeply involved in cacao contraband on the Venezuelan coast. Other smuggled goods included mules, hides and

⁹⁹ An Anguillan sloop, fitted out in Cumaná (the port capital of the mainland Province of Nueva Andalucía) was caught by Spanish corsairs in 1737 as she was on her way to catch turtle in the Rocas. Since the vessel was built in Cumaná, Antigua Governor William Matthew hoped to negotiate with the governor of Nueva Andalucía to get the sloop back (Davies 1963: 11). Another similar incident that same year occurred on the 4th of September when a Spanish corsair ship took an Antigua vessel bound for St. Vincent that had veered off south towards the Spanish mainland. After stripping the English crew naked, severely beating them and wounding one with cutlasses they left them on Gran Roque. 5 days later the corsairs took a sloop belonging to Nevis, apparently, also in the Archipelago. They were saved by a Dutch vessel 9 days later, only to fall once again into the hands of the same corsairs ship whose crew treated them even more savagely (Ibid.).

tobacco (Aizpurua 1984, 1988). Dutch ships regularly sneaked into numerous sheltered and secluded bays along Venezuela's central coast to sell goods and buy cacao from the plantations nestled in the valleys extending inland from the sea (Aizpurua 1993).

Los Roques, along with the island of La Blanquilla, the Las Aves Archipelago and Dutch Bonaire¹⁰⁰ became uninhabited transshipment points for cacao smuggling. These islands were remote enough to offer a certain degree of concealment yet lay within striking distance of the Spanish mainland to engage commercially with the coastal inhabitants of the Province of Venezuela (Aizpurua 1993: 266–267) (Fig. 3.2.5).¹⁰¹ Often by written prearrangement, Venezuelan cacao growers would meet Curaçaoan traders on Los Roques in order to exchange their goods there (Klooster 1998: 126–127).¹⁰² During

¹⁰⁰ Bonaire was used as a transshipment point for smuggled goods as mentioned in this excerpt from the late 18th century, “La isla Bonaire, holandesa, les sirve [a los contrabandistas] para depósito de sus géneros y caldos, así como para los frutos que se extraen de la tierra firme...” [The island of Bonaire serves the smugglers as a place to deposit their merchandise along with the products that they extract from the mainland...] (Amézaga 1966: 49).

¹⁰¹ Declarations of various men before the *Castellano y Justicia* (a high judicial official) of La Guaira on 16 December, 1763 coincided in noting that, “las Islas de Los Roques, son las más inmediatas norte-sur con esta ciudad y que por lo tanto son muy propicias a los extranjeros para sus comercios furtivos” [the islands of Los Roques are closest north-south to this city (La Guaira), and as such are very propitious to the foreigners for their furtive commerce] (AGN, Compañía Guipuzcoana, Tomo XII, Folios 32–38; Boletín del Archivo General de la Nación [Caracas] 1944: 93).

¹⁰² On the 14th of May of 1791 the *guardacosta* ship *Nuestra Señora de los Dolores* (alias “*La Concha*”) followed a suspicious sloop into the Los Roques Archipelago. Part of the corsairs disembarked and found various contraband goods buried in the sand. Relación de Juan Antonio Careaga, 14 de enero de 1793, Audiencia de Caracas, Legajo 785, Archivo General de Indias (AGI) (Ortega Rincones 2003: 244). The potentially contrived nature of at least parts of such testimonies that were meant to provide evidence for contraband and prove a foreign ship caught by corsairs as a legal prize, means that they must all be taken with a grain of salt.

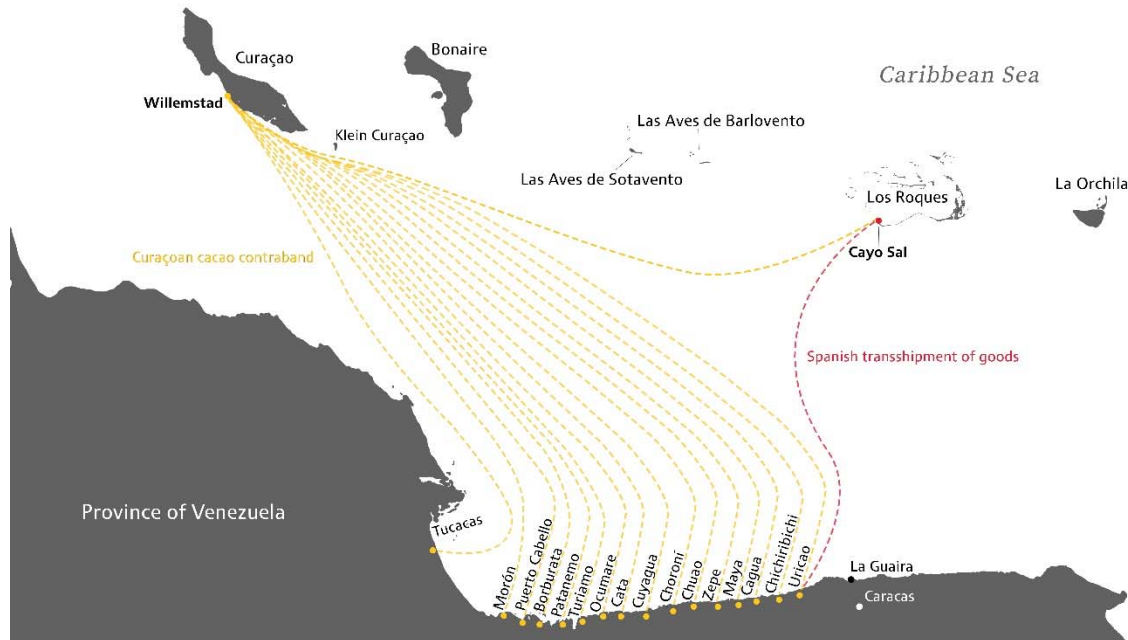


Fig. 3.2.5. Map indicating the main cacao plantations in the bays of the central coast of the Province of Venezuela in the 18th century. The regular contraband routes to and from Curaçao are indicated in yellow and, in red, the route for contraband transshipment on Cayo Sal.

the 18th century, Spanish corsairs and *guardacostas*¹⁰³ were well aware that Los Roques was a nest for contraband activities and captured numerous Dutch, English and French ships there laden with contraband goods.¹⁰⁴ Some of these ships, as mentioned, were not smuggling cacao. Dutch, English and French ships also illegally transported mules and

¹⁰³ From 1728 to 1781, the Real Compañía Guipuzcoana de Caracas held a monopoly granted by the Spanish Crown on all trade with the Venezuelan provinces. As part of the contract, the Compañía Guipuzcoana agreed to stymie the informal commerce (contraband) that Venezuelan cacao planters had been undertaking with predominantly Sephardic Curaçaoan seafarers since the 17th century. To do this, the company employed privateer ships to patrol Venezuelan waters seizing any vessel engaged in illicit activities (Vivas Pineda 1998). In the wake of the Bourbon Reforms, and less stringent commercial regulations, the Compañía Guipuzcoana's contract was annulled in 1781 (Lucena Salmoral 2006). This, along with the unification of the Provinces of Caracas, Cumaná, Maracaibo, Margarita, Trinidad and Guyana under the administrative figure of the Captaincy General of Venezuela in 1777 meant that the corsairs were gradually decommissioned and replaced by the Guardacosta de Caracas [The Caracas Coastguard] (Bracho Palma 2005).

¹⁰⁴ Vessels intercepted by the corsairs in Los Roques include the following: Spanish schooner *La Fortuna*, 1766; Curaçaoan schooner *Jorge Jacobo*, 1766 (Boletín del Archivo General de la Nación [Caracas] 1947: 399, 400); Dutch schooner *La Esperanza*, clothes and alcohol, 1774; Curaçaoan schooner *El Rey David* (Aizpurua 2006: 381, 392; see also Boletín del Archivo General de la Nación [Caracas] 1937: 415–422); and a French sloop carrying only grass, 1767 (Aizpurua 1988: 13).

would stop by the Archipelago to gather grass for their animals. Nor were the Spanish corsairs the only privateers operating in the waters in and around Los Roques. During the War of the Spanish Succession, French privateers—allied with the Spanish—were sent to the archipelago (as well as to Las Aves, La Blanquilla and La Orchila) in search of Dutch prizes for capture and delivery to Spanish ports (Klooster 1998: 101–102). Not only did the aforementioned eleven Curaçaoan Creole seafarers camp on Los Roques in 1775; according to a 1769 report by Spanish corsair Vicente Antonio de Icuza, some English and French turtle fishermen apparently set up shelters and *corrales* (likely corrals for livestock) on Los Roques and traded with the fishermen from the mainland, selling them clothes and *aguardiente* (alcohol) in exchange for silver coins (Amézaga 1966: 49).¹⁰⁵ As a result of these incursions into Spanish insular territory, instructions of the Captain General of Venezuela in 1771 to the corsairs of the Compañía Guipuzcoana stated that “podrán los guardacostas desalojar de Los Roques, de La Tortuga, Blanca [La Blanquilla] y Orchila todo extranjero que habite en barraca” [The guardacostas may evict any foreigner living in shelters on Los Roques, La Tortuga, La Blanquilla and La Orchila] (Aizpurua 1993:

¹⁰⁵ The full reference from Icuza’s report says the following, “Las islas españolas (inhabitadas) Los Testigos, Los Hermanos, La Sola, Tortuga, Isla de Aves, Isla Blanca, Orchila y Los Roques, sirven a los ingleses y franceses para la pesca de la tortuga, en las cuales hay cierto número de pescadores con barracas y corrales, manteniéndose con víveres que cada mes les lleva una balandrita, y aun plata fuerte, negociados por los pescadores españoles en cambio de ropa y aguardiente.” [The uninhabited Spanish islands of Los Testigos, Los Hermanos, La Sola, Tortuga, Isla de Aves, Isla Blanca, Orchila and Los Roques, serve the English and French for turtle fishing, and on these islands there are a certain number of fishermen in shelters and with corrals, maintaining themselves with the supplies that are brought to them every month in a sloop (presumably Curaçaoan or Spanish), and they obtain silver coins from the Spanish fishermen in exchange for clothes and alcohol] (Amézaga 1966: 49).

357).¹⁰⁶ Such shelters might well have been located on Cayo Sal as the archaeological evidence to be presented in the next chapters suggests.

As the above documentary evidence indicates, during the 18th century, Cayo Sal and Los Roques was inevitably entangled with the more profitable activity of contraband that was endemic to the Venezuelan Caribbean. Curaçaoans, Bermudians, English and French all knew and frequented the archipelago, not only for salt and fishing but also used these islands as a waystation for contraband activities. Given that Los Roques' large and sheltered internal lagoon dotted with islands of sand and mangrove was a space frequented by these Caribbean seafarers, it is plausible to suggest that the saltpan of Cayo Sal—the only place in the archipelago to have visible archaeological evidence of temporary human occupation in the 18th century—would have been a trans-imperial place of rendezvous for traders. Here seafarers could rake salt, catch turtle and fish, gather grass for their smuggled mules. The island and the archipelago were also trans-imperial places of contact where Information could be exchanged, future commercial networks established and commercial plans and schemes developed. As we shall see in Chapters 4 and 6, the archaeological evidence from the 18th-century site of Uespen de la Salina (CS/A) on Cayo Sal has much to offer in terms of materially grounding and complicating the diverse assortment of seafarers that are known from documentary evidence to have stopped by this Venezuelan archipelago during that century.

¹⁰⁶ These same instructions were then repeated in 1784 by the General Intendent of Venezuela since, presumably, the foreigners continued using the Venezuelan islands as a theatre for contraband excursions (Aizpurua 1993: 362).

Neglected Archipelago (c. 1800–1880)

“P.—¿Cuáles son las islas importantes de esta costa? R.—La Isla de Tortuga, por la Sal; la Isla de Orchila, por la yerba de este nombre, y Los Roques, por sus ricas salinas” [Question: What are the most important islands of this coast? Answer: the island of La Tortuga, because of its salt, the island of La Orchila, because of the moss of the same name, and Los Roques, because of its rich saltpans] (Codazzi 1960: 80). This assertion regarding Los Roques and La Tortuga as two of the three most important islands of the Venezuelan Caribbean because of their salt was made in the 1830s by Agustín Codazzi, an Italian military man turned geographer and cartographer of Venezuela. Some 30 years earlier, Humboldt (1872: 181) similarly appraised the Los Roques saltpans: “The province of Caracas possesses fine salt-works at Los Roques.” Curiously, both these conclusions about the riches of Los Roques’ saltpans were reached by foreigners and—for that matter—foreigners very well acquainted with the natural and physical environment of Venezuela, perhaps more so than many Venezuelans of the time. Both Codazzi and Humboldt knew of the other saltpans on the Venezuelan coast but agreed on the importance of those on Los Roques. Their view contrasted strongly with the reality around them. Both during colonial times and the Republican era (beginning with Venezuelan independence from Spain on July 5th, 1811), Venezuelans assumed one of two postures regarding the economic and strategic potential of Cayo Sal’s saltpan: lack of interest or ineffectual action. In the latter case, they hamstrung themselves through taxes and duties widely differing from other coastal pans, especially those in *Oriente*, that is, the east of the country. In fact, as shall be seen in this section, the newly independent Venezuelan

Republic would often treat the issue of foreign encroachment into its islands and salt pans ambivalently and irresponsibly, in much the same way the Spanish colonial authorities had handled this issue in the 17th and 18th centuries.

The moment of abandonment of the CS/A site on the western end of the Cayo Sal salt pan as well as the moment when the eastern CS/B site began to bustle with the shouts of saltworkers is not easily defined. As will be discussed in later chapters, the archaeological evidence indicates that the first site was primarily occupied in the 18th century with CS/B starting operations in the 1810s. The documentary evidence at hand does not point to a clear distinction between the 18th-century colonial site and the 19th-century Republican-era site. Responding to a Venezuelan inquiry about documents related to the Venezuelan Isla de Aves¹⁰⁷ that was being contested by the Netherlands, France and the US, The Hydrological Directorate of Spain in 1855 sent a document shedding some light on activity on Cayo Sal:

...en el extremo [sic] Occidental del Cayo Largo que despide la punta O. del mayor de los Roques, tenía Hacienda del Gobierno Español, porque abundan las salinas, una casilla que servía de alojamiento al resguardo allí establecido con el objeto de custodiarlas e impedir que ningún buque extranjero [sic] cargase de sal, sin llevar el correspondiente permiso, espedido [sic] por el Gobernador de la Guaira, mediante el pago del derecho que se exija. [...at west end of the long cay that is at the western end of Los Roques, the Spanish Government had an *Hacienda* (property/business). Because salt pans are abundant there, they had a small house that served as an accommodation for the guard that was established there to watch over the salt pans and to impede loading salt by any foreign vessel that did not have the necessary permit issued by the Governor of La Guaira by payment of a tariff for that right] (Barandiarán 1989: 149).

¹⁰⁷ Isla de Aves is a small sandbank located some 500 km north in a straight line from the Venezuelan mainland. It lies at a similar latitude as the French island of Guadeloupe. It was contested by France, the Netherlands and the US because of its strategic location as well as for its guano (Barandiarán 1989).

First, it must be stressed that this document cannot be taken at face-value. It was written to support the Venezuelan claim to the islands in its territorial sea along with the strategic Isla de Aves, intending to prove possession through the presence of “guards” and a “small house” on Cayo Sal. Another issue is the time period the 1855 document refers to. Clearly, since it refers to the “Spanish Government,” the conclusion must be that it harks back to the pre-1811 colonial administration. In this case, the “small house” may have existed at the CS/A site because that location was occupied during the 18th century.¹⁰⁸ Alternatively, however, the document might refer to the small partially-standing structure, possibly an overseer’s house, at the CS/B site. It is not certain by whom and when that structure was built, but the archaeological evidence indicates it was probably occupied beginning in the 1830s. If we accept the possibility that the document is fabricating “evidence” to support 18th-century colonial-Venezuelan presence on Cayo Sal, clearly the 19th-century structure at CS/B was still standing in 1855, making for a credible if largely unverifiable argument.

Although documentary and archaeological evidence does not offer many clues about when construction of the coral-stone dikes on the saltpan and when salt production at the CS/B site began—and whether it was initially a Venezuelan venture or a foreign one—there do exist a few written indications that salt was being produced and commercialized there in the 1810s. In a letter dated July 3, 1812, Antonio Fernández de León¹⁰⁹ wrote to General Francisco de Miranda:

Los introductores de sal de Cumaná por unos principios mal entendidos, ó protección á algunos particulares, ó de pocos años á esta parte gozaban un privilegio en los derechos

¹⁰⁸ The possible foundations of a structure at the CS/A site will be discussed in Chapter 6, Part II.

¹⁰⁹ Fernández de León was appointed the Director General of Revenue of the *Confederación de Venezuela* by Francisco de Miranda in early 1812 (Briceño Iragorry 1981).

con respecto á la de los Roques que trabajaban algunos vecinos de esta provincia, que ha resultado de que se abandonen aquellas salinas y que los extranjeros sean los que las disfrutan. He dispuesto también la igualdad de derechos. [The salt merchants of Cumaná, because of some misunderstood principles, or the protection of some private individuals, for a few years have benefitted from a (superior) privilege in rights with respect to the (saltpan) of Los Roques that was exploited by some neighbors of this province (Caracas), which has resulted in the abandonment of those salt pans and their enjoyment by foreigners. I have also decreed the equality of rights (for the salt pans of Los Roques)] (de Rojas 1884: 380).

De León makes clear that the Cayo Sal saltpan was utilized by people from the Province of Caracas but due to inequalities in the taxation of the final product in relation to salt from Cumaná (principally Araya), the Cayo Sal pan was abandoned and left to foreigners, probably Dutch Antilleans from Curaçao and Bonaire.¹¹⁰ This state of affairs is made even more evident by a letter of June 25 of that same year written to de León by José de Alustiza. The latter mentions that the salt tax of 1777 (stipulating that 8 *reales* had to be paid for every 8 *arrobas* of salt) was met with great opposition by the indigenous fishermen and salt traders of Araya, Cumaná and Margarita, and was subsequently changed to 8 *reales* for every 12 *arrobas* for the indigenous fishermen and the fish salting industry (de Rojas 1884: 370; Sarabia Viejo 1995: 93–94). Adding insult to injury for the Caracas salt traders, in 1806 the original 1777 salt tax was reimposed in the province of Caracas. Alustiza mentioned that this arbitrary measure by the Spanish authorities was contested by an unnamed individual, “El único interesado en las salina de los Roques se presentó solicitando la igualdad con Cumaná y nunca resultó providencia al intento” [The only person interested in the salt pans of Los Roques appeared soliciting equality with those of Cumaná and this was never granted] (de Rojas 1884: 370).

¹¹⁰ It is also uncertain to what extent the Dutch Antilleans sought out salt from Cayo Sal in the periods 1800–1803 and 1807–1816 while Curaçao, Aruba and Bonaire were under British occupation during the Napoleonic Wars (Goslinga 1990: 129–130).

Based on these injustices, Alustiza recommended to de León that he promote the levelling of salt taxes, arguing that, “para que fomentándose nuestras salinas estemos libres de tener que mendigar de otras partes una especie tan necesaria” [so that by developing our saltpans we would be free from begging elsewhere for such a necessary good] (de Rojas 1884: 370). Clearly, the freshly independent First Republic of Venezuela would have a greater degree of autonomy if it could guarantee a salt supply from strategically local Cayo Sal instead of importing it from *Oriente* (the Venezuelan East). Shortly after these letters were written, on July 25th, Miranda capitulated to the Spanish Crown, bringing an end to the short-lived First Republic. The plan to equalize salt taxes for Los Roques and Cumaná was probably shelved (Larrazábal 1865: 126).

How this taxation issue was resolved in the years following 1812 is still unclear, but the fierce competitiveness of Cumaná salt merchants would still come to haunt the saltpan on Cayo Sal. Notwithstanding, various vessels entered the port of La Guaira with salt from Los Roques during the years 1814 and 1815 indicating that the pans were being raked to some degree, although it is not known by whom. Nor is it known whether this represented sporadic raking of naturally crystallized salt on the abandoned saltpan or if a salt cultivation enterprise with saltpan infrastructure existed on the island.¹¹¹ The captains of these vessels, with surnames such as Ramírez, Padrón and Cabrera, were

¹¹¹ On Jan. 9, 1814, the *Santa Rita*, Capt. Marcos Cabrera, entered La Guaira from Los Roques with salt and departed that same day once again to Los Roques (*Gazeta de Caracas* Mar. 3, 1814). On Jan. 20, 1814, the *Carmen*, Capt. Juan Ramírez, entered La Guaira from Los Roques with salt (*Gazeta de Caracas* Mar. 7, 1814), and on Sept. 18, 1815, the schooner *Candelaria*, Capt. D. Antonio Padrón, entered La Guaira from Los Roques also with salt. It had left on Sept. 3 (*Gaceta de Caracas* Oct. 11, 1815 and Oct. 18, 1815). On Oct. 2, 1815, the schooner *Candelaria*, Capt. D. Antonio Padrón, entered La Guaira from Los Roques with salt and that same day left for the archipelago (*Gaceta de Caracas* Nov. 29, 1815 and Dec. 13, 1815).

probably local Venezuelans and the salt they shipped was perhaps used domestically to salt beef, hides, or fish—possibly even to help supply the Patriots as they were often short of supplies in their battles for independence (Blanco 1876: 881; de Rojas 1884: 380; O’Leary 1881: 218).

Sporadic salt raking at Cayo Sal continued in the 1820s as shown by the registration of two Venezuelan ships entering La Guaira with salt from Los Roques, one captained by Josef Mariche and the other by Miguel Monagas.¹¹² At least one US ship likely stopped at Los Roques in 1824 although it is not known if it loaded salt.¹¹³ In fact, Los Roques lay between major shipping lanes running on either side of the archipelago (between the Archipelago of Las Aves de Barlovento to the west and La Orchila to the east) along which merchant vessels made way for La Guaira from the northern Caribbean¹¹⁴ and North America (Fig. 3.2.5). This traffic resulted in numerous wrecks on the archipelago’s reefs in the 19th century. For some, these proved opportune for loading salt and the other natural resources Los Roques had to offer. The first fragmentary information available concerning who was exploiting the Cayo Sal saltpan appears in a document dated, July 24, 1830, in Caracas, where Mr. Tomás González announces that he

¹¹² On Feb. 24, 1822, the national polacre schooner *Cármén*, Capt. Josef Mariche, entered La Guaira from Los Roques with salt (*Iris de Venezuela*, Mar. 18, 1822); and on Jun. 30, 1822, the national schooner *Felicidad*, Capt. Miguel Monagas, entered La Guaira also with salt (*Iris de Venezuela*, Jul. 15, 1822). Of course, it must also be considered that during these times of war and turmoil some Venezuelan vessels might have been circumventing the unequal taxation of Cayo Sal salt by “illicitly” delivering the mineral to smaller ports on the Venezuelan littoral where official ship entries would not have been recorded.

¹¹³ On Nov. 11, 1824, the schooner *Chili* arrived in New York 20 days after leaving the “Grand Rocas Isles” (Los Roques), having first been in La Guaira (*Baltimore Patriot*, Nov. 13, 1824).

¹¹⁴ The Danish island of Saint Thomas was in fact an important provider of dry goods and victuals to the fledgling nation of Venezuela during lulls in the war for independence in the early 19th century (see Vergara 2010).

will lease the pan for a period of two years.¹¹⁵ This reference raises the possibility that Mr. González, apparently a Venezuelan, was either the owner or a governmental administrator of the Cayo Sal saltpan. On May 3, 1831, a dispatch was expedited to transport 30 bushels of salt to La Guaira from Los Roques, firm evidence that salt was in fact being produced on Cayo Sal, possibly under the control of said Tomás González.¹¹⁶

Additional evidence from the 1830s aids in reconstructing some of the local and regional entanglements knotting Cayo Sal and its salt. On November 9, 1833, by resolution of the executive branch of the Venezuelan government, a man by the name of Jeremías Morell was given the right to catch *carey* (hawksbill turtle) for five years in Los Roques (Hood 1846: 68). Other sources indicate he was a US American and also given the right to exploit salt at Cayo Sal for eight years starting in 1834 at a rate of 2,000 guilders per year (Bosch 1836: 306–307; Goslinga 1990: 122; Teenstra 1837: 220).¹¹⁷ The US American was apparently still exploiting the saltpan in 1842 as can be inferred from the following anecdote. On December 7th of that year, a convoy escorting Simon Bolívar’s mortal remains to the port of La Guaira anchored at the saltpan of Cayo Sal for six days. Before leaving, they left “Señor Mosell” who was “empresario de aquellas salinas” [manager of the saltpan] a note to deliver to the commander of a Dutch vessel they had been waiting

¹¹⁵ Minuta de un informe pasado al Prefecto Departamental, referente al remate de las salinas de *Los Roques*, por parte del Sr. *Tomás González*, y por el término de dos años. Caracas, 24 de julio de 1830. Hacienda Pública, Tomo XXIX, Fol. 314 (Boletín del Archivo General de la Nación [Caracas] 1972: 474).

¹¹⁶ Hacienda Pública, Tomo LXIV, Fol. 77 (Boletín del Archivo General de la Nación [Caracas] 1991: 95).

¹¹⁷ It is quite possible that this US American sought out Cayo Sal since salt production the pans of the Turks Islands—preferred by the US Americans for the purity of their salt and relative proximity to North America—came to a standstill in the years 1832 and 1833 due to the destructive effects of a hurricane (Goslinga 1990: 121, 133).

for (Guzmán 1883: 457). Mr. Mosell was probably the Jeremías Morell mentioned above.¹¹⁸

In fact, both Mr. Mosell and Jeremías Morell were likely misspellings of the name “Jeremiah Morrell.” Jeremiah Havens Morrell, Sr. was a seafarer, carpenter and trader born in Stonington, Connecticut sometime in the late 18th or early 19th century (Burrows 1975: 1179). In a sealing voyage to the South Sea in 1819–1820, Jeremiah was carpenter aboard the brig *Hersilia* captained by his brother Benjamin, a noted and controversial sea captain, explorer and trader (Morrell 1832). During this voyage the Morrell brothers apparently were the first US Americans to sight the Antarctic continent ahead of its official discovery (Burrows 1975: 1179; Fairhead 2015: 31). In late 1823, Jeremiah became master of the Stonington schooner *Chile*, of 45 tons, whose owner was Silas Enoch Burrows (Burrows 1975: 1179). The wealthy merchant Burrows, a foster brother of the Morrells’ sisters, was involved in supplying another ship with guns and soldiers to aid revolutionary leader Simón Bolívar in Venezuela (Fairhead 2015: 62, 70). Burrows was apparently based in the Venezuelan port city of Puerto Cabello in the 1830’s and Jeremiah had gone to work for him, possibly bringing his whole family including his son Jeremiah, Jr. with him (Fairhead 2015: 289). In 1847, Stonington land records state that Jeremiah H. Morrel was “of Puerto Cabello” (Burrows 1975: 1180).

¹¹⁸ Curiously, from 1810 to 1816 Bonaire was leased to a US American merchant and ship owner from New York by the name of Joseph Foulke. During this time Foulke cut divi-divi and redwood (brazilwood) on the island and also extracted salt (Goslinga 1990: 130). It is possible that Morrell might somehow have been attracted to Cayo Sal following Foulke’s Bonaire venture.

US Americans were the most important buyers of the sodium chloride from the saltpans of Bonaire and Curaçao during the first four decades of the 19th century, as they were from the Turks Islands which was their mainstay producer (Goslinga 1990: 123, 133; Renkema 1981: 58). The takeover of the Cayo Sal saltpan by US citizen Jeremiah Morrell distressed the *Gezaghebber* (Governor) of Curaçao Reinier Frederik van Raders (1836–1842) who was in charge of the government-subsidized saltpans on Bonaire (which was a dependency of Curaçao and essentially a large salt plantation) as well as the Curaçaoan *zoutplanters* (salt planters, that is, cultivators). Even though the *zoutplanters* were greatly dissatisfied by Van Rader's subsidizing of Bonaire's saltpans which produced three to four times more salt than Curaçao and at a cheaper price,¹¹⁹ both Curaçaoan and Bonairean salt was outcompeted by the low price of salt from Cayo Sal (Goslinga 1990: 121–123).¹²⁰ Morrell on Cayo Sal sold to US ships at 37 US cents a barrel whereas the Bonaireans sold their salt for 50 cents (Bosch 1936: 307). Moreover, no freight duties had to be paid on Los Roques (known to the Dutch as the *Rocas-eilanden*) while Bonairean salt was indeed subject to them (Goslinga 1990: 122).¹²¹ The low price of Cayo Sal salt had the effect of stagnating the Curaçaoan and Bonairean salt industry. The unsold mineral accumulated

¹¹⁹ There were few good anchorages by Curaçaoan saltpans meaning the mineral had to be transported by small vessels or donkeys to the port of Willemstad, thus increasing the price per barrel to an uncompetitive level (Goslinga 1990: 122).

¹²⁰ Salt from Cayo Sal was at the time considered by the Dutch to be inferior to Curaçaoan salt (Bosch 1836: 307). It is possible this was just a bias arising from the fact that Cayo Sal salt was more competitively priced.

¹²¹ In addition to this, Cayo Sal apparently had a better anchorage than Bonaire where ships had to anchor by the saltpans guided by two steep concrete pyramids built to indicate the exact spot where they could moor at special dolphins built onshore (Goslinga 1990: 133; Renkema 2009: 303). Cayo Sal's anchorage seems to have been better situated relative to currents and winds (Bosch 1836: 307; Teenstra 1837: 220).

on Bonaire and Curaçao during 1834, 1835 and 1836 (Goslinga 1990: 122–123; Renkema 1981: 59).

By 1834 there were already more than 120 “free coloreds” from Bonaire and Curaçao working for Morrell on Cayo Sal improving the saltpan, raking salt and even constructing a “cistern” (Bosch 1836: 307). Considering the large number of workers and the extent of infrastructural investment, Morrell’s enterprise seems to have featured the most intensive exploitation of the Cayo Sal saltpan ever, and to have been the one contributing most significantly to its built environment. Alongside the scale of operation and complete pricing of their rival producer to the east, another factor that may have disturbed Van Rader and Elsevier is that Morrell hired those 120 “free coloreds” from Bonaire and Curaçao. Even if this did not significantly affect the labor force on the Bonaire and Curaçao pans—where slaves predominantly raked salt—the fact that 120 Dutch Antillean freedmen (barely scraping by and living in abject poverty) were contributing to the Dutch zone’s economic salt slump must have vexed and embittered both Dutch administrators and Curaçaoan *zoutplanters*. As M. D. Teenstra (1837: 220) bitingly noted, “He [the US American] had the salt pans improved and worked by 120 people from Curacao and Bonaire, who had themselves being used for that, like they were digging their own graves” (Goslinga 1990: 124, 132, 250). The 1830s and 1840s were tumultuous years of agricultural experimentation by Van Raders with little success on the ABC islands. Even though salt production continued to cover some of the deficits of the Curaçaoan Government, the Cayo Sal lease must have caused a significant economic setback (Goslinga 1990: 126, 134).

By 1837, Van Raders was very worried about the state of the salt industry on his islands and decided to lay a claim before the Venezuelan government regarding the arbitrary treatment that the Dutch Antilleans were suffering because of Jeremías (or Jeremiah) Morell.¹²² Van Raders went to Bonaire to see if salt production costs could be lowered and sent his secretary, Rammelman Elsevier Jr., to Caracas partly in search of a solution to the issue of low salt prices on Cayo Sal (Goslinga 1990: 122). Van Raders decided to choke the Los Roques competition by building more saltpans thereby greatly increasing salt production on Bonaire, thus offering more employment to Bonairean freedmen and eventually lowering salt prices dramatically for buyers (Renkema 2009: 302, 1981: 59). This move had immediate results. Eight freedmen returned from Los Roques to Bonaire in early 1837 greatly diminishing salt output on Cayo Sal because Venezuelans preferred not to work on the saltpan (Renkema 2009: 302).

During Morrell's tenure on Cayo Sal, one Boston vessel was known to load salt in 1834.¹²³ Whereas 19th-century mentions of Los Roques in United States newspapers are rare (asides from shipwrecks and acts of piracy), from 1834 to 1836 four other ships appeared in the press as passing by the archipelago, possibly to load salt at Cayo Sal.¹²⁴ If

¹²² Expediente relativo a un reclamo hecho por R. F. van Raders, Director interino de Curazao, en favor de los súbitos holandeses que sufren en la isla de Los Roques las arbitrariedades de Jeremías Morell [File related to a claim made by R.F van Raders, acting Director of Curazao, in favor of the Dutch subjects who suffer Jeremías Morell's arbitrariness in Los Roques Island] 1837, Secretaría del Interior y Justicia, Tomo CLIV, Fol. 359 (Boletín del Archivo General de la Nación [Caracas] 1951: 371).

¹²³ On Oct. 6, 1834, Capt. Montgomery in the Brig *Nickerson* saw the Brig *Sarah and Esther*, "at anchor at the Rocas, by the Salt Slaps [sic]" (*Baltimore Gazette and Daily Advertiser*, Oct. 24, 1834).

¹²⁴ On Dec. 24, 1834, the *Delaware*, Capt. Wilson [or Gilson], entered Philadelphia via "Rocas" from "Demarara" (Guyana) (*Baltimore Patriot*, Dec. 26 1834); the Brig *Kingston*, Capt. Cole, bound for Boston from "Laguayra" via "Rocas", in ballast and with "57 zeroons [sic] of indigo" (no mention of salt onboard) (*Salem Gazette* Jan. 13, 1835); on Nov. 10, 1835, the Schooner *Emperor*, Capt. Benjamin Berry, entered Philadelphia from La Guaira and 20 days from "Rocas Isle" (*Baltimore Gazette and Daily Advertiser* Nov. 11,

unrecorded Dutch Antillean salt exploitation occurred on Cayo Sal during the first half of the 19th century, it is possible Dutch vessels went directly from Curaçao and Bonaire to Los Roques circumventing their legal obligation to stop at La Guaira for a permit. It is apparent that even during the Republican era, Los Roques, along with the other islands in the Venezuelan Caribbean, continued to figure as a theater for foreign contraband activities along the coast. This activity sapped the fledgling nation of important port taxes.¹²⁵ Morrell's salt enterprise on Cayo Sal likely had concluded by the mid-1840s.

Venezuelan involvement with the Cayo Sal saltpan is, to reiterate, quite difficult to document during this period. An 1836 decree regulating all Venezuelan saltpans stipulated that the Los Roques (Cayo Sal) saltpan, among others, had to have merely a salaried *celador* (watchman or keeper); meanwhile just three saltpans (Píritu, Pampatar and Mitare) would have *expendedores* (salt retailers) permitted to collect salt taxes and emit loading licenses to vessels at the saltpans themselves (Venezuela, Poder Ejecutivo 1839: 167–168). This decree seems to have created a problem for some Venezuelan merchants such as Domingo Antonio Olavarría and others from the port of Puerto Cabello (about 100 km west of La Guaira). It was common knowledge that the Los Roques saltpan

1835); on Dec. 26, 1836, the Brig *Black Hawk*, Capt. Baker, entered Holmes Hole (Vineyard Haven, MA) from La Guaira via "Rocas" (*Baltimore Daily Gazette and Advertiser* Jan. 5, 1836).

¹²⁵ A report from 1843 to the Venezuelan Secretary of State expressed the worry about contraband undertaken among the Venezuelan islands, to wit: "Todos estos mares son muy favorecidos de apoyo para el contrabandista que haga sus depósitos en las islas adyacentes de Los Roques, Tortuga, Blanquilla, Orquilla, Isletas de Píritu y muchos otros mogotes en donde puede abrigar sus pacotillas para aprovechar por medio de buques menores la ocasión de introducirlos a tierra puesto que son muy abiertas y solitarias las costas que tenemos..." [All these seas privilege the smuggler in making his drop-offs on the adjacent islands of Los Roques, Tortuga, Blanquilla, Orquilla, Islets of Píritu, and many other *mogotes* (mangrove-laden islands) to hide his shoddy goods (cheap cloth and merchandise), from where by means of small vessels he takes advantage of the situation to introduce them onto the mainland, since the coasts we have are so lonely and open...] (Venezuela 1843: 35).

belonged to the district of La Guaira.¹²⁶ Since Cayo Sal did not have an *expendedor*, ships heading to the island for salt potentially broke the law in two ways: first by failing to pass through La Guaira to collect a salt license on their way to the saltpans; and second by failing, on their return leg to the coast, to weigh the newly laden salt and pay the corresponding taxes at the customs house in La Guaira. Instead, ships from Puerto Cabello skirted La Guaira altogether due to the inconvenience and loss of time this implied and the cost of taxes. Cayo Sal apparently did not have even a *celador*, something contributing to the legal ambiguity (del Castillo 1852: 203).

The *resolución no. 187* (resolution) of November 4, 1839 abrogated the stop at the La Guaira customs house for salt merchants heading to Cayo Sal from the ports of Puerto Cabello and Choroní on the grounds that this had been merely a customary practice and not a legal requirement (Carrillo Batalla 1984a: 237–238). Henceforth, however, Cayo Sal and Los Roques in general were in effect deemed to depend, in the administrative sense, not solely on La Guaira (del Castillo 1852: 203–204).¹²⁷ Following the *resolución*, vessels departing to load salt at such saltpans as those in Los Roques where there were no governmental administrators had to take on board one or two *celadores* from the customs house at their home port. These officials were to witness the loading of the salt, take note of each load, and upon the ship's return to its home port, provide a certificate of the cargo. The ship captain was then to take this certificate to the customs house

¹²⁶ Some salt merchants even preferred to go to Bonaire for salt due to the cost of going to Los Roques, given the cumbersome customs laws (Carrillo Batalla 1992: 83).

¹²⁷ One document mentions that following the *resolución*, three unnamed customs houses were set up to furnish licenses for salt at Los Roques (Carrillo Batalla 1993: 82). Which three these were is unclear, but they were probably at La Guaira, Choroní and Puerto Cabello.

together with a manifest signed by the administrator or owner of the saltpan detailing the loaded salt (Carrillo Batalla 1972: 274).

All of this makes a somewhat strange impression when we consider that the Cayo Sal saltpan, both in 1836 and 1839, was still being rented and exploited by Morrell. Also odd is the fact that this seems not to have been known by Venezuelan politician and legislator Francisco Aranda—a firm believer in facilitating export and dropping cumbersome commercial laws—who naively announced, regarding Los Roques, that “de esta salina no se ha sacado ninguna sal para el extranjero” [no salt has been taken abroad from this saltpan] (Carrillo Batalla 1992: 83).¹²⁸ It is possible that salt merchants from Venezuela’s central coast found Cayo Sal a good and local supply of salt, given Morrell’s large infrastructural investment on the saltpan resulting in likely the largest salt output the island had ever produced.¹²⁹ In any case, following sporadic mentions in Venezuelan newspapers of vessels entering La Guaira with salt from Los Roques in the 1820s, there are no later mentions of at least that principal port.¹³⁰ Aranda remarked in 1839 that small insignificant saltpans (apparently, much like those on Los Roques) rented out to individuals by the government were damagingly competitive and economically outperforming large state-owned saltpans. He recommended that once their leases expired, they should not be renewed (Carrillo Batalla 1992: 84–85). It appears that those

¹²⁸ It was Aranda who pushed for the reform of the burdensome customs house law forcing salt merchants first to obtain permits, then to weigh their salt not at the customs houses of their ports of departure but only at those having jurisdiction over the given saltpans (Carrillo Batalla 1984b: 283).

¹²⁹ It is not far-fetched to conclude that before Morrell’s modifications and improvements, Cayo Sal salt cultivation was more sporadic and haphazard—certainly not semi-industrial.

¹³⁰ As suggested by the legal disputes, it is probable that Puerto Cabello and Choroní were the primary ports of departure for salt merchants heading to Los Roques; thus any information regarding ship entrances could be found in early 19th-century newspapers from those locales (e.g. *El Vigía*) if any are extant.

pans leased out to private operators were not so “insignificant” after all. In 1840, President José Antonio Páez issued a decree regulating saltpans. Its seventh article stipulated that various pans, including those in Los Roques, were to be returned to governmental administration (Carillo Batalla 1984: 295). The lack of further documentary evidence suggests that after Morrell’s contract ended (the exact end date in the 1840s is still unknown), the Cayo Sal pan was abandoned until the second half of the 1860s.

Ships, however, did arrive regularly from Los Roques at La Guaira during the 1840s and 1850s but reported cargoes only of fish¹³¹ and turtles, *leña* (wood), *ceniza* (ashes), and mangrove bark.¹³² Moreover, many of the captains of these ships were most certainly Dutch Antilleans as their surnames indicate: Wolff, Boon, Hart, Tilman, Kran, Tholbedt, Bon, van Gricken (prob. van Grieken), Damers, Tode (prob. Thode), Dammers, and Maduro.¹³³ All of these vessels are noted in the port entries as “nacionales” or national vessels, which is surprising because they were most probably foreign vessels from Bonaire and Curaçao.¹³⁴ This suggests that the customs house in La Guaira had an under-the-table deal with the Dutch Antilleans and registered them as nationals since they were bringing

¹³¹ Los Roques was always a great reservoir of queen conch and it is possible that conch meat was not distinguished from “fish”, at least in port records. Hawksbill turtle carapaces, on the other, hand were prized and expensive, so turtle catching or “turtling” was distinguished from regular fishing.

¹³² See *El Patriota* (Caracas, Venezuela), May 18, Oct. 4, and Dec. 6, 1845, where there are mentions of ships arriving at La Guaira from Los Roques with *leña*, *ceniza*, fish and turtles. For mangrove bark (*concha de mangle*) see *Diario de Avisos*, Jul. 31, 1858. Curiously, lime from burnt coral stones does not seem to have been imported to the Venezuelan mainland from Los Roques. It most probably all went on board Bonairean vessels to be sold in Curaçao (Koloniaal Verslag 1854: 24). Fish caught by Bonaireans in Los Roques was also sold in Curaçao as well as in Puerto Cabello (Koloniaal Verslag 1854: 24).

¹³³ *Diario de Avisos*: Nov. 17, Dec. 29, 1855; Jun. 18, Oct. 8, 1856; Mar. 28, Apr. 1, May 2, Dic. 2 1857; Mar. 8, 10, Apr. 3, 1858; Mar. 30, 1859.

¹³⁴ This was also not a mistake on part of the periodical that published ship entries and departures as there was one vessel, the aptly named sloop *Bonaire*, that left for Los Roques from La Guaira in 1856 clearly listed as Dutch (*Diario de Avisos*, Jul. 2, 1856).

commodities from Los Roques that were important to the fledgling nation.¹³⁵ Perhaps the most flagrant example of this likely corruption is the fact that the most certainly Dutch Antillean sloop *Curazao* was listed as a national vessel when it entered La Guaira from Los Roques with fish and *ceniza* in 1859.¹³⁶ In 1861–1862, 139 permits were issued to Dutch Antillean boats by the Venezuelan government allowing them to fish and burn lime in the archipelago (Koloniaal Verslag 1862: 735).

Between the Curaçaoans and Bonaireans, it was especially the latter who were better well-acquainted with Los Roques. Following the exit of Morrell’s enterprise in the archipelago, the Bonaireans made sure to swiftly return to the waters that they had once roved to catch turtles and fish, burn lime and ash, and extract wood and mangrove bark. Some of these Bonaireans not only visited the archipelago seasonally but also inhabited it on and off. One such was Williau Tizou—as one Venezuelan news correspondent named him in a column in 1857 (the spelling of his name is most certainly incorrect)—who had a *ranchería* (makeshift hut) and a “train” of boats and sailboats in Los Roques. He dedicated himself to exploiting its marine and terrestrial resources as well as salvaging wrecks and helping those shipwrecked, for profit. The news column romanticized the Bonairean’s life in the archipelago, painting him and his men as hardy seafarers and master connoisseurs of the archipelago’s treacherous shoals and reefs. At the same time the journalist, who visited Tizou for more than a month, writes that he exclaimed to Tizou: “¡Miseria humana!

¹³⁵ It is also possible that by being registered as nationals these Dutch Antilleans would not have to pay foreign import tariffs at the customs house and could then re-ship their products to the Dutch islands and beyond.

¹³⁶ *Diario de Avisos*, Apr. 2, 1859. See also Aug. 30, 1856 in the same periodical.

Verse U. reducido a estas estrechas e innumerables islas...! Rodeado de constante trabajo, privado de los goces de familia y de la sociedad para morir en una miseria espantosa...!” [Human misery! To see yourself relegated to these narrow and innumerable islands...! Surrounded by constant work, deprived of the pleasures of family and society to die in appalling misery...!].¹³⁷ It is quite probable that the Venezuelan journalist was articulating general Venezuelan notions of the hardships of life at sea. Moreover, the poetic Venezuelan fascination with hardy foreigners exploiting the islands of their own nation—the characteristic lack of interest in populating the breadth of their territory or exploiting their own resources—perfectly summed up and even furthered the neglect of Los Roques by the local authorities.

Tizou was only one of a number of Bonaireans who had settled Los Roques in the 1850s. The Bonairean about whom we know the most is Lodewijk Christoffel “Cris” Boyé (hereafter L. C. Boyé) (Fig. 3.2.6). L. C. Boyé was born in the 1830s on Bonaire to Cornelis “Nene” Boyé, who was commander of Bonaire during the decades of the 1850s and 60s and a notable businessman on the island (Nooyen 1985: 67–68).¹³⁸ L. C. Boyé, who also owned an aloe plantation on Bonaire, probably established himself on the island of Gran Roque sometime in the 1850s or ‘60s since by 1871, when English adventurer and chemist James Mudie Spence paid a visit to the Los Roques Archipelago, L. C. Boyé was comfortably settled in a large wooden house (de Loos 1888: 67; Spence 1878: 205) (Fig.

¹³⁷ *Diario de Avisos*, Sept. 12, 1857.

¹³⁸ He was also the grandson of Ludwig Boyé, an officer from Gottingen who had come to Curacao in the late 18th century and served as personal aide-de-camp to Curaçao governor Pierre J. Changuion (Goslinga 1995: 40–41).



Fig. 3.2.6. Portrait of L.C. Boyé (Spence 1878: 203).

3.2.7).¹³⁹ Clearly a man intimately familiar with Los Roques, Boyé was painted by Spence (1878: 212) as a “veritable Robinson Crusoe... with his negroes, goats and water-barrels”. On the 29th of May, 1866, the Venezuelan Ministry of Development,¹⁴⁰ presided over by José Maria Alvarez de Lugo, signed a contract with L. C. Boyé (in representation of his father Cornelis) to construct a masonry lighthouse on Gran Roque within five years (Ministerio de Fomento 1866). L. C. Boyé was also given the right to rake salt, burn lime and exploit all of the natural “products” of the archipelago without having to sail to

¹³⁹ In 1866, the Governor of Bonaire expressed his deep concern over the ceding by the Venezuelan Government of resource exploitation (fishing and lime burning) on Los Roques to a single individual. As the Governor argued, the Bonairean fishing industry, which offered its people a livelihood, was in jeopardy following these changes since the “private person” who owned the rights to exploitation in the archipelago “does not prohibit access to the Roques, yet claims for himself part of the revenue from labor” (Koloniaal Verslag 1866: 561). This person was probably Bonairean entrepreneur L. C. Boyé.

¹⁴⁰ The president at the time was Juan Crisóstomo Falcón.

Venezuelan customs houses to pay export fees or freight duties (Ministerio de Fomento 1866).

L. C. Boyé began work on the lighthouse and also engaged in legal salt cultivation and lime burning at the time, although it is quite possible that he was involved in these latter activities before he was given the contract (Fig. 3.2.8). Boyé's salt enterprise was apparently not large since there were only three people working on the saltpan in 1871 (Spence 1878: 197).¹⁴¹ Spence (1878: 198) mentions that "Several acres [of the saltpan] are covered with large flat tanks, into which a little windmill pumps seawater." It is not known where Boyé exported the salt, but it probably went to Bonaire to be sold on from there. To transport the salt from Los Roques to La Guaira or Puerto Cabello, Boyé probably had to pay to obtain the appropriate policies and sureties, something he likely did not want to waste money on (Venezuela 1890: 1038). It is also possible that part of the salt was used locally on the archipelago for salting the fish catch. By 1870, the lighthouse was still not finished. Upon an inspection by engineer Jesús Muñoz Tébar, Boyé's contract was extended in 1871 for four more years (Venezuela 1873: 486–487; Zawisza 1988: 323). However, in June of 1874 the Congress rescinded his contract and approved another one presented to Luis Odúber (Zawisza 1988: 323). Boyé was apparently a savvy businessman because in 1877, in the wake of the lighthouse fiasco, he still managed to sign a contract with Governor Galarraga in the newly formed Territorio Colón to exploit phosphates on

¹⁴¹ It is also possible that due to the fact that Spence visited the archipelago in late July or August, the rains had already set in and only a minimum number of people were needed. Nonetheless, Spence also mention heaps of salt "lying in all directions ready for shipping" which indicates that salt raking was occurring (Spence 1878: 197).



Fig. 3.2.7. (Top to bottom) L.C. Boyé's house on Gran Roque as seen in 1892 (*El Cojo Ilustrado*, Aug. 15, 1892, [No. 16, p. 263]). Interior of Boyé's house drawn by Spence (1878: 205).



Fig. 3.2.8. The lighthouse on Gran Roque that Boyé never finished, and which was later finished by the Venezuelan government. The ruins of the lighthouse are today a landmark of the island (photo: José Voglar).

Gran Roque from which he would export 200 tons in 1880 (Venezuela 1881: 402–403).¹⁴² It is unclear if L. C. Boyé ever received Venezuelan nationality, but he was certainly greatly esteemed by the Venezuelan government as he was given the honor of being one of the few “citizens” to escort the remains of independence hero Luis Brión to Caracas from La Guaira in 1882. He was also recognized with the third-class medal of the *Busto de Bolívar* (Bust of Bolívar) in 1884 (Venezuela 1883: 67; Venezuela 1885: 415–416). He died in 1899 on Curaçao.¹⁴³

Following the rescinding of Boyé’s lighthouse contract, in 1875 the Venezuelan government declared salt extracted from Los Roques as national property (Venezuela 1875: 175–176). In a response to an inquiry by the governor of Territorio Colón asking about how to proceed with salt loading at Los Roques—given that there was no administrator at the saltpan—the head of the national *Dirección de Salinas* [Directorate of Saltpans] gave instructions noting that, since the quantity of salt exploited from Los Roques was small, it could be weighed on board the vessels themselves and such instruments would not be needed by the saltpan (Venezuela 1875: 180). Salt output was probably not small at all, however, since in 1879 the Cayo Sal pan, now opened to nationals, had attracted enough of the vessels originally seeking salt at Cumaná (Araya principally) that the situation began to worry the *Administración de Salinas* [Saltpan

¹⁴² L. C. Boyé, jack of all trades, even served as consular agent of the United States on Bonaire in which function he submitted reports detailing the exports of the island (Bureau of the American Republics 1891: 189; United States Consular Reports 1884: 229).

¹⁴³ <http://gw.geneanet.org/mikewinkel?lang=es&pz=friedrich+wilhelm+pieter&nz=winkel&ocz=0&p=lodewijk+christoffel&n=boye>

Administration] of that city. Cumaná was also feeling the competitive pressure of the large and productive saltpans on the island of Coche (Venezuela 1880: 199).

This uneasy competition with the long-standing center of salt exploitation that was Cumaná probably factored heavily into the government's 1880 decision to destroy the dikes and render the saltpan on Cayo Sal useless, as well as prohibit the exploitation and importation of salt from the greater Territorio (Venezuela 1881: LXVI; Venezuela 1891: 370).¹⁴⁴ One of the pretexts for this destruction was that the saltpans "se prestan fácilmente al contrabando, y no pueden vigilarse con eficacia" [readily lend themselves to contraband and cannot be effectively watched over] (Venezuela 1881: LXVI). In fact, by 1896, the *Inspector de las Salinas de Oriente* [Inspector of the Saltpans of *Oriente* (Cumaná)] had to "con frecuencia... visitar las Salinas del Territorio Colón para proceder a destruir las Salinetas cuyo estado de cristalización así lo exija" [frequently visit the saltpans of the Territorio Colón to proceed and destroy those whose state of crystallization required it] (Venezuela 1897: 79–80). Clearly Cumaná did not want Los Roques competing with their salt business. Venezuela's solution to its embarrassment of salt riches was—like Spain's in the 17th century vs. the Dutch *zoutvaerders*—the destruction of some pans as it simply could not effectively manage them all and prevent illegal exploitation (Venezuela 1880: 200). In 1889 the Governor of the Territorio, Juan J. Yepes, wistfully wrote: "Es lástima que la salina de que trato [Cayo Sal] y cuyo producto es de las mejores condiciones, este prohibida su explotación, que estoy seguro que daría

¹⁴⁴ In fact, the saltpan was flooded by way of an opening to the sea which was monitored to ensure that the pan would remain constantly flooded (Venezuela 1890: 313). By this means, salt could no longer effectively crystallize on the pans (Venezuela 1881: LXVI).

pingües resultados” [It is a pity that the saltpan which I am referring to (Cayo Sal) and its product which is of the best conditions, should have its export prohibited, since I am certain that it would give abundant results] (Venezuela 1890: 315).

Therefore, the saltpan of Cayo Sal once again fell into intentional disuse by the Venezuelan Government, wasting the valuable investments in infrastructure of the 1830s by Morrell and in the 1860s and '70s by L. C. Boyé—now flooded due to the competitive politics of Venezuelan salt commerce and local administrative incompetence. The saltpan has remained largely flooded until the present day. Nonetheless, in the 20th century parts of the pan still often provided temporary fishermen from Margarita sufficient naturally-crystallized salt during the dry seasons to cure their catches which they would then sell in *Oriente* (Germán Reyes “Moncho”, pers. comm. 2015).

DISCUSSION

The central theme of foreign incursion into the Venezuelan Caribbean in search of salt, addressed in the first part of this chapter in relation to La Tortuga in the 17th and 18th centuries, also intimately involved the nearby Los Roques archipelago and its island of Cayo Sal. However, unlike La Tortuga’s saltpan which was primarily raked by the Dutch from the Low Countries and the Anglo Americans from the east coast of North America, it was Dutch Antillean seafarers from neighboring Curaçao and Bonaire who roved the Los Roques archipelago gathering grass, burning lime and charcoal, cutting mangrove wood, turning turtles, fishing, and raking salt. Unlike the salt raking-activities of the Anglo-Americans on La Tortuga which were explicitly legalized by treaty at the beginning of the 18th century, the Dutch Antilleans simply took advantage of their proximity and the

neglect of Los Roques by colonial and later republican authorities in order to extract its resources. The Dutch Antilleans were, in fact, never seriously challenged by the Spanish or the Venezuelans in their unwritten claim to the resources of the archipelago until the establishment of the Territorio Colón in 1871. The intermittent presence of Spanish corsairs and *guardacostas* policing the archipelago in the 18th century, and the episodic captures of foreign vessels by these corsairs in and around Los Roques indicate that the archipelago was probably not patrolled as often as it should have been given its strategic importance in illicit commerce. As a result of this laxity, Dutch extraction of resources in the archipelago only grew in the 19th century, resulting in an entrenched Curaçaoan and Bonairean presence on Los Roques.

In fact, the primary fault first of the colonial and then of the Venezuelan Republican authorities was that they did not people the archipelago in the 19th century with Venezuelans. Nor did they establish a permanent administrative seat or naval presence there for more than three centuries. It is a known fact that “to govern is to populate”. Exercising effective control over a geopolitical frontier comes hand-in-hand with settling it. The uninhabited and resource-rich maritime geopolitical frontier consisting of the Venezuelan islands proved only a danger to the territorial integrity of the Spanish provinces and later the independent nation (Briceño Monzillo 1995: 114; Briceño Monzón 2004: 227). This negligent lack of maritime conscience and nearly null possession of the Venezuelan Caribbean and insular region also account for why Venezuela lost the westernmost Guajira Peninsula and its territorial sea to Colombia in a series of diplomatic negotiations from 1833 to 1891 (Vivas Pineda 2015). Historian

Gerardo Vivas Pineda (2015: 286) explains this maritime negligence in the following way: “Para la inteligentsia criolla el mar ha parecido ser más un fastidio o una barrera húmeda que un recurso útil de territorialidad y desarrollo [For the criollo intelligentsia, the sea seems to have been more a nuisance or a humid barrier than a useful territorial and developmental resource]”.

The Spanish provinces of today’s Venezuela did not depend on exporting cured fish to drive their economies, as did the 17th-century Low Countries and, later, the 17th- and 18th-century British colonies of North America. The Spanish provinces primarily exported the valuable commodities of cacao, tobacco and hides. Endemic foreign contraband operations and their attendant corruption siphoned off considerable sums of revenue from these commodities as well. Since salted fish played such a limited role in the economy, colonial and later Venezuelan Republican authorities seem never to have incentivized their own countrymen to load salt at Los Roques either through tariff breaks or other means. This resulted in their saltpans being neglected by locals but exploited by foreigners. Ironically, Dutch Antilleans traveling to and from the archipelago seem to have received under-the-table privileges. A general legal laxity prevailed as the Dutch Antilleans themselves explained: “There are no difficult government officials, no export taxes, no duties no harbor fees or any other duties” (Teenstra 1837: 220–221). Contraband and illegal extraction were commonplace occurrences in the 17th-, 18th- and

19th-century Venezuelan Caribbean, and in Los Roques they became intimately entangled with salt-raking activities.¹⁴⁵

Venezuelan authorities did not know—or at least appreciate—what they had in the resource-rich Los Roques Archipelago until Marcano and Ernst visited in 1871. They had no real idea what they had been losing. Finally, unregulated foreign extraction of resources in Los Roques was in large part halted by the 1871 creation of the Territorio Colón. Dutch Antilleans could no longer do just as they pleased in the archipelago but at last had to obtain a fishing permit at La Guaira for six Guilders valid for six months. Moreover, salt exploitation was prohibited entirely (Anonymous 1907: 127). Nevertheless as we have discussed, in just this transition period Bonairean L. C. Boyé became a prominent inhabitant of the archipelago enjoying considerable favors from the Venezuelan authorities and managing to strike various deals for the exploitation of salt, lime and phosphates in the 1860s and 1870s. The Dutch Antillean presence in Los Roques was strong and rooted. No Venezuelan at the time could challenge their intimate knowledge of the archipelago's myriad cays and coves.

The entanglements of Cayo Sal salt in the 18th and early 19th centuries were initially of a local nature. This salt itinerated primarily in the Southeastern Caribbean. During the 18th century, it was transported by Dutch Antillean vessels to Curaçao and Bonaire thence

¹⁴⁵ In 1857 a Venezuelan *guardacosta* caught a US American vessel extracting guano on Los Roques without a legal permit. The news article that presents this incident naively argues that, “porque la isla mencionada no puede ninguna nación extraña considerarla abandonada, vistos los hechos de positiva ocupación que nuestro comercio ejerce en ella diariamente” [because the mentioned island cannot be considered abandoned by any foreign nation, given the actions of positive occupation that our trade exercises on them daily] *Diario de Avisos*, June 5, 1857. This happened 14 years before the creation of the Territorio and at the time there was limited Venezuelan activity and much less occupation of the archipelago.

to be sold onward in a commodity chain that is still unclear. French and English turtle fishermen, who seasonally camped on the island, also presumably raked the salt to preserve their catches and engaged with the locals from the mainland in licit and illicit commercial interactions. During the 19th century, Cayo Sal salt would also become entangled in a web of interactions spanning not only the ABC islands but also involving North America. A rogue capitalist venture on Los Roques by US businessman Jeremiah Morrell—the trend of 19th century United States investments in the Caribbean—aimed at fast revenue from a large investment in Cayo Sal’s pan. For less than a decade, Venezuelan salt once more itinerated to the east coast of North America as it had done for more than a century during the times of the Saltertuda Fleets. However, just as had occurred on La Tortuga in 1633, 1638 and 1781, in 1880 the Cayo Sal pan was eventually flooded and rendered inoperable by decree. Clearly, like their colonial predecessors, the Venezuelans preferred to take their insular saltpans out of use rather than permit their salt, without their direct knowledge, to itinerate beyond the Venezuelan Caribbean for the benefit of private, national or other foreign and imperial interests.

CHAPTER 4

CRUSTY SALTS: THE SEAFARERS AT THE VENEZUELAN SALTPANS

SEAFARERS AT THE VENEZUELAN SALTPANS

Having traced the itineraries of the salt harvested from the Venezuelan insular saltpans of La Tortuga and Cayo Sal and explored that salt's multifarious local, regional and supra-regional entanglements, I now turn to discussing the people who produced, harvested and shipped this salt across vast expanses of sea and ocean. By marshaling documentary evidence and analyzing small finds such as buttons, shoe buckles and gold pocket watch keys—brought to light in archaeological excavations at campsites by the saltpans—this chapter will attempt to elucidate who these salt-raking seafarers were in terms of “social markers”: race, gender, ethnicity and nationality. Offering a deeper reading of both independent lines of evidence, I will also make preliminary remarks regarding the social status and rank of the seafarers and discuss inequalities present aboard their ships and in the relations of production on the saltpans. First, however, to set the stage, let me begin by examining the unique aspects of the space these people traversed and inhabited—not a *landscape*, but rather—a *seascape*.

INHABITING THE SEASCAPE

Sea-centered studies have been gathering momentum in the humanities and the social sciences in recent years especially among maritime historians examining various aspects of early-modern seafaring (see, for instance, Bolster 1997, 2008; Earle 1998; Jarvis 2002,

2007, 2010a, 2010b; Linebaugh and Rediker 2013; Magra 2010; Rediker 1987, 2004, 2007, 2014; Rupert 2012; Vickers 2007; Vivas Pineda 1998). A current and concerted turn by historians towards studying the sea holistically as a social space has also emerged, termed by some “thalassography” or “thalassology” (see, among others, Blum 2013; Cusack 2014; Finamore 2004; Horden and Purcell 2006; Klein and Mackenthun 2004; Miller 2013; Polónia et al. 2017; Wigen 2006, 2011). These historians are retelling the history of the world from the perspective of the sea. The “aquatic turn” is also evident in human and historical geography especially in the wake of mobility studies (see, for example, Anderson and Peters 2014; Anim-Addo et al. 2014; Hasty and Peters 2012; Hay 2013; Lambert et al. 2006; Peters 2014a, 2014b; Steinberg 1999, 2013; Vannini 2012). The trend is, nonetheless, not as apparent in anthropology where apart from the work of John Mack (2007, 2011), there has been comparatively little interest in a shift to an overtly sea-based perspective. Such seminal works as those by anthropologists Eric Wolf (1982) and Sidney Mintz (1985) rarely consider the sea as more than a backdrop, focusing rather on the land-centered arenas in which capitalism and modernity arose.

As for archaeology, the sea has seen interest primarily in the broad field of maritime archaeology. One of the stalwart emphases of maritime archaeology from its beginning has been the study of ships, their construction and their uses (specifically in nautical archaeology) primarily through the excavation of shipwrecks by means of the methods of underwater archaeology. While some maritime archaeologists have taken up the task of re-theorizing the role of the sea in archaeology (see, for instance, Clark et al. 2008; Cooney 2004; Flatman 2003, 2011; Flatman and Stainforth 2006; Ford 2011b;

McNiven 2004, 2008; Rainbird 2007; Westerdahl 2011a), historical archaeology has been slow coming to terms with the study of the sea. Granted, there have been investigations of maritime landscapes (Delgado et al. 2016; Borrelli 2015; Cook 2012; Dellino-Musgrave 2006; Pietruszka 2011; Pope 2008), whaling stations (Paterson 2006; Prickett 2002) and perhaps, most famously, the sunken city of Port Royal in Jamaica (Trussell 2004). Yet it seems that the terra-centrism of historical archaeologists and the aqua-centrism of maritime archaeologists rarely touch. The sea has remained surprisingly under-theorized in historical archaeology even while historical archaeologists have become interested in Atlantic world perspectives, the dynamics of trade and commerce, global flows of goods and commodities, the African diaspora, and other topics that are, in many cases, inseparable from the sea. The sea has been principally treated indirectly as the theater for war, trade and imperial expansion. It has rarely been closely examined as an inhabited social space, replete with places and seascapes. This subliminal terra-centrism—even among many maritime archaeologists—is evident in the prevalence of the term “maritime landscapes” (for examples, see Delgado et al. 2016; Flatman 2011; Ford 2011a; Harris 2017; Tuddenham 2010; Westerdahl 2011b). It is as if researchers have not been wholly willing to “cut their cables” and confidently take their studies out to sea.

I contend that the sea, which covers 71% of the earth’s surface, deserves a central role in historical archaeology especially if we are interested in diversifying our understanding of such processes as capitalism, globalization and modernity on multiple spatial and temporal scales. Moreover, historical archaeology, with its unique blend of independent evidentiary sources (material evidence, historical documents and oral

histories) can open perspectives on the roles of the sea within those processes that no other discipline alone can. To foreground the role of the sea, this dissertation will engage with *seascapes*; *seascapes* will be the predominant term for what would up to now be termed “maritime landscapes”.¹⁴⁶ Moreover, rather than denote the natural environment—artificially set apart from human activity—here *seascape* will signify the watery “domain of entanglement” (Ingold 2011: 71).

There is no doubt that the physical properties of the sea (and any body of water for that matter, whether lake, river or floodplain) are different from those of land. Although I agree with Ingold (1993) that the temporality of a landscape is vibrant, fluid and ever-changing, such “land”scape temporality is markedly different in the phenomenological sense from the temporality of the “sea”-scape. Ingold argues that we have been predominantly “land-ing the sea”; he proposes that we critically consider what “sea-ing the land” offers, contending that “in sea-ing the land [...] it is the solidity of the ground itself that is thrown into doubt” (2011: 131). I would propose that neither “land-ing” nor “sea-ing” is sufficient. Ingold (2000: 241) describes the ocean as an “infinitely variegated and ever-changing surface.” Yet in so doing he does not take the further step of explaining how the sea is qualitatively different from the land. The temporalities of the sea are clearly distinct from those of land as can be seen in the following three examples. At sea, a storm can brew in a matter of minutes creating enormous swells in turn

¹⁴⁶ I am aware that some of the previously mentioned maritime and historical archaeological studies refer to coastal landscapes as maritime landscapes. However, when dealing with the diminutive, flat and calcareous Venezuelan islands lost in a sea of blue, I drop ‘landscape’ entirely precisely in order to underline the centrality of the sea in these environments.

rendering its surface treacherous if not impassable. Or strong and steady trade-winds of their own accord propel sailing ships, obviating all other energy sources. Conversely, the sea also presents doldrums flattening its surface limpid as a sheet of glass, a condition inconceivable on land.

The fluidity of the sea, unlike land, is directly observable and palpable. The surface of the sea and the water below it are ever-changing, in flux to an extent land never is with the exception of brief earthquakes. The sea, if turbid and murky, can turn transparent and crystalline in little time and back again as fast. The moon exerts its gravitational pull on the sea, uncovering land previously submerged and flooding coastal landscapes during constantly shifting tides in a matter of minutes or hours. It makes of the land a mannequin, clothing and denuding it around the clock. Sea level rise since the onset of the Holocene has markedly changed worldwide paleoshorelines and coastal biotic communities. Some of these enormous advances in the reach of the sea have been so brisk they have been perceptible over the course of only a couple of generations (Sassaman 2016). On calcareous islands, the sea penetrates the sands and invades by seeping into the phreatic level. Currents of hot and cold water encounter one another and affect the shores, land and islands that they flow by, altering their weather patterns and microclimates. Just as a ship's anchor thrown into a bay is swallowed by the waters, so too an entire sinking ship settles on the seafloor. The sea moves and changes, enfolds and discloses under our watching eyes.

The seas and oceans served, therefore, not just as the passive interstices of the Atlantic world. They were its vital and pulsating connective tissue. These were inhabited,

traversed, and exploited seascapes. Far from abstract spaces, they brimmed with lived-upon places (Tuan 1977). Mobility on the sea far exceeded that on land. Ocean ways became hyper-connected highways moving people and things in bulk in all directions, linking shores, islands and continents in ways that movement over land (with the exception of riverine systems, lakes and other inland bodies of water) could never match. The seas and oceans were and remain the domain of mobility par excellence. As shall be discussed further on, the early modern period saw the sea increasingly enable human-thing knotting resulting in an increasingly dense meshwork of entanglements. As we turn now to the seafarers arriving at the saltpans of the Venezuelan islands between the 17th and 19th centuries, let us keep in mind the vibrant seascapes across which they, their things and their ships itinerated, and which these seafarers inhabited for considerable seasons of their lives. The small, low, uninhabited and dry Venezuelan islands to which they sailed were in their majority dwarfed by the immensity of the surrounding marine environment, and the salt cultivated and raked on their saltpans was, by and large, a fruit of the sea.

THE DUTCH *ZOUTVAERDERS* AT PUNTA SALINAS (1624–1638)

The following section seeks out further insights into the Dutch social context of the La Tortuga salt enterprise and approaches the seafarers present at Punta Salinas during the various salt campaigns of the 1620s and 1630s. I will argue that since this salt enterprise was a regional initiative carried out by several West Frisian towns of north Holland, the interactions and attitudes of the *zoutvaerders* exemplified late medieval communal cooperation already highlighted in Part I of the previous chapter. Let me begin by briefly

supplying the historical-contextual backdrop against which the *zoutvaerders* at Punta Salinas may be better understood.

The various intense and violent episodes of the Dutch salt enterprise on La Tortuga discussed in Part I of the previous chapter pertain to the second period of Dutch foreign trade. After 1621 the Netherlands began to challenge its neighbors, rapidly developing trade both within and beyond Europe despite external resistance (Vries and Woude 1997: 403). By 1635, the trade with the West Indies involved about 15,000 seafarers (van Lottum et al. 2011: 320). After that date the number of Dutch involved in it declined, in part due to a decrease in the South American salt trade (Enthoven 2005: 156; van Lottum et al. 2011: 320). The expulsion of the Dutch from La Tortuga in 1638 and from the Unare saltpan in 1640 (only two of various expulsions from salt pans suffered by the Dutch at the time) played their part in affecting the above statistic. The multifarious impacts of the powerful Dutch East India Company (VOC) on world history have been widely recognized and the literature on navigation and the seafarers aboard VOC ships is copious (see, for example, Boxer 1963; Mörzer Bruyns 1992; Parthesius 2010; van der Heijden and van den Heuvel 2007). Its scale alone is daunting. During its existence between 1602 and 1795, a staggering number of c. 1,000,000 seafarers set sail from Dutch ports on 4,700 voyages (de Vries 1985: 668). In economic and socio-political terms, the Dutch West India Company (WIC), created in 1621, proved less successful in its Atlantic endeavors than the VOC would be in Asia (Boxer 1977: 25). Nonetheless, WIC efforts were remarkable as between 1624 and 1636 (while the Dutch were on La Tortuga), the Company equipped over 800 ships with an average crew of 100 (Enthoven 2005: 161).

Among the 19 directors that governed the WIC (the *Heren XIX*), the maritime province of West Friesland in northern Holland was represented by the regional chambers of the towns of Hoorn and Enkhuizen (Boxer 1963: 82). The envoys from these ports fought to extend their control beyond the pre-1621 monopoly their towns and local merchants had garnered in the salt trade at Araya (Vries and Woude 1997: 399). After 1621 Hoorn, Enkhuizen, Medemblik and Monnickendam continued sending salt carriers to Venezuela for the production of salted herring. These local-scale privately-run operations persisted despite both the new monopoly of the WIC and fierce resistance mounted by the Spanish authorities based in the Province of Nueva Andalucía (see Part I of Chapter 3). A few years after 1621, the Dutch reached an agreement permitting towns to continue trading salt on the Venezuelan coast on condition they paid dues to the WIC (Emmer 1998: 72).

The West Frisian towns, therefore, not only led the La Tortuga salt enterprise. Their merchants and agents almost certainly arranged the overall funding and logistical organization of the *zoutvaerder* fleets including crew recruitment, equipment acquisition, victualling and armament. These specifically West Frisian arrangements differed from traditional WIC and VOC organization especially with regard to the number of foreigners in the crews. In the case of the VOC, foreigners made up nearly a quarter of crews until the 1720s (de Vries 1985: 668). Arguably, “Holland’s small size in relation to its maritime performance nearly automatically implied the recruitment of foreigners for the Dutch merchant marine and navy” (van Lottum et al. 2011: 313, see Figure 13.3). I would argue that the crews on board the *fluits* of the eminently maritime provinces of West Friesland

(themselves providing seafarers to other Dutch provinces [Boxer 1963: 85]) were largely local compared to the typical VOC and WIC sailing complement. In addition, the policies of sailing to La Tortuga were basically left to the local authorities. Maritime recruitment and selection were overwhelmingly conducted on the local or provincial level.

Because West Frisian salt fleets relied mainly on local salt merchants and crews, the organization of work on La Tortuga must have been ruled by structural arrangements stemming from communal inter-town organization. To support this conclusion, I will draw from two already-cited documentary data sources: the Dutch song relating the 1638 events on La Tortuga written by an eyewitness (Rhijnenburgh 1661) and the previously mentioned report of the shipwrecked Spanish seaman Seledón de Suasola (1934 [1630]: 125–129) who interacted with Dutch *zoutvaerders* at Punta Salinas between June and August of 1630. The song, contained in the Rhijnenburgh booklet narrating “A short account of what happened to us in the West Indies on a Salt Island in the year 1638,” was written by an eyewitness of those violent events and sheds light on the regional character of the salt fleets’ crews. The prefabricated wooden fortress emplaced at Punta Salinas in 1638 depended on two—diurnal and nocturnal— guard shifts. This garrison was probably composed of ship crew members, not the foreign soldiers the WIC and the VOC hired for their campaigns. According to the song, the only survivors to escape the Spanish slaughter and flee severely injured to board the fluits were a captain (*schipper*, identified as Klaes Florissen from Monnickendam in North Holland), his barber-surgeon (most probably from the same vessel), and one ship’s artillery master (probably from another vessel). This may indicate that at least during the nocturnal shifts, a captain of a fluit anchored in the bay—

assisted by an experienced artillery operator—was in charge of the fort. The guardians of the fort to be replaced at dawn at the signal of a shot are mentioned by the songwriter as “our men” or, on three occasions, “our mates” [*onse Maets*] (Rhijnenburgh 1661: 7, 10–13). Leaving his ship at anchor to spend half of a day on land was not a usual arrangement for a ship captain. A similarly unusual arrangement obtained if soldiers hired and present among the Dutch crews at Punta Salinas were supposed to take their turns standing watch and otherwise executing all the duties of a sefarer while on board the fluits. This was a common schema on board Dutch East-Indiamen; soldiers had to perform the common tasks “in order to make them equally proficient in both the sea and the land service” (Boxer 1963: 93). Nevertheless, despite the fact that maritime skills were mostly acquired on board, formal learning was required if a regular seaman was to rise through the ranks.

Marked differences in skill, knowledge and responsibility were evident between captains (*schieper* translates as skipper, master or captain), senior merchant (if he was on board), mates (*stierlieden*), and common seamen (Boxer 1963: 87). No Dutch small and portable clearly personal possessions (aside from the numerous pipes to be discussed in Part I of Chapter 6) were found at Punta Salinas, and this constrains archaeological insights into rank and socio-economic status on board the fluits. It can be argued that living together during the long Atlantic crossing, followed by working united on the Punta Salinas saltpan then facing death together under attack by the Spanish, all might have resulted in the fraternal application of such epithets as “our men” and “our mates” to non-West Frisians of varying regional, national, religious and cultural backgrounds, if they

were in fact present amongst the crews (see van Lottum et al. 2011: 351). However, in keeping with documentary data attesting to frictions on board Dutch East-Indiamen (Boxer 1963: 101), caused by the traditional rivalry between soldiers and seafarers, I am inclined to the view that the epithets found in the Rhijnenburgh song are another confirmation of the local West Frisian character of the seafarers in the salt fleets.

Furthermore, Seledón de Suasola's (1934 [1630]: 125–129) account reveals the communal character of the salt enterprise led by inter-town corpora. It makes clear references to the interconnected fluits at anchor in Punta Salinas Bay, the shared burden of interning the Spanish castaways, the solidarity exhibited by the Dutch through sharing the work of loading a late-coming fluit with salt so the fleet could sail together, not to mention the cooperative goat-hunting parties into the interior of the island (de Suasola's (1934 [1630]: 125–129). This account provides the best testimony of the communal and fraternal organization of the Dutch salt enterprise at Punta Salinas.

It is important to bear in mind that all these events in the Venezuelan Caribbean (beginning with the Araya incursions in the late 1580s and ending with the ousting from Unare in 1640) occurred within the span of less than a lifetime. A 58-year old *zoutvaerder* defeated in the La Tortuga attack in 1638 might have first sailed to the Venezuelan Caribbean as a youngster, later encountering the Spanish at Araya at the age of 25. Thus, it is highly probable some experienced men were among both the skilled sailors and the

more common crew members who participated in the decades-long engagement of the West Frieslanders with the Caribbean salt pans.¹⁴⁷

THE SEAFARERS AT PUNTA SALINAS (1638–1781)

The Seafarers: rank, social status and small personal possessions

The Anglo-American and Bermudian merchant ships at La Tortuga loading salt were relatively small vessels. Tonnage figures derived from my analysis of the NOSL for Massachusetts (Boston, Salem and Marblehead), New Hampshire (Piscataqua) and New York indicate that the average burden of the ships arriving at those ports from La Tortuga between 1700 and 1775 was 55 tons (see Table 2.1.2). In comparison to the much larger 150-plus-ton, three-masted ocean-going vessels that frequently crossed the Atlantic, most ships arriving at La Tortuga were but small sloops, brigantines and schooners. Analysis of the NOSL also indicates that, on average, these ships had only seven seafarers on board including captain and mate. Such small crew sizes conduced towards a division of labor not as clearly defined as on larger ships in the English merchant marine and the British Navy, most of which sailed with hundreds of men arrayed in a strict and rigid hierarchy (Rodger 1986). Stiff 17th- and 18th-century gender roles plus the dangers and hardships of life at sea would have resulted in virtually all seafarers sailing to La Tortuga being male. The documentary and material evidence is mute regarding any adventurous

¹⁴⁷ Future research on the topics addressed in this section should take into account both archaeological and documentary data to support or weaken the hypotheses formulated here. Diverse sources of potentially pertinent data have been unequally explored to date. For example, while archaeological data concerning early Dutch engagement with the Araya salina is virtually null, that coming from closely related West Frisian municipal archaeology is growing exponentially (Bartels 2009). In addition, the unexplored Dutch West Frisian Archives of Hoorn and Enkhuizen may yet provide invaluable insights into the social realities of the *zoutvaerders*.

women at La Tortuga, either posing as men, or wives or concubines brought along by captains (for studies of seafaring women, see De Pauw 1982; Dugaw 1996; and Springer 1996). It cannot, however, be discarded that women were present on the island on rare occasions.

The captain was the sole commander on such small ships. Captains were directly responsible to the merchant(s) who had hired them to manage the navigation, voyage, cargo, and seamen of a vessel (Rediker 1987: 84). They assigned labor and imposed discipline, but also had the obligation to provision the crew exercising due care for their general welfare (Jarvis 2010b: 90; Vickers 2007: 222). Occupying the position of second in command, the mate was an officer who marshaled significantly less power. Among his numerous duties were setting the seamen to work, maintaining good order, keeping the ship operative, and overseeing the second of the two watches (Rediker 1987: 84). The common seaman (also known as a salt, jack, jack-tar, gob and deckhand) was at the bottom rung of the labor hierarchy. Seamen were divided into two shifts and carried out the bulk of the physical labor at sea as well as in ports loading and unloading cargo. While off duty, seamen could dedicate their free time to recreational activities such as drinking, eating, and storytelling, as well as mending clothes, fishing and sleeping extra (Vickers 2007: 91).

Considerable debate among maritime scholars has centered on the figure of the captain—his power and authority as well as his social and economic distance from the crew. Marcus Rediker (1987: 84, 241) has insisted that maritime authority largely rested on coercion and violence. Rediker (1987: 209) does, however, acknowledge that crew size

affected the exercise of authority and that small North American ships had less need for physical discipline. Other maritime scholars such as Peter Earle (1998), Michael Jarvis (2010b), and Daniel Vickers (2007) place less emphasis on violence and conflict although they recognize that chastisement and corporal punishment at sea were legal and the norm, as long as they were communally accepted. They suggest that tyranny on board was not a universal phenomenon and that the authority of a captain over his crew was primarily circumscribed by scale—the smaller the ship and crew, the stronger the communal and quasi-familial affiliations amongst the crew, and therefore the less physical violence a captain could mete out (Earle 1998: 163; Jarvis 2010b: 81; Vickers 2007: 225). Captains on these small ships would have had to exercise their authority in alternative ways not necessarily violent. One such way might have been the paternalistic distribution of alcohol, especially to their crews laboring on the saltpan of La Tortuga (Antczak 2015 [this topic will be discussed in Chapter 6, Part I]).

My analysis of the eighteenth-century NOSL as well dozens of Anglo-American newspapers and other documents has revealed the names of hundreds of ship captains arriving at La Tortuga from 1688 to 1775. Although this breadth of data necessitates more detailed future study, I offer here a few faces of captains who probably sailed to La Tortuga during the 18th century (Fig. 4.1). Captains arriving at the island belonged to various age groups. Some were as young as John Green from Salem, who sailed to the island in 1714 at the age of 19, and then again in 1716 at 21 years of age.¹⁴⁸ Much older

¹⁴⁸ C.O. 1/738, 5/848.



Capt. James Buffinton
(1738–1775)
Master of the *Tryal*

1774 on La Tortuga

Capt. Edward Allen, Merchant
(1735–1803)
Master of the Brig. *Hope*

Prob. 1764 on La Tortuga

Capt. William Bartlett
(1741–1794)
Master of the Brig. *Charlotte*

1763 on La Tortuga

Fig. 4.1. Portraits of three Salem captains who are known to have probably sailed to La Tortuga for salt in the 18th century (in Tapley 1934: 88, 192, 157).

captains included Isaac Woodbury of Salem who sailed to La Tortuga in 1699 at the age of 54 and El[i]ezer Lindsey [Lynsey] of the same town who sailed in 1702 at the age of 56, then a last time in 1715 at the age of 69.¹⁴⁹ Although the documentary record is fragmentary and does not enable us to know the ages of all captains who sailed to the island, the average age of those available, from a sample of 53 names, was 35 years of age for captains sailing between 1688 and 1721 to Tortuga.¹⁵⁰ Some came multiple times. At 35 years of age a sea captain would have already had substantial seagoing experience under his belt, considering that he could have begun in the business as a young cabin boy ascending through the ranks aboard small merchant vessels through the years. It is also

¹⁴⁹ C.O. 33/13.

¹⁵⁰ The ages of captains were derived from Vince Walsh's and Daniel Vicker's excellent online database of 17th- through 19th-century mariners from Salem which they used for their 2007 publication *Young Men and the Sea*. The database can be accessed freely at <https://www.mun.ca/mha/holdings/yms/yms.php>.

important to note that a number of these captains were masters and owners of their own vessels. Jonathan Gardner of Salisbury, MA, who sailed for salt in 1753, was master and owner of the Salem Schooner *Two Brothers*; Samuel Dogget of Pembroke, MA, sailed that same year captaining his own Schooner *Lady Sophia*; Joseph Grafton captained his Salem Schooner *Rebecca* in 1755; and David Glover was master and owner of the Salem schooner *Neptune* on a voyage to La Tortuga in 1762.¹⁵¹ Most captains, however, were hired by a merchant or various merchants who had shares in a vessel and commercial stakes in a voyage. These findings suggest that the captains sailing to La Tortuga were of different socio-economic status and backgrounds. It is probable that various captains also followed different career paths following their stints as ship masters. Although his stay on La Tortuga might not have significantly influenced his future career, the most notable example is that of William Whipple—the future signer of the Declaration of Independence as a representative of New Hampshire—who captained the brigantine *Elizabeth* of Piscataqua to La Tortuga in 1756 (Ward 2012: 59–60).¹⁵²

Living in close quarters, small crew size and shared tasks, activities and dangers all contributed to a general collectivism onboard most ships sailing to La Tortuga. Outside of the seaman’s menial tasks of pumping the bilge, knotting yarn to make rope or scrubbing the deck, captains often worked with the crew in tasks pertaining to regular ship handling such as “setting, reefing, trimming and taking in sails, steering the vessel, as well as repairing and rigging canvas” (Vickers 2007: 90). Moreover, captains not only shared

¹⁵¹ C.O. 5/849, 5/850.

¹⁵² C.O. 5/967.

numerous such manual tasks with their crews but also partook of the same or similar leisure activities, ate the same rations and inhabited the same general living space (Jarvis 2010b: 86). The captain and mate probably had their own cabins on the vessels visiting La Tortuga, but these were cramped and offered limited privacy. It is probable that at times captains and mates did not partake in regular manual tasks. Yet it would be a stretch of the imagination to suggest that a rigid hierarchy developed on board small ships with captains functioning exclusively as commanders and managers, aloof from any physical work (Jarvis 2010b: 86; Vickers 2007: 90–91).

According to Rediker (1987: 243), collectivism on board merchant ships in the eighteenth century fell into two broad categories. The first was a vertical collectivism of the entire ship, created by a shared confrontation with nature and the struggle for survival at sea. The second was a horizontal collectivism amongst the crew arising from conflict caused by the social relations of wage labor. This class conflict, however, is only fully applicable to much larger ships, where social distinction, rank and hierarchy could be understood through considerable spatial distinctions onboard (like those between the officers' quarterdeck and the crews' forecastle), a more systematic division of labor, and thus a greater separation of the captain and the seamen (Vickers 2007: 225). As Jarvis (2002: 605) contends, Rediker primarily dwells on the tension and sharp social distinctions between officers and seamen existing on large merchant and navy ships. These were unlike small merchant ships "where the highly personal level of constant interaction and considerable potential for advancement worked against such differentiation" (Jarvis 2002: 605). I suggest that once the seafarers made landfall on La Tortuga and began raking

salt, captains, rather than engage in such hard manual labor, spent their time overseeing this work while meanwhile engaging in leisurely activities such as drinking, eating and gambling. These activities will be discussed in depth in Chapter 6, Part I.

Keeping these debates in mind, there is clear documentary evidence that at least on some vessels arriving at La Tortuga, significant socio-economic distinctions between the captain, the mate and the crew did exist. Evidence for the social and economic distancing of the captain from the mate and the regular seaman can be found in the 1766 inventories of shipboard items and personal belongings of the seafarers on three Bermudian vessels intercepted by Spanish corsairs and taken into the port of La Guaira while raking salt on La Tortuga (MHMCB 1996 [1766]: 200–227). The personal possessions of the captain of the Sloop *Polly*, Benjamin Stiles, as well as those of chief mate Daniel Keele and regular mariner William Gibbs, along with the listed estimated prices of these belongings, offer us a unique snapshot of these seafarers' purchasing power and status (Table 4.1) (MHMCB 1996 [1766]: 218, 223–224, 226).

Capt. Stiles had among his personal possessions such luxury items as a gold watch, gold ring, gold seals, a pair of pocket pistols and a small sidearm, plus a number of religious and sundry other goods. His apparel was also fancy including a green silk waistcoat, seven fine Holland shirts, silk stockings, a “fine” beaver hat, and two gowns among others articles. In addition, he possessed items for his personal consumption including a keg of brandy, green tea, coffee and a keg of butter. On the other hand, chief mate Keele had fewer luxury items to his name, all raiment and clothing accessories including two fine Holland shirts, a pair of silver shoe buckles, a silk handkerchief, a regular

beaver hat and three periwigs. An exception is the costly Hadley's quadrant that would have been an essential navigational instrument. Finally, mariner Gibbs had little more than the clothes on his back—and these were not made of expensive materials. His fanciest items were a pair of silver shoe buckles, a silver stock buckle, a coat and a few navigational instruments. The difference in quality and quantity of personal possessions is also evidenced in the total cost of items belonging to each of these seafarers. The captain's belongings amounted to more than double the cost of the mate's, and the mariner's were only a little more than half the cost of the mate's (Table 4.1). Even though a general collectivism might have existed aboard these small ships, material distinctions between the positions on the short chain of command such as those seen on the Bermudian Sloop *Polly* might also have existed on other Anglo-American vessels arriving at the La Tortuga saltpan.

Delving deeper into the material belongings of the seafarers at La Tortuga, let us turn to some of the personal possessions brought to light by the archaeological excavations at the Punta Salinas (TR/S) site by the saltpan. As shall be discussed in Chapter 6, Part I, where more of the archaeological evidence of eating and drinking at La Tortuga is analyzed, the evidence indicates that many of the captains who arrived at the saltpan were likely of higher status than most of their crewmembers. Many of the small finds echo the lists of personal belongings from the *Polly* (Table 4.1). Twenty-six buttons (Fig. 4.2, 1–2, 6–26), two glass pastes (3 and 4), and one eye from an eye-and-hook fastener (5) were found at the site, many of which were located through systematic metal detector transects and through sifting backfill from the trenches through 1 mm-wide meshes. Two

Table 4.1. Personal possessions from the 1766 inventories of the Sloop Polly. Source: (MHMCB 1996 [1766]: 218, 223–224, 226).

Capt. Benjamin Stiles	Cost*	Chief Mate, Daniel Keele	Cost	Mariner, William Gibbs	Cost
1 gold watch	£18 18s	2 fine Holland shirts	£4	2 Holland shirts	£2
1 gold ring	£3	4 chex shirts	£1 12s	4 chex shirts	£2
2 gold seals	£2 8s	1 coat, waistcoat & pair of breeches	£6 10s	5 waistcoats	£3 5s
7 fine Holland ruffled shirts	£10 18s	3 pairs of breeches & 3 waistcoats	£6 10s	1 coat	£3 10s
3 chex shirts	£1 16s	4 pairs of trousers	£1 10s	4 pairs of trousers	£1
1 green silk waistcoat	£5 7s	6 pairs of stockings	£1 18s	4 pairs of breeches	£2 15s
1 silk & cotton waistcoat	£1 10s	1 pair of garters	2s	1 pair of knee buckles	15s
2 cloth waistcoats	£1 5s	1 pair of knee buckles	12s	3 pairs of stockings	15s
1 coat	£3 10s	2 pairs of shoes	15s	2 pairs of shoes	15s
1 green beige gown	£2	1 pair of silver shoe buckles	£2	1 pair of silver shoe buckles	£2
1 calico gown	£2 10s	4 neckcloths & 4 stocks	£1 19s	3 necks cloths	4s
3 pairs of trousers	£1 7s	1 stone stock buckle	£1	1 silver stock buckle	12s
3 pairs of breeches	£1	1 silk handkerchief	7s 6d	1 chest	£1
1 pair of stone knee buckles	£1 5s	3 periwigs	£3 10s	1 case	10s
1 stone stock buckle	£1 10s	1 beaver hat	£2	1 bed & bedding	15s
1 breast buckle	£1	2 cotton caps	7s 6d	1 pair of sheets	18s
1 dozen stone buttons	18s	1 chest & case	£1 10s	1 rug	15s
12 pair of silk & cotton stockings	£2 15s	1 bed & bedding	£2	Davis quadrant, Calendar and mariner's compass	£3
1 fine beaver hat	£2 5s	1 Hadley's Quadrant	£5		
10 neckcloths	£1 17s 6d	1 mariner's compass & calendar	11s 6d		
1 pair of gloves	4s 6d				
1 small arm	£3				
1 pair of pocket pistols	£3 10s				
1 cutlass	7s 6d				
1 case of razors	£1 10s				
2 chests	£1				
1 case	15s				
1 pair of sheets	£1 10s				
1 mariners compass	6s 8d				
1 calendar	6s 8d				
1 scale	1s 8d				
1 pair of brass dividers	3s 6d				
1 large hog	£2 10s				
2 small hogs	£1 10s				
1 keg of butter	£1 10s				
1 lb of green tea	18s				
10 lb of coffee	15s				
1 keg of brandy	£2 5s				
2 large decanters	12s				
2 table cloths	18s				
4 napkins	12s				
1 brass candlestick	9s				
1 frying pan	10s				
1 tea kettle	18s				
2 large dishes	16s				
½ dozen plates	6s				
1 large Bible	12s 6d				
1 prayer book	6s 8d				
1 sermon book	15s				
Atkinsons Epitome	10s				
Sundry other books	£2 10s				
TOTAL	£98 18s 2d		£45 14s		£25 16s

*Values are expressed in pounds (£), followed by shillings (s), followed by pence (d). There are 12 pence to the shilling and 20 shillings to the pound.

cast copper-alloy buttons (suggesting a pre-1750 date) have glass pastes inserted into them with the larger circular one possibly part of a gown or coat, and the smaller oval one a waistcoat (it could also be part of a sleeve button) (1 and 2). Generally, in the 18th century, waistcoat buttons were smaller than those on gowns and coats (White 2005: 51, 57). Two oval buttons might have been a part of composite sleeve buttons (6 and 7). One is a copper-alloy button with a stamped floral design (6), and the other is a silver button with an etched floral design (7). Two circular cast copper-alloy buttons with stamped decorations might have been waistcoat buttons (8 and 9). One pre-1750 circular copper-alloy button has a stamped floral design and decorative holes. It probably graced a coat or a gown (10). Seven circular copper-alloy buttons (one of which is decorated) are large and probably were exhibited on coats or gowns (11–18). All these buttons have cone shanks (where a metal loop was affixed to a metal cone on the back of the button) suggesting a post-1750 date (White 2005: 51). A large hollow-cast brass button with a soldered shank might have been used on a waistcoat or possibly as a sleeve button (19). Three small circular buttons, one copper-alloy and two pewter, might have been used on breeches (20–22). Finally, four certain sleeve buttons were found (23–25, 27), two of which are copper-alloy with stamped floral decorations (23–24). A sleeve button link was also recovered (26). The other two buttons are fancy silver sleeve buttons that might have been inserted in the cuff of a fine coat or even a gown like those listed in the inventory of Capt. Stiles (25 and 27). One of these buttons (27) stands out as it is hollow-cast and has a punched image of what is probably the crest of the Virginia Company of London, representing the Virginia Queen (Pocahontas, also known as Matoaka) (Bly Straube and



Fig. 4.2. 18th-century metal buttons, button inlays and other clothes fasteners recovered at Punta Salinas.

Merry Abbitt, pers. comm. 2011). The broad range of buttons discovered fits well with the inventories of items mentioning attire such as coats, gowns, waistcoats and breeches, all of which required certain sizes of buttons in the 18th century. Interpreting social status and purchasing power from these small portable items is nonetheless problematical and may lead to biased socio-economic reductionism. For example, a fine silver sleeve button might have been the only costly item a regular seaman owned; or it might have been one of many that a sea captain possessed. In this case, the unique (and, for this research, opportune) inventories of the personal belongings of three seafarers on board the Sloop *Polly* provide a detailed contrasting evidentiary source with which to critically analyze the material record.

Further evidence comes in the form of 37 buckles and buckle fragments found at Punta Salinas (Fig. 4.3; Table 4.2).¹⁵³ Most of these buckles were recovered in metal detector transects and were not associated with any particular depositional contexts, objects or features. Instead, they were strewn haphazardly throughout the site. A fancy gilded annular stock buckle might have belonged to a captain, although Capt. Stiles' and mate Keele's inventories mention a simpler stone stock buckle each. Mariner Gibbs's inventory, on the other hand, mentions a silver stock buckle (Fig. 4.3, 1) (Table 4.1). Gibbs had a more expensive stock buckle than his superiors, which once again proves the dangers of assigning status on the basis of such small portable items. Three further

¹⁵³ Six fragments of buckles were not included in the table or the figure as they consisted of one small fragment of a copper-alloy chape, three heavily rusted iron chapes, and two fragments of disfigured undecorated pewter buckle frames. For more detailed identification of each buckle and buckle fragment see Table 4.2.



Fig. 4.3. 18th-century buckles recovered at Punta Salinas.

Table 4.2. Detailed identification of buckles recovered at Punta Salinas.

Image No.	Inv. No. TR/S	Width	Length	Distal thickness	Observation	Identification and References
1	1636	2.8	3.6	0.22		Annular stock buckle. Second half of 18 th century. Gilded copper-alloy. Incised lines. (Whitehead 1996: 113, no. 725; White 2005: 45–47).
2	1638	3.3	4.2	0.21		Sub-rectangular knee, hat or stock buckle. Copper-alloy. Plain. (Whitehead 1996: 113).
3	1637	3	3.2	0.3		Rectangular dress buckle. Possibly late 17 th century. Copper-alloy. Engraved oblique lines and a notch for pin, possible touchmark. (Whitehead 1996: 26, no. 128).
4	1668	2.3	2.3	0.5	Heavily rusted	Dress or sword buckle. 18 th century. Iron.
5	1656	4.8	5.2	0.18	Other pair of TR/S/1657.	Annular shoe buckle. Late 18 th century. Copper-alloy. Openwork with molded floral decoration.
5	1657	4.7	5.05	0.2	Other pair of TR/S/1656.	Annular shoe buckle. Late 18 th century. Copper-alloy. Openwork with molded floral decoration.
6	1659	4.8	5.6	0.18		Annular shoe buckle. 18 th century. Copper-alloy. Molded floral wreath decoration emphasized by sharp edges.
7	1666	5.5	5.7	0.2	Refitted	Circular shoe buckle. Second half of 18 th century. Openwork with molded flowers, punched notches and incised lines.
8	1658	5	5.3	-	Heavily eroded, with remaining fragment of roll and pin. Possibly pair of TR/S/1763 and 1667.	Annular shoe buckle. Late 18 th century. Tinned copper-alloy. Openwork with decoration of two interlaced ribbons with molded rosettes, punched circles and oblique incised lines. (Whitehead 1996: 109, no. 701; Abbitt 1973: 47–48, Type V, Fig. 15-7). A nearly-identical buckle recovered from the 1785 shipwreck of the <i>General Carleton</i> in Gdańsk, Poland (Ossowski 2008: 349).
9	1667	5	7?	0.28	Fragment, eroded, probably other half of TR/S/1763	Annular shoe buckle. Late 18 th century. Tinned copper-alloy. Openwork with decoration of two interlaced ribbons with molded rosettes, punched circles and oblique incised lines. (Whitehead 1996: 109, no. 701; Abbitt 1973: 47–48, Type V, Fig. 15-7).
10	1763	4.4	4.8	-	Fragment, eroded, probably other half of TR/S/1667	Annular shoe buckle. Late 18 th century. Tinned copper-alloy. Openwork with decoration of two interlaced ribbons with molded rosettes, punched circles and oblique incised lines. (Whitehead 1996: pg. 109 no. 701; Abbitt 1973: 47–48, Type V, Fig. 15-7).
11	1648	4.8	6.2	0.3	Silver plated, probably the other pair of TR/S/1654	Sub-rectangular shoe buckle. Copper-alloy or bronze frame. Silver plated frame. c. 1733–1790.
12	1654	4.9	6.4	0.3	Silver Plated, probably the other pair of TR/S/1648.	Sub-rectangular shoe buckle. Copper-alloy or bronze frame and copper-alloy chape. Silver plated frame. c. 1733–1790.
13	1652	5.1	6	0.28	Copper alloy pin and loop chape.	Sub-rectangular shoe buckle with rounded ends. c. 1720–1790. Copper-alloy. Complete with copper-alloy pin and loop chape. (Whitehead 1996: 105, no. 669).
14	1644	2.1	4.15	0.3	Fragment	Annular dress buckle. c. 1720–1790. Tinned copper-alloy? Curvilinear line on frame. (Whitehead 1996: 113, no. 729).
15	1642	4.9	6.2	0.3		Sub-rectangular shoe buckle. c. 1720–1790. Copper-alloy. Molded, scrolled floral ornamentation emphasized by shaped edges. (Whitehead 1996: 106, no. 678).
16	1651	5	6.5	0.2	Refitted	Sub-rectangular shoe buckle. c. 1720–1790. Copper-alloy. Inward curvature at pin holes, holes for circular and close-set pastes. (Whitehead 1996: pg. 120 no. 754; Hughes and Hughes 1972: plate 7).
17	1649	4.9	5.5	0.4		Rectangular shoe buckle. c. 1720–1790. Possibly earlier 18 th -century example due to its thickness. Copper-alloy.
18	1643	4.7	6.6	0.28		Rectangular shoe buckle. c. 1720–1790. Copper-alloy.
19	1653	4.8	5.1	0.3	Traces of gilding, and defined curvature.	Rectangular Artois style shoe buckle. Last third of 18 th century. Copper-alloy. Openwork slots with floral molding and notching. (Whitehead 1996: 107; Abbitt 1973: 47–48, Type V, Fig. 15-4).
20	1639	3.7	4.3	0.18	Loop chape present but rusted. Very small for a late shoe buckle.	Rectangular shoe buckle. Copper-alloy. Last third of 18 th century. Molded imitation square paste shoe buckle. Shaped edges.
21	1645	1.7	4.4	0.3	Fragment	Rectangular shoe buckle. Copper-alloy. Last third of 18 th century. Molded imitation paste shoe buckle. Floral motif at corner.
22	1647	1.6	4.8	0.27	Fragment	Rectangular shoe buckle. Mid-18 th century. Copper-alloy. Grooves, and fluting. (Whitehead 1996: 106; Abbitt 1973: 37, 38).
23	1640	4.5	5	0.25	Minimal curvature.	Rectangular shoe buckle. c. 1720–1790. Copper-alloy.
24	1641	4.6	5.55	0.3		Rectangular shoe buckle. Mid-18 th century. Copper-alloy. Notching, grooves, and fluting. (Whitehead 1996: 106; Abbitt 1973: 37, 38).
25	1763	4.4	4.85	-		Rectangular shoe buckle. c. 1720–1790. Copper alloy. Incised straight lines.
26	1650	4	4.7	0.3	Rusted iron pin and fragment of roll in place.	Trapezoidal shoe buckle. c. 1720–1790. Copper-alloy.
27	1663	2.8	3.8	0.3	Fragment	Loop chape fragment. 18 th century. Copper-alloy.
28	1655	6	8.5	0.4	Copper-alloy pin, loop and chape.	Sub-rectangular shoe buckle, possibly Artois. Post-1760. Pewter frame and copper-alloy chape. (Stelten 2009: 19).
29	1646	2.9	5.8	0.45	Fragment	Sub-rectangular shoe buckle. Pewter? c. 1720–1790. Molded band on inside of frame, molded scrolls, circles and lozenges. (Whitehead 1996: 95, 108, no. 696)
Fig. 4.4	1665	5.1	6.5	0.48	Two, attached by rust and sand. Rusted iron loop chape on both.	Sub-rectangular shoe buckle. c. 1720–1790. Copper-alloy.

buckles were clearly not shoe buckles. One is a knee, hat or stock buckle; another a dress buckle; and the final heavily corroded iron one is probably a dress or sword buckle (2–4). Six copper-alloy shoe buckles are annular or circular and have intricate molded, stamped and incised designs and openwork (5–10). Two sub-rectangular shoe buckles are silver-plated (11 and 12), and match, at least in description, the silver shoe buckles mentioned in the inventories of Keele and Gibbs. This once again indicates that such silver buckles were not solely worn by captains. A further four shoe buckles are sub-rectangular (13–16), with one in particular standing out since it was probably inlaid with glass pastes (16). Copper-alloy buckles and buckle fragments nos. 17–26 are all rectangular, with some exhibiting various forms of decoration. One shoe buckle is especially noteworthy (19) since it is probably an Artois-style buckle due to its pronounced curvature. These large shoe buckles were introduced after 1777 by Comte d’Artois who was the French Ambassador to England (later to become King Charles X). This fashion trend quickly caught on in the late-18th-century Atlantic world (Stelten 2006: 19). Another rectangular shoe buckle (20) also stands out because it is well-preserved and has molded imitation square pastes. There is also one trapezoidal shoe buckle (26). A further two shoe buckles are the only ones with molded and decorated pewter frames, one of which is still intact and has a copper-alloy pin, loop and chape (28 and 29). Shoe buckle no. 28 is also the largest buckle in the collection, suggesting that it might also have been an Artois-style buckle from the late 18th century flattened after deposition. Finally, a pair of sub-rectangular copper-alloy shoe buckles was found in a metal detector transect, one on top of the other in a concreted state (Fig. 4.4). The buckles were located beyond the known archaeological



Fig. 4.4. A concreted pair of 18th-century copper-alloy shoe buckles from Punta Salinas.

activity areas of the site. Having been found at 25 cm of depth, I suggest that perhaps these buckles were placed in a canvas bag and hidden in the sand.

All of these buckles fall comfortably within the date range of known 18th-century buckles (1720–1790). Since so many shoe buckles were recovered at Punta Salinas, and among these at least four matching pairs (Fig. 4.3, 5, 8–12; Fig. 4.4), it can be suggested that the leather shoes which these buckles held together deteriorated exceedingly fast in the hypersaline conditions of work on the saltpan. Such a suggestion gains strength from the fact that most buckles were found dispersed throughout the Punta Salinas site, not concentrated within any of the activity areas dense in artifacts and features. These depositional characteristics indicate that the majority of the shoe buckles belonged to the seamen toiling on the pans and not to the captains spending their time overseeing their labor and engaging in leisurely activities within the artifact-rich activity areas. Since a silver stock buckle and a pair of silver shoe buckles were the only fancy items mariner Gibbs had among his humble possessions (Table 4.1), I suggest that ownership of

expensive buckles along with a few quality pieces of clothing could be one of the limited ways in which a regular seaman could distinguish himself socio-economically from his fellow seamen. Gibb's £2 silver shoe buckles could "hide" a pair of modest leather shoes priced at 6 shillings giving them some extra panache. And, at £3 and 10-shillings, Gibb's coat—which cost the same as that which the captain had—could also "conceal" a cheaper waistcoat, shirt and breeches beneath. One nagging question remains: why, if leather shoes quickly fell apart due to the corrosive effects of salt, were so many metal buckles not salvaged and reutilized but instead discarded? Perhaps the buckles themselves were already deteriorated, broken, or even out of style, or simply lost.

Three small items also fit well within the category of portable personal possessions. One is a gilded pocket watch key (Fig. 4.5, 2). Capt. Stiles' most expensive possession by far was a gold watch valued at £18 and 18 shillings (Table 4.1). The key found at Punta Salinas would most probably have belonged to such a high-end gilded mechanical pocket watch as the one Stiles owned, suggesting that it was perhaps lost by a captain much like himself. The two other items are very well-preserved brass navigational dividers and a finely-made brass fragment of what might be a drafting point or pen tip from an 18th-century navigational drafting set (Fig. 4.5, 1 and 3). A very similar brass divider and similarly-shaped pen tips were found in the c. 1774 wreck at Roosevelt Inlet, Delaware Bay (Krivor et al 2010: 215–216). Interestingly, Capt. Stiles has a pair of brass dividers in his inventory valued at 3 shillings and 6 pence (Table 4.1). They were clearly not fancy accessories but indispensable navigational tools. I contend that these elements from a drafting set might have belonged to a captain rather than other seafarers



Fig. 4.5. Other small personal possessions from Punta Salinas.

aboard one of the small Anglo-American or Bermudian vessels. Even though the mate and the mariner on the *Polly* owned more expensive navigational instruments such as quadrants and compasses (Table 4.1), the items from a drafting set probably would have belonged only to a captain since he was the one in charge of charting a voyage. A captain would likely have been the only one on board possessing sea charts and maps, with which,

along with drafting implements, he determined the course of a voyage and the ports of call.

A number of firearm hardware items, attributable to the Anglo-American period of salt raking, were found at Punta Salinas (Fig. 4.6). Three pieces of copper-alloy (most probably brass) hardware were found from what appears to be a Royal Navy long sea service flintlock pistol dated to post-1720 (Gilkerson 1993: 243–246; Howard Dixon, pers. comm. 2010) (1–3). The butt cap (or pommel) (1) is typical of this popular type of naval firearm; the trigger guard (2) is rather peculiar since it has an incised star, a flourish that is uncommon in known examples and perhaps suggests that its owner was not a naval seaman; and the shape of the ramrod pipe (3) also suggests that it belongs to this type of weapon (Howard Dixon, pers. comm. 2010). The “small arm” mentioned among the belongings of Capt. Stiles (Table 4.1) might well have been such a pistol. There are five copper-alloy fragments of trigger guards (4–8). One trigger guard finial is non-military issue because of its elaborate decoration (5), and another has a crown-shaped touch mark on the interior suggesting that it was part of a British military firearm (6) (Howard Dixon, pers. comm. 2010). A large butt plate (or stock) from what was perhaps a musket or rifle was also found (9). A large copper-alloy trigger guard with an intricately-incised and punched cross-shaped design (10) might have been part of an 18th-century musket, rifle or blunderbuss. Finally, there is also a copper-alloy terminal ramrod pipe (11) that could have held a long wooden ramrod of a musket or rifle. Fifteen gunflints of different sizes and colors were also recovered at the site (Fig. 4.7). All of these flints seem to have been heavily used and broken and many display amorphous shapes, while others exhibit the



Fig. 4.6. Copper-alloy fragments of firearms from Punta Salinas.



Fig. 4.7. Various gunflints found at Punta Salinas.



Fig. 4.8. Different calibers of lead shot found at Punta Salinas.

“D-form” of 18th-century French gunspalls (Ballin 2012: 125; Kenmotsu 1990: 98). The flints also present two general sizes, suggesting that the smaller ones were perhaps used for pistols and the larger ones for muskets and rifles. Furthermore, a total of 274 lead shot pellets of diverse calibers, both in good-to-unused and impacted condition, were recovered throughout the Punta Salinas site (Fig. 4.8). It is impossible to determine if these lead pellets were brought from the ships to the island and some of them fired there during the Anglo-American period of salt raking. Most of them may have been brought to the site, and some of them fired, during the various armed confrontations between the Dutch and the Spanish in the 1630s (Antczak et al. 2015). It is also plausible that some of this lead shot might have been fired in Anglo-American skirmishes with Spanish corsairs. Further suggesting that the Anglo-Americans had ammunition with them, several amorphous clusters of lead slag were found in the Anglo-American Dunes activity area at Punta Salinas. These might indicate on-site lead shot molding or making.

An edged weapon and various fragments pertaining to other edged weapons were also recovered at Punta Salinas. The most remarkable is an iron hanger—perhaps a naval boarding cutlass—featuring a large disc guard and a short wide blade suggesting a weapon for intense hand-to-hand combat (Fig. 4.9) (Gilkerson 1991: 73–77; Howard Dixon, pers. comm. 2010). The cutlass is only missing its knuckle guard. It was found during a routine metal detector survey, distant from any other finds, positioned diagonally in sheer white sand with the tip of the pommel interred at a depth of around 10 cm (Fig. 4.10). The position of the cutlass in the sand suggests that it was hidden intentionally, not simply abandoned. This discovery once again leaves many unanswered



Fig. 4.9. Naval boarding cutlass recovered at Punta Salinas.



Fig. 4.10. Naval boarding cutlass in situ after being excavated at Punta Salinas. Note the diagonal position in the sand.

questions. Why was the cutlass hidden? Why was it missing a knuckle guard? Perhaps it was hidden by a bitter crewmember to take revenge on a captain when the time was right?

Further fragments of edged weapons include what may be part of a copper-alloy knuckle guard or knuckle bow from an officer's sword or hanger (Fig. 4.11, 1) and a fancy gilded copper-alloy quillon, with molded decoration, that might have been part of a non-



Fig. 4.11. Copper-alloy fragments of edged weapons and scabbard chapes.

military issue smallsword (Gilkerson 1991: 115–128; Howard Dixon, pers. comm. 2010). The final three items are all scabbard chapes (3–5). The smallest of these (3) could have been the scabbard chape of a smallsword or possibly also from a bayonet. Smallswords were expensive items usually associated with a range of gentlemen and officers of rank, not with regular seamen (Howard Dixon, pers. comm. 2010). The smallsword inserted within the scabbard of which the recovered chape was a part, thus could have belonged to an affluent ship captain or an officer from a Royal Navy guard ship. Chape no. 5 could have come from a dirk scabbard as it is symmetrical and exhibits no curvature. Dirks were

large straight daggers with sword-like hilts (Gilkerson 1991: 111–115). Finally, the largest chape (4) could have been from the scabbard of a cutlass much like the one recovered at Punta Salinas. As a matter of fact, it fits the rusted tip of the cutlass perfectly.

The above-discussed fragments of 18th-century firearms and edged weapons indicate that some of the seafarers disembarking at Punta Salinas were well-armed. It is important to note here that the only person listed with weapons among his personal possessions aboard the *Polly* was Capt. Stiles who had a small arm, a pair of pocket pistols and a cutlass (Table 4.1). It must also be noted, however, that some vessels such as the Bermudian brigantine *Porgey* had an ample stock of shipboard weapons for the eventual skirmish with a pirate or corsair. The *Porgey* carried 13 small arms, four brass blunderbusses, three iron blunderbusses, two pairs of pistols, one lance, five cutlasses and a large selection of lead shot and cartridges (MHMCB 1996 [1766]: 206). It is probable, nonetheless, that for protection from marauding Spanish corsairs and, possibly, even from a disgruntled crew or crewmember, captains came down on land armed with edged weapons and firearms so as not to be caught off guard. For this latter reason, they also might not have allowed their crewmembers to bear arms. The presence of expensive items such as a smallsword with gilded hardware suggests that weapons were not only carried by captains for self-defense purposes but also for displaying their purchasing power, status and rank. Yet why these weapons and their fragments ended up in the dry sands of Punta Salinas remains unknown. Possibly some of the hardware was broken off during short armed confrontations with Spanish corsairs that from time to time intercepted salt fleets at the island. Perhaps some firearms jammed in the heat of battle

and had to be left behind when the seafarers fled to their ships, only for their wooden forms to quickly decay in the fierce sun and biting salt of the site.

The variety of personal belongings recovered at Punta Salinas offers a cautious cross-sectional glimpse of the materiality of maritime ranks present at the saltpan—those of the captain, the mate and the regular seaman. Undoubtedly, the inventories of the personal possessions of the three seafarers aboard the Bermudian Sloop *Polly* have provided much-needed textual evidence with which to better contrast and understand the archaeological findings. As we have discussed above, determining social status and purchasing power on the basis of such small personal items as shoe buckles and buttons alone is problematic. The raiment of a seafarer was most often his only possession, and thus, having a pair of silver shoe buckles was the only luxury a humble seaman such as William Gibbs could afford. Furthermore, it cannot be assumed that the socio-economic differences in possessions evident in the inventories of the Bermudian sloop's crew were the same amongst the vessels from Boston, Salem, Piscataqua and New London which formed the bulk of arrivals at Punta Salinas. Nonetheless, drawing from the above-discussed examples, it is safe to suggest that 18th-century wage labor at sea formed an increasingly differentiated class of officers and seamen—even aboard these small 55-ton vessels manned on average by seven seafarers.

Enslaved Seafarers

This section discusses the fragmentary evidence for the presence of enslaved mariners at La Tortuga. Enslaved mariners might have been interspersed in and among the ship crews arriving at Punta Salinas. The work of historian W. Jeffrey Bolster (1997) brings to light

the forgotten lives of enslaved seamen of color in the 18th-century Atlantic world and suggests that they were indeed present on many voyages. Alongside the particular case of enslaved Bermudian mariners which will be discussed in this section, the small New England vessels that formed the bulk of the salt fleets to La Tortuga were chiefly manned by free white seamen. This does not, however, preclude enslaved seamen of color. Although more common in the West Indies (Bolster 1997: 18–28), they were not that uncommon in 18th-century New England. In fact, compared to coastal boatmen, a larger proportion of enslaved laborers on water in the northern colonies were seamen (Bolster 1997: 27).

Bolster (1997: 79–83) suggests that race might have played a less determining role in the maritime lives of enslaved seafarers of color aboard small New England ships due to the generalized collectivism I previously discussed. This might have tended to draw black and white shipmates together. Despite, nonetheless, the shared shipboard space, work and dangers at sea, social identities were conditioned in many cases by race. The acceptance and treatment of an enslaved seaman depended greatly on the humanitarian or racist views of each captain and his crew (Bolster 1997: 93–96). The variability of enslaved maritime experiences on La Tortuga is well illustrated by two cases. The first, an anecdote, comes to us from a letter by D. Francisco Fajardo sent from Cúpira (a small town east of Caracas) to the Governor of Caracas in September of 1775. Fajardo writes:

En la boca de Tacarigua arribó un negro inglés en un bote, sin tener otra cosa que un remo y un pedazo de trapo por vela... Dice que se tiró huyendo del capitán, desde la Tortuga, isla española, que distará seis horas de navegación deste puerto y en ella están continuamente los ingleses haciendo sal... [In the mouth of the Tacarigua Lagoon there arrived an English negro in a boat, without anything but an oar and a piece of cloth for a sail... He said that he jumped, escaping from the captain at La Tortuga, which is a Spanish

island that is six hours sailing from this port where the English are continually making salt]
(in Acosta Saignes 1967: 85).

This excerpt from the letter by Fajardo poignantly illustrates the case of an enslaved mariner who escaped from a ship on which he was chattel. The seaman took the ship's boat and made his way on a desperate chance into the unknown waters of the Venezuelan Caribbean marauded by Spanish corsairs. Yet the risk of such a perilous escape and unknown future was apparently more appealing to the enslaved seaman than remaining on his ship, presumably in a condition bad enough to precipitate his escape and at the very least one of dehumanizing bondage. Alternatively, he might not have been escaping a particularly despotic captain but simply scouting the best opportunity to gain his freedom. Once at La Tortuga—close to the Spanish Main—he made good use of his chance. Perhaps this enslaved seaman knew that since 1680 the Spanish Crown had authorized colonial authorities in the Americas to emancipate runaway slaves from the colonies of rival European Protestant powers who would subsequently be baptized in the Catholic faith (Rupert 2006b: 45). In fact, throughout the 18th century, hundreds of enslaved Curaçaoans escaped from the Dutch island to the adjacent mainland of the Province of Venezuela there to find their freedom, obtain land and become part of the society of the mainland Spanish colony (Rupert 2006b: 45). Since the enslaved seaman escaped from La Tortuga in September, it is probable that he did not belong to a New England crew since the *Saltertuda* fleet usually raked salt from February to May of each year. Rather, he might have been a crewmember of a West Indian or Bermudian vessel, many of which braved the risks of going unescorted sailing to the island unaccompanied and out of season.

The first mention of an enslaved seaman at La Tortuga dates to March 1709 and refers to a Bermudian man by the name of Dick 'Negro,' owned by Justice of the Peace Dickinson, and working aboard the vessel *Ruth* of James Basset along with five other men (Maxwell 2009: 146). The only other mention of enslaved seamen on the island is from the 1766 attack by Spanish corsairs that resulted in the detention of three Bermudian vessels and their crews, one of which was the previously-discussed sloop *Polly* captured by Benjamin Stiles. When the corsairs attacked, the fleet was dispersed. In the flurry of cannon fire that ensued, according to the sloop's mate Daniel Keele,

...there being five Negroe Sailors on Board his [Keele's] said Sloop who were more fearful of falling into the hands of Pirates, than White Persons were, as soon as they saw they were likely to be made Captives, jumped overboard in order to Swim to the Shore, all which the Deponent [Keele] hath been since informed by some of the said Negroes since his the Deponents return to these Islands [Bermuda], got on Shore except one (by the name of Daniel, a Slave the property of one George Chaplin of these islands) who was drowned" (MHMCB 1996 [1766]: 220).

Various elements of Keele's narrative are conspicuous. The first is the fact that the enslaved Bermudian mariners were so afraid of the Spanish corsairs that they preferred a risky and deadly swimming getaway than falling into their hands. In fact, once caught as chattel, these enslaved mariners would not have had the same rights in Spanish possession as runaway slaves had fleeing to the Spanish Main. For this reason, many Bermudian masters issued their enslaved seamen certificates of freedom that retroactively manumitted them so they could not be sold by the Spanish or French but held as prisoners of war (Jarvis 2002: 614).

What is more surprising is that the enslaved seafarers preferred not to take a prime opportunity to seek their freedom being stranded on deserted La Tortuga more

than 2,300 km away from Bermuda but only 100 km away from the mainland. Instead, they actively endeavored—and managed—to return to Bermuda. Some four months later, on May 26th, halfway between St. Croix and Bermuda, Capt. Brownlow from Barbados spoke to Capt. Bascome of St. Croix who was heading for Bermuda with “some Negroes” on board, “belonging to the Vessels that were taken by the Spaniards at Saltertuda, who jumped overboard, when they were taken, and swam ashore, in attempting which, several were drowned.”¹⁵⁴ It is probable that the four remaining black seamen were forced to survive on the parched island of La Tortuga for weeks or even months following the Spanish attack until they were presumably taken to St. Croix on a salt ship, possibly by way of other West Indian islands. Their astonishing eagerness to return to enslavement on Bermuda is a clear indication that their lives there were more privileged than those of many seafaring people of color, so much so that they preferred Bermudian enslavement to the unknown prospect of freedom in Spanish lands. Indeed, many enslaved Bermudian seamen were more comfortable on Bermuda where they had strong family ties, limited competition from free blacks compared to continental colonies, and access to the markets of bustling circum-Caribbean ports. Furthermore, on Bermuda they could claim wages and profits from ventures in such ports supported by the legal advocacy of their masters (Jarvis 2002: 608–613; Maxwell 2009: 147–150).

The enslaved populations of Bermuda were in many ways distinct from those in much of Anglo-America. After the initial importation of captive Africans in the early years

¹⁵⁴ *New-York Gazette*, May 26, 1766.

of the 17th century, the enslaved population on the island was self-sustaining. The constraints of space on Bermuda and the sharply declining need for agricultural labor in the later 17th century led white Bermudians to halt importation of captive Africans. As a result, Bermuda's enslaved population was settled, had a considerable degree of familial stability and was in many cases educated and more cosmopolitan than those in other colonial contexts in the Americas (Jarvis 2002: 617–618). The form and character of the institution of early modern slavery was malleable and highly contingent upon geographical, social, political and economic factors. The small yet vibrant trading hub of Bermuda represents a prime example of such contingency. Enslaved Bermudian men were predominantly employed as seamen. Oftentimes they were allowed to have personal portage or adventures, and so earned profits in private commercial ventures to Caribbean and North American ports; many were also paid one third of a white sailor's salary and permitted to use this money as they wished (Jarvis 2002: 606; Maxwell 2009: 151–154). The access to money and goods by enslaved Bermudians came to outrage the white slave-owning elites of the island who complained that blacks dressed ostentatiously. Sumptuary laws and other decrees limiting the display of enslaved acquisitive power were passed by the Bermuda Assembly numerous times throughout the 18th century, suggesting that the island's bondspeople were not deterred by these legal restraints (Jarvis 2002: 610–612). By the 1740s, at least a quarter of every Bermudian sloop's crew was enslaved (Jarvis 2002: 598).

Various artifacts that can be cautiously assigned to enslaved seamen were found at Punta Salinas. The first two are crudely-fashioned lead buttons, one with three holes

and the other with two (Fig. 4.12, 1 and 2). These buttons, however, cannot be conclusively linked to slaves as they might have also been spur-of-the-moment creations by white seafarers who were in desperate need of a button. It can be only guardedly suggested that, given their rudimentary fashioning, they might have formed part of an enslaved seaman's humble garments. A further five artifacts have been more commonly associated with the presence of enslaved people of African origin in colonial archaeological contexts. The first is a copper-alloy sheet with a stamped image of a "wild man", a mythical European figure similar to the faun or satyr of classical mythology (3). Surrounding the image are the words "IN NVRNBERG" and the letters "I.A.B". The "wild man" image (or *wilder mann* in German) suggests that perhaps this little plaque had something to do with the town of Brunswick in northern Germany for which the "wild man" was a symbol. Or perhaps it was related in some way to the "wild man" pfennigs that were minted in the region in the mid-18th century. Alternatively, it could have been a counting jetton produced in Nuremberg, many of which were traded throughout Europe and made their way to the East Coast of North America (Geoff Egan, pers. comm. 2010). What is most interesting about the item is that it has a hole crudely punched in from the back of the piece right through the stamped decoration. This treatment of the item suggests that it might have been hung from the neck on a string as a form of amulet or charm, regardless of the Western values and meanings the artifact might have had. Four pierced Spanish silver cobs or *macuquinas* were also found (4–7), further suggesting that these five punctured items might have indeed been charms worn by enslaved seamen of African descent possibly constituting evidence for the persistence of African traditions



Fig. 4.12. Various small artefacts that could have belonged to enslaved seafarers at Punta Salinas.

and spiritual beliefs amongst enslaved seafarers through the new media expressing them (Young 2002: 12). Pierced coins have, in fact, been found in a number of 17th– through 19th-century archaeological excavations and associated with enslaved or free peoples of African descent in the Americas (Camilla Agostini, pers. comm. 2015; Davidson 2004; Domínguez 1999; Heath 1999; Lucas 2014; Schablitsky 2011; Yentsch 1994). The

prominent crosses on these cobs might have, furthermore, augmented their symbolic and magical properties to the enslaved (Camilla Agostini, pers. comm. 2015; Davidson 2004).

Finally, the fragments of three black clay reed-stemmed pipes were recovered (8–10). The pipe fragments are similar to those found in Fort San Severino, Matanzas Cuba, described by Orihuela and Viera (2016: 390–392). Based on the work of Beltrán de Heredia Bercero et al. (2012: 179), they suggest that they might have been manufactured in the late 18th or early 19th century in the Balkans. One bowl fragment (8) had a diamond-shape stamped design. The pipe fragments recovered at Punta Salinas, however, have no mold marks but are crudely handmade, unlike the Balkan specimens. I cautiously suggest that these were perhaps handmade on the East Coast of North America or in the West Indies (including Bermuda) by enslaved craftsmen and then used by black seafarers. There are in fact general similarities between these pipe fragments and a probable West African pipe found at Newton Plantation Cemetery on Barbados including the acute angle between the stem and bowl as well as the black clay (Handler and Lange 1978; Handler and Norman 2007). Perhaps these black clay pipes were preferred by enslaved seamen due to the various layers of cultural, symbolic and spiritual meanings that they represented (Brown 2016: 251–258). These black clay pipes stand out from the numerous typical Dutch and English white kaolin pipes recovered at Punta Salinas which will be discussed in Chapter 6, Part I.

In the above discussion of items that might have belonged to enslaved seamen, I cautiously distance myself from what some historical archaeologists have termed “Africanisms” (for a summary of the debate see Brown 2015). “Africanisms” simplistically

assume enslaved presence and African cultural continuity on the basis of *essentializations*, which means assuming that the presence of certain objects proves former African or Afro-descendant presence. It can be safely assumed that many of the enslaved who sailed to La Tortuga were Bermudians. This being so, it is dangerous to assign cheap items such as rudimentary lead buttons to the enslaved alone. As has been discussed above, enslaved Bermudians took pride in their appearance and spent the money they earned through ventures and wages on personal adornments and other, often expensive, goods (Jarvis 2002: 610). Furthermore, archaeological investigations undertaken by Marley Brown III at the Dickinson/Bell House Site on Bermuda have brought to light a large collection of ceramics and glassware that apparently belonged to enslaved Bermudians inhabiting a house quarter. This preliminary information suggests that enslaved Bermudians indeed had access to a broader and much finer range of material goods than slaves in other parts of the Americas (Marley Brown, pers. comm. 2013).¹⁵⁵ For this reason, it cannot be discounted that some of the personal items of adornment discussed in the previous section might have belonged to enslaved Bermudian seamen. As has been discussed, seafaring in many cases was different for regular white seamen and enslaved mariners of color. Whereas white jack tars were some of the most marginalized free workers in 18th-century British society, enslaved seamen of color could access places, things and privileges denied to most slaves (Bolster 1997: 36). Many were

¹⁵⁵ Interestingly, it appears that consecutive owners of the household, including Boaz Bell and Henry Dickinson, both of whom were ship captains and merchants, visited La Tortuga's saltpan in 1709 and 1741 respectively (Bennet 1709 [1922]: 252; *Pennsylvania Gazette*, 1741, July 9). The clear link between these Bermudian captains, their enslaved mariners, and the rich archaeological evidence from the Bell/Dickinson House Site and Punta Salinas could certainly be an interesting avenue for future research.

well-traveled, multilingual and cosmopolitan inhabitants of a trans-imperial Atlantic (Bolster 1997: 40). Enslaved Bermudian seamen in particular were subject to a distinct—though no less inhuman—institution of slavery on their island and aboard their masters’ sloops. As historian Kevin Dawson (2013: 91) cautions, “...the ocean provided opportunities denied ashore, but maritime slavery was a cruel master.”

THE SEAFARERS AT CAYO SAL, UESPEN DE LA SALINA (c. 1700–1800)

A Miscellany of Anonymous Seafarers

The limited documentary evidence regarding the site of Uespen de La Salina (CS/A) on the island of Cayo Sal in the Los Roques Archipelago was discussed in Part II of the previous chapter. The documentary record for 18th-century Cayo Sal is grudging, but we must principally depend on this limited textual evidence and fragmentary archaeological evidence to discern who the anonymous seafarers at this saltpan might have been, at the very least, in socio-economic terms. Whereas the bulk of archaeological materials including the assemblages of dining and drinking will be discussed in Chapter 6, Part II, this section attempts an approximation of the Cayo Sal seafarers’ race, ethnicity and nationality based on the documentary and archaeological evidence at hand. One textual source indicates that in 1775 the island’s saltpan was visited by eleven Afro-Caribbean freedmen and bondsmen (10 Curaçaoans and 1 Saban) who had been dropped off by an English sea captain and supervised by an unarmed white seaman (Cromwell 2012: 257; Declaraciones 1775). The island could also have been visited on occasion by Bermudian seafarers. While these were the only people known from documents to have been directly engaged with salt raking on the island, as has been discussed in Part II of the previous

chapter, other seafarers visited the archipelago for reasons that overtly did not involve obtaining solar salt. Ships from as far as Anguilla, Saba and Nevis visited the Los Roques Archipelago for turtles and Dutch, English and French contraband ships stopped by the archipelago to collect the abundant grass to feed their smuggled mules. The archipelago, and possibly Cayo Sal, was also an ideal rendezvous point for Venezuelan cacao traders seeking to transship their goods onto Curaçaoan contraband ships. Finally, the archipelago was also often a hideout and hunting-ground for French privateers and Spanish corsairs.

The 1775 document relating the capture by Spanish Guipuzcoana Company corsairs of seven slaves and four freedmen of African descent raking salt in Los Roques does not mention Cayo Sal. Nonetheless, the Afro-Caribbean men were most probably raking salt there as it was the island with the largest internal lagoons where salt crystallized. It was also the first and most accessible island for ships traveling from the Netherlands Antilles east towards Los Roques. In fact, the Curaçaoan seafarers who formed the bulk of the workforce as per the document would have been well-acquainted with salt cultivation and salt raking. Upon the Dutch takeover of the island of Curaçao from the Spanish in 1634, and during the remainder of the 17th century, the island's population principally relied on the vast saltpans of Bonaire for its salt supply as salt production on Curaçao was negligible (Gehring 2011; Goslinga 1971: 136). During the 18th and 19th century, enslaved laborers principally worked the saltpans of both Curaçao and Bonaire (Rupert 2006a: 86). This scenario of leaving enslaved seafarers to rake pans and catch turtles and fish on deserted islands for many weeks is very similar to the *modus*

operandi of the Bermudians in the late 17th and early 18th centuries. The Bermudian ship captains would drop off part of their crews to rake the pans on the Turks and Caicos Islands while the remainder roved around “wrecking”, turtling and fishing (Jarvis 2002: 597; Kennedy C. 2007: 220; Kennedy N. 2013: 82–83). Likewise, the fact that the men of African descent at Cayo Sal’s saltpan were being supervised by an unarmed white seaman suggests this form of labor was might have been also utilized more commonly by the Dutch Antilleans and featured limited risks of desertion and mutiny on part of the salt workers. It has been noted that the institution of slavery on Curaçao was in fact “milder” and less exploitative than that in Surinam and other Caribbean plantations. It was much like that on Bermuda due to both islands’ being thriving entrepôts for maritime trade (Goslinga 1990: 7).

Archaeological evidence of personal possessions at the 18th-century site of CS/A on Cayo Sal is limited. One pierced silver Spanish cob was found. As has been previously discussed, such pierced coins might have been charms enslaved seafarers wore around their necks. Since we know that enslaved Afro-Caribbean seafarers were raking salt at the site in 1775, it is plausible that such a coin was left behind by this or other similar salt-raking parties during the 18th century. No buttons, buckles or fragments of arms were found at the site. The only other revealing small find is a brass fitting from a nautical cross-staff (Fig. 4.13). The item consists of a brass plaque with a screw inserted in a hole at the center of the plaque. This device would have been fitted to a cross-piece or transom, which was a straight wooden piece sliding up and down the main bar of the cross-staff marked with graduations for length. The screw would have held the transom in place at



Fig. 4.13. Brass fitting from a nautical cross-staff recovered at the CS/A site on Cayo Sal.

the desired graduation so that the correct angle could be measured between the base of the cross-staff and the tip of the transom. Thus, the cross-staff could be used to measure angles between stars and the horizon and determine latitude. This simple yet difficult-to-use navigational instrument was later replaced by the quadrant. It is difficult to assign a date to the piece which possibly dates to the 17th or 18th century. The presence of a fragment of a nautical cross-staff is not surprising at the site given that at Punta Salinas nautical instruments were also recovered and such instruments had to be carried by seafarers. Yet these two items which could be characterized as small personal possessions offer few inroads into grasping the socio-economic cross section of the miscellany of anonymous seafarers who must have arrived at the Cayo Sal saltpan during the 18th

century. A deeper reading of the rest of the large archaeological collection from the site will be, nonetheless, offered in Chapter 6, Part II, and will provide further evidence for understanding who the anonymous seafarers at CS/A were.

THE SEAFARERS AT CAYO SAL, LOS ESCOMBROS (C. 1800–1880)

“Free coloreds” and a US American

The 120 “free coloreds” from Curaçao and Bonaire hired by US entrepreneur Jeremiah Morrell to work on the Cayo Sal pan in the 1830s and 1840s were not necessarily deep-sea seafarers like the Dutch *zoutvaerders* and the free and enslaved Anglo-American and Bermudian seafarers we have been discussing so far (Bosch 1836: 307). Still, since the freedmen lived on the relatively small islands of Curaçao (444 km²) and Bonaire (294 km²), many were likely in close contact with the sea and had traveled by water before—in other words, they were maritime people. The insular seascape was directly and indirectly an integral part of the lives of their enslaved and free ancestors of African descent who had been brought to the islands in the 17th and 18th centuries. Curaçao was a bustling entrepôt of local, regional and trans-Atlantic maritime trade from the mid-17th century throughout the long 18th century, depending entirely on the sea and seafaring for its wealth (Rupert 2012: 35–42). By contrast, Bonaire at the time was no vibrant trade hub but simply Curaçao’s salt plantation. Yet the sea also provided Bonaire its primary source of revenue in the sea salt cultivated and harvested on the large saltpans of the island’s southern end.

During the last decades of the 18th century, the ABC islands (Aruba, Curaçao and Bonaire) suffered tumultuous times. In 1795 a slave revolt rippled through the islands around the same time the long-standing tenure of the West India Company on the ABC

islands was dissolved due to incompetence and replaced by direct governance of the States-General of the United Provinces of the Netherlands (Goslinga 1990: 1–2). The economic and political situation of Curaçao and its dependencies, Bonaire and Aruba, in the early decades of the 19th century was no less tumultuous. During two periods, from 1800 to 1803, and from 1807 to 1816, because of the Napoleonic Wars, the ABC islands were occupied by the British (Goslinga 1990: 31–45). As a result of these changes, the Dutch Antillean “free coloreds” who came to work on the Cayo Sal saltpan in the 1830s and 1840s were left to fend for themselves in a new political and economic environment following 1816 once the British had returned the islands to the Dutch.

There is some documentary evidence that aids in approximating the ethnic identities of some of the 120 “free coloreds” working on the saltpan in 1834. Historian Cornelis Goslinga (1990: 130) notes that after 1806, Amerindians on the Dutch islands are no longer mentioned in textual sources. The Amerindians, descendants of the Caquetío from what is today the Venezuelan State of Falcón and the Peninsula of Paraguaná, inhabited the ABC islands before European colonization and were later incorporated into the island society albeit in steadily dwindling numbers (Rupert 2012: 93, 142). In 1806 there were reportedly 284 “Indians” and 225 freedmen living on Bonaire (Goslinga 1990: 130). Goslinga (1990: 130) also notes that, in following years, these Amerindians were likely incorporated into the freedmen category showed a considerable increase from 225 in 1806 to 568 in 1816. This evidence clearly indicates that during the first decades of the 19th century, Amerindians hardly formed but a handful of the Bonairean population. In 1806 they outnumbered even freedmen and government slaves. The Amerindians on

Bonaire were also no strangers to salt cultivation as they were involved in overseeing labor on the island's pans. They were also a potential ally to the Dutch in conflicts with the blacks, so much so that the white government officials were advised to treat them with "all gentleness and kindness" which included distributing food rations to them weekly (Goslinga 1990: 127–130).

The Bonairean freedmen—those slaves who had been manumitted or had bought their freedom—were not on the same footing as those of Curaçao (Goslinga 1990: 130). The former freedmen, including the Amerindians, were required to perform occasional feudal statute labor when called upon by the government. This included work on the salt pans for which they were given regular food rations. For extra heavy work, they were given rum. The Amerindians were also tasked with the care and catching of stray cattle that roamed the sparse interior of the island. Other than these tasks, the free inhabitants of Bonaire made their living from fishing and planting corn and were "very poor" (Goslinga 1990: 130–132). In 1807 there were reportedly between 500 and 600 freedmen on Curaçao (Goslinga 1990: 45). We do not know what economic offer enticed the poor Bonairean and Curaçaoan freedmen to join Morrell in his new salt venture on Cayo Sal in 1834. In fact, the back-breaking work on the Bonaire pans was often seen as exceptionally severe punishment for those exiled from Curaçao for serious crimes (Goslinga 1990: 129). The economic opportunity offered by Morrell to the freedmen, however, must have been sufficiently enticing to lure 120 men to work on an uninhabited island more than 150 km east of their home islands.

The archaeological evidence of small personal possessions from the 19th-century CS/B site beside the saltpan of Cayo Sal is, once again, quite limited in comparison to 18th-



Fig. 4.14. Small 19th-century personal possessions recovered from the CS/B site on Cayo Sal.

century La Tortuga. A total of five glass beads were recovered (Fig. 4.14, 1–5). The first two beads (1 and 2) are blue cornerless hexagonal faceted beads probably of drawn manufacture. An additional blue bead (3) is barrel-shaped and was also probably drawn. Another is a green biconical bead (4). Finally, there is one magenta-colored spherical wound bead (5) (Grillo and Aultman 2014). Further analysis of these beads must still be undertaken in order to determine their possible origin and define a date range within which they were likely produced.

Since the documentary record does not speak of any other white overseers at the saltpan of the CS/B site (presumably aside from Jeremiah Morrell himself), the beads can more comfortably be assigned as the bodily adornments of a freedman or freedmen working on the saltpan. The category of freedmen, as we have discussed, probably included Amerindians in addition to Afro-Curaçaoan and -Bonairean workers. In this scenario, these beads might have been part of necklaces worn by either or both of these groups of people. Here, I am again cautious about assigning these blue beads specifically to people of African descent in order not to fall into the essentializations of ethnic or racial reductionism or both. Finally, one copper-alloy fragment of a ring with inlaid glass pastes was found along with a molded 19th-century copper-alloy button, perhaps from a jacket or gown (Fig. 4.14, 6–7).

These limited findings represent small personal belongings that might have pertained to any one of the 120 freedmen who were working on the saltpan of Cayo Sal in 1834. All of the 120 freedmen were probably present at the site only in the initial stages of the construction of saltpan infrastructure; once salt cultivation began, Morrell likely

only needed a handful of workers. Furthermore, the Curaçaoan governor Van Raders built new saltpans on Bonaire increasing salt production there in order to draw the freedmen away from his competition on Cayo Sal. He succeeded in attracting eight freedmen back to Bonaire in 1837 (Renkema 2009: 302). Morrell's enterprise on Cayo Sal probably ended in the early-to-mid 1840s, and thus the length and intensity of the enterprise's presence on the island was similar to the Dutch period of salt production on La Tortuga in the 1620s and 1630s. This short time span, and the small number of people present at the saltpan once the infrastructure had been built, resulted in a limited number of small personal possessions making it into the archaeological record. It must also be stressed, nonetheless, that the freedmen were poor and desperate for jobs, so their personal possessions might have been few and far between for this reason as well.

DISCUSSION

Portable personal possessions such as buttons, pendants, buckles, pistols and cutlasses, among other items discussed in this section, can fall within numerous assemblages of practice. Nevertheless, I have not addressed assemblages of practice in this chapter because these items in most instances did not *directly* partake in the assemblages of practice of dining and drinking, fishing and salt cultivating. The predominantly small items of personal adornment discussed here were not punch bowls used for drinking rum punch, nor plates and knives for serving steamy dishes of fish, nor a hook and line for catching red snapper. Rather, the fancy polished silver buttons that shone on a captain's calico gown, his fashionable oversized Artois-style shoe buckle, and a burnished pistol hanging from his belt took part in multiple assemblages, displaying their owner's

purchasing power, status and rank throughout the different activities he undertook and with whomever he engaged on and beside the saltpan of La Tortuga. In the same way, the necklaces made of colorful glass beads that adorned a Bonairean freedman's neck on Cayo Sal in the 19th century, or the pierced coins that hung from the necks of enslaved seamen at La Tortuga and Cayo Sal in the 18th century might have referenced symbolic and spiritual registers as much as status and rank among these people with less authority in colonial contexts.

This chapter has made inroads into the discussion of race, gender, ethnicity and nationality as well as into the social status and rank of the seafarers who sailed to the saltpans of the Venezuelan islands. In some cases, as is the case with the Anglo-Americans at Punta Salinas during the late 17th and throughout the 18th century, the documentary and archaeological evidence of personal possessions is detailed and abundant. This offers a marvelous opportunity to compare the two independent evidentiary lines and thereby critically analyze what each reveals about the seafarers at the site. In the other cases (the Dutch on La Tortuga in the early 17th century and both occupational periods on Cayo Sal), however, the lines of evidence are grudging, offering only small glimpses into who the seafarers at the saltpans were in terms of "social markers" via the small personal belongings they brought with them. The themes of race, gender, ethnicity, nationality, social status and rank, explored in this chapter, will be further discussed in following ones, specifically in Parts I and II of Chapter 6 where the assemblages of practice at each site will be reassembled. Having achieved a better idea of who the seafarers were, let us now

turn to exploring how they obtained salt on the saltpans of La Tortuga and Cayo Sal and what assemblages of practice they became entangled in.

CHAPTER 5

CULTIVATING SALT: SOCIO-NATURAL ASSEMBLAGES OF PRACTICE ON THE VENEZUELAN SALTPANS

INTRODUCING SOCIO-NATURAL ASSEMBLAGES OF PRACTICE

This chapter discusses socio-natural assemblages of practice involving humans, other organisms and natural phenomena on the saltpans of La Tortuga and Cayo Sal from the 17th to the 19th century. In the past, a keen knowledge of the climatic conditions, the tides, and the effects of the microorganisms involved in the concentration of brine and the subsequent crystallization of sodium chloride (NaCl) was indispensable to augmenting the quantity and quality of a salt harvest. These natural phenomena could be managed through anthropic intervention to the benefit of a saltpan enterprise by investing in infrastructure and tools such as dikes and pumps, thereby modifying the natural environment of a salt lagoon. My research indicates that the Dutch in the 17th, the Anglo-Americans in the 17th and 18th, as well as the Dutch Antilleans and a US American in the 18th and 19th centuries, approached the process of obtaining salt on the Venezuelan saltpans differently. This resulted in different configurations of the socio-natural assemblages of practice on the saltpans and a variable final product conditioned by distinct market necessities.

Archaeological, documentary and oral data relating to the solar salt production process on Venezuelan islands between 1624 and 1880 suggest that for those who

worked the saltpans, any line dividing human activity from the natural environment was arbitrary and illusory. Ingold (2011b: 250) contends that “as the edge of nature is an illusion, so too is the image of society as a sphere of life that exists beyond it”. Accordingly, this chapter discusses solar saltpans within a conception of environment where nature and society are not separated *a priori*, but instead form an integral, inseparable and vibrant socio-natural whole.

To define the socio-natural systems that will be discussed in this chapter, the concept of assemblage of practice, introduced in Chapter 2, will be mobilized. An assemblage of practice is a mesh of human-thing entanglements that correspond in stronger or weaker ways and for longer or shorter durations during events and in the practice of everyday life. It is important to stress once again that such an assemblage is not merely composed of artificially cobbled-together heterogeneous bits and pieces. Rather, such assemblages are dynamic gatherings of corresponding entities entangled through human practice (Ingold 2016: 5; 2015: 154–158; 2011a: 90–94). According to Ingold (2016: 6), correspondence is the process by which beings and things answer to one another through time. In this chapter, I propose that socio-natural assemblages of practice on saltpans coalesce through the correspondence of human doings (i.e. practice) and earthly undergoings (Ingold 2015: 155).

Unlike other solely extractive endeavours in the early-modern Caribbean (such as gold mining, pearl diving, turtle fishing, and logwood and mahogany cutting), solar salt production can be elucidated through simple agricultural metaphors. The vibrant and synergistic correspondence of human and non-human entities on a solar saltpan weakens

the idea of simple salt extraction and strengthens the notion of *growing* salt crystals (Ingold and Hallam 2013). The evidence indicates that to obtain high-quality salt, the process of solar salt production has to become one of methodical salt ‘cultivation’ and ‘tending’ of a saltpan. Only this leads to a bountiful ‘harvest’ of a ‘crop’ of salt.

As it elaborates such a perspective, this chapter not only concerns itself with the way humans in the past corresponded with material things, other organisms and physical and chemical processes on saltpans. It addresses how, through time, this correspondence varied within differing sociocultural, economic and political frames. Seafarers such as the Anglo-Americans arriving at the saltpan on the Venezuelan island of La Tortuga during the late 17th and 18th centuries, as well as various others coming to Cayo Sal in the Los Roques Archipelago during the 18th century, preferred to rake naturally-crystallized salt due to the lower costs. In contrast, the Dutch in the 1620s and 1630s on La Tortuga and a US American entrepreneur on Cayo Sal in the 1830s invested in large-scale modifications to the salt lagoons. They also invested in the infrastructure necessary to manage the salt cultivation process in order to obtain a higher-quality sodium chloride product. Through time, the shifting interests of the various social actors engaged in deriving solar salt on Venezuelan islands were reflected in different configurations of the socio-natural assemblages playing out on the saltpans.

THE PHYSICAL ENVIRONMENT OF THE VENEZUELAN ISLANDS

This chapter will discuss the saltpans on the islands of La Tortuga and Cayo Sal, presented in Chapter 3. To recap briefly, the first saltpan is located at Punta Salinas on the south-



Fig. 5.1. Aerial view of the saltpan of La Tortuga at Punta Salinas with Los Mogotes Lagoon at far-right (photograph by José Miguel Pérez Gómez).

eastern corner of La Tortuga and stretches nearly 1 km from south-west to north-east, lying adjacent to the large Los Mogotes Lagoon to the east (Fig. 5.1). The second saltpan is found at the western end of Cayo Sal, in the Los Roques Archipelago. There, two large internal lagoons nestled between extensive windward storm terraces and the shallow waters of the archipelago on the leeward side have been partly converted into a saltpan. These lagoons stretch for more than 2.2 km from east to west and are divided nearly in half by a natural 100-meter sandy isthmus (Fig. 5.2).

Los Roques and La Tortuga are subject to similar semi-arid climatic conditions principally determined by warm and steady east north-easterly trade winds prevailing most of the year, occasionally spelled by inflows from the east south-east (Cervigón 1995:



Fig. 5.2. Aerial view of the internal lagoons and saltpan of Cayo Sal, Los Roques Archipelago.

37). The average annual velocity of the trade winds in Los Roques is 21 km/h, rising to 31–33 km/h from February to June (Méndez Baamonde 1978; Ministerio de la Defensa 1988). The climate, hot and dry, features an average annual temperature in Los Roques of 28.9°C (Laughlin et al. 1985). Precipitation is usually in the form of *chubascos*, or intense rainfalls of short duration. Mean annual rainfall of 321.8 mm was recorded from 1961 to 1986 on the nearby island of La Orchila about 40 km east of Los Roques (Ministerio de la Defensa 1988). Most of the rain on La Orchila falls in November and December (although frequent rain showers also occur in July); and the least rainfall occurs from February to June (with a mean of 12.22 mm), coinciding with the months of strongest winds (Ministerio de la Defensa 1988). The Venezuelan islands receive more than 3,000 yearly hours of solar radiation which results in an average annual evaporation of 2.5 m and a maximum daily

evaporation of 8.2 mm on La Orchila in April and May (Cervigón 1995: 37–38; Lew 1977: 6–9). The months of major sun exposure on La Orchila peak in June with a mean of 10.5 hours of sunlight a day (Ministerio de la Defensa 1988). The semi-arid climate of the Venezuelan islands, together with strong and warm trade winds and increased solar insolation from February to June provide ideal conditions for solar salt production during those months.

THE SOLAR SALT CULTIVATION PROCESS

A salina, also often called a saltern or saltwork, is the location where salt is obtained from shallow pools of brine evaporated with the help of solar radiation. Salinas are most often coastal or insular, and although they can be naturally occurring, usually they consist of shallow coastal lagoons, marshes or wetlands artificially transformed into saltworks. The term ‘saltpan’¹⁵⁶ is most often ascribed to periodically dried out or ephemeral salinas where halite (sodium chloride as a mineral) crystallizes on the surface in locations such as those discussed in this chapter. ‘Salt pond’ is the term most often given to perennially flooded salinas that produce continuous subaqueous deposits of halite, as is the case with the large Venezuelan salinas on Araya as well as on Anguilla, Curaçao, Bonaire, and other Caribbean islands (Lugli 2009: 323; Reading 1996: 295).

¹⁵⁶ A salt pan according to the 10th Edition of Merriam-Webster’s Dictionary (2002: 1030) is an, “undrained natural depression in which water gathers and leaves a deposit of salt on evaporation”. An earlier definition of saltpan (notice that here “salt” and “pan” are neither hyphenated nor separated by a space, which is the spelling I adhere to) according to Webster’s New Standard Dictionary of the English Language (1905: 501) defines it as a “pan in which salt is obtained by evaporation” or a “salt works”. The key difference here is that the 1905 definition addresses the fact that although salt pans in many cases are created upon preexisting and naturally occurring shallow coastal lagoons, marshes or wetlands, salt can only effectively be cultivated on salt pans through human modification of the natural environment.

At first glance, solar salt cultivation may seem a simple process, but just permitting seawater to evaporate will not yield an abundant and high-quality product. Seawater contains other compounds that must be precipitated before relatively pure sodium chloride (NaCl) can crystallize. For this reason, salt pans are segmented into successively shallower and smaller ponds and pans. The ideal salt cultivation process on an artificial salt pan can be described as follows.

In a salt pan, seawater is let into the first and largest concentrating pond, or *concentrator*, by means of an inlet. On relatively recently functioning salt pans in the Turks and Caicos, for example, seawater remained at this stage roughly six to eight weeks (depending on the size of the concentrating pond) until its salinity had increased three-fold (Davis 1974: 370; Gregory 1978: 28). By that point, two of the unwanted minerals, calcium carbonate and iron oxide, have all but entirely precipitated. The remaining hypersaline liquid, or brine, was transferred to smaller secondary concentrating ponds where salinity ranges from three to seven times that of seawater (Davis 1974: 370). The brine stood for a few more weeks until the remainder of the calcium carbonate and all of the calcium sulfate (that is, gypsum) had precipitated (Davis 1974: 370; Gregory 1978).

Finally, once the brine reached at least six times the salinity of seawater and all the contaminating minerals precipitated, it was channeled into crystallizing pans or *crystallizers*, also known as “making pans” (Gregory 1978: 30). These pans, as their name suggests, are smaller in surface area than the ponds and much shallower. Like the concentrating ponds, they are often segmented by dikes made of stone (on Cayo Sal in Los Roques, of coral stones) and made impermeable by the addition of compacted mud.

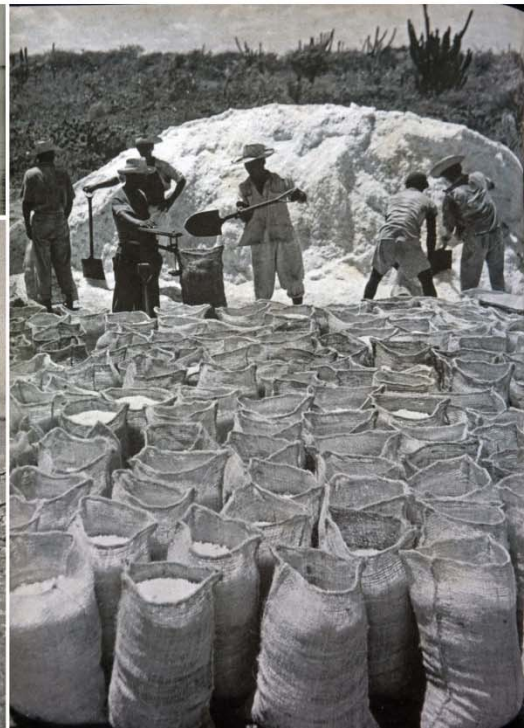


Fig. 5.3. (*Top and in color*): A man raking the salt pans of Marakkanam, Tamil Nadu, India, with a long rake with flat end (photo: Sandip Dey). (*Bottom images, left to right*): men carting wheelbarrows of salt across the mainland salina of Sauca, Falcón State, Venezuela in the 1950s (Vila 1953: 65, 70). A man shovels salt into a wheelbarrow at the Sauca salina. Men pack sisal bags with salt at Araya; a large conical pile of salt in the background (Vila 1954: 53, 56).

It can take some three weeks for the brine in the crystallizing pans to reach the point of sodium chloride saturation and for the halite crystals to fully grow (Harriott 1996: 63).

After most of the water has evaporated and a hard and cakey salt precipitate has appeared, the salt can be harvested. First, however, the bittern or pickle containing unwanted precipitated minerals detrimental to salt quality (including magnesium, potassium, chloride and sulfate) has to be removed, oftentimes by pumping or digging an outlet channel through the salt for drainage (Oren 2009: 1). The salt is then broken up with wooden scoops, hoes or metal-toothed rakes. If the pans still contain a substantial amount of brine, the salt crystals can be scooped out with long flattened wooden rakes or shovels (Fig. 5.3) (Lemonnier 1980: 104). Usually, salt is raked into conical piles permitting the remaining bittern to drain, thus further improving quality (Fig. 5.3) (Baas-Becking 1931: 445–446). Because of the inherent variability of environmental factors including the passing seasons and human practices on saltpans, the resulting final salt product varies in color, texture, taste and potential uses (Morsink 2012: 108).

SOCIO-NATURAL ASSEMBLAGES OF SALT CULTIVATION

The role of human agency in optimal solar salt production is constrained, however, by microorganisms in the saltpans as well as by marine and climatic phenomena—all of which are vital to the effective crystallization of halite. Humans, things and various phenomena on saltpans inevitably become entangled in relations of dependence. Although at first glance they may seem hostile to living organisms, saltpans are in fact highly diverse biological systems (Oren 2009). Brine shrimp (*Artemia salina*) and a variety



Fig. 5.4. Various microorganisms inhabiting salt pans. (From left to right): *Artemia salina* brine shrimp (photo: Hans Hillewaert), *Dunaliella* sp. Micro-algae, and halobacteria.

of unicellular micro-algae from the diverse genus *Dunaliella* thrive in the large concentrating ponds (Fig. 5.4) (Baas-Becking 1931). The dark orange and brown hues (Fig. 5.5) of these ponds result primarily from green *Dunaliella* spp. algae which accumulate β -carotene but also are caused by pigments from heterotrophic prokaryote communities (Bacteria and Archaea) which impart color to the brines (Fig. 5.4). These pigments increase the absorption of solar energy into the liquid and raise its temperature, thereby accelerating evaporation and the precipitation rates of the various minerals in the early stages of salt cultivation (Davis 1974: 370–371; Oren 2009: 2). Brine shrimp have been identified in salt lagoons on the islands of Los Roques, La Orchila and the Las Aves Archipelagos, and they are also likely present in the saltpan on La Tortuga (Triantaphyllidis et al. 1998: 219). These diminutive crustaceans are essential in the second series of concentrating ponds. As a result of their feeding habits, they strain the brine of any calcium sulfate and calcium carbonate particles by aggregating them in pellets which fall to the bottom. This prevents the brine from becoming turbid as it is passed on to the final

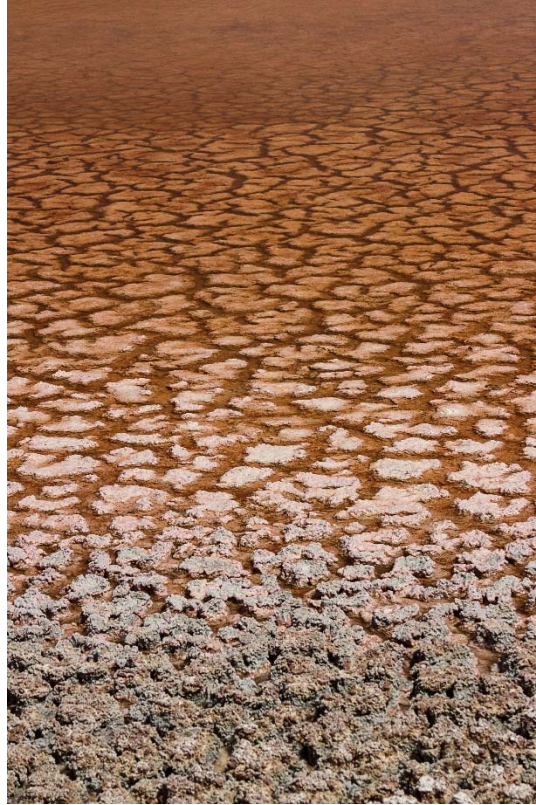


Fig. 5.5. A secondary concentrating pond on Cayo Sal with brown-colored brine and a gypsum benthic mat (photo: José Voglar).

crystallizing pans where it must be clear in order for halite to precipitate effectively (Baas-Becking 1931: 445; Davis 1974: 370; Javor 2002: 43).

The complex and stratified benthic bacterial and algal mats that form on the bottom of the ponds are all but impervious to water and effectively seal them, preventing costly brine leakage (Davis 1974: 370; Oren 2009: 2). This phenomenon is most valuable in the second series of concentrating ponds where the brine approaches sodium chloride saturation. Any percolation of the painstakingly condensed brine at this stage translates into an important economic loss (Davis 1974: 371; Javor 2002: 43; Oren 2009: 5–6). Furthermore, the microbial mats also prevent the mixing of halite with the mud below



Fig. 5.6. Ankle-deep mud on the dried-out saltpan of Cayo Sal, April 2007.

thus preventing the incorporation of undesirable manganese and iron ions into the halite crystals (Fig. 5.6) (Coleman and White 1993: 626–627; Oren 2011: 17).¹⁵⁷ Finally, in the last stages of sodium chloride precipitation, the organisms that generally inhabit the crystallizing pans are algae from the genus *Dunaliella*, halophilic Archaea, and red rod-shaped bacteria (Elevi Bardavid et al. 2008). It is the pigment of these Archaea that primarily impart striking deep red and pink hues to the crystallizing pans (Fig. 5.7). The pigment critically aids in increasing the temperature of the brine and its evaporation rate, serving as well as a tell-tale sign to salt workers of a brine's salt content (Davis 1974: 371; Oren et al. 1992: 86–87).

¹⁵⁷ If the nutrient balance in the brine is not appropriate, the cyanobacteria in the mats secrete excessive polysaccharide mucus that floats downstream and inhibits salt crystallization (Javor 2002: 44–45). Low nutrient content in brines may also prevent mat development or displace mats from the bottom and cause them to float to the surface (Javor 2002: 43). If such effects, detrimental to the salt cultivation process, occurred in the past, they were largely impossible to prevent.



Fig. 5.7. A small saltpan at Punta Salinas, La Tortuga, where the brine has reached close to sodium chloride saturation and the microorganisms have imparted it with a deep pink hue.

In the past, a keen understanding of the daily, monthly and yearly cycles of tides also would have been vital to an efficient saltpan enterprise. However, accurate tidal data for the Venezuelan islands is lacking. As a result, on the basis of personal experience and interviews conducted among inhabitants of the Los Roques Archipelago, it was noted that minimal rainfall and high winds from March to June coincide with the lowest yearly tides; the *mar de leva*, or highest yearly tides, fill the saltpan in October and November (Reyes and Boadas-Gil, pers. comm. 2015). Significant percolation of seawater through the loose calcareous sands forming the matrix of the saltpans on La Tortuga and Cayo Sal probably occurs throughout the year in similar fashion to that observed on the coralline island also named Cayo Sal off Chichiriviche, Falcón State, in Western Venezuela (Weiss 1979: 4). The drying of the saltpans from March to June would have been aided greatly by such a

phreatic connection with the sea. Moreover, strong wind speeds play a key part in aiding the diffusion of water molecules away from the surface of the brines in the concentrating ponds and crystallizing pans (Akridge 2008: 1454; Davis 1974: 371). High winds and low tides, concatenated with high ambient temperatures, longer days, lower humidity and limited rains from March to June created a window of opportunity on the Venezuelan islands ideal for salt cultivation.

In the past, tending a saltpan without salometers to measure the percentage of sodium chloride in the brine and without motorized pumps for channeling brine as well as pumping out bittern involved a close correspondence between humans, microorganisms and physical and chemical processes. In 1799, a shoemaker of Castilian descent who lived in a hut beside the Venezuelan salina of Araya, impressed Alexander von Humboldt with his understanding of “the formation of salt through the influence of the sun and full moon” (von Humboldt 1995 [1814–1825]: 71). The presence of biotic factors and their vital role in sodium chloride crystallization, however, probably went largely unnoticed by the seafarers tending the saltpans on the Venezuelan islands from the 17th to the 19th century. This is still the case in many traditional non-industrial solar saltworks today (Davis 1974: 370). In fact, many of the microorganisms in saltpans were only scientifically identified and studied in the later 19th and 20th centuries (*Dunaliella salina* was identified in 1838) (Bass-Becking 1931; Oren 2009: 7). Even though likely unaware of the fundamental role of microorganisms in effective salt cultivation, salt workers of former times were nonetheless capable of detecting their effects and acting upon the changes in brine coloration. The change from dark brown to dark red and pink

hues (Figs. 5.5 and 5.7) caused by microorganisms in the salt gradient from primary and secondary concentrating ponds to the final crystallizing pans, along with the appearance of small hopper-shaped salt crystals, were the only available clear signs of the state of the brine and its salt content (Gregory 1978: 30). Experienced salt farmers could precisely determine when one brine had to be passed on to the next concentrating pond and when it had to be channeled into the final crystallizing pans (Harriott 1996: 63).

The human saltpan management evident in the knowledge-based channeling of brines to successive ponds, the maintenance of the waterproofing mud on the dividing dikes, and the careful raking of salt from the crystallizers in order not to disturb the all-important benthic mats, was essential to maintaining a productive saltpan system. Cognizant of some factors and unaware of others, the seafarers tending saltpans on the Venezuelan islands were dependent on the correspondence of an array of biotic, chemical, marine and climatic factors that together with their own physical actions conduced to the cultivation of solar salt. The dynamic correspondence of these various factors resulted in socio-natural assemblages of salt cultivation. How these same assemblages functioned and varied on the saltpans of La Tortuga and Cayo Sal between 1624 and 1880 is explored in the following sections.

THE ASSEMBLAGES OF PRACTICE ON THE VENEZUELAN SALTPANS

Systematic archaeological surveys of the saltpans of La Tortuga and Cayo Sal as well as excavations at their margins were undertaken during more than a dozen field seasons between 1983 and 2015. The subsequently discussed case studies are primarily informed by pedestrian surveys, GPS mapping of relevant features, analysis of aerial and satellite

imagery of the saltpans, and 17th- through 19th-century documentary evidence. Archaeological excavations beside the saltpans have brought to light little direct material evidence of salt cultivation and raking activities on the saltpans themselves. However, they have revealed abundant material evidence of the daily lives of the seafarers at the saltpan campsites that shall be discussed in depth in Chapter 6.

La Tortuga: the Dutch enterprise (1624–1638)

The first case study begins in the 1620s when Dutch salt fleets, impelled by the worsening crisis of constricted salt supply for their vital and lucrative herring fisheries, once again started to rove the Caribbean in search of the coveted white mineral (Goslinga 1971: 129). These Dutch *zoutvaarders* (salt carriers) ventured to the Spanish island of La Tortuga, which at the time featured a series of natural internal lagoons at Punta Salinas, capable of producing vast quantities of salt when ingeniously altered by the Dutch to do so (Figs. 5.8 and 5.9). The Dutch perception of the environment generally sustained the strong Cartesian culture/nature divide borne out in Western thought (Glacken 1976), yet the *zoutvaarders* were at the same time cognizant of a number of natural factors involved in salt crystallization from their previous experiences on Venezuelan (Araya, Unare), Caribbean (Sint Maarten) and other (Setubál, Aveiro and Cape Verde) saltpans. They maximized both salt output and quality on La Tortuga by adopting the semi-industrial use of artificially-flattened pans, wooden boardwalks, buckets, pumps, channels and floodgates. They did so also by synchronizing salt cultivation with the rhythms of the local weather patterns and tides, and the microorganisms in the brine.



Fig. 5.8. Saltpan of La Tortuga seen from the air with Laguna de Los Mogotes in the background (photo: José Voglar).

When all the salt was harvested from the surface of the saltpan, more had to be cultivated. In 1630, Spanish shipwrecked seaman Seledón de Suasola observed how the Dutch, using a *batea* (probably a wooden bucket, perhaps affixed to a tripod and long pole with a counterweight that eased the weight), poured “water” onto the saltpan for eight consecutive days (de Suasola 1934 [1630]: 127). It is probable that this “water” was actually brine that had been concentrated in adjacent ponds prior to pouring. Suasola also reported that while the water was left to evaporate on the saltpan, men with shovels were extracting the same mineral from subsurface layers in other parts of the saltpan (de Suasola 1934 [1630]: 127). It is, however, unclear how this salt had formed. Suasola explicitly mentions that it was being shoveled “devajo de tierra” [from beneath a layer of



Fig. 5.9. Map of the saltpan of Punta Salinas highlighting the Dutch and Anglo-American campsites and trenches excavated within them.

ground] and “de bajo de la dicha arena” [from beneath a layer of sand] (de Suasola 1934 [1630]: 127–128). Perhaps this salt was an ancient layer that had been covered by sediment at the edges of the saltpan. There clearly was a lot of this salt as during six days of work, 1,148 wheelbarrows of this sodium chloride were gathered (c. 56 metric tons).

Nearly four weeks later, by June 28, 1630, salt had kernalled again in the formerly flooded crystallizing pans. It was raked and piled up over eight days, and during the following twelve transported to the jetty. Some 14,000 wheelbarrow loads (c. 707 metric tons) were loaded onto all seven fluits anchored in Punta Salinas Bay. The process was then repeated: the saltpan was inundated once more, the salt crystallized and was heaped in piles during eight more days, and over the next nine some 606 metric tons were

transported in 12,000 wheelbarrow trips to the jetty and onloaded. In sum, over two and a half months, Suasola witnessed a total of 28,344 wheelbarrow loads or c. 1,431 metric tons of salt harvested, transported across the saltpan, and loaded onto the seven Dutch vessels (de Suasola 1934 [1630]: 128).

How did the zoutvaerders distribute the salt among the vessels? How did they determine the access of each ship's crew to each part of the saltpan? At Araya, crews from vessels belonging to different Dutch towns used their own tools. They separately constructed, maintained and used their own boardwalks, midday shelters, and flat-bottomed boats to transport salt across flooded salina. The jetty was the only installation that was jointly constructed, maintained and utilized (Varela Marcos 1980: 76). According to Suasola, all seven fluits present at La Tortuga between June and August of 1630, came from two different Dutch towns, but belonged to the same four salt merchants (de Suasola 1934 [1630]: 128). This mercantile arrangement was most probably brokered under the aegis of the WIC. It may have meant that the La Tortuga saltpan did not have to be partitioned among the vessels of respective merchants but was instead exploited cooperatively. Despite the fact that the crew of a fluit which had arrived a week before the remaining six had harvested all the salt from the saltpan, upon their arrival the other crews helped with the onloading. New salt that was subsequently cultivated was distributed among all the fluits, including the first (topping off its load) (de Suasola 1934 [1630]: 128). It could have been that the 'rights' of certain towns or merchants to La Tortuga salt resulted in coordinated crew activity on the island. Plausibly, over the years

to come, all the Dutch on the island worked harmoniously for the success of the total salt mission.

Given the high ambient temperatures at the La Tortuga saltpan, the clouds of pestering sandflies and permanent contact with salt and hypersaline water, this work had to be trying and wearing in the extreme. Some 30 years prior, Juan Bautista Antonelli (the Elder) had observed how saltworkers at the salina of Araya were active only during mornings and moonlit nights, avoiding the hottest part of the day (Varela Marcos 1980: 77). It is probable that the La Tortuga saltpan was similar, abuzz with action and resounding with the creaking of wheelbarrows and the clatter of clogs on wooden boardwalks in the early mornings and late evenings. During moonlight nights, lively cheers ricocheted off the limestone cliff walls and pipe bowls flickered across the saltpan like fireflies. Despite the times of relaxation and rest, the harshness of cultivating salt claimed human lives. A small Dutch cemetery with humble wooden crosses was situated on the dune rising above the salina of Araya (Varela Marcos 1980: 77). Likewise, Dutch burials might have existed on La Tortuga where today there are crosses erected by fishermen on the site of Punta Salinas (Fig. 5.10).

In 1631, Captain Benito Arias Montano mounted a surprise attack on two Dutch fluits that were loading salt at La Tortuga, seizing them and their precious salt cargo and taking it to Caracas (Arias Montano 1934 [1632]: 131). However, in October of 1632 Jacinto de Amaya, who had accompanied Montano as a soldier in 1631, was sent back to the island and reported that all the facilities dismantled by Montano had not only been reconstructed but vastly improved (Núñez Meleán 1934 [1632]: 133–134). The path of c.



Fig. 5.10. Modern crosses on the southwestern corner of the earthwork feature at Punta Salinas (photo: José Voglar).

250 m between the jetty and the saltpan was entirely covered with 0.42 m-wide pine planks, well-fitted and nailed together. Water bucketing was replaced by six manually-operated pumps drawing from the sea. Towards the center of the saltpan, Amaya saw another five pumps distributing water into various sections. These pumps were most probably versions of the well-known ship bilge pump (Oertling 1996). All activity areas were interconnected by a boardwalk network (de Amaya 1934 [1632]: 135). The Dutch, absent during Amaya's visit, had naively left the pumps and other facilities ready for the next salt cultivation campaign despite the fact they could easily be destroyed by the Spanish.

Two years later, in 1633, architect Juan Bautista Antonelli the Younger reported with admiration that the saltpan—according to measurements done “con un ynstrumento precissamente” [precisely with an instrument]—had become so transformed and artificially extended beyond its natural borders that its circumference had increased from over 4,000 m in 1626 to over 10,000 m seven years later (Antonelli 1934 [1633]: 137). Dutch ingeniousness and industriousness stunned Antonelli so much that he remarked that, “Todo el dicho beneficio con tanta curiosidad y trauajo que no en credible” [improvements (were) done with curious and incredible work] (Antonelli 1934 [1633]: 137). The vast input of hard labor under the blazing tropical sun converted the underestimated ‘natural’ Los Mogotes Lagoon into a highly productive saltpan. Antonelli (1934 [1633]: 137–138) provided a description of the spatial organization and methods applied in the saltpan, to wit:

“Y desde muelle a la salina acian vnos caminos entablados por donde se carretea la sal en unos carretoncillos de mano de una rueda que vn hombre lleva. Dicha salina toda ella esta repartida y labrada a mano, hechas vnas eras cada una de quarenta passos de ancho y setenta de largo, vnas mas largas y otras mas cortas, todas mui llanas, bien anibeladas; y a lo largo de dichas eras vnos arroyos o acequias, para encaminar el agua a las eras, para el beneficio de cargar la sal; y a trechos de dichs acequias ay unos albergones pequeños, de donde con vn ingenio vn hombre hecha el agua en dichas eras. El veneficio y modo de hacer la sal es que con dicho ynjenio se echa en dichas eras vn dedo de agua v dos, y dentro de sies dias esta cuajada y echa sal; y estandolo con un rodillo se ua amontonando en las eras, haciendo montones pequeños; y luego de los pequeños se saca fuera de las eras, haciendo vn monton grande, donde se enjuga y escurre alguna agua que saco de las eras. Y de aquellos montones grandes se carga con los carretoncillos de mano al muelle, para cargar en las naos. Y entretanto que cargan dichos carretones por otra mano se ace el dicho beneficio, de manera que todas las semanas, beneficiandose todas las dichas eras, pueden cargar cada semana doze mil fanegas, echa la quenta por vna era que tantee, tendría de sal; y al respeto beneficiandose todas dichas eras pueden estar a la carga treinta v quarenta naos.” [From the jetty to the salina they (the Dutch) built some boardwalks where the salt is carted in small wheelbarrows of one wheel, operated by a single man. The entire saltpan is divided and tilled by hand. It has some *eras* (flat, square, firm and clean pans) of 40 by 70 paces (55 x 97 m), some longer and some shorter, all very flat and levelled. Alongside these *eras* there are streams or ditches (channels) through which the water is conducted to the *eras* for the benefit of the salt production. At intervals along these ditches there are some small water reservoirs (probably ponds)

from which a man with a device throws the water into the *eras*. The beneficial result – and how salt is made – is that with this device they throw into those *eras* 1 or 2 fingers (1 finger =c. 19 mm) of water and after six days the salt is curdled and ready. Afterwards, the salt is piled in the *eras* with a *rodillo* (flat toothless rake), making small piles and later from these small piles the salt is taken outside the *eras* making a large heap, where it dries and the water from the *eras* that it contains is drained from it. From these large heaps the salt is transported in wheelbarrows to the jetty from which it is later loaded onto the ships. As they load the wheelbarrows, they do the abovementioned procedure (in the *era*) every week so that all the *eras* can produce, each week, 12,000 bushels of salt (606 metric tons; Antonelli extrapolates the data obtained from one *era*). All *eras* together can load 30 to 40 ships and in the meantime new ships may enter the bay and can also be benefitted (receive loads of salt)].

This passage indicates that after the destruction of the pumps in 1632, the persistent and resourceful Dutch returned to manual water bucketing but built a complex system of reservoirs (probably ponds), channels and level pans primed for optimal salt cultivation.

However, Antonelli had arrived in 1633 not to praise but to sabotage the Dutch enterprise through an elaborate plan to flood the saltpan. One hundred Cumanagoto Indians and 50 Spaniards dug two canals to the seashore 100 m away (Antonelli 1934 [1633]: 137). Due to the periodic scouring effect of tides, the canals have perpetuated themselves to this day, leaving a lasting and visible environmental legacy of the 17th-century colonial Venezuelan reaction to foreign incursion (Fig. 5.11). Part of the large Dutch saltpan was permanently converted into the perennially flooded Los Mogotes Lagoon.

With the formerly salt-producing Los Mogotes Lagoon flooded, the Dutch had to further modify the natural environment if they were to continue cultivating salt. A map of the 1638 battle between Dutch and Spanish shows the artificial canal the Dutch made after 1633 which connected the lagoon with the saltpan to the west (Fig. 5.12). The map caption indicates a “caño por donde la cebaban” [small canal (through which the Dutch)



Fig. 5.11. Satellite image of Punta Salinas highlighting the anthropogenic modifications to the saltpan and Los Mogotes Lagoon during the 17th-century Dutch enterprise (imagery from Google, DigitalGlobe).

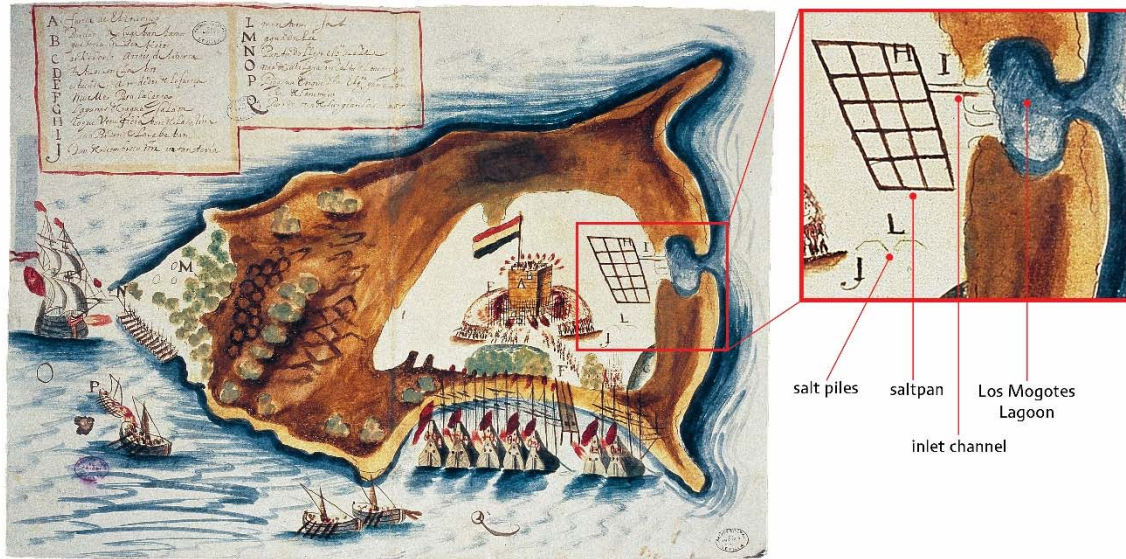


Fig. 5.12. Map of Dutch fort on La Tortuga under attack by Spanish forces. The inset highlights depicted features of salt cultivation. Painted by Juan Bautista Antonelli (the Younger) in 1638 (España, Ministerio de Cultura, Archivo General de Indias [AGI], MP-Venezuela, 24).

fed the saltpan (with seawater)] (Archivo General de Indias 1638) (Fig. 5.12). Towards the west, the canal opens onto a rectangle with 15 quadrangular subdivisions (Fig. 5.12). Together they constituted the artifice of “lo que veneficiaban de la salina” [which made profit from the saltpan] (Archivo General de Indias 1638). This artifice consisted of levelled square pans similar to those mentioned above by Antonelli in 1633. By conveniently closing or opening the canal by means of a wooden sluice, the hypersaline water entering the pans to the west could be managed. The resilient and ingenious Dutch had begun to use the lagoon as a large reservoir of hypersaline water to feed their saltpan. They had thus created an optimal output from the Spanish sabotage. In fact, after the Dutch were expelled by the Spaniards in 1638, their expert modifications of the salt lagoon and saltpan allowed Anglo-Americans in the following decades to rake abundant salt with very little human management. However, apart from the Dutch modifications to

the saltpan reported in documentary sources and corroborated through aerial imagery, no archaeological evidence remains of Dutch infrastructure on the saltpan as this was dismantled by the Spanish in 1638. Even more surprisingly, no artefactual evidence whatsoever has emerged from all the Dutch involvement in the saltpan area. This absence may partly be explained by the renowned Dutch orderliness (Schama 1997: 375) which may have prevented a whole range of materials such as food scraps, broken pipes and glass shards from being accidentally mixed with the precious 'white gold'.

Even though the Dutch managed much of the saltpan on La Tortuga artificially—by means of modifications and controlling the cultivation process through infrastructure and technological innovation—they necessarily corresponded with the biotic, chemical, marine and climatic factors without which high-quality solar salt could not have been cultivated in such large quantities. The *zoutvaarders'* saltpan enterprise was thus, in effect, a dynamic and highly productive socio-natural assemblage.

La Tortuga: the Anglo-American fleets (1638–1781)

Beginning in 1638, what was at first a trickle of determined Salem merchants heading to La Tortuga to rake salt became a steady stream. By the early 18th century, Boston and other New England ports such as Portsmouth, Newport, New London and New York, along with Bermuda, had joined the salt venture that became the lifeblood of New England's refuse fish industry (Antczak 2015: 162). Low-grade salted fish (cod and mackerel among other species) was the principal staple of the enslaved working on sugar plantations in the Lesser Antilles (Innis 1954: 162–163; Magra 2006: 157–164). From 1700 to 1781, protected by various Anglo-Hispanic treaties and by Royal Navy guard ships, more than

1,000 vessels set sail in annual fleets to rake free sodium chloride on La Tortuga. The humble island became New England's most important source of free salt (Antczak 2015: 162).

The Anglo-American salt enterprise on La Tortuga was considerably larger in total salt output, longer-lived and much more important to the British Caribbean and Atlantic world economies than the short-lived Dutch enterprise was to the Low Countries. Nonetheless, it featured no more than the gathering of naturally-crystallized salt under minimal saltpan management. It also resulted in no perceivable long-lasting physical effects on the saltpan itself. Compared to the Dutch enterprise, Anglo-American salt raking seems to have been much less a proactive affair. Human manipulation of the physical saltpan environment was, at most, limited and dependence on the unassisted natural process of salt crystallization was nearly total. Direct archaeological evidence for anthropogenic modifications from the period is lacking; no visible surface or underground structures of any sort exist. What *is* striking is that archaeological surveys of the saltpan revealed not a single ceramic, glass, metal or bone object within the perimeter of the saltpan. This suggests a strict regime of orderliness keeping campsite trash well away from salt-raking and packing areas.

Upon the annual arrival of the Anglo-American salt fleet in the period between February and May, the saltpan was apportioned according to ship tonnage before the salt was raked (Brownrigg 1748: 24–28). In some cases, it seems the seafarers waited for the salt to crystallize on the pans a second time in order to perform a “second raking” (Anonymous 1768: 90). The English castaway Henry Pitman (1903 [1689]: 456), who

survived on La Tortuga for several months in 1687, had enough time to observe the process by which salt on the saltpan of Punta Salinas formed and vividly described it thus,

On the south side, near the east end, are the *salinas* or salt ponds ; from whence the salt is brought ; which is thus made. The sea or salt water penetrates through the beachy banks of the sea, and overflows a large plain of two or three miles circumference, nearly a foot deep ; where, by the scorching heat of the sun, the thin aqueous part is exhaled, and the saline part is coagulated into pure white crystalline salt. And because there is a continual supply of salt water from the sea, the sun continues exhaling and coagulating, until the whole *salinas* is deeply covered over with salt ; so that all they have to do, is only to rake it together, and carry it aboard.

To reiterate: management of the natural crystallization process was all but non-existent. Anglo-American seafarers invested no money, time, and effort in building dikes, canals or any other infrastructure on the pans but simply put rakes, shovels, wheelbarrows and oznabrig bags (for salt gathering and packing) to good use (MHMCB 1996 [1766]: 208, 211, 219). The seafarers depended solely on the whims of climate and tide to assist or impede their enterprise. When rains laid waste to the pans and no salt could crystallize, as was the case in 1687, their ships returned to New England empty (Anonymous 1868, 41).

The ever-changing and expanding mangrove ecosystem of the Laguna de Los Mogotes makes it difficult to assess the extent of the usable area of the saltpan to the Anglo-Americans in the late 17th and 18th century. As discussed in the previous section, the perennially flooded Laguna de Los Mogotes itself is an anthropogenic formation,



Fig. 5.13. Satellite image of Punta Salinas highlighting the possible saltpan now overgrown by mangroves, the Fringe activity area and trench TR/S/F-5 (imagery from Google, DigitalGlobe).

created by Antonelli and his men in 1633. Furthermore, Arias Montano flooded the remainder of the saltpan after the battle in 1638 (Archivo Histórico Nacional 1639). The compounded effects of these anthropic modifications, the following 140+ years of Anglo-American salt raking, and the more than 230 subsequent years of neglect following abandonment in 1781, make the task of determining the contours and size of the Anglo-American saltpan challenging. Data from the 2009–2010 survey and excavations at Punta Salinas suggests that the large forest of mangroves at the eastern edge of the site was not present in its current state at the time of Anglo-American activities (Fig. 5.13). Evidence for this is found in trench TR/S/F-5, located in the Fringe activity area which borders with the dense mangrove forest of the Laguna de Los Mogotes to the east (Fig. 5.13). When excavated, the stratigraphic profile of the trench showed a clear slope of the previous shoreline of the salt pan to the east (now engulfed by mangroves from the Laguna de Los Mogotes [Fig. 5.13]), with artefacts lying a few centimeters below the water table. The cultural strata defined in a horizon of darker soil at a depth of 20 to 40 cm, contained ceramics, glass, metal, zooarchaeological remains and residue of carbon from fireplaces. No artefacts were found among the adjacent mangroves. This area that now is swampy and flooded during high tide was most probably colonized during the last 230 years following the abandonment of the saltpan. Even more so, the archaeological data corroborates this hypothesis since the bulk of material and remains of the campsites extend along the eastern margin of the site in an arch following the line of mangrove (as seen on Figures 5.9 and 5.13).

As has already been discussed in Chapter 3, Part I, La Tortuga salt was coarse, large-grained and reddish (Sloane 1707: lxxxviii). There was much debate in New England as to the quality of this salt in the second half of the 17th century. Some condemned La Tortuga salt as injurious to quality cured fish since it was more “fiery” than that from Portugal and the Bay of Biscay and its use resulted in salt-burnt cod (McFarland 1911: 66, 95–96). La Tortuga salt was criticized specifically in 1670 for containing “shells” and other “trash” and for leaving spots on the fish, something that could have been avoided by more careful salt-gathering crews (Felt 1849: 212; Innis 1940: 161). Some merchants in 1750, however, counterintuitively claimed that salt from La Tortuga was of better quality than its English counterpart, its strong characteristics rendering it more favorable to the curing of provisions (Stock 1940: 401–402). Given what was known about the carefully managed cultivation process necessary to produce high-quality salt, however, La Tortuga salt at that time must be considered low-grade since it was primarily used to salt refuse fish (Colonial Society of Massachusetts 1927: 241). Because the Anglo-Americans raked it with no management of the natural process, it would have crystallized mixed with numerous other minerals from the bittern, making it unpalatable and indeed ‘fiery’.

Unlike the Dutch seafarers who worked together harmoniously for the success of the entire West Frisian fleet’s salt supply, each Anglo-American ship belonged to a different New England or Bermudian merchant and thus had a different economic goal and interest. This difference between the communal or corporate Dutch approach to salt cultivation and the more individualistic Anglo-American salt-raking style may also explain the lack of any Anglo-American modifications to the saltpan. Moreover, since low-grade

salt from La Tortuga cured refuse fish sent to the West Indies for enslaved sugar plantation workers—the end users—investment in saltpan infrastructure was minimal. Little attention was paid to more sophisticated cultivation which could have resulted in a better product. In short, whilst the Dutch engaged in careful salt cultivation seeking a high-quality product to cure their herring for free (and moneyed) Europeans, the Anglo-Americans were interested only in large quantities of low-grade salt to cure refuse fish for enslaved laborers. Consequently, the Anglo-American socio-natural assemblage of salt-raking was significantly less dynamic than that of the Dutch and much more haphazardly dependent on natural factors.

Cayo Sal, Los Roques Archipelago: Uespen de la Salina (c. 1700–1800)

There are two archaeological sites adjacent to the saltpan on Cayo Sal. The first, Uespen de la Salina (hereafter CS/A), is located on the westernmost end of the saltpan and on the leeward (northern) coast of the cay (Fig. 5.14). The extant documentary sources discussed in Chapter 3, Part II, as well as analysis of the varied collection of ceramics excavated from the site (which will be discussed in depth in Chapter 6, Part II) suggest that the location was visited between 1700 and 1800 by French, Bermudian and Anglo-Caribbean seafarers as well as Curaçaoans and the Spanish from the mainland Province of Venezuela. Archaeological evidence of salt cultivation at the CS/A site includes corroded remains of two shovels, two hoes and a possible pitchfork (probably used for breaking up the superficial hard salt crust) (Fig. 5.15). It is difficult to establish contemporaneity between the archaeological materials and the earliest dikes on the saltpan in order to determine



Fig. 5.14. Map of the saltpan of Cayo Sal with the CS/A and CS/B sites indicating possible features pertinent to the salt cultivation process.



Fig. 5.15. Metal salt-gathering implements recovered at the CS/A site. (From left to right, top to bottom): fragments of two shovels; fragment of a pitchfork; fragments of two hoes.

precisely when salt cultivation began on the pans with the use of this infrastructure.

Nonetheless, it can be confidently suggested that the seafarers who arrived at Cayo Sal in the 18th century engaged at the very least in the raking of naturally-crystallized salt, much like what Anglo-Americans were doing on La Tortuga at the same time.

Cayo Sal, Los Roques Archipelago: Los Escombros (c. 1800–1880)

The second site, Los Escombros (hereafter CS/B), is located 1 km east of CS/A on a sandy corridor between two large sections of the saltpan lying to the east and west (Fig. 5.14). The saltpan adjacent to CS/B was sporadically visited and raked by Venezuelans in the 1810s and 1820s. In 1834, the saltpan was rented out by the Venezuelan government for eight years to a US American sea captain and trader by the name of Jeremiah H. Morrell, who was based in the Venezuelan port of Puerto Cabello (Burrows 1975: 1179–1180; Hood 1846: 68). During this period, more than 120 “free coloreds” from Bonaire and Curaçao worked on the saltpan (Bosch 1836: 306–307) which was largely abandoned from the early 1840s to the mid-1860s. Small-scale salt cultivation was again initiated by Bonairean entrepreneur L. C. Boyé in 1866. This halted in 1880 when the Venezuelan government disabled the saltpan by flooding it via a channel cut from the sea (Venezuela 1881, LXVI).

The CS/B site includes the ruin of an overseer’s house as well as a sunken salt-packing patio of 123.75 m². The patio also was enclosed by a wall of red bricks and coral stones held together with lime mortar, and its bottom was lined with large ballast stones fitted together with lime-mortar. The feature most probably dates to the 1834–1842 period and is contemporaneous with the house (Fig. 5.16). There are two groups of structures made of coral stones on the storm



Fig. 5.16. (Top to bottom, left to right): salt-packing patio and ruin of overseer's house at CS/B (photo: José Voglar); detail of brick lining of patio; coral stone foundations of the jetty; western structures (shelters) (photo: José Voglar); eastern structures (shelters).

terraces adjacent to the crystallizing pans, one to the east and the other to the west (Figs. 5.14 and 5.16). It is possible that these structures were shelters, that once covered in a canvas tarp, served as a refuge and temporary respite from the blazing midday sun for the salt workers managing the saltpan during Morrell's tenure. As has already been



Fig. 5.17. Panorama of the coral stone dikes that crisscross the saltpan of Cayo Sal (photos: José Voglar).

intimated regarding the 17th-century Dutch, salt cultivating was by no means an easy activity—it was grueling, painful, and debilitating work. The account of Mary Prince, an enslaved woman who worked from 1802–1812 on the saltpans of Grand Turk, is vividly telling of the embodied experience of salt raking (Maddison-MacFadyen 2012: 654; Prince 1831). As Prince (1831: 10) describes,

I was given a half barrel and a shovel, and had to stand up to my knees in the water, from four o'clock in the morning till nine, when we were given some Indian corn boiled in water, which we were obliged to swallow as fast as we could for fear the rain should come on and melt the salt. We were then called again to our tasks, and worked through the heat of the day; the sun flaming upon our heads like fire, and raising salt blisters in those parts which were not completely covered. Our feet and legs, from standing in the salt water for so many hours, soon became full of dreadful boils, which eat down in some cases to the very bone, afflicting the sufferers with great torment. We came home at twelve; ate our corn soup, called *blawly*, as fast as we could, and went back to our employment till dark at night. We then shovelled up the salt in large heaps, and went down to the sea, where we washed the pickle from our limbs, and cleaned the barrows and shovels from the salt.

Although the “free coloreds” working on Morrell’s saltpan were probably not subject to the same dehumanizing conditions to which slaves on Grand Turk were, it can be assumed



Fig. 5.18. Diagram displaying the three types of coral stone dikes on the saltpan of Cayo Sal (photo on far right: José Voglar).

that the nature of the constant work with salt—that inflicted boils, prevented wounds from healing and relentlessly ate at the skin—was equally insufferable.

The coral stone foundations of a jetty were located in and among the saltwort and mangroves on the windward beach of the site (Figs. 5.14 and 5.16). The saltpan also has a large number of coral dikes and walkways crisscrossing it in different directions (Fig. 5.17). Long-term archaeological surveys indicate two probable seawater inlets and permit a hypothetical layout of the concentrating ponds and crystallizing pans (Fig. 5.14). Apart from the several large concentrating ponds, there seem to have been five separate sets of crystallizing pans. This saltpan was thus laid out in an ideal manner for optimizing the salt gradient and maximizing the salt crop. Some of the double coral stone dikes were wide and included a channel for brine to run to crystallizing pans. Others were primarily

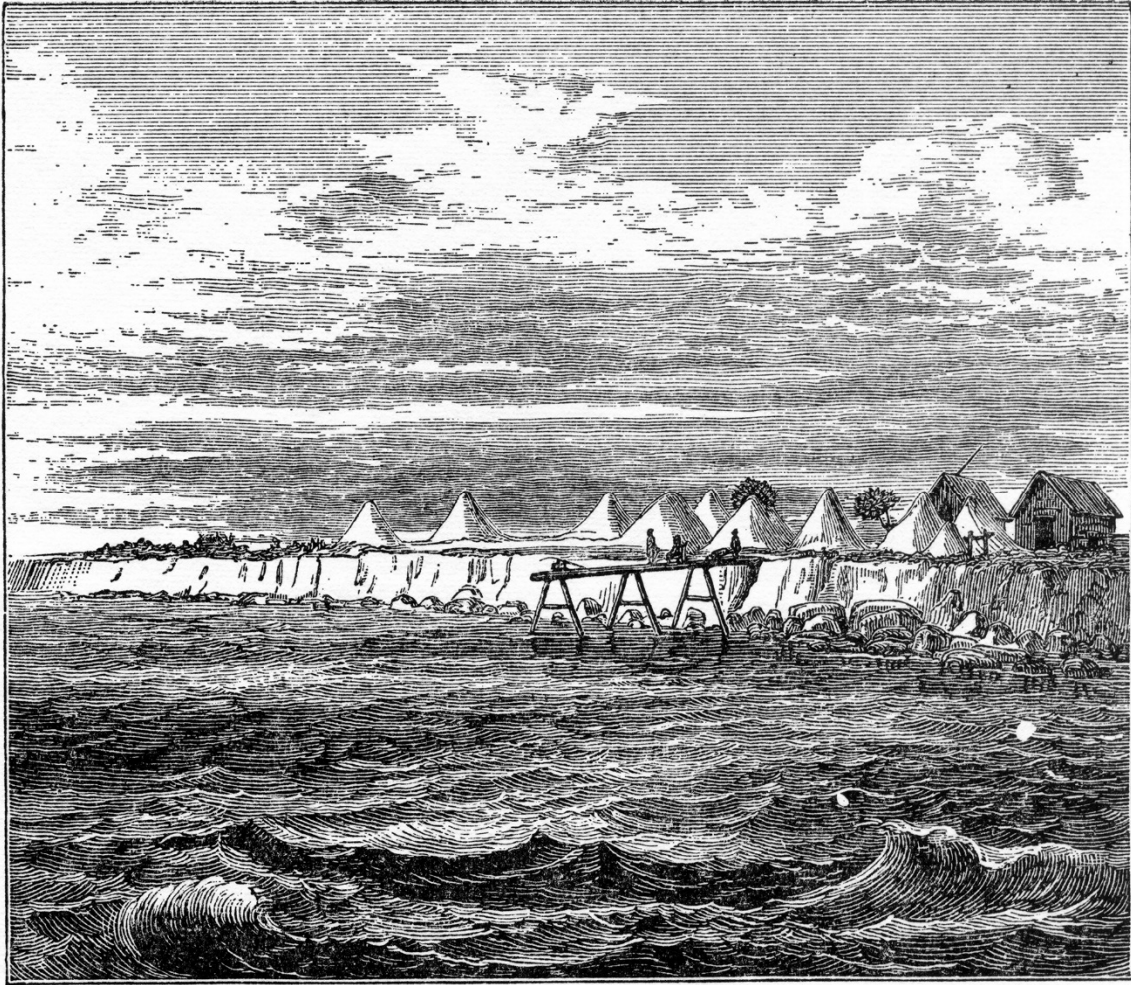


Fig. 5.19. Drawing of “Cayo de Sal” (Spence 1878: 197).

used for carting salt on wheelbarrows to the packing patio (Fig. 5.18). In 1871, English adventurer and chemist James Mudie Spence paid a visit to the saltworks on Cayo Sal. Spence (1878: 197) mentions that “Several acres [of the saltpan] are covered with large flat tanks, into which a little windmill pumps seawater.” The hypothetical location of this pump is indicated in Figure 10. Spence’s account of his adventure to Los Roques also includes a drawing of the saltpan from the windward coast of the island. Tall conical piles of salt can be seen in the foreground alongside two wooden huts. There are three persons standing on a tall wooden jetty, one of whom holds a wheelbarrow (Fig. 5.19).

Although the documentary evidence is as yet too sparse to paint a more detailed picture of salt cultivation at CS/B, the large-scale infrastructural investment by Morrell displays a carefully thought-out salt cultivation enterprise. His business of the 1830s and early 1840s was established within a legal framework granted by the newly independent government of the Republic of Venezuela. Such legality and relative security—something neither the Dutch nor the Anglo-Americans on La Tortuga enjoyed—would have conduced to longer-term investment in saltpan infrastructure and more careful attention to the process of salt cultivation. Furthermore, it is plausible to suggest that the environmental knowledge of the Dutch Antillean freedmen (who’d had considerable experience working for *zoutplanters* [salt planters] on the salt ponds of Curaçao and Bonaire) working under Morrell was a key factor in the functioning and success of the saltpan on Cayo Sal. Maximizing a salt harvest would have required knowledge of the optimal distribution of ponds, pans, dikes and pumps; an experienced eye to detect changing brine colors derived from various microorganisms; the careful tending of the organic mats on the bottoms of the concentrating ponds; and a remarkable synchronization of salt cultivation with the tides and the weather. Like that of the 17th-century Dutch on La Tortuga, Morrell’s enterprise on Cayo Sal was a dynamic socio-natural assemblage of salt cultivation.

DISCUSSION

Although obtaining solar salt may at first glance appear to be a merely extractive human endeavor, successful salt cultivating enterprises require humans to correspond intimately with and depend heavily on numerous non-human entities and processes. In fact, human



Fig. 5.20. Naturally-crystallized salt collected from the saltpan of Cayo Sal by Germán Reyes (Moncho) during an exceptionally dry season in June 2015.

correspondence with natural factors is so vital to the saltpan enterprise that uniquely agricultural terms such as salt “cultivation” and “harvesting” a “crop” of salt were still used by salt-rakers of the Turks and Caicos Islands in the 1970s (Gregory 1978: 28, 30). Whereas most salt rakers on the Venezuelan islands of La Tortuga and Cayo Sal may have regarded nature and culture as separate domains (Glacken 1976), their practical engagement with the saltpans demonstrates quite the contrary. They were at times knowingly and at other times unknowingly corresponding with and depending on the microorganisms, chemical processes, tides and weather conditions interwoven in optimal saltpan production. Even the Anglo-Americans who did not actively cultivate salt on La Tortuga in the 17th and 18th centuries were highly reliant on a keen knowledge of the tides

and rains in order to rake as much naturally-crystallized salt as possible in the window of opportunity from March to June.

On the salt pans of the two Venezuelan islands discussed above, the entanglement of human and non-human entities created socio-natural assemblages of salt cultivation. To successfully cultivate high-quality salt on these islands, humans, their tools and the structures they erected had to join, dynamically and synergistically, with the rhythms of microorganisms, chemical compounds, tides, and clouds. It is in this very correspondence of “earthly undergoings and human doings” (Ingold 2015: 155) that salt crystals were successfully grown (Fig. 5.20).

CHAPTER 6 | PART I

THE LIVED SALTPAN:

ASSEMBLAGES OF PRACTICE AT THE CAMPSITES OF LA TORTUGA

INTRODUCTION: THE LIVED SALTPAN

In Chapter 3, I traced the unexpected itineraries and various local, regional and supra-regional entanglements of salt cultivated and raked on the islands of La Tortuga and Cayo Sal during a 256-year swath of time. Chapter 4 sought to contextualize the seafarers who arrived at the saltpans in terms of their “social markers,” namely: their gender, race, ethnicity and nationality, as well as distinctions of social status and rank. Therefore, Chapter 4 set the stage for Chapter 5 which explored salt cultivation and raking assemblages of practice entangling seafarers with biological, chemical, climatic and marine phenomena on the saltpans through relations of correspondence. The chapters so far have gradually focused on smaller, more detailed and less abstract matters, moving from discussions of the local, regional and supra-regional itineraries and entanglements of salt to who the seafarers were and to salt cultivation practices on the saltpans. In this chapter, we will finally dive head-first into the bulk of the archaeologically recovered objects themselves, looking to uncover the everyday lives of the seafarers at the campsites by these desolate saltpans through the reassembling of assemblages of practice. Whereas the work of salt cultivation and raking has been discussed in the previous chapter, this chapter will explore the quotidian aspects of life beyond work on the saltpan involving foodways, drinking and leisure activities in the campsites by their

margins. The assemblages of practice involving seafarers and things at the temporary campsites by the saltpans of La Tortuga and Cayo Sal offer an unrivalled window onto seafarers' material entanglements at the uninhabited mid-points on their maritime itineraries. Part I of this Chapter will discuss La Tortuga, and Part II, Cayo Sal.

THE DUTCH AT PUNTA SALINAS (1624–1638)

EXCAVATIONS AND FEATURES

The Punta Salinas archaeological site (TR/S) is approximately 5.6 ha in area (ca. 200 x 280 m). The saltpan lies on the site's north and runs more than 1 km eastward towards the coast (Fig. 6.1.1). The site comprises an area of sandy plain with the maximum elevation in low sand dunes rising to some 1.4 m above sea level on the north. The Laguna de Los Mogotes forms a dense barrier of tall black mangroves (*Avicennia germinans*) delimitating the site to the east. Vegetation on the site is sparse consisting of clusters of black mangrove congregating around a few small salt ponds at the western margin of the site. There are areas at the southeastern corner of the site carpeted by saltwort (*Batis maritima*) (Fig. 6.1.2).

Archaeological reconnaissance of La Tortuga began in the early 1990s. It was led by Venezuelan archaeologists Andrzej and Ma. Magdalena Antczak as part of their larger project dedicated to the systematic archaeology of the islands in the Venezuela Caribbean. The Spanish document and map from 1638 (Archivo General de Indias 1638 [Fig. 3.1.5]; Arias Montano 1934 [1638]: 140–141) that narrates and illustrates the 1638 battle inspired and guided the initial archaeological survey of La Tortuga in 1992. This survey resulted in the localization of the Punta Salinas site. The results of this survey did



Fig. 6.1.1. The bay and site of Punta Salinas with the yellow-brown now inundated saltpan at the top and the Laguna de Los Mogotes to its right (photo: José Miguel Pérez Gomez).

not reveal evidence for 17th-century Dutch occupation of the site, but a substantial presence of archaeological remains principally dating to the 18th century was determined. A month-long expedition was launched by the Drs. Antczak in May of 1993 to perform extensive shovel, test pit and trench excavation to systematically delineate the contours of the 18th century site. More recently, three expeditions to the Punta Salinas site in August 2009, January 2010 and August 2010 were undertaken.¹⁵⁸ It was only at the end of the August 2009 field campaign that the first 17th-century material remains of the

¹⁵⁸ The isolated nature of the island and lack of any permanent settlements made the logistics for a month-long camping stay very complex. The harsh conditions of work were further exacerbated by incessant mosquito and sand fly (*Ceratopogonidae* family) infestation, harsh sun and tropical storms.



Fig. 6.1.2. Map of the site of Punta Salinas with Dutch occupational phase features, and excavated test pits and trenches highlighted.

Dutch occupational period were recovered. The various features discussed hereafter were then excavated in January and August of 2010.¹⁵⁹

As was discussed in Chapter 3, Part I, the Dutch were the only visitors to Punta Salinas to invest in considerable modifications to the saltpan and set up defensive infrastructure at the site. Their most significant construction was the wooden fort of 1638. I first turn to the examination of the archaeological features located at the site and discuss which of them would correspond to the emplacement of the wooden fort. Feature TR/S/T-1 consists of a diamond-shaped earthwork of sand, 20 x 19 m, with a maximum elevation of 1.25 masl (meters above sea level) (Fig. 6.1.2). Although routine shovel test pits had been excavated in this feature before, it was in August 2009 that a new pit excavated in the central part of the earthwork yielded the first Dutch artifacts recovered on the island. The pit presented a feature of conical shape and circular cross section with a diameter of 75 cm in its upper part. This feature extended to a depth of 80 cm and was composed of sand darker than the surrounding matrix. It contained twelve fragments of 17th-century Dutch pipe stems and four pipe bowls as well as a fragment of a Dutch redware porringer. These fragments were dispersed randomly along the column of sand at depths between 25 and 80 cm. The feature was interpreted as a possible rubbish pit or a post hole associated with the 1638 fort's main supporting structure. Further excavation enlarged the pit to 2 x 2 m, but no other remains or similar features were found.

¹⁵⁹ In 1997 and 1999 members of the Amsterdam Archaeological Centre, University of Amsterdam, carried out a survey along the coast of Venezuela seeking "to find traces of the salt-gathering activities of Dutch sailors" (van Beek, 2002: 84). On La Tortuga, the team visited the small bay of Carenero to the west of the Punta Salinas archaeological site and claimed that it was there that the 1638 fort might have been erected (see also van Beek et al. 1999).

On the eastern flank of the earthwork (TR/S/T-1), a 45-square-meter trench was excavated revealing that the earthwork originated from a coastal dune which was then artificially modified (Fig. 6.1.2). The resulting earthwork, surrounded on all four sides by a meter-wide ditch, was the highest ground at Punta Salinas. It is uncertain whether the ditch had specific defensive purposes, yet I suggest that guided by the structural principle of Dutch orderliness, the *zoutvaerders* on La Tortuga replicated the basic Dutch fort design using the simplest techniques and materials. Dikes with floodgates, water-filled moats and canals were the basic elements of Dutch military defensive architecture of the time (Haviser 2010: 172). It seems possible that the ditch was originally dug down to at least the water table level. However, such a mini-moat was more of a visual deterrent than an effective defensive measure.¹⁶⁰ Alternatively, it may also be argued that the effectiveness of the ditch might have been more considerable since it was positioned bordering a high wooden palisade topped with metal barbs, mentioned in the documentary sources.

The first 10 cm of loose sand in the trench excavated in the earthwork feature yielded a few fragments of 18th-century white salt-glazed stoneware associated with the Anglo-American occupation of Punta Salinas (Fig. 6.1.3). The majority of Dutch-related

¹⁶⁰ For a similar conclusion concerning the moat at the 1652 Fort de Goede Hoop in Cape Town, South Africa, see Abrahams 1993: 13.

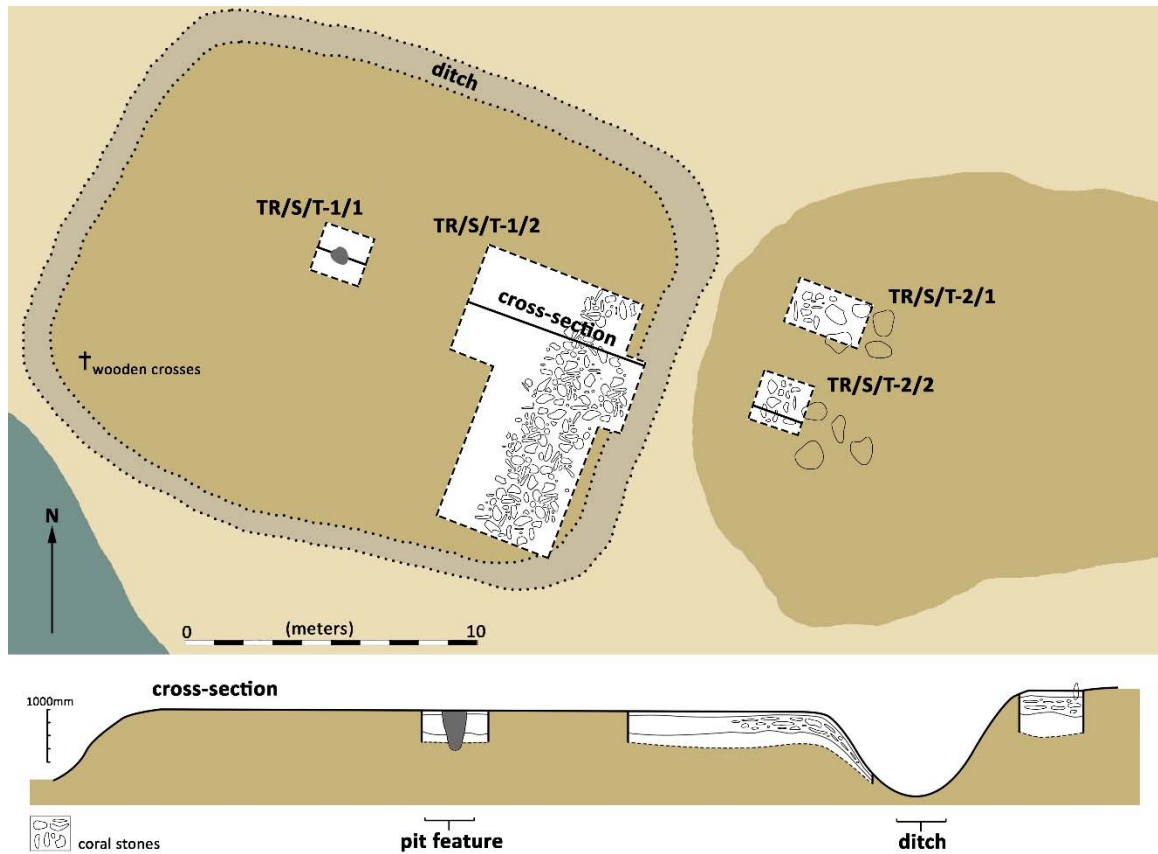


Fig. 6.1.3. Plan of the excavations carried out at the Dutch features TR/S/T-1 and TR/S/T-2 and their profiles.

ceramic fragments was recovered at depths between 20 and 40 cm and lay along the eastern edge of the earthwork in a sandy matrix amongst coral stones. Towards the center of the earthwork ceramics were virtually absent, but several fragments of Dutch pipes and rabbit bones appeared at depths between 20 and 40 cm. Small scatters of Amerindian pottery, as well as shell and stone artifacts, were found at depths between 30 and 50 cm in association with a hearth. Thus far, we may conclude that the Amerindian component was most probably present in the coastal dune before the Dutch converted it into the earthwork, and future radio-carbon dates from carbonized organic matter in the hearth may substantiate this claim. Aside from the aforementioned pit feature, no post holes were identified in the trench excavated within the earthwork. One suggestion is

that the loose sandy matrix of the site was not conducive to preservation of such features, as horizontal and vertical movement of the matrix through time may have been considerable. Alternatively, this may also be due to sampling bias; future excavations may indeed yield post holes.

A sandy ridge of irregular shape (TR/S/T-2), with an elevation of 1.49 masl extends immediately to the east of the earthwork (Fig. 6.1.3). An anthropogenic origin seems doubtful, but several large coral stones that were found on its top were probably placed there intentionally. Dark patches of carbonized organic matter visible among the semi-interred stones are the remains of fireplaces, suggesting that the stones were used as wind screens. Fragments of 18th-century Anglo-American artifacts were found on the surface and to a depth of 20 cm and such fragments were also found in the test pits excavated in the western part of the ridge. Fragments of Dutch ceramics, pipes and faunal remains were recovered at depths ranging from 20 to 55 cm. These material remains were randomly dispersed in the matrix, similar to their disposition in the adjacent earthwork. An Amerindian cultural layer, however, was not found in this sandy ridge; only a few dispersed fragments of Amerindian pottery were encountered.

The ridge is separated from the earthwork by the ditch and the slopes of the earthwork as well as the ridge that rise from the ditch are parallel (Fig. 6.1.3). The abundant coral stones found in this interface between the ridge and the earthwork seem to be the remains of an embankment. Fragments of Dutch ceramics pertaining to the same vessels were recovered both in the earthwork and in the ridge. This indicates that the two formations constituted a continuous dune formation that was cut through by the

ditch and subsequent construction of the earthwork. It may be suggested that during the excavation of the ditch by the Dutch, sand might have been thrown to both sides. This would account for the dispersal of the pottery fragments encountered, and might indicate that the site was utilized by the Dutch prior to the construction of the earthwork.

RESOURCE PROCUREMENT AND FOOD PREPARATION

Archaeological evidence indicates that the Dutch at Punta Salinas procured some of their meals from local sources. Faunal remains from the two Dutch features are dominated by rabbit (Genus *Sylvilagus*) bones which account for 374 specimens (Number of Identified Specimens [NISP]) in the earthwork and 137 in the adjacent ridge. The minimum number of 18 individuals (MNI) was established from the count of eight right pelvis fragments in the earthwork and 10 in the ridge. Three pelvic bones from the earthwork show marks from the cutting action of knives and, on two of these bones, the marks are patterned. The earthwork and the adjacent ridge are the only places in the whole archaeological site of Punta Salinas where these rabbit bones were found, and all are associated with Dutch pipes and ceramics.¹⁶¹ This indicates that the Dutch consumed rabbits in situ. Nevertheless, the question remains open as to whether these animals were brought from the Netherlands or captured on the island. Although some sources may favor the first scenario,¹⁶² the presence of rabbits on some islands located off the coast of Venezuela

¹⁶¹ One partial carcass of a rabbit was found during the 1993 field survey lying on the surface a few kilometers west of Punta Salinas. Rabbit droppings are often found on the dunes to the north of the Los Mogotes Lagoon and fishermen confirm sightings of rabbits on the island.

¹⁶² For early presence of rabbits in the Netherlands see Lauwerier and Zeiler (2001: 89) and van Dam (2001: 167). Rabbits were often carried on board ships and placed on islands to provide food for shipwrecked seafarers; alternatively, the wrecking of a ship could cast the rabbits onto an island where they had not previously been present (Armstrong 1982: 354–355).

had already been mentioned in 16th-century Spanish documents.¹⁶³ Indeed, the coastal dunes at Punta Salinas provide an environment where these animals could burrow. Twenty-eight mammal bones indicate that beef and pork were also consumed. The remains of wild goats have not been recovered thus far. This suggests that once hunted in the interior of the island (as mentioned by Seledón de Suasola 1934[1630]), the game was taken on board the Dutch fluits for dressing, butchery, preparation and consumption.¹⁶⁴ Avifauna is represented by 43 bones, among which the presence of pelicans (*Pelecanus occidentalis*) can thus far be confirmed. It cannot be conclusively determined whether these bird remains entered the archaeological record through human consumption and discard or through natural death of the animals.

Local marine fauna is poorly represented. This is not due to preservation and soil acidity as in the adjacent portions of the Punta Salinas site that pertain to the later 18th-century Anglo-American activities, which will be discussed later on, a large number of marine faunal remains was recovered. Among the 36 fish remains recovered from the earthwork, the majority are unidentified spines and vertebrae. Two spines with hyperostosis probably belonged to medium-size jacks (Carangidae); two otoliths of snappers (Lutjanidae) and one of a grouper (Epinephelidae) pertained to medium-to-large specimens; grunts (Haemulidae) are represented by one otolith; and one premaxilar of a

¹⁶³ Rabbits were introduced on La Tortuga in pre-Dutch times. In 1578, the Governor of the Province of Venezuela, don Juan de Pimentel, while describing the islands off the coast of Venezuela including La Tortuga, mentioned that some had many rabbits (in Nectario María 1966: 331–351). La Tortuga with its nearly six hectares of surface is within the lower range of island areas capable of supporting permanent rabbit populations (Armstrong 1982: 360).

¹⁶⁴ The butchery of game on fluits avoided the problem of sand getting into the meat and flies that were ubiquitous on land, especially in the area adjacent to the saltpan.

porgy (*Calamus* sp.) was also recovered. All these fish could have been easily captured by hook and line directly from the fluits or from the storm terrace close to the site. Molluscs from the earthwork include three shells of a subadult queen conch (*Lobatus gigas*), a few broken nodules, and one apex of the same species. One or two shells of the following molluscs were also recovered: *Cittarium pica*, *Natica canrena*, *Cypraea* sp., *Oliva* sp., *Conus* sp., and *Cassis* sp. Two dozen chiton (Polyplacophora) plates were also identified. Six opercula of *Litophoma* sp. and fourteen valves of *Tivela mactroides* complete the sample. Almost all of these species can be easily collected in the intertidal zone of the adjacent shoreline. Intriguingly, sea turtle bones were not recovered except for three small fragments of charred carapace.¹⁶⁵ The collection of marine animal remains is complemented by single fragments of a lobster and of an unidentified crab. Within the contextual matrix of the site, the faunal remains are interpreted as food remains left by musketeers guarding the fort.¹⁶⁶

The ceramic collection from the two features is composed of 132 fragments and a minimum number of 20 vessels (114 from the earthwork and 18 from the ridge) (Table 6.1.1). The presence of a majority of storage- and cooking-related vessels (N=14) suggests that some of the meals the Dutch consumed might have been prepared on site and not

¹⁶⁵ Sea turtles were eaten in abundance by the permanent occupants of the Dutch Fort Amsterdam in Sint Marteen, Netherlands Antilles, who also ate cattle, pigs and goats (Baart et al. 1988: 274–275). Menkman (1935: 195) mentions that the Dutch on La Tortuga hunted goats and turtles. The unexpected absence of turtle bones in the Dutch-related deposits on Punta Salinas may be related to the temporary character of the installations on land, butchery on board, or separate sites of consumption and discard.

¹⁶⁶ Analyzing the 1661 song (Rhijnenburgh: 13) presented in Chapter 3, Part I, it seems likely that captains of fluits at anchor in the bay took night shifts in the fort accompanied by their crew members (cannon operators and surgeons); permanent mercenary musketeers might have been the minority of the fort garrison if they were present at all. If so, it can be suggested that the food consumed in or around the fort during the watch was prepared on the watchkeepers' respective ships.

Table 6.1.1. Dutch ceramic and glass vessels recovered from the TR/S/T-1 and T-2 features at Punta Salinas.

Ware/Glass Type	Color	Vessel Form(s)	NF	MNV
Ceramic				
Dutch lead-glazed red earthenware	N/A	Two-handled porringer	9	1
		Tripod saucepan	52	3
		Skillet	2	1
		Pitcher	14	4
		Jar	38	7
		Plate	1	1
		Sub-subtotal		115
Dutch Delftware		Dish	7	2
San Juan Polychrome		Dish	8	1
Rheinish stoneware	N/A	Jug	2	1
Subtotal ceramic vessels			132	20
Glass				
Prob. Belgian case bottle	Black	Case bottle with short restricted lip	1	1
Poss. Belgian vial	Olive -green	Vial with short neck and flared finish	1	1
Subtotal glass vessels			2	2
TOTAL			134	22

on board the fluits. All of the storage- and cooking-related vessels are Dutch lead-glazed red earthenware (redware), with the most complete cross-mended example being a tripod saucepan (Fig. 6.1.4, 6) (Schaefer 1994: 382–383, Fig. 15). Other Dutch redware sherds include rims and handles which, taken together, indicate that at least two other saucepans were present, as well as a skillet, seven jars and four jugs (Hurst et al. 1986: 134–136).

Some meals may have been prepared on the ridge (TR/S/T-2) adjacent to the earthwork as suggested by the presence of a ceramic skillet and various saucepans in that feature. Thereafter the meals might have been consumed on the earthwork where the fort stood. No Dutch fireplaces were found which is understandable as lighting fires within the perimeter of the fort which contained stores of gunpowder was dangerous and indeed likely prohibited. The diet of the musketeers—and by extension probably the rest of the *zoutvaarders*—was based on salted and dry provisions brought from the Netherlands, some of which might have been stored in the various jars found in the two

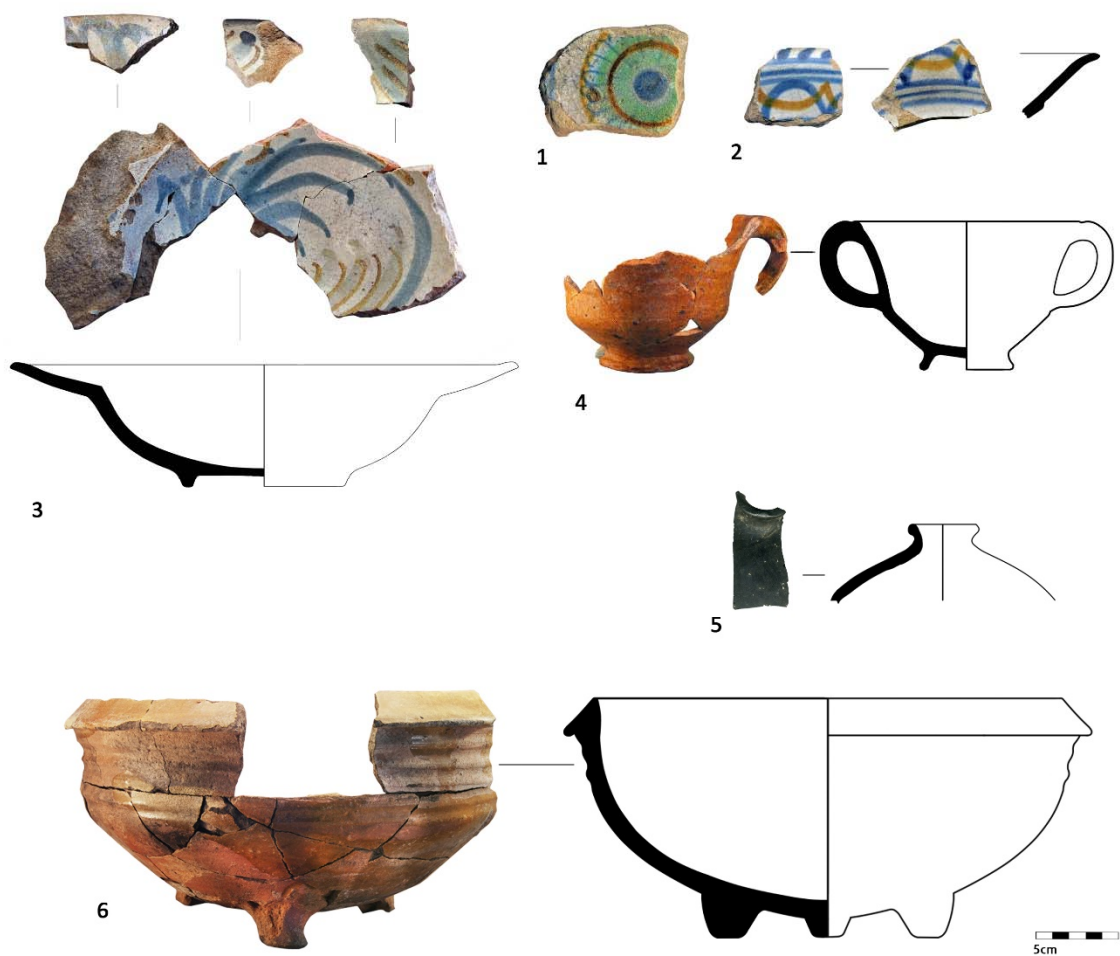


Fig. 6.1.4. Ceramics and glass recovered in the earthwork feature (TR/S/T-1). (1–2). Dutch tin-glazed earthenware dish fragments; (3) brimmed dish probably of Mexican majolica and attributed to the San Juan Polychrome style; (4). Dutch lead-glazed red earthenware two-handed porringer with a thick green glaze on the interior; (5). Belgian case bottle fragment; 6. Dutch lead-glazed red earthenware tripod saucepan.

features. Inclusion of local marine fauna in the foods being consumed at the site was negligible perhaps because of fear of poisoning.¹⁶⁷ The available allochthonous land animals such as goats and rabbits—well-known from the Dutch homeland—were hunted over a period of time. As we know from documentary evidence, goats were hunted in the

¹⁶⁷ See Floore and Jayasena (2010: 336) for similar conclusions. Reports from Curaçao indicate that by the end of the 1630s fluits were bringing almost all necessary food from Holland; these victuals were paid for by the WIC (Wright and van Dam 1634: 226, 227, 236).

interior of the island (de Suasola 1934 [1630]). The rabbits could easily have been trapped with nets when smoked out of their coastal dune warrens.

FOOD CONSUMPTION, DRINKING AND LEISURE ACTIVITIES

Of the 20 ceramic vessels recovered from the features, only six were tableware, with two polychrome Dutch Delftware (tin-glazed earthenware) dishes standing out amongst them. One features blue dashes on its rim and interlaced blue and orange curved lines below (Fig. 6.1.4, 2)¹⁶⁸ (Korf 1981: 27, Fig. 14; Scholten 1993: 26–27, Fig. 24). The other is a fragment with a blue, green, yellow and orange rosette in the center (Fig. 6.1.4, 1) (Korf 1981: 32–33, Fig. 29). A further puzzling find was a brimmed *plato* (plate/dish) probably of Mexican majolica and attributed to the San Juan Polychrome style (Fig. 6.1.4, 3) (Deagan 1987: 74, 109, Plate 3, E; Emma Yanes, pers. comm. 2012). Its presence in the Dutch earthwork could be the result of Dutch commercial interactions in the greater Caribbean through which it was acquired; or, alternatively, it could be one of the only identifiable remains of the Spanish under the command of Benito Arias Montano who camped at Punta Salinas for various weeks after the 1638 raid as they were digging channels to flood the saltpan. Finally, there is a Dutch redware two-handled porringer with a thick green glaze on the interior and a rim fragment from what appears to be a Dutch redware plate (Fig. 6.1.4, 4) (Allan and Barber 1992: 232, 236, Fig. 3, 21; Klijn 1995: 217, Fig. 4.b.143). It can be assumed that either liquid was drunk out of this small vessel or more solid fare was scooped out with a spoon. It must also be considered that the

¹⁶⁸ All vessel profiles were drawn on paper by Andrzej Antczak and later digitalized in Adobe Photoshop by Oliver Antczak, José Miguel Pérez Gómez and myself.

paucity of tableware may be due to the fact that most northern European 17th-century ship tableware was wooden as evidenced from the excavation of the Swedish warship *Vasa* that sank in Stockholm Harbor in 1628 (Gandulla 2014).

Ceramic liquid containers are represented by two fragments of a German brown stoneware Bellarmine jug. Two identifiable glass bottle fragments that can be attributed to the Dutch visits to the site include a Belgian case bottle with a short, restricted lip and black metal (Fig. 6.1.4, 5), as well as a possibly Belgian vial with a short neck and flared finish of olive-green metal (van den Bossche 2001: 308, 167). These bottles could have contained wine, brandy or gin (Boxer 1963: 94–95). Rather than principally drinking alcohol from bottles, however, the Dutch most probably drank beer brought down to land from the fluits in wooden barrels, of which no evidence was found (Boxer 1963: 94). Beer was in fact the preferred Dutch alcoholic beverage during the first half of the 17th century (Roberts 2004: 239). It is also important to note that the Dutch at Punta Salinas were provisioning themselves with water at La Tortuga's brackish water pools as mentioned in the Rhijnenburgh song (1661: 6). Upon being intercepted by a Spanish reconnaissance ship, the Dutch threw the "barrels of water" overboard; the map of the 1638 confrontation also shows a Dutch vessel by the seasonal pool at the northwestern end of Punta Arenas at Punta Tamarindo (Archivo General de Indias 1638). A fragment of melted olive-green glass, unassociated with any hearth, was also found. This might be a product of Arias Montano's burning of the fort once he had defeated and killed the Dutch garrisoned within.



Fig. 6.1.5. Iron ladle or knife handle recovered in the earthwork feature (TR/S/T-1).

Remains of metal tools and utensils are scant in the earthwork. Six heavily corroded iron fragments of either ladle or knife handles or both were recovered (Fig. 6.1.5). A small fragment of what may have been a colander was also encountered. The excavation yielded 20 corroded nails with lengths varying from 3.6 to 12 mm. Another sixteen fragments of nails which were still attached to tiny fragments of wood could be the remains of a chest, chests, or a coffer. Judging by their deposition, some of the nails may pertain to the Anglo-American period. Five fragments of isinglass (thin and transparent mica) sheets, identified as possibly Muscovy glass, suggest that a lantern might have been lowered from the Dutch fluits to light the adjacencies of the fort during



Fig. 6.1.6. Dutch pipes recovered in the earthwork feature (TR/S/T-1), dating between 1625 and 1638. (1) pipe with a rose mark, prob. Amsterdam; (2) Gouda pipe with a tulip mark; (3) Pipe with a crowned rose mark flanked by 'T' and 'T', Amsterdam; (4) Pipe with a crowned rose mark, Amsterdam; (5) double-conical pipe with a lily mark, prob. Amsterdam; (6) pipe with molded rose on bowl; (7) West-Frisian pipe (Hoorn/Enkhuizen); (8) Poss. West-Frisian pipe; (9–13) various molded and stamped pipe stems, mostly from Amsterdam; (14) rare and finely molded pipe bowl with baroque motifs of human faces, a rooster's head and vegetal design, poss. Gouda (Jan van Oostveen pers. comm. 2010).

the night. It is in the light of this lantern that the eating and drinking activities might have occurred at the site.

The leisure activities of the Dutch at Punta Salinas also involved smoking. The earthwork yielded 125 fragments of Dutch pipe stems.¹⁶⁹ Eighteen of these exhibited a stamped decoration of a lily inside a diamond as well as molded stylized vegetal motifs (Fig. 6.1.6, 9–13). The ridge yielded 28 stems including eight decorated with similar motifs. Thirty bowls and bowl fragments were recovered from the earthwork and eight from the ridge. The majority of the bowls feature rouletted rims and marks stamped on the heels including a rose, a tulip, a crowned rose, and a lily, with the initials of the makers present on some of these (Fig. 6.1.6, 1–5). Several of the bowls have plain rims and flat and undecorated heels. Upon close inspection, eight of the stems also present clear bite marks. Most of these pipes were probably produced in Amsterdam as it was a dominant clay pipe production center of the period and can be dated to between 1625 and 1638 (the latter is the *terminus ante quem* for the Dutch archaeological component on La Tortuga) (Don Duco, pers. comm. 2010; Jan van Oostveen, pers. comm. 2010). A few pipes were made in West-Frisia (Hoorn/Enkhuizen) and Gouda during the same time span (Fig. 6.1.6, 2, 7, 8). One fine pipe bowl, decorated with baroque motifs of human faces, a rooster's head and vegetal design, is a rare example (Fig. 6.1.6, 14) (Jan van Oostveen, pers. comm. 2010; Don Duco 1987: Fig. 466).

¹⁶⁹ The numbers of stems and bowls recovered in the earthwork and specified here include the specimens recovered from the feature excavated in the central part of the earthwork and described at the beginning of this section.



Fig. 6.1.7. Graphic reconstruction of the Dutch fort from 1638 on La Tortuga (drawing, Julijan Vermeer & Konrad A. Antczak).

Due to the short duration of the Dutch salt campaigns in the decade of the 1630s, the paucity of archaeological remains from this period is not surprising. As the limited archaeological evidence indicates, the assemblages of dining, drinking and smoking at Punta Salinas during Dutch visits were principally centered on the Dutch fort and its adjacent sandy ridge. Meals, involving local rabbits and goat as well as shipboard provisions brought from the Netherlands would have been cooked on the ridge, away from the stores of gunpowder in the fort. The Dutch musketeers garrisoned in the fort and the ship crews probably sat in the shade of the fort to consume these meals, plausibly while drinking beer, brandy, wine and the water collected from the brackish pools on the island (Fig. 6.1.7). Smoking was the only other pastime that could be identified through archaeological evidence; it is evidenced through the fairly large collection of pipe stems and pipe bowls. In their moments of relaxation from raking and loading salt onto the fluits as well as protecting Punta Salinas from Spanish attack, the Dutch smoked to fend off the tropical tedium of waiting for the salt to quern on the saltpan.¹⁷⁰ Nonetheless, the limited archaeological and documentary data provide only snapshots of what were once vibrant assemblages of practice at Punta Salinas during Dutch salt campaigns. In the following sections I explore the much more robust archaeological and documentary data for the much longer Anglo-American presence at the site, where the reconstruction of the dynamic assemblages of practice becomes a more feasible task.

¹⁷⁰ It can be also suggested that smoking was not only a leisure activity. To a certain degree it abated the attacks of mosquitoes and sandflies that are ubiquitous at the site and which assault exposed skin mercilessly.

ANGLO-AMERICAN EVERYDAY LIFE AT PUNTA SALINAS (1634–1781)

EXCAVATIONS

During the five field seasons at Punta Salinas, 41 (1x1 m) test pits were placed and then excavated primarily where surface scatters of material remains were identified. These pits helped to map the extent of the vast site and delimited the boundaries of three activity areas: Dunes (TR/S/D), Fringe (TR/S/F) and Barracks (TR/S/B), where large trenches were excavated (Fig. 6.1.8; 6.1.9). I define an activity area in this case as a spatially-contained physical locus of human activities evidenced by the horizontal or vertical clustering as well as patterned deposition, or all three, of material remains against a surrounding area not exhibiting such clustering or patterning. Such activity areas may be results of singular events or a fragmentary “palimpsest of residues of such events” (Lucas 2012: 183). As contained areas for everyday life, my detailed historical archaeological study of these activity areas will reveal assemblages of practice that entangled the extant material remains with no-longer-present material things and humans. Trenches excavated in these activity areas contained a high density and wide array of 18th-century ceramics, glass, metal artifacts, and zooarchaeological remains, suggesting that throughout the 18th century, seafarers concentrated their everyday activities beyond work on the saltpan here.

Outside of these activity areas, the Punta Salinas site exhibits a remarkable horizontal dispersion and very low density of objects per square meter making it unrewarding for conducting extensive open-area excavations. There are, however, small agglomerations of material remains at certain loci beyond the activity areas at Punta



Fig. 6.1.8. Map of the site of Punta Salinas with Anglo-American occupational phase features, and excavated test pits and trenches highlighted.

Salinas, suggesting that not all activities were concentrated at the above-mentioned three areas. Singular events of cooking, eating and discard occurred at these concrete places. It must be emphasized that due to the intensity and long-standing duration of visits to Punta Salinas—where during the 18th century dozens of ships arrived in convoy at once and

hundreds of seafarers debarked—determining the synchronicity of activity areas and other material agglomerations is nearly impossible. The site is indeed a palimpsest. Pinpointing material remains that reflect individual yearly events of visitation within the activity areas is also very difficult since they seem to have been the foci of most significant human activity. Individual events may be identified from discrete cache deposits (of which three were found, to be discussed) as well as from the more ephemeral above-mentioned agglomerations beyond the activity areas. The material remains recovered from the activity areas can, however, be dated to certain ranges and, as shall be seen in further sections, important diachronic trends at the site can be identified.

During the three most recent field seasons in August 2009 as well as in January and August 2010, systematic survey in transects with a professional metal detector (Minelab *Excalibur II*) combined with GPS recordings also yielded much information on the limits of the activity areas and the overall spatial distribution of mostly small metal artifacts (most of which have been discussed in Chapter 4) within the Punta Salinas site. This survey also brought to light significant finds that would have been difficult to locate through excavation due to the remarkable horizontal dispersion of small objects over the extensive area of the site.

Due to its loose sandy matrix, the Dunes activity area has particularly poorly defined strata. Constant aeolian action relentlessly exposes and buries archaeological remains, mixing and dispersing them over the adjacent area. In trenches and test pits excavated on the lower-lying and central areas of the Punta Salinas site, the artifacts were found on—or just centimeters below—the current surface. Cultural strata deeper than 40



Fig. 6.1.9. Excavation of trench in the Fringe activity area in August of 2010.

cm below the ground surface were found only in trench F-5. All other archaeological remains at Punta Salinas are found no deeper than this. As has been discussed in the previous chapter, the 2009–2010 survey and excavations suggest that the large forest of mangroves adjacent to the east of the Fringe activity area was not present in its current state during the time of Anglo-American activities. The bulk of material remains from the Anglo-American campsites extends along the eastern margin of the site in an arc following the current line of mangroves, and what was probably in the 17th and 18th centuries the edge of a now overgrown saltpan (as seen on Fig. 5.13).

The material remains excavated at Punta Salinas also have a clearly established *terminus ante quem*. As was discussed in Chapter 3, Part I, the last known Anglo-American activity at the site is documented: the forceful ousting of the salt rakers by the Spanish

corsair Vicente Antonio de Icuza in 1781.¹⁷¹ The archaeological record corroborates the documentary sources. Only 12 fragments (MNV=10), to wit, nine Dutch gin bottles, one British whiteware plate, a copper-alloy button and a copper plaque from a ship hull that were directly dateable to the 19th century, were found at the site. These were most probably left behind by sporadic visits to the saltpan on the part of local Venezuelan and Dutch Antillean fishermen.

SEAFARER CAMPSITES

The archaeological features that can be distinguished at the Punta Salinas site are few. This is mainly due to the short-term and seasonal character of Anglo-American visits to the island and the impermanent nature of structures that might have been erected to provide protection from sun and rain. Documentary evidence suggests that such temporary structures existed by the saltpan as a 1737 dispatch from the Governor of Puerto Rico indicates: "Sometimes as many as thirty ships are there (at La Tortuga [called "Tortuguilla" in the document]) at once in a convoy especially about the month of April. They make themselves masters of the island, and even set up clusters of huts" (McLachlan 2015: 96). One can infer that these "huts" were probably canvas tarps supported by an improvised frame of wooden poles or oars, secured with lines and stakes to the ground or by heavy barrels or sea chests.¹⁷² A shelter much like the ones I envisage existed on La Tortuga provided the officers under the infamous pirate Captain George Lowther a soothing respite from the tropical sun as the pirate crew labored on careening their ship

¹⁷¹ Amezaga 1966: 94.

¹⁷² At the 18th-century bayman campsite of the Barcadares in what is today Belize, the baymen set up tarps made from ozenbrig (course and tough linen canvas) supported by wooden poles (Finamore 2006: 71).

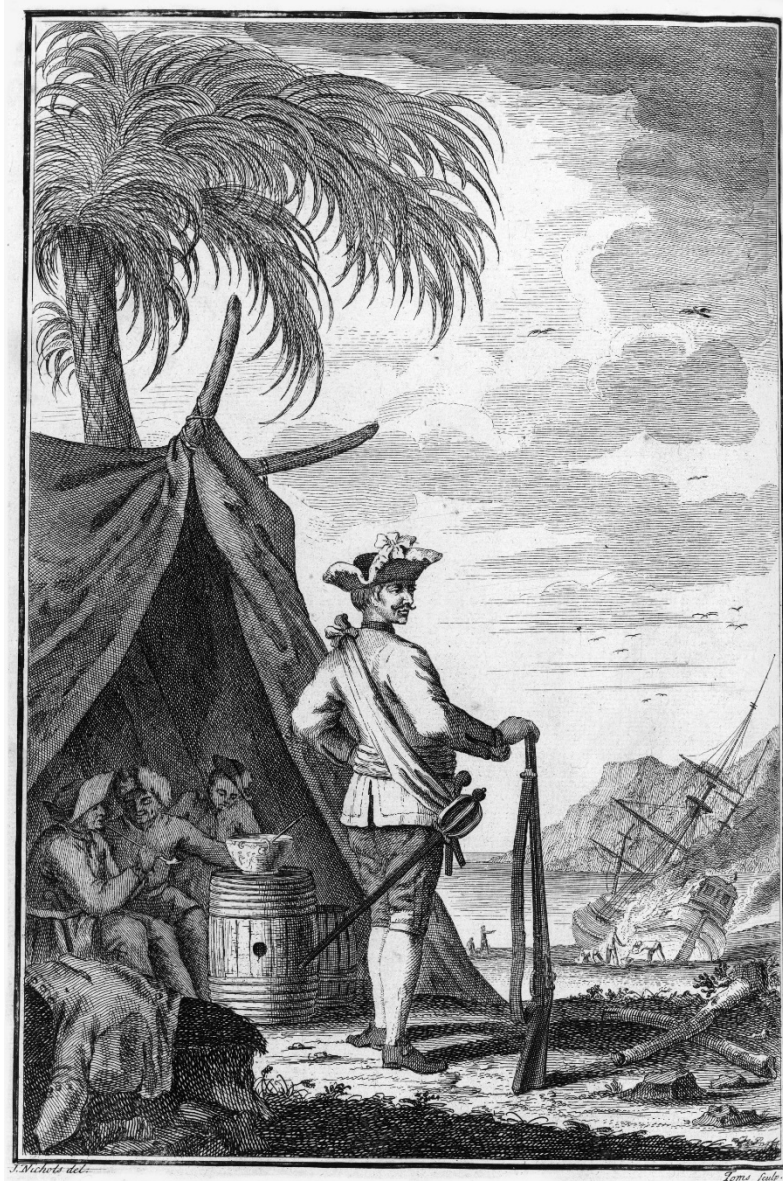


Fig. 6.1.10. Capt. George Lowther and his Company at Port Mayo in the Gulph of Matique. Early 18th century. Officers of pirate captain Lowther drink punch in the shade of a tarp, while their crew labors careening a ship in the background—a labor division very much like that on La Tortuga. Courtesy of the John Carter Brown Library at Brown University, Providence, RI

in the background, probably at Isla de Maio, Cape Verde (Fig. 6.1.10). In fact, agglomerations of ballast and coral stones were found in the Dunes and Fringe activity areas as well as in various loci throughout the sandy plain beyond. I suggest that these stones might have been used to keep tarp stakes in place in the loose sandy matrix since



Fig. 6.1.11. Low coral-stone wall within the Barracks activity area.

constant breezes blow across the site as well as occasional stronger gusts of wind. One feature, that of an 'L' shaped coral wall formed in a wedge against the wind at the Barracks activity area, stands out as the remains of a possible shelter erected and used during the Anglo-American period (Fig. 6.1.11). There is, however, no conclusive evidence that this feature is the product of 17th- or 18th-century Anglo-American activity, with the possible exception of a silver-plated shoe buckle from the 1750s found in the corner of the structure at a depth of 25 cm. It might have been a simple low wall of coral stones that, in combination with some mangrove branch thatch or canvas or both, formed a temporary shelter from the elements.

Further evidence suggests that sitting on land might have been customary for the captains at Punta Salinas throughout the 18th century.¹⁷³ A letter relating the arrival of the *Scarborough* Man of War, commanded by Capt. Gregory (who confiscated the salt from all of the vessels that were at the island in March of 1768) recounts, “Captain Gregory then sent his lieutenant on shore, to acquaint all the captains of the vessels, that all their salt should be taken from them [...] About two o’clock Captain Gregory, with one of the masters under his convoy, came on shore himself and repeated to us the same things” (Anonymous 1768: 90). Another revealing snippet mentions that the man that the salt-gathering vessels had left by the saltpan to guard the salt was threatened by Capt. Gregory to the effect that if he would not move to the shore he would “fire into the tent, and carry him on board the *Scarborough*” (Anonymous 1768: 92). From these excerpts, it can be inferred that captains were often on land, probably sitting in the shade of tarps and tents while overseeing the labor of their crews on the saltpan beyond. Furthermore, in 1771 and 1784, the instructions of the Captain General of Venezuela to the corsairs of the *Compañía Guipuzcoana* stated that they could evict any foreigner living in a *barraca* [shelter] on the Venezuelan islands including that of La Tortuga (Aizpurua 1993: 357, 362). It was in the wake of this instruction that Vicente Antonio de Icuza drove out thirty “Englishmen” in 1781 who probably had *barracas* set up by the saltpan (Amezaga 1966: 94). It seems that in the 18th century the seafarers who arrived at Punta Salinas to engage

¹⁷³ There is no convincing documentary or archaeological evidence that sitting on land while not working on the saltpan was the *modus operandi* in the 17th century up until around 1720. This puzzling difference will be fully discussed in chapter 7 as I believe it has to do with larger structural changes in seafarers’ practices.

in salt exploitation spent a considerable portion of their daytime on land, whether working on the saltpan or sitting in the shade of makeshift shelters or “huts”. How the shipboard hierarchies of power, the seafarer’s socio-economic status and labor relations played out spatially while they were on land at Punta Salinas will be discussed further along in this chapter.

I now turn to discuss the foodways at Punta Salinas, and hopefully reconstruct some of the associated assemblages of practice that entangled humans and things around the “cultural, social, and economic practices related to the production and consumption of food, from procurement and preparation to presentation, consumption, and disposal” (Metheny 2015: 221). I begin with food procurement and discuss ship victualling on 18th-century voyages to La Tortuga.

SHIPBOARD VICTUALS

The Anglo-American and Bermudian seafarers who arrived at the saltpan of La Tortuga to spend various weeks and even at times more than a month in the intense business of salt raking, packing and loading brought along with them their shipboard victuals or provisions.¹⁷⁴ Due to the constraints of food preservation practices, space, practicality and cost, ship captains carried a limited range of standard rations on board. Proteins were most often heavily salted meats—usually beef and pork in cask—as well as the widely-disliked stockfish (most often salted cod) (Earle 1998: 87). Some vessels, especially on longer voyages, carried live animals such as chickens, turkeys, pigs and sheep to provide

¹⁷⁴ *Boston News-Letter* May 12, 1768.

fresh meat as a necessary respite from the salted regimen (Spalding 2015: 90–91; Vickers 2007: 91, 190; 2006: 42, 44). Carbohydrates or starches included dried peas and beans, root vegetables (potatoes, sweet potatoes, yams and turnips) and oats, barley and corn groats (Earle 1998: 88–89). The ubiquitous *tack*—the term seafarers gave to bread—came in the form of dry and hard sea biscuits (hardtack) and fresh-baked bread (soft tack) (Oliver 1995: 105). Fats such as butter and suet were essential for adding flavor to meals and were highly esteemed by seafarers (Earle 1998: 87; Oliver 1995: 105). Molasses and honey, and sometimes raisins, were the usual ingredients for making sweet puddings, pies and cakes (Oliver 1995: 105–108). Limited greens included such hard vegetables as cabbage and squashes which preserved reasonably well (Oliver 1995: 107).

In reconstructing the victuals of seafarers at Punta Salinas, we do not have to rely solely on the above general knowledge as we have specific and detailed information regarding the provisions that were on board the ships at La Tortuga from an extraordinary set of documents. As has been discussed in previous chapters, the Bermudian brigantines *Porgey* and *Roach* and the sloop *Polly* were intercepted and seized while loading salt at La Tortuga on February 18, 1766, by the Spanish corsairs *Nuestra Señora de Aranzazu* commanded by Vicente Antonio de Icuza and the *Santa Ana* commanded by Juan José Gamón.¹⁷⁵ The Bermudian vessels were taken to La Guaira and their captains and crews jailed. In the ensuing legal battle to free the seafarers who'd been unjustly locked up under the pretense that they were engaging in contraband with the Venezuelan coast,

¹⁷⁵ AGN, Compañía Guipuzcoana, Tomo XV, Expediente 16, Folio 1.

the Compañía Guipuzcoana had the captains Jeremiah Bassett, Willis Morgan and Benjamin Stiles draft inventories and itemize the articles confiscated aboard the vessels by the Spanish corsairs, stipulating the cost of every item (MHMCB 1996 [1766]: 203).

Table 6.1.2 shows the stores and provisions on board each one of the three Bermudian vessels. The sloop, being the smallest of the three vessels, carried less provisions. It is probable that once at Punta Salinas, the Bermudians from these three ships shared their stores amongst each other as they had all sailed together to La Tortuga for salt. The provisions from these vessels generally fall within the norm of what I have described above as the standard regimen on board Anglo-American ships, and a diet based solely on these items would have probably been quite dull. There are, however, a few items that stand out from the inventories. Apart from the ubiquitous tack, it is of note that rice and yams seem were the staples of this voyage. The two brigantines also carried livestock (although it is uncertain if these were fowl or mammals) and the sloop had two large coops of fowl. It is probable that some of these animals might have been killed and

Table 6.1.2. Dry and live provisions aboard the Bermudian Brigantine *Porgey*, Brigantine *Roach*, Sloop *Polly* captured by Spanish corsairs in 1766.

<i>Brigantine Porgey</i>	<i>Brigantine Roach</i>	<i>Sloop Polly</i>
3 barrels of pork	3 barrels of pork	2 barrels of pork
3 barrels of beef	3 barrels of beef	2 barrels of beef
820lb of bread	750lb of bread	520lb of bread
200lb of yams	200lb of yams	40lb of rice
50lb of rice	50lb of rice	3 bushels of corn
1 barrel of flour	1 barrel of flour	4 bottles of mustard & onions
½ a keg of peas	½ a keg of peas	2 large coops (of fowl)
1 firkin of butter	45lb of sugar	
60lb of brown sugar	25lb of white sugar	
£10-worth of unspecified livestock	£5-worth of unspecified livestock	

(MHMCB 1996 [1766]: 207–210, 216–217).

consumed at Punta Salinas while the seafarers were raking salt. Captain Benjamin Stiles of the *Polly* also had a personal keg of butter to his name, listed separately from the ship stores (MHMCB 1996 [1766]: 218). Finally, the bottles of mustard and onions probably contained a wet prepared spicy mustard that included vinegar, spices and onions (Jones 2010: 130; Jones and Smith 1985: 60). The 25 lb. of white sugar on board the *Roach* will be discussed in a later section on drinking.

The New London (Connecticut) Sloop *Gull* was outfitted to sail to Barbados in December of 1763 and was provisioned for the voyage with the stores listed in Table 6.1.3. Anchored at Barbados, in March of 1764, the *Gull's* master (probably John Tiley) was instructed to proceed to La Tortuga along with the convoy headed by the H.M.S. Beaver and gather salt there (Ship paper of the Sloop *Gull* 1761–1765). It can be presumed that the items on board the ship listed in the bill of stores from December 1763 would have been used on La Tortuga, and possibly later complemented with extra provisions from Barbados. Most of the fare of salted meats and fish, flour, beans and tack is regular,

Table 6.1.3. Dry and live provisions from the bill of stores on board the sloop *Gull* bound from New London for Barbados in December of 1763 and 25th October of 1765.

Sloop <i>Gull</i> , December 1763	Sloop <i>Gull</i> , October 1765
20 barrels of beef and pork	20 barrels of beef and pork
4 barrels of fish	500lb of cheese
3 barrels of flour	800lb of bread
2 hogsheads of beans	20 dozen poultry
600lb of bread	5 barrels of apples
2 barrels of nuts	
8 coops of fowl	
24 bundles of hay	
500 bushels corn and oats	

(Ship papers of the sloop *Gull*, VFM 1450, Manuscripts Collection, G. W. Blunt White Library, Mystic Seaport Museum, Inc.)

although there are two exceptions. The two barrels of nuts might have been salted peanuts, and could have offered the seafarers a slight change in diet. The eight coops of fowl¹⁷⁶ are further evidence that eating fresh meat was not uncommon aboard these small merchant ships, and fresh eggs also possibly could have been available. In fact, when the ship sailed to Barbados two years later it took 240 chickens with it on board.¹⁷⁷ It is probable that part of the provisions of corn and oats on board the *Gull* was destined to feed the fowl, whereas the hay would have been fed to the horses that were to be sold on Barbados (Ship paper of the Sloop *Gull* 1761–1765). The 1765 voyage of the *Gull* also had 500 lb. of cheese and five barrels of apples on board. Although it is not known if the sloop sailed to La Tortuga on that occasion, these items offer us further glimpses into the provisions that would have been available for New Englanders at sea and on La Tortuga.

It is exceedingly difficult to trace the archaeological signatures of most of these provisions themselves at Punta Salinas with the exception of the salted meat and livestock that will be discussed in the following section on food preparation. Nonetheless, the probable presence of some victuals can be inferred through the archaeologically-recovered objects. Before discussing the material remains from Punta Salinas, it is important to explain the method I used to obtain the minimum number of vessel (MNV) counts used throughout this dissertation. The archaeological excavations conducted at

¹⁷⁶ It is uncertain what size one coop was or how many fowl a coop contained, but given that the same ship two years later had 240 chickens on board, eight coops seems reasonable.

¹⁷⁷ This seems to have been more commonplace. Underwater archaeological excavations of the Readers Point vessel that sank sometime after 1775 in St. Ann's Bay, Jamaica, brought to light chicken (*Gallus gallus*) bones composing 7.1% of the total faunal assemblage. These bones probably pertained to chickens carried live in coops aboard the ship (Cook and Rubenstein-Gottschamer 2011: 110).

the sites on the islands of La Tortuga and Cayo Sal over the past 30 years yielded an abundance of material remains. The sites themselves were not merely sampled through shovel-test-pit survey (STPs) but, rather, thoroughly excavated in large trenches that spanned the majority of the artifact-dense portions of the sites discussed. The ceramic collections thus obtained through long-term and large-scale excavations of the sites allowed for detailed cross-mending and vesselization. Close attendance to paste and glaze characteristics as well as vessel form, developed throughout the many years of cross-mending the collections, allowed me to further divide the collections by ware type in order to obtain the highest level of detail on the vessel forms present at each site. My long-term experience with manipulating the sherds from the collection greatly aided in determining what fragments of sherds that did not mend pertained to what vessels. For glass containers, MNV was calculated quantitatively due to the difficulty of accurate qualitative analysis of glass because of differential post-depositional solarization and patina of the metal. Only closures and mostly-complete bases were counted towards the MNV, with the largest number of these then determining the MNV for the bottle category. For glass tableware, only mostly complete bases counted towards the MNV (for more on MNV analysis in historical archaeology see Voss and Allen 2010). MNV counts are essential for reassembling assemblages of objects and then, in a further step, assemblages of practice involving human communities of the past. This is because people in the past in most cases did not interact with broken bits and pieces of ceramics and glass but with whole usable vessels. Thus, assemblages of practice cannot be constructed on

the merely *quantitative* basis of sherd counts, but, rather on both *quantitative* and *qualitative* data from MNV counts.

Six glass storage vessels with wide mouths, probably used for storing pickled vegetables and fruits as well as preserves or condiments or both, were found throughout the three activity areas. This suggests that seafarers were bringing items—similar to the bottles of mustard and onions onboard the *Polly*—down on land to flavor what might have otherwise been insipid meals (Table 6.1.4). Two are Dutch/Belgian wide-mouthed case bottles with a flanged lip dating to between c. 1725–1780 (Fig. 6.1.12, 1) (van den Bossche 2001: p. 347, plate 286; McNulty 2004: p. 14–15, fig. 1; McNulty 1971: p. 106, fig. 23).¹⁷⁸ Another two are mid-18th century French blue-green wide-mouthed cylindrical *flacons* (bottles) with very short shoulders and inwardly-folded everted lips, as well as two other such *flacons* with much longer tapered necks and thick fire-polished lips (Fig. 6.1.12, 2) (Harris 1979: 103–104; van den Bossche 2001: p. 210, plate 159, figs. 1 and 2). These glass bottles and jars would have probably not had a cork closure due to the size of the mouth. Rather, they would have been closed over with a waxed cloth or paper tied under the lip (Harris 1979: 104).¹⁷⁹ The presence of these various glass containers suggests that

¹⁷⁸ Alternatively, this jar could also be English (see Jones and Smith 1985: p. 65, fig. 71).

¹⁷⁹ It is important to note that in the wreck of the HMS *Swift* that sank in 1770 in a bay of Patagonia, Argentina, the contents of various sealed cylindrical glass bottles (typically used for alcohol) were analyzed. Among the numerous macro- and micro-botanical remains mustard seeds were found, suggesting that the bottles contained mustard (Elkin et al. 2011: 191–193; Picca 2011; Rodríguez 2011).

Table 6.1.4. Ceramic and glass food storage vessels recovered at Punta Salinas.

Ware/Glass Type	Vessel Form	NF	MNV
Ceramic			
New England redware	Jar, pot	111	7
	UID	33	-
English brown stoneware	Jar	13	2
American or German Stoneware	Jar	5	1
Subtotal Ceramic Vessels		162	10
Glass			
Dutch/Belgian wide-mouthed case bottles	Wide-mouthed case bottle	2 (necks)	2
French wide-mouthed cylindrical <i>flacon</i>	Wide-mouthed cylindrical <i>flacon</i> (very short shoulder and inwardly-folded everted lip)	2 (necks), 2 (body sherds)	2
French wide-mouthed cylindrical <i>flacon</i>	Wide-mouthed cylindrical <i>flacon</i> (long tapered neck and thick fire-polished lip)	2 (necks)	2
French short-necked square "case" <i>flacon</i>	"Case" <i>flacon</i>	20 (necks), 19 (bases), 232 (body sherds)	25
French tall-necked cylindrical <i>flacon</i>	Tall-necked cylindrical <i>flacon</i>	2 (necks), 2 (bases), 5 (body sherds)	2
Subtotal Glass Vessels		288	33
TOTAL		450	43



Fig. 6.1.12. (1) Dutch/Belgian wide-mouthed case bottles with flanged lip. Black to dark-green glass. Second to third quarter of 18th century (c.1725–1780). Approx. height 21.5 cm, approx. base dimensions 9.5 x 9.5 cm and mouth diameter 8.8 cm (approx. dimensions taken from reconstruction drawings). (2) French wide-mouthed cylindrical *flacon* with very short shoulder and inwardly-folded everted lip. Blue-green glass. Mid-18th century. Mouth diameter 6.5cm.

seafarers at Punta Salinas could have not only been consuming such savory fixings as mustard and onions but also anchovies, fruit preserves, brandied fruit, ketchup, India soy and Quin's sauce plus pickled condiments such as ginger, mangoes, gherkins, walnuts, cauliflowers, capsicum, capers, olives and mushrooms, among others (Harris 1979: 104; Jones 2010: 133–135; Jones and Smith 1985: 60–62; McNulty 2004: 15).

French multi-purpose *flacons* found at Punta Salinas also might have contained condiments. In her analysis of the inventories at the Fortress at Louisbourg in Nova Scotia, Jane Harris found that these *flacons* were most often filled with contents other than wine and spirits (which were usually stored in black and dark-green glass *bouteilles*), contents such as oils, vinegar, *eau de toilette* and apothecary products (Harris 2000: 235, 240–241). A minimum number of 25 short-necked square “case” *flacons*, generally dating to the mid-18th century, were recovered at Punta Salinas. At least nine of these are not the regular blue-green glass that was commonly produced at French glasshouses but, rather, are made of clear, brown and pale violet glass with varying degrees of post-depositional patina and solarization (Fig. 6.1.13, 1) (Harris 2000: 239–242). Two tall-necked cylindrical *flacons*, dating to the mid-18th century, were also found (Fig. 6.1.13, 2) (Harris 2000: 245–246).

At least ten ceramic storage vessels have been recovered at Punta Salinas (Table 6.1.4). Seven vessels are New England redware probably dating to the second half of the



Fig. 6.1.13. (1) French short-necked square “case” flacons. Cracked-off and fire-polished lip. Blue-green, brown, colorless and solarized pale violet glass. Mid-18th century. Approx. height 21 cm, base dimensions 6.5 x 6.5cm. (2) French tall-necked cylindrical flacons. Everted, cracked-off and fire-polished lip. Blue-green glass. Mid-18th century. Approx. height 24.5 cm, base diameter 5 cm.



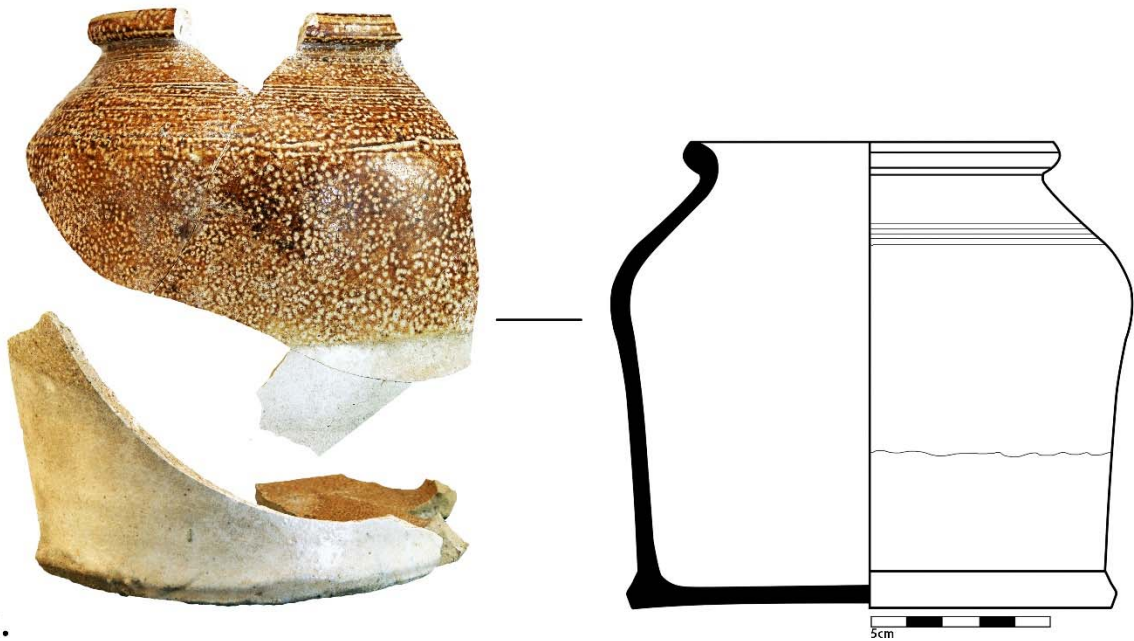
Fig. 6.1.14. (1–2) New England lead-glazed redware pots/jars. Brown lead glaze on interior. Second half of 18th century. (3) New England lead-glazed redware ovoid jar. Green lead glaze on interior and part of exterior. Second half of 18th century. Approx. height 23 cm, mouth diameter 10.5 cm. (4) New England black-glazed redware wide-mouthed pot or jar. Second half of 18th century. Thick black glaze on interior and exterior. Base diameter 19.5 cm, mouth diameter 15 cm.

18th century. One is an ovoid jar¹⁸⁰ that is glazed on the interior and partially on the exterior in a thick green lead glaze (Fig. 6.1.14, 3) (Watkins 1950: p. 109, figs. 42 and 43, p. 117, fig. 60). Such a jar was designed for preserves and would have paper or cloth tied over the mouth and made relatively airtight with wax (Watkins 1950: 238). The other four are wide-mouthed pots or jars with brown lead-glazed interiors (Fig. 6.1.14, 1–2) (Heindl 2010: 144–145, p. 193, fig. 13; Pendery 1985: 107–109; Watkins 1950: 234). Two are wide-mouthed pots or jars with a thick black glaze on the interior and exterior and another two fragments might also belong to such pots/jars or possibly to pitchers (Fig. 6.1.14, 4) (Gibble 2005: 52–53, p. 55, fig. 20; 2001: 130–134). These multi-purpose pots would have been used for storing ingredients such as butter, suet or lard and could also be used for baking beans and making pudding (Gibble 2001: 118–122; Jones 1993: 30–33; Watkins 1950: 234). It is noteworthy that these are local New England earthenware and not British imports. They were certainly made during the 18th century in the Anglo-American seafarers' home ports including Philadelphia, Portsmouth (N.H.), New York and the Massachusetts Bay area, among others (Gibble 2001, 2005; Heindl 2010; Magid and Means 2003; Myers 1977; Pendery 1985; Turnbaugh 1983; Watkins 1950). Finally, there are three stoneware storage vessels. Two are English brown stoneware jars, probably from London and dated to the mid-18th century (Fig. 6.1.15, 2) (Dellino-Musgrave 2006: p. 119, fig. 7-2; Glenn 2002: 185; Skerry and Hood 2009: 72–74). One further rim sherd and various body fragments with a cobalt-blue design seem to belong to at least one

¹⁸⁰ This ceramic vessel form is also classified as a “pot” according to the widely-used historical archaeological Potomac Typological System (POTS) for 17th-century ceramics in the Chesapeake (Beaudry et al. 1983: 36). In fact, “jar” does not appear in early New England potter’s lists (Watkins 1950: 238).



1.



2.

Fig. 6.1.15. (1) American or German stoneware jar fragments. Cobalt-blue painted design. Prob. 18th century. Largest frag. length 5.3 cm. (2) English brown stoneware wide-mouth jar. Prob. 18th century. Height 13.5 cm, base diameter 14 cm, mouth diameter 10.3 cm.

American or German stoneware jar, probably from the 18th century (Fig. 6.1.15, 1) (Hudgins 2007; Skerry and Hood 2009: 199, 201, 204).

The larger armed brigantine *Porgy* also had a cruet stand, a salt stand, a pepper box and a sugar box on board (MHMCB 1996 [1766]: 209–210). Since glass and ceramic containers were often reused and owned for many years, it is quite reasonable to suggest

that other vessel types (which will be discussed further in the section on drinking) such as regular wine bottles, case bottles, French *fioles* and German stoneware bottles and jugs were used for such condiments as oils, vinegar and various prepared sauces. Moreover, staved wooden containers, especially smaller kegs or casks (such as the firkin of butter from the *Polly*) of which no archaeological evidence remains at Punta Salinas, might also have been brought down on land to be used in food preparation and consumption (Jones 1993: 27–30).

These items, meant to store fancy condiments such as pepper, vinegar and oil, might have been part of the paraphernalia on the captain's quarterdeck. It is possible such things accompanied captains when they debarked at Punta Salinas. Even though the stereotype of bland and tasteless food at sea seems to be substantiated in many cases, the indirect archaeological evidence indicates that seafarers setting foot on La Tortuga (in most cases probably captains who had the most buying power) brought along with them condiments and seasonings that could flavor and enhance the meals they cooked and consumed on this deserted island.

LOCAL RESOURCE PROCUREMENT

Even though shipboard provisions were mostly adequate calorically—and could be livened up with various condiments—they were often nutritionally deficient and at times even spoiled, gnawed-on by rats and infested with vermin (Earle 1998: 90; Fury 2012: 195). For these reasons, seafarers eagerly sought to complement their meager diets with anything fresh they could harvest from the sea en route or buy or find once they could disembark, be that at a bustling port or on uninhabited island like La Tortuga. Merchant

seafarers were often capable fishermen and caught a wide variety of sea life on their voyages (Vickers 2007: 190). Ships carried fishing tackle such as lines, nets, “fish-gigs” and harpoons (Earle 1998: 89; Rediker 1989: 128). Fishing offered a welcome change in diet while at the same time providing a much-needed “competitive pastime” (Jarvis 2010b: 88). It also cut operating costs for captains and owners.

The three Bermudian vessels again offer an excellent glimpse into the fishing gear that would have been available on board ships arriving at Punta Salinas. The *Porgey* had eight fishing lines, six dozen fishing hooks, and three pairs of fish-gigs (MHMCB 1996 [1766]: 207). The *Roach* carried fishing lines, hooks and wire, a fish hook and pendant (probably a lure), plus a harpoon (MHMCB 1996 [1766]: 210). Finally, the *Polly* featured four large fishing lines, four small ones, and four dozen fishing hooks (MHMCB 1996 [1766]: 216). The gear mentioned in the inventories would have been more than sufficient to catch a variety of pelagic fish by the method of trolling. In trolling, lines with hooks and bait or lures would have been drawn through the water behind the slowly moving vessel.

Unlike their gastronomically unadventurous 17th-century Dutch predecessors, the Anglo-American seafarers at Punta Salinas consumed a variety of resources the sea around them had to offer. Constrained the weeks they were confined to the saltpan, the seafarers were nevertheless enabled to fish in their time off from work. Before we turn to discussing the fishing methods and gear employed at Punta Salinas, let us first look at the fish remains that have been recovered at the site as these will supplement our information about fishing techniques. A total number of 192 individual specimens were recovered from the Dunes activity area. Most of these specimens were found while

screening the sand excavated from the trenches through 1 mm-wide metal meshes. Notably, fish specimens were not found in either of the other two activity areas, even though the backfill from the trenches excavated there was also screened. This might be due to preservation. The Dunes matrix is mainly loose dry sand that conserved bone material very well, whereas the Fringe and Barracks activity areas are lower-lying and closer to the water table level. This exposed organic matter to brackish water and decay. It seems, however, that anthropogenic rather than natural factors were responsible for differential recoverability or presence or both of fish bones within all three activity areas. All of the fish remains were in fact recovered in trench D-1 clustered around a brick-lined fire pit (Fig. 6.1.8). This fire pit was the only such large structured feature associated with cooking discovered at the site. It will be discussed in detail in the following section on food preparation.

Amongst the 192 individual fish specimens, various fish taxa have been identified (Table 6.1.5). The most abundant taxon is Sparidae represented by a minimum number of 24 individuals (NISP=75) of the genus *Calamus* which includes various species of porgy. Porgies are common in clear shallow water and coastal seagrass beds. The second most common taxon is Epinephelidae; a minimum number of 16 individuals was identified (NISP=52). These individuals were all most probably groupers. These fish are common reef dwellers, preferring deeper reefs with crevices and caves to seek shelter and catch prey. Two specimens were ascertained; a left and right dentary belonged to very large individuals. Fourteen individuals (NISP=52) of the taxon Lutjanidae were also identified. These are snappers which are usually found on reefs of varying depths, but they

Table 6.1.5. Fish remains from the Dunes activity area, Punta Salinas.

Family	Taxon & vernacular name	Skeletal element	NISP	MNI	Observations
Dunas					
Scaridae	<i>Scarus</i> sp. (most probably <i>Scarus guacamaya</i>) (Rainbow parrotfish or pez loro)	Premaxillary right	1		
		Premaxillary left	1		
		Subtotal	2	1	
Sphyraenidae	<i>Sphyraena barracuda</i> (Great barracuda or <i>picúa</i>)	Premaxillary right	2		One of them is a small fragment
		Premaxillary left	3		
		Dentary	3		Fragments
		Dentary left	1		
Subtotal		9	3		
Sparidae	<i>Calamus calamus</i> (Saucereye porgy or <i>cachicato</i>)	Premaxillary right	22		
		Premaxillary left	24		
		Dentary right	11		
		Dentary left	18		
		Subtotal		75	24
Lutjanidae	<i>Lutjanus</i> sp. (snapper or <i>pargo</i>)	Premaxillary right	13		
		Premaxillary left	11		
		Dentary right	14		
		Dentary left	14		
		Subtotal		52	14
Serranidae	<i>Epinephelus</i> sp. (Grouper or <i>mero</i>)	Premaxillary right	15		
		Premaxillary left	16		
		Dentary right	11		One of them very large
		Dentary left	10		One of them very large
		Subtotal		52	16
Diodontidae	<i>Diodon hystrix</i> (Spot-fin porcupinefish or <i>tamboril pintado</i>)	Dentary	8		
Subtotal		8	8		
Haemulidae	<i>Haemulon sciurus</i> (Blue-stripped grunt or <i>coro-coro</i>)	Premaxillary right	2		All specimens from the largest specimens within the range
		Premaxillary left	2		
		Dentary right	3		
		Dentary left	1		
		Subtotal		8	3
Carangidae	<i>Caranx hippos</i> (Crevalle jack or <i>ojo gordo</i>)	Dentary right	1		
		Subtotal		1	
UID	UID	Premaxillary & dentary	30		Small fragments
		Subtotal		30	
Chelonioidea (sea turtles)	UID	Various unidentified fragments	6	-	
		Subtotal		6	-
TOTAL			192	57	

+ 1226 UID small and medium-size fish vertebrae

occasionally breed on seagrass beds or in shallow waters as well. Three individuals (NISP=8) belonging to the taxon Haemulidae were also ascertained. These grunts are ubiquitous on the reefs of the Venezuelan Caribbean.

Three individuals (NISP=9) of the species *Sphyraena barracuda* were found. Great barracudas regularly occur in nearshore coral reefs, seagrasses, mangroves and in the

open ocean. One individual (NISP=1) of the taxon Carangidae was discovered. This was probably a *Caranx latus* or Horse-eye jack, which is a pelagic fish often found passing over coral reefs. Also, one individual (NISP=2) of the taxon Scaridae was confirmed, this being a parrotfish, a reef-dwelling bottom feeder. Finally, eight dentaries of *Diodon hystrix*, the Spot-fin porcupinefish, representing eight individual fish were also recovered. The presence of such a considerable number (when compared to the other fish taxa) of these fish in the Dunes activity area is puzzling. Porcupinefish have a potent and often lethal neurotoxin—tetrodotoxin—present in their skin, liver, gonads, and viscera. They can be eaten only if the toxic parts are removed with the utmost caution. For this reason, it is improbable that these fish were consumed by the seafarers. These fish are very rarely caught with hook and line as they have large plate-like mandibles with which they crush the carapaces of crustaceans and shells of mollusks; thus they can crush fishhooks with ease.¹⁸¹ Rather, they might have been found washed up on shore. Desiccated porcupinefish are regular finds on storm terraces where their thick skin becomes hard as leather. They might have been collected by the seafarers as curiosities and brought to the campsite. Alternatively, the seafarers might also have collected desiccated porcupinefish carcasses to extract their long hard spines for the purpose of modifying them into implements for punching or, perhaps, sewing canvases for tarps or mending sails. The hard cartilage of the spines would not have survived in the archaeological record.

¹⁸¹ I have only managed to catch a porcupinefish with hook and line after hooking onto the flesh above its lip (the fish was then released unharmed).

During the two field seasons in January and August of 2010 at Punta Salinas, the archaeological team caught porgies, snappers and grunts while bottom fishing at night from the shore over the reef using a baited hook and line with attached lead sinker. All of the fish the seafarers ate at Punta Salinas would have been easily caught by bottom fishing with hook and line, lead sinkers and bait, either by casting the lines from the seashore or from on board vessels anchored in Punta Salinas Bay. The excavations in the Dunes and Fringe activity areas also brought to light some of the fishing gear used by the seafarers at the site. One large 6.7 cm-long iron fishhook would have been used only for catching very large groupers (Epinephelidae), snappers (Lutjanidae), sharks (Carcharhanidae), rays (Dasyatidae, Myliobatidae), Great barracudas (*Sphyræna barracuda*) or large jacks (Carangidae). The fishhook would have had a sharp point and barb and was probably tied to the leader wire via a snell knot, as the remnants of a copper leader wire tightly wound around its shank indicate (Fig. 6.1.16, 2). A smaller 2.4- cm iron hook was also found (Fig. 6.1.16, 1). Eight lead sinkers or weights were also recovered, six of which are rudimentary spherical sinkers with holes running through the middle. One is spherical with a circular groove molded into its circumference and another is a more refined tear-shaped sinker with a copper-alloy hoop attached to one end (Fig. 6.1.16, 4–6).

In order to improve their casting distance from shore, the seafarers might have attached a lead sinker at the end of a stiff copper leader wire much like one found at the site (Fig. 6.1.16, 3). Alternatively, such a wire might have had another wire attached to

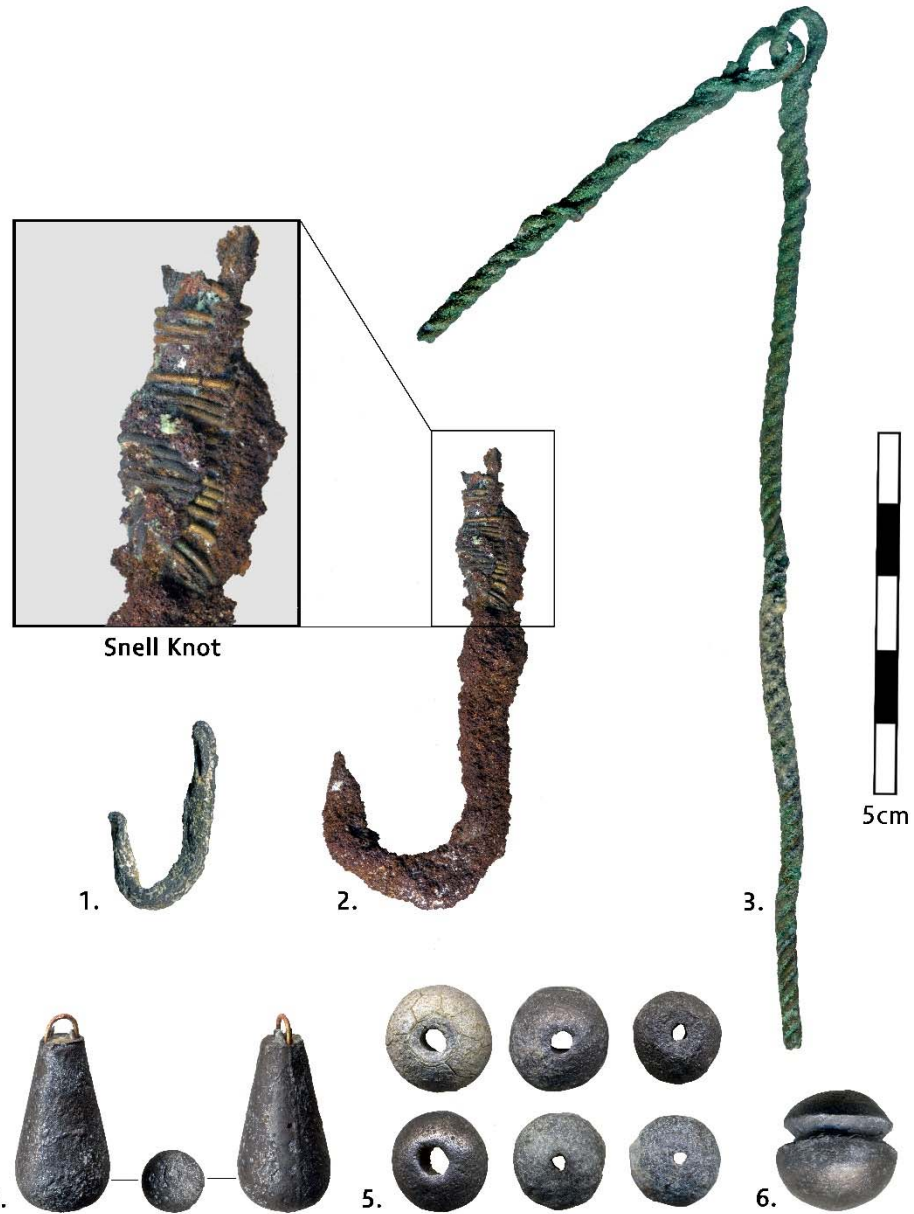


Fig. 6.1.16. (1) Small hook; (2) large iron hook with copper wire wrapped in snell knot around shank; (3) copper leader wire; (4) tear-shaped lead sinker with copper-alloy hoop; (5) six spherical lead sinkers; (6) lead sinker with circular groove molded in circumference.

make a three-way swivel allowing the hook more movement on the sea bottom—two such configurations could have allowed attaching two independently swiveling hooks to a line and sinker. Various other used and unused copper wire pieces, possibly from fishing

leaders, were found at the site, indicating that the seafarers were engaged in preparing their fishing rigs on land and probably fishing from the shore at Punta Salinas.

Fish were, however, not the only creatures captured and consumed at Punta Salinas. A fragmentary bone from an unidentified seabird was recovered. It cannot, however, be determined if the remains were not at the site as a consequence of natural death and deposition. The paucity of bird bones probably indicates, much like today, the absence of nearby colonies near the saltpan during the 18th century.¹⁸² The seafarers also collected West Indian top shell (*Cittarium pica*) from the intertidal zone beneath the coral stones on the storm terrace to the east of the saltpan. These were in fact the only mollusks targeted for food at Punta Salinas. Other edible bivalves and gastropods were also found but in marginal numbers. These included *Chama sp.*, *Astrea sp.*, *Arca zebra* and *Lobatus spp.* The numerous test pits dug beyond the three activity areas, primarily throughout the sandy plain, identified small concentrations of material remains. There are 12 such small clusters (between 20 and 40 square meters each) that I term *quigueros* (*quigua* [Spanish vernacular for top shell] middens) since most of these small activity areas feature clusters of top shell remains lying just below the surface to a depth of 15–25 cm. These *quigueros* also include large stones (mostly ballast and some coral stones) clearly visible on the surface, though their lower portions were usually buried well within the sand. These possibly served as tarp stake weights. Among these clusters of stones and top shells there is oftentimes found a darker sandy matrix, indicating that there was a

¹⁸² This contrasts sharply with both sites at Cayo Sal, where, as shall be seen in Part II of this chapter, birds played a sizeable role in the diet of seafarers and saltpan workers.

hearth or hearths (although the strong aeolian erosion blew away most ashes and charcoal after fires ceased). These *quigueros* also contained fragments of ceramic tableware, glass and metal artifacts that will be discussed further on.

In his logbook recounting the voyage of the brigantine *Mary Ann* of Hartford to La Tortuga in 1748, Jonathan Easton recorded that the ship's crew "...went to walk [at Punta Salinas] & our popel cach [sic] a number of craw fish & wilks [sic] and caught many aboard we have over board sailors" (Easton 1748). During the field seasons at the site we also occasionally recovered and cooked top shell and fed upwards of eight people with an hour of gathering the molluscs. The mandible fragments of one individual lobster (NISP=1) were also found at the site, suggesting that just as Easton had noted, "craw fish" were also eaten by the seafarers. The lobsters caught by Easton's men and the one found at Punta Salinas were probably caught bare-handed by men wading in the water or speared with a harpoon or fishing gig. Lobsters and crabs could also have been caught bare-handed among the rocks and close to the shore at night with the aid of a bright torch (Dawson 2005: 207).

Sea turtles seem to have formed a small portion of the diet of the seafarers. They are represented by six specimens (NISP) at the Punta Salinas site. Sea turtles were easily caught on the wide and long beaches of the island when they came to nest during the night. Exhausted female turtles were ambushed and once turned on their carapaces could no longer move. Perhaps the best published instance of catching turtles on La Tortuga comes from the account of the shipwrecked Englishman Henry Pitman, who during his several-month-long stay on the island in 1687 survived together with a few companions

and an Amerindian slave almost exclusively on the basis of the meat of these large sea creatures (Pitman 1903 [1689]: 456–458). He even built small “shades” to protect the turned turtles from the sun and keep them alive so as to have a constant supply of fresh meat (Pitman 1903 [1689]: 456). Turtles could be kept alive outside of the water for a long time, and were also considered a delicacy in New England. “Turtle frolics” —large elite parties thrown by wealthy merchants and regular seamen who had received or brought sea turtles from the West Indies—were a popular form of entertainment (Anonymous 456; Downey 1947: 190; Goodwin 2002: 139–40; Hunter 2001: 199). The seafarers would still have been on La Tortuga in most cases during the beginning of the nesting season of the hawksbill turtle (*Eretmochelys imbricata*) in May (Antczak 1999: 232). It is possible that the low number of turtle remains recovered at the site at Punta Salinas is due to the fact that any turtles caught on the island were likely taken back to New England as exotic delicacies. Moreover, depending on the species, turtles can lay anywhere from 130 to 146 eggs. These might have been collected from nests by seafarers and eaten much like regular fowl eggs (Antczak 1999: 232; Dawson 2005: 227–228).

The dynamic assemblage of fishing practices at Punta Salinas entangled seafarers and things in pursuit of a freshly-caught meal. The coming together of seafarer, line, hook, sinker and bait would have provided seafarers with opportunities to blow off steam from work, trying their luck and testing their fishing skills. Depending on their tackle and expertise, they were endeavoring to put more protein on their plates. Gathering top shells on the storm terrace, conversely, required no engagement with material things. Only a keen eye, patience and the turning over of coral stones by hand.

FOOD PREPARATION

In this section I will attempt to reconstruct an assemblage of practice—namely food preparation—at Punta Salinas. Let us first discuss the archaeological features related to food preparation that were identified at Punta Salinas. The most concrete feature was found at the northeastern end of trench D-1 in the Dunes activity area (Fig. 6.1.8). The feature was a brick-lined fire pit consisting of a bed of bricks placed directly on the sand with a semicircle of coral stones forming a protective wall from the wind. The bricks and stones were not consolidated, just placed tightly one beside the other (Fig. 6.1.17). The fire pit made of a bed of bricks is reminiscent of the simple brick hearths existing on board 18th-century vessels such as the gunboat *Philadelphia*. This suggests that the seafarers on the sands of Punta Salinas were directly replicating cooking technique from onboard (Bratten 1997: p. 316, fig. A.54). The sand on top of the fire pit was dark with charcoal and carbonized organic matter. To the south and adjacent to the fire pit were scattered faunal remains including the various local species of fish previously discussed, as well as numerous West Indian top shells, sea turtle bones and the remains of one lobster. This scatter may be interpreted as a somewhat spatially delimited area for discarding food remains.

Faunal remains also included 155 NISP of *Bos taurus* (cattle) and 28 NISP of *Sus scrofa domestica* (pig) among which a minimum number of eight individuals (MNI) of each species were identified (Table 6.1.6). A large proportion of pig remains are fragments of the inferior maxilla (making calculation of MNI easier) which suggests that the seafarers gathered at the Dunes might have been consuming pork jowl. Pig head and cheek were



Fig. 6.1.17. Brick and coral-stone lined fire pit found at the Dunes activity area.

prized pieces of meat in the 18th century (Fig. 6.1.18). The MNI alone here is not as relevant as in the case of fish remains, since salted beef and pork would have included cuts from numerous individual animals mixed, salted and distributed into wooden barrels. The pig remains might represent delicacies, whereas the 155 specimens of cattle are far from negligible. They suggest that contrary to what the large number of fish remains might indicate, a significant amount of salted beef was brought down on land and consumed in the Dunes activity area. Further research into this zooarchaeological sample should examine butchery marks to determine what type of cuts these were. This would suggest the quality of these meat rations.

Table 6.1.6. Pig and cow remains recovered in the Dunes activity area, Punta Salinas.

	NISP	MNI
<i>Sus scrofus domesticus</i>	28	8
<i>Bos taurus</i>	155	4
Unidentified	36	-



Fig. 6.1.18. Pig maxilla recovered from the Dunes activity area, Punta Salinas.

Also recovered, mixed in among the bones, were numerous fragments of ceramic and glass as well as other objects to be discussed in the following section on dining. All of these remains were lying in the sheer sand of the dune at a depth of between 20 and 40 cm. The base of the fire pit was seated at around at 45 to 50 cm.¹⁸³ The fire pit was

¹⁸³ The strata of the constantly shifting sandy matrix of the Dunes activity area is unreliable, and in the absence of microstratigraphic layers it was impossible to determine which portions of faunal remains, ceramics, glass and other artifacts were cotemporaneous with the fireplace. Nonetheless, it can be

probably used repeatedly for a large part of the 18th century and could have been the focal point of seafarer gatherings at the Dunes activity area. It is noteworthy that in 1993, what was presumably a treasure hunter's hole was found in the Fringe activity area. This was the only modern anthropogenic disturbance observed at the site. Dark soil with many carbonized particles, coral and ballast stones and a few bricks were found exposed around the treasure hunters' hole. Subsequent excavation of the feature suggests that a structured fireplace might also have also existed there. However, this statement cannot be fully supported by the evidence. There were also various smaller hearths found outside the main activity areas in the small *quigueros* that I mentioned earlier. In a few cases, there are also stains of dark sand with carbonized matter; but in the main, these *quigueros* feature only scatters of West Indian top shell, some fish bones, and a few ballast and coral stones strewn about. The artifacts associated with these *quigueros* will be discussed in the following sections on dining and drinking.

Asides from the fire pit and the hearths, there is little other direct archaeological evidence indicating how meals at Punta Salinas might have been prepared or what else these assemblages of practice might have involved. Of the entire ceramic collection, the only cooking vessels found at the site were French Vallauris lead-glazed coarse earthenware *marmites* (the French term for cooking pot), also known as *canaris* (a Carib term given to cooking pots in the French Caribbean), dating to pre-1750 (Fig. 6.1.19) (Arcangeli 2012: 292, 299–306; Petrucci 1999). A minimum of three such cooking pots

reasonably assumed through contextual associations that many of the faunal remains and associated material things relate to the use of the fire pit due to their immediate proximity.



Fig. 6.1.19. Vallauris lead-glazed coarse earthenware marmite/canari lid.

were found as well as one lid (NF=37). One rim fragment of an iron cooking pot was also recovered. The cooking pot might have been hung over the fire pit from an iron hook or crane. Alternatively, if it had three legs, it could have been placed above the coals (Franklin 2005: 140–141). The lack of any other significant cooking ware suggests that either the cooking methods employed by seafarers at the site did not necessitate these vessels, or that most of them were metal sauce pans, skillets and cauldrons that would not have been broken or discarded as easily as their ceramic counterparts and were thus returned to the ships. The first possibility will be addressed when we examine the ceramic tableware which will tell us more about the types of food that were served and eaten at

Punta Salinas. Support for the second possibility can be found in the inventories of the three Bermudian ships.

The 1766 inventories do not mention any ceramic cooking vessels. This is reasonable because ceramic cooking vessels on board could be clumsy and certainly not as durable as metal ones. As regards cooking ware and implements, the well-equipped *Porgey* carried two copper sauce pans, two tin sauce pans, two iron pots, one colander and skimmer plus a spit and frying pan (MHMCB 1996 [1766]: 206–207). The *Roach* had a frying pan, a spit and a cook's ladle, while the *Polly* carried nothing related to cooking listed in the inventory (MHMCB 1996 [1766]: 210). The iron pots from the *Porgey* might have resembled cast iron cooking pots found in excavations of the North American transport sloop *Industry* shipwrecked in 1764 near the coast of St. Augustine, Florida; and of the gunboat *Philadelphia* which sank in Lake Champlain in 1776 (Bratten 1997: pp. 317, 319, figs. A.55–56, 58–59; Franklin 2005: p. 141, fig. 7-19). Captain Benjamin Stiles of the *Polly* also had a personal frying pan to his name, listed separately from the ship stores (MHMCB 1996 [1766]: 218). Since such metal vessels were rugged, their absence at Punta Salinas—aside from the single iron rim fragment—is not surprising. It is possible the disembarking seafarers put to use metal cooking pots as well as frying and sauce pans to prepare meals over the large fire pit in the Dunes activity area. They also may have used various other fireplaces beyond, burning firewood gathered from the mangrove forest surrounding the Los Mogotes Lagoon.

Six corroded iron knife blades were found at Punta Salinas. Two are complete, measuring 12 and 17.8 cm (Fig. 6.1.20, 1). The larger could have been used to clean fish,

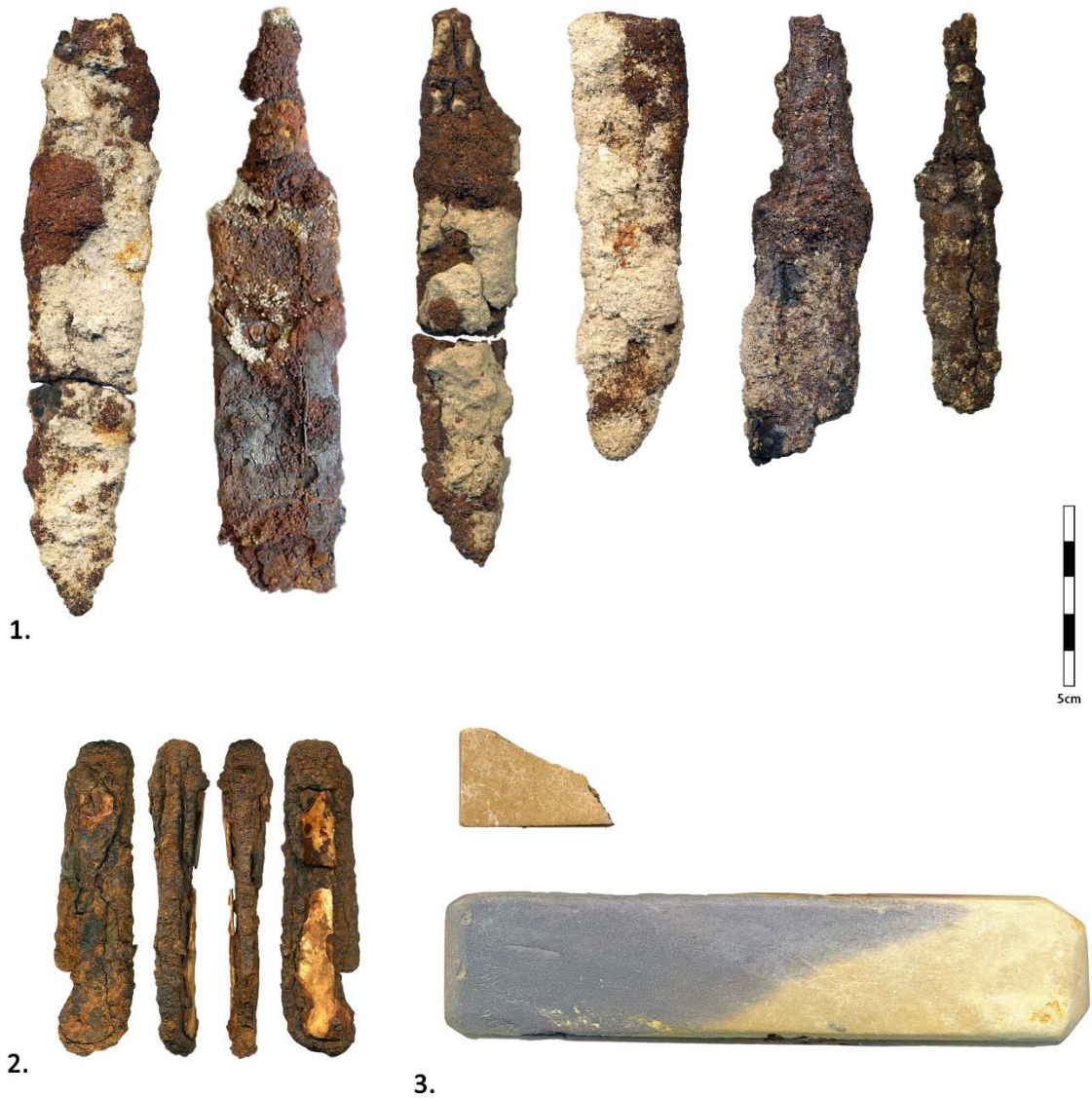


Fig. 6.1.20. (1) Various knife blades and knife blade fragments, 12 to 17.8 cm in length; (2) folding knife with bone chape; (3) stone whetstones.

shell lobsters and prepare sea turtle carcasses as well as cut salted meat victuals. The smaller may also have been used for one or more of these activities or served as a table knife used for cutting food on the plate. The remaining knife blades are broken, but the size of the fragments (11.6–12.1 cm in length) suggests that they resembled the largest complete knife blade when whole. A folding knife with a decorative bone chape was also

found (Nöel Hume 1969: 182) (Fig. 6.1.20, 2). Two whetstones were recovered as well—one complete and the other only a fragment—further indicating that knives had to be sharpened as food was being prepared for cooking and consumption on land at Punta Salinas (Fig. 6.1.20, 3).

TABLEWARE FOR THE SERVING AND CONSUMPTION OF FOOD

To this point, I have discussed the sub-assemblages of practice relating to provisioning, fishing-gathering, and cooking at Punta Salinas. Before I turn to the larger assemblage of foodways, we need to discuss a fundamental part of the evidence: ceramic tableware. By analyzing the tableware intended for the serving and consumption of various foods, we

Table 6.1.7. Ceramic tableware recovered at Punta Salinas.

Ware Type	Vessel Form	NF	MNV
English delft	Plate	243	39
	Basin	156	16
	Soup plate	1	1
	Subtotal	400	56
English creamware	Plate	184	34
	Soup plate	13	2
	Dish	3	1
	Subtotal	200	37
English white salt-glazed stoneware	Plate	164	17
	Oval platter	2	1
	Porringer	10	1
	Unidentified	51	-
	Subtotal	227	19
Whieldon-type clouded /tortoiseshell-ware	Plate	5	1
British agaware	Dish	3	1
Philadelphia-style slipware	Bowl	47	3
Albisola-type red earthenware	Plate	15	3
French lead-glazed earthenware. prob. Huveaune	Soup plate	3	1
	Dish	21	5
	Subtotal	24	6
French faïence blanche, blue on white	Plate	6	1
French faïence blanche, Provence blue on white	Plate	7	1
French faïence blanche, Provence yellow on white	Plate	1	1
French faïence brune, Rouen blue on white	Dish	17	2
Chinese porcelain	Soup plate	11	2
TOTAL		963	133

can begin to approximate the dishes seafarers at the site would have been serving and the crockery from which they ate.

A minimum 130 ceramic tableware vessels associated with the serving and consumption of food were recovered from the excavations at Punta Salinas (Table 6.1.7). Of these, ten have been identified as dishes and might have been used solely for serving food. Dishes were differentiated from plates which measure more than 10 in (25.4 cm) in diameter (Beaudry et al. 1983: 27). One creamware dish and one English white salt-glazed stoneware oval platter with a feather-edge¹⁸⁴ were found (Fig. 6.1.21, 2). These were quite fancy vessels to have been brought down on land and used at the site. Given their large size, they might have been used to serve whole fish. A further British agateware dish, dating to the second half of the 18th century, was also recovered (Fig. 2.1.21, 1) (Erickson and Hunter 2003: fig. 4; Noël Hume 1969: 132, 134; Grigsby 1993: p. 63, fig. 84). Two dishes are French faïence brune from Rouen, dating to between c. 1720–1800 (Fig. 6.1.21, 3) (Waselkov and Walthall 2002: 72). Five further dishes are probably French Huveanue slipware dating to c. 1700–1760. Since they are deeper than the rest, they might have been multi-purpose vessels for serving more liquid fare (Fig. 6.1.21, 4) (Abel 2001: 232, 1992: 30–31; Abel and Amouric 1995; Arcangeli 2012: 162, 317; Brassard and Leclerc 2001: 31).

The forms of the remainder of the ceramic flatware from Punta Salinas principally indicate direct food consumption. Ninety-seven plates were recovered. These embodied

¹⁸⁴ This design post-dates 1765 according to Noël Hume (2001: 125).

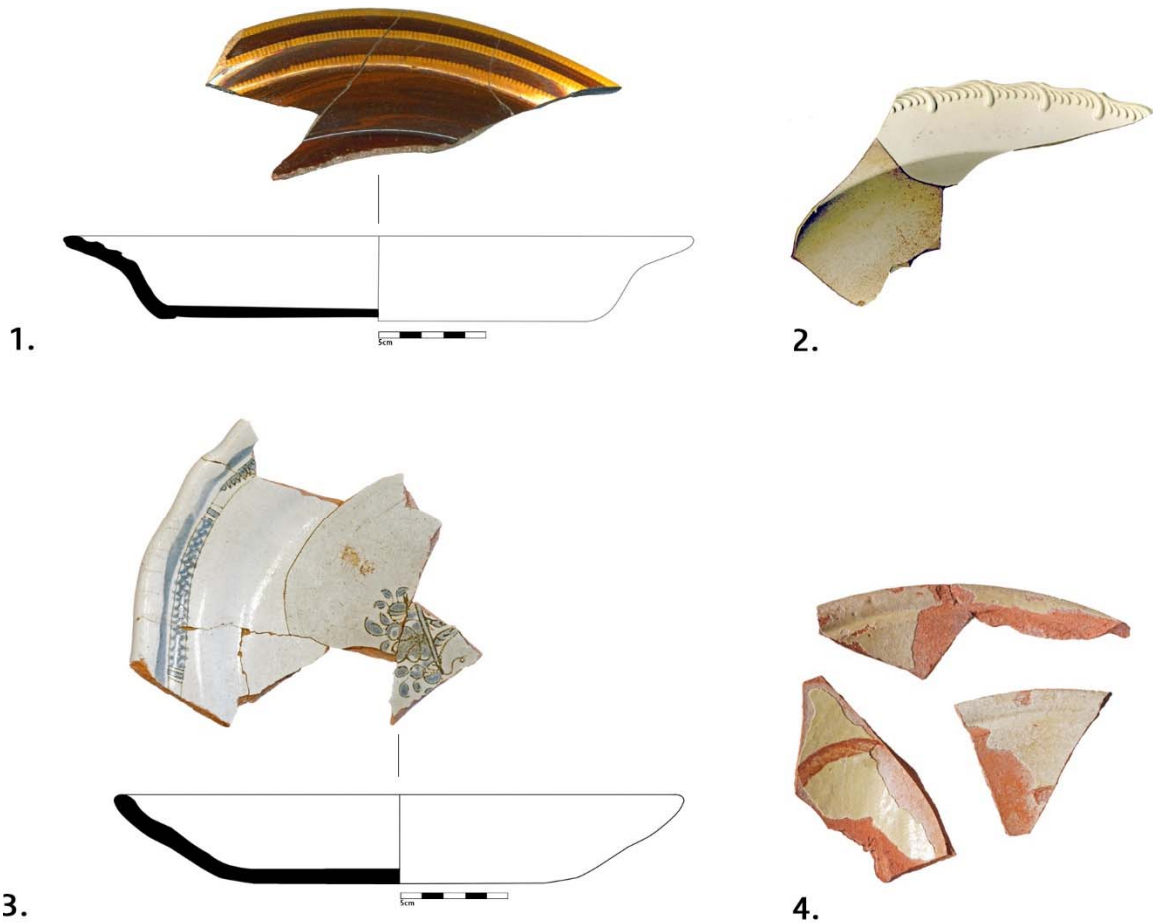


Fig. 6.1.21. Dishes for serving food recovered at Punta Salinas. (1) British agateware dish. Multi-clay paste composed of a light pink and red clay. Three bands of pipeclay rouletting on the rim and a honey-yellow glaze. c. 1750–1775. Diameter 16 cm. (2) English white salt-glazed stoneware oval platter, feather edged. c. 1740–1778. Size of fragment: 15 cm. (3) French faïence brune, Rouen blue on white. On the rim we see the Claude Guillibaud quadrillage (grid with dots) motif, and a central floral basket design. 27 cm diameter. (4) French lead-glazed earthenware dish, prob. Huveanue slipware. Orange paste and lead glaze with red decoration over white slip below. c. 1700–1760. 36 cm diameter.

the second most abundant ceramic form at the site after the punch bowl, conforming 12.45% of the total minimum number of ceramic and glass vessels (Table 6.1.8). Thirty-nine English delft plates were found with the measurable diameters being quite standardized, ranging between 22 and 23 cm. The height of the plates varies from 3.1 to 4.3 cm, which makes them quite deep and capable of containing wet-food preparations

Table 6.1.8. Percentages of ceramic, glass and metal vessels from Punta Salinas according to functional vessel class.

Functional Vessel Class	Vessel Form(s)	MNV	Percentage of Total MNV
Food-Related Vessels			
Food Storage	Jar, pot	10	1.27%
	Wide-mouthed glass bottle	2	0.25%
	Wide-mouthed <i>flacon</i>	4	0.51%
	"Case" <i>flacon</i>	25	3.16%
	Tall-necked cylindrical <i>flacon</i>	2	0.25%
	Sub-subtotal Food Storage	43	5.44%
Food Preparation	Cooking pot	3	0.38%
	Cauldron	1	0.13%
	Sub-subtotal Food Preparation	4	0.51%
Food Serving	Dish, oval platter	9	1.14%
	Oval platter	1	0.13%
	Sub-subtotal Food Serving	10	1.27%
Food Consumption	Plate	97	12.28%
	Soup plate	6	0.76%
	Basin	16	2.03%
	Bowl	3	0.38%
	Porringer	1	0.13%
	Sub-subtotal Food Consumption	123	15.57%
Subtotal Food-Related Vessels		180	22.78%
Beverage-Related Vessels			
Beverage Storage	Jug, bellarmine bottle	37	4.68%
	Stoneware water bottle	91	11.52%
	Earthenware barrel/flask	1	0.13%
	Cylindrical and onion-shaped glass bottle	88	11.14%
	Case bottle	53	6.71%
	<i>Flacon</i>	6	0.76%
	<i>Fiole</i> , small long-necked glass bottle	19	2.41%
	Glass flask	2	0.25%
	Sub-subtotal Beverage Storage	297	37.59%
Beverage Serving	Pitcher	6	0.76%
	Teapot	5	0.63%
	Coffee/chocolate pot	2	0.25%
	Punch pot	1	0.13%
	Sub-subtotal Beverage Serving	14	1.77%
Beverage Consumption	Punch bowl	142	17.97%
	Tea bowl	13	1.65%
	Tea bowl/punch bowl*	17	2.15%
	Saucer	2	0.25%
	Mug	37	4.68%
	Cup	4	0.51%
	Two-handled cup	3	0.38%
	Glass tumbler	45	5.70%
	Glass mug	8	1.01%
	Drinking glass	2	0.25%
	Sub-subtotal Beverage Consumption	273	34.56%
Subtotal Beverage-Related Vessels		584	73.92%
Other Vessels			
Pharmaceutical Storage	Vial	18	2.28%
	Sub-subtotal Pharmaceutical Storage	18	2.28%
Snuff Storage	Wide-mouthed case bottle	5	0.63%
	Sub-subtotal Snuff Storage	5	0.63%
Other Utilitarian	Hour glass	2	0.25%
	Octagonal glass bottle	1	0.13%
	Sub-subtotal Other Utilitarian	3	0.38%
Subtotal Other Vessels		26	3.29%
TOTAL		790	100%

well. Most of these delftware plates can be dated to between 1730 and 1760 based on their form and decoration (John Austin, pers. comm. 2010). The majority of the plates are quite simple featuring manganese purple on white (MNV=7) and blue on white (MNV=9) decoration consisting of five stylized sprigs on the flange painted in square brushstrokes within two concentric circles and a large flower composition (sometimes with a vase) in the center (Fig. 6.1.22, 13 and 14). At least four other plates are blue on white and have only thick circular lines on the flange; some have stylized central floral motifs, very reminiscent of French faïence from Brittany, and might well have been imitations (Fig. 6.1.22, 17) (Jelks 2007: 101–104; Waselkov and Walhall 2002). Another plate has manganese decoration consisting of a circle with a hexagon and spiral in the center with outwardly radiating horizontal brushstrokes (Fig. 6.1.22, 15). All of these aforementioned delft plates have been characterized as having a simple or “primitive” shape (vessel profile) by delft specialist Michael Archer. All the examples he identifies having this shape are from Bristol (1997: p. 130–133, nos. B26–28, B33–34, p. 552, Appendix A, shape H). The plates are not only simple in shape, but are also of poor craftsmanship (John Austin, pers. comm. 2010). Furthermore, all of these simple plates have a standardized 22 cm (roughly 9 in) diameter. This suggests that outside of their decorative differences, they might have been mass-produced and could have come from a similar place of origin in England such, indeed, as Bristol.¹⁸⁵ The remainder of plate fragments from which the

¹⁸⁵ The question of the provenance of most of these plates, however, is still quite debatable. Delft specialist John Austin, retired Curator of the Collection of Ceramics and Glass at the Colonial Williamsburg Foundation, has analyzed thousands of delft sherds from excavations in Colonial Williamsburg. He has never seen delft plates with such simple designs in that collection or, for that matter, from any other site or collection (pers. comm. 2010; see also Austin 1994). I have also never seen these designs on delft from excavations at sites in the Caribbean; they appear solely at the sites of Punta Salinas and Uespen de la Salina

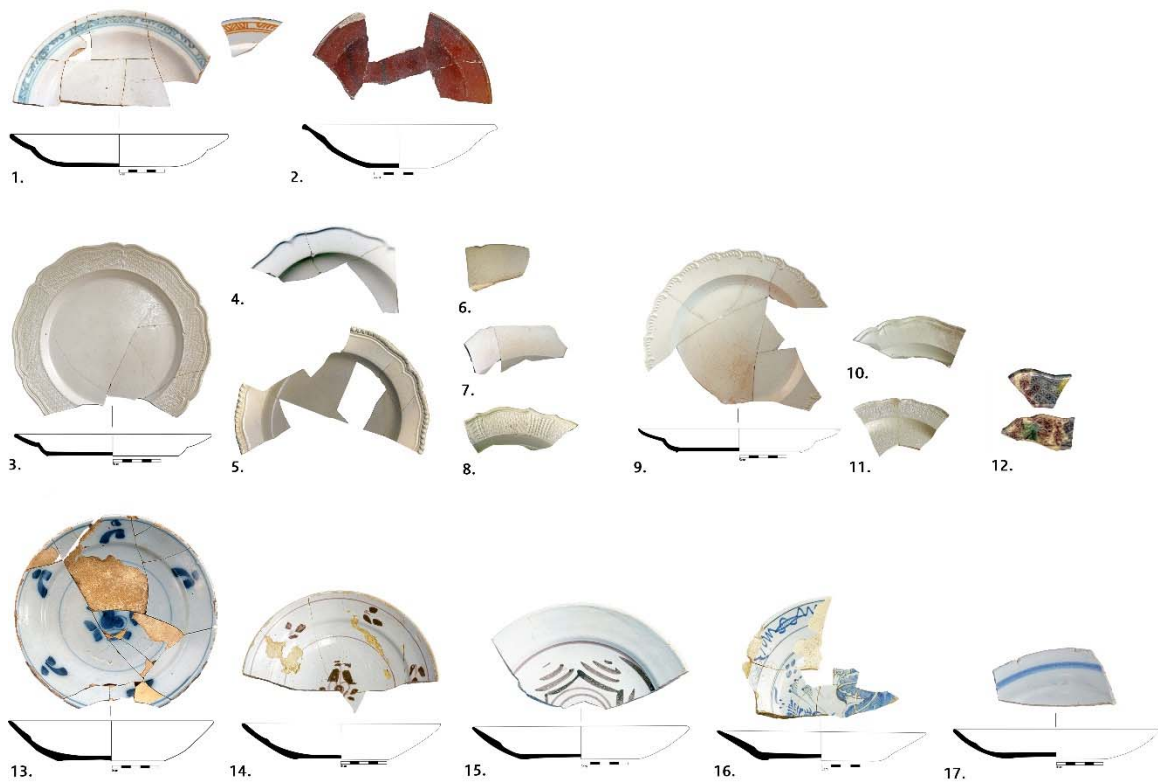


Fig. 6.1.22. Plates recovered at Punta Salinas. (1) French faience blanche plates, blue on white and yellow on white, Provence. Mid-18th century. 24 cm diameter. (2) Albisola-type red earthenware. Poss. France. Second-half of 18th century. Hard, fine and dark to salmon red paste with minimal inclusions. Black trailed slip decoration under a lustrous chestnut-brown glaze of which there are lighter and darker hues. 20 cm diameter. (3–8) English White salt-glazed stoneware plates. C. 1740–1778. Various edge patterns include: (3) “barley”; (4) Royal pattern; (5) “bead and reel” or “gadron”; (6) plain circular; (7) plain octagonal; and (8) “barley and basket”. Diameters range between 23 and 24 cm. (9–11) English creamware plates, c. 1762–1810. Various edge patterns include: (9) feather-edged; (10) modified Queen’s shape or “reeded” pattern; (11) molded shell-edge below rim. 24 cm diameters. (12) Whieldon-type clouded/tortoiseshell-ware plate. c. 1750–1765. Cream colored body, “cartouche and diaper” edge decoration, painted in “clouded” glazes and tortoiseshell sponging on the back. 20 cm diameter. (13 and 14) English delft plates, c. 1730–1760. 22 cm diameter. (15) English delft plate, poss, London, c. 1730–1760. 22 cm diameter. (16) English delft plate, Liverpool, c. 1750. 23 cm diameter. (17) English delft plate, c. 1730–1760. 23 cm diameter.

qualitative MNV was calculated were not sufficiently large to determine their entire vessel profile, but none of the base fragments have foot rings. This suggests that they were indeed of a similar shape to the ones discussed above. The only plate somewhat

on Cayo Sal. The delft dashed basins found at both sites, to be discussed further in this section, constitute a similar anomaly. They are quite common at Venezuelan sites but found virtually nowhere else.

different from the ones above offers a lustrous medium-blue glaze, an alternating dot-and-diaper with artemisia leaf design in panels on the flange, and a vegetal arrangement in the center (Fig. 6.1.22, 16). In form, it is reminiscent of the simple plates, yet it has an incised foot ring suggesting a Liverpool attribution (Austin 1994: p. 156, no. 246; Lipski and Archer 1984: p. 122, nos. 535, 535A and 535B).

A minimum number of 34 creamware plates were recovered. The plate diameters were all generally standardized at 24 cm (9½ in) and most were quite shallow. The majority are feather-edged (Fig. 6.1.22, 9). There is one example of a slightly modified Queen's shape pattern (10) (described as a "reeded" pattern in Kuettner 2009: 232), and another with a modified royal pattern with a molded shell-edge below that seems to be later 18th century and quite rare at archaeological sites (11) (Miller 2015: 5; Noël Hume 1969: 125–126, 2001: 210–212). It is important to note here that creamware began to be produced in England in 1762 and that the earliest creamware was generally of a darker yellow hue. This held until 1767 when Josiah Wedgwood began producing lighter-colored creamware in Staffordshire (Miller 2015: 1–2). Ceramic historian George Miller (2015: 4, 7) has found that feather-edged creamware probably started being produced around 1765. It rose in popularity until 1780 when it was replaced by other edge decorations. More than half of the feather-edged creamware fragments from La Tortuga exhibit the darker yellow tint to the glaze (Fig. 6.1.22, 9–11), suggesting that it is in fact early and could have been bought as soon as it became available in English shops by seafarers arriving at La Tortuga, who often traversed the Atlantic. Moreover, Miller (2015: 1–2) posits that there is little to no creamware found in archaeological contexts or

documentary records in North America dating to before 1770. This presence of early creamware at Punta Salinas is a very interesting marker of the fashionable consumer choices and purchasing opportunities on the part of seafarers. The point will be further discussed in the following final chapter.

English white salt-glazed stoneware was represented by a minimum number of 17 plates. Most of these plates exhibited standardized diameters of between 23 and 24 cm (9 to 9½ in plates) and featured the “bead and reel” or “gadroon” pattern (Fig. 6.1.22, 5). Some plates also presented the “barley” (3), the “barley and basket” (8) and the “basket and diaper” patterns, while further singular plates revealed an altered Queen’s shape (described as a “reeded” pattern in Kuettner 2009: 232) and the Royal pattern (4). One plate had a plain octagonal rim (7) and one a plain circular rim (6) (Kuettner 2009: 232; Mountford 1971: p. 40, plates 122, 125; Noël Hume 1969: 115–117, 125; Skerry and Hood 2009: 136–137). The comparatively small number of salt-glazed stoneware plates from Punta Salinas (MNV=17), including the feather-edged oval platter mentioned in the paragraph on dishes (MNV=1), along with the diversity of rim decorations (nine different designs), suggests that the seafarers perhaps consciously chose the newest edge designs as these salt-glazed stoneware vessels came out of the Staffordshire potteries and became available at shops in British port cities. Finally, a Whieldon-type tortoiseshell-ware plate was also found with a “cartouche and diaper” pattern, cream-colored body and clouded glazes and tortoiseshell sponging on the back (Fig. 6.1.22, 12) (Kuettner 2009: 233; Noël Hume 1969: 123, 125, 2001: 209).

Three Albisola-type red earthenware plates were recovered dating probably to the second half of the 18th century (Fig. 6.1.22, 2) (Barton 1977: 64–68, 1981: 46–47; Amouric and Vallauri 2007: 201, 21). This ceramic ware is still oftentimes referred to as “Rey ware” in the Caribbean and Latin America (Deagan 1987: 51–52) meanwhile being most often termed *taches noires* ware in Europe (Capelli and Cabella 2015: 30). This fine lead-glazed earthenware was originally produced in the communes of Albisola and Savona in Liguria after the mid-18th century and was widely exported to the rest of Europe and the Americas (Blake 1981: 114–120; Brassard and Leclerc 2001: 22–23; Capelli and Cabella 2015: 30). The ware was, nonetheless, widely and accurately imitated in the latter 18th century in the neighboring French region of Provence and as far away as Barcelona (Amouric and Vallauri 2007: 230; Capelli et al. 2013; Beltrán de Heredia Bercero et al. 2015). Given the fact that there were a significant number of other French ceramics at Punta Salinas, it is plausible that the Albisola-type earthenware was in fact a French imitation. Many more of these plates were found at the 18th-century CS/A site on Cayo Sal and will be discussed in Part II of this chapter.

Finally, three French faïence blanche plates were recovered. One is a Provence yellow-on-white plate; the other is blue-on-white, both presenting the same decoration and probably dating to the mid-18th century (Fig. 6.1.22, 1) (Waselkov and Walthall 2002: 66–72). The third is a plate whose provenance in France cannot be pinpointed with certainty. It exhibits, nonetheless, the salmon-red paste and hard and thick white lead glaze characteristic of French faïence. The presence of French ceramics at this purely Anglo-American site is not surprising, as New England and Bermudian seafarers often

visited the French islands of Saint-Domingue, Martinique and Guadeloupe, among others, to trade and French ceramics could be bought or bartered there (Jarvis 2010a: 354, 363; Pares 1956).¹⁸⁶

Five soup plates or deep plates were identified in the ceramic collection. One fits more comfortably within the range of vessel forms and decoration known from 18th-century British delft potteries. It is deep, possibly a soup plate, with blue-on-white decoration consisting of diaper and braided concentric designs and a central floral arrangement (Fig. 6.1.23, 3) (Archer 1997: p. 552, Appendix A, shape M; Garner and Archer 1972: p. 81, Appendix A, shape D; Britton 1982: p. 321, no. 12.12, Appendix I, shape F). Two soup plates are creamware and two others are Chinese porcelain. The first porcelain plate has a scalloped rim, blue floral sprays on the flange, a trellis motif on the well (cavetto), and a seasonal flowers-on-terrace composition in the center (Madsen and White 2011: 74, 87–91) (Fig. 6.1.23, 1). The trellis motif is blurred and has a doubled effect suggesting that this piece is from the later part of the 1715–1790 range to which this motif is dated. A decrease in the quality of the painting was evidenced due to a general decline in Chinese underglaze for blue-on-white ware after the 1750s (Madsen and White 2011: 74). A further plate exhibits a central floral arrangement with a decorative vignette around it (Fig. 6.1.23, 3). A slip-decorated lead-glazed earthenware soup plate, probably

¹⁸⁶ Anglo-American ties with the French Antilles had significant material resonances. Recent evidence from excavations at 18th- and 19th-century sites on Guadeloupe, as well as analysis of probate inventories, reveals that the French and creole inhabitants of the island had a strong affinity for the English ceramics that arrived during the British occupation of Guadeloupe 1759–1763, and were the most popular foreign ceramics thereafter (Arcangeli 2010: 180–181).

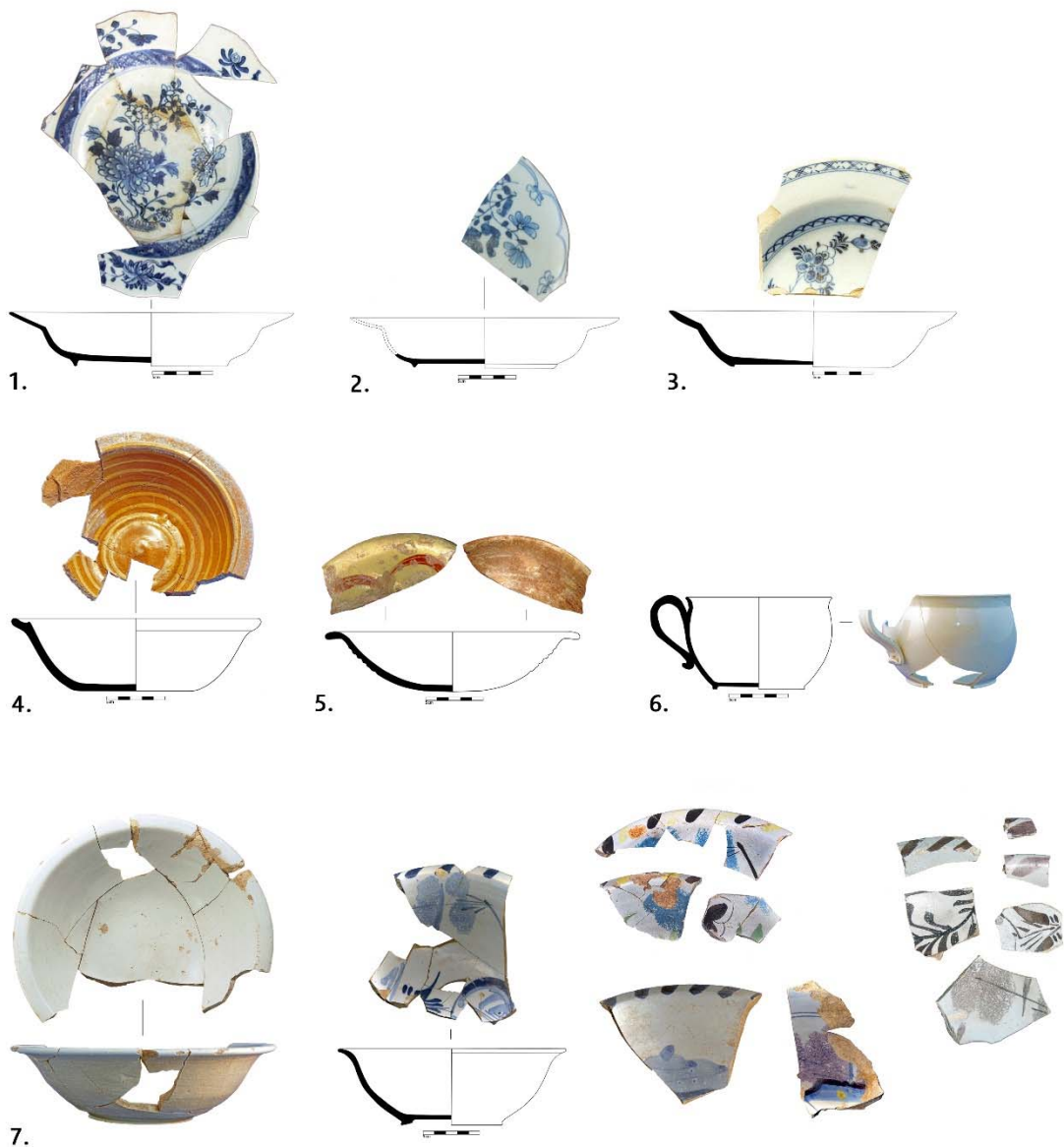


Fig. 6.1.23. Soup plates recovered at Punta Salinas. (1) Chinese porcelain soup plate. Prob. second half of 18th century. 23 cm diameter. (2) Chinese porcelain soup plate. Prob. mid-18th century. 24 cm diameter. (3) English delft soup-plate. Prob. Liverpool or London. 1730 onwards. 24 cm diameter. (4) Philadelphia-style slipware bowl, poss. Philadelphia. c. 1750—1820. Red body with brown and yellow trailed slip decoration. 20 cm diameter. (5) French lead-glazed earthenware soup plate, prob. Huveaune slipware. Orange-red paste and lead glaze with red decoration over white slip below. c. 1700—1760. 20 cm diameter. (6) English White salt-glazed stoneware porringer. c. 1740—1778. 7 cm height, 11 cm diameter. (7) English delft basins. Prob. 1740 onwards. Lead glaze over pale slip on exterior and bluish milky tin glaze on exterior. Some undecorated others with monochrome and polychrome blue, purple, yellow and brown decoration and dashes on rim. 21 to 23 cm diameters.

from Huveaune, was also recovered (Fig. 6.1.23, 5) (Abel 2001: 232, 1992: 30–31; Abel and Amouric 1995; Arcangeli 2012: 162, 317; Brassard and Leclerc 2001: 31).

Only one porringer was found at the site. Porringers were multi-purpose vessels that could hold a medley of wet food preparations such as porridge, pottage (stew) and soups, among other things (Beaudry et al. 1983: 32; Skerry and Hood 2009: 145). This English white salt-glazed stoneware porringer has a yellow tint and a lustrous glaze over the hard paste, making it somewhat different from the other white-bodied English stonewares (Fig. 6.1.23, 6) (Mountford 1971: plate 78). Three Philadelphia-style slipware bowls were recovered as well (Fig. 6.1.23, 4) (Bower 1985: 277–280; Gible 2005: 42–43; Magid and Means 2003: 47–54). The shape of these vessels falls neatly within the POTS (Potomac Typological System) definition of a bowl, rather than that of the pan that is most often associated with this ware type, due to the smaller 20 cm-diameter of the vessels and their convex sides (Beaudry et al 1983: 33).¹⁸⁷ As bowls, they might have been used for consumption of wet foods. These versatile earthenware vessels might also have been used occasionally for heating food as well as stewing and cooking desserts such as puddings (Janowitz 2013: 95–96).

The final ceramic tableware vessel form found at Punta Salinas is the basin. A minimum 16 delft basins were recovered (Fig. 6.1.23, 7). These are open vessels of greater width than depth, an everted thickened lip and a flat foot ring (Beaudry et al. 1983: 33). Their diameters range between 21 and 23cm. The exterior of the basins has a pale slip

¹⁸⁷ Nonetheless, Magid and Means (2003: 50–52) define these vessels as pans, even the ones with smaller 20-cm diameters like the ones from Punta Salinas.

and is dipped in a transparent, greenish-to-turquoise or mustard-yellow lead glaze. The interior is dipped in the characteristic bluish milky delft tin glaze. All but three of these basins are brightly painted on the interior in blue, and manganese purple, and display polychrome floral designs. The painted basins also have characteristic dashes on the rims, some in blue, others in manganese purple, others in brown and yellow and others in brown. The dashes and the two different forms of glaze are certainly very similar to 17th- and early 18th-century delft dashed chargers (Archer 1997: 73–95). It is in the form and decoration that the vessels differ, with the basins being deeper and the floral designs presenting the more characteristic square brushstrokes of mid-18th century British delft potteries. This all suggests that possibly following the phasing out of traditional chargers by the 1740s, these small basins—reminiscent of the older traditional delft forms—started being produced (Archer 1997: 70, John Austin, pers. comm. 2010).

It is puzzling why these delft basins do not appear, or at least have not been reported, in 18th-century archaeological contexts in the greater Caribbean and North America. They have been found at the site of CS/A on Cayo Sal as well as at various coastal sites in the western Venezuelan state of Falcón (Miguel Zavala Reyes, pers. comm. 2015). They have also been found in excavations in the far west of Venezuela in the urban center of Maracaibo, far inland beside the Orinoco River in 18th-century contexts at Santo Tomás de El Baratillo and in a museum collection in the eastern Venezuelan port city of Cumaná (Sanoja 2008: 74; Sanoja and Vargas Arenas 2005: 226, fig. 68D; van Beek 2002: 81, fig.

8¹⁸⁸). The only other two sightings of these vessels (that I am aware of) were from 18th-century contexts at the Habitation Poulain in French Guyana and one complete example from the collection of the Pilgrim Society in Plymouth, Massachusetts (Austin 1994: 19, fig. 21; Losier 2016: 135, fig. 3.14h). Since they are abundant and very similar in diameter to delft plates, it is probable that these vessels were used for dining at Punta Salinas and might have been preferred for the consumption of wetter dishes not as easy to consume using flatter tableware (Beaudry et al. 1983: 27).

The diversity of wares and vessel forms from Britain, France and China recovered at Punta Salinas reveals the transoceanic itineraries of these things. It suggests that in the 18th-century, Anglo-American merchant seafarers created tight entanglements with an array of attractive early-industrial ceramics from Europe and fancy porcelains from the Orient. The analysis of these human-scaled entanglements in light of such large-scale processes such as the development of consumerism, globalization and modernity will be addressed in the following final chapter (Chapter 7) once the various assemblages of practice from the four occupational periods on La Tortuga and Cayo Sal are reassembled.

DINING AT PUNTA SALINAS

Now that the types of ceramic tableware from Punta Salinas and their provenance have been scrutinized, let us go beyond the formal identification and analysis of these objects and turn to what they can reveal about the dynamic assemblage of practice of foodways at the site. Just as archaeologists must delve deeper than the dry taxonomic list, so too they must look beyond mere vessel identification and analysis. Here I am referring to a

¹⁸⁸ These authors misidentified the delft basins and associated plates as Dutch 17th-century Delftware.

qualitative leap from treating entities as simple analytical objects to incorporating them into the living matrix of the human practices of everyday life in the past (I have already begun this task by suggesting the possible uses of vessels as a consequence of their shape, dimensions and frequency in the ceramic collection). This is of course easier said than done. Yet various archaeologists have championed these approaches to great effect, making their narratives vibrant and rich and as a result captivating to read (for instance, Beaudry 2010; MacDonald and Needs-Howarth 2013; Graff and Rodríguez-Alegría 2012; Smith 2008). As historical archaeologists, with multiple independent lines of evidence at our disposal to thoughtfully add vital flesh to the otherwise dry analytical bone of our data, we ought not forefront bland tables and lifeless charts as a result of interpretive laziness. The alternative of “interpretive enthusiasm,” however, must be grounded in the hard reality that evidentiary sources are more often than not fragmentary and confusing when they are not lacking altogether. It is in the tension between negative evidence and the evidence at hand from which assemblages of practice are judiciously reassembled, even if they can offer us no more (but no less) than impressionistic snapshots of past practices entangling humans and things.

It is also in such reassembling that spatial patterning of material remains will begin to reveal who the seafarers using material things and consuming foods within the activity areas and beyond them might have been in terms of socio-economic status. We already know that the seafarers at La Tortuga were consuming locally-caught reef fish, West Indian top shell, lobsters and occasionally sea turtles to complement their rations of

salted beef and pork.¹⁸⁹ Other items that might have been cooked and possibly combined into dishes and eaten on site—as inferred from the archaeological and documentary records—included victuals such as tack, various cereals and flours, grains, tubers, fats, cheeses, sweeteners and other condiments and seasonings. These ingredients would have been cooked over rudimentary open fires and on the only brick-lined fire pit at the site. There metal cauldrons may have hung over the fire bubbling with 18th-century culinary concoctions whose scent wafted across the empty expanses of the island. But what were these concoctions and dishes?

The reef fish such as porgy, grunt, snapper and grouper caught at Punta Salinas would have been scaled, gutted, cleaned and pan-fried whole in animal fat until crisp and golden—this was a common way of preparing small fish in the 18th century (Glasse 1774: 177). Alternatively, they might have been placed on a gridiron and broiled over the brick-lined fire pit in the Dunes activity area (Glasse 1774: 122). Larger, white-fleshed fish such as the barracuda may have been stewed. Oilier fish such as jacks could have been cut into chunks and boiled or broiled, given the eating customs of the day (Oliver 1995: 364). Since fish was considered a low-value food in 18th- and 19th-century New England, and generally not seen as nutritious, substantial and finally tasty fish dishes—in order to compete with preferred fresh or salted meat-based meals—were usually heavily flavored with melted butter, salt-pork fat and scraps, and sauces that could include butter thickened with flour or mashed eggs and flavored with lime juice (Oliver 1995: 332–335). Nevertheless, it is

¹⁸⁹ Given the unpopularity of salted fish on board, it is reasonable to suggest that salted fish were not often consumed at Punta Salinas since fresh fish could be caught quite easily at the site.

probable that given the dry and salted food available at sea, many seafarers put the unpopularity of fish back home aside and yearned for fresh fish flesh to enliven their diet. Important to note, however, is, when trying to approximate just how seafarers consumed fresh fish, there are no merchant mariner cookbooks extant from the 18th century. Interpretations are primarily based on such 18th-century land-based cookbooks as that by Hannah Glasse (1774) first published in England in 1747.

As opposed to fish, shellfish, lobster and especially sea turtle (particularly the green turtle [*Chelonia mydas*]) were highly esteemed in New England, the Caribbean and Europe (Dawson 2005: 217–228). Sea turtle meat and eggs were even considered to possess fine medicinal qualities, including the capacity to cure scurvy (Dawson 2005: 268–269). The large number of West Indian top shell recovered at Punta Salinas suggests that it was a particularly targeted resource, if easily collected in large quantities. Once the meat had been removed from the mollusk's shell, it had to boil for at least an hour to become tender. Then it could have been stewed with the addition of fats, various spices and prepared sauces (Glasse 1774: 201). Cooked top shell meat could also have been sliced and tenderized in vinegar, as was done with conch meat in the West Indies (Dawson 2005: 259). Sea turtle could be stewed in a sauce made of butter, flour, madeira wine and spices. For extravagant and theatrical effect, this could then be served inside the turtle's carapace (Glasse 1774: 346–347). It could also be made into the widely popular and rich sea turtle soup (Dawson 2005: 282). Finally, lobster might simply have been boiled, or boiled then roasted by the fire and eaten with melted butter (Glasse 1774: 191). Stews and soups involving top shell and sea turtle meat could have been eaten out of the

Philadelphia-style slipware bowls, Chinese porcelain, creamware and white salt-glazed stoneware soup plates and porringer, as well as from the delftware basins and even the many simple quite deep delft plates.

Anglo-American staple maritime dishes of the 18th century were intended to be hardy and filling. Seafaring recipes were not fixed but rather general combinations. Procedures were heavily dependent on what ingredients were on hand and what cooking means were available.¹⁹⁰ One rustic seafaring classic and favorite was lobscouse. Lobscouse was a dish consisting of salted meat(s) (beef or pork) stewed with vegetables (carrots, onions, celery and such—if any were available), hardtack, and a dash of black pepper, thus forming a thick and rich mixture (Oliver 1995: 108; Grossman and Thomas 1997: 18–20). Such a dish would probably have not involved many large pieces of meat on the bone as it was mainly made from small cut-up pieces (often leftovers). Therefore, the 155 cow bones and 28 pig bones (which were by no means small) recovered at Punta Salinas might have represented, rather, the remains of more elaborate and less rudimentary meat dishes (Oliver 1995: 108).

Given that most of the cow and pig bones were found in the Dunes activity area, it is quite possible that they were discarded primarily by sea captains. Although we have still not discussed the assemblage of drinking practices at the site, the zooarchaeological remains such as fish, crustacean, sea turtle and mammal bones (aside from top shells that were also dispersed throughout the other activity areas and beyond) were primarily

¹⁹⁰ Once there was little salt meat and fewer vegetables left on board a scouse could then be turned by a ship's cook to a crackerhash, where the bulk of the recipe was pounded hardtack (Oliver 1995: 109).

concentrated in the Dunes activity area. Moreover, as I have discussed in Chapter 4, the division of labor on board small Anglo-American merchant ships was not as hierarchical at sea as it was on larger merchant and naval vessels. However, at Punta Salinas, ship captains (and in the rarer case of larger ships, ship officers) were probably not engaged in the raking, packing and loading of salt. Instead, they oversaw those labors from the campsites they set up on land by the saltpan. The brick-lined fire pit of the Dunes would have offered a more permanent place to cook for all of the captains involved with the cooking duties possibly delegated to a cook, cabin boy or an enslaved mariner.

Since most classic seafaring recipes were dense concoctions along the lines of lobsouse that would have left little to no material evidence in the archaeological record, one can only suppose that the seafarers at Punta Salinas used such dry provisions as were listed in the inventories of the Bermudian vessels including peas, beans, yams, rice, oats, and flour to cook hearty meals. Perhaps, if—as I suggest—the material evidence is primarily a result of sea captains dining and drinking, these victuals might have been utilized to create side dishes to the main servings of meat and seafood. The pickled and savory fixings that would have been inside the numerous glass jars recovered at the site would have further complemented meals. The recovered cow remains could have been pieces of salted beef on the bone that were broiled on a gridiron over the fire pit, or cooked in stews that were more refined than unsophisticated seamen’s scouses.

Benjamin Stiles had one large “hogg” and two small “hoggs” among his personal shipboard assets (MHMCB 1996 [1766]: 207, 210, 218). This detail is highly revealing, as Stiles and the accompanying Bermudian vessels sailed directly from Bermuda to La

Tortuga. Therefore, hogs were most certainly taken for consumption during mariners' prolonged salt-raking stay on the island. Since these were Stiles' hogs, I suggest that rather than necessarily killing them to feed his ship's company (the *Polly's* victuals already included two large coops of fowl), he intended to feast on them with fellow captains at Punta Salinas in order to show off his purchasing power and hospitality. The 28 archaeologically-recovered pig remains are, however, mostly fragments of the inferior and superior maxilla, with no fragments of the cranium present. The preference for this particular cut of meat suggests that sea captains were especially fond of the succulent and fatty cheeks of hogs and their tongues. Although these cuts of pork do not appear in 18th-century cookbooks, it is possible that what the captains were eating was some version of Bath chaps, which were the lower jaw bones (and often also, upper jaws) of pigs with attached cheek and tongue, often brined and dried (Davidson 2014: 67). If roasted over the fire, the thick skin on the cuts might have turned into tasty crackling; alternatively, they might also have been eaten as cold-cut delicacies.

Desserts might have also been prepared at Punta Salinas. The versatile New England redware pots could have served well not only as containers for fats but as cooking pots, nested in the coals of a fire, with a dense pudding bubbling inside (Janowitz 2013: 100). Puddings were especially esteemed sweet treats by seafarers, offering a welcome change to the monotony of onboard cuisine. These puddings were, however, not always similar to the gelatinous and creamy puddings of today. Often, boiled and steamed puddings were dense and cake-like (Oliver 1995: 109). They went by exotic names including spotted dog, boiled baby, dandyfunk and duff (Oliver 1995: 109; Grossman and

Thomas 1997: 28–29, 92–93, 105–107). The consistency and delectability of a pudding depended on its ingredients and their proportions. These almost always included flour or pounded hardtack or both mixed with sugar or molasses plus grated suet or lard (Oliver 1995: 109). Raisins, plums, apples and nuts could also be added to the mix as well as spices such as cinnamon and nutmeg. The mixture was then placed in a pudding cloth and submerged in boiling water for a few hours (Grossman and Thomas 1997: 28–29). A molasses sauce could then be poured over the result. (Oliver 1995: 110).

The rudimentary cooking conditions at Punta Salinas certainly limited the complexity of dishes that could be prepared on land. It is, nonetheless, probable that more complex baked dishes such as pies and cakes were prepared on board then brought to shore for consumption. The complexity of dishes also depended on the culinary expertise and experience of the ship's cook. On these small ships with an average complement of but seven men, it is improbable that a proper cook existed as all hands were necessary for navigation at sea, work in ports and salt raking at Punta Salinas (Earle 1998: 71). For example, Ashley Bowen from Marblehead, Massachusetts, served as a regular seaman when he began his life at sea on a Boston merchant ship. Nonetheless as a youngster he was occasionally entrusted to—with limited skill—prepare meals for his captain (Vickers 2006: 42–45). It is probable that one particular seaman was entrusted with the bulk of cooking duties, though perhaps the duty was divided among those mariners with the best culinary experience. It is also important to note that, especially among the Bermudian crews at Punta Salinas where enslaved mariners of African origin

where common, African foodways including spices and ways of preparing foods might have influenced dishes (Dawson 2005).

The presence of fine dining ceramics such as a large white salt-glazed stoneware oval platter, a creamware dish and two colorful Rouen faïence brune dishes suggests that food was not simply consumed at Punta Salinas. The display of food and dining practices of a certain refinement were also important, and commonplace at the rudimentary campsite. In 1744, New England sailor Ashley Bowen placed two pieces of burnt and unappetizing mutton on a “dish” to make the food more presentable to his ship captain (Vickers 2006: 43). Documentary evidence from the 1766 inventories corroborates the fact that fine serving vessels were present onboard the ships at Punta Salinas. The *Porgey* carried four dishes on board, the *Roach* transported a China sauce boat, and the captain of the *Polly*, Benjamin Stiles, possessed two “large” dishes among his personal possessions confiscated by the Spanish corsairs (Table 6.1.9). Although the level of dining refinement represented by certain dishes didn’t necessarily reflect the food they contained (witness Ashley Bowen’s example), the presence of a sauce boat and large serving dishes (probably pewter or ceramic) in the inventories supports my argument that especially sea captains strove to maintain some of the practices of fine dining even at the most remote and desolate of locations.

The large number of 97 plates recovered at Punta Salinas suggests that the seafarers there were not necessarily eating wet foods such as scouses, pottages and stews that were customarily eaten onboard by regular seamen. The Bermudian ship inventories list the *Porgey* as having 1 dozen unspecified plates and the *Roach* having half a dozen

Table 6.1.9. Tablewares on board Bermudian vessels.

Brigantine <i>Porgey</i>	Brigantine <i>Roach</i>	Sloop <i>Polly</i>	Capt. Benjamin Stiles (Sloop <i>Polly</i>)
½ dozen knives and forks	½ dozen knives and forks	2 mess tubs	2 large dishes
1 dozen plates*	½ dozen pewter plates	½ dozen knives and forks**	½ dozen plates
4 dishes	1 dozen “earthen” plates		
2 mess tubs	China sauce boat		
	Mess tub		

(Minutes of His Majesty’s Council 1996 [1766]: 207–210, 216–217).

*The transcription mentions that there were “11 dozen” plates, however, that number is probably due to a transcription error as it is disproportionately large. Moreover, the cost of the apparent “11 dozen” plates does not reflect their large number.

** Here once again the transcription is incorrect as it mentions “72 dozen” knives and forks which is a preposterous number as this is not reflected in the price which is equivalent to that of ½ dozen knives and forks from the other vessels. Most probably, the person who transcribed from the original document confused ½ with 72.

pewter plates and 1 dozen “earthen” plates on board (Table 6.1.9). More interestingly, the Captain of the *Polly* had half a dozen unspecified plates to his name, whereas his mate and one of his mariners, whose personal belongings were also inventoried, had no tableware whatsoever (Table 6.1.9). This detail (as well as the two “large” dishes Benjamin Stiles owned), along with the large number of recovered plates—especially the more refined and flatter creamware and white salt-glazed stoneware plates—lend even more credence to my argument that captains dined rather extravagantly on La Tortuga.¹⁹¹ Larger portions of meat, with accompanying vegetables and starches, would have been

¹⁹¹ Although I have yet not discussed the date ranges during which certain ceramics might have been used at the site (which I will discuss in detail in the following Chapter 7), temporality must also be taken into account here. Foodway practices at the site might have changed throughout the 18th century. The vast majority of the material remains of seafarers camping on land date to after 1720. Thus even within those 61 years before the *terminus ante quem* of 1781 after which the site was abandoned, there was time enough for considerable variation in dining practices. Given the lack of proper stratigraphy at the site and the greatly dispersed and palimpsest-like nature of the site, how foodways changed through time is impossible to determine.

much more presentable on fine earthenware and stoneware plates than in simple bowls. It seems that many of these sea captains, who comprised part of the growing group of middling wealth in Anglo-American colonies, were intent on emulating at Punta Salinas the dining experiences they were accustomed to in Atlantic-world port taverns along with parties and social events in New England and Bermuda (Antczak 2015: 179).

The archaeological evidence suggests that the cutlery seafarers used with their plates and bowls at Punta Salinas seem to have been primarily pewter spoons and sharp-tipped knives. For instance, the six sharp-tipped knives and the folding knife found at the site might have been used at table as cutlery and not only for food preparation. A minimum number of 42 (minimum number of fragments= 56) individual pewter spoons were recovered at Punta Salinas (Fig 6.1.24). Many of these spoons exhibit crudely incised and even punched and molded letters and markings on the undersides of the finials, suggesting that they were personal items marked with the owners' initials (Fig. 6.1.24).¹⁹² One spoon not only features the owner's initials scratched into it but also a pierced finial for hanging (Fig. 6.1.24). All of these spoons date to the 18th century. A few 'wavy end' spoons were made around 1700–1730, a majority of 'round end' spoons date to after 1710, and a 'fiddle end' spoon comes from around 1750 (Wadley 1985: 43, 124–125).

¹⁹² Spoons inscribed with owners' initials were found onboard the HMS *Fowey*, a fifth-rate ship that sank in the Straight of Florida in 1748 (Skowronek and Fischer 2009: 132–133). They were also found in underwater archaeological excavations of the sunken city of Port Royal, Jamaica (Wadley 1985: 112–113).



Fig. 6.1.24. A selection of the pewter spoons recovered at Punta Salinas. Various have incised, punched and molded initials and markings on underside of finials. One has a drilled hole.

Since no forks were recovered at Punta Salinas, it is probable the seafarers ate their dishes with knives and spoons and by hand.¹⁹³ The Bermudian ship inventories do, however, explicitly mention half a dozen knives and forks aboard each of the three vessels with no mention of spoons (Table 6.1.9). Moreover, archaeological evidence exists showing forks were already on board other ships of the time. Two copper-alloy four-tined forks were found during the excavation of the Roosevelt Inlet Shipwreck, in Delaware Bay, which was an Anglo-American merchant vessel that probably sank in 1774 (Krivor et al. 2010: 159). Forks made a relatively late 17th-century appearance on middling British tables (Noël Hume 1969: 177–179) but were increasingly used in 18th-century Britain. James Deetz suggested that, unlike in Britain, forks were not commonplace on Anglo-American tables until well into the 18th century, the principal means of conveying food to mouth being a sharp knife tip (perhaps with an intermediate stop at a spoon) (Deetz 1996: 168–170). Why no fork fragments were found at Punta Salinas is puzzling, given that the Bermudians had them on board already by 1766, and that so many pewter spoons and spoon fragments were recovered at the site.

Since the Saltertuda Fleet was a New England institution during the 18th century, it is quite possible that the seafarers—and especially the ship captains—took extra things with them onboard before they left their home ports, knowing that they would spend weeks camping on the deserted island. Things that have not been recovered archaeologically but might have been used at Punta Salinas include furniture and

¹⁹³ Spoons would also have been important for mixing punch in punch bowls as will be discussed in the following section.

accessories that would have enabled and refined the dining experience. The *Porgy* carried two chairs (valued at £3, which was relatively expensive), and the *Roach* and the *Polly* had a table each (why there is no matching table to the chairs and no chairs to the tables is unclear) (MHMCB 1996 [1766]: 207, 210, 216). Benjamin Stile's also had two tablecloths and four napkins with which to accessorize his table at Punta Salinas (MHMCB 1996 [1766]: 218). Because captains were camping on land while their crews labored on the saltpan, they must have furnished their campsites to a greater or lesser degree with tables and chairs brought down from their ships, or at least with makeshift tables and seats improvised from wooden barrels and sea chests in the manner of pirate captain George Lowther and his officers (Fig. 6.1.10).

All of these refinements contrast rather markedly with the mess tubs listed in the inventories of the three sailing vessels (Table 6.1.9). Mess tubs or "kids" were large containers used for the preparation and serving of food. They were often made from wooden barrels cut in half (Oliver 1995: 110; Sullivan 1986: 64). Food would have been directly eaten by hand from the tubs or ladled out into vessels such as pewter plates. Only one rim fragment of a possible pewter plate was found at Punta Salinas. Evidence for the dining practices of the regular ship hands, laboring away at the saltpan on Punta Salinas, is not easily or convincingly inferred from the archaeological and documentary records. Where did the seamen who worked on the saltpan eat during the day? What did they eat? What vessels, if any, did they own and make use of? The aforementioned *quigueros* on the sandy plain beyond the activity areas (Fig. 6.1.8) consisted of dark patches of carbonized organic matter with agglomerations of West Indian top shell along with

fragments of white salt-glazed stoneware, creamware plates, punch bowls, German stoneware water bottles and bottle glass. It can be suggested that perhaps regular seamen, off of work on the scorching saltpan during the hottest part of the day, sat under makeshift tarps on the sandy plain to eat the top shells they had cooked on small fireplaces off of ceramic plates. Alternatively, these *quigueros* might simply have been other places in which smaller groups of captains congregated. Perhaps we shall never be able to determine who sat at the *quigueros* with certainty. Taking into account the *Polly* inventories and that (as has been discussed in Chapter 4) mariner William Gibbs seems to have brought on board with him no more than the clothes on his back, limited personal possessions and no ceramics or glass, I am inclined to think that the majority of ceramics at Punta Salinas were left behind by sea captains (MHMCB 1996 [1766]: 226).

Given the intensity and extent of successive annual activities at Punta Salinas occurring throughout the 18th century, and the thousands of seafarers who walked its dry sands, my interpretation of the patterning of material remains cannot be taken to faithfully represent what was happening at any one time at the site or during any one event. Rather, it is in the decadal series of events that the material record amid the shifting sands of Punta Salinas came to be. I would argue that, although ships at La Tortuga on average were manned by only seven men (including captain and mate), cooking on rudimentary fire pits and fireplaces on land to feed five hungry ship hands would have been logistically difficult. During the hottest hours of midday, regular seamen likely had their scouses, gruels and stews cooked on board and brought down in a mess tub then to be eaten communally, directly from the kid or from the ship's pewter plates. During

noontime, regular seamen probably sat under their own makeshift tarps beyond the typical gathering spots for captains such as the Dunes, and there possibly broiled their additional catches of fish and lobster by small fires. Breakfasts were likely eaten in the early morning hours on board and evening dinners as well when all had returned to the ship, probably including the captains (Oliver 1995: 97).

To sum up: both archaeological and textual evidence has enabled me to partially (and in some cases hypothetically) reconstruct the assemblages of foodway practices that unfolded as part of everyday life at Punta Salinas campsites during the 18th century. That being consumed at Punta Salinas was probably not the standard and rustic seafaring fare of lobscouse and dense gruels. Rather, sea captains sought to replicate fine dining experiences with the things they brought along complemented by what natural resources they could procure on site. In the deep shade of canvas tarps stood tables bedecked with cloths flapping in the warm breeze. These might have been adorned with napkins, cruet stands and condiment bottles along with elegant plates and dishes on which nestled crunchy pork chaps, crispy reef fish and steaming speckled puddings. The smells arising from these tables wafted across the bleak expanse of the island towards the saltpan and the seamen arduously raking caky crusts of salt. The disparity between the tropical languor of the ship captains and the labor of their crews was softened by alcohol—more precisely, rum punch—the evidence for which we shall now discuss.

BEVERAGES AND BEVERAGE CONTAINERS

In the following sections I will discuss the archaeological and documentary evidence for drinking at Punta Salinas, both alcohol (primarily punch) as well as tea, coffee and

chocolate. As with the previous sections on dining, I will begin by explaining what beverage supplies were customarily taken on board small Anglo-American merchant ships. In order to reconstruct the assemblages of drinking practices at the site I will then incorporate and discuss in detail the recovered alcoholic beverage storage vessels. Finally, I will discuss the alcoholic beverage serving and consumption-related vessels then reassemble them into the vibrant social milieu of everyday practice at the site. The assemblages of practice of tea, coffee and chocolate-drinking will be discussed thereafter.

Fresh water had a very short shelf life once stored in wooden casks in the dank, hot and vermin-infested holds of ships. Soon enough it ended up putrid and foul-smelling (Earle 1998: 90). Even though water supplies were planned by the captain and merchant to last the length of the voyage, it was not uncommon for a delay caused by unfavorable weather to leave a ship short of the vital liquid (Oliver 1995: 95). On La Tortuga, as mentioned in Chapter 3, Part I, there were a few brackish pools on the northeastern end of the island and on the northern coast where seafarers could collect potable water. Given that the prime salt-raking season on the island was during April and May—towards the end of the dry season in the Venezuelan Caribbean—it is probable that these pools were dry and that the seafarers were also not able to depend on replenishing their water supplies by collecting rainwater.

Seventeenth-century Dutch seafarers addressed this issue by supplying their ships with casks of beer. The alcoholic content of the beverage prevented it from going bad. Eighteenth-century Anglo-American merchant ship captains and owners also preferred to supply their vessels with alcohol, principally in the form of rum, but also with brandy and

wine. The inventories of the Bermudian vessels once again offer an excellent window into the supplies of beverages on board ships arriving at La Tortuga (Table 6.1.10). All three vessels carried large quantities of rum: from 40 to 45 gallons of the spirit (150–170 l). The *Porgey* and the *Roach* also had 4 and 9 gal respectively of “old spirit,” and the New London sloop *Gull* had a barrel of “British West India Rum” on board. These were likely designations for aged rum and would most certainly have been used for the rum punch to be discussed below (Frederick Smith, pers. comm. 2014). Interestingly, the *Gull* carried only half this amount of rum (20 gal) on its voyage to Barbados in 1763, suggesting the possibility that the Bermudian ships had topped off their rum supplies in the West Indies on their way from Bermuda to La Tortuga (Table 6.1.11).

Table 6.1.10. Water and alcohol supplies aboard the Bermudian vessels.

Brigantine <i>Porgey</i>	Brigantine <i>Roach</i>	Sloop <i>Polly</i>	Capt. Benjamin Stiles (Sloop <i>Polly</i>)
40 gallons of rum	45 gallons of rum	40 gallons of rum	1 keg of brandy
4 gallons of old spirit	9 gallons of old spirit	3 water casks	
Keg of brandy	1 anchor of brandy		
4 dozen bottles of porter	4 dozen bottles of porter		
1 dozen bottles of wine	1 dozen bottles of wine		
3 “Iron bound” water casks			
2 small water casks			

(Minutes of His Majesty’s Council 1996 [1766]: 206,208–209, 216).

Table 6.1.11. Water and alcohol supplies aboard the sloop *Gull* in 1763 and 1765.

Sloop <i>Gull</i> , December 1763	Sloop <i>Gull</i> , October 1765
20 gallons rum	1 barrel British West India Rum
42 water casks	42 water casks

(Ship papers of the sloop *Gull*, VFM 1450, Manuscripts Collection, G. W. Blunt White Library, Mystic Seaport Museum, Inc.)

The anchor (anker) of brandy on board the *Roach* was equivalent to 10 gal. (37.8 l). It is possible that the other kegs of brandy (one figuring among the personal belongings of Capt. Stiles; the other traveling on board the *Porgey*) had the same capacity (Montefiore 1804: 679). Stiles had this large quantity of brandy at his personal disposal. Possibly he brought it along knowing he'd be drinking with his fellow captains encamped at Punta Salinas. The *Porgey* and the *Roach* each carried four dozen bottles of porter (a dark beer) and 1 dozen bottles of unspecified wine. Given their small number, these would have presumably not freely available to the crew but allotted to the captain. The array of alcoholic beverages on board the Bermudian vessels demonstrates the seafarers were intent on varying their alcoholic intake whether beer, wine, brandy or rum, and all of the different mixtures that could be made from these plus other ingredients. The principal such concoction was punch.

Water was apparently not favored by the Bermudian seafarers. Whereas the *Gull* transported 42 casks of water on its voyages to Barbados in 1763 and 1765, only the *Porgey*, among the Bermudian vessels, carried three "Iron bound" water casks and two small ones. The *Polly* had just three casks of water, possibly only for cooking. The rest of the liquid supplies consisted only of alcohol. Looking ahead over the various weeks of salt raking and camping at La Tortuga, captains not only would have provisioned their ships with extra food items for the stay (topping off their supplies at Barbados), but also with extra alcohol for drinking. Once the salt ships left La Tortuga they would probably not stop at any port of call until they returned to their ports on the Eastern Seaboard. Thus food and drink had to last the weeks of salt raking plus the two weeks or so of sailing back to

New England and Bermuda. The Bermudian vessels' lack of water and predominance of rum and other spirits presents a convincing documentary case for the prevalence and importance of alcohol drinking in the everyday activities and practices surrounding salt raking at Punta Salinas. But what does the archaeological record reveal about this matter?

The archeological evidence indicates that food was only a small fraction of consumption at Punta Salinas. In fact, as shall be discussed further on, drinking probably played a more important role in captain-to-captain peer relations and captain-crew labor relations as well as in the politics of hierarchy. This is amply supported by the sheer number and high percentage of beverage-related vessels at Punta Salinas. Ceramic and glass beverage-related vessels represent a staggering 73.92% (MNV=584) of the entire ceramic and glass collection recovered at Punta Salinas; food-related vessels comprise only 22.78% (MNV=180) (Table 6.1.8). Beverage consumption vessels (34.56% [MNV=273]) more than double those useful for food consumption (15.57% [MNV=123]) (Table 6.1.8).¹⁹⁴ Punta Salinas falls amply within Kathleen Bragdon's (1988: 90) definition of a tavern site by displaying such a high percentage of vessels for beverage storage, serving and consumption. As I shall reveal, Punta Salinas was indeed the site of a unique and seasonal tavern—one open to the four winds, unconstrained by wooden walls. This

¹⁹⁴ It cannot be entirely dismissed that there are more drinking-related vessels at Punta Salinas due to higher breakage rates of these smaller more portable items. The argument could be also made that the archaeological collection in this sense is not entirely representative of the entire unbroken assemblage of drinking- and food-related objects present at any one time at Punta Salinas during the yearly salt-raking visits by Anglo-American and Bermudian seafarers. However, I am inclined to assume that the collection does indeed reflect the general percentages of unbroken vessels brought to the site because of two factors: the constancy of the annual visits to La Salinas throughout the 18th century, and the intensity of campsite occupation taking into account that 20 ships regularly sailed in convoy to the island.

tavern came alive with the bustle of human activity every year upon the arrival of the Saltertuda Fleet.

The most common glass bottle found at Punta Salinas is the English cylindrical example (Table 6.1.12). Based on the number of necks, a minimum number of 60 such bottles was calculated.¹⁹⁵ The bottles all feature variously tooled string rims and various heights (the diameters of the bases vary between 7 and 9cm), and are all of a dark green color (Fig. 6.1.25, 4–5) (van den Bossche 2001: p. 30, pp. 80–82, plates 24 and 25; Dumbrell 1983: 91–99; Jones 1986; Noël Hume 1969: 64–68). The heights and range of base diameters suggest that they fall within both the wine- and beer-style cylindrical bottle quarts identified by Olive Jones (1986: 77), and their volumes would have been quite variable, probably ranging anywhere between 675 ml to 1250 ml (Jones and Smith 1985: 14). They most probably all date to between 1735 and the 1780s.

¹⁹⁵ It is important once again to explain that for glass containers, MNV was calculated quantitatively due to the difficulty of accurate qualitative analysis of glass because of differential post-depositional solarization and patina on fragments. Only closures and mostly-complete bases were counted towards the MNV. The largest number of these then determined the MNV for the bottle category. For more about MNV analysis in historical archaeology, see Voss and Allen 2010.

Table 6.1.12. Ceramic and glass vessels used for beverage storage recovered at Punta Salinas.

Ware/Glass Type	Color	Vessel Form(s)	NF	MNV
Ceramic				
Rheinish stoneware	N/A	Water bottle	600	91
Rheinish and English stoneware	N/A	Bottle, bellarmine bottle	215	37
Lead-glazed earthenware, poss. North Carolina	N/A	Barrel/Flask	1	1
Subtotal ceramic vessels			816	129
Glass				
English late onion-shaped bottles	Dark green	Onion-shaped bottle (short neck and untooled string rim)	833	15
English cylindrical mallet bottles	Dark olive green	Cylindrical mallet bottle (tooled string rim)		8
English cylindrical bottles	Dark green	Cylindrical bottle (tooled string rim)		60
Dutch/Belgian cylindrical bottle	Olive green	Cylindrical bottle ('lady's leg' neck)		1
Dutch/Belgian cylindrical bottle	Dark olive green	Cylindrical 'Long neck' utility bottle ('langhal')		1
French cylindrical mallet bottle	Olive green	Cylindrical mallet utility bottle (untooled string rim)		1
French cylindrical bottle	Grass green	Cylindrical utility bottle (v-tooled string rim)		1
Prob. Belgian onion-shaped bottle	Olive green	Dutch' onion-shaped bottle		1
Case bottles	Black and dark green	Case bottle	463	51
Dutch/German case bottle	Emerald-green	Vertical straight-sided case bottle (untooled string rim)	1	1
English/Dutch octagonal bottle	Black	Octagonal bottle	4	1
French cylindrical storage <i>flacons</i>	Blue-green	Cylindrical storage <i>flacon</i> (flanged finish)	108	6
English large case bottle	Black	Large case bottle (sand pontil scar)	35	1
Poss. German/French small long-necked bottles	Dark brown, blue-green and solarized-violet	Small long-necked bottles (swirled molding, untooled string rim and flared finish)	44	13
Poss. German/French small long-necked bottles	Colorless	Small long-necked bottles (vertically ribbed or slightly written molding, straight and flared finishes)		2
French <i>fiolés</i>	Blue-green	<i>Fiole</i>		3
English/American rectangular flask	Colorless	Rectangular flask (with concave chamfers)	3	1
Bohemian octagonal bottle	Colorless	Octagonal bottle (wheel-engraved and painted)	5	1
Subtotal glass vessels			1496	168
TOTAL			2312	297



Fig. 6.1.25. Glass and ceramic beverage containers recovered at Punta Salinas. (1–2) Dutch/Belgian/English case bottles. Mid to late 18th century (c. 1750–1780). Black and dark green metal. The tallest bottle having approx. 30 cm. (3) Dutch/German straight sided case bottle with untooled string rim. Early to mid-18th century (c. 1720–1750). Emerald-green metal. Approx. height 29 cm, base 10.5 x 10.5 cm. (4–5) English cylindrical bottles with tooled string rims. c. 1735–1780. Dark green metal. 26 and 23.5 cm. (6) English onion-shaped bottles with short neck and untooled string rim. Late 17th–early 18th century (c. 1680–1725). Dark green metal. Various heights; diameters of bases varying from 8 cm to 13.5 cm. (7) French long-neck cylindrical storage flacon with flanged finish. 18th century. Blue-green metal. Approx. height 28 cm, neck length 11.5 cm and base diameter 9.5 cm. (8) Dutch or Belgian langhal or long-neck utility bottle. Late 18th century. Dark olive-green metal. Approx. height 28 cm and neck length 11.6 cm. (9) French fioles. 18th century. Blue-green glass. Height 15.5 cm. (10–11) Unidentified long-necked bottles with string rims and flared finishes. Prob. 18th century. Dark metal to a clear and violet-solarized metal. No. 10 exhibit swirled molding, and no. 11 vertical ribbing. Height of no. 10 is 18.5 cm, height of no. 11 is 16 cm. (12) Rheinisch stoneware mineral water bottles. c. 1750–1780. Height 29 cm. Various source marks of the Selters brand: (13) “SELTERS” brand mark; (14) source mark from Nauort; (15) mark from Ransbach; (16) mark from Haiderbach; (17) mark from Fachingen. (18–19) Rheinisch stoneware, medallion and bartmann jug “bearded man” fragments. Last quarter of 17th century. (19) Rheinisch stoneware, jug fragments (probably from “GR” or similar ovoid jugs), Westerwald. Early to mid-18th century. Cobalt blue painted, incised flower decorations. 9.5 cm. (20) Spout poss. from Moravian lead-glazed earthenware barrel or flask. Poss. North Carolina. 18th century.

The second most common bottle type was the case bottle (Fig. 6.1.25, 1–2) (Table 6.1.12) (van den Bossche 2001: pp. 131–132, plates 83 and 84; Jones 2010: 104–106; McNulty 2004: 22–24). Case bottles were rectangular bottles with an almost horizontal shoulder, a short neck and either a straight body (in earlier examples) or a body that tapered from shoulder to base (in later examples) (Jones and Smith 1985: 14–15). Their name comes from the fact that they were made to fit easily into wooden cases. The square bottles were placed upright into compartmentalized boxes containing nine, 12 or 15 bottles (Jones 2010: 103). The base diameters of the recovered case bottles range between 6.5 x 6.5 cm and 10 x 10 cm, suggesting that they might have held volumes from one quart to half a gallon (Jones 2010: 105). Case bottles were produced in almost every European country and also in the American colonies. It is thus difficult to precisely pinpoint their provenance (McNulty 2004: 23–24, 1971: 107). Given that most have a downward-tapering body, the bottles from Punta Salinas were probably produced after 1750 and before 1780 (Jones and Smith 1985: 24; McNulty 2004: 23–24). Dutch case bottles were primarily used to store and transport gin. Nevertheless, the case bottles found at Punta Salinas also could have served to store other alcoholic liquids, water, and oils and vinegars (Jones and Smith 1985: 15). One other case bottle seems to be date from pre-1750 given its lack of taper and simple untooled string rim attached to the lip (Fig. 6.1.25, 3) (van den Bossche 2001: p. 132, plate 84; Jones and Smith 1985: 23).

Most of the cylindrical and case bottles were used extensively during the late 17th and 18th centuries. They would have been originally intended to hold a wide variety of alcoholic beverages including wines, fortified wines (e.g. madeira), porter, ale, cider and

spirits (rum, whiskey, brandy, gin and arrack) (Jones 1986: 17). Since this bottle type and form was so popular and widespread, it could have also been used for storing liquid condiments (ketchups and mustards), mineral waters, plus oils and vinegar among other things (Jones 1986: 17). It is important here also to underline that these bottles did not necessarily function only for storage. Given their portability, they might have been used at table for the serving of alcoholic beverages, especially among convivial masculine groups like those on Punta Salinas (Jones 1986: 22–26). Indeed, iconography from the time suggests that having bottles on the table was a commonplace practice.

The remaining bottles (Table 6.1.12) include an assortment of different types including 15 English late-17th- and early 18th-century onion-shape bottles (Fig. 6.1.25, 6) (Bossche 2001: 30, 66–79, 91; Noël Hume 1969: 63–64), eight English cylindrical mallet bottles, a Dutch or Belgian *langhal* or long-neck utility bottle (8) (Bossche 2001: 129), various French tall-neck cylindrical storage *flacons* (7) (Catherine Losier, pers. comm. 2011; Harris 1979: 101–103, 136–137; Willy van den Bossche, pers. comm. 2010), an octagonal case bottle and a large English case bottle, among others. Apart from the onion bottles, the remainder date from the first third to the latter portion of the 18th century. Five small fragments of a colorfully-painted and wheel-engraved Bohemian octagonal bottle were also found, probably dating to the late 18th century (Van den Bossche 2001: 278–279). One particular bottle type remains a mystery as to its dating, provenance and use. Fifteen small, delicate and svelte long-necked bottles exhibit string rims and flared finishes ranging from dark to clear and violet-solarized metal. Many feature swirled molding (10) and vertical ribbing (11). They could have been used for containing exotic

spirits such as arrack, unknown flavorings, or fine muscat wine (Van den Bossche 2001: 211).¹⁹⁶ It can be suggested that they were of French manufacture, as they are of the same proportions as small French *fiolés* (9) (Harris 2000: 236–239). However, the color of most (apart from one blue-green example) is markedly not the blue-green color most often associated with French glass factories. Perhaps they were instead of Bohemian manufacture (Willy van den Bossche, pers. comm. 2010).

Finally, a total of 129 individual ceramic beverage containers were found (Table 6.1.12). The majority of these are stoneware mineral water bottles (known as *Selterswasserflasche* [Seltzer water bottles] or *mineralwasserkrüge* [mineral water jugs]) from the German pottery-making region known as Kannenbäckerland (Westerwald) and dating to c. 1750–1780 (Fig. 6.1.25, 12). The spa or source marks on the bottles are mostly of the “SELTERS” brand name from a bottling factory located north of Frankfurt (13). The “C” and “T” stand for produced in Curtrier ([Kurtrier], the Electorate of Trier) (12). The makers-marks (letters standing for the localities where the bottles were made) stamped below the seal include the towns of Nauort (14), Ransbach (15), Haiderbach (16) and Fachingen (17) (Brinkmann 1984: 98–99; Leavitt 2013; Nienhaus 1986: 100–120; Skerry and Hood 2009: 53–55; Wielandt 1980: 288–291). Further ceramic beverage containers include large German and English stoneware jugs, most of which exhibit no decoration except for a few fragments. One of these features a stylized “bearded man” stamped below the rim; another, an elaborate stamped medallion indicating a possible mid-to-late

¹⁹⁶ So far, these bottles have not been identified despite my consultations with numerous glass experts around the world. Outside of Punta Salinas, they appear at no other archaeological sites in the Americas that I am aware of.



Fig. 6.1.26. Copper-alloy liquor box lock. 18th century. Height 4 cm.

17th- century date (18–19) (Noël Hume 1969: 55–57). Still another fragment is from a German jug with stamped floral decorations painted in cobalt blue (19) (Skerry and Hood 2009: 48–49). Most of these large stoneware jugs were likely multi-purpose vessels, useful for the storage of water and alcoholic beverages as well as oils and other liquids. Finally, there is a fragment from the spout of what could have been a Moravian lead-glazed earthenware barrel or flask, possibly from North Carolina (20) (Brown 2009: 111, fig. 11, 126, fig. 43).

It is important to note here that, as in the aforementioned inventories from the Bermudian ships, a large quantity of the alcohol brought to Punta Salinas could have been contained in wooden barrels. No distinguishable remains of iron barrel hoops were found at the site, however, suggesting that if barrels were brought down on land and their

contents emptied, they were then returned to the ships for reuse. Further evidence of liquor storage is a fine copper-alloy lock probably part of a fine leather-and- wood liquor box that would have held a number of glass case bottles (Fig. 6.1.26). Let us now turn to discussing the vessels used for the serving and consumption of alcoholic beverages at Punta Salinas, and by this means reassemble of the assemblage of alcohol drinking.

VESSELS FOR ALCOHOL SERVING AND CONSUMPTION

Much of the evidence for punch-drinking has been analyzed by this author extensively in a previous article (Antczak 2015). In this section I will summarize, expand upon, and update a few aspects of that investigation. Excavations at Punta Salinas have revealed a minimum number of 142 ceramic punch bowls. Punch bowls were the most common vessel type representing 17.97% of the entire ceramic and glass collection of 790 vessels (Table 6.1.8). These vessels were identified according to the Potomac Typological System. It defines a punch bowl as a “hemispherical vessel with a plain rim” extending beyond the 17th-century scope of the typology. This vessel form peaked in popularity in the 18th century (Beaudry et al. 1988: 63). Fifty-three of the punch bowls from Punta Salinas are creamware (Fig. 6.1.27, 1–4). Of these, two peculiar vessels dating to the 1760s feature rouletted cable bands on the rim and on the foot ring along with vertical fluting on the body and are possibly skeuomorphs of similarly decorated fine silver punchbowls (1) (Connell 1957: 10; David Barker, pers. comm. 2012). One creamware punch bowl is a polychrome over-glaze hand-painted vessel (3). The remainder are either undecorated or



Fig. 6.1.27. Various ceramic punch bowls recovered at Punta Salinas. (1–4) Creamware punch bowls, c. 1762–1810. No. 1 has rouletted cable bands on the rim and on the foot ring and vertical fluting on the body. Others are undecorated, while some have beaded decorations under rim and banding on body. No. 3 is over-glaze painted. (5) English white salt-glazed stoneware punch bowls. c. 1740–1778. Largest is 20.5 cm in diameter. (6) Scratch-blue white salt-glazed stoneware punch bowl. c. 1745–1775. Diameter 17 cm. (7) Chinese porcelain punch bowl with Batavia brown engobe on exterior and decorated on interior. C. 1720–1740. Diameter 15 cm. (8) English brown stoneware punch bowls, Derbyshire or Nottingham. c. 1745–1775. Diameters 15.4 cm and 18 cm. (9) New England black lead-glazed redware punch bowl, poss. Philadelphia. Late 18th century. Diameter 15.5 cm.



Fig. 6.1.28. English delft punch bowls recovered at Punta Salinas. c. 1720–1760, except for no. 2 which is from Liverpool and prob. post 1760.



Fig. 6.1.29. English delft punch bowls and punch bowl fragments recovered at Punta Salinas. c. 1720–1760.

have bands of beading under the rim and, on occasion, banding on the bodies (2 and 4). There are a minimum number of 43 English delft punch bowls (Fig. 6.1.28 and 6.1.29). Many of these bowls were made in London factories, several in Bristol and at least two in Liverpool. Most date to between 1720 or 1730 and 1750 (Archer 1997; Austin 1994; Britton 1982; John Austin, pers. comm. 2010; Lipski and Archer 1984). The forms of the bowls are characteristic of this period of most intensive delft production in the English factories. They are deeper and less broad at the rim, with shorter foot rings than examples from the later 1760s and 1770s (Archer 1997: 9; Noël Hume 1969: 107, 125; Shlasko 1989: 84). Only one bowl is datable to the later production phase (post-1760) and is probably from Liverpool (Fig. 6.1.28, 2).

Further punch bowls are represented by English white salt-glazed stoneware (23 minimum vessels) (Fig. 6.1.27, 5), Chinese porcelain (6 minimum vessels) (7) (Madsen and White 2011: 93), New England black lead-glazed redware (7 minimum vessels) (9) (Suzanne Hood, pers. comm. 2010), English brown stoneware from Derbyshire or Nottingham (5 minimum vessels) (8) (Noël Hume 1969: 114; Skerry and Hood 2009: 82–87; Suzanne Hood, pers. comm. 2010), and scratch-blue white salt-glazed stoneware (4 minimum vessels) (6) (Table 6.1.13) (Noël Hume 1969: 116–118). Punch bowls from Punta Salinas represent 39.78% of all ceramic tableware of a minimum 357 vessels recovered at

Table 6.1.13. Ceramic and glass vessels used for beverage serving and drinking recovered at Punta Salinas.

Ware/Glass Type	Color	Vessel Form(s)	NF	MNV
Ceramic				
English delft	N/A	Punch bowl	336	43
		Tea bowl	19	8
		Saucer	7	1
		Pitcher	1	1
		Sub-subtotal	363	53
English creamware	N/A	Punch bowl	206	53
		Mug	77	12
		Cup	6	1
		Tea bowl	2	2
		Saucer	5	1
		Teapot	3	1
		Sub-subtotal	299	70
English white salt-glazed stoneware	N/A	Punch bowl	94	23
		Mug	29	6
		Pitcher	11	2
		Teapot	10	2
		Unidentified	51	-
		Sub-subtotal	195	33
Chinese Porcelain	N/A	Tea bowl/punch bowl*	71	17
		Punch bowl	6	6
		Tea bowl	5	2
		Sub-subtotal	82	25
New England black lead-glazed redware	N/A	Punch bowl	48	7
		Mug	31	2
		Sub-subtotal	79	9
English brown stoneware, Derbyshire or Nottingham	N/A	Punch bowl	69	5
		Mug	1	1
		Sub-subtotal	70	6
Scratch-blue white salt-glazed stoneware	N/A	Punch bowl	21	4
		Tea bowl	8	1
		Sub-subtotal	29	5
English slipware	N/A	Two-handed cup	15	3
		Pitcher	34	1
		Sub-subtotal	34	4
Whieldon-type clouded/tortoiseshell-ware	N/A	Coffee pot/chocolate pot	8	1
Debased scratch-blue white salt-glazed stoneware	N/A	Mug	37	7
English sgraffito slipware	N/A	Cup	5	2
English hand-painted creamware	N/A	Punch bowl	2	1
English pearlware	N/A	Cup	2	1
English black salt-glazed stoneware	N/A	Punch pot	10	1
Whieldon-type Melon ware	N/A	Teapot	30	1
Whieldon-type Cauliflower ware	N/A	Teapot	1	1
Buckley ware	N/A	Pitcher	40	1
New England lead-glazed redware (green glazed interior)	N/A	Coffee/chocolate pot	12	1
French faience brune, Rouen plain	N/A	Pitcher	4	1
Rheinish stoneware, Westerwald	N/A	Mug	4	1
Subtotal ceramic vessels			1306	224
Glass				
Prob. Bohemian glass tumbler	Colorless	Tumbler (plain and copper-wheel engraved)	125	29
Prob. Bohemian glass tumbler	Colorless	Tumbler (fluted, ribbed, writhed and/or diamond-shaped molding)	37	12
Prob. Bohemian glass tumbler	Colorless	Tumbler (polychrome enameled)	17	4
Prob. Bohemian mugs	Solarized-violet	Mugs (applied threads of glass)	6	4
Prob. Bohemian mug	Opaline glass	Mug (polychrome enamel on milk/opaline glass)	30	1
Prob. Bohemian mug	Colorless	Mug (plain)	4	3
Prob. English drinking glass	Colorless	Drinking glass	1	1
English drinking glass	Colorless	Drinking glass (rib-molded ogee bowl, opaque-twist ornament in stem)	2	1
Subtotal glass vessels			222	55
TOTAL			1528	279

Punta Salinas (Table 6.1.13).¹⁹⁷ This percentage from La Tortuga stands out as unusually high when compared to Eleanor Breen's (2012: 86–87) analysis of punch bowls from 38 archaeological sites from the east coast of the United States and the Caribbean. Of these, the highest percentage figure comes from the late phase of Shields Tavern in Williamsburg, Virginia (1738–1751), where 54 punch bowls represented 29.8% of the total number of ceramic tableware recovered (181 minimum vessels) (Brown et al. 1990: 99). Furthermore, beverage consumption vessels (including punch bowls) at the New Tavern Street site in Port Royal, Jamaica, represent only 27.8% of the entire ceramic collection from the location. This once again demonstrates that punch bowls at the Punta Salinas site composed a greater percentage of the entire ceramic tableware collection than at this bustling late-17th- and early-18th-century Jamaican port tavern (Brown 2011: 64).

The punch bowls from Punta Salinas are relatively small and portable items, perfectly suited for stowing in a sea chest—a characteristic indispensable to a seafarer's mobile lifestyle. They fall within Anne Yentsch's (1991: 65) category of small bowls used for consumption (as opposed to larger bowls used for serving). Such small handheld punch bowls were commonly termed “sneakers” in the 18th century, and could be found in various taverns around the Atlantic in the hands of those solitary drinkers who did not have the money or company with which to share a larger bowl (Harvey 2008: 207, 219). The total average diameter of the punch bowl fragments from Punta Salinas that could

¹⁹⁷ Since the publication of my paper (Antczak 2015), this figure has slightly declined as I have added seven ceramic vessels (that I previously did not classify as tableware) to the total number of ceramic tableware vessels recovered.

be measured is 15.5 cm, compared to the average diameter of more standard delft punch bowls studied by Archer (1997: 283) which is 30.5 cm. The smallest punch bowl from Punta Salinas was 12.6 cm in diameter and the largest 24 cm.¹⁹⁸

The volumes of punch bowls at Punta Salinas also reflect their use not as communal bowls but individual drinking vessels from which punch was probably directly consumed. This in part evokes the growing individualism permeating British society with the advent of the Georgian worldview in the mid-18th century (Deetz 1996; Leone and Potter 1999; Leone 1988; Rice 1983: 98). The largest punch bowl was calculated to contain 420 ml and the smallest 221 ml, with an average of the measurable bowls being a volume of 273 ml. Four quarts of punch (almost four liters) was required to fill a large communal punch bowl in an Anglo-American tavern. Yet at Punta Salinas, punch bowls on average held close to half a pint, that is, one-sixteenth the communal amount (237 ml [Ross 1983: 39]) (Rice 1983: 95). Amid the range of sizes of cylindrical bottles found at Punta Salinas most were “quarts,” meaning their volumes likely fell in the range of 675 to 950 ml (Jones 1986: 77). Any of the cylindrical bottles from the site filled a personal punch bowl multiple times—up to over four times (considering that alcohol was only a portion of the punch mixture).

The small personal bowls are paltry compared to the multi-liter behemoths often used at elite merchant parties in the 18th century where punch was often ladled into smaller stemware (Archer 1997: 283; Gollanek 2008: 202–203). Some of the smaller

¹⁹⁸ Ten delft punch bowls found at the Rumney West Tavern in London Town, Maryland, fall within a similar range of diameters (Luckenbach 2002: 146).

bowls from Punta Salinas (primarily delft and Chinese porcelain) may have been tea bowls (also sometimes referred to as teacups); in fact five indisputable teacups of various wares were discovered at Punta Salinas. Delft bowls from archaeological assemblages identified as tea bowls have diameters that range 6–8 cm (Austin 1994: 122–125; Brown et al. 1990: 185; Leskovec 2007: 191; John Austin, pers. comm. 2010). An analysis of delft tea bowls from published collections suggests their diameters span 6–8 cm. One delft tea bowl in the Bristol Collection has a diameter of 6.8 cm (Britton 1982: 252, fig. 15.58). Three delft tea bowls with matching saucers illustrated by Archer (1997: 351, figs. H.7, H.8; Archer and Poole 2013: 284, fig. H.2) have diameters ranging from 7.4 to 7.8 cm. Nonetheless, one displays a diameter of 12.1 cm (Archer and Poole 2013: 284, fig. H.1); it is the largest such delft tea bowl in published sources. Louis Lipski (1955: 7–8) describes nine delft tea bowls which vary in diameter from 6.35 to 11.43 cm. A fine delft “duck-egg-blue” tea bowl with matching saucer from Punta Salinas has a diameter of 11.5 cm. As regards other English ceramic wares, two scratch-blue tea bowls from collections have similar dimensions of 7.6 cm (Noël Hume 1969: 117, fig. 36; Mountford 1971: fig. 159) and two English white salt-glazed tea bowls fall within the same range of diameters (Mountford 1971: fig. 109; Skerry and Hood 2009: 123). In view of the above, and taking into account the abovementioned largest published delft tea bowl (12.1 cm in diameter), I set an arbitrary cut-off diameter of 12.5 cm. Above this size, for purposes of categorization, bowls from Punta Salinas were categorized not as tea bowls but as punch bowls.

It could plausibly be suggested that some of the vessels I have identified as punch bowls might have been multi-purpose vessels used for the consumption of soups and

pottages as well as drink. However, when the wide variety of ceramic and glass tableware vessel forms from Punta Salinas is considered (Table 6.1.8), it is highly probable that vessel form indeed defined function in most cases at the site. As has already been discussed in the previous section on dining, captains seem to have been intent on reproducing, at least in part, the genteel experience of 18th-century dining back in New England, with various vessel forms being used for service and others for the consumption of meals. It cannot, however, be discarded that on occasion, some of the punch bowls might also have been used as slop bowls (vessels used for the discard of tea dregs) which were a traditional component of tea services.

As has been noted by cultural historian Karen Harvey (2012: 177), “[T]he material culture of punch-drinking crossed these material lines of demarcation.” Punch could also have been poured from punch pots or ladled from bowls and drunk from glass tumblers and stem glasses. All these vessel types have been found at Punta Salinas. Fragments of one English black salt-glazed stoneware punch pot were recovered roughly dating to 1759–1765 (Fig. 6.1.30, 1) (Noël Hume 2001: 277). The large size of the fragments suggests that it was not a teapot. Teapots were usually quite small. Instead it seemed to have been a rather uncommon pot for mixing and distributing punch, probably into glass tumblers and stemware. A total of 45 18th-century conical glass tumblers, probably from Bohemian glassworks, were recovered at Punta Salinas (3–6) (Table 6.1.13; Table 6.1.8) (de Almeida Ferreira 2005; Jones and Smith 1985: 34–37). Many of these tumblers are not plain but feature intricate copper-wheel engraved designs. Others have pattern-molded flutes and pattern-molded diamonds. Some are also cold-painted in polychrome



Fig. 6.1.30. (1) English black salt-glazed stoneware punch pot fragments, one with a crabstock handle. Staffordshire. c. 1755–1770. Handle height 10.2cm. (2) Solid drawn drinking glass with a plain trumpet-shaped bowl; the other is a drinking glass with a rib-molded ogee bowl and a straight stem with opaque-twist ornament within. Prob. British. 18th century. (3–6) Glass tumblers and tumbler fragments. Prob. Bohemian. 18th century. (4) Drawings of various copper-wheel engraved designs on the tumbler fragments.

enamel. One is octagonal in shape (4). Finally, only two drinking glasses were recovered, both dating to the 18th century. One is a solid drawn glass with a plain trumpet-shaped bowl and the other a glass with a rib-molded ogee bowl and a straight stem with opaque-twist ornament within (2). The Brigantine *Porgy* stowed six wine glasses (MHMCB 1996 [1766]: 207). It is probable that the tumblers and drinking glasses found at Punta Salinas as well as those on board the *Porgy* were part of the paraphernalia of punch-drinking, with the alcoholic beverage ladled out of bowls or poured from punch pots into these glass vessels (Antczak *In Press*).

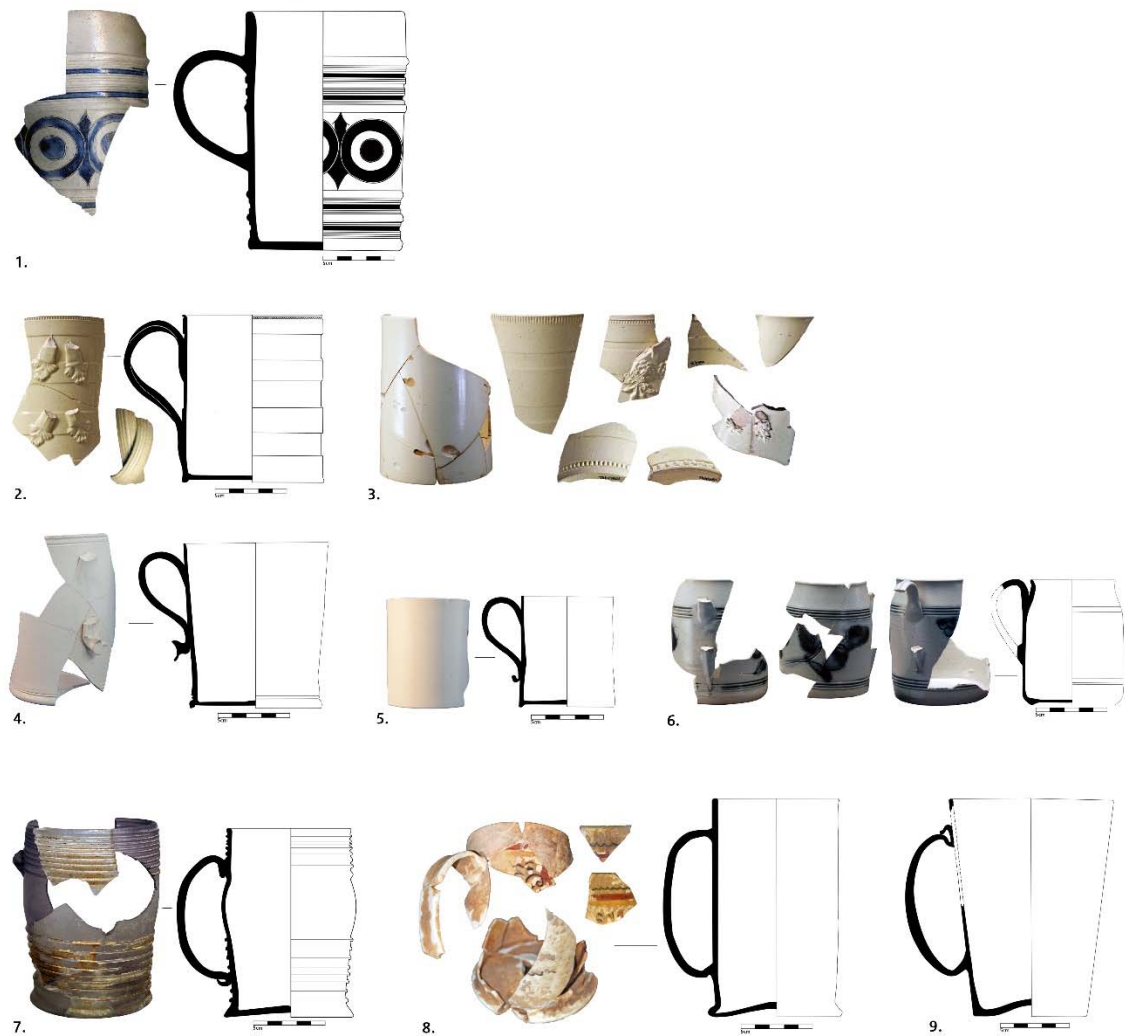


Fig. 6.1.31. Various ceramic and glass mugs recovered at Punta Salinas. (1) Rheinisch stoneware mug, Westerwald. c. 1730–1760. Cobalt blue painted decoration. 17 cm height. (2–3) Various creamware mugs. c. 1762–1810. (4–5) Two English white salt-glazed stoneware mugs. c. 1740–1778. (6) Debased “scratch blue” white salt-glazed stoneware mugs, Staffordshire. c. 1765–1790. (7–9) Probably Bohemian glass mugs. No. 7 has applied circular threads of glass; no. 8. is made of opaline (non-translucent) glass and decorated with a cold-painted polychrome enamel; and no. 9 is plain. 18th century.

The ceramics and glass collection from Punta Salinas also includes a considerable number of mugs (37 vessels) (Table 6.1.8). Mugs would have generally been used for drinking alcoholic beverages such as beer at taverns and at home. Although there is no documentary evidence for beer at Punta Salinas, it is possible it was also one of the many alcoholic beverages consumed at the site. Twenty-nine ceramic mugs were recovered

(Fig. 6.1.31). Twelve are of creamware, various of which have molded horizontal banding and decorative foliated handle antefixes (Fig. 6.1.31, 2 and 3). Seven colorful debased scratch-blue mugs (6) (Noël Hume 1969: 118), and six English white salt-glazed stoneware mugs (4 and 5) were also found, one of which (5) is particularly small (7.6 cm tall) and could have been used for chocolate or coffee drinking. Other mugs are New England black lead-glazed redware, English brown stoneware and a large beautifully decorated cobalt-blue colored Rheinisch stoneware mug (1) (Noël Hume 1969: 280 and Noël Hume 2001: 108). Eight glass mugs were also recovered (7–9) (Table 6.1.13). Three of these mugs are plain (9), and four have applied circular threads of glass and are probably German-made (Bohemian) beer mugs dating from the 18th century (7) (Willy van den Bossche, pers. comm. 2010). A final fine Bohemian glass mug is made of opaline (non-translucent) glass and decorated with cold-painted polychrome enamel (8) (Willy van den Bossche, pers. comm. 2010). The Brigantine *Roach* had two “stone mugs” and two smaller ones on board. The Brigantine *Porgey* carried six wine glasses (MHMCB 1996 [1766]: 209). As noted by Royal Navy Officer John Mitford (1819: 11), the unconventional adaptation of teacups for alcohol consumption during long voyages when glass tumblers broke was not uncommon. This suggests that perhaps some of the abovementioned sturdy glass and ceramic mugs (as well as some of the ceramic cups mentioned below) could have stood in for punch-drinking vessels (perhaps punch cups) when necessary.

The final vessel types recovered at Punta Salinas that might have been used for serving and drinking alcoholic beverages are ceramic pitchers and two-handled cups. Six pitchers were recovered at the site (Fig. 6.1.32) (Table 6.1.13; Table 6.1.8). These include



Fig. 6.1.32. Pitchers and cup recovered at Punta Salinas. (1) English slipware cup, probably Staffordshire or elsewhere in the Midlands. c. 1720–1740. Probably had a dotted rim, and two handles. Base diameter 8.4 cm. (2) Lead-glazed Buckley earthenware pitcher, North Wales. Second and third quarters of 18th century. Height 19.6 cm, diameter 10 cm. (3) English slipware jug, probably Staffordshire. First half of 18th century. Height 15.5 cm.

an English slipware pitcher from the first half of the 18th century (3) (Grigsby 1993: 55); a lead-glazed Buckley earthenware pitcher from the second half of the 18th century (2) (Noël Hume 1969: 133, 135); as well as a delft, white salt-glazed stoneware and a French faïence brune, Rouen plain pitcher each. The presence of pitchers at La Tortuga suggests that these multi-function vessels, often used in the kitchen and associated with dairy, were used not for individual alcoholic beverage serving but for the communal distribution

of alcohol among captains, or possibly seamen, at Punta Salinas (Beaudry et al. 1983: 28, 31; Yentsch 1991). Finally, three English slipware two-handled cups were also recovered (all of which probably with dotted rims) dating to the first half of the 18th century (1) (Grigsby 1993: 56; Orr 2003: 252).

We now turn to reassemble these drinking-related objects into the vibrant assemblage of drinking at Punta Salinas where I argue punch was the focal point. As I shall explain, the Punta Salinas assemblage of drinking was different from those in any other city, town, port or household in the Anglo-American Atlantic world.

DRINKING AT THE TAVERN BY THE SALTPAN

On La Tortuga, seafarers had no permanent physical tavern in which they could spend their leisure time as they did in other Caribbean and Atlantic world ports. Therefore, I argue that at Punta Salinas, captains improvised and created an open-air tavern. Before coming to La Tortuga, most of the ships in the Saltertuda Fleet would congregate in the port of Bridgetown, Barbados, which had more than one tavern for every 30 residents (Smith and Watson 2008: 79). Seafarers and taverns went hand in hand. Thus it is not surprising that in 1682, English privateer and naturalist William Dampier (1699: 56) recounted the popularity of punch-drinking on La Tortuga:

I have seen above 20 Sail at a time in this Road [La Tortuga] come to lade Salt; and these ships coming from some of the *Caribbe Islands*, are always well stored with Rum, Sugar and Limejuice to make Punch, to hearten their Men when they are at work, getting and bringing aboard the Salt; and they commonly provide the more, in hopes to meet with Privateers, who resort hither in the aforesaid Months, purposely to keep a Christmas, as they call it; being sure to meet with Liquor enough to be merry with, and are very liberal to those that treat them.

In fact, punch was a cornerstone of the later 17th- and 18th-century seafarer's drinking practice (Harvey 2012: 194). Punch is a mixed drink consisting of five ingredients; in fact, the name "punch" most probably derives from the Hindustani *panch* meaning five (Connell 1957: 1; Grigsby 2002: 176; Smith 2005: 80–81). The five principal ingredients varied in the many 17th- and 18th-century recipes, but generally included spirit (rum, brandy and arrack) or wine, fruit (limes, lemons or oranges), sugar, spices (usually nutmeg) and water (Goodwin 2002: 131; Rice 1983: 95). Punch has been traditionally ascribed an Asian origin. Nonetheless, there is a strong claim that it was an English invention originating on board 17th-century ships travelling to Asia traversing the vast Pacific, Indian, and Atlantic oceans (Gollanek 2008: 164; Harvey 2012: 173–174; Kimball 1945; Wondrich 2010: 37).

More expensive versions of punch could contain rare grated nutmeg, exotic pineapples, and fine French brandy or Madeira wines (Nathan 2006: 32). There were also various grades of sugar that could be used, from simple and unrefined dark muscovado to a highly refined and expensive white powdery sugar (Gollanek 2008: 189). Moreover, large delft and porcelain punch bowls and their accompanying assortment of paraphernalia including silver punch ladles, fancy nutmeg graters, sugar dredgers, crushers, nippers and hatchets to cut sugar cones, wine funnels, glass punch lifters and fine glass stemware made punch a preferred showy drink among the gentility, whether Barbadian planters or New England merchants (Connell 1957; Goodwin 2002; Smith 2005: 123). Many of these more expensive items might have been in fact more available to seafarers as they were the very people who made them accessible to the gentility in the

first place by way of their maritime mobilities (Harvey 2012: 194). Fresh drinking water, one of the five ingredients of punch, however, would have been a luxury aboard any vessel. The 91 German stoneware mineral water bottles recovered at Punta Salinas most probably contained fine German spa or *Selters* (Seltzer) water. A 1786 “Royal” punch recipe published in *The Bermuda Gazette*, among other exotic spirits, calls for “2 Bottles of Seltzer Water” (cited in Fortenberry and Carlson 2015: 585). The large number of German water bottles is a prime example that even water, the most seemingly inconspicuous ingredient in the making of punch, could be exotic on La Tortuga where no fresh water could be found.

Punch, that “quintessential Atlantic world beverage” as art historian Eric Gollanek (2008: 164) terms it, grew greatly in popularity in the late 17th and 18th centuries and became a drink of which people of all social classes partook (Harvey 2012: 180). The maritime origins of punch were evident in multiple ways. In the mid-18th century in Britain, decorated “success” or “presentation” punch bowls made in delft, salt-glazed stoneware and other ceramic wares were commissioned by captains as testimonials of business friendships. They often had the recipient’s ship and name painted on the interior (Archer 1997: 308–309; Rudolph 1985: 42–43). As is evident in the quote from Dampier at the beginning of this section, punch was popular among the seafarers (both captains and crews) when the privateer visited La Tortuga’s saltpan in 1682. Indeed, punch was primarily consumed by the middle classes, of which seafarers formed a large part in the late 17th and 18th century (Harvey 2012: 180). This popularity of punch amongst maritime people was also noted by Dampier in 1675–1676 when he visited a logwood-cutting camp

in the Bay of Campeche whose inhabitants he described as very “frolicsome” (Dampier 1700: 18, 80). Concerning punch houses on the central Atlantic island of St. Helena in 1691, Dampier (1699: 548) commented, “never empty”.

In the Caribbean, Rum punch offered a distinct local option to those who could not purchase finer imported spirits. It was made with rum plentiful in the West Indies and New England and, especially, in the case of the Saltertuda Fleet, readily available on Barbados (Smith 2005). Limes were also plentiful on Barbados, and were renowned for yielding abundant juice (Singleton 2010 [1767]: 23–24). Moreover, the lime juice in punch supplemented the seafarer’s miserable and nutrient-deficient diet by providing him with an essential source of vitamin C to counter the constant threat of scurvy on long voyages (Dampier 1699: 296; Watt 1981: 57–58). Sugar, Barbados’ prime export, was also readily available to the seafarers sailing from the island to La Tortuga for salt.

As previously mentioned, the 1766 inventories of the three Bermudian vessels also showed abundant stores of alcohol (Table 6.1.10) as well as punch ingredients and paraphernalia. The *Porgey* carried two punch ladles and a large tin sugar box, whereas, the Brigantine *Roach* transported similar stores including a “China Bowle,” the 18th-century term associated with punch bowls. Moreover, the *Porgey* conveyed 60 lb of brown sugar and the *Roach* included 45 lb of regular sugar and 25 lb of finer white sugar among its stores (Table 6.1.2) (MHMCB 1996 [1766]: 206–210). In 1765, two ships arriving at Piscataqua via Barbados and Saltertuda (La Tortuga) carried salt, rum and 50 gal (189

l) of lime juice each, which the naval officer describes as stores.¹⁹⁹ In spite of the naval officer's description, it is doubtful such a large quantity of lime juice could have constituted solely ship stores. In fact, oftentimes captains returning from a voyage to the West Indies would bring with them a keg of limes for making punch with which to regale their friends back in New England (Downey 1947: 190). It is possible, however, that part of this lime juice was put to good use in the making of punch while at Punta Salinas.

As mentioned in the sections on food preparation and dining at Punta Salinas, the Dunes activity area stands out as the richest archaeological context at Punta Salinas. The two large trenches (TR/S/D-1 and D-2) (Fig. 6.1.8) excavated there yielded a breadth and variety of material things. These suggest that the temporary occupants repeatedly brought and employed items of economic, personal and social value at the Dunes activity area. A large portion of the tableware associated with dining was found in the trenches in this place. Also, most of the zooarchaeological remains were found here, which indicate that local species and provisions/livestock were being consumed at the site. It is evident that dining at the rudimentary campsite was of a higher-than-expected standard. A considerable quantity of ceramic and glass drinking vessels were also recovered in the Dunes including 23 delft, 26 creamware, 14 English white salt-glazed and two scratch-blue punch bowls, along with numerous ceramic and glass mugs, glass tumblers and German stoneware water bottles. The Dunes activity area also featured the previously mentioned permanent brick-lined fire pit. Faunal remains recovered in the area lay at a depth

¹⁹⁹ C.O. 5/969.

between 20 and 40 cm; the base of the fire pit extended 45–50 cm deep. Many of the ceramic and glass fragments were interspersed with faunal remains in these strata, so it can reasonably be assumed that the cooking activities taking place here were functionally associated with the discard of punch bowls and other items.

Other objects found at the Dunes include items used in typical tavern leisure activities. Three lead die, a fighting cock's tarsometatarsus with spur, and 47 silver

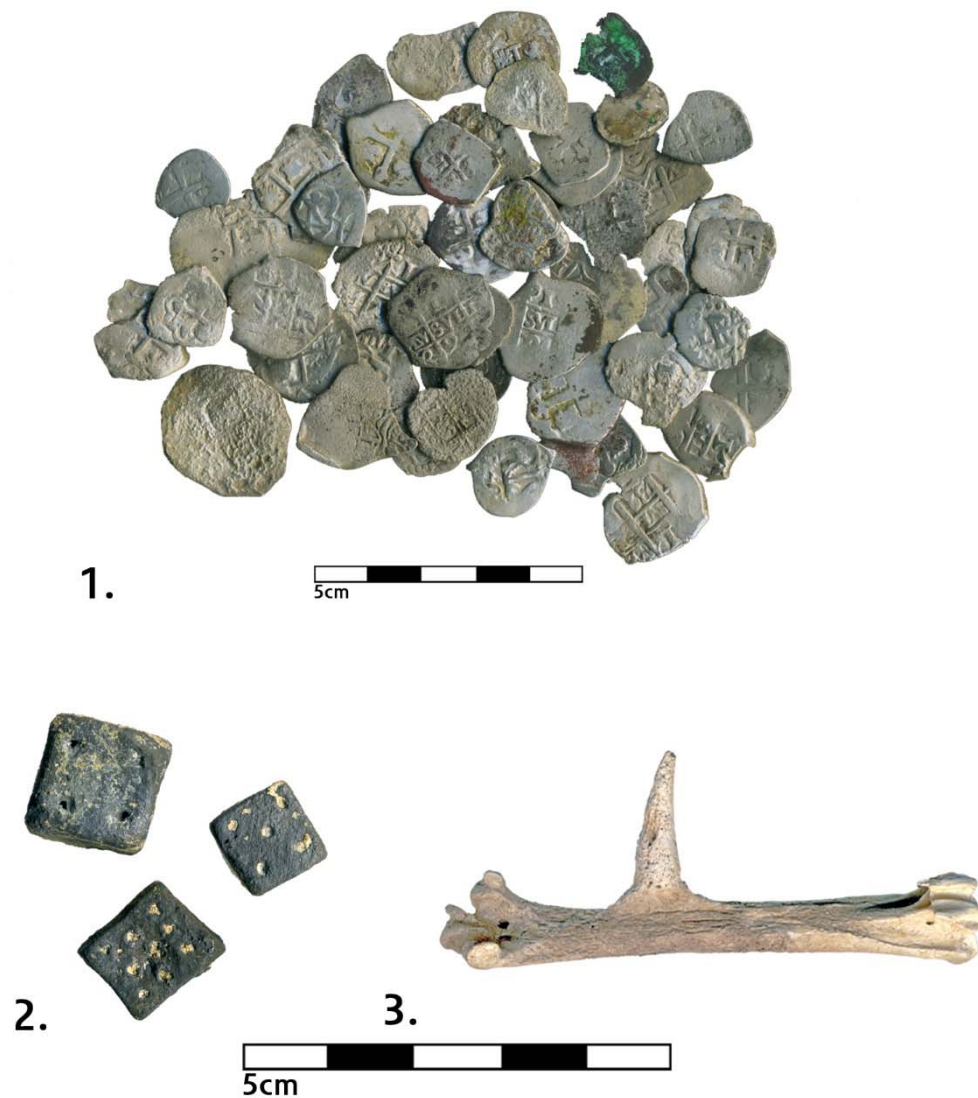


Fig. 6.1.33. Various items indicating typical tavern leisure activities at the Dunes activity area. (1) 47 silver Spanish cobs. (2) Three lead die. (3) Fighting cock tarsometatarsus with spur.

Spanish *macuquinas* (coins), with values of half, one and two *Reales*²⁰⁰ suggest that the characteristic 18th-century tavern activities of gambling and cockfighting occurred within the Dunes activity area (Fig. 6.1.33) (Brown 2011: 59; Brown et al. 1990; Rice 1983). Pipe smoking, however, does not seem to have been as common as could be presumed at Punta Salinas. Pipe fragments, especially stems, often figure as some of the most abundant archaeological remains at colonial sites. Yet at Punta Salinas only 35 stems and 11 bowls plus bowl fragments were found. All of these pipe fragments are from 18th-century pipes and a number of the bowls are from Gouda, exhibiting the characteristic ovoid bowl shapes of pipes from the second half of the 18th century (Fig. 6.1.34, 3) (Duco 1987: 44–47). One decorated black ceramic reed pipe was already mentioned in Chapter 4 as possibly being the personal possession of an enslaved mariner. The Dunes activity area had the majority of pipe fragments, suggesting that smoking principally occurred at the campsite on the dune. No pipe stems were found on the saltpan suggesting, as mentioned in Chapter 5, that a strict regimen of orderliness and cleanliness was associated with salt raking. Two smoking-associated finds were also located during metal detector survey on the sandy plain beyond the Dunes activity area (Fig. 6.1.8). These include a copper-alloy kettle spout re-fashioned into a crude smoking pipe and a copper-alloy pipe lid (Fig. 6.1.34, 1 and 2) (Dąbal 2008: 243). The crude metal pipe could have been an ingenious, if hot, invention less breakable and fragile than a kaolin pipe. It could also have been, feasibly, the personal possession of an enslaved mariner. Further

²⁰⁰ Crudely made and asymmetrical, the Spanish coins were the most widely used currency throughout the Americas even beyond the limits of the Spanish Empire in the 17th and 18th centuries (Hicklin 2007: 65).

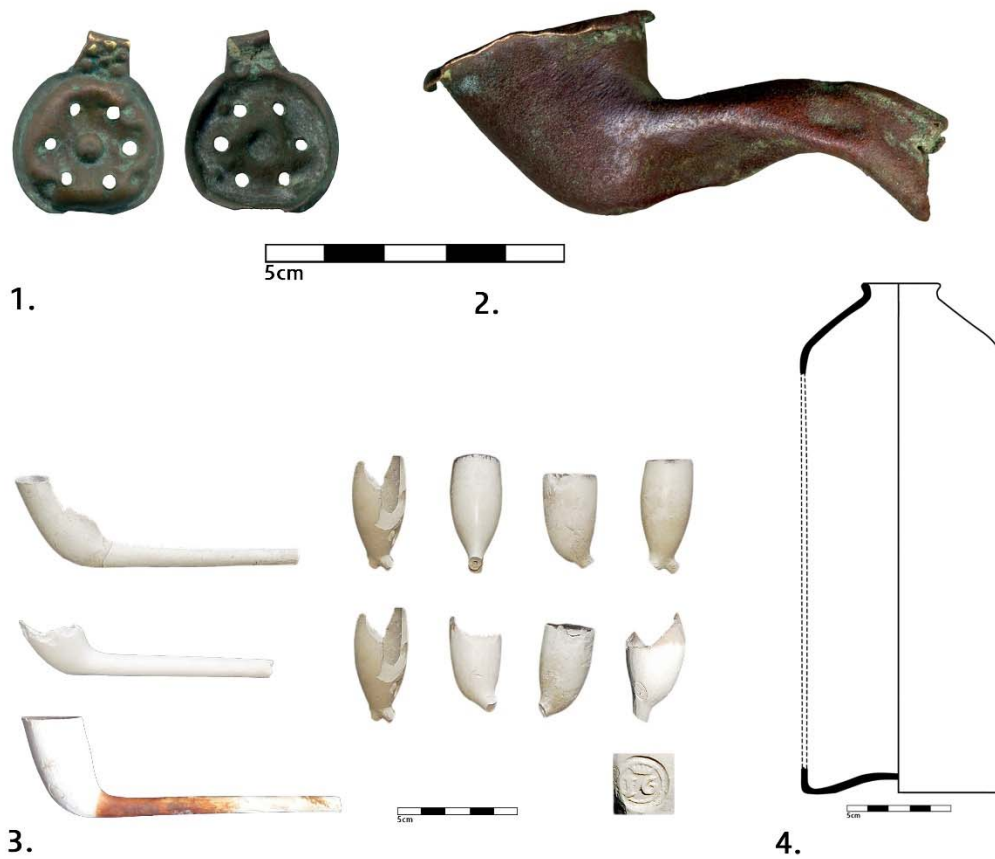


Fig. 6.1.34. Tobacco-related items from the Dunes activity area. (1) Prob. copper-alloy pipe lid. (2) Copper-alloy kettle spout re-fashioned into a crude smoking pipe. (3) Various Dutch and probably also English kaolin pipes. Second half of 18th century. (4) English or American, wide-mouthed case bottles with short everted lips. Probably snuff bottles. Second half of the 18th century.

evidence for tobacco use comes from five English or American wide-mouthed case bottles with short everted lips dating to the second half of the 18th century (4). These bottles probably contained tobacco snuff. Their shape was often recognized for such in the 18th and 19th centuries (although they might also have been jars for storing preserves) (Jones 2010: 138–139; 1993: 33–34).



Fig. 6.1.35. Metal keys, copper-alloy escutcheons from sea chests, and a large iron sea chest lock.

Furthermore, many of these expensive ceramic and glass tableware items along with storage vessels and smaller items such as coins, dice and pipes were probably unloaded in sea chests. Archaeological evidence once again suggests that indeed, captains at the Dunes brought their items down on land in such chests. Five corroded iron keys

were found at the site along with a fragment of a copper-alloy key (Fig. 6.1.35, 1 and 2). Two copper-alloy escutcheons belong to sea chests (2). Furthermore, a large iron lock mechanism exhibits impressions of wood on the corroded iron of its interior where it would have been inserted into the wooden frame of a chest (4). Clearly, no matter how convivial and merry the dining and drinking assemblages at Punta Salinas, captains preferred to keep their personal belongings securely under lock and key when they were not using them. Furthermore, as mentioned in Chapter 4, various fragments of metal hardware from firearms including pistols, muskets and probably rifles or blunderbusses, along with a boarding cutlass and chapes from edged-weapon scabbards, were found at Punta Salinas. I also noted that lead shot could have been produced at the site due to the large quantity of lead slag recovered. This evidence indicates that captains set foot on land armed in order to further assert their status among peers. Naturally, being armed also served as a protective measure, exhibiting rank and authority to prevent possible mutinies. Moreover, captains would have been armed to protect themselves from Spanish corsair attacks. Whatever the reasons for bearing arms, the threat of violence loomed over Punta Salinas. When Spanish corsairs did attack, which was often, violence interrupted scenes of “bucolic” revelry at Punta Salinas.

The Dunes activity area, situated on the most elevated portion of the site, would have offered its occupants the best vantage point from which to oversee the work of the crews on the saltpan. It also afforded enjoyment of the refreshing sea breeze unavailable on the surrounding plain and saltpan (Fig. 6.1.36). A small pewter sundial from Massachusetts (Fig. 6.1.37, 2) (Davis 2003: 285–287), a gilded key from a mechanical



Fig. 6.1.36. Dunes activity area panorama as seen from the saltpan.

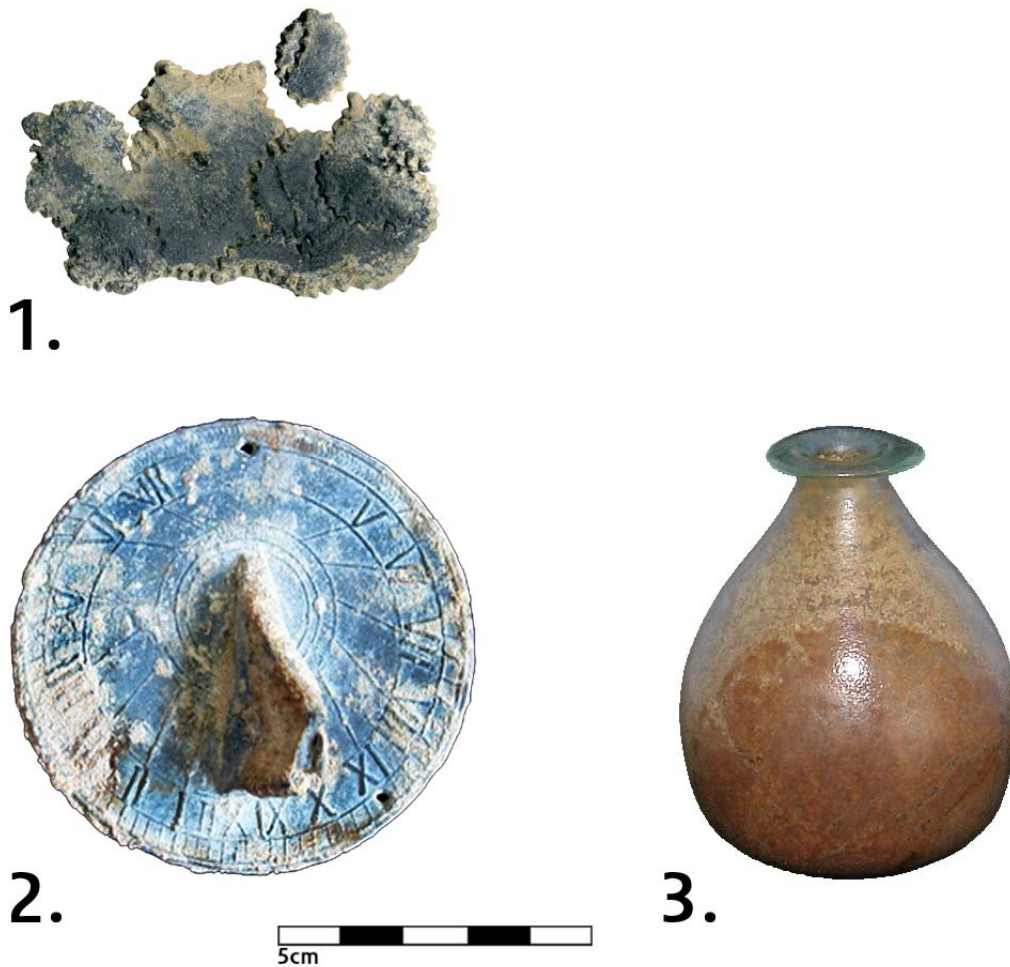


Fig. 6.1.37. Items associated with labor management on saltpan recovered in the Dunes activity area. (1) Lead sheet with stamped circular token pre-forms. (2) Pewter sundial, New York or New England, 1740–1780. (3) Half of a sand hourglass.

pocket watch (the latter already mentioned in Chapter 4 [Fig. 4.5]), and two bottles from what was probably a sand hourglass (3) strongly suggest that the captains who were drinking and dining on the Dunes were simultaneously interested in timekeeping to manage the salt-raking labors of their crews. These findings echo Mark Leone’s (1988: 242) interpretation of clocks and watches in the 18th century as often serving the “Georgian conceptual order”: segregation and subdivision to foster order and social

control. Sand hourglasses are recurring finds from 18th-century shipwrecks (e.g. Bratten 2002: 189; Elkin et al. 2011: 295; Ossowski 2008: 238). The *Porgy* carried various such instruments including one two-hour glass, two ½-hour glasses, two ½-minute glasses and two ¼-minute glasses (MHMCB 1996 [1766]: 207). Also, two recovered lead sheets with circular token pre-forms stamped into them along with various circular lead tokens were likely either temporary substitutes for future payments, stand-ins for money to purchase alcohol, or gaming pieces (Fig. 6.1.37, 1). The evidence for a variety of expensive items at the Dunes activity area as well as objects associated with gambling and time-keeping suggests that the activity area was largely and repeatedly occupied by the most economically adventurous New England seafarers and by those with most authority—namely the captains.

Unhindered by the four walls of a traditional tavern, the captains—obliged to supply their own crockery at Punta Salinas—had a unique opportunity to display their material possessions and exotic ingredients, many of which were associated with punch-drinking. Through the manipulation of these things within the vibrant sub-semblage of punch-drinking (part of the larger assemblage of beverage drinking at the site), captains could underscore their individuality. The previously mentioned and expanding Georgian worldview placed a greater emphasis on the individual, as evidenced by portable and personal—not communal—punch sneakers. These changes, evident at Punta Salinas, were also echoed in individual drinking preferences in New England taverns during the second half of the 18th century (Garvin and Garvin 1988: 157–158; Rice 1983: 98). Although the crockery that the captains brought indeed emphasized their growing

concern for individuality, punch-drinking was still a thoroughly communal affair. The temporary open-air tavern by the saltpan offered captains a prime setting not only for dining with peers, but for alcohol-based masculine sociability. As has been noted by cultural historians, punch was not usually served with meals. Imbibing it was most often a separate ceremony in its own right (Detweiler 1982: 34; Harvey 2008: 216). Punch was probably consumed between or following meal times. Moreover, unlike solid fare, the alcoholic punch in itself functioned as a social lubricant. Alcohol is known to be an important agent in fostering social interaction, communication, companionship, camaraderie, conviviality and sociability (Douglas 2003; Hawdon 2005: 177; Marshall 1979: 453). The role of punch at Punta Salinas was no different. Gollanek (2008: 213) describes the socially “magnetic” role of the punch bowl and its alcoholic contents as a social lubricant around which strangers felt at ease. For the captains at Punta Salinas, punch lubricated social leisure activities and, at the least, reduced the monotony of waiting weeks on end for salt to be raked and loaded on board the ships by the laboring crews.

The leisurely weeks of tropical tedium on La Tortuga would also have served as opportunities for captains to create future social networks and build strategic commercial alliances, as well as form friendships that might lead to greater social mobility for certain individuals. Although the populations of New England port cities varied, many captains probably knew each other and could shape opportunities to meet on future voyages in the region. To Michael Dietler (2010: 222–223) the performative aspects of alcohol consumption (discussed above in relation to punch bowls and the other paraphernalia of

punch-drinking) serve to construct social and personal identities as well as to create and maintain social and political relationships. It is therefore, plausible to suggest that communal alcohol drinking was of great importance to the captains carousing at Punta Salinas. Furthermore, as has been mentioned in Chapter 4, at least 11 of the captains of the small ships that arrived at the island in the 18th century—identified in the fragmentary NOLS—were owners of the vessels they piloted, indicating a certain degree of social mobility in the business of maritime trade.

The convivial gathering of captains would also have involved exchanges of information, news and gossip. The captains indeed exhibited great solidarity and camaraderie in the face of a common threat, underscored by the account of the confiscation of their salt by Robert Gregory, commander of the H.M.S. *Scarborough* in March of 1768. The captains, from various West Indian and East Coast ports, united in an attempt to stop Gregory's "illegal" confiscation of their salt. However, upon failing to do so, they promised to prosecute Gregory in court in New England (Anonymous 1768: 90–93).²⁰¹ As the evidence from the Dunes activity area indicates, besides drinking, captains also probably engaged in the typical tavern activities of gambling and cock-fighting (Brown et al. 1990: 53; Rice 1983: 111). Toasting and health-drinking, important rituals in Anglo-American taverns, also likely occurred and fostered a sense of community, if temporary, among the captains (Goodwin 2002: 131, 137; Rice 1983: 98).

²⁰¹ *Boston News-Letter*, May 12, 1768.

The punch bowl was an 18th-century object that metaphorically synthesized the Atlantic world. These eye-catching vessels filled with exotic punch became the foci of sea captains' social gatherings and of the entire assemblage of alcohol drinking. Punch itself—the blend of alcohol, fruit, water, spices and sugar—suggested the coming together of disparate people in the convivial act of drinking (Harvey 2012: 191). In effect, punch bowls and punch became a potent metaphor of the far-reaching tentacles of the growing British mercantile capitalist world order. They became, as Gollanek (2008: 220) describes them, “supercharged space[s] for the sensory consumption of empire.” It was through these fashionable bowls and their accompanying things that captains could underscore their cosmopolitan identities and their connections to far-flung places in the Atlantic world and even beyond. The sub-assemblage of punch-drinking at Punta Salinas thus sympathetically entangled the colorful ceramic bowls, their intoxicating and often exotic contents, and the diverse material paraphernalia of punch-drinking with the gregariously reveling captains. Amid the resulting correspondence of punch, bowls, and sea captains, the vibrant imaginary tavern by the saltpan thrived. It enabled not only jovial socialization but also provided a stage on which captains could display their acquisitive power, interact with peers and construct their individual social identities as well as build future commercial alliances.

PUNCH FOR THE LABORING CREWS

While alcohol drinking meant relaxation and sociability for the captains, it was a source of strength in the exhausting work of the ordinary seamen laboring on the saltpan (Garvin and Garvin 1988: 154). The role of alcohol as a labor incentive and enhancer has been

explored by numerous authors (see, for example, Dietler 1990; Dove 1988; Jankowiak and Bradburd 2003; Karp 1980; Suggs and Lewis 2003). The cases addressed by these authors, however, do not relate to conditions of wage labor but rather to incentivizing and mobilizing labor through the distribution of alcohol during feasts. On La Tortuga, the alcohol given by captains to their waged crews did not function within a framework of feasting. It was an act of paternalism.

Crews performed better under toilsome conditions on the saltpan when they had the “incentive” of alcohol. Captains capitalized on this knowledge. As English cook Richard Briggs (1788: 646) noted, “A great piece of aeconomy is the good management of small beer; for if that is not good, the drinkers of it will be feeble in summer time, incapable of strong work, and will be very subject to distempers.” With such considerations in mind, Dampier (1699: 56) saw that many captains gave punch to their crews in hopes that it would “hearten” their men in the arduous process of raking salt and transporting it to the ships. The captains thus exercised a form of power through distributing alcohol more subliminal than the employment of outright violence in order to manage their men. Strategic alcohol disbursement was a widespread phenomenon at sea. The most emblematic example was the British Navy’s daily rum ration for seamen that began around 1655 in the Caribbean and continued, uninterrupted, for more than 300 years (Pack 1996).

Some common 18th-century notions of health and humoral medicine may have further encouraged alcohol (especially rum) drinking in hot conditions such as those at Punta Salinas. British author Richard Ligon (1673: 27) reasoned that “certain strong drinks

are very requisite, where so much heat is; for the spirits being exhausted with much sweating, the inner parts are left cold and faint, and shall need comforting, and reviving [with more strong drinks].” In the same vein, Philadelphian Daniel Roberdeau (Rice 1983: 96) wrote in 1763, “In our extream Hot weather we cant do well with out Punch.” Historian Neville Connell (1957: 1) argues that the tropical climate is the reason for there existing fewer 17th- and 18th-century accounts of drunkenness in the Caribbean relative to the Atlantic world as a whole: sweating in the sun, drinkers were less prone to drunkenness.²⁰²

At Punta Salinas, the seamen’s workday on the saltpan was probably not constant. The arduous environmental conditions of the site likely dictated a truncated schedule with the crews raking, bagging and transporting salt to the shore then to the ships during the early mornings, late afternoons and nights. In the late 16th century, Spanish military architect Juan Bautista Antonelli (the Elder) noticed that the Dutchmen obtaining salt from the salina of Araya only worked during the early mornings and moonlit nights to avoid the fatigue that resulted from working in the full tropical sun (Varela Marcos 1980: 77). Blazing middays and other moments when the seamen were not working offered an opportunity to drink and eat those rations allotted to them by their captains, and possibly forage for local resources.

²⁰² This is certainly true on La Tortuga where the sweltering heat diminishes the effects of excessive alcohol intake, as I observed among fishermen visited during the fieldwork campaigns on the Venezuelan islands.

As is the case with material evidence of regular seamen dining, evidence for punch and alcohol consumption by crews at Punta Salinas is grudging and difficult to interpret. Some of the aforementioned *quigueros*, lying beyond the three large activity areas, had, as mentioned, dark sand with carbonized matter and scatters of West Indian top shell. The ceramic and glass finds broadly associated with these features included fragments of German stoneware mineral water bottles, cylindrical and case glass bottles, and a few fragments of white salt-glazed stoneware and creamware punch bowls and plates. Because of the periodicity of visits to Punta Salinas and because the shifting sand strata have left very little stratigraphic information, the site presents a complicated palimpsestic record. For this reason, it is impossible to separate particular object scatters from each other and determine their synchronicity with the better-delineated activity areas. Thus it is not entirely clear if these *quigueros* were small campsites for captains not on the Dunes, or if they were utilized at different times when the Dunes campsites were abandoned. Alternatively, these remains could have been left behind by regular seamen resting during the midday under tarps, drinking alcohol, and eating the rations given to them by captains, as well as consuming West Indian top shell gathered from the shore. Identifying the elusive regular seaman in the archaeological record of Punta Salinas is a difficult task.

Regardless of where exactly the crews consumed alcohol, I hypothesize that by incentivizing their work, alcohol simultaneously functioned as a safety valve. For the captains, it provided a means of veiling the now-blattant line of labor division and social distinction drawn between themselves and their crews at Punta Salinas. Indeed, as recipients of punch and alcohol rations paternalistically distributed by captains, many

seamen might have been diverted from recognizing their new degraded social situation at the site (as mentioned earlier in this Chapter and in Chapter 4, on board the ships a general collectivism prevailed). Interestingly, this situation contrasts markedly with that noted by archaeologist James Finamore (1994: 78, 229) in the British Bay Settlement (modern-day Belize) where the wood-cutters and baymen were primarily renegade and opportunistic seafarers and pirates. These seafarers all periodically engaged in bouts of copious communal drinking (primarily rum punch) which reinforced their social cohesion and horizontal collectivism, and accentuated their anti-authoritarianism.²⁰³ With the intoxicating incentive of alcohol, on La Tortuga salt-raking crews were deployed and controlled by their captains in the context of the strict and paternalistic maritime labor relations against which the renegade baymen were rebelling through uncontrolled communal drunkenness in their autonomous world on the wood-cutting frontier (Finamore 2007: 76). The open-air tavern at Punta Salinas was, nonetheless, a temporary one, and the captains and their personal things would soon return on board their small ships becoming immersed in their routine social milieu. Only during the few weeks that the salt-raking enterprise at Punta Salinas lasted, could the captains engage in strict overseeing, leisure and the display of their material possessions, with their crews working on the saltpans appeased with alcohol primarily in the form of punch.

²⁰³ It could also be argued that captains might have sold punch and alcohol to their crews at Punta Salinas, as items were often sold to seamen at sea and debited against their wages (Earle 1998: 91–92). I argue, however, that this would have been counterproductive, given the role of freely distributed alcohol in the form of punch as a safety valve smoothing the potentially sharp edges of the temporary yet divergent labor politics and social dynamics of the saltpan.

GENTEEL SEAFARERS: TEA, COFFEE AND CHOCOLATE DRINKING

The sunbaked campsite of Punta Salinas was not only the site of widespread alcohol consumption, primarily in the form of punch. The archaeological evidence from Punta Salinas has so far demonstrated that the caricatures of 18th-century seafarers as rough and alcohol-dependent men were in fact very far from reality. Sea captains at Punta Salinas engaged in elaborate punch-drinking ceremonies and dining practices with all the required fancy and oftentimes exotic and expensive tableware and other requisite paraphernalia on the uninhabited and scorched strip of sand beside the saltpan of La Tortuga. Whereas alcohol drinking in such a hot and inclement place as Punta Salinas is not surprising, the remains of tea, chocolate and coffee drinking assemblages at the site are startling.

Five teapots were found at Punta Salinas (Fig. 6.1.38, 2 and 3) (Table 6.1.13; Table 6.1.8). The first is a small and fine Whieldon-type Melon-ware teapot from Staffordshire dating to c. 1747–1780 (2) (Grigsby 1990: 186–187). Another is the fragment of a fine Whieldon-type Cauliflower-ware teapot also from Staffordshire and dating to c. 1765–1780. (3) (Grigsby 1990: 188–189). Another is a creamware teapot, and the last two are both white salt-glazed stoneware examples. Two coffee or chocolate pots were also found. They were much larger than the teapots and exhibited cylindrical rather than ovoid bodies. One is a fine Whieldon-type clouded tortoiseshell-ware pot dated to c. 1750–1765; the other is probably a New England lead-glazed redware pot with a green-glazed interior dating to the second half of the 18th century (1) (Grigsby 1990: 173–175).



Fig. 6.1.38. Tea- and coffee-related ceramics recovered from the Dunes activity area. (1) Whieldon-type clouded/tortoiseshell-ware coffee/ chocolate pot. c. 1750–1765. Cream colored body, decorated with “clouded” glazes with spout and handle molded with floral patterns. Height 12.6 cm. (2) Whieldon-type Melon-ware teapot, Staffordshire. c. 1747–1780. Cream-colored body decorated with colored glazes and tightly spaced lines of horizontal dots; sprig-molded leaf flanking handle. Height 8.7 cm. (3) Whieldon-type Cauliflower-ware teapot, Staffordshire. c. 1765–1780. Cream-colored body, decorated with colored glazes and press-molded cauliflower design. (4) English delft saucer and tea bowl set with rich turquoise glaze commonly called “duck egg blue”, poss. Bristol. c. 1730–1750. Diameter of saucer 16 cm, diameter of bowl 11.5 cm. (5) English delft tea bowl, manganese purple glaze with no decoration, prob. Bristol. c. 1730–1750. Approx. volume is 210 ml. (6–7) Various fragments of Chinese porcelain tea bowls, some with Batavia brown engobe on exterior and all painted blue on white. 18th century. (8–9) Creamware saucer and cup with foliated antefixes and swirled molded handle. c. 1762–1810. Saucer diameter 14 cm, cup diameter 6.75 cm.

As mentioned previously in the description of punch bowls, I differentiated smaller tea bowls from larger punch bowls through an arbitrary cut-off diameter of 12.5 cm. Clearly near the demarcation line, a small difference in diameter would not have reliably determined use. Small punch bowls might have been used for tea-drinking and large tea bowls for punch. Thirteen tea bowls were found at Punta Salinas. Eight were of delft and date to 1730–1760 (John Austin, pers. comm. 2010) (4 and 5). Two were creamware, one was scratch-blue and at least two were 18th-century Chinese porcelain bowls (6 and 7). A further seventeen different Chinese porcelain bowls were identified based on distinct decorations on rim fragments, although these fragments were too small to determine diameters. They were thus classified as either punch or tea bowls (Table 6.1.13). Two saucers, one creamware (9) and one delft (4), were also found at the site. The delft one matched a fine delft “duck-egg-blue” tea bowl (4) (John Austin, pers. comm. 2010). Furthermore, tea bowls were not the only vessel type used for drinking tea, even though they were the most appropriate ceramic form. As has been suggested by Lipski (1955: 7), among the middle classes, “whichever vessel was convenient was employed.” Vessels with handles probably were more comfortable to use. Four cups were also recovered, including a pearlware, a creamware and two English sgraffito slipware cups from the mid- to late 18th century (8) (Table 6.1.8) (Grigsby 1993: 63).

Tea paraphernalia also figured in the 1766 inventories from the Bermudian ships. The *Roach* carried a teapot, an earthenware teapot, a coffee pot, a tea kettle, a half-dozen “China” cups, five other “China” cups and 20 lb. of coffee (MHMCB 1996 [1766]: 209). The *Polly* transported six tea cups and matching saucers (MHMCB 1996 [1766]: 217). The

Polly's captain, Stiles, had among his personal possessions a tea kettle, 10 lb. of coffee and 1 lb. of green tea (MHMCB 1996 [1766]: 218). A copper-alloy tea kettle spout refashioned into a pipe has already been mentioned, and could have been broken off on the island then reworked into the pipe. It is also interesting to note that the *Porgey* had a copper stove on board (MHMCB 1996 [1766]: 207). This seems to have been quite an expensive piece of equipment, since it was valued at £15 in the inventory (MHMCB 1996 [1766]: 207). It was in fact one of the most expensive single items in the inventories of the three ships and among the personal items of the captain, mate and mariner of the *Polly*. For comparison's sake, three barrels of salted pork cost £12, and the gold watch of captain Benjamin Stiles cost £18.18 (MHMCB 1996 [1766]: 206, 218). Such a stove likely was small and portable. It would have been primarily used for heating water in a copper kettle for tea, coffee or chocolate. It was surely an expensive and showy piece of paraphernalia, although as the inventory of the *Porgey* suggests, this particular item belonged to the ship. A puzzling copper-alloy piece that could well have been part of such a stove apparatus was recovered at Punta Salinas (Fig. 6.1.39).

The archaeological and documentary evidence unequivocally proves that tea-drinking occurred at Punta Salinas; coffee and even chocolate might also have been consumed. Drinking hot tea on hot La Tortuga, however, does not seem to be something that we would do today—it seems anti-intuitive to our modern-day Western sensibilities. During numerous archaeological expeditions to Punta Salinas our modern palates yearned for something cold and refreshing after excavating on the frying pan that was the site. Whereas punch-drinking was most always a form of masculine homosociability in the



Fig. 6.1.39. Copper-alloy piece that might have been part of a stove apparatus. Alternatively, it might have also been the lid of a copper tankard. Diameter 11.5 cm.

18th century and, outside of the elite, often associated with brash, rowdy and un-genteel behavior among lower classes, tea was quite the opposite. Tea was seen as a drink of fashionable gentility, often associated with the elite, women and the home (Harvey 2008: 205–206). Much like punch-drinking, tea-drinking too was a ceremony. In well-off homes in early 18th-century Britain and its colonies, tea was either drunk privately in the morning

with breakfast or socially in the afternoon or early evening (Roth 1963: 64, 66). Tea-drinking seems to have gone hand in hand with punch-drinking in late 18th-century Boston as suggested by Baron Cromot du Bourg, a French visitor to the port city: “They take a great deal of tea in the morning... About five o’clock they take more tea, some wine, madeira, punch, and this ceremony lasts until ten o’clock” (Sherrill 1915: 155). Since the majority of ship captains and crews at La Tortuga throughout the 18th century came from Boston, it is plausible that tea was indeed drunk with punch as described above. Furthermore, it can be suggested that tea and punch were drunk at Punta Salinas in the afternoon, when the scorching heat of the day had waned and a cool breeze from the sea blew across the site.

The complementary assemblages of tea- and punch-drinking (and there is evidence for coffee- and chocolate-drinking) at Punta Salinas, both dating to as early as 1730 based on ceramic evidence, functioned in parallel in the strongly masculine setting of a temporary tavern on a deserted island populated by sea captains. This juxtaposition of stereotypically polite and genteel tea with rowdy punch is striking. It challenges the well-documented norms of gendered use of the ceramic objects involved in the two ceremonies during the 18th century (Harvey 2008; Roth 1963). On Punta Salinas, the re-assembling of the vibrant assemblages of drinking has greatly complicated the neat picture of Anglo-American drinking practices in the 18th century. My research indicates that seafarers, often caricatured as unmannerly and unpolished salty dogs, in fact entertained themselves at Punta Salinas surrounded by a material equipage rivaling that of rich New England merchants’ homes (Goodwin 2002). They leisurely sipped exotic

green tea from fine Chinese tea bowls and drank rum punch from colorful punch bowls as the cool afternoon breeze billowed the tarps of this unique tavern by the saltpan.

DISCUSSION

In this chapter, I have dived head-on into the large and diverse collection of archaeological remains excavated from the Dutch and Anglo-American occupational periods at the site of Punta Salinas. The Dutch occupation, primarily consisting of various intensive and short-term visits to the site in the decade of the 1630s, witnessed the only anthropogenic modifications to the saltpan and to the area beyond it, including an earthwork that was the foundation of the 1638 fort. The material remains from the short Dutch presence, however, are limited, allowing only for a sketchy reconstruction of the assemblages of foodways, drinking and smoking. The foodways assemblage involved local mammals such as rabbits, as well as Dutch red earthenware saucepans and skillets and shipboard provisions brought from the Netherlands. Some meals were probably consumed in situ by the musketeers garrisoned in the fort and by the salt-raking crews. Nonetheless, I suggest that the butchery of local goats (known from textual evidence to have been hunted by the Dutch), and the cooking and consumption of the majority of meals occurred in the relative safety of the fluits anchored in Punta Salinas Bay. This state of affairs resulted in limited archaeological evidence of food consumption on land. The Dutch also engaged in drinking while on land, although the evidence here is once again grudging. This suggests that either most of these activities occurred on board or that most tableware was wooden and broke less easily than ceramics, which meant it was returned to the ships; or if discarded, has not survived the passage of time. The archaeological

evidence for the assemblage of smoking was the most abundant. It suggests that the early practice of smoking in the Low Countries became increasingly fashionable in the decades of the 1620s and 1630s, permeating maritime life and becoming a cornerstone of Dutch leisure activities on the island (Duco 1987; Fox 2002; Loktu 2009).

In turn, the Anglo-American assemblages of practice at Punta Salinas could be much more thoroughly reassembled. The diversity and size of the archaeological collection from the site—including a staggering 790 individual ceramic, glass and metal vessels—goes hand in hand with the breadth and detail of documentary evidence. The uniquely meticulous inventories of items confiscated from on board three Bermudian vessels, intercepted by Spanish corsairs on the island in 1766, have aided greatly in approximating much more fully (than in the Dutch case) the assemblages of practice of fishing, cooking, dining and drinking at Punta Salinas during the 18th century. Thanks to the confluence of these abundant lines of evidence, the assemblages of practice at Punta Salinas are the best reconstructed assemblages of all the sites and occupational phases studied in this dissertation. Such was the level of detail possible that even seafaring dishes—whether roasted pork jowl, lobscouse or West Indian top shell stew—from the time could be reconstructed through the judicious interlacing of archaeological, faunal and textual data. The archaeological evidence strongly suggests that the majority of remains, especially those found in the Dunes activity area, were discarded by Anglo-American sea captains and not ship crews. Captains spent the majority of their time while salt raking on at Punta Salinas lasted overseeing the labor of their crews from the Dunes activity area, under tarps amongst barrels and sea chests. There they socialized with peers

whether over a bowl of exotic rum punch or a smaller and more refined porcelain bowl of green tea. As I have suggested in the first part of this chapter, desolate Punta Salinas offered Anglo-American captains a unique tavern space in which they could engage bibulously with other captains, show off *their* personal material goods, and possibly, establish friendships plus future commercial alliances. In contrast to its current bleakness, 18th-century Punta Salinas saw a seasonal hubbub of activity. Between January and early May of every year, this seascape pulsed with vibrant human-thing assemblages of practice.

CHAPTER 6 | PART II

THE LIVED SALTPAN:

ASSEMBLAGES OF PRACTICE AT THE CAMPSITES OF CAYO SAL

DAILY LIFE AT UESPEN DE LA SALINA (C. 1700–1800)

EXCAVATIONS AND FEATURES

The site of Uespen de la Salina (CS/A), is located at the westernmost end of the saltpan and on the leeward (northern) shore of Cayo Sal (Fig. 6.2.1 and 6.2.2). Initial archaeological reconnaissance of the CS/A site was undertaken in 1982 by Ma. Magdalena and Andrzej Antczak. Systematic archaeological excavations were initiated thereafter and included numerous shovel and test pit that helped delimitate the contours of a trash midden where two trenches were subsequently excavated in the decade of the 1980s (Antczak and Antczak 2006: 86–87). More recently, the trenches were extended in 2007, and in 2009 and 2010, and further systematic in-trench and block excavations covering the extent of the trash midden were performed under my direction. Three 1 x 2 m units were also placed at the southern edge of the site within the thick benthic mat (mud) of the saltpan into which the trash midden extended (Fig. 6.2.3). The site exhibited no discernible stratigraphy, with most material remains found from 0 to 30 cm below the surface. The sandy matrix was littered with large amalgamations of oxidized iron clumped together with organic debris including mammal bones and charcoal.

The only feature at the site is a semi-interred two-tier stack of coral stones arranged in an “L”-shape (Fig. 6.2.1). This could have possibly been the foundation of a



Fig. 6.2.1. Map of the CS/A site highlighting excavation trenches, features and structures on adjacent



Fig. 6.2.2. Aerial view of the west end of Cayo Sal and its saltpan.



Fig. 6.2.3. (Top) excavations in the main trash midden at CS/A. (Bottom) excavations at the edge of the trash midden and into the saltpan.

coral stone structure, although no further coral stone debris were found, and the ‘foundation’ is composed of only two tiers of stones. I suggest that this is what remains of a larger structure since it is possible that the majority of its coral stones were recycled in the 19th century to build and consolidate the coral stone dikes on the adjacent saltpan. As I mentioned in Part II of Chapter 3, a report from 1769 suggests that during the latter 18th-century English (probably Bermudian and/or British West-Indian seafarers) and French turtle fishermen set up “barracas” [shelters] and “corrales” (possibly, corrals for livestock) on Los Roques, and probably on Cayo Sal. The eleven men of African descent, including seven slaves and three freedmen from Curaçao as well as a slave from Saba, who were seized by Spanish *corsos* in Los Roques (most probably at Cayo Sal) in 1775 were also “ranchados” [camping] in a makeshift shelter at the time (Amézaga 1966: 220; Cromwell 2012: 257; Declaraciones 1775). The “L”-shaped feature might have been the foundation of one of these *barracas* which could have originally featured a wall and a canvas tarp roof that sheltered its occupants from the elements (Amézaga 1966: 49). Fifteen nails of various sizes (ranging from 2.5 cm to 18 cm in length) were recovered at the CS/A site, three of which are copper-alloy and the rest iron. Five of these nails are bent to a nearly 90-degree angle, suggesting that they might have been used in some sort of wooden construction at the site—perhaps wooden walls or roofing that was associated with the coral-stone structure (Fig. 6.2.4). Further evidence of such shelters comes from the 1771 instructions of the Captain General of Venezuela to the *guardacostas* to evict any foreigners who lived in shelters on Los Roques (and all other Venezuelan islands) (Aizpurua 1993: 357). With the limited documentary data currently available for the site,

it is as of this moment impossible to determine if the dikes directly adjacent to the CS/A site are contemporaneous with its 18th-century occupation or if they were constructed in the subsequent 19th-century salt cultivation on the saltpan.



Fig. 6.2.4. Various copper-alloy and iron nails recovered at the CS/A site on Cayo Sal. Sizes range from 2.5 cm to 18 cm.

PROVISIONING

Much could be revealed about the provisioning of the Anglo-American seafarers during the 18th century at Punta Salinas through the 1766 inventories of Bermudian ships, as well as other abundant documentary sources. The case with the CS/A site, however, is different as I mentioned in Part II of Chapter 3, the documentary sources are few and far between and only give a general idea of whom the seafarers at the site were during the 18th century. Because of the lack of more detailed documentary evidence, little can be said about what type of provisions the seafarers at CS/A were consuming. The only available documentary evidence mentions that the English and French turtle fishermen who were camping in the archipelago—most probably on Cayo Sal—were supplied every month by a Spanish fishing sloop from the Venezuelan coast that brought provisions and silver coins in exchange for alcohol and clothes (Amézaga 1966: 49). Clearly, the English and French turtle fishermen, unlike the Anglo-Americans at La Tortuga, did not have enough supplies of their own to survive on and depended on the mainland colonial Spanish population for provisioning, thereby also earning silver specie from these small-scale commercial interactions. The alcohol that was being sold by these fishermen will be discussed in a further section on drinking. Furthermore, as has already been mentioned above, these fishermen had *corrales* that might have contained livestock, which complemented the provisions that were brought to them from the mainland. In the case of the abovementioned Dutch Antillean salt rakers of African descent, it is feasible to suggest that they and the white mariner who oversaw their labor would have received

their provisions in the vessel in which they arrived, since they would only be on the island for a few weeks and not months at a time.

Archaeological excavations, however, have revealed valuable information on provisioning at the site. A total NISP of 625 mammal-bones was recovered at CS/A (Table 6.2.1). Of these specimens seven belonged to pig (*Sus scrofa domestica*) and 611 belonged to cow (*Bos taurus*), with seven specimens unidentified. MNI counts resulted in the identification of at least one individual pig and four cows among the specimens, suggesting that the bone remains belonged to a large number of different individual animals. The large quantity of cow bones from the CS/A site and low MNI initially seems to suggest that there might have been a small herd on the island which the seafarers gradually butchered for consumption. In fact, as has been mentioned in Part II of Chapter 3, the abundant *gramínea* [seashore dropseed] (*Sporobolus virginicus*) that carpets the cays of the Los Roques archipelago was used as feed by mule smugglers on their way from the Venezuelan mainland to the West Indies, and could have sustained a small herd of cattle. However, due to the large number of small bones and rough estimation of the MNI it is possible that upon more careful analysis, more individual cows will emerge. This large number of bones could also indicate that the cow meat was not necessarily from a standing herd on the island, but rather, was salted or dried barreled beef brought to the site as provisions. The small number of pig bones, on the other hand, might have been in fact remains of a few live animals kept in the *corrales* at the site. I suggest that the cow bones might be the remains of *tasajo*, brought from mainland Venezuela by the local traders. *Tasajo*, however, was most commonly meat without bone, salted and left to dry

Table 6.2.1. NISP and MNI of pig and cow remains from CS/A.

	NISP	MNI
<i>Sus scrofa domestica</i>	7	1
<i>Bos taurus</i>	611	4
Unidentified	7	-

and cure in the sun (Lovera 1988: 75). This preserved meat on the bone might have been a cheaper, perhaps only salted, version of *tasajo*. It may be expected that a large quantity of it was consumed at the site and as the documentary evidence suggests, the seafarers at the site were being provisioned by the colonial Spaniards from the mainland, and Venezuela was a major consumer as well as supplier of salted and dried beef to the Caribbean in the late colonial era (Arcila Farías 1946: 408; Brito Figueroa 1978: 196; Lovera 1988: 74; Torres Sánchez 1997). Detailed zooarchaeological analysis of the bone remains must be still undertaken to determine a more careful MNI and which types of cuts were used and how these animals were butchered. Preliminary visual inspection reveals that many cow bones have cut marks from large iron knives (Andrej Sýkora, pers. comm. 2016). Various corroded fragments of iron cask hoops were also recovered at the site, indicating that indeed provisions, whether they be salted meat, other dry goods, or liquids were being brought down on land at Uespen de la Salina.

It is possible that the remainder of provisions that the English and French (and possibly as well the Dutch Antilleans) at the site were receiving primarily came in the form of Spanish (most probably Sevillan) earthenware *botijas*, more commonly known in English as “olive jars”. *Botijas* were versatile vessels and are ubiquitous at Spanish colonial sites around the world. Thirty-two *botijas* were found at the CS/A site (Fig. 6.2.5, 1–4)

(Table 6.2.2). Most of these fall comfortably within the rim shapes and ovoid bodies with sloping shoulders typical of 18th-century Type B *botijas* (2) (Avery 1997: 96, 120; Deagan

Table 6.2.2. Ceramic and glass food-related storage vessels recovered at CS/A.

Ware/Glass Type		Vessel Form	NF	MNV
Ceramic				
Spanish earthenware, Sevilla		<i>Botija</i> (olive jar)	268	32
Lead-glazed coarse earthenware (morroware)		Jar	3	3
		<i>Damajuana</i> (long-necked jar)	1	1
		sub-subtotal	4	4
Prob. France faience brune, Gênes		Jar	5	1
French lead-glazed earthenware, Vallauris		Jar	3	1
Subtotal Ceramic Vessels			280	38
Glass				
Prob. German wide-mouthed case bottle		Wide-mouthed case bottle (short flared lip)	1 (neck)	1
French wide-mouthed cylindrical <i>flacon</i>		Wide-mouthed cylindrical <i>flacon</i> (long tapered neck and thick fire-polished lip)	1(necks)	1
French short-necked square "case" <i>flacon</i>		"Case" <i>flacon</i>	4 (necks), 10 (bases), 12 (body sherds)	10
Subtotal Glass Vessels			28	12
TOTAL			308	50

1987: 33–34; Goggin 1964: 283; Marken 1994: 133–135). Only one has a “9 E” mark stamped on the shoulder, and one has a flat base (4 and 3). *Botijas* used for storing ship provisions in the 18th century are known to have contained olive oil, vinegar, and other dry comestibles such as garbanzos, olives, pickles, honey, mustard, capers and sugar (Avery 1997: 198; Lovera 1988: 69). Moreover, *botijas* were durable vessels and could be reused until they broke or leaked, and if the provisions from the Venezuelan mainland were being shipped to Cayo Sal within them it is probable that they included local legumes and grains, perhaps even corn, cornmeal or corn flour (Felipe Dorta 2011; Lovera 1988: 66–70, 80). Furthermore, in the 18th century, wooden barrels largely began to replace

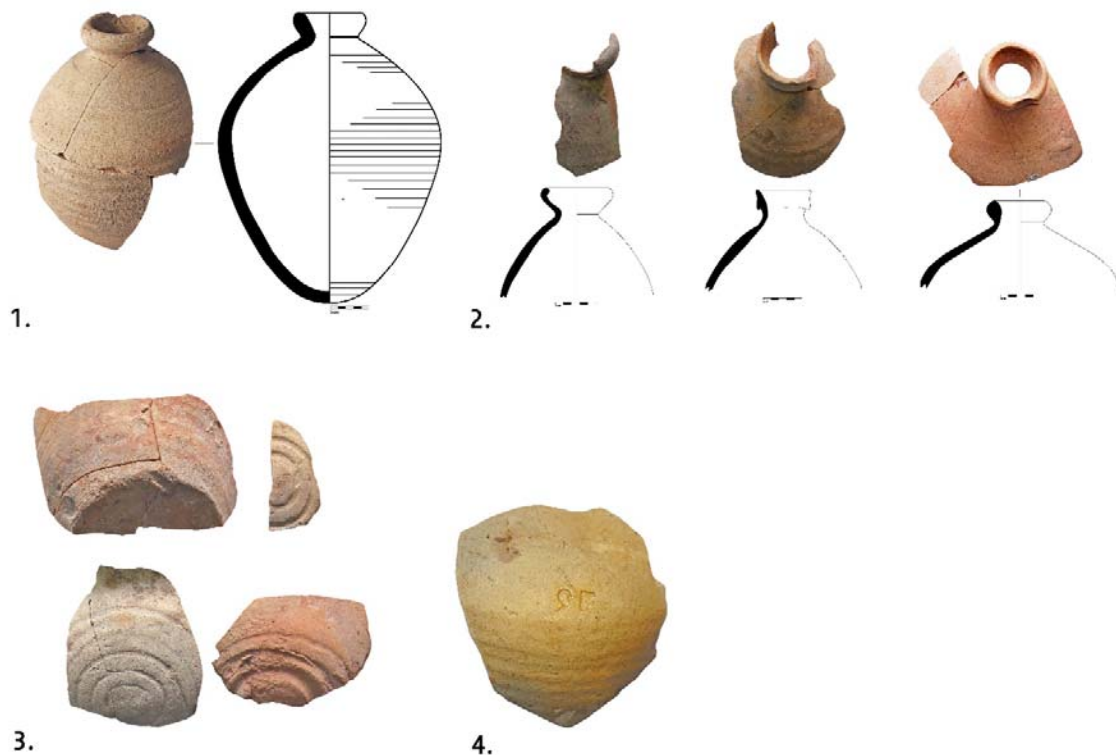


Fig. 6.2.5. Sevillian *botijas* or olive jars recovered at CS/A. (1) Profile of a typical 18th-century Type B *botija* from the site. (2) Three profiles of *botijas* with slight variations to shoulder and rim shape. (3) Various bases of *botijas*, with the top left one a flat base. (4) Shoulder of a *botija* with a “9E” stamp.

botijas in the transport of alcohol and water, and it is possible that once again, the iron cask hoop fragments from CS/A, belonged to such barrels containing water and alcohol (Avery 1997: 196). However, only seven of the minimum number of 32 *botijas* from the site are not glazed on the interior, with the remainder exhibiting primarily honey-yellow, opaque and greenish glazes (de Amores Carredano and Chisvert Jiménez 1993: 284). The lead-glaze waterproofing suggests that they were principally used for wet provisions such as vinegar and possibly also water and alcohol (Escribano Cobo and Mederos Martin 1999: 179), although they could have also been used for legumes, and other salted provisions such as capers, anchovies and olives.

Asides from *botijas*, a further 18 ceramic and glass storage vessels were recovered at CS/A (Table 6.22). Three lead-glazed coarse earthenware jars and one *damajuana* (long-necked jar) were recovered. This earthenware, ubiquitous at Hispanic-colonial sites, is often also called morroware or “El Morro”-type, and is of an unknown provenance; it will be fully discussed in the section on cooking since the majority of vessels in this ware type are cooking pots. The three wide-mouthed jars might have contained preserves such as capers and olives or could have also had lard and the *damajuana* could have contained oil or vinegar. The remaining two ceramic jars are of French manufacture, one French faïence brune jar from Gênes (Amouric and Vallauri 2007: 242–243), and the other a Vallauris lead-glazed earthenware jar (Petrucci 1999: 113). These perhaps contained animal fats or preserves such as anchovies, capers and olives. A further two glass vessels are a probably German wide-mouthed case bottle and a French wide-mouthed cylindrical *flacon*, various of which were also found at Punta Salinas, typically used for storing

preserves and savory fixings. Ten French “case” *flacons*, also present among the 18th-century finds from Punta Salinas, were also found at CS/A. As has been mentioned in Part I of this chapter, these multipurpose 18th-century bottles contained condiments, oil, vinegar as well as *eau de toilette* and apothecary products. The French provenance of various of these vessels also fits well with the documentary evidence that indicates that French turtle fishermen, who most probably also raked the abundant salt at Cayo Sal’s saltpan, were present in the Archipelago in the last third of the 18th century.

LOCAL RESOURCE PROCUREMENT

Archaeological evidence indicates that the seafarers at CS/A were not only consuming the salted beef and other dry and wet provisions that they brought or traded for but also were engaged in fishing, turtling and catching birds for food. The total NISP of fish remains from CS/A is comprised of 72 mandibular fragments, 6 large vertebrae and 312 small- and medium-size vertebrae (Table 6.2.3). Fish remains identified by taxon include an MNI of 10 groupers (*Epinephelus* sp.), 11 Crevalle jacks (*Caranx hippos*), eight snappers (*Lutjanus* sp.), seven Saucereye porgies (*Calamus calamus*), two barracudas (*Sphyræna barracuda*), one parrot fish (*Scarus* sp.), as well as one Atlantic goliath grouper (*Epinephelus itajara*), one Southern stingray (*Dasyatis americana*). The vertebrae pertain to the large specimen of Atlantic goliath grouper or itajara (*Epinephelus itajara*) that could weight several dozens of kilograms (Fernando Cervigón, pers. comm. 2010). Additionally two fragments of lobsters (*Panulirus argus*) were also found.

All of the fish the seafarers ate at CS/A would have been easily caught by bottom fishing with hook and line, lead sinkers and bait, either by casting the lines from the

Table 6.2.3. NISP and MNI of fish remains from the CS/A site.

Family	Taxon & vernacular name	Premaxillary		Dentary		MNI	Observations
		Right	Left	Right	Left		
Epinephelidae	<i>Epinephelus</i> sp. (Grouper or <i>mero</i>)	8	4	2	4	10	
Serranidae	<i>Epinephelus itajara</i> (Atlantic goliath grouper or <i>Mero guasa</i>)	-	-	-	-	1	Six large vertebrae
Lutjanidae	<i>Lutjanus</i> sp. (Snapper or <i>pargo</i>)	3	5	4	3	8	
Sphyraenidae	<i>Sphyraena barracuda</i> (Great barracuda or <i>picua</i>)	1	1	1	1	2	
Scaridae	<i>Scarus</i> sp. (most probably <i>Scarus guacamaya</i>) (Rainbow <i>parrotfish</i> or <i>pez loro</i>)	1	1	-	-	1	
Sparidae	<i>Calamus calamus</i> (Saucereye porgy or <i>cachicato</i>)	6	3	2	1	7	
Dasyatidae	<i>Dasyatis americana</i> (Southern stingray or <i>raya</i>)		-	1	-	1	
Carangidae	<i>Caranx hippos</i> (Crevalle jack or <i>ojo gordo</i>)	6	5	5	4	11	
TOTAL		25	19	15	13	41	
Palinuridae	<i>Panulirus argus</i> (lobster or <i>langosta</i>)					1	2 mandibular fragments

*Total NISP fish mandibular fragments 72 and 6 large vertebrae = 78 NISP. Small and medium size vertebrae NISP 312.



Fig. 6.2.6. Probable coral stone sinkers from the CS/ A site. Note grooves around top ends.

seashore or from on board vessels anchored in deeper waters close to the cape of the island. The lobster and stingray could have been harpooned in the shallow seagrass beds adjacent to the CS/A site. No hooks or lead weights were recovered at the site and only two probable coral stone sinkers were found (Fig. 6.2.6). These possible sinkers, the largest of which is 19 cm long, are elongated in shape and have a groove notched around the top, probably used to affix a line. They could have been used for line fishing as well as

affixed to nets, however, few of the fish species recovered at the site is caught in nets, suggesting the former use.

Forty-seven bone specimens of marine turtle were also recovered, most probably either the green turtle (*Chelonia mydas*) or the hawksbill turtle (*Eretmochelys imbricata*), which most commonly nest in the archipelago (Buitrago 1987; Guada and Vernet 1992). This number of bones is not very large given the abundance of sea turtles in the archipelago, and I suggest that perhaps since the French and the English seafarers at the site during the 18th century were primarily turtle fishermen, they did not consume most of the animals they caught but rather preserved their meat for resale in other parts of the Caribbean or took the live animals with them following a short period of captivity.

One hundred and twenty-five bird bones (NISP) were also recovered at the site. Although the analysis of these remains is still ongoing and accurate MNI counts are unknown, the most common species seems to be Brown pelican (*Pelecanus occidentalis*) and Brown booby (*Sula leucogaster*) that nest in the kilometers of mangrove forest adjacent to the saltpan at the western end of Cayo Sal. These birds, and especially their chicks, would have been easy to catch by seafarers and were even until recently still caught by Los Roques fishermen on Isla Larga and Cayo Sal for food, during the breeding season of these birds (see Amend 1992: 170). In 1800, Humboldt (1995: 289–290) described how Cuban fishermen hunted pelican chicks for food at Cayo Bonito by taking them out of their nests in the mangroves. In 1681, Dampier (1699: 49) noted that the booby bird's "[flesh] is black and eats fishy, but [they] are often eaten by the privateers" and their numbers were especially lessened by the starving shipwrecked sailors of the

French fleet of Comte d'Estrées that sank on the reefs of the nearby archipelago of Las Aves de Sotavento in 1678. Not only the flesh but also the eggs of sea birds, the shells of which do not preserve in the archaeological record of the islands, might have also been a prized source of sustenance for these seafarers. The Englishman Henry Pitman (1903 [1689]: 460), who was castaway with his companions on La Tortuga in 1687, grew fond of the eggs of sea birds and also relied on their flesh for survival, but noted as well that it tasted "extremely fishy; much like red herrings". The presence of a relatively large number of bird bones at the site suggests that some of the seafarers who visited Cayo Sal during the 18th century whether French, English, Bermudian, Dutch-Antillean, or *criollos* from the Province of Venezuela, might have either suffered from lack of provisions and had to resort to catching birds, or like fishermen in the Los Roques archipelago before the creation of the National Park in 1972, sought the poultry-like meat of these seabirds for a change from the months-long monotonous diet based solely on fish and crustaceans (Andrzej Antczak, pers. comm. 2017).

FOOD PREPARATION

No nucleated hearths or fireplaces were found at CS/A, yet, charcoal was mixed in with the ceramic, glass and faunal remains within the trash midden suggesting that these must have existed. Abundant evidence for cooking in the form of a minimum of 64 vessels for cooking and food preparation was recovered at the site, representing 23.70% of the entire ceramic and glass collection from the site (Table 6.2.4; Table 6.2.5). A total of 30 lead-glazed coarse earthenware vessels were found (Table 6.2.4). Twenty-six of these are

Table 6.2.4. Ceramic and metal food preparation-and cooking-related vessels from the CS/A site.

Ware/Glass Type	Vessel Form	NF	MNV
Ceramic			
<i>Criollo</i> -ware	<i>Cazuela</i>	7	2
	<i>Caldero</i>	42	8
	<i>Caldero abierto</i> or <i>olla</i>	1	1
	<i>Cazuela/caldero</i>	4	3
	sub-subtotal	54	14
<i>Criollo</i> -ware (poss. prehispanic Amerindian pottery)	Large <i>olla</i>	3	2
	<i>Olla</i>	11	4
	Shallow <i>olla</i>	1	1
	UID	113	-
	sub-subtotal	128	7
Lead-glazed coarse earthenware (morroware)	<i>Cazuela/cacerola</i>	17	4
	<i>Olla/puchero</i>	69	26
	UID	47	-
	sub-subtotal	133	30
Spanish lead-glazed earthenware	<i>Lebrillo</i>	4	1
Mexican lead-glazed coarse earthenware, poss. Puebla	<i>Lebrillo</i>	5	1
French lead-glazed earthenware, Vallauris	<i>Canarior marmite</i> (cooking pot)	48	8
Subtotal Ceramic Vessels		372	61
Metal			
Large metal <i>caldero</i>	<i>Caldero</i> (cauldron)	3	3
Subtotal Metal Vessels		3	3
TOTAL		375	64

Table 6.2.5. Percentages of ceramic, glass and metal vessels from the CS/A site according to functional vessel class.

Functional Vessel Class	Vessel Form(s)	MNV	Percentage of Total MNV
Food-Related Vessels			
Food Storage	<i>Botija</i> (poss. also for liquid storage)	32	11.85%
	Jar	5	1.85%
	<i>Damajuana</i>	1	0.37%
	Wide-mouthed case bottle	1	0.37%
	Wide-mouthed <i>flacon</i>	1	0.37%
	"Case" <i>flacon</i>	10	3.70%
	Sub-subtotal Food Storage	50	18.52%
Food Preparation	<i>Olla/puchero</i>	26	9.63%
	<i>Olla</i>	4	1.48%
	Large <i>olla</i>	2	0.74%
	Shallow <i>olla</i>	1	0.37%
	<i>Canari/marmite</i> (cooking pot)	8	2.96%
	<i>Caldero</i>	8	2.96%
	<i>Caldero abierto</i> or <i>olla</i>	1	0.37%
	Metal <i>Caldero</i>	3	1.11%
	<i>Cazuela/caldero</i>	3	1.11%
	<i>Cazuela</i>	2	0.74%
	<i>Cazuela/cacerola</i>	4	1.48%
	<i>Lebrillo</i>	2	0.74%
	Sub-subtotal Food Preparation	64	23.70%
Food Serving	Butter dish	1	0.37%
	<i>Platón</i>	1	0.37%
	Sub-subtotal Food Serving	2	0.74%
Food Consumption	<i>Plato</i> /plate	54	20.00%
	<i>Plato hando</i>	1	0.37%
	Soup plate	2	0.74%
	Basin	6	2.22%
	Bowl	3	1.11%
	Pedestal bowl	1	0.37%
	Sub-subtotal Food Consumption	67	24.81%
Subtotal Food-Related Vessels		183	67.78%
Beverage-Related Vessels			
Beverage Storage	Jug, bellarmine bottle	9	3.33%
	Stoneware bottle	10	3.70%
	<i>Botijo/hidrocéramo</i>	1	0.37%
	<i>Pimpina</i>	6	2.22%
	Cylindrical glass bottle	19	7.04%
	Case bottle	22	8.15%
	Sub-subtotal Beverage Storage	67	24.81%
Beverage Serving	<i>Cantaro</i> (jug/pitcher)	1	0.37%
	Sub-subtotal Beverage Serving	1	0.37%
Beverage Consumption	Punch bowl	1	0.37%
	Tea bowl	2	0.74%
	Tea bowl/punch bowl	1	0.37%
	Saucer	1	0.37%
	Mug	1	0.37%
	Cup	1	0.37%
	<i>Taza</i> (cup)	1	0.37%
	<i>Pocillo</i> (chocolate cup)	1	0.37%
	Two-handled cup	1	0.37%
	Glass tumbler	7	2.59%
	Drinking glass	1	0.37%
	Sub-subtotal Beverage Consumption	18	6.67%
	Subtotal Beverage-Related Vessels		86
Other Vessels			
Pharmaceutical Storage	Vial	1	0.37%
	Sub-subtotal Pharmaceutical Storage	1	0.37%
Subtotal Other Vessels		1	0.37%
TOTAL		270	100%

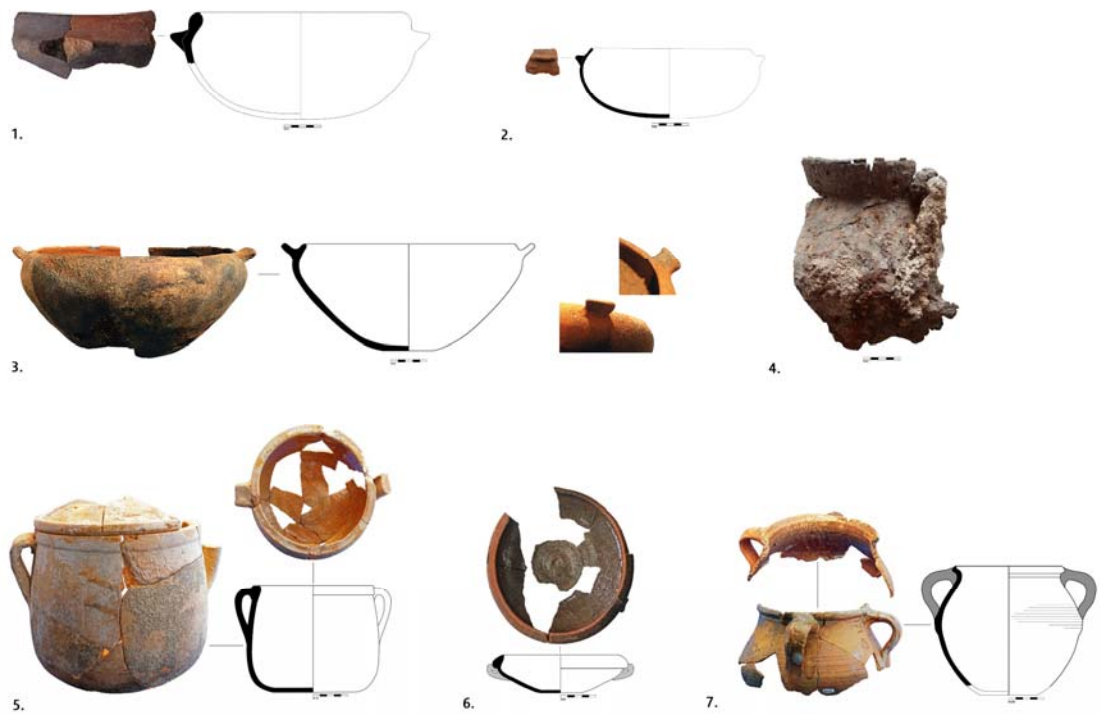


Fig. 6.2.7. Various ceramic and metal cooking vessels recovered at the CS/A site. (1) Heavy *criollo*-ware *cazuela* with a burnished orange paste and wide handles. (2 and 3) *Criollo*-ware *calderos*, both with characteristic horizontal rectangular to trapezoidal handles and an orange to red paste with large mica inclusions. (4) Large metal *caldero*. (5) French lead-glazed earthenware *marmites/canaris* from Vallauris. 18th century. (6) "El Morro"-type (morroware) lead-glazed coarse earthenware *cazuela*. 18th century. (7) "El Morro"-type (morroware) lead-glazed coarse earthenware *puchero*. 18th century.

*ollas*²⁰⁴ or *pucheros* [cooking pots] (Fig. 6.2.7, 7). These *ollas* were versatile cooking pots that could be used for preparing a variety of stews and soups probably involving the salted beef, pork, sea birds and marine fauna that was consumed at the site, along with other provisions that were held in the *botijas*. Four *cazuelas* or *cacerolas*, that are shallow cooking vessels similar to skillets, but without handles, were also found (6). These would have been probably used for frying meat and fish. The lead-glazed earthenware (40

²⁰⁴ Typical Venezuelan vessel forms and their uses were primarily derived from Anzola and Garrido (1989), de Alamo (1985) and Fuentes and González (1993).

minimum number of vessels) compose 24% of the total ceramic cooking, storage and tableware vessels and 49.2% of the cooking vessels recovered at the CS/A site.

These coarse earthenwares stand out among the ceramics collection since they have not been successfully provenanced through formal comparison with other such ceramics in the circum-Caribbean region. These ceramics have been defined by Smith (1962: 67–68) and Deagan (1987: 50) as “El Morro”-type (morroware), yet their specific geographic point (or points) of origin is yet unknown. Current suppositions are that they were local ceramics made in the Greater Antilles (Joseph and Bryne 1992: 53; Smith 1962: 67; Solís-Magaña 1988: 69–72), or that these are Mexican or Iberian imports (Crane 1993: 156; Deagan 1987: 51; Schiapacasse Rubio 2011: 330; Solís-Magaña and Schiapacasse Rubio 1997: 81–82). Although they are ubiquitous at Spanish colonial-era sites throughout Latin America, the Southeastern United States and the Caribbean, systematic chemical analyses of these ceramics have not been undertaken to date. A recent total reflection x-ray fluorescence (TXRF) pilot study that I conducted by Dr. Haydn Barros at the Simón Bolívar University Laboratory of Nuclear Physics, in Caracas, Venezuela, concluded that 4 samples of the lead-glazed earthenware from CS/A were very heterogeneous and that TXRF analysis did not deliver sufficient resolution to determine trace elements usually necessary for provenancing. The study concluded that only LA-ICP-MS (laser ablation inductively coupled plasma mass spectrometry) or neutron activation analysis (hereafter NAA) are capable of providing detailed data on trace elements essential to determining if they were Mexican or Iberian imports, or Caribbean products,

on the basis of comparisons with other samples from the circum-Caribbean region (Haydn Barros, pers. comm. 2015). Future analytical studies of these ceramics are planned.

Eight French lead-glazed earthenware *marmites/canaris* from Vallauris were also recovered (Fig. 6.2.7, 5) (Table 6.2.4). The presence of these vessels fits well with documentary evidence suggesting that French turtle fishermen were at the site. A large number of yet unidentified coarse earthenware was also found at the site. In total 21 vessels were recovered, of which 14 have been defined as *Loza criolla* [thereafter *criollo-ware*] and seven are either *criollo-ware* or vessels of prehispanic Amerindian manufacture. Among the 14 *criollo-ware* vessels there are eight *calderos* [large cooking pots], all with characteristic horizontal rectangular to trapezoidal handles and an orange to red paste with large mica inclusions (2 and 3); two thick and heavy *cazuelas* with a burnished orange paste and wide handles (1); as well as a *caldero abierto* [large wide-mouth cooking pot] or *olla* with a square handle and three other fragments of different *cazuelas* and/or *calderos*. It is important to note that all of these cooking vessels exhibit varying degrees of charring on the outside, further corroborating their use as cooking vessels. The remainder of seven uncertain *criollo-ware*s from CS/A include four *ollas*, two large *ollas*, and a shallow *olla*. The prehispanic site of CS/D is only 75 m to the west of CS/A and it is possible that some of the pottery sherds recovered at CS/A were already at the site when later 18th-century seafarers arrived and are of prehispanic origin. Nonetheless, the *criollo-ware* in doubt does not exhibit stylistic attributes characteristic of the prehispanic Valencioid ceramic series present at the CS/D site (Antczak and Antczak 2006).

The provenance of these *criollo*-wares is unknown and no certain parallels for its identification exist in Venezuela since no regional historical archaeological studies of the coarse earthenware produced in colonial Venezuela have been undertaken to date. Only limited and piecemeal published data are available from archaeological investigations at colonial- and republican-era sites in north-central and north-eastern Venezuela such as the Ingenio Bolívar, San Mateo, Aragua State (Navarrete 2014b: 197–198), El Calvario, Caracas (Molina 2010a: 137), Quinta de Anauco, Caracas (González Portales 2014: 77–78), the Teatro Municipal, Caracas (Vargas et al. 1998: 73–80), Casa Amarilla, Caracas (Linero Baróni 2008: 10), the Misión San Bernardino, Anzoátegui State (Zucchi 2013: 107–110), and the Unare Basin, Anzoátegui State (Velázquez Fernández 2007), as well as description and classification of some ceramics of local Venezuelan production in Bencomo (1993). I suggest that the *criollo*-wares recovered at CS/A might be colonial Venezuelan Amerindian or Afro-Amerindian wares made on the Venezuelan coast or further inland and brought to Cayo Sal by local colonial-Venezuelan traders along with the provisions that supplied the French and English turtle fishermen in the 18th century. As late as the 1870s, Ernst (1987: 701–704) remarked that “Free-formed earthenwares are made in Venezuela only by the indigenous Amerindians”, suggesting that at the time in the town of La Vega, adjacent to Caracas, indigenous women made a variety of pots. The topic of ceramic manufacture, however, has also been little studied by Venezuelan historians and there are many lacunae to fill in this respect (Duarte 1977). For the future, the regional evidence for local colonial ceramic production must be further studied and comparative collections from the Venezuelan coast and hinterland must be analyzed to

determine the stylistic, morphological and technological characteristics of the colonial- and republican-era *criollo* ceramics of north-central Venezuela.

Finally, three large iron cauldrons were recovered at CS/A with the largest fragment providing a good idea of the entire vessel's shape (Fig. 6.1.7, 4). Why these cauldrons broke and were discarded is unknown, since iron vessels are much more durable than ceramic. The fact that three such vessels ended up in the archaeological record might be an indicator of the length of stay of the seafarers at the site, which allowed the iron cauldrons to simply crack through repeated and constant use, or the already used and cheap nature of the iron cauldrons that they had. A further two *lebrillos*, large ceramic basins, were also recovered and were multipurpose vessels used for mixing and kneading food ingredients, as well as for personal hygiene and cleaning clothes, among other uses (Amores Carredano and Chisvert Jiménez 1993: 288). The largest *lebrillo* is lead-glazed earthenware, from Triana, Seville, dating to the second half of 18th century and has a light salmon-colored paste covered in an amber-brown lead-glaze, with melado-like colors with green strokes bleeding through the glaze (Fig. 6.2.8, 1) (Amores Carredano and Chisvert Jiménez 1993: 314–315). The corded impression on the underside of the rim is not simply decorative but due to the fact that when still crude these *lebrillos* were tied around the rim to prevent the heavy, everted and inclined rims from collapsing (Alfonso Pleguezuelo Hernández, pers. comm. 2010). The other *lebrillo* does not have an everted rim, and has a bright red paste with a lime-yellow glaze which suggests that the piece is probably not of Spanish origin, and is perhaps from Puebla, Mexico where colonial

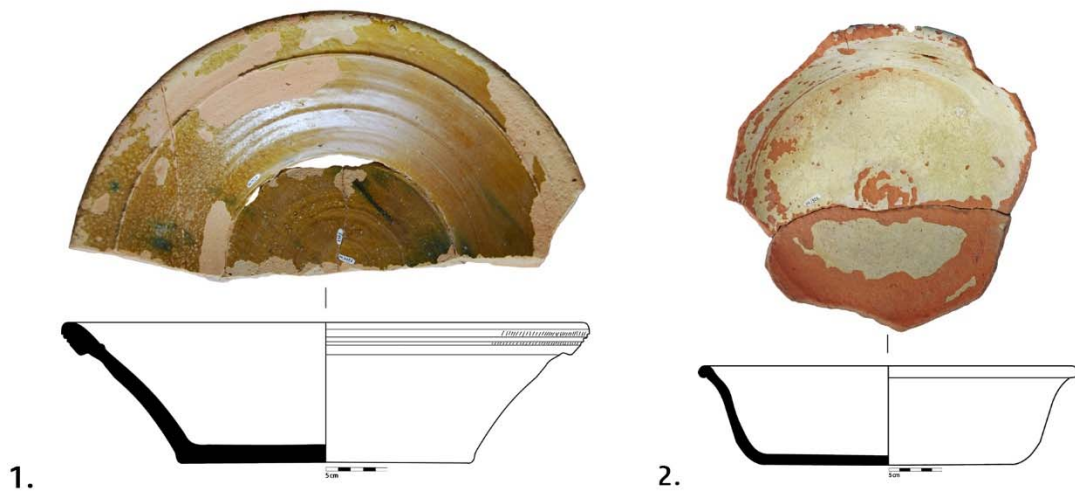


Fig. 6.2.8. Ceramic *Lebrillos* recovered at the CS/A site. (1) Large *lebrillo*, Triana, Seville, Second half of 18th century. Diameter 46 cm, height 11.3 cm, thickness ≈13mm. (2) *Lebrillo*, poss. Puebla, 18th century. Diameter 35 cm, height 9 cm.

pottery with such a red clay was made (Fig. 6.2.8, 2) (Alfonso Pleguezuelo Hernández, pers. comm. 2010; Deagan 1987: 78).

The absence of typically-Venezuelan *aripo* (flat and round ceramic griddles for cooking *arepas*, the Venezuelan staple corn cakes [Rivas Alfonzo 2014]), at the CS/A site, might suggest that colonists from the mainland Province of Venezuela were probably not among the seafarers visiting the saltpan of Cayo Sal in the 18th century. *Aripas* could, however, also be made from iron (*budares*) and these might have been brought to the site and never discarded since they were very durable items (Felipe Dorta 2011: 73). The large number of 64 cooking-related vessels recovered at CS/A stands in contrast to 18th-century Punta Salinas, where only four cooking vessels were recovered. This indicates that unlike at Punta Salinas, where occupation of the site was temporary and only lasted the various weeks of salt raking, at CS/A occupation of the site by certain groups of seafarers

was more long-term, and rather than weeks, the temporary campsite might have been inhabited for months on end. As has been mentioned, the apparent modus operandi of Dutch Antillean salt rakers at the site was to leave various enslaved and free black salt rakers under the supervision of a white overseer at the site for a few weeks until enough salt had been recollected. In contrast, the French and English turtle fishermen—who were most certainly raking salt from the Cayo Sal saltpan to preserve their catches—would have been present at CS/A for *temporadas* [seasons] much like the modern-day Margariteño fishermen in the archipelago and on other Venezuelan islands, who seasonally inhabit ephemeral *rancherías* [temporary makeshift huts] during the fishing season, that are then left abandoned until the next season. The large number of cooking vessels suggests that the seafarers at the site stayed for prolonged periods of time, rather than just a few weeks as at La Tortuga.

DINING AT UESPEN DE LA SALINA

Ceramic tableware for the serving and consumption of food comprises 25.55% of the total ceramic and glass collection from CS/A and is the largest functional vessel group at the site represented by 69 vessels (Table 6.2.5). The most abundant ceramic type at the site is Spanish majolica (tin-glazed earthenware) from the pottery-producing neighborhood of Triana in Seville, dating to the second half of the 18th century (Alfonso Pleguezuelo Hernández, pers. comm. 2010; Pleguezuelo Hernández 2011, 1985). The majolica recovered at CS/A includes 23 *platos* [plates] and one *platón* [large plate] (Fig. 6.2.9, 1–4) (Table 6.2.6). All but one of the vessels are painted in vibrant polychrome and monochrome colors exhibiting floral and foliar decorations (1), stylized animal motifs (2),

Table 6.2.6. Ceramic tableware for food serving and consumption recovered at the CS/A site.

Ware Type	Vessel Form	NF	MNV
Spanish painted majolica, Triana (Seville)	<i>Plato</i>	173	22
	<i>Platón</i> (large plato)	1	1
	Subtotal	174	23
Spanish plain majolica, Triana (Seville)	<i>Plato</i>	7	1
Lead-glazed coarse earthenware (morroware)	<i>Plato/platón</i>	22	4
	<i>Plato hondo</i>	4	1
	Subtotal	26	5
<i>Criollo</i> -ware (poss. prehispanic Amerindian pottery)	Pedestal bowl	1	1
English creamware	Plate	2	1
	Soup plate	17	2
	Butter dish	4	1
	Subtotal	23	4
English pearlware	Plate	18	1
English delft	Plate	45	8
	Basin	24	6
	Subtotal	69	14
Albisola-type red earthenware	Plate	38	11
French faïence blanche, Normandy	Plate	8	3
French faïence blanche, unidentified	Plate	3	2
French coarse earthenware, Saintonge-like plain	Plate	3	1
French faïence blanche, polychrome unidentified	Bowl	7	2
French faïence brune, poss. Rouen	Bowl	1	1
TOTAL		378	69

sponging, sinuous and concentric lines, dot and diaper, and spirals in the center (3 and 4). These Sevillian majolicas seem to have been traded to various parts of the Spanish Americas as they have been found in Buenos Aires, Argentina (Schávelzon 2000: 132) and San Juan, Puerto Rico (Solís Magaña 1988: 77–89), among other places. Whereas the *platos* were probably used for direct consumption of foods, the large 32.5 cm in diameter *platón* might have been a serving vessel.

Five lead-glazed coarse earthenware (morroware) tableware vessels were also recovered (Fig. 6.2.9, 5) (Table 6.2.6). Four are large *platos* or *platónes* and one is a *plato hondo* [deep plate]. One of the *platos* has two holes drilled on the side of the fissure suggesting that it would have been re-mended with a copper wire either at the site or

before being brought to CS/A. This suggests that, unlike many of the Anglo-American seafarers at Punta Salinas who brought fancy crockery to the site, some of the seafarers who came to Cayo Sal in the 18th century were of very modest economic means. Perhaps such a plate belonged to one of the free or enslaved blacks who were brought from Curaçao and Bonaire to work the saltpan? Perhaps during their months-long stay at Cayo Sal the French or Spanish seafarers had to resort to re-mending their wares because they were breaking too often and replacements could not be found? Similar repairing of vessels has been noted in remote locations such as the seasonal fishing stations on Saddle Island, Red Bay, Labrador (Burke 1991: 110) and in the Inuit camps of Labrador (Cabak and Loring 2000), as well as at isolated island sites in the Outer Hebrides, Scotland, all of which were irregularly supplied (Barker 2005). A pedestal bowl base, either *criollo*-ware or of prehispanic Amerindian manufacture was also found.

Fourteen English delft plates were also recovered at the site (Fig. 6.2.9, 9 and 10) (Table 6.2.6). Most of them exhibit either blue-on-white or manganese purple-on-white floral decorations painted in stylized brushstrokes typical of English potteries and dating to c. 1730–1760 (9 and 10) (John Austin, pers. comm. 2010). These plates are quite simple in their design and I know no parallels from museum collections or other archaeological sites, besides from Punta Salinas where similar plates were recovered. This lack of comparative data makes it therefore difficult to attribute them to any particular British potteries. Six English delft dashed basins were also recovered (11) (Table 6.2.6). This peculiar vessel type decorated with dashes on the everted rim was already discussed in Part I of this chapter, since various such vessels were also found at Punta Salinas. Further



Fig. 6.2.9. Ceramic tableware recovered at the CS/A site. (1–4) Spanish majolica *platos* from Triana, Seville. Second half of 18th century. (5) “El-Morro”-type lead-glazed coarse earthenware *plátón*. 18th century. (6) French faïence blanche, Normandy blue on white type with a wavy decoration on the plate rim. Second half of the 18th-century. (7) Albisola-type red earthenware plates. Post-1750. (8) Saintongelike plain, French coarse earthenware plate with a green lead glaze and a salmon-red paste. 18th century. (9 and 10) English delft plates, c. 1730–1760. (11) English delft basins. Prob. 1740 onwards. Lead glaze over pale slip on exterior and bluish milky tin glaze on exterior. Monochrome and polychrome blue and purple decoration and dashes on rim. (12) Creamware soup plate. c. 1762–1810.

English tablewares from CS/A include one creamware plate, one soup plate (12) and one probable butter dish, as well as one pearlware plate (Table 6.2.6). As has previously been discussed ethnic and/or national reductionism on the basis of artefact provenance is problematic, yet here the presence of these English plates as well as other, further discussed, English ceramics fits well with the documentary evidence that not only French but also English turtle fishermen were present at Cayo Sal in the late 1760s. Furthermore, the presence of creamware that began to be produced in 1762 in Staffordshire, also fits with the documentary evidence suggesting that in the late 1760s English seafarers were at the site (Miller 2015: 1–2). The similarity of the English wares at CS/A to those at Punta Salinas suggests that the unnamed “English” turtle fishermen at Cayo Sal might have been Bermudian or West Indian British colonists of whom a number arrived at La Tortuga throughout the 18th century.

Eleven Albisola-type red earthenware plates were recovered at the site (Fig. 6.2.9, 7) (Table 6.2.6). A small number of plates of this ceramic type were found at Punta Salinas, and as I mentioned in Part I of this chapter, these wares were made after the mid-18th century in Liguria, and widely copied from Provence to Barcelona, but are often found at French sites in the Americas. Given that there is a considerable French component in the ceramic assemblage from CS/A it can be suggested that these Albisola-type wares were probably of Provençal manufacture. The remainder of the tableware vessels from the site are all 18th-century French ceramics. Three plates are faïence blanche from Rouen, of the Normandy blue on white type with a wavy decoration on the plate rim, dating to the second half of the 18th-century (6) (Jelks 2007: 111; Waselkov and Walthall 2002: 65–66).

Two other plates are unidentified faïence blanche and one is a Saintonge-like plain, French coarse earthenware plate with a green lead glaze and a salmon-red paste (8) (Arcangeli 2012: 162; Brassard and Leclerc 2001: 28–29; Losier 2012: 256). The remainder of vessels are two unidentified polychrome faïence blanche bowls and a faïence brune bowl possibly from Rouen.

Interestingly, no pewter spoons were recovered at the site. The only fragments of a table utensil is a bone handle engraved with cross-hatchings that was probably part of a table knife (Fig. 6.2.10). There are also no serving tableware vessels at the site besides from the creamware butter dish and possibly the majolica *platón*, which suggests that unlike at Punta Salinas, some of the seafarers at CS/A were not necessarily engaging in fancy displays of fine dining but rather using the crockery for the simple non-showy purpose of food consumption. Clearly, as the documentary and archaeological evidence indicates, unlike at Punta Salinas, a number of seafarers from different imperial/national/ethnic backgrounds arrived to the CS/A site. This makes it difficult to effectively reconstruct the assemblages of dining practices because the foodways of this mixed group of seafarers are not easy to determine at this multi-component site. As shall be discussed in the following section on drinking, two English delft tea bowls and a punch bowl were recovered suggesting, however, that the English turtle fishermen who came to Cayo Sal in the 18th century engaged in similar ceremonies of punch and tea drinking as the Anglo-Americans at Punta Salinas. The abovementioned creamware butter dish along with a creamware plate and soup plate might indicate that even though the presence of the English at Cayo Sal might have been nowhere near as intensive throughout the 18th



Fig. 6.2.10. Bone handle engraved with cross-hatchings that was probably part of a table knife.

century as that of the Anglo-Americans at Punta Salinas, they might have nonetheless brought along with them a more ‘refined’ array of tablewares than the French or Dutch Antilleans. The Spanish/Hispanic tablewares include variations of *platos*, a *taza* and a *pocillo*, and the French tablewares include only plates and bowls. The English tablewares in contrast demonstrate the most variety in forms including plates, soup plates, basins, as well as tea bowls, saucers, punch bowls and cups that will be discussed hereafter.

DRINKING AT UESPEN DE LA SALINA

A total of 67 ceramic and glass beverage storage containers were recovered at CS/A, representing 24.81% of the total collection (Table 6.2.7; Table 6.2.5). Twenty-six of these containers were ceramic. Nine Rheinisch or English 18th century stoneware jugs or bellarmine bottles were recovered, that might have contained alcoholic beverage such as wine, water, or other liquids. Seven Westerwald stoneware water bottles were also recovered, most of which have the spa marks from the “SELTERS” brand and date to c. 1750–1780 (Fig. 6.2.11, 1). Two other similarly-shaped stoneware bottles are marked “IFS WEESP GIN” indicating that they originally contained Dutch *jenever* or gin bottled in the municipality of Weesp in North Holland (2). A further similar stoneware bottle, possibly dating to the late 18th or early 19th century, has a stamped mark with a logo and the words

Table 6.2.7. Ceramic and glass liquid storage containers recovered at the CS/A site.

Ware/Glass Type	Color	Vessel Form(s)	NF	MNV
Ceramic				
Rheinish stoneware	N/A	Water bottle	50	7
Rheinish and English stoneware	N/A	Jug, bellarmine bottle	59	9
Prob. Rheinish stoneware	N/A	Bottle (for Riga Black Balsam herbal liquor, Latvia)	1	1
Prob. Rheinish stoneware	N/A	Bottle, (for Dutch gin marked "IFS WEESP GIN")	10	2
Spanish greyware	N/A	<i>Botijo /hidrocéramo</i> (water container)	10	1
<i>Criollo</i> -ware (poss. prehispanic Amerindian pottery)	N/A	<i>Pimpina</i> (water bottle)	9	5
		<i>Pimpina</i> with everted rim	2	1
		sub-subtotal	11	6
Subtotal ceramic vessels			141	26
Glass				
English cylindrical mallet bottle	Dark olive green	Cylindrical mallet bottle (untooled string rim, maker's mark on lip)	180	19 (bases)
English cylindrical mallet bottle	Dark olive green	Cylindrical half-size mallet bottle (down-tooled string rim)		
English cylindrical bottle	Heavily solarized	Cylindrical bottle (up-tooled string rim)		
English cylindrical bottle	Dark olive green	Cylindrical bottle (un-tooled flattened string rim)		
English cylindrical bottles	Dark green	Cylindrical bottle (tooled string rim)		
Dutch/English cylindrical bottle	Black-green	Cylindrical bottle (down-tooled v-shaped two-part string rim)		
Dutch/Belgian cylindrical utility bottle	Dark-olive green	Cylindrical 'long neck' utility bottle (<i>langhal</i>)		
Dutch cylindrical bottle	Yellow-green	Cylindrical bottle (roughly v-tooled string rim and flaring lip)		
Poss. Dutch cylindrical bottle	Olive green	Cylindrical bottle (flattened and tooled string rim)		
Poss. Dutch cylindrical bottle	Olive green	Cylindrical bottle (wide v-tooled string rim and flaring lip)		
French cylindrical bottle	Olive green	Burgundy'-type cylindrical bottle (thick rounded string rim)		
Case bottles	Black to dark green	Case bottle	219	22 (bases)
Subtotal glass vessels			399	41
TOTAL			540	67



Fig. 6.2.11. Ceramic liquid storage vessels found at the CS/A site. (1) Westerwald stoneware water bottle with “SELTERS” brand name. c. 1750–1780. (2) Rhinish-made stoneware bottle marked “IFS WEESP GIN” indicating that it originally contained Dutch *jenever*. Second half of 18th century. (3) Spanish greyware *hidrocéramo* or *botijo*. Post-1750.

“BALSAM”. This bottle probably originally contained the Latvian Black Balsam herbal liquor, although both this and the other gin and water bottles might have been reused as multipurpose storage containers for other alcoholic beverages, vinegar and oils. Fragments of a Spanish greyware *hidrocéramo* or *botijo*, a vessel used to store cool water, dating to post-1750 were also found (3) (Deagan 1987: 39–41; Smith 1962: 71). Six *criollo*-ware, or possibly prehispanic Amerindian *pimpinás* (these specific vessels with shorter and wider rims were at times called *alcarrazas*) were also recovered at the site. These vessels were used for storing and refreshing water, since if placed in the shade the ceramic container would maintain the liquid within cooler than the ambient temperature (Anzola and Garrido 1993: 108). An MNV of 41 glass bottles was also determined (Table 6.2.7). Of these 19 were English, Dutch/Belgian and French cylindrical bottles of which most can be

dated to between the mid-18th and early 19th century. These bottles could have contained various kinds of fortified and aged wines and spirits. Twenty-two European case bottles dating probably to the mid- to late 18th century were also recovered. Much like the cylindrical bottles, the contents of these were also generally alcoholic. The relative paucity of vessels for alcoholic beverage storage is of note. As I mentioned at the beginning of this Part II of Chapter 6, the French and English turtle fishermen on Cayo Sal would sell alcohol and clothes to the colonial-Venezuelan traders who brought them provisions (Amézaga 1966: 220). This alcohol might have been primarily stored in wooden barrels, and iron cask hoops recovered at the site indicate that wooden barrels containing both liquids and food provisions were brought down on land at CS/A. Moreover, the Spanish *botijas* might have not only contained comestibles but also wine, and some of these might have been intended for trade with the local Venezuelan colonists.

Turning now to the vessels for beverage consumption, only 19 such vessels were recovered (Table 6.2.8). A fragment of an English delft punch bowl (Fig. 6.2.12, 7), two tea bowls (5 and 6), and a saucer (8) were recovered at the site, all probably produced in London and dating to c. 1720–1740 (John Austin, pers. comm. 2010). Two fragments of a creamware tea bowl or punch bowl, a mug handle and the base of a cup were also found (3). An English slipware two-handled cup, dating to the first half of the 18th century, concludes the English vessels found at CS/A related to beverage consumption. Much like at Punta Salinas, seven probably Bohemian glass tumblers, five plain and two copper-wheel engraved were also found, and these could have been used in the punch drinking

Table 6.2.8. Ceramic and glass tableware for serving and consumption of liquid recovered at the CS/A site.

Ware/Glass Type	Color	Vessel Form(s)	NF	MNV
Ceramic				
English delft	N/A	Punch bowl	10	1
		Tea bowl	8	2
		Saucer	2	1
		Sub-subtotal	20	4
English creamware	N/A	Tea bowl/Punch bowl	2	1
		Mug	1	1
		Cup	1	1
		Sub-subtotal	4	3
English slipware	N/A	Two-handed cup	1	1
Spanish painted majolica, Triana (Seville)	N/A	<i>Taza</i> (cup)	3	1
Mexican majolica, Esquitlan-ware, Puebla	N/A	<i>Pocillo</i> (chocolate cup)	6	1
Lead-glazed coarse earthenware (morroware)	N/A	<i>Cantaro</i> (jug/pitcher)	1	1
Subtotal ceramic vessels			35	11
Glass				
Prob. Bohemian glass tumbler	Colorless	Tumbler (plain)	15	5
Prob. Bohemian glass tumbler	Colorless	Tumbler (copper-wheel engraved)	2	2
English drinking glass	Colorless	Drinking glass (tear in base of bowl and drawn stem)	1	1
Subtotal glass vessels			18	8
TOTAL			53	19

ceremony along with an English mid-18th-century colorless drinking glass with a drawn stem and a tear in the base of the bowl (9). The presence of these specific ceramic and glass vessel forms suggest that the unnamed English turtle fishermen at Cayo Sal were engaging in similar tea and punch drinking rituals as at the site as at Punta Salinas.

There are three further beverage-serving and consumption related vessels from CS/A. The first is a lead-glazed coarse earthenware (morroware) *cantaro* [pitcher], that could have been used for distributing water or alcohol at the site. A Spanish majolica *taza* [cup] from Triana, Seville, is finely painted in polychrome colors (Fig. 6.2.12, 2). This small and fragile little cup could have been used for drinking tea or coffee. The most interesting of these vessels is a Mexican majolica, *pocillo* [chocolate cup], dating to the late 18th- to early 19th century. This piece with its characteristic mustard-yellow glaze and black-brown simplified Greek scroll border motif in between two lines below the rim is an example of what Donna Seifert (1977: 249–255) and Kathleen Deagan (1987: 89–90) define as Esquitlan-ware, probably produced in Puebla (1). Mexican majolicas have been found abundantly at mainland Venezuelan archaeological sites and they were imported in the 17th and 18th century through an exchange of Venezuelan cacao for Mexican manufactured goods (Arcila Farias 1950: 97–98, 101).

Chocolate drinking had become popular in Spain during the 17th century and in the 18th century was a well-formed ritual with associated paraphernalia, comparable to that of English tea drinking (Duarte 2005: 25–31, 40–47). Those seafarers who were using the *pocillo*, if they were using it to consume chocolate, were also engaging in this colonial-



Fig. 6.2.12. Ceramic and glass tableware for consumption of beverages found at the CS/A site. (1) Esquitlan-ware *pocillo*, prob. Puebla, Mexico. Late 18th to early 19th century. (2) Majolica *taza* from Triana, Seville. Second half of 18th century. (3) Creamware handle from a mug and the base of a cup. c. 1762–1810. (4) Cut coconut shell that was possibly intended to become a *coco chocolatero* or *jicara*. (5 and 6) English delft tea bowls. c. 1720–1740. Diameters 11.5 cm. (7) English delft punch bowl. c. 1720–1740. (8) English delft tea bowl, punch bowl and saucer rim and base sherds. c. 1720–1740. (9) English colorless drinking glass with a drawn stem and a tear in the base of the bowl. Mid-18th-century.

Spanish practice and one that in the late 18th-century was well set in Venezuelan society, where chocolate would be consumed at breakfast, at noon and with dinner (Duarte 2005: 37). What is furthermore curious is that, as I mentioned in Part II of Chapter 3, Cayo Sal was an occasional transshipment point for the contraband of cacao from the Venezuelan coast to Curaçao. It can be suggested thus that for those at Cayo Sal, consumption of chocolate was very much at hand, since the high-quality raw material of cacao passed



Fig. 6.2.13. Two corroded iron locks found at the CS/A site.

through the island. Furthermore, excavations at CS/A in the trenches that were placed at the edge of the saltpan within the mud of the microbial mats revealed various fragments of coconut shell interspersed with the 18th-century ceramics. Aside from the fact that these seafarers might have also been consuming coconut, one of the coconut shells is cut into a cup and is remarkably similar in form to the Spanish-colonial chocolate drinking vessel called *cocos chocolateros* or *jícaras* that consisted of a polished coconut shell with engraved decorations mounted within a silver foot, with attached silver handles and a silver lip (Fig. 6.2.12, 4) (Duarte 2005; Fuentes and Hernández 1993: 77). Although the association of this rudimentary coconut shell cup with a refined *coco chocolatero* may be far-fetched, the Mexican majolica *pocillo* indeed suggests that chocolate might have been drunk beside the saltpan of Cayo Sal.

Evidence for activities usually associated with alcohol drinking at CS/A is limited to a fragment of a Dutch or English 18th-century pipe and two pipe stems. This paucity of

pipes is puzzling and may suggest that the seafarers at the site were too poor to purchase tobacco. Personal goods or provisions in large trunks or chests might have been kept under lock at the site as evidenced by two large iron locks that were recovered at the site (Fig. 6.2.13).

Unlike at Punta Salinas, where ceramic and glass beverage-related vessels comprised a large 73.92% of the total ceramic and glass collection, at CS/A beverage-related vessels only compose 31.85% of the total collection (Table 6.2.5). In fact, the proportion of food to beverage related vessels at CS/A is nearly an inversion of that at Punta Salinas. This suggests that either, 1) drinking was not one of the principal pastimes of the seafarers at Punta Salinas, 2) that most of these seafarers did not utilize vessels for beverage consumption but rather drank straight from containers such as glass bottles, or 3) that their drinking practices have left no significant material remains. Taking into consideration once again that the seafarers that we know from documentary sources to have arrived at Cayo Sal in the 18th century were English, French and Dutch Antillean, it may be suggested that the English had the more 'refined' and specialized assemblages of beverage drinking, whether they be punch or tea. As has been mentioned the Spanish chocolate-drinking ceremony might have also been occurring at Cayo Sal, yet it is impossible at this stage to ascertain which seafarers were engaging in this practice.

The material collection from CS/A is numerous and diversified. The ceramic collection can be separated into four categories, with one being British, one Spanish (Iberian), one French, and one of yet-unknown origin including the un-provenanced lead-glazed coarse earthenwares (morrowares) and the possibly local *criollo*-wares. As the

scant documentary evidence indicates, English and French turtle fishermen as well as free and enslaved black Dutch Antillean salt rakers were present at the saltpans of Cayo Sal in the second half of the 18th century. Given the location of the site right beside the saltpan, and the recovery of salt gathering tools (Fig. 5.15), it can be suggested that the turtle fishermen were also engaging in salt raking and possibly also salt cultivation at the site. The presence of a majority of food storage, cooking and serving wares at CS/A suggests that the French and English turtle fishermen stayed at the site for prolonged periods of time (perhaps several months), unlike the Anglo-Americans at Punta Salinas, so much so that they traded for provisions with Venezuelan coastal traders, caught a variety of local marine fauna and captured the local sea birds for food. These turtle fishermen apparently also engaged with the local Venezuelan traders by selling them alcohol and clothes (Amézaga 1966: 220), and I would further suggest that they might have also been the intermediaries who traded the contraband Venezuelan cacao with Curaçaoan seafarers.

DAILY LIFE AT LOS ESCOMBROS (c. 1800–1880)

EXCAVATIONS AND FEATURES

The site of Los Escombros (hereafter CS/B), is located 1 km east of CS/A on a sandy corridor between two large saltpans to the east and west of Cayo Sal (Fig. 6.2.14). The site was initially located and surveyed by Andrzej and Ma. Magdalena Antczak in 1982. Test pit excavations helped delimit the boundaries of two trash middens where trenches CS/B/E-1 and CS/B/E-2 were subsequently excavated in the decade of the 1980s (Fig. 6.2.14). These trenches were further expanded in 2006 and more recently, under my

direction, in 2010, 2012, and 2013 further systematic excavations were performed and a trench was placed at CS/B/W where a small trash midden was located (Fig. 6.2.15). In



Fig. 6.2.14. Map of the CS/B site highlighting excavations trenches, features and structures by and on the adjacent saltpan.



Fig. 6.2.15. Views of excavations at the site of CS/B. (*Top*) Excavation in 2013 during the experiential community archaeology workshop (photo: José Voglar). (*Bottom*) excavation in March 2012

2013 I led a weeklong experiential community archaeology workshop at this site for schoolchildren from the main Los Roque island of Gran Roque (Fig. 6.2.15). I also performed a systematic GPS survey and mapping of the saltpans during that year. Much of the material remains in the trenches at the CS/B site were found no further than 30 cm below the surface. The bulk of material was found between 0 and 20 cm of depth, with no definable stratigraphy due to the loose sandy matrix of the site.

The CS/B site has the largest number of associated features of any of the sites mentioned in this dissertation. The saltpan to the west and east is crisscrossed by a dense network of coral stone dikes and walkways that segment the saltworks into various concentrating ponds and at least four groups of crystallizing pans that were thoroughly discussed in Chapter 5. The site and its adjacent areas harbor the remains of a coral stone and lime-mortar structure, a large salt-packing patio and many coral stone shelters on the windward storm terraces. The coral stone and lime-mortar structure is the remains of a house, which now only has two walls that are partially standing. Its foundations roughly measure 7.40 x 5 m. It has a window facing east, and originally could have had windows on three sides and a door facing west (Fig. 6.2.16). The coral for the structure of the house was gathered from the large adjacent storm terraces and the lime was burnt in situ, as evidenced by the remains of a lime kiln to the north of the house (Fig. 6.2.16). This house probably had a wooden roof, as numerous copper and iron nails found strewn around the ruin and within the excavation units might have fastened architectural timbers. This solid structure might have been the house in which Jeremiah Morrell lived while he oversaw the work on the saltpan. As discussed in Part II of Chapter 3, Morrell was a US



Fig. 6.2.16. (Top) picture of the partially-standing coral stone and lime mortar structure at the CS/B site on Cayo Sal (photo: José Voglar). (Bottom) lime kiln a few hundred meters to the north of the house.

American entrepreneur to whom the saltpan was leased by the Venezuelan government for eight years starting in 1834. Morrell, who resided in Puerto Cabello, is known to have not only managed the saltpan from afar, but was on Cayo Sal himself in December of 1842 when the convoy escorting the mortal remains of Simón Bolívar anchored in front of the saltpan for six days before leaving for La Guaira (Guzmán 1883: 457). It is unknown if Morrell had hired a Venezuelan, Dutch Antillean or US American *capataz*, or overseer, but the above anecdote suggests that he was present at the saltworks at least from time to time if not permanently.

The 120 Bonairean and Curaçaoan freedmen that Morrell hired in 1834 to build the saltpan and then manage the process of salt cultivation would have also been present at the site and would have had to be accommodated somewhere (Bosch 1836: 307). It is improbable however, that such a large workforce was necessary beyond the initial construction of the saltpan infrastructure which might have taken a few months, and thereafter probably only a dozen or so freedmen were needed to manage the saltpan and rake and load the salt. These salt workers might have lived in wooden huts, much like those illustrated in Fig. 5.19, drawn by Spence during his visit to the saltpan in 1871. In later years, precarious living conditions for those men whom apparently watched over the saltpan of Cayo Sal were quite the norm. As noted in 1889 by the governor of the Territorio Colón, Juan J. Yepes, who was trying to reopen the salt pans of the Cayo Sal after these had been disabled in 1880:

En la salina principal del Territorio se hace necesaria una pequeña casa de bajareque y techo de hierro galvanizado, cuyo costo es insignificante, pues hasta ahora, para guarecer los celadores solo se construye provisionalmente un rancho con ramas secas, que si bien los preserva del sol,

en tiempos de invierno viven casi a la intemperie y se enferman constantemente. [On the principal saltpan of the Territorio a small wattle-and-daub house with a galvanized iron roof is necessary, whose cost is insignificant, since until now, to protect the watchmen of the saltpan from the sun a provisional shelter made of dry branches is built, that does protect them from the sun, but in winter they live nearly in the open air and constantly fall ill] (Venezuela 1890: 315).

Given this information, the Dutch Antillean workers could have also lived in such makeshift shelters surrounding the overseer's house. However, no discernible post holes were found during the excavations and this could be predominantly due to the loose sandy matrix inhibiting their preservation.

A few meters to the east of the ruin there lies the sunken patio (Fig. 5.16). As has been discussed in Chapter 5, this patio was probably used for the packing of salt into canvas bags, with the stone floor preventing the surrounding sand from getting into the prized salty product. Adjacent to the west of the house ruin there also lies a stacked coral stone structure in the form of a horseshoe. I suggest that given its proximity to the house, this might have been a storage depot, which covered with wooden planks or a canvas tarp, could have kept water and food provisions in a cool shade. Alternatively, it could have been a small animal pen for chickens and pigs. A 2.5-meter-wide walkway of large coral stones leads from the west through the saltpan pan and onto the portion of the site with the structures (Fig. 6.2.14; Fig. 5.18). Since this was the widest walkway it was possibly used to transport the salt from the western crystallizing pans in wheelbarrows to the packing patio. To the east and to the west of the CS/B site, the wide coral storm terrace has multiple horse-shoe shaped and circular coral structures built on it, some that are more than 1.5 m in height and 3 m in diameter (Fig. 6.2.14; Fig. 5.16). The western group of structures is located directly to the south of one group of crystallizing pans and

the eastern group is also found adjacent to the south of the crystallizing pans (Fig. 6.2.14). With a tarp over the top, these structures might have served as a respite from the blazing midday sun for the salt workers raking the salt on the adjacent crystallizing pans. The surroundings and the inside of the structures themselves had only small fragments of sporadically strewn green-glass bottle fragments. The lack of any material remains aside from bottles that might have contained alcohol or water furthermore indicates that these were not places where the Dutch Antilleans bivouacked or camped while at CS/B, but rather were temporary noontime shelters.

PROVISIONING AND LOCAL RESOURCE PROCUREMENT

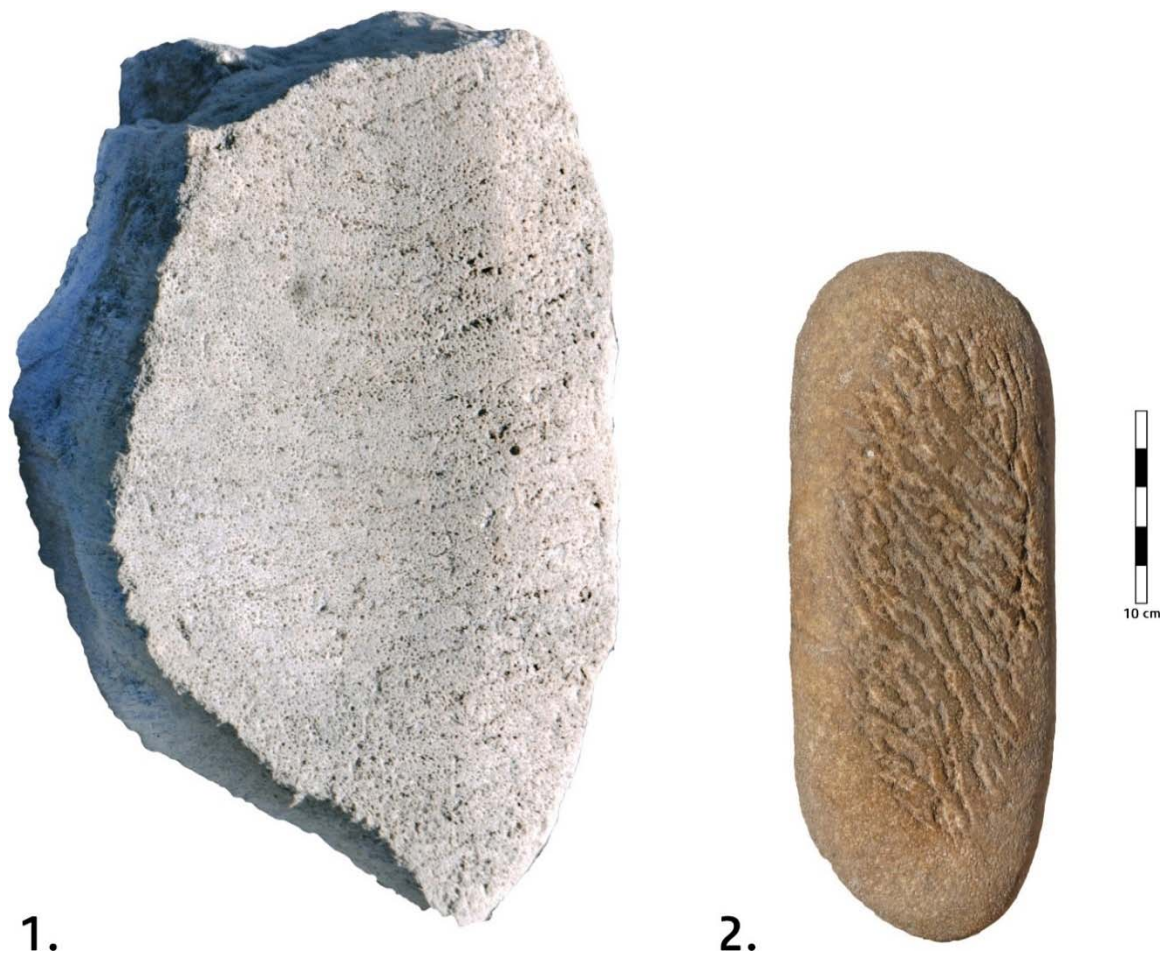
The documentary record is as of yet quite sparse regarding any information on the functioning of the saltpan enterprise during the 1830s and 1840s under Morrell. The 120 Dutch Antillean freedmen must have been provisioned by Morrell, as well as those salt workers who then remained at the finished saltpan cultivating the salt. What they and Morrell were receiving as provisions, probably from Puerto Cabello, cannot be determined with certainty. Eight Spanish earthenware *botijas* of the late style, most

Table 6.2.9. Ceramic and glass food-related storage vessels recovered at CS/B.

Ware/Glass Type	Color	Vessel Form	NF	MNV
Ceramic				
Spanish earthenware, prob. Sevilla	N/A	<i>Botija</i> (olive jar)	39	8
Subtotal Ceramic Vessels			39	8
Glass				
French wide-mouthed cylindrical <i>flacon</i>	Transparent and solarized-violet	Wide-mouthed cylindrical <i>flacon</i> (long tapered neck and thick fire-polished lip)	1(necks)	1
French short-necked square "case" <i>flacon</i>	Transparent and solarized-violet	"Case" <i>flacon</i>	3 (necks), 3 (bases), 3 1 (body sherds)	
Unidentified jar	Transparent	Jar (rounded rim, mold blown or machine made)	1	1
Subtotal Glass Vessels			9	5
TOTAL			48	13

probably from the first half of the 19th century were found at the CS/B, seven in the CS/B/E trash middens and one in the CS/B/W midden (Table 6.2.9) (Goggin 1964: 278–279). Three of these were glazed on the interior. As has already been discussed in the previous section on the CS/A site, these multipurpose vessels could contain a wide array of dry and wet provisions as well as alcoholic beverages and water. Their presence within a context from the 1830s and 40s suggests that they were still in use in the first half of the 19th century in Venezuela, even after Independence. Five glass bottles that might have stored provisions and condiments were also found (Table 6.2.9). Three French “case” *flacons*, also found at CS/A and at Punta Salinas, were recovered as well as one wide-mouth cylindrical *flacon*. These containers could have had been used for storing vinegar, pickled vegetables and other preserves and savory sauces. Finally, one glass jar, whose provenance has still not been identified, was also recovered. Various fragments of iron cask hoops also indicate that wooden barrels were present at the site. As was the case with CS/A, these barrels could have contained potable water, alcohol and also dry provisions such as legumes, flours and salted meat.

Excavations within the CS/B/W trash midden, located across the large dike to the west of the main middens and structures of CS/B/E, brought to light a broken coral stone *metate* (mealing stone) and a coral stone *mano* (grinding stone) with signs of grinding use-wear (Fig. 6.2.17). This suggests that those who were camping and eating at the site were also grinding corn, cassava or millet into flour. As shall be discussed further on,



1. **2.**
Fig. 6.2.17. Coral stone *metate* and *mano* found in the CS/B/W midden.

ceramic *criollo*-ware *aripos* (griddles) used for cooking cassava cakes and corn cakes were also recovered within the eastern and western middens. This evidence suggests that the Dutch Antillean freedmen at the site were also engaging in their own traditional foodways, and perhaps, during the 8-year duration of the salt enterprise at Cayo Sal, some local Venezuelan saltworkers were also present at the site. Jay Haviser reported that the coral stone *metate* and *mano*, termed “*piedra pa mula maishi*” in Papiamentu, was among the artefacts found in mid- to late 19th-century post-emancipation households on Curaçao, and would have been used to grind maize and millet into flour (Haviser 1999:

241, 246–247). Furthermore, as shall be discussed later, the CS/B/W trash midden indicates that a group of salt workers was camping further away from the main structures, and it is very probable that all of the remains recovered from this midden were not the overseer's trash, but the trash of the Dutch Antillean freedmen.

There is a paucity of mammal bones from the excavations in the CS/B/E-1 and E-2 trash middens adjacent to the house. A total NISP of 46 mammal bones was recovered and an MNI of one cow and one goat was determined. Although a more detailed analysis of the mammal remains must be undertaken in the future, this preliminary data suggests that these bones might have been from live animals kept at the site and thereafter slaughtered and consumed. Perhaps, however, the primary protein source for the workers at the site was salted beef brought from Puerto Cabello, and if this was primarily boneless *tasajo*, it would have therefore left no zooarchaeological remains in the archaeological record.

A total NISP of 272 fish remains and an MNI of 29 fishes was determined for the CS/B/E-1 and E-2 trash middens (Table 6.2.10). The MNI includes eight Snappers (*Lutjanus sp.*), six Groupers (*Epinephelus sp.*), six individuals from the taxon Carangidae that include various Jacks, four Saucereye porgies (*Calamus calamus*), three Blue-striped grunts (*Haemulon sciurus*), probably one Rainbow parrotfish (*Scarus guacamaya*), and one Cosmopolitan eel (*Gymnothorax sp.*). All of these fish could be easily caught with hook and line from the nearby storm terraces by casting the baited hook over the coral reef. An iron hook with a snell knot for affixing the lead wire was found within the CS/B/E-1 trash midden, indicating that this might have been the primary method of fishing at the

Table 6.2.10. NISP and MNI of fish remains recovered at the CS/B site.

Family	Taxon & vernacular name	Skeletal element	NISP	MNI	Observations
Scaridae	<i>Scarus</i> sp. (most probably <i>Scarus guacamaya</i>) (Rainbow parrotfish or pez loro)	Premaxillary right	1	1	
		Subtotal	1	1	
Muraenidae	<i>Gymnothorax</i> sp. (Cosmopolitan eel or <i>morena</i>)	Dentary	2	1	Fragments
		Subtotal	2	1	
Sparidae	<i>Calamus calamus</i> (Saucereye porgy or <i>cachicato</i>)	Premaxillary right	3		
		Premaxillary left	4	4	
		Subtotal	7	4	
Lutjanidae	<i>Lutjanus</i> sp. (snapper or <i>pargo</i>)	Premaxillary right	5		
		Premaxillary left	4		
		Dentary right	3		
		Dentary left	8	8	
		Subtotal	20	8	
Serranidae	<i>Epinephelus</i> sp. (Grouper or <i>mero</i>)	Premaxillary right	3		
		Premaxillary left	3		
		Dentary right	6	6	
		Dentary left	3		
		Subtotal	15	6	
Haemulidae	<i>Haemulon sciurus</i> (Blue-striped grunt or <i>coro-coro</i>)	Premaxillary right	3	3	
		Premaxillary left	2		
		Subtotal	5	3	
Carangidae		Dentary right	6	6	
		Dentary left	3		
		Vertebrae with	5		
		Subtotal	14	6	
Subtotal NISP (identified)			64	29	
UID NISP		Vertebrae	198		Small and medium
Total NISP			272		

site (Fig. 6.2.18). A small lead sinker was also recovered (Fig. 6.2.18). The large Rainbow parrotfish could have been easily speared from the shore when schooling over the coral reef. An NISP of 18 turtle bones was recovered, indicating that those at the site consumed the marine reptiles, but perhaps also caught them and preserved their meat for delayed consumption upon their return to the Netherlands Antilles and Puerto Cabello.

Finally, a total NISP of 354 sea bird bones was recovered from the CS/B/E-1 and E-2 trash middens. Thus far, the bones were only counted and further analysis awaits to determine the species. Like the bird remains from the nearby 18th-century CS/A site, these most probably are principally bones of the sea birds that nest in the mangroves of Cayo Sal, namely the Brown pelican (*Pelecanus occidentalis*) and Brown booby (*Sula leucogaster*). This large number of bones (if it is in fact indicative of a large MNI must still



Fig. 6.2.18. Iron hook with copper-alloy wire snell knot and lead sinker recovered in the CS/B/E-1 trash midden.

be determined) initially suggests that the freedmen at the site were principally consuming these sea birds apart from provisions with which they were possibly provided during their stay on the island. In the case that a provision ship did not arrive for a few days or weeks, the freedmen at the site would have to resort to fishing and catching turtles and birds to survive. It cannot be also dismissed that the large number of sea bird bones is not as much an indication of poor provisioning of his men by the overseer, or Morrell himself, but rather a purely culinary preference on part of the Dutch Antilleans.

FOOD PREPARATION

As was the case at CS/A, no clear nucleated hearths or fireplaces were found at CS/B, with charcoal particles mixed in with the ceramic, glass and faunal remains within the trash middens. Clearly, the freedmen and the overseer(s) at the site must have been cooking their meals, and it is possible that the overseer cooked his meals within the house on an

iron stove and within that used firewood or charcoal, rather than on a rudimentary fireplace. Ten small fragments of broken flint, one of which is very similar to a gunflint or gun spall, were found, suggesting that these might have been used as fire starters.

A total of 23 cooking vessels were recovered at the site, representing 5.45% of the entire collection of ceramics and glass from CS/B (Table 6.2.11; Table 6.2.12). Fourteen *criollo*-ware *ollas* were recovered, eleven in the CS/B/E-1 and E-2 trash middens and three in the CS/B/W midden (Fig. 6.2.19). These ceramics are all very variable in paste, exhibiting colors from grey to red with a burnished red slip (1), and reddish-brown to buff-pink. Some have no visible inclusions, whereas others have small quartz and mica within the fabric of the sherds. The vessels also have widely divergent forms with some exhibiting everted rims, while others have inverted rims and straight rims. Finally, there are also various decorations. One has a wide incised wavy motif below the rim (1), another has possible painted slip, a further vessel has a decoration consisting of small indentations on the lip (7), and another has a semicircular appendix with three indentations. Another vessel has a pinched horizontal handle (4). The smallest of these *ollas* measured 10 cm in diameter and the largest 20 cm. Furthermore, one large *olla* rim sherd was found, but its

Table 6.2.11. Ceramic and metal food preparation-and cooking-related vessels from the CS/B site.

Ware/Glass Type	Vessel Form	NF	MNV
Ceramic			
<i>Criollo</i> -ware	Large <i>olla</i>	1	1
	<i>Olla</i>	25	14
	<i>Aripo</i>	3	3
	Poss. <i>aripo</i>	2	2
	UID	112	-
	sub-subtotal	143	20
French lead-glazed earthenware, Vallauris	<i>Canari</i> or <i>marmite</i> (cooking pot)	10	2
Subtotal Ceramic Vessels		153	22
Metal			
Large metal <i>caldero</i>	<i>Caldero</i> (cauldron)	1	1
Subtotal Metal Vessels		3	1
TOTAL		156	23

Table 6.2.12. Percentages of ceramic, glass and metal vessels from the CS/B site according to functional vessel class.

Functional Vessel Class	Vessel Form(s)	MNV	Percentage of Total MNV
Food-Related Vessels			
Food Storage	<i>Botija</i> (poss. also for liquid storage)	8	1.90%
	Glass jar	1	0.24%
	Wide-mouthed <i>flacon</i>	1	0.24%
	"Case" <i>flacon</i>	3	0.71%
	Sub-subtotal Food Storage	13	3.08%
Food Preparation	<i>Olla</i>	14	3.32%
	Large <i>olla</i>	1	0.24%
	<i>Aripo</i>	3	0.71%
	Poss. <i>aripo</i>	2	0.47%
	<i>Canari/marmite</i> (cooking pot)	2	0.47%
	Metal <i>Caldero</i>	1	0.24%
	Sub-subtotal Food Preparation	23	5.45%
Food Serving	Soup tureen	2	0.47%
	Dish	4	0.95%
	Sub-subtotal Food Serving	6	1.42%
Food Consumption	Plate	11	2.61%
	Soup plate	23	5.45%
	Plate/soup plate	43	10.19%
	Bowl	79	18.72%
	Bowl?	1	0.24%
	Pedestal bowl	2	0.47%
	Pedestal bowl?	2	0.47%
	Sub-subtotal Food Consumption	161	38.15%
Subtotal Food-Related Vessels		203	48.10%
Beverage-Related Vessels			
Beverage Storage	Jug	10	2.37%
	Stoneware bottle	33	7.82%
	<i>Pimpina</i>	7	1.66%
	<i>Pimpina</i> or <i>tinaja</i>	1	0.24%
	<i>Botijita/botijuela</i>	1	0.24%
	Cylindrical glass bottle	34	8.06%
	Large cylindrical glass bottle	3	0.71%
	Case bottle	21	4.98%
	French <i>firole</i>	2	0.47%
	Square bottle	3	0.71%
	Decanter?	2	0.47%
	Sub-subtotal Beverage Storage	117	27.73%
	Beverage Serving	Pitcher	4
Sub-subtotal Beverage Serving		4	0.95%
Beverage Consumption	Cup	28	6.64%
	Mug	10	2.37%
	Saucer	30	7.11%
	Glass tumbler	14	3.32%
	Sugar pot	2	0.47%
	Sub-subtotal Beverage Consumption	84	19.91%
Subtotal Beverage-Related Vessels		205	48.58%
Other Vessels			
Pharmaceutical Storage	Vial	5	1.18%
	Bottle	10	2.37%
	Ointment jar	1	0.24%
	Drug jar (ceramic)	3	0.71%
	Sub-subtotal Pharmaceutical Storage	5	1.18%
Hygiene-Related	Chamber pot	8	1.90%
Other Utilitarian	Blacking bottle	1	0.24%
Subtotal Other Vessels		14	3.32%
TOTAL		422	100%

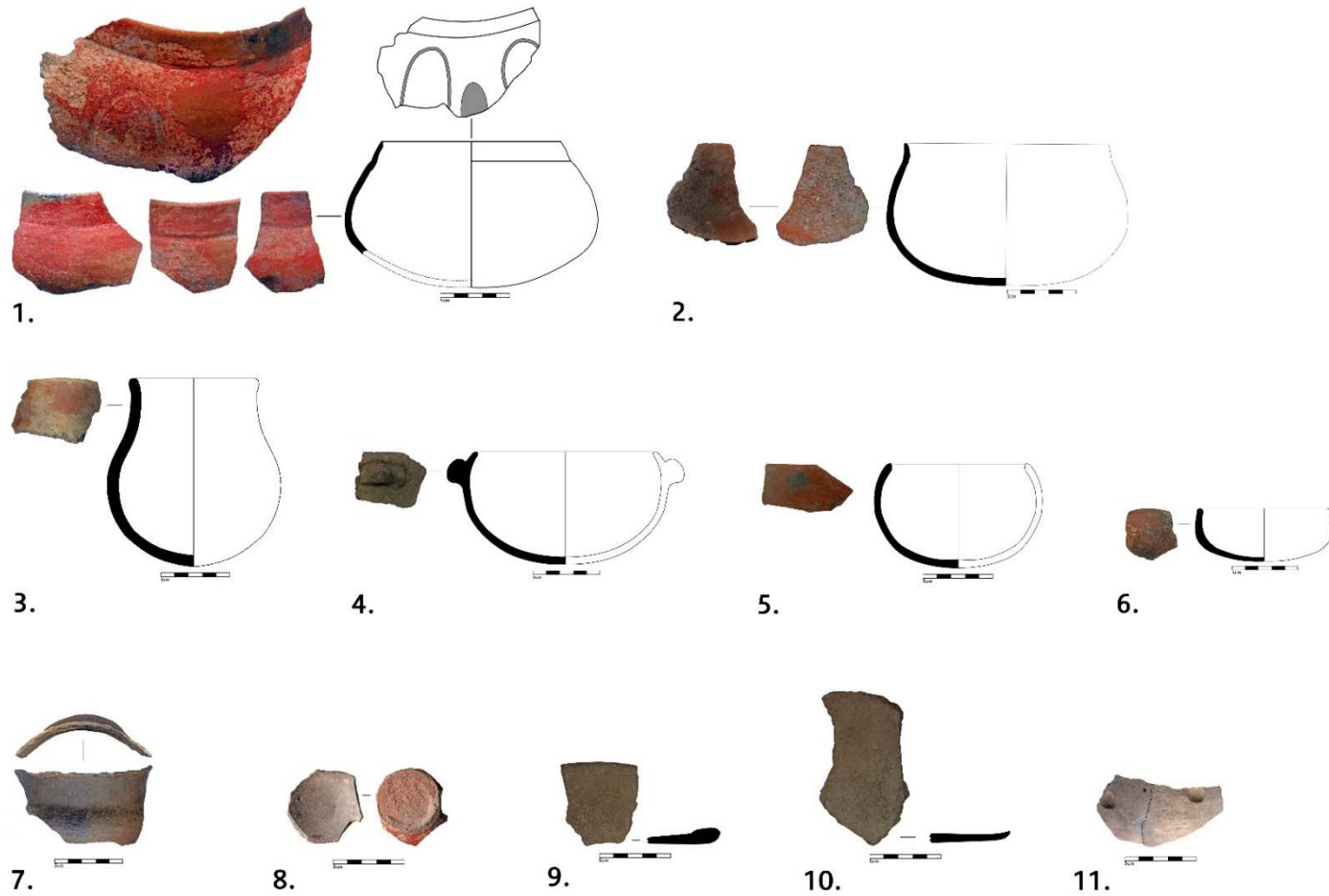


Fig. 6.2.19. Various *criollo*-ware cooking vessels and vessel fragments (1–7), *aripos* (9 and 10), as well as some probable storage vessels (8 and 11).

diameter could not be determined. Three *aripos*, used for roasting corn and/or cassava cakes and two other possible *aripos* were also recovered (9 and 10) (Table 6.2.11). One of these *aripos* was recovered in the CS/B/W midden. The *aripos* are flat and have slightly bulging rims, with the largest being approx. 33 cm and the smallest 22 cm in diameter. It is also important to note that most of these vessels show signs of charring on the outside, suggesting that they were used for cooking.

As has been already discussed in the section on cooking at CS/A, where a large number of *criollo*-ware vessels was also found, these coarse and low-fired earthenwares have not been well studied in Venezuela. Little has also been written on the local potting traditions of Curaçao and Bonaire, therefore provenancing this *criollo*-ware is difficult (see, for example, Havisser 1999: 256–258; van Meeteren 1977). Furthermore, it is also possible that these cooking vessels were not brought by the Dutch Antillean salt workers but, rather, supplied to them by Morrell who acquired them in Puerto Cabello. Given the great variability in paste, temper, finish, decoration, and vessel form (various of which still will be further discussed in sections on Dining and Drinking), I suggest that it is improbable that these ceramics were made on the islands of Curaçao and Bonaire, but rather, they were made on the Venezuelan mainland by nineteenth-century Amerindian and/or Afro-Venezuelan potters settled on the central coast and in the hinterland. The hodgepodge of these *criollo*-wares is surprising and might suggest that these earthenwares were not brought to Cayo Sal by the freedmen, but rather, were acquired in markets on the Venezuelan coast by Morrell. It is hoped that in the coming years, with more detailed, systematic and contextual archaeological investigations being undertaken in mainland

Venezuelan colonial- and republican-era sites, as well as using cutting-edge analytical provenancing techniques, sounder comparative data will be acquired in order to better contextualize the *criollo*-wares from Cayo Sal within the regional spatial frame during the 18th and 19th century.

The three other cooking vessels recovered within the CS/B/E middens include two French lead-glazed earthenware *marmites* from Vallauris and a rim fragment from a large iron *caldero* (Table 6.2.11). Unlike at CS/A, where a large portion of the cooking wares were the unprovenanced lead-glazed morrowares, at CS/B the bulk of the cooking—at least based on archaeological evidence—seems to have been done in the *criollo*-ware *ollas*. Here again it can be suggested that since these *ollas* are not very large, the *actual* bulk of cooking was being done in iron *calderos*, which were more durable, and of which only one fragment has been found. However, the absence of a significant proportion of lead-glazed coarse earthenware cooking pots (aside from the two Vallauris *marmites*) in a 19th-century site later than CS/A may indicate preference on behalf of the Dutch Antillean freedmen to cook some or part of their meals—perhaps the fish and sea birds they caught—in ceramic *ollas* to which they might have been more accustomed (Haviser 1999: 256–258; van Meeteren 1977). Furthermore, although there is no documentary evidence, it is possible that some Dutch Antillean women were hired by Morrell to cook for the overseer and the freedmen working at the saltpan. In conclusion, I would suggest that these *criollo*-wares might have been bought by the freedmen in Curaçao and Bonaire from Venezuelan seafaring traders rather than made on the ABC islands and, therefore,

they were in fact products of the Amerindian and Afro-Venezuelan potters from the mainland.

DINING AT LOS ESCOMBROS

Ceramic tableware for the serving and consumption of food comprises 39.57% of the total ceramic and glass collection from CS/B and is the largest functional vessel group at the site represented by 165 vessels (Table 6.2.13; Table 6.2.12). The most abundant ceramic ware type at the site is variously decorated whiteware, represented by 153 vessels that are 92.73% of the total number of ceramic tableware vessels for food consumption. Whiteware, a British white-bodied and clear-glazed refined earthenware—a whiter refinement of earlier creamware and pearlware—began to be introduced to the mass market by Staffordshire factories at around 1820 (Brooks 2005: 35). This time frame fits very well with the short time span of Morrell’s salt enterprise on Cayo Sal during the 1830s and early 1840s, and suggests that indeed the majority of the material remains from the trash middens at the CS/B site are from this period.

Serving vessels at CS/B are few (Table 6.2.13). Two blue shell-edged whiteware soup tureens were found in the CS/B/E-1 and E-2 middens, suggesting that these were perhaps part of the tablewares from the overseer’s house (Fig. 6.2.20, 1) (Hunter and Miller 1994). A large number of soup plates and possible soup plates were also found, and these will be discussed further on. The soup tureens could have been used for serving solid fare and not only soups. The presence of these fancy and specialized serving vessels at the site suggests that Morrell or his overseer(s) had their food served to them rather than merely scooped from the cooking pot on a plate, evidencing a level of refinement

Table 6.2.13. Ceramic tablewares for food serving and consumption recovered at the CS/B site.

Ware Type and Decoration	Vessel Form	NF	MNV
Painted whiteware	Bowl	114	29
	Plate	72	2
	Soup plate		5
	Plate/soup plate		1
	Subtotal	186	37
Plain unmolded whiteware	Plate/soup plate	6	3
Plain Whiteware UID	Plate/soup plate	148	-
Plain whiteware, Royal pattern	Plate/soup plate	2	2
Shell-edged whiteware (blue)	Plate	148	7
	Soup plate		12
	Plate/soup plate		25
	Soup tureen	15	2
	Subtotal	163	46
Shell-edged whiteware (green)	Plate	41	2
	Soup plate		1
	Plate/soup plate		12
	Subtotal	41	15
Transfer-printed whiteware	Bowl	22	3
	Soup plate	11	3
	Subtotal	33	6
Industrial slip whiteware	Bowl	220	42
Spatter-sponged whiteware	Bowl	2	1
Flow blue whiteware	Soup plate	4	1
Canary ware	Bowl	3	2
	Soup plate	12	1
	Subtotal	15	3
Yellowware	Dish	41	3
	Bowl	1	1
	Subtotal	42	4
Hardpaste yellowware?	Dish	3	1
American or French slipped red earthenware?	Bowl	3	1
<i>Criollo</i> -ware	Pedestal bowl	2	2
	Pedestal bowl?	15	2
	Bowl?	1	1
	Subtotal	18	5
TOTAL		886	167

that was not even seen in the activity areas of captains who dined at Punta Salinas on La Tortuga Island. Further serving vessels only include three yellowware dishes and one unidentified yellowware-like hardpaste dish that has still not been successfully identified (Fig. 6.2.20, 2 and 3) (Brooks 2005: 35).



Fig. 6.2.20. Serving vessels, bowls, plates and soup plates recovered at the CS/B site. (1) Blue shell-edged whiteware soup tureens. (2) Yellowware dish. (3) Poss. hardpaste yellowware dish, unidentified. (4) Unidentified slip-decorated red earthenware bowl, possibly of U.S. or French Huveaune manufacture. Note three drill holes in bottom. (5) Spatter-sponged hemispherical profile whiteware bowl with raised footring. (6) Industrial slip bowl with cabling decoration. London-shaped profile (7) Industrial slip bowl with cat's eye decoration. (8) Industrial slip bowl with mocha decoration. London-shaped profile. (9) Industrial slip bowl with annular decoration. (10) Manganese transfer-printed whiteware bowl. (11 and 12) Whiteware bowls painted in colorful and large underglaze polychrome floral patterns. (13) Shell-edged whiteware plate. (14–16) Painted whiteware soup plates. No. 16 has sprig pattern decoration dating to after 1835. (17) Canary ware soup dish. (18) Flow blue whiteware soup dish with "Copeland and Garrett" mark. (19) "Copeland and Garrett" mark on the bottom of the base of a painted hemispherical bowl. (20) "Copeland and Garret" mark and "Late Spode" designation on bottom of blue shell-edged plate. (21) Criollo-ware sherd from what might have been a pedestal bowl. Well-made earthenware with an orange-buff paste, with a decoration painted on the interior of the bowl in red slip and a line on the lip.

A total of 79 bowls were recovered at CS/B, the majority of these being 42 industrial slip whiteware bowls. These include such colorful sub-types as *mocha* and *annular* as well as other slip decorations including, among others, *cat's eye* and *cabbling* and their combinations (Fig. 6.2.20, 6–9) (Brooks 2005: 36–40; Rickard 2006: 48–103). All of these industrial slip bowls also exhibit the characteristic “London shape” (Miller 2013a: 427–428). Twenty-nine bowls are painted in colorful and large underglaze polychrome floral patterns, suggesting that they are from after 1830, when the usage of bright red, black and lighter shades of green and blue became popular (11 and 12) (Miller 1991: 8).²⁰⁵ Further aiding to date these painted whitewares is one bowl of hemispherical profile with a raised footring (non-London shaped), which has a “Copeland and Garrett” mark on the bottom of the base indicating that it was produced in the Stoke-upon-Trent factory in the period from 1833 to 1847 (19) (Palliser 1874: 126–127). A few bowls also have characteristic sprig pattern decorations consisting of small flowers with black stems—these decorations are a bit later and started to become popular after 1835 and in the 1840s (Majewski and O’Brien 158–159; Miller 1991: 8). Three whiteware bowls are transfer-printed with London-shaped profiles, and one has a spatter sponged decoration with a hemispherical profile and raised footring (5 and 10) (Brooks 2005: 42; Hunter 2006: 220–228). Two further bowls are made in the bright yellow Canary ware and one in yellowware (Miller 1974). One unidentified slip-decorated red earthenware bowl,

²⁰⁵ It is important to note that even though these wares are commonly found in 19th-century Venezuelan archaeological contexts, Venezuelan archaeologists regularly mislabel painted whiteware as “Gaudy Dutch”. “Gaudy Dutch” refers to vessels underglaze painted in blue and over glaze painted in enamel colors. Furthermore, it is a 20th-century term that has no time depth since it was not used by the potters of the 19th century (Miller 2013a: 428–429, 1991: 8).

possibly of U.S. or French Huveaune manufacture, was also found in the CS/B/W midden. This bowl is especially curious since it has four drill-holes in the bottom of the vessel, clearly made after the vessel had been fired, and perhaps done at the site (4). It may be suggested that the bowl with the holes functioned as a rudimentary colander, although it seems like there are too few holes to make it really practical as one.

Finally, five *criollo*-ware vessels were found at the site with one probably being a bowl, two identified as pedestal bowls, and two others probably pedestal bowls as well (Table 6.2.13). One fragment of what was probably a pedestal bowl is especially interesting. It was found in the CS/B/W midden and is a very well-made earthenware with an orange-buff paste, with a decoration painted on the interior of the bowl in red slip and a line on the lip (Fig. 6.2.20, 21). The vessel rim fragment is not similar to any known prehispanic Venezuelan ceramic styles. If this piece is effectively from the 19th century, and its depositional context indicates this is the case, it is puzzling where and by whom such an elaborate and finely decorated piece was made, since no parallels are known from 19th-century archaeological sites in the region.

Eleven plates were recovered at the CS/B site with two of these painted whiteware, seven blue shell-edged whiteware and two green shell-edge (Fig. 6.2.20, 13) (Table 6.2.13). All of the shell-edged tablewares exhibit impressed neo-classical straight and curved lines on the rim common in the period 1800–1830, and given that the ware is most probably whiteware (all, or most, of the other refined earthenware at the site is whiteware), these edgewares can be dated with some certainty to the decade of the 1830s (Miller 2013b: 488; Miller and Hunter 1990: 116–117). Furthermore, two of the

blue shell-edged plates have “Copeland and Garret” marks and the “Late Spode” designation (20). Vessels with this mark were found in the excavations at the elite Casa Monagas in Barcelona, eastern Venezuela, from a context that probably dates to the second half of the 1830s (Brooks and Rodríguez 2012: 76–77). Twenty-three soup plates were found at the site with five painted whiteware (14–6), 12 blue shell-edge, one green shell-edge, three transfer printed whiteware, one canary ware (17) and one flow blue whiteware with a “Copeland and Garrett” mark (18) (Miller and Hunter 1990; Brooks 2005: 38–39). The remainder of the flatwares for food consumption are 43 vessels that could not be clearly identified as plates or soup plates since the rim fragments do not reveal the vessel depths. These flatwares total 80 individual vessels versus 79 bowls, indicating that both plates/soup plates and bowls had a similar popularity at the site. Bowls were more versatile as they could be eaten from more comfortably without having to sit at a table, whereas plates and especially soup plates would have probably required some sort of table for dining or other flat or rigid surfaces for dining. Further evidence to reconstruct the assemblage of dining at CS/B comes from the bone handle of what was probably a table knife (Fig. Fig. 6.2.21, 1), an engraved bone handle of what was probably a carving or serving fork (2), and a fragment of a bone handle that might have belonged to a further piece of cutlery (3). No iron knife blades were recovered at the site and no other cutlery of any sort was found, suggesting that that which the salt workers at the site



Fig. 6.2.21. Various bone handles from cutlery and broken whetstone.

used might have been more durable and outlasted the fragile ceramics and rust-prone bone-and-iron composite cutlery recovered.²⁰⁶ One broken whetstone was found (4).

The presence of two painted whiteware and six industrial slip bowls, a yellowware bowl and four plates or soup plates in the CS/B/W midden offers a window onto reconstructing the assemblage of dining of the freedmen at the saltpan. This evidence suggests that these tablewares were not only used in the overseer's house but were also being utilized for dining in the campsite that I argue was occupied by some Dutch Antillean freedmen to the west of the house, by the crystallizing pans (Table 6.2.14). This would also indicate that there was no clear economic scaling of the vessels at the site, with the

²⁰⁶ The hypersaline environment of the saltpan would have accelerated rusting even more.

only outlier being the shell-edged soup tureens that were found in the trash middens by the overseer's house. Given that the bulk of the archaeological remains was found in these two trash middens (CS/B/E-1 and E-2) it is also probable that this was not solely the trash of the overseer(s), but also included the wares and the discarded food remains of the freedmen who were at the site, given that they were more numerous and would have most probably camped around the house or possibly had some sort of wooden structures to sleep in. It is also possible that given the density of remains in these middens, for a certain duration of Morrell's salt enterprise, a central kitchen area where food for all of the freedmen salt workers was cooked was installed in the house perimeter, and the

Table 6.2.14. Ceramics and glass recovered in the CS/B/W midden.

Ware/Glass Type	Color	Vessel Form(s)	NF	MNV
Ceramic				
Painted Whiteware	N/A	Cup	3	3
		Saucer	7	3
		Pitcher	1	1
		Bowl	4	2
		Sub-subtotal	15	9
Plain whiteware	N/A	Soup plate	5	2
Industrial slip whiteware	N/A	Bowl	9	6
Transfer-printed whiteware	N/A	Cup	3	1
Shell-edged whiteware (blue)	N/A	Plate and/or soup plate	2	2
Canary ware	N/A	Bowl	2	1
Yellowware	N/A	Dish	7	1
		Bowl	1	1
		Sub-subtotal	8	2
Hardpaste yellowware?	N/A	Dish	3	1
English delft/Frence faience	N/A	Drug jar	1	1
German stoneware	N/A	Bottle (prob. mineral water)	8	3
Spanish earthenware	N/A	<i>Botija</i>	1	1
American or French slipped red earthenware?	N/A	Bowl (with drilled holes)	3	1
<i>Criollo</i> -ware	N/A	<i>Olla</i>	5	3
		<i>Pimpina</i>	2	2
		Pedestal bowl?	1	1
		<i>Budare</i>	1	1
		Sub-subtotal	9	7
Subtotal ceramic vessels			69	37
Glass				
Glass tumbler, mold-blown	Colorless	Tumbler	4	4
Cylindrical bottle	Black-green	Cylindrical bottle	2	1
French short-necked square "case" <i>flacon</i>	Blue-green	"Case" <i>flacon</i>	1	1
Prob. French <i>firole</i>	Blue-green	<i>Firole</i>	1	1
Bottle	Coloreless	Retouched bottle neck	1	1
Subtotal glass vessels			9	8
TOTAL			78	45

wares off of which the freedmen ate were not theirs but Morrell's. I would propose that at some point a group of freedmen decided to camp further away at CS/B/W and there they might have utilized their personal belongings along with Morrell's wares, reutilizing some of them such as the drilled slipware bowl, and a further few retouched items that will be discussed in the following section.

DRINKING AT LOS ESCOMBROS

Even though there is no documentary evidence that indicates what sort of liquid provisions and in what containers they were brought to the CS/B site during Morrell's tenure of the saltpan, the remains or rusted iron cask hoops suggest that barrels were brought down on land with solid fare or vital liquids for the salt workers. Spence (1878: 198) noted in 1871, when he visited the Cayo Sal saltpan under the tenure of Bonairean L.C. Boyé, that water for household purposes had to be brought to the island in barrels, and this was most probably the case during Morrell's tenure as well, since there are no freshwater sources in the Los Roques archipelago. Before turning to discuss the ceramic and glass beverage containers at the site, there is evidence at the site that the salt workers were occasionally under-provisioned with water supplies, perhaps waiting for weeks for a supply ship to arrive from the mainland.²⁰⁷ To the north of both the east and west coral stone shelters found adjacent to the crystalizing pans (Fig. 6.2.14), there are large scatters (more than 100 shells each) of up-turned Queen conch (*Lobatus gigas*) shells on the storm terrace and adjacent sandy plain (Fig. 6.2.22). The large conchs, with their cavernous

²⁰⁷ They could have also perhaps provisioned themselves with water at the brackish pools on Cayo de Agua and Gran Roque, mentioned in Part II of Chapter 3.



Fig. 2.2.22. Large scatters of up-turned Queen conch (*Lobatus gigas*) used for collecting rainwater at the CS/B site.

openings facing upward were clearly placed in this way to gather rainwater. Between four and five conchs can in fact collect close to a liter of water during just half an hour of rain (Antczak and Antczak 2006: 303). Given that these scatters of conch are adjacent to the coral stone shelters and the crystallizing pans it can be assumed with a degree of certainty that they were placed there by the Dutch Antillean freedmen in the 1830s and 1840s to recollect rainwater principally during the rainy season.

Apart from the eight aforementioned Spanish *botijas*, that might have not only been used for storing solid provisions but also for liquid supplies, a total of 119 ceramic and glass beverage storage containers were recovered at CS/B, representing 27.73% of

Table 6.2.15. Ceramic and glass liquid storage containers recovered at the CS/B site.

Ware/Glass Type	Color	Vessel Form(s)	NF	MNV
Ceramic				
Rheinish stoneware	N/A	Dutch gin bottle	21	5
Rheinish stoneware	N/A	Prob. mineral water bottle	226	28
Rheinish and/or English stoneware	N/A	Jug	24	10
Criollo-ware	N/A	Pimpina (water bottle)	14	7
		Pimpina or tinaja	1	1
		Botijita/botijuela	5	1
		sub-subtotal	20	9
Subtotal ceramic vessels			291	52
Glass				
English cylindrical bottle	Black-green	Cylindrical bottle (two-part down-tooled v-shaped string rim)	97	12
Prob. Dutch cylindrical bottle	Black-green	Cylindrical bottle (two-part down-tooled v-shaped string rim)		5
Prob. French cylindrical bottle	Light-green	Cylindrical bottle (flat square-tooled string rim)		1
Prob. French cylindrical bottle	Light-green	Cylindrical bottle (un-tooled flattened string rim)		5
Unidentified cylindrical bottle	Light-green	Cylindrical bottle (square-tooled string rim and no lip)		1
Unidentified cylindrical bottle	Light-green	Cylindrical bottle (machine-made)		1
Unidentified cylindrical bottle	Light-green	Cylindrical bottle (round-tooled two-part string rim)		1
Unidentified cylindrical bottle	Yellow-green	Cylindrical bottle (flattened string rim)		1
Unidentified large cylindrical bottle	Light-green	Large cylindrical bottle (tapered neck and thin string rim)		1
Unidentified large cylindrical bottle	Light-green	Large cylindrical bottle (tapered neck and thick string rim)		1
Unidentified large cylindrical bottle	Yellow-green	Large cylindrical bottle (thin string rim with impressed letters "... A H")		1
Unidentified cylindrical bottle	Light-green	Cylindrical bottle (base, mold-blown)		1
French cylindrical bottle	Blue-green	Cylindrical bottle (base)		3
Unidentified cylindrical bottle	Blue-green	Cylindrical bottle (mold-blown with valve mark)		1
Unidentified cylindrical bottle	Transparent	Cylindrical bottle (tapered with down-tooled neck, free-blown)		1
French? Square bottle	Blue-green	Square bottle (mold-blown)		6
Unidentified square bottle	Solarized violet	Square bottle (machine made? Patent lip)		1
Prob. French <i>firole</i>	Blue-green	<i>Firole</i> (mold-blown)		2
Unidentified cylindrical ribbed bottle	Solarized violet	Cylindrical ribbed bottle (bulging body, 38 ribs, mold-blown)		4
UID	Blue-green	UID		20
UID	Transparent	UID		30
Case bottles	Black to dark green	Case bottle		54
Unidentified decanter?	Transparent	Decanter? (mold-blown, chamfered neck with rings)		1
Unidentified decanter?	Solarized violet	Decanter? (ball neck, mold-blown)	1	
Unidentified square bottle	Transparent	Retouched square bottle neck	1	
Unidentified glass stopper	Blue-green	Decanter stopper? (molded)	1	
Subtotal glass vessels			218	65
TOTAL			509	117

the total collection (Table 6.2.15; Table 6.2.12). Fifty-three of these containers are ceramic. Twenty-eight are Rheinish stoneware mineral water bottles, some of which are of the “Selters” brand and one which has the brand name “Lamscheiderwasser”, from the Rhineland municipality of Lamscheid. Even though these mineral waters might have been more accessible in the increasingly globalized market of the 1830s and 1840s than they were at La Tortuga in the 18th century, the presence of such a number of these spa water bottles from Germany suggests that probably the overseer consumed this exotic water at the site. Nonetheless, one such bottle was found within the CS/B/W midden, suggesting that perhaps they were reutilized and contained “normal” potable water or alcohol. A



Fig. 6.2.23. Fragments of a porous filter stone from a tinajero.

further five Dutch gin bottles branded “Blankenheym and Nolet” were also found, along with 10 Rheinisch or English multi-purpose stoneware jugs. Nine *criollo*-ware beverage storage vessels were also found, including seven *pimpinas*, a large *pimpina* or *tinaja*, and a *botijita* or *botijuela* with a long neck. In the CS/B/E-1 midden three carved porous sandstone fragments were found from what might have been a filter stone from a *tinajero*, a typical Venezuelan wooden cupboard, where water was poured into the bowl-like filter stone and then was filtered and dropped into the *tinaja* that stood below (Fig. 6.2.23). If this is indeed the filter stone from a *tinajero*, it is probable that it stood in the



Fig. 2.2.24. Sawn off clear glass bottle top. Diameter 5 cm.

overseer's house and could have been used to make more palatable the often foul-smelling and tasting water stored in wooden casks.

Sixty-six glass bottles were found at the CS/B site (Table 6.2.15). Even though many of these bottles could not be dated with precision they are mostly mold blown and their tooled string rims indicate that they are from the first half of the 19th century. It is probable that some of these bottles are also those that were left behind by the handful of salt workers that manned the saltpan under L.C. Boyé's short tenure in the late 1860s and early 1870s. Drinking was the only pastime of one of Boyé's coopers, Gabriel Regales, and as recounted by Spence (1878: 198) in 1871, he "...was cursed with a passion for alcohol... and would drink 2 to 3 bottles of spirits a day". Most of the bottles found at CS/B are cylindrical and there are also 21 case bottles that probably contained Dutch gin.

Table 6.2.16. Table 6.2.8. Ceramic and glass tableware for serving and consumption of liquid recovered at the CS/B site.

Ware/Glass Type	Color	Vessel Form(s)	NF	MNV
Ceramic				
Painted whiteware	N/A	Cup	147	21
		Saucer	106	26
		Mug	6	1
		Pitcher	8	4
		Sub-subtotal	267	52
Industrial slip whiteware	N/A	Cup	10	1
		Mug	19	6
		Sugar pot	10	2
		Sub-subtotal	39	9
Transfer-printed whiteware	N/A	Cup	22	6
		Saucer	17	3
		Mug	3	1
		Sub-subtotal	42	10
Flow blue whiteware	N/A	Saucer	3	1
Plain whiteware	N/A	Mug	1	1
		Cup/poss. bowl UID	26	-
		UID	84	-
		Sub-subtotal	111	1
Creamware?	N/A	Mug	1	1
Subtotal ceramic vessels			463	74
Glass				
UID glass tumbler	Colorless, solarized-violet	Tumbler (mold-blown, 32 ribs, star impression in base)	1	1
UID glass tumbler	Colorless	Tumbler (Mold-blown, mold-decorated base)	3	3
UID glass tumbler	Colorless	Tumbler (plain, mold blown)	27	8
UID glass tumbler	Colorless	Tumbler (copper wheel-engraved)	1	-
UID glass tumbler	Colorless, solarized-violet	Tumbler (fluted molding)	3	2
Subtotal glass vessels			35	14
TOTAL			498	88

Various of the cylindrical bottles were also Dutch as they have molded markings on the bases with such names as “J.P. Hoffman and Sons Rotterdam” and “Amsterdam...” Most of these bottles probably contained spirits such as gin and rum and possibly also wine and brandy. Two possible decanters were also found and a stopper that might have belonged to a decanter. One transparent square bottle rim from the CS/B/W midden demonstrates clear signs of being retouched, being very delicately sawn off for some other unknown use (Fig. 2.2.24).

Turning now to the vessels for beverage serving and consumption, a total of 88 ceramic and glass vessels were found at the site, composing 20.86% of the total ceramic and glass collection (Table 6.2.16; Table 6.2.12). Fourteen glass tumblers were found, various of which are decorated with molded flutes and copper wheel-engraved. These were the vessels that most probably were used for imbibing spirits and other alcoholic

beverages from the site for those who preferred to not drink straight from the bottles. Four tumblers were found in the CS/B/W midden, suggesting that the freedmen gathered there also had these glass vessels and did not merely drink alcohol from the bottle but celebrated it with more 'refinement'.

Seventy-four of the beverage consumption and serving-related vessels are ceramic. Four painted whiteware pitchers were found, one of which was recovered in the CS/B/W midden (Fig. 6.2.25, 2) (Table 6.2.16; Table 6.2.14). These are the only beverage service vessels from the site. Twenty-eight whiteware cups were recovered at the site with 21 being painted (3), one industrial slip and six transfer-printed (4). All of these cups are London-shaped and can be dated to the 1830s and 1840s, fitting in perfectly with the aforementioned bowls and other tablewares. Furthermore, many of the cup fragments show clear handle attachments and a number of small cup handles were also found. According to ceramic historian George Miller (1991: 15–16) these colorfully-painted and handled cups would have been more expensive than unhandled ones, a fact that is striking given their usage in such a rudimentary and desolate place as Cayo Sal. Furthermore, Miller (1991: 15–16) suggests that they are not common in North America before the 1850s, and given that these date to the 1830s and 40s, their discovery at CS/B is all the more puzzling and indicative of less homogeneous patterns of consumption in the Americas.



Fig. 6.2.25. Vessels related to beverage serving and consumption recovered at the CS/B site. (1) Industrial slip and painted whiteware sugar pot lids. (2) Painted whiteware pitchers. (3) Painted whiteware London-shaped tea cup. (4) Transfer-printed whiteware tea cup. (5) Industrial slip mug. (6) Four painted whiteware saucers.

Thirty saucers were also recovered, 26 of which were painted, three transfer-printed and one flow blue (Fig. 6.2.25, 6). Twelve matching cup and saucer sets could be determined among these vessels, ten of which were painted whiteware and two transfer-printed with oriental motifs. These sets reveal that the drinking wares at the site were not a hodgepodge of different vessels but some of them were intentionally brought to the site as matching sets. This could suggest a certain level of refinement, and since the majority of these wares were found in the middens adjacent to the overseer's house, it

can be proposed that the overseer had these matching sets at his disposal. However, the recovery of a painted whiteware set of cup and saucer from the CS/B/W midden complicates this idea and indicates that among the ceramic drinking wares brought to the site were, at least initially, a number of matching sets that both the overseer(s) and the freedmen utilized. Furthermore, one transfer-printed cup (it could not be determined if it had a handle) was also found in this midden. According to Miller (1991: 18), printed teas were twice as expensive as painted teas in the 1830s and 40s, suggesting once more that Morrell was not a thrifty, but a rather extravagant businessman and provided his workers with fairly expensive colorful tablewares, or that the poor Dutch Antillean freedmen went to the lengths of bringing expensive cups to this parched site. What was drunk from these cups is another question that we have no answer for from the archaeological or documentary record. Even though in England these cup and saucer sets or “teas” were used for tea drinking, I suggest that at CS/B, where the majority of the workers were Dutch Antilleans and Morrell, the overseer, was a US American living in Puerto Cabello, what was being drunk from these sets was coffee. Coffee, which was exported from Venezuela in the 19th century, became a nationally-celebrated drink at the time, and given that Morrell’s salt enterprise at Cayo Sal was probably being provisioned from Puerto Cabello, I argue that coffee and not tea would have been the hot beverage of choice that was being consumed at the site (Lovera 1988: 80–81). Furthermore, two industrial slip whiteware sugar pots were also recovered, and if they were indeed used for sugar storage and serving they might have been utilized by those at the saltpan to provide the sugar essential to a Venezuelan *cafecito* [small coffee] (1) (Table 6.2.16).



Fig. 6.2.26. (1) Gaming pieces refashioned from a shell-edged whiteware plate and an English delft apothecary jar. (2) Copper-alloy thimble. (3) English or Dutch pipe.

Finally, ten whiteware mugs were also found at the site. Six of these are industrial slip, one is polychrome painted and one is a transfer-printed whiteware with a black oriental landscape print colored in with polychrome enamel (Fig. 6.2.25, 5). These mugs might have been used for drinking alcoholic beverages as well as coffee and other warm drinks.

There is also evidence for other leisure activities at CS/B related to drinking. A total of 158 clay pipe fragments were recovered at the site (Fig. 6.2.26, 3). Twenty-seven of these are bowl fragments and the remainder are stems. One of the pipes is made of red clay, two stems are molded with decorations, and another has a mark associated with the



Fig. 6.2.27. Painted whiteware chamber pot.

Gouda pipemakers of the 19th century. Two round gaming pieces, one refashioned from a fragment of blue shell-edged whiteware and the other from an English delft apothecary jar, were also recovered (1). Such gaming pieces have been found in many colonial- and republican-era sites in the Caribbean and they were probably used for playing the game of chance (MacLean 2015: 332–334). As was the case at Punta Salinas, it seems that the freedmen at CS/B drank, smoked and gambled in their time off from salt work. A copper-alloy thimble also indicates that in their time off the people at the saltpan also engaged in activities such as mending clothes (2).²⁰⁸

There are also a few vessels that do not fit neatly within the assemblages of dining and drinking from the site. One is a blacking bottle from Derbyshire that contained blacking ink, a liquid used to polish shoes. It was found in the CS/B/E-1 midden and could have been the overseer's property, used to keep his boots nice and polished for the day's

²⁰⁸ Although thimbles do not solely index the presence of women at archaeological sites, especially at sites associated with masculine maritime activity (where sails and canvas abounded), there could have been some women present at the site as cooks and they might have engaged in activities such as mending clothes. The thimble might have also been used to sew the canvas bags in which the salt was most probably packed.

work. Five painted whiteware chamber pots were also found in this midden (49 fragments) (Fig. 6.2.27). The presence of these chamber pots in the midden by the house suggests that perhaps one of the archaeologically visible means of differentiation between the overseer (or inhabitant[s] of the house) and the freedmen was the usage of these hygiene vessels on the desolate, parched and hot CS/B site.

DISCUSSION

The assemblages of practice at the 18th-century CS/A site could only be partially reconstructed. The documentary evidence available is only fragmentary. Furthermore, unlike the homogeneous Anglo-American material remains from Punta Salinas, the CS/A site is complicated since it is multi-component in nature. There are fairly equal frequencies of Spanish, French and English imported ceramics as well as the unprovenanced Hispanic lead-glazed morroware and the probably locally-made, Venezuelan *criollo*-wares. This complex material *mélange* may partially be explained by the presence of French and English turtle fishermen, who seasonally inhabited the site, at least from what limited textual evidence reveals, in the 1760s. These fishermen who were living on the island in *Barracas*, or makeshift shelters, probably supplied themselves with the salt to preserve their turtle meat from the adjacent saltpan, and engaged in trade with local Spanish colonists from the Province of Venezuela from whom they bought provisions and to whom they sold alcohol and clothes. Documentary evidence also intimates that at least once in the 1770s, an English ship left a mixed group of freed and enslaved Dutch Antillean men on the saltpan to rake salt. It can only be speculated that

this was a generalized *modus operandi* for Dutch Antillean salt merchants looking to top off their production on Curaçao and Bonaire with free salt from Cayo Sal.

The minimum number of 270 ceramic, metal and glass vessels recovered at CS/A suggest that the comings and goings of the seafarers to the site were not as sporadic as the patchy documentary evidence might suggest. The English seafarers at the site most probably engaged in the British ceremonies of tea and punch drinking, as was being done contemporaneously at Punta Salinas, as evidenced by the recovery of various delft teawares and at least one punch bowl. Dining and drinking at Uespen de la Salina may not have generally been as much a refined affair as it was at Punta Salinas, with only 32.59% of all of the vessels at the site dedicated to food and beverage serving and consumption, whereas at Punta Salinas the majority of the vessels were part of those assemblages of practice. The remainder of the vessels from CS/A are food and beverage storage vessels and vessels used for cooking and food preparation. Most of these are either the unprovenanced morrowares or the probably local Venezuelan *criollo*-wares. It is plausible to suggest that the French and English turtlers who traded with the Venezuelan colonists acquired the *criollo*-wares to cook their meals that consisted primarily of beef, either from a standing herd, or most probably, from salted and barreled beef provisions. In times of need, or to change up their monotonous diet, they engaged in fishing and caught some of the locally nesting sea birds for food. More curiously still, the recovery of a Mexican majolica *pocillo* and a possible *coco chocolatero*, both vessels used to drink chocolate, indicate that the seafarers at the site might have been consuming some of the valuable

cocoa beans that were apparently being transshipped through the island in illicit Venezuelan planter commerce with Curaçaoan seafarers.

The material remains from CS/B are more homogeneous in terms of date range and provenance, with the majority of dateable ceramic and glass vessels from the site being manufactured in the decades of the 1830s and 40s and the ceramics being principally refined earthenwares from Britain. During that time, the US American Jeremiah Morrell had the tenure of the saltpans, which he harvested with the waged labor of Curaçaoan and Bonairean freedmen. The minimum number of 422 ceramic, metal and glass vessels recovered at the site indicates that the occupation and work on the saltpan was intensive and, if not permanent, it was at least seasonal. The site was perhaps only uninhabited in the thick of the rainy season in November and December. The near absence of any plain white refined British earthenwares at CS/B and the abundance of the more expensive slipped, painted and transfer-printed handled cups, bowls, painted and transfer-printed plates and soup plates and specialized serving and storage vessels such as soup tureens, pitchers and sugar pots, as well as the colorful chamber pots, suggests that Morrell was an extravagant and perhaps even eccentric businessman for his time, spending more money than necessary on building and equipping a short-lived salt enterprise in the hostile natural environment of uninhabited Cayo Sal. The recovery of all of these more expensive wares not only in the middens adjacent to the overseer's house but also a smaller number of them in the CS/B/W midden—where I argue the freedmen camped at some point in the 1830s or 40s—indicates one of two options: 1) if these were tablewares provided by Morrell for the freedmen to dine and drink from, he was indeed

spending more money on his laborers than necessary, since he could have bought considerably cheaper plain whitewares, or; 2) that the freedmen also had access to these refined British earthenwares on Bonaire and Curaçao and even though many of them were relatively poor and jobless (as mentioned in Part II of Chapter 3), they nonetheless could have decided to spend some of their earnings on fine imported wares and use them among their peers on Cayo Sal, perhaps as status symbols in much the way the captains used their wares at Punta Salinas.

The assemblages of practice at CS/B could not be reconstructed as completely and thoroughly as those from Punta Salinas, given that the documentary evidence for the site is still quite sparse and archaeological limitations—especially a lack of stratigraphy in the loose sandy matrix—hinder more detailed analysis. Nonetheless, from what could be reassembled it can be suggested that most of the meals at the site were cooked in locally made (probably Venezuelan) *criollo*-ware *ollas* (also possibly in large iron *calderos*), and involved a variety of local marine species as well as a considerable number of seabirds. Even though Morrell might have provided his workers with rather expensive crockery, it seems that he had problems with provisioning the freedmen in a timely fashion as suggested by the hundreds of up-turned rainwater-collecting conchs and the large proportion of local marine and avian fauna present among the zooarchaeological remains from the site. In times of hunger, when no supply ship arrived, the Dutch Antillean freedmen might have had to resort to catching pelicans and spearing parrotfish, they then would eat from colorfully painted refined British earthenware in the suffocating heat of Cayo Sal and in the blinding glare of the nearby saltpan. Meanwhile, in the shade of the

equally-suffocating coral-stone house, the overseer, or perhaps in various occasions Jeremiah Morrell himself, would dine, having his soup of the day served in a shell-edged tureen, ladled into a transfer-printed bowl. Once 'nature called' he did not have to resort to the mangrove thickets as the freedmen, but he would politely use one of the various painted whiteware chamber pots recovered at the site. Clearly, there was differentiation in labor between those in charge at Los Escombros and the freedmen working on the saltpan, but this differentiation as it is reflected in the material things at the site, I argue, was not as sharp and obvious as could be expected in the 1830s and 40s, when slavery was still rampant and entrenched in the greater Spanish Caribbean.

CHAPTER 7

DISCUSSION:

ENTANGLEMENTS AT THE SALTY EDGE OF EMPIRES AND NATIONS

PRELUDE

The hot afternoon breeze dried the sweat on my brow as I scooped the loose white sand from the trench at Punta Salinas, La Tortuga. The dig had been dull and there had been few discoveries that day to excite further work. The pesky little sandflies incessantly bit away at my ankles. Suddenly—a light scrape and a gasp. On all fours, I carefully brushed away the sediment that had cradled the object for centuries. As the round full form emerged, I realized what it was—a punch bowl. Its striking colors immediately popped out of the monochrome sand. On the bowl were painted small red bees buzzing around a stunning yellow, red and green flower.

As I marveled there in the sand at the serendipitous discovery of the broken punch bowl, my mind took flight, winging its way back beyond the threshold of 1781. I imagined the sand dune on which we were digging, bustling with life. Canvas tarps were flapping in the warm zephyr and the smell of char-grilled snapper floated to my nostrils. Voices could be heard—some loud and raspy, others jovial and merry. The bibulous folk were gathered in the soothing shade, and one fellow, a lanky, brown-eyed man, wearing a polished tricorne and coat, was fondly clutching the very bowl I had just found. He lifted it to his lips and took a long deep draught of its contents, visibly relishing the drink. Then I was abruptly jolted forward by a realization. In our makeshift camp by the trenches we also

drank. Ours was an unglamorous yet refreshing rum and coke with a dash of lemon which we sipped in the evenings when relaxing after a tough day of digging.

To us, our stainless-steel cups in which we sloshed around our makeshift version of punch were purely functional and durable. The salt-drenched air and seawater would not eat them away after a few expeditions and they were easy to clean. But to those intrepid and sun-bleached seafarers of the 18th-century, the fragile, colorful and finely decorated delft punch bowl must have been something more than merely functional alcohol-containing vessels. Why not drink from much more sturdy wood or pewter bowls and mugs? Why go to such great lengths to bring these delicate products of British factories to this distant, desolate island, basking lazily in the rays of the West Indian sun?

Chapter 6 has shown that the seafarers who arrived at La Tortuga and Cayo Sal from 1624 to 1880 did not only bring along shovels, rakes and canvas bags to rake the precious sodium chloride crystallizing on the saltpans. These seafarers, beginning with the 17th-century Dutch *zoutvaarders* and the 18th-century Anglo-Americans on La Tortuga, and the 18th-century French, English and Dutch Antilleans and 19th-century US American and Dutch Antillean freedmen, brought along with them a dizzying array of ceramic and glass vessels. These vessels were part of dynamic assemblages of dining and drinking at each island site. Such assemblages were in many ways more elaborate and complex than the strictly utilitarian and no-frills 21st-century dining and drinking assemblages in our makeshift archaeological camp by the trenches on La Tortuga. In the past, daily life at the

campsites by the saltpans was lived in most cases seasonally, in campaigns lasting from weeks to months. The seafarers came and went on board their ships, heeding the rains and the tides and seeking to make the most of their salt runs and solar salt works. In this final discussion, I will scrutinize the entanglements of these seafarers and their things within and between the four occupational phases. By comparing in diachronic perspective the itineraries of salt discussed in Chapter 3 and the assemblages of practice analyzed in Chapters 5 and 6, and in light of the “social markers” discussed in Chapter 4, I will provide a deeper reading of what the entanglements reveal about changes in the relationship between seafarers and things in the Venezuelan Caribbean between 1624 and 1880. I will also offer some indications as to what these changes reveal about seafarers’ role within the Atlantic world. To begin, let me define the concept of consumerism that will be used to understand some of these entanglements.

SEAFARING CONSUMERS: ANGLO-AMERICAN CAPTAINS

CONSUMERISM

Archaeologists typically view consumption as “a complex and far-reaching concept that encompasses the making, selling, buying, using, and discarding of material things”, with the focus of the study of consumption being either the social, economic and ideological processes that provide consumers with goods, or the ways in which people socialize material things and define the meaning of objects (Mullins 2011a: 134; 2011b: 2). Within historical archaeology, consumption is seen by many scholars as part and parcel of the growth of European capitalism (Mullins 2007). At a larger scale, it is also seen as intimately tied to the broader phenomenon known as modernity (Heath 2017: 4).

It has been recently suggested by Majewski and Schiffer (2009) that modern material culture studies (by-and-large studies of consumption) can be redefined by the broader term “consumerism”. The historical archaeological study of consumerism focuses on concrete material things, with its fundamental insight being the study of comparative evidence of consumption practices over space and time (Mullins 2011a: 142). Recent historical archaeological studies of consumerism move the scholarly eye from the world of elite consumption, to reconstructing the quotidian material behaviors of people in middling and lower classes, the enslaved and those outside colonial class structures (see, for example, Galle 2010; Hodge 2014; Orser 2011; Scaramelli 2006; Schweickart 2014; Trussell 2004, among others). This dissertation project follows in the wake of these recent studies, and seeks to provide a perspective on consumerism far beyond the household, the tavern, and the urban context of shops and markets, by focusing on the dynamic assemblages of practice involving seafarers and things at the saltpan campsites on the uninhabited islands of the Venezuelan Caribbean, situated at the territorial edges of European empires and newly independent republics.

INTERPRETING CERAMIC ABSENCE AT PUNTA SALINAS

The site with the richest archaeological and documentary evidence in this study is Punta Salinas, La Tortuga, during the Anglo-American²⁰⁹ period of salt raking that lasted from 1638 to 1781. As I have already intimated in Part I of the previous chapter, where I analyzed the assemblages of practice at Punta Salinas, even though Anglo-American

²⁰⁹ Although the bulk of the vessels arriving to La Tortuga to load salt during the 17th and 18th century were from New England, there was also a small but important contingent of Bermudian ships as well as those from other British colonies in the West Indies (see Chapter 3, Part I).

seafarers occasionally stopped by the saltpan of La Tortuga from 1638 onward, and started to regularly sail there in the late 1680s, there is little to no archaeological evidence from these early visits. Even more bewildering is the fact that this absence of archaeological materials is not only evidenced for the second half of the 17th century, but there are few artifacts that can be securely dated to before the mid-to-late 1720s. As a matter of fact, in 1716 the largest ever Saltertuda fleet, comprising 60 ships, came to load salt at the island. Why did the hundreds of captains and crews that arrived at the saltpan during this time not leave any material remains apart from possibly a handful of late 17th- and early 18th-century English 'onion' bottles?

Firstly, I suggest that the lack of archaeological materials from the time could be linked to the piracy that was rampant in the late 17th and early 18th century. Piracy in the Caribbean and on the Eastern Seaboard was exterminated in great measure by the end of the 1720s (Rediker 1987: 282, 285). This might have been one reason why only after the seas were largely clear of these roving maritime criminals, the Anglo-American captains felt safe to come down on land at Punta Salinas and spend considerable time camping there, away from the relative safety of their ships anchored in the bay, as their crews worked the saltpan.²¹⁰ Nonetheless, as I discussed in Part I of Chapter 3, even though pirates might have been less of a threat following the 1720s, Spanish corsairs, with the legal authority to combat contraband in Spanish waters, were constantly on the

²¹⁰ Pirates might have in fact liked the solitude of the Venezuelan islands, as in October of 1723 infamous pirate George Lowther was ambushed by a Barbadian sloop while he was careening his ship on the nearby Venezuelan island of La Blanquilla. Lowther escaped into the island and was later found dead with a "pistol burst by his side" (*Daily Courant* [London], June 12, 1724).

prowl. From 1727 to 1781 the corsairs attacked the salt fleets at the island at least 10 times, often taking captured Anglo-American vessels back to Spanish ports, confiscating their salt and their possessions and imprisoning their crews, which often resulted in protracted legal battles (Table 3.1.5). In many cases the corsairs attacked the fleets even though they had armed British Navy warships stationed in Punta Salinas Bay. The recovery of a number of firearm and edged-weapon remains (discussed in Chapter 4) at Punta Salinas further indicates that many seafarers at the site, principally captains—as I suggest—were always armed in the eventuality of Spanish attack. For this reason, I propose that safety was not the principal reason why Anglo-Americans did not come down on land at Punta Salinas before the 1720s. Rather, answers to the near-absence of material remains from that time period must be sought elsewhere.

I consider that the Anglo-American ceramic and glass collection from Punta Salinas does not include any 17th-century and early 18th-century tableware because seafarers at the time predominantly ate from wooden trenchers and pewter plates and drank from wooden, pewter or leather tankards (Gandulla 2014; Weatherill 1986: 93–94). Wooden trenchers or plates, if any broke and were discarded on site, did not preserve in the archaeological record, and thus cannot be discounted as having existed and been in use by Anglo-Americans (at least those sailors of more modest means who could not acquire pewter wares). Pewter plates, if any did break at the site, would have been too valuable and recyclable of an object for a sailor to not take back, at least to later melt down, repair or reuse in New England (Lucas 2006: 43). Moreover, during the later 17th and first quarter

of the 18th century it was unusual for wage laborers and middling folk to afford durable consumables such as ceramics (Weatherill 1986: 108).

Contrasting this case with the Dutch *zoutvaerders* at Punta Salinas in the 1630s brings to light some noteworthy differences. The limited number of 20 ceramic and two glass vessels recovered from the two Dutch earthworks probably associated with the 1638 fort, suggest that the reason why ceramic vessels were brought down on land was to cook meals for the musketeers garrisoned within. The paucity of material remains from this period might also be due to the short-lived nature of the Dutch enterprise which was soon destroyed by the Spaniards (although the documents are not clear, the Spanish attacked probably a few weeks after the *zoutvaerders'* arrival in 1638). Furthermore, as I suggested in Part I of the previous chapter, many Dutch shipboard wares might have been wooden and most food consumption might have occurred on board, with only the meals cooked for the musketeers leaving any material evidence on land. The Dutch, however, along with their considerable investment in saltpan infrastructure and salt cultivation, intended the wooden fort and earthwork to be more permanent than the makeshift tents that Anglo-Americans later set up during their weeks of salt raking at Punta Salinas. For this reason, the 17th-century Dutch might have thought it appropriate to equip the fort with less rustic and homelier ceramic table- and cooking-wares including various Delft dishes, and redware pitchers, skillets and cooking pots. The temporality and superficiality of Anglo-American engagement with the site vis-à-vis the Dutch semi-permanent investment in the saltpan and the site, coupled with a limited access to European ceramics among 17th-century seafarers, might explain the initial lack of Anglo-American crockery

from the time. Although Dampier (1699: 56) was not explicit regarding where the punch was drunk at Punta Salinas in 1682, I consider that this was probably happening on land and not on board the ships, given that the captains had to manage and oversee the labor of their crews from a closer vantage point.

Prior to the industrial manufacturing developments of the 18th century there were fewer ships and there was a smaller quantity and variety of material things—especially ceramics—in circulation in 17th century New England (Richards 1999; Shammass 1993; Trentmann 2016: 60–61; Weatherill 1993).²¹¹ Additionally, there would have been a process of selection of wares to be taken aboard ships which disfavored those that were not durable and rugged wood or pewter. In the 17th century pre-Georgian mindset, the cost and functionality of crockery on ships might have been paramount, and a poor mariner (or even a captain) may have used a wooden trencher or bowl for multiple purposes, such as eating soup and drinking punch. The shape of a vessel might not have therefore determined its function, especially in the harsh conditions of onboard life. English delft and other ceramics of the 17th and early 18th century may have not reached the New Englanders so often, and were mainly destined (because of their price) to the upper echelons of society such as the merchant elite.

²¹¹ The very thorough historical work of Lorna Weatherill (1986) on the growth of the English pottery industry supports the statement that imported ceramics in 17th-century New England were found in smaller quantities, as Weatherill asserts “[...] regardless of market level, it is clear that the market for pottery in the seventeenth century was very restricted” (Weatherill 1986: 90). She discusses the access to ceramics in Britain, and by extension, the market for ceramics in the British colonies in North America must have been even more limited.

With the advent of the Georgian Period after 1714, “The Genteel Revolution”—a term historical archaeologist Christina Hodge (2014: 179) uses to label this shift—placed growing emphasis on gentility, politeness, and refinement which had material repercussions, among others, in the rise of individual portions, the proliferation of ceramic tableware sets, and the widespread introduction of tea, coffee, chocolate and punch into elite and mainstream British society (Harvey 2008; Roth 1963; Weatherill 1993: 215–216).²¹² The advent of the Georgian Period and its attendant Genteel Revolution was not a phenomenon that only affected British society’s elite and whose dimensions the well-to-do constructed. As elegantly demonstrated by Hodge’s (2014: 184) outstanding historical archaeological study of the daily material life of middling widow Elizabeth Pratt in 18th-century Newport, Rhode Island, “Pratt’s selective gentility, tracked through partible refinements and professional practices, was part of the broader Genteel Revolution that redefined society.” Through her case study, Hodge (2014: 175–176) identifies Pratt as only one of myriad middling consumers in colonial Anglo-America who were not merely followers, but “discerning cultural leaders” who strategically appropriated, refashioned and redefined the Genteel Revolution through partible refinements, where “individual material practices varied widely within a field of broadly shared values”. I argue that Anglo-American sea captains, as evidenced in the assemblages of practice from Punta Salinas (as well as the small English assemblages from Uespen de La Salina) were at the forefront of innovating in 18th-century gentility.

²¹² The roots of the Consumer Revolution and the “material renaissance” can be traced much farther back in time to the Renaissance period (see Blondé and Ryckbosch 2015).

The sweeping changes of the Georgian Period also saw the increasing accessibility of refined ceramics to lower classes of British society and between 1705 and 1715 there was a substantial expansion of ownership of material goods including earthenware throughout England (Archer 1997: 7). These processes came hand in hand with the rapid growth of the British ceramic industry in the 1720s. The very early batches of these ceramics were most probably largely inaccessible to sea captains from Anglo-America, but by the early 1730s, the factories at Staffordshire and elsewhere in the Midlands started producing large quantities of industrially-manufactured refined earthenwares and stonewares for the domestic market and for export to the colonies (Weatherill 1986). In fact, as has been proven by ceramic historian Sarah Richards (1999), 18th-century ceramics were principally produced by middling entrepreneurs for middle class consumers. These goods would only have become largely accessible to Anglo-American sea captains in the late 1720s as they constantly traversed the Atlantic visiting numerous British ports supplied with the latest fashionable goods. Thus, a small and fragile colorfully-painted delft punch bowl or sneaker was a consumable that would have highlighted a captain's individuality as well as his access to the novel goods from Britain. The captains camping by the saltpan of Punta Salinas throughout the 18th century with their fancy tea pots and showy creamware platters were not simply emulating elite practices in a top-down trickle effect of consumerism, but rather, as members of the growing middle-income group of society they selectively engaged in partible refinements, acquiring fashionable items and seeking to show off their possessions to their peers and their crews. As Lucas surmises, "Suddenly wealth and status was marked by new material

culture [...] the latest design, the latest fashion helped to accrue status” (Lucas 2006: 42–43).²¹³ The quantitative increase in industrially produced ceramics was followed by their quick incorporation into the sea chests of captains heading to La Tortuga, and the swift replacement of wooden and pewter wares on board (Martin 1989). During the late 1720s and early 1730s, industrial ceramics had become accessible to the middling sea captains unlike ever before, and it is precisely at this time that they begin to appear in the assemblages of dining and drinking at Punta Salinas.

CAPTAINS AS CONSUMERS

When approximating the consumer choices of seafarers, it is important to distinguish between the documented behavior of common sailors to accumulate or acquire souvenirs, curios or bric-a-brac for their personal value rather than their market value (Rudolph 1985). Seafarers would often bring exotic goods of all kinds back home to show to their families and friends. Even coral became an exotic souvenir from a seafarer’s maritime forays into the tropics:

Our fathers saw, as we see, the poetry of the sea in these gardens of the deep—for the sea hath its gardens, as hath the land—and many a New England home could show boughs and branches of coral, plucked from the wide, beautiful and abundant gardens of the deep, and suggestive, even in their silent and fragmentary fate, of the beauties, the wonders, the mysteries of the sea (Chever 1859: 134).

The ceramics from Punta Salinas, however, were not tchotchkes or gimcracks. The sea captains who arrived at the island strategically purchased ceramic vessels at the peak of

²¹³ Lucas, in his study of how ceramics supplanted the role of pewter, argues that this occurred at the turn of the 18th and 19th centuries. At the time ceramics were being mass-produced industrially in Staffordshire on a much larger scale and with greater standardization than earlier types, and refined white-bodied earthenwares became widely available to most social strata. On La Tortuga, I see this process occurring at an earlier date, where the industrial production of early Staffordshire English white salt-glaze and delftware (1720+) in various factories in Britain, provided similar circumstances for captains to acquire fashionable consumables at lower prices.

their fashionability to display not at home, but in the temporary encampment by La Tortuga's saltpan.

The maritime mobilities of New England captains to ports in the circum-Atlantic were a contributing factor to the presence of fashionable objects—including punch bowls, tea bowls, and teapot, among others—at Punta Salinas. This presence of such fashionable items in sea captain's homes has also been noted by historical archaeologist Steven Pendery (1992: 64) for Charlestown, Massachusetts. Barbados, one of the stopovers of the Saltertuda Fleet, would have also been a prime port for acquiring fine goods. Traveler and clergyman of the Dominican order Jean-Baptiste Labat (1979: 207–208) noted at the end of the 17th-century that “the traders’ shops and warehouses [in Barbados] are filled with desirous items from all parts of the world” (my translation). The seafarers’ access to various ports and their goods, especially those in Britain such as Bristol and London, also created the possibility to acquire such exotic commodities associated with drinking practices discussed in Part I of Chapter 6, including green tea, coffee, chocolate, fine spices, German spa water, and various fine alcoholic beverages and spirits.

The fashionable tastes of many captains and their access to the new-fangled goods from Britain, the Atlantic world and beyond were most certainly driving factors for the acquisitive desire of the rest of the captains to seek and emulate the collections of their peers. Sociologist Ian Woodward (2007: 158) argues that the tastes of one person are only meaningful in relation to those of others, where the force of these tastes at once becomes socially integrative and differentiating. I argue that the captains at the campsites of Punta Salinas found the leisure time there as a unique opportunity to engage in material

discourse with the things they brought along on their voyage—be they punch bowls, teapots or shoe buckles—in order to differentiate themselves from one another and their crews. On Punta Salinas, the captains could set themselves apart from their crews and engage in a more horizontal verbal and material discourse with their peers. The suppressed and attenuated desires of social distinction onboard the small merchant ships discussed in Chapter 4—where a generalized communalism prevailed—were temporarily set loose on the saltpan. Captains, however, knew they would inescapably return to life at sea. The assemblages of practice at Punta Salinas evidence a material distancing of the captains of middling class, from their lower-class ship crews. This further resulted in more evident rifts between those laboring on the saltpan and those overseeing and managing that work. Alcohol was used to temporarily attenuate that rift through paternalistic giving of the intoxicating beverage of punch by captains to crews.

As Lorinda Goodwin (2002: 119) argues, the “craze for novelty might have arisen from a desire to stand out (in a favorable sense) from a crowd of dedicated consumers.” To Goodwin (2002: 119) refinement required the use of luxuries, which elevate the status of the practitioner. On Punta Salinas, a captain’s knowledge and possession of fashionable and novel things as well as the display of accompanying manners of handling and use (including expressions, gestures and poses) would be essential to demonstrating knowledge of genteel customs and items. All those who were similarly versed in these dealings became part of a group exhibiting a competitive yet convivial fraternal atmosphere. A telling account in 1814 of the shopping impulses of captains comes from a captain from Holstein by the name of Smidt upon his visit to Newcastle:

I stopped at each store to admire the splendid goods which were displayed. Nothing can be more seductive than this kind of rich shop-windows [...] With difficulty I resisted the temptation to spend my all of seven half-crowns on some of this colorful bric-a-brac; however, a portion of my hoard was sacrificed and I became the owner of a few decorated mugs and cups. My purchases were knotted into my kerchief and I resumed my promenade up and down the streets, bearing my treasure most gingerly. (quoted in Rudolph 1985, p. 73)

Ashley Bowen, an eighteenth-century seaman from Marblehead, Massachusetts, recounts that his captain, Peter Hall “was a man so well acquainted in luxury [...] he must make as grand show as possible of his abilities” (Vickers 2007: 47). Although probably Smidt and, certainly, Hall were captains of considerably larger and more hierarchically structured ships than those that arrived at Punta Salinas, their taste for refined goods was probably shared by other captains of the 18th-century Atlantic world. I argue that the captains who had access to these goods were not emulating the mannerly behavior of the merchant elite in New England and their affluent drinking parties, as much as strategically refashioning Georgian gentility to serve their own social context and needs (Goodwin 2002: 135–138). If, as Charles Cobb (2017: 279) posits, modernity is “more akin to a buffet”, the highly mobile sea captains seem to have had first dibs. Furthermore, as Goodwin (2002: 134) suggests, perhaps the mannerliness of the captains consisted in setting aside the polite distance and detachment of elite society and replacing it with communal drunkenness during convivial punch drinking at Punta Salinas. In turn, this ‘bawdy’ activity was paradoxically juxtaposed with the refined politeness of the tea ceremony being practiced simultaneously at the site.

Further analysis of the consumer choices that captains must have made when buying ceramics back home in New England or in ports in the Caribbean and Britain are beyond the scope of this study. However, a strong argument for their conscious and

strategic purchasing of fashionable creamware can be made through detailed analysis of the assemblages of dining and drinking at Punta Salinas. Creamware, a white-bodied refined earthenware with a cream-colored glaze, began to be produced in England in 1762. The archaeological collection from Punta Salinas has a total of 107 creamware vessels, only outnumbered by English delft that has 109. The earliest creamware was generally of a darker yellow hue, until in 1767 Josiah Wedgwood began producing lighter colored creamware in Staffordshire (Miller 2015: 1–2). Miller (2015: 4, 7) has revealed that feather-edged creamware probably started being produced around 1765 and continued in popularity up until 1780, when it was replaced by other edge decorations. More than half of the feather-edged creamware fragments from La Tortuga exhibit the darker yellow tint to the glaze (Fig. 6.1.22, 9–11), suggesting that these ceramics are in fact early exemplars. This indicates that they could have been bought as soon as they became available in British shops by Anglo-American sea captains who then visited La Tortuga. Moreover, Miller (2015: 1–2) posits that there is little to no creamware found in archaeological contexts or documentary records in North America that dates to before 1770.²¹⁴ Here it must be highlighted that the Punta Salinas archaeological assemblage ends in 1781, after which no more creamware brought by seafarers would have been deposited in the archaeological record. Furthermore, as discussed in Part I of Chapter 3, the last documented arrival of an Anglo-American ship to New England with salt from La Tortuga occurred in 1776. This large presence of early creamware at Punta Salinas in the

²¹⁴ The creamware from La Tortuga seems to pre-date the so-called “Creamware Revolution” in the late 18th-century Chesapeake (Martin 1994).

time period between 1765 and 1776—a mere 11 years—is therefore a very compelling marker of the fashionable consumer choices and purchasing opportunities of sea captains arriving at Punta Salinas.²¹⁵ Clearly, many of them had a keen sense of fashion and were proactive in acquiring these refined ceramics before they even became available back home in New England. In the 1760s creamware had effectively replaced most other ceramic wares in the seafarers’s chest.

In New England, beginning in the early seventeenth century, sea captains who were a part of the middle wealth group in Charlestown, Massachusetts, began to acquire ceramics of diverse quality and to consume exotic goods—a trend that only increased as the eighteenth century unfolded (Pendery 1987). Many also possessed large homes such as captain John Foster, who is recorded to have been on La Tortuga and was probably the same person whose sizeable six-room Boston house was inventoried in 1720 (Pendery 1987: 97–98).²¹⁶ Detailed historical archaeological research of the households of captains James Garrett, Jonathan Carey and Captain Robert Ball, in Charlestown, revealed these men’s self-fulfilling social strategies of consumption and the long-term investment in those material things that facilitated social interaction (Pendery 1987: 281–282). Archaeological research in the 18th-century households of the Tate and Brown families (the latter of whom was a sea captain and petty merchant) in Newport, Rhode Island also have revealed a collection of fine imported British and French ceramics (Mrozowski 2006:

²¹⁵ The seven debased English scratch-blue stoneware mugs found at the site are generally dated to c. 1765-1790, but were most popular in the period from 1765 to 1775 (Noël Hume 1969: 118). Their presence at the site further supports my argument for Anglo-American captains being very fashion conscious. Jillian Galle

²¹⁶ *Boston News-Letter*, May 21–May 28, 1716.

48–56). Excavations in the sunken city of Port Royal in Jamaica have revealed that the British colonial merchants and seafarers of the port were middle class consumers significantly ahead of their peers in Britain and her other colonies, acquiring an array of ceramics, glass and other material things to use in conspicuous consumption, aggressive social climbing and symbolic display as early as the 1680s (Trussell 2004: 174–181).

New England sea captains, a number of whom travelled to La Tortuga during the 18th century, therefore selectively appropriated the refinements of wealthy merchants and the English gentry through acquisition of fine and quality goods. It must be emphasized that these genteel developments were not forceful top-down impositions of the elite on the people of middle rank, nor where these captains simplemindedly emulating the merchant class. Rather, genteel practices were highly contingent and mutable, and thus during the second half of the 18th century, paradoxically, the middling maritime folk appropriating and redefining British gentility were also those moving the colonies towards economic and political independence from Britain (Hodge 2014: 179–181; Mrozowski 2006: 151–152; Pendery 1986: 77). Many such captains from New England ports found La Tortuga as an alternative place where they could refine, adjust and transform these genteel refinements to suit their individual social strategies among a group of captains with similar aspirations.

Even though the middling New England ship captains might have not had the same acquisitive power as the merchant elites who could import highly refined and fashionable items to their East Coast homes without setting foot in a ship to do so (Goodwin 2002), they could nonetheless maneuver the world of fashionability with their direct consumer

choices, acquiring refined ceramics and exotic items in British ports. The evidence of changes within the assemblages of dining and drinking at Punta Salinas discussed above shows that the maritime mobilities of sea captains enabled them to always be at the forefront of fashionability, riding the waves of British consumer culture before they ever reached Anglo-America and the Caribbean colonies. I emphatically support Hodge's (2014: 5) claim that "non-elites were something more than pale and partial imitations of their wealthier neighbors". It is at uninhabited La Tortuga, among their fellow captains, that these Anglo-American seafarers engaged with material consumables, whether they be delft punch bowls or tasteful feather-edged creamware plates. In this way, they not only put their cosmopolitanism, purchasing power and prowess on display among their peers but, more significantly for this study, they selectively appropriated the Georgian ethos of gentility (Hodge 2014: 7–8). At desolate Punta Salinas, men politely sipped green tea from Chinese porcelain tea bowls, poured from small and colorful mellonware teapots, yet paradoxically, they also engaged in rowdy bouts of carousing as they shared punch bowls filled with the intoxicating and exotic elixir of empire. In this way, middling Anglo-American sea captains selectively adopted refined Georgian practices in their own measure, restructuring the practices of the urban elite and influencing the production of ceramics from British factories (Richards 1999: 219–220), and strategically making these practices their own in their untethered maritime world. Middling 18th-century Anglo-American sea captains effectively were at the forefront of innovating Georgian gentility beyond the home.

CONFLUENCE OF LOCAL AND GLOBAL ENTANGLEMENTS : CAYO SAL

The assemblages of practice reconstructed from the archaeological evidence from excavations at the 18th-century site of Uespen de la Salina (CS/A), and the 19th-century site of Los Escombros (CS/B), on Cayo Sal in the Los Roques archipelago, provide a less sweeping supra-regional panorama of entanglements. Rather, the archaeological evidence reveals that, unlike the Anglo-Americans fleets that arrived at La Tortuga for salt and then left, without engaging with the Spanish colonists on the mainland (asides for the occasional skirmish with a Spanish corsair ship), the seafarers and maritime peoples at Cayo Sal were knotted in a mesh of largely local and regional commercial entanglements that altered the configuration of the assemblages of practice at the sites.

At CS/A the multicomponent nature of the site with Iberian, French, British, and probably regional and local ceramics, offers a glimpse into the local and regional trans-imperial and extra-imperial entanglements of seafarers within the Caribbean. The French and English turtlers that are known to have seasonally camped at the site engaged in local trade with the Spanish colonists from the mainland Province of Venezuela. It is through these commercial interactions, I argue that, the Spanish majolica from Seville, the Sevillian storage *botijas* (olive jars), and the large number of probably regional lead-glazed earthenwares (morrowares) and local *criollo*-wares made their way into the assemblages of cooking, dining and drinking at the site. Unlike at Punta Salinas where wares for food preparation represent a meagre 0.51% of the entire collection of vessels, at CS/A, they compose 23.7%. The majority of these are local *criollo*-wares. The dependence on local birds and marine fauna at the site, at least during times when supplies of salted beef from

the mainland did not arrive, also contrasts with Punta Salinas. While at CS/A these faunal remains suggest that the seafarers there consumed local faunal resources for survival, at Punta Salinas the evidence from fish remains and molluscs indicates that these were consumed as complements to the shipboard provisions during the multiple-week-long stay at the site.

Another clear difference between CS/A and Punta Salinas lies in the number of beverage serving- and consumption-related vessels. At CS/A only 7.04% of the vessels are related to beverage serving and consumption. At Punta Salinas, these represent 36.33%. Furthermore, at CS/A 67.78% of the vessels are food-related and 31.85% are beverage-related. At Punta Salinas, this proportion is nearly reversed, with 22.78% related to food and a staggering 73.92% related to beverage consumption. I argue that this pattern is, in part, reflective of the duration of stay of the seafarers at each site. Whereas at Punta Salinas captains camped on land for a few weeks while their crews raked salt on the saltpans, packed and loaded it on board the vessels in the bay, at CS/A a more motley community of turtle fishermen, probably without the same hierarchical captain-mate-crew social dynamics of small New England merchant vessels, was present at the site for the several months that a turtle season lasted. Furthermore, while at Punta Salinas we can observe the leisurely dining and drinking practices of New England sea captains, at CS/A we see a campsite geared toward seasonal survival. The assemblages of practice from CS/A indicate that the seafarers there were principally preoccupied with gathering local faunal resources and preparing and cooking their meals, to be then eaten with less fanfare. Rather than utilize a functionally diverse array of tableware including dishes,

plates, soup plates, as at Punta Salinas, most of the seafarers at CS/A (asides from the English seafarers who left behind the creamware and delft vessels), merely used practical all-purpose plates and even had to resort to re-mending them once they cracked. Alcohol, while not absent at CS/A, might have not played such a fundamental two-fold role as it did at Punta Salinas. There punch made up of exotic and expensive ingredients was drunk by captains to foster a temporary tavern community, show off material things, and strategically utilize gentility and debauchery for captains' personal goals. Simpler rum punch and alcohol was also offered by captains to their crews to ameliorate the clear social distinction that became evident on land at the Punta Salinas, where captains drank, ate and oversaw the labor of the crews toiling on the scorching saltpans. Meanwhile, at CS/A alcohol was probably drunk straight out of glass bottles by the French and Dutch Antilleans, as well as from the various small glass tumblers and the drinking glass. These differences indeed indicate that the hierarchy amongst the turtlers might have not been as clear as among the captains and their crews on land at La Tortuga.

In sum, at CS/A, apart from the small assemblage of punch and tea wares that probably belonged to the English turtlers, or perhaps, the sporadic Bermudian salt-raking sloop's crew, the assemblages of cooking, dining and drinking are markedly more modest and less refined than those at Punta Salinas. At a time in the late 18th century, when refined white-bodied earthenwares were flooding the market and at Punta Salinas creamwares had all but replaced all other ceramic types, at CS/A what was being used was primarily tin-glazed majolica from Triana, Seville. I suggest that the reasons for this may be various. Firstly, the turtlers and salt-rakers at the site were most probably regional

Caribbean seafarers from the ABC islands and Lesser Antilles. As such they were not the deep-sea captains of small New England merchant vessels and they probably rarely itinerated across the Atlantic to Europe. Rather, they sought their means of sustenance from catching turtles and raking salt for the local colonial-Caribbean economies. The mélange of ceramics and glass at the site, however, indicates that even though these seafarers were not as directly connected to the ceramic production centers in Europe, they nonetheless found ways to not only acquire local lead-glazed earthenwares and *criollo*-wares for their cooking needs but also a number of refined tin-glazed earthenwares, be they French faïence, Sevillian majolica or English delft.

The local and regional commercial connections that the sea afforded these seafarers, be they interactions with the colonist of the Spanish province of Venezuela or the colonists in French Martinique and Dutch Curaçao, served to situate them at the confluence of trade routes where they could acquire imported Atlantic world goods indirectly. Furthermore, the Venezuelan Caribbean seascape allowed these untethered inter-imperial seafarers to partake in the endemic informal cacao commerce (contraband, to the Spanish authorities) of the mainland cacao plantations with Curaçao. Encamped at the southwestern end of the archipelago, the seafarers at Cayo Sal were strategically located at a transshipment point where colonial Venezuelan cacao sellers could furtively meet with Curaçaoan seafarers and exchange the prized commodity for manufactured goods. It is probably directly or indirectly from these commercial interactions that the turtlers could supply themselves with mainland provisions, acquire local and foreign ceramic and glass vessels, and also, as the documentary evidence suggests, sell the

Venezuelan colonists alcohol and clothing. The mesh of entanglements at Uespen de la Salina was thus more complex, demonstrating the dense arrays of knots that local and regional trans-imperial seafarers could form thanks to the unique mobilities offered them by the sea.

US entrepreneur Jeremiah Morrell could have probably acquired the various types of ceramic wares with which he equipped his salt works at CS/B on Cayo Sal in the mainland port of Puerto Cabello, where he resided. Venezuela was an important market for Staffordshire potters in the decades following independence and, Puerto Cabello, being one of the principal and oldest ports of the country would have feasibly been one of the destinations for these trans-Atlantic imports, from where they were then distributed to shops and markets inland (Brooks and Rodríguez 2012). In fact, one smaller Staffordshire firm, Cork and Edge, directly sold its ceramics to Puerto Cabello in 1856 (Ewins 2008: 115–117). The refined white-bodied ceramics from CS/B are not the simplest utilitarian forms produced by British factories. There are very few plain whitewares and probably most cups were handled, these being more expensive than un-handled variants. The 42 industrial slip bowls, one cup, six mugs and two sugar pots represent the cheapest of the decorated hollowware produced by English factories (Miller 1991: 8). The remainder and majority of the refined wares, most of which are painted and some of which are transfer-printed, would have been more expensive items. Why Morrell equipped the campsite by the saltpan of the hot and inhospitable island of Cayo Sal with the more expensive products of English ceramic factories is unknown. After all, if there was only one overseer (perhaps in many occasions himself), or a few people overseeing

the salt works, the majority of the workers were poor Dutch Antillean freedmen. Either the costlier whitewares were the only such tablewares that he could acquire in Puerto Cabello, or Morrell was an eccentric (for his time) entrepreneur, who did not cut back on costs and luxuries and indulged his salt workers with the colorful and refined products of English ceramic factories.

Yet, countering the consumerist pull of exotic and fashionable things evidenced at Punta Salinas and among the fancy whitewares Morrell acquired for his salt enterprise, the 18th-century CS/A and 19th-century CS/B sites have a large number of local *criollo*-wares. These sites were probably supplied and provisioned from the Venezuelan mainland, yet the presence of these earthenwares not only indicates local entanglements that were fostered for economic convenience of the parties involved (Venezuelan traders and foreign turtle fishermen or salt merchants), but I argue that they represent an entanglement of another sort as well. These ceramics would have been probably more versatile for the French, English and Dutch Antillean seafarers at CS/A and for the Dutch Antillean freedmen at CS/B. The reconstruction of the assemblages of practice of food preparation, dining and drinking from the two sites on Cayo Sal reveals the many uses of *criollo*-wares as cooking vessels (*ollas*), water storage vessels (*pimpinas*, *tinajas* and *botijuelas*), and tablewares (pedestal bowls). These earthenwares were unrivalled by the more rigid functional classes of English refined white-bodied earthenwares. This contrast between industrial age refined white-bodied ceramics and local low-fired *criollo*-ware is especially evident at the CS/B site were these wares—the whiteware transfer-printed cup

and saucer, and the red-slipped earthenware pedestal bowl—coexisted in apparent harmony.

Unlike the supra-regional, Atlantic-world entanglements of the seafarers at Punta Salinas that could be reconstructed and contextualized within a large and growing body of literature on the Consumer and Genteel revolutions, the local entanglements at Cayo Sal require further comparative studies to understand their dimensions and dynamics. Archaeological and historical research of the local trade and contraband of ceramics, glass and other such consumables within the Venezuelan and Southeastern Caribbean is practically non-existent. Furthermore, there have been no historical archaeological investigations that address local Venezuelan and Dutch Antillean *criollo*-wares, their trade and their itineraries. Future research into this promising topic may provide the opportunity to compare the assemblages of practice from Cayo Sal with Venezuelan colonial- and republican-era archaeological assemblages, allowing for better contextualization of these entanglements and their resulting practices.

FUTURE RESEARCH

Future avenues for broadening and deepening the research I have undertaken in this dissertation are various. The lead-glazed earthenware (morroware) from the CS/A site as well as the *criollo*-wares from CS/A and CS/B have not been successfully provenanced. Identifying, or at least excluding, certain places of provenance, would aid in further understanding the economic possibilities, consumer behaviors and local and regional entanglements of the seafarers who acquired and brought these items to the insular campsites. Neutron Activation Analysis (NAA) of ceramics has already been proven to be

an effective way in narrowing down or pinpointing provenance of colonial-era ceramics (Alvarez and Arrazcaeta 2003; Blackman et al. 2006; De la Vega et al. 2013; Fournier et al. 2009; Fournier et al. 2012; Iñáñez et al. 2010; Jamieson et al. 2013; Neff et al. 2004; Rodríguez-Alegría 2002; Rodríguez-Alegría et al. 2003, 2013; Stevanato et al. 2012). I plan to undertake NAA analysis of the earthenwares from CS/A and CS/B ceramics in the near future, comparing them to a large sample of local and regional ceramics recovered from Spanish-colonial sites in Venezuelan and the circum-Caribbean. Use-wear analysis on the interior of ceramic tablewares from the sites at Punta Salinas and Cayo Sal could also be helpful in understanding more clearly what functions certain vessels had in dining and drinking practices at the sites, and especially indicate more accurately in which of these assemblages of practice certain vessel forms such as the mysterious English delft basins found at Punta Salinas and CS/A were entangled.

As mentioned in Chapter 6, the faunal analysis of mammal bones from CS/A and CS/B was only undertaken at a preliminary level to identify species and determine NISP and MNI. Further and more detailed analysis of the skeletal remains is necessary to determine what cuts were being consumed at each site, and in this way to obtain a better picture of provisioning at the sites and the quality of meat. The numerous remains of sea birds from these two sites also require MNI counts and furthermore detailed zooarchaeological analysis to understand more fully how the seafarers incorporated them into their diets by the saltpans.

Finally, it is my hope that this study has highlighted the potential and usefulness of the concepts of itineraries of things and assemblages of practice in uncovering

entanglements and understanding their changes through time in historical archaeological research. These theoretical models, however, require further polishing and refining, not only within the sites and phases discussed in this dissertation, but also at other sites and in other time periods, to further test their effectiveness in studying human-thing entanglements through time. The sensorial aspects of the past mentioned in Chapter 2, that were part and parcel of any assemblage of practice, were only briefly approached in my analyses, and they can certainly be further explored in future studies.

THE SEA AS DOMAIN OF ENTANGLEMENT

Whereas many terrestrial historical archaeological excavations in the Americas are undertaken within stationary structures and grounded built environments, this dissertation explores the largely unknown and mobile everyday entanglements of seafarers and things in the temporary and seasonal campsites by the saltpans of the Venezuelan islands. My study offers a valuable and unique window into the assemblages of practice involving seafarers and their things in these nodes on their otherwise largely untraceable and unrecoverable maritime itineraries.

The assemblages of dining and drinking practices from Punta Salinas reveal that once Anglo-American captains began to acquire refined ceramic and glass vessels in the late 1720s and early 1730s, they never stopped. These were binding and entrapping entanglements, creating relationships of enabling dependence (i.e. aiding social mobility, reinforcing status, mediating social relations), but also of constraining dependency (i.e. requiring constant purchase of new and often fragile fashionable items). These fragile delft punch bowls and cauliflower ware teapots were no longer the hardy, durable and

utilitarian wooden and pewter shipboard wares of yesteryear. Sea captains became inescapably entrapped in their refined frailty, unable to let go, seemingly spellbound by the Consumer and Genteel revolutions.²¹⁷ The enormous collection of broken post-1720s ceramic and glass tableware at La Tortuga, representing more than 53% of the entire collection of 790 vessels, is a vivid testament to the mesmerizing allure delicate refined European consumables had on seafarers. Entrapped in these consumerist entanglements, Anglo-American sea captains also strategically reformulated the practices of 18th-century gentility, adapting them to their own socio-cultural contexts. They engaged in communal bouts of stereotypical seafaring drunkenness around bowls of punch and at the same time politely sipped green tea from dainty Chinese porcelain tea bowls. Anglo-American sea captains were at once paradoxically sophisticated and uncouth, restrained and flamboyant, controlled and indulgent (Hodge 2014: 178). After all, the sea was their domain, and in this domain they could do as they pleased with their things.

This study reveals that the entanglements of seafarers and things on local, regional and supra-regional scales were highly negotiated and contested. At once globally conscious cosmopolitan citizens of the sea, the inter-imperial French, English and Dutch Antillean seafarers at Cayo Sal during the 18th century consumed both foreign ceramic and glass products from European factories and local *criollo*-wares, probably handmade by Venezuelan Amerindian and Afro-Amerindian artisans. Even with the early to mid-19th-century global thrust of mass-produced Staffordshire tablewares that flooded the global

²¹⁷ This spellbinding and even imprisoning or enslaving effect of things on 18th-century consumers is excellently explained by Trentmann (2016: 99–105).

markets and made their way even to the scorching site of CS/B, local earthenware cooking pots and storage vessels such as *pimpinas* stood their ground as indispensable and inimitable kitchen wares. Entrapped in trans-Atlantic entanglements with fashionable and colorful Staffordshire crockery, the seasonal inhabitants of CS/B—be they the overseer(s) or the Dutch Antillean freedmen—were also inseparably dependent on local hand-made ceramics to cook their daily meals. Sea bird stews would have been ladled out of *criollo*-ware cooking pots, probably made by the hands of indigenous Venezuelan potters, into transfer-printed Staffordshire soup dishes. Water cooled in *criollo*-ware *tinajas* would have been then poured into fine glass tumblers. Coffee—a prized 19th-century Venezuelan-made commodity—would have been drunk out of matching painted whiteware tea cup and saucer sets. At this seemingly peripheral island of Cayo Sal that was nonetheless part of a bustling and interconnected seascape, such seemingly paradoxical global and local entanglements could be manifest within the assemblages of cooking, dining and drinking.

Rediker (2014: 26) elegantly sums up the fundamental role of seafarers to the growth of commerce and capitalism: “In the age of sail, the workers of the wooden world were themselves, in their minds and bodies, vectors of global communication”. The maritime mobilities of the seafarers who temporally and seasonally inhabited the salt pans of the Venezuelan islands have also challenged the spatial limits of the local, regional and supra-regional scales introduced in Chapter 1. In fact, the presence of consumables from Europe and around the globe on these uninhabited islands evidences that seafarers were largely footloose and untethered cosmopolitan consumers,

constantly navigating spatial scales, and through their consumer practices creating nested spatial relationships where situated globalities became commonplace and the international became conflated in the local (Dixon 2014; Blok 2010; Law 2004). The seafarers visiting the Venezuelan Caribbean were in fact actively shaped at the confluence of the local and global manifestations of the Consumer and Genteel revolutions, in turn transforming these phenomena in a recursive relationship. This study broadens and deepens scholarly understandings of 17th- through 19th-century seafarers by positioning them in the limelight, not as the anonymous movers of international trade and facilitators of imperial and national interests, but as avid trans-imperial and extra-national consumers of the fruits of those very empires and nations. By tracing the itineraries of things and analyzing assemblages of practice, I have revealed some of the ways in which seafarers became increasingly entangled in and entrapped by the new and growing array of consumer goods brought about by the dawn of industrialization and the expansion of a global world, whilst themselves being the vital mobile maritime enablers and transformers of these large-scale phenomena.

If, as historian N. A. M. Rodger (2011: 71) posits, “Only ships and seafaring made possible the construction of the Atlantic world”, then historical archaeology can certainly provide a singular perspective into the early-modern and modern entanglements of seafarers and things beyond the limits of written sources. This historical archaeological study has aimed to illuminate precisely such entanglements from 1624 to 1880, demonstrating that material things were not as Karl Marx (2009) would simply have them—mere abstractions or lifeless objects with “use value” that could be exchanged for

money (Trentmann 2009, 2016: 95). Rather, from the 17th to the 19th century, a growing multitude of things including punch bowls and punch, tea pots and green tea, shoe buckles and silk waistcoats, drew seafarers into tighter relations of enabling dependence and entrapping dependency (Hodder 2012, 2016). All the while 'natural' things such as clouds, tides and microorganisms were also entangled in the dynamic mix of assemblage on the insular Venezuelan saltpans. Through this study, I prove that artificially separated Cartesian (and Marxian) objects and subjects do not exist beyond the mind. Instead, things and seafarers in the past became intimately and vibrantly entangled in assemblages of salt cultivation, food preparation, dining and drinking on the uninhabited Venezuelan islands at the salty edge of empires and nations. The sea was the vital and pulsating connective tissue of an increasingly global world and a domain of entanglement par excellence.

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