

"This is the peer reviewed version of the following article: Finneran, N. (2016), Slaves to Sailors: the archaeology of traditional Caribbean shore whaling c.1850–2000. A case study from Barbados and Bequia (St Vincent Grenadines). *International Journal of Nautical Archaeology*, 45: 388–405. doi:10.1111/1095-9270.12184, which has been published in final form at <http://dx.doi.org/10.1111/1095-9270.12184>. This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Self-Archiving."

© 2016 Wiley-Blackwell

|

**Slaves to sailors: the archaeology of traditional Caribbean shore whaling c. 1850-2000**

Niall Finneran

Reader in Archaeology

University of Winchester

Hampshire

UK

[Niall.Finneran@winchester.ac.uk](mailto:Niall.Finneran@winchester.ac.uk)

## **Abstract**

The archaeology of post-Emancipation periods in the Caribbean (i.e. after c. 1807 in the British Caribbean) remains relatively understudied. The collapse of the industrial-scale sugar plantation systems of the islands in the early 19th century saw a radical re-organisation of social and economic life. A new corpus of consumers was created, eking out a living on the margins of island society as sharecroppers or artisans, but never quite economically or culturally liberated. The archaeological implications for the study of this period, in terms of vernacular housing, material culture and ritual behaviour *inter alia* should be considerable. A major development within this trajectory sees the emergence, on many islands, of a strong Afro-Caribbean maritime culture focused upon ship building, fishing and whaling. The archaeology of whaling communities, highly distinctive functionally specific settlements, is relatively well understood from the perspective of north America, Australasia and Europe, but less so in the Caribbean. Using two case studies based upon recent excavation and survey work by the author, this paper attempts to shed light on a very distinctive maritime cultural response in the post-Emancipation Caribbean world and one which deserves wider consideration.

**Key words:** historical archaeology in the Caribbean; Caribbean boatbuilding; whaling; Caribbean maritime history; Bequia; Barbados.

## Introduction: after slavery

Recent research trends in the archaeology of the 'historic' periods of the insular Caribbean (see Reid 2009: 1-11 for critique of the term 'historic') have mainly focused upon the ubiquitous sugar plantation as the locus of analysis (Armstrong and Hauser 2009; Farnsworth 2001 *passim*). Archaeologists have historically analysed these industrial units in terms of landscapes of surveillance and power (Singleton 2001), and of slave responses (resistance, passive or active; Agorsah 1993; Fellowes and Delle 2014) to the oppressive and cruel system, evidenced by survivals of African cultural memes such as definition of space in slave houses and their surroundings (Delle 1999), pottery forms (Meyers 1999), cuisine (Higman 2008 *passim*), medicinal systems (Carney 2003) bodily adornment (Wilkie 2000) and burial practice (Handler 1997) *inter alia*. A complex web of African cultural survivals existed alongside unbending European plantocracy attempts to impose cultural and ideological order.

In the townscapes of the British Caribbean (themselves also poorly studied for the most part by archaeologists) dynamic and cosmopolitan 'creolised' societies, emerging from a melange of marginalised indentured 'poor' white settlers (Reilly 2014), radical non-conformists (Chenoweth 2011), indigenous native Kalinago/'Carib' (Hoffman et al. 2014)—and on occasion Jewish communities (Ezratty 2002)—developed and flourished (eg Finneran 2012; 2013). Within these different theatres, Caribbean colonial-period island-scales, be they Spanish, Dutch, French or British (the latter have been more fully explored archaeologically; see overviews in: Deagan, 1988; Haviser, 2001; Kelly 2009; Watters, 2001) develop culturally distinct identities at all levels of society. They do not 'hold up a cultural mirror' to the motherland. This is the process archaeologists describe as creolisation (Delle 2000; Finneran 2013), and one which characterises the dynamic and complex development of the material cultures of the Caribbean islandscapes.

In 1806 in British Government outlawed slavery on their island possessions, although slave ownership was still legal until 1833 (and arguably continued for a few more years under the restrictive terms of the apprenticeship system). The Danes had done so first on their small island possessions (now the US Virgin Islands), and soon the other major European colonial Caribbean island powers followed: Dutch, French, Spanish. After

Emancipation, former slaves were still largely tied to their plantation landscapes and freedom was essentially illusory. Economic landscapes were reordered; sharecropping became an important way of life and this is visible from a landscape archaeology perspective (Armstrong 2010; Kelly, Hauser and Armstrong 2011). Vernacular house cultures developed in response to Emancipation; the ubiquitous Barbadian chattel house, for example, is part of a wider continuum of freed slave wooden house styles from south America into the southern United States (cf Vlach 1976). In Barbados, the house was a moveable chattel; as land ownership was prohibited to many freed slaves, a solution presented itself in the design and construction of wooden houses which could be moved to other plots within a short period of time. Although built to a standardised plan reflecting standardised dimensions of imported timber, a great deal of individual choice in decorative schemes is visible in such houses, evidencing individual taste and choice within the socio-cultural structuration of the post-Emancipation island (Finneran 2013).

Although obviously limiting and oppressive, many slaves were able to some extent to develop specialist artisanal skills in the context of the plantation system and its successors. Boat building and crewing would have been at least one wider-ranging skill, and in many cases fishing served to provide an essential dietary adjunct (Price 1966; Beckles 2002). In a sense, slaves and then freed slaves found an outlet to the sea (for a wider context see: Bolster 1998; Harris 2014; Putney 1987), and if anything, liberated from the bonds of slavery, the process of cultural creolisation quickened, and individual islands developed strong localized identities (cf Seetah 2015). One of the most significant, yet largely understudied elements of life among the freed slaves is the emergence of a strong maritime-based cultural tradition (eg Price 1966), exemplified, for example, by the emergence of dynamic ship building traditions in hitherto small and marginal islands such as Bequia in the Grenadines and Anguilla in the north-eastern Leewards (Pyle 1998).

## **Figure one**

### **Maritime historical archaeology in the Caribbean**

Research trajectories in Caribbean maritime archaeology are often unfairly stereotyped as either treasure-hunting activities, or searches for pirate lairs. In pre-contact periods, much valuable work has been undertaken on canoe designs and simulation patterns for inter-island trade, movement and navigation (Curet and Hauser, 2011; Hoffman et al. 2007;

Keegan 1986; Keegan et al. 2008; Leshikar-Denton 2011; Leshikar-Denton and Erreguerena (eds.) 2008). Moving into the historical period, much effort has been expended on the archaeological reconstruction of Columbus' voyages (Ewen and Deagan 1988), as well as the location and excavation of European ships of the period, some of which happen to contain quantities of treasure either being transported from Spanish Mesoamerican possessions or being looted by British, French and Dutch privateers from those ships. Other historic wrecks (and not necessarily in Caribbean waters) have deeper resonance: the wreck of the slavers *Trouvadore* (Sadler 2008) and *Henrietta Marie* (Moore and Malcolm 2008) are just smaller elements of the wider picture of the experience of the archaeology of the Atlantic 'middle passage', the forcible movement of a *mélange* of African peoples in appalling conditions to the Americas (Handler 2009). Apart from actual historical shipwrecks, limited archaeological attention has been focused upon ports and installations, mainly in the context of military archaeology (eg Weaver 2002). The investigation of the sunken Jamaican site at Port Royal, with its lurid backstory as a pirate base and den of iniquity is popularly known, and is part of a wider context of the archaeology of piracy and privateering in the region (Hamilton 2006).

Within the overall scope of Caribbean maritime archaeology, the ethnographic study of traditional recent boat building techniques across the islands is less well studied, and this has implications for much of the material described herein in connection to local responses to contact with whalers. Marco Meniketti's paper (2012), for example, on the lighters of Nevis in the Leeward Islands highlights a tradition of local wooden boat construction which is now dying out. This is an important area of consideration. In order to gain an appreciation of the diversity of Caribbean traditional wooden boat building, we must turn to one of the most significant works on the ethnography of Caribbean boat building, Douglas Pyle's *Clean Sweet Wind* (1998), which takes a wide ranging consideration of differing regional styles of inshore fishing boats as well as inter-island trading vessels. Pyle's work derives from informal ethnographic study undertaken in the late 1960s and early 1970s. Many of the wooden ship building traditions and builders that he lovingly details in his book have long disappeared. These builders essentially kept their knowledge within the family; skillsets were handed down by oral transmission and it may not be too dramatic to state that much of their knowledge fossilised European post-medieval ship building knowledge and practice. Boats were built singly, one at a time, to fit in with the rhythms of island economic life. Traditional techniques and materials were

used, and the boats--even large schooners or sloops of 60 feet (for inter-island, and wider regional trade)--were built by eye and hand in teams of two or three.

A number of other intriguing starting points for the nautical archaeologist arise from Pyle's valuable book. Each Caribbean island developed a strong local cultural maritime identity evidenced by its forms of boat building that often betray a range of different roots, thus indicating the importance of the study of the boat as an artifact in its own right. For smaller range inshore work, particularly fishing, smaller sail boats were widespread. In Bequia in the Grenadines, these appear to be identical to, but slightly smaller than whaling boats (which will be considered later); classically double-ended and at around 23 feet LOA they carry a small spritsail rig (Pyle 1988: 34). In Grenada, traditional sailing canoes (which may fossilize earlier Carib/Kalinago-type designs) were replaced by imitations of the distinctive Bequia double-enders in the 1970s, (Pyle 1988: 15), and as if to emphasise the possibilities afforded by an analysis of the diffusion of boat designs over time and space, larger Grenadan fishing boats of the 1970s appear to have been based on a design devised by an English fisheries officer (Pyle.1988: 17). Elsewhere in the Lesser Antilles, local variants of smaller boat forms survive. On St Martin/Sint Maarten there is a clear influence from Anguila (Pyle1988: 105), and apparently no local boat building tradition. The St Kitts beach boat (Pyle 1988:120), the Martinique *gommier* and yole (Pyle 1988: 148), St Lucian *canot* (Pyle 1988: 158) and Trinidadian *piroque* (Pyle 1988: 182) all belong to this continuum of local small-scale boat building (i.e. under 30 foot LOA).

There is also a tradition of building larger boats (sloops or schooners) for inter-island and regional trade. The St Kitts lighters reported defunct by Meniketti (2012) also belong to this form. Four remained when Pyle visited in the 1970s (Pyle 1988: 114); a lighter is used to transport goods from a ship lying off a port, but they are also used to transport cargo between St Kitts and the neighbouring island of Nevis. Further south in the Grenadines, on the island of Carriacou, the larger schooners built there (up to 60 feet LOA) were characterized by a long overhanging stern and curved stem (Pyle 1988: 25). A vigorous schooner-building tradition on the neighbouring island of Bequia; the Friendship Rose was launched there in 1969 and still operates from Admiralty Bay as a charter. Even more famous was the Gloria Colita owned by the famed Reginald Mitchell (reputedly the only Afro-Caribbean seaman to master celestial navigation). At 165 feet LOA this was the largest schooner ever built in the Caribbean with three-masted rig, although it was lost under mysterious circumstances in World War 2 with all its crew (Pyle 1988: 39). It is

however the smaller-scale of boatbuilding which, as we shall see, informs the design of local whaling boats.

Pyle also documents syncretic ritualistic behaviour associated with launching boats in Carriacou, for example (Pyle 1988: 26), which could be regarded as being African ideological survivals (cf Handler 1997, in a totally different context). Here, the sacrifice of a chicken is as part of the launching ceremony sits awkwardly alongside the presence of a Roman Catholic priest. Pyle also emphasises the communal effort which goes into the launch of a boat; his account of the celebrations surrounding the launch of the sloop *Skywave* in 1971 is colourful, and the use of 18<sup>th</sup> century cannon as a sinker for its mooring from a fort on east side of Friendship Bay above St Hillaire (Pyle 1988: 81) tells us something of the fluidity of maritime material culture within these settings. The foregoing analysis sets out some of the rich material which could be accessed in Caribbean maritime cultural settings; now the paper focuses on the specifics of one understudied area of this rich maritime tradition: whaling and its associated material culture (cf Price 1985; Romero and Creswell 2005; Romero 2012).

### **A historical outline of Caribbean whaling and its wider cultural context**

It should be emphasized that whaling is not merely fishing writ large. The archaeology and material culture implications of this activity are different. The technology for catching whales is often highly specialized; whaling boats (in some cases, such as the Yankee whalers of the 19<sup>th</sup> century) are designed to undertake full processing of the catch such as flensing (cutting) and trying (boiling out the oil) whilst at sea; settlement location for shore whaling is obviously tied to the migration routes of the whales, and the whole operation demands a great degree of co-ordination and planning. Whaling communities are, but their nature, functionally specific sites with their own almost spiritual quality. Literary characters at two ends of the historical spectrum such as Jonah and Captain Ahab reveal something about the almost Manichaeian dualist mystique, fear and awe in which humans hold these mammals (cf Kalland 1993).

Humans have exploited marine mammals (*Cetacea*) for their meat, oil and bone for thousands of years, although earlier strategies for whale hunting in the Arctic, for example, were naturally small scale in scope (Douglas et al 2004; Mason 1998; Grier 1999; Whitridge 2004). Exploitation of the whale is reported in classical Europe (Papadopoulos



and Ruscillo 2002), but larger-scale industrial exploitation of whales is more associated with the Basques of northern Spain who were able to establish whaling centres in Labrador, on the northeastern-American coast from the 16<sup>th</sup> century (Tuck and Grenier 1981; Barkham 1984). Much recent archaeological work on whaling settlements has focused extensively on Australasia (eg Coutts 1976; Pearson 1983 McIlroy 1986; Lawrence and Staniforth eds. 1998; Smith and Weir 1999; Prickett 2002; Gibbs 2005), but also the South Atlantic (eg Basberg 2004), Latin America (Duran 2008) and Europe (McNeary 2007).

As an industrial activity, whaling reaches its zenith in the 19<sup>th</sup> century at the time of the Yankee Whalers, an industry which had deep historical roots in north America (Shoemaker 2005). From the late 18<sup>th</sup> century the focus of the whaling industry had been the north-eastern states of Massachusetts, New York, Connecticut and Rhode Island; at its apogee in 1856 the whole American whaling fleet (comprising a range of different types of ship) numbered 742 vessels ranging across the seas in search of whales (whalingmuseum.org 2016). It had a massive social and economic impact upon the ports of north-eastern America, and such was its impact that its heritage is celebrated in museum displays such as that at New Bedford, Mass. It was the activity of the Yankee whalers in the Caribbean during the late 18<sup>th</sup>-19<sup>th</sup> centuries which directly initiated the development of whaling activity there (Price 1985). This is an important observation in the light of the fact that contemporary whalers in the St Vincent Grenadines, for example, have made a case to the International Whaling Commission that they should be able to continue their limited shore whaling activities because theirs is an *aboriginal* tradition (meaning, it dates from before European contact in the 15<sup>th</sup> century; Animal Welfare Institute 2012). This is, of course, neither supported by historical sources (which are very clear on the matter) nor by non-existent archaeological evidence of large scale whale exploitation among the prehistoric Carib/Kalinago peoples of the Lesser Antilles (apart from random encounters with stranded mammals; cf Wing 2000; the rights and wrongs of continued whale exploitation in the region is anyhow beyond the scope of this paper).

Humpback (*Megaptera novaeangliae*; *nodosa*), Blackfish (or Pilot) (*Globecephalus melas*) and Sperm (*Physter catadon*) whales migrate southwards from the north Atlantic early in the year (January) to the seas round the south-eastern Windwards (Martin et al. 1984). Calves at this stage of their development have thin skin and would be unable to survive in the colder waters further northwards (Adams 1971). It was the recognition of the

potential for exploiting these migration routes which brought American whalers to the region. The earliest historical evidence for European whaling here is reported as far back by New Englanders in 1688 when they petitioned the Governor of New York to establish 'a fishing design about the Bahamas Islands' (Romero 2012). In the western Atlantic, Bermuda became a key centre for whaling for at least 200 years (Romero 2006; 2009). As Romero (2012: 225) points out, this is 24 years before New Englanders caught a Sperm Whale in their own waters off Nantucket. The first visit of a Yankee whaler into more southerly Caribbean waters is reported from Barbados in 1762, and from St Eustatius in the Leewards in 1775. The south-eastern seascapes, around the Windward islands, appeared to be the primary focus of the industry. Over the next few years, whalers visited a whole range of Caribbean islands reaching as far south as Trinidad and Tobago and the coast of Venezuela (Romero 2012 fig. 1). It was a far-reaching socio-cultural maritime phenomenon which had a profound impact upon the development of the island economies. By the end of the 19<sup>th</sup> century, Yankee whalers had imparted knowledge of whaling techniques to Caribbean fishermen (who had often also served as replacement crew members) on Windward islands such as St Vincent and Bequia (Adams 1971; Kannada 2006 *passim*), Grenada (Romero and Hayford 2000), Dominica (Price 1985) St Lucia (Reeves 1988), and Barbados (Romero and Creswell 2010). In Trinidad and Tobago, further southwards, however, the industry developed without any obvious external influence, as there was an indigenous active shore whaling tradition *prior* to the advent of Yankee whaling there in the 1830s (Romero et al 2002). In order to understand the archaeological implications of the impact of this industry, two contrasting case studies have been selected, the first very much a 'dead' site at Speightstown, Barbados, the second a very much 'live' and contentious whaling centre at Bequia, St Vincent Grenadines.

### **The archaeology of Caribbean whaling: two contrasting sites.**

Speightstown is located on the north-western coast of the island of Barbados in the parish of St Peter. Known popularly as 'Little Bristol' in recognition of its links with the southwestern English sea port through history, it is now a small town, relatively unspoilt, which preserves a great deal of historical fabric within the townscape. Since 2010 the town has been the focus of extensive archaeological work (Finneran 2012; 2013) which seeks to understand the long-term history of the settlement through archaeological survey and excavation, oral history research and underwater archaeology. Once a thriving seaport

with a multi-ethnic mercantile community (including a significant Jewish population) the town today supports a small fishing industry. Historically, however, Speightstown and its neighbouring settlement of Six Mens' Bay to the north has been well known as a centre for ship building activity, although much of this activity has fallen off in recent years. The Speightstown Schooner, a large twin-masted ketch, was built here until the 1960s. Its long bowsprit, however, made it less effective in the open sea (Pyle 1988: 186) and it was widely utilised on the run from Speightstown to Bridgetown, carrying passengers and goods rather than for longer-distance inter-island trading (Clement Armstrong pers. comm.). In addition, schooners sourced from Nova Scotia in Canada augmented the locally-built versions.

From the 19th century Speightstown became an important centre for shore-based whaling largely as a result of the collapse of the plantation system and the re-focusing of mercantile interest on ship building, and whaling. The *London Times* of 24th April 1867 mentions the establishment of the whaling industry (presumably as a direct result of contact with Yankee whalers) here under an un-named individual, which was then sold on to C. Jordan in 1869 (an important local merchant family; historical sources after Brown 1942; Cresswell 2002 *passim*; Romero and Cresswell 2010 and interviews with Clement Armstrong, Adrian Roach and Karl Watson). Another concern was set up next to the Jordan's operation, which passed into the ownership of A. Skinner. Both concerns closed around the 1920s (although the industry had been declining since 1912). A third whaling concern is reported as operating out of Hometown to the south under the ownership of A. Archer (Romero and Cresswell 2010). Whaling was very much a seasonal and opportunistic pursuit; it could only take place during the period of whale migrations (January to March) and at a time when agricultural workers were freed up from labour in the cane fields, and appears to have focused on Humpback whales alone.

It is not clear as to the type of boat used in the whaling operations; schooners were too large, lacked agility and were more suited to trade. We have descriptions of four 25-30 foot-long open boats, powered by sail and oar, which were kept on davits on the actual jetties ready for rapid launching when the whales were spotted (Romero and Cresswell 2010). After the cessation of whaling in Speightstown in the 1920s, these boats were taken to the Norwegian whaling centre established briefly at Glover Island, on the south coast of Grenada. In the 20<sup>th</sup> century, Barbadian whalers used lances and bomb guns to attack the mainly mother-calf pairs which populated the waters to the west of the island. This was

not, of course, a sustainable approach, and this pattern of hunting hastened the end of whaling here. The bodies of the whales were then taken to be flensed alongside the Speightstown jetties (Romero and Creswell 2010: 21 report that at Holetown carcasses were flensed on the beach; we have as yet been unable to locate the precise location of this whaling concern). Tryworks at Speightstown were located in small shacks at the end of the jetties where most of the equipment was stored, and the flensing pots and furnaces kept. Much of the material culture was reused, and obtained from the rapidly declining sugar industry. The copper boiling pots used at Jordan's, for example, came from a sugar boiling house at a defunct local plantation site and these were used to try the corpse to yield oil (in this case 50/60 barrels of oil would have been estimated from each whale yielding c. 202 barrels per year). One of the pots is shown in Fig. 2. Nothing from the carcass was wasted; bone would have been used crushed as fertilizer on the cane fields, (this is why these elements generally do not survive in the archaeological record in Barbados; this is not so much the case in Bequia). Meat was locally sold fresh or salted, and the baleen plates were made into brooms.

## **Figure 2**

Shore-based archaeological survey work has sought to identify the locations of the whaling jetties indicated on the 1898 town map, which is the earliest source we have which indicates jetties. This has largely been undertaken using satellite photo rectification of the map to yield approximate locations along the sea front (Fig. 3). The beach area here has been extensively redeveloped and in some locations large quantities of rock have been dumped to help stabilise the coastline, and this has had the effect of obliterating many archaeological traces of older installations and sites. The 1898 map shows three jetties, from South to North: Archers, Skinners and Challenors—therefore, where is Jordans—and also why is Archers shown here when it is reported as being at Holetown? Local resident and historian Clement Armstrong (pers.comm.) suggested that this could just be another branch of the Archers operation, and went on to indicate the location of Jordans and Plantations jetties as being to the south of Plantations jetty as shown on the 1898 map.

## **Figure 3**

A photograph dating from 1919 (Fig. 4), looking from the north along the coast, shows two larger jetties flanking a smaller one, and these are captioned as Plantation at

the South, Jordans in middle and Challenors at the north. Clearly the two jetties shown with davits (used to launch the whaling boats), indicated in this photograph as Plantations and Challenors, are the whaling jetties, and these appear again in an aerial shot taken in the 1940s from the west but minus the smaller jetty (?Jordans) in the middle (Fig. 4). Taking this information into account, we may deduce that after the compilation of the 1898 map, Skinners and Archers jetties fell out of use, and the 1919 photograph shows only three jetties along that stretch of the coast. Why the Jordans jetty is not indicated on the 1898 map remains unclear, although it is probable that ownership of the jetties must have changed over time. Given the lack of extant shore remains consistent with the archaeological footprint of a whaling station, it was hoped that underwater survey could elucidate matters further.

#### **Figure 4**

Remains of two iron-piered jetties which must conform to those shown in the 1940s aerial photograph have been located; the northerly is still visible on the beach (Fig. 5) whilst the remains of the southernmost jetty were identified during scuba survey in 2012 lying just to the west of the present Jordans Supermarket car park. This is the right-hand (southernmost) jetty shown in Fig. 4 in the 1940s, probably to be identified as Archers Jetty. The diving team found evidence of the remains of this crane structure on the sea bed (Fig. 6), associated with steel rails from a railway. These can only be explained as reused railway lines taken from the former narrow gauge Bridgetown-Belleplain railway which closed in 1937, and used as a means of conveying cargoes from the end of the jetty back to shore on some form of railcart system (see Horsford 2001).

#### **Figure 5**

#### **Figure 6**

Little remains archaeologically of a maritime industry that once contributed a great deal to the post-emancipation economy of Speightstown. In 2013 the Barbados Museum mounted an exhibition on whaling which celebrated what was a very poorly known element of the post-emancipation economy. Further underwater and land-based survey is planned for the coming years at Speightstown, and it is possible that much can be added to this

picture, but for a greater contrast, we look westwards to the Grenadine island of Bequia, where a much stronger cultural footprint survives.

Archaeological research at Bequia offers a quite different, and much more highly visible case study. Bequia is the northernmost island of the St Vincent Grenadines, a chain of 100 islands, islets and cays extending c. 100 kilometres north-south between St Vincent and Grenada. The island presents a strong contrast with Barbados. The landscape is volcanic, and heavily wooded, and the island is also small (measuring c 18 km square and supporting a population of c. 4500). These geomorphological factors, allied to erratic rainfall, meant that sugar plantations were never extensive here. The island was ceded to the British by the French in 1763 at the Treaty of Paris and subsequently divided into nine estates, or sugar plantations. With the collapse of an already fragile sugar industry in the 1830s, the plantation workers settled in discrete areas of the island; sharecroppers occupied the land in Lower Bay, whilst in Hamilton African slaves settled and remained relatively isolated. The population turned to ship building and fishing as a primary activity, but in the 1850s Yankee Whalers began put into Admiralty Bay for repairs, and in many cases took on locals for crew (Ward 1995: 3). This new relationship affected Bequia in two ways: firstly a core group of competent seamen emerged and became sought after across the Caribbean for their skills and know how. Second, the knowledge of whaling became locally entrenched and developed as a significant indigenous industry, reinterpreted at a local and shore-based level in fishing communities such as Friendship Bay on the south of the island (Fig. 7).

## **Figure 7**

Since 2014, the Bequia Heritage and Community Archaeological Project, directed by the present author, has, as a sub-component of the overall research design, been devoting time to the identification, survey and excavation of historical whaling works and also recording (taking lines off) extant whaling boats. An interesting social background to the importance of Bequia whaling was provided in a series of interviews by Mr Herman Belmar, a former whaler and now leading light in the development of the Bequia Boat Museum with its extensive collection of whale-related memorabilia.

The development of the Bequia whaling industry is associated with the son of a Scottish plantation owner, William Thomas Wallace ('Old Bill'; 1840-1917), who joined a

Yankee whaler crew in in the 1860s, and who subsequently married the daughter of a Yankee whaler captain (Adams 1971). In 1875 Wallace bought two second hand Yankee 'beetleboats' (built by the Beetle family at the Hillman yard in New Bedford from 1834), the *Iron Duke* and the *Nancy Dawson* from the whalers and in 1875 established a small whaling concern at Friendship Bay (St Vincent Government 1876 Blue Book). In the 1880s he joined in partnership with Joseph Ollivierre (who established the Petit Nevis whaling works). Wallace's sons then carried on the family whaling concern with the construction of try works at St Hilaire on the east side of Friendship Bay (Adams 1971; Ward 1995: 5) which was briefly in use in the 1920s-30s. Ollivierre's son Napoleon also established his own try works on the small islet of Semple Cay in the 1880s (subsequently modernised, and this is the only surviving whaling station in Bequia).

The industry grew through the late 1890s into the early years of the 20th century and expanded to other Grenadine islands (eg Canouan; Union Island) and Grenada, causing a series of rules (or whalers' ordinances) to be formulated to deal with the organisation of the hunting (Ward 1995:8). At its apogee, in the years 1880-1920 the industry supported 20 percent of the Bequia working population indirectly or directly so can be seen to have had a massive economic and socio-cultural impact, and every year some 5-6 whales were taken, mainly humpbacks (sperm whales inhabited deeper waters and were more difficult prey; Ward 1995: 24-28); some 1.5 million gallons of whale oil, used for heating and light, were exported by the Grenadine whaling concerns between 1893-1903 (source: *St Vincent Government Blue Book*). Adams (1971) makes the crucial point that whaling was not just of economic importance; it was a test of bravery and skill and as such afforded a great deal of social cachet. The stratified society of the limited plantation class was replaced by a 'schooner aristocracy' (Price 1984: 14), here former planters retained elements of power in the ownership of boats and tackle, a widespread phenomenon in the post-Emancipation Caribbean (Price 1966).

The scale of the industry however was not sustainable and the establishment in the 1920s of a Norwegian whaling base at Glover Island, Grenada, with improved efficiency and skill spelt ultimate collapse for the industry (this clearly also had an impact on the Speightstown whaling concern). Whaling is still practiced today in Bequia, and indeed the Bequia flag shows a whale, although it is very much a marginal activity. The most culturally visible aspect of the historical whaling culture of Bequia is the local whaleboat, examples of which can be seen on the beach at Port Elizabeth and in the Bequia Boat Museum. It is

important to emphasise, given the issues discussed earlier regarding cultural creolisation, that Bequia shipwrights were building whaling boats which although based upon the beetle boat archetype of the Yankee whaler, developed a number of strong localised adaptations (discussed below).

The whole process of catching a whale was very much a highly organized activity. Lookouts were stationed on the hills of Bequia, or another island, and when they spotted the whales (usually in the channel to the west of the island between the islands of Batoway, Balliceaux and Mustique) they alerted the crews to be ready to move either using a heliograph, or more recently walkie-talkie (Herman Belmar pers. comm.). The crews pursued the whale under sail and oar, and when they caught up with the whale the harpooned at the bow steadied himself using a knee chock cut into the foredeck and threw a 20-pound harpoon 'iron' into the whale (in recent years explosive forty pound 'bum' or explosive guns have been used to effect a catch). The 'iron' is tipped with a swivelling blade which digs deep into the whale's flesh, and the whole operation may be repeated. The effective distance of the hand-thrown harpoon is only about four metres, so the boat has to be close to the whale, and this put great demands upon the bravery and skill of the crew. The harpoon in turn was secured to a c.150 fathom (274 metre) manila (*abaca*) line running from a water filled tub (to douse the heat caused by friction of the rope running out) and secured by pins in the bows which stopped it moving dangerously around the open boat (see Fig. 8). Once harpooned (and after the inevitable 'Nantucket sleigh ride'), the next job was to lance the now exhausted whale through its vital organs to ensure a quick kill. It is also reported that a crew member would be on hand to sew up the mouth of the whale to ensure it did not swallow a vast amount of water ensuring the sinking of both carcass and boat. The whale would be lashed to the boat and brought to shore to be flensed, where the flesh would be shared among the crew in strictly ordained proportions (Pyle 1988: 85-93 gives a full account; also Ward 1995 and Herman Belmar pers. comm.).

## Figure 8

For an archaeological overview of the Bequia whaling industry, we may focus on two categories of evidence: boats and technology and whaling sites. In 2014 and 2015, the author was able to study a number of whaling boats in the Bequia Boat Museum closely and to take lines from them (see note at end of paper), while at the same time interviewing Herman Belmar about the material. Within the Museum there are three whale boats (and



also a French-built reproduction of a Kalinago/Carib dug out canoe the *Couloura* and an archaeological example of a log canoe). The largest boat on display is Athneal Ollivierre's *Dart* which was purchased by the Bequia Heritage Trust in the early 1990s (Nicola Redway pers. comm; Ollivierre himself, 1921-2000, was one of the most famous of the recent Bequia whaler men and boatbuilders).

The Bequia whaleboat *Dart* differs from the standard Yankee whaler design in that it is more beamy in order to deal with the rougher seas on the windward side of the Grenadines (where the whales tended to gather). A higher prow kept waves from swamping what would be a heavily-laden boat in terms of crew (usually six) and equipment; Pyle reports (1998: 35) that when Ollivierre had *Dart* built in the late 1950s he specified that it should have more beam aft in order to keep her level when being towed by a harpooned whale. Double ended, to allow for easy beaching, it was also slightly smaller than the Yankee whaleboat (c. 25-29 feet LOA as opposed to 28-30 feet LOA; Fig. 9). The frame was made of local white cedar (*Tabebuia pallid*) whose natural curvature allowed for easy frame construction. A daggerboard was favoured (Pyle 1998: 32) as it improves the performance of the boat to windward (this is of simple wooden construction and is lifted in and out of position without use of blocks or lines).

## Figure 9

As with all boats built on Bequia until recently, construction was completely undertaken by eye and hand with no reference to plans of any sort. It could be rowed, but in many cases carried a spritsail rig. This is a choice dictated by the availability of local wood for spars; for larger schooners (Pyle 1998: 32) it became necessary for shipwrights to travel to Grenada in order to source suitable long trunks for masts and spars. Local smaller whaling boats carried a sprit fashioned from strong local bamboo which can be seen growing today to great lengths in areas of the island. Much of the original whaling equipment used by Ollivierre and his crew is still displayed in the boat; this material includes a steering oar with five pulling oars and five paddles, three harpoons, three lances and a flensing spade, tub and line, a dart gun and (perhaps the only concession to the comfort of the crew) a small urinal bottle fashioned from bamboo.

Another boat, superficially similar but constructed with a different task in mind is also on display. This is the St Vincent 'Blackfish' boat *Faith*, which was constructed on

Bequia at Pagets Farm in the early 1960s by local builders Leroy Maloney and Lansford Hazell, and used from the 1960s to the mid-1980s out of Barrouaille on the west coast of St Vincent. *Faith* differs from *Dart* in that she was designed to catch Blackfish (pilot whale; *Globecephalus melas*) rather than the larger humpbacks. Barrouaille was the focus of the St Vincentian Blackfish industry, and it relied heavily upon the expertise of the Bequia shipwrights to provide suitable boats. *Faith* is based upon the standard Yankee Whaler-Bequia whaler evolution; she measures 27 feet by 7 feet 6 inches on the beam (so is about 2 inches wider than *Dart*). The key difference here is that *Faith* is deeper than *Dart*, and the reason for this is that the Blackfish could be brought on board and flensed at sea, rather than needing to bring the carcass back for processing at Barrouaille (Herman Belmar pers. comm.).

The last of the whaling boats on display is a much smaller (11 feet 8 inch LOA, 4 feet 5 inch beam) double-bowed tender. This craft was built in the 1960s by local shipwright Bertram Wallace, who was the grandson of William Thomas 'Old Bill' Wallace. Construction is, as with the larger boats, white cedar and spruce. This boat was designed as a multi-purposes inshore fishing craft, but during the whaling season had a very specific function. This small boat was crewed by children, who were employed to keep sharks away from the flensing operations. When killed, the shark livers were fried and eaten as a great delicacy (Fig. 10).

## Figure 10

Arguably the most famous and oldest of the Bequia whaling boats is not to be found in the Museum, but along the shore at Admiralty Bay by the church at Port Elizabeth: the *Iron Duke*. This was the boat originally used by 'Old Bill' Wallace in the 1860s, and most closely conforms to the Yankee form of boat (although it has been greatly restored, and as such analysis of the hull does not permit meaningful comparison with the later *Dart*). The maritime material culture of the Bequia whaling tradition clearly indicates a local degree of creolisation and adaptation in approach to the taking of whales. Local adaptation and innovation is also evidenced in the disposition and design of the shore processing stations, the tryworks. Archaeological survey in 2013 and 2014 demonstrates the development of these sites over the last 150 or so years.

The largest concentration of tryworks historically is found on Friendship Bay on the south of the island. Unlike Yankee whalers, which were integrated factory ships designed to cope with on board trying and flensing, Bequia whaling (like its counterpart in Speightstown) was a shore-based activity, although in Bequia jetties were not used. The double-ended design of the whaling boats permitted both rapid launching and their beaching or landing on a slipway. The modern centre of whaling is located in a small concrete shed-slipway complex on the islet of Semple Cay just off the beach at Friendship Bay. This is a modern complex developed from an older site, with a small series of sheds, stores and a slipway (Fig. 11). Before Semple Cay was developed, the main focus of whaling was on the island of Petit Nevis which is located c. 1 km to the south of La Pompe.

### **Figure 11**

This whaling works on Petit Nevis, dating from the late 19th century was still in use into the 1960s and was relatively intact until quite recently. As with many of the other tryworks, it is situated on the lee of the island so is well sheltered. A good tide runs into the islet allowing for constant flushing through of debris (Ward 1995: 29; Herman Belmar per.comm). 'Cutting in' or butchering took place as much as possible in the water to keep the carcass cool, and a large adult whale would take c. two days to be fully butchered. Slabs of blubber thus flensed were taken to be rendered down in the two large copper pots (seen *in situ* by ward in 1995: 32 but now dispersed across the wider area) which hold about 375 gallons of oil, or 15 standard barrels (for purposes of comparison, an average humpback would be expected to yield c 1000 gallons of oil, or 40 barrels of oil; Ward 1995: 35). Flesh was in demand for food; the flesh would have been shared initially among the crew with the owner (frequently the captain of the boat) gaining the largest share; the harpooner the next largest. Meat was often salted prior to export but in the 1960s the French introduced refrigerated boats to enable greater possibilities for preservation.

### **Figure 12**

The Petit Nevis complex comprises two concrete slipways and three structures which were used to store equipment, fuel and trying pots (the boats themselves would not have been based here, but close to the whalers' homes at Pagets Farm, La Pompe or Friendship Bay). The furnaces that supported the trying pots are still visible here and fairly well preserved. Built of brick, with lining or render and a substructure of rough stone, the

complex takes the form of two conjoined circular structures, with with airholes set in the structure to allow through flow of air. The bricks carry the name 'Ramsay' and were therefore fabricated by the George Heppel Ramsay firebrick company of Hebburn, Newcastle (Northumberland, England; Penmorfa 2016). This factory closed in 1925, so the bricks themselves date from before this period. As they are dedicated firebricks, it is unlikely that they came to Bequia as ship's ballast. They were therefore specially imported, or reused from similar furnace constructions from sugar boiling houses on the declining estates, or sourced from other whale works (Fig. 13).

### **Figure 13**

The Petit Nevis works were the first 'industrial scale' whaling works on Bequia, and bridged the gap between the modern works at Semple Cay, and the smaller and more basic mid-19<sup>th</sup>-century tryworks associated with the shore settlements around Friendship Bay. Herman Belmar was able to tell us that of all the locations of shore-based tryworks mapped in Ward, only one, dating to the 1860s, remained relatively intact. This site could perhaps be identified as the site of Wallace's original try works as it is in the correct area according to historical accounts. This was located to the west of the Boat Museum on an overgrown stretch of beach and to the north of the more recent try works at St Hilaire which have completely disappeared. In 2015 the archaeological team cleaned, excavated and planned this feature. Ward (1995: 4) reports her source, Wallace's grandson Bertram (d. 1990) as describing this try works on the western side of the bay as being "a wall structure with white lime and sand leaving room for the two coppers to boil oil, and the receiving copper next side to receive the oil after it boil and overflow". Initial survey in 2014 located a low mound of material which retained some shape; this was fully exposed and excavated in 2015. The shape is suggestive of the similar double-tryworks on Petit Nevis, but is smaller. Bricks lined the furnace area, and small ventilation holes were noted. Material culture associated with the inside of the furnace consisted of a large iron pot-stand, roughly fired red roof tile, 19<sup>th</sup> century bottle glass and fragments of creamware (Fig. 14). This site probably represents the earliest archaeological evidence for whaling in the Caribbean.

### **Figure 14**

For such a small island, Bequia clearly has had a great impact on the maritime culture of the Caribbean. Whaling is very much still a living tradition here, although now the accent is upon conservation and the development of whale watching (us.whales.org 2014; Hoyt and Hvenegaard 2002). Problematic as this history may be to many, we should not of course ignore this rich maritime heritage. We need to recognise the wider setting of the practice, and one can do no better than quote the words of Natalie Ward in this regard: 'Bequians are the custodians of the historic land-based whaling industry — a living museum of pre-modern whaling technique. Bequia whaling is a fragment of global maritime history' Ward 1995: 50). Although one could argue with Ward's sentiment that it is somehow 'pre-modern' (it is not, it is, as is stressed continually here a successful localised and creolized cultural adaptation), whaling in Bequia does have wider maritime contextual resonance.

### **Conclusion: Caribbean whaling past, present and future**

As Romero and Cresswell suggest (2005), the development of whaling in the Caribbean was informed in the main by external factors: the nautical culture was adapted from Yankee Whalers, and the choice of target species by British colonial taste. Shore whaling techniques which developed from these external factors are therefore good examples of localised 'creolising' cultural adaptations within the context of changing post-Emancipation economic and social contexts in Caribbean island communities. This form of 'aboriginal' (even if introduced by outsiders) rather than commercial whaling (cf Reeves 1982) has its own distinctive character. There is also a great deal of variation among the different 'aboriginal' approaches to Caribbean whaling which have distinctive archaeological implications.

Within the south-eastern Caribbean, whaling centres of varying size and scale were established in Barbados, St Vincent and the Grenadines and also at Pigeon Island St Lucia, Glover Island Grenada and Prince Rupert's Bay, Cabrits, Dominica. At Speightstown, whaling was organised among established mercantile families and boat builders, and to some extent was undertaken on a simpler, less industrialised scale, and was a rather marginal activity. On the small island of Bequia, the industry was far more organised, based on a number of centres and very closely attached culturally to the tradition of the Yankee Whaler. It was an activity with huge social and cultural significance to the entire island (as witnessed by the development of the new maritime museum). In Grenada, at Glover Island, the Norwegians introduced a more organised Arctic scale of

whaling, using in some cases steam launches which cruised the seas looking for prey rather than relying upon lookouts. They also developed a factory-scale of processing works (the remains of large and extensive buildings can be seen on Glover island today; Romero and Hayford 2000). The small whaling station at Pigeon Island on St Lucia was only ever part of a marginal activity conducted entirely by American ships and lasted for the first half of the 20<sup>th</sup> century, until whaling was banned under legislation in 1925 (Philpot 203: 104; Romero 2012). Similarly, the base at Cabritts on the north-western coast of Dominica was an American operation with little shore-based infrastructure and little socio-cultural or economic effect upon the island populations. Trinidad, alone of all the Caribbean islands, possessed its own idiosyncratic whaling culture based very much on an informal shore-based strategy (Romero et al 2003), and seemingly owing little to outside influence.

It is hoped that this paper has demonstrated the potential for more archaeological research into this understudied area of maritime cultural history, and perhaps broadened the conception of cultural creolisation and post-Emancipation cultural study. Boats are artefacts, and as such can be seen as being parts of a wider and dynamic material culture system. Localised, indigenous responses and contingencies can be recognised within this maritime material culture organisation, and the institution of Caribbean whaling, in its varied archaeologically-visible forms, played a large part in the transition from predominantly slave-based, plantation societies to free island economies. Maritime culture gave hitherto oppressed peoples the opportunity to express themselves culturally, economically and socially. In marginal islands such as Bequia, fishing, whaling and boatbuilding became important modes of production and consumption, more than just a way of life: 'I pledge my life to the people of Bequia. Every day I go out and if I do meet a whale I fight to strike it' (Athneal Ollivierre, Bequia whaler, cited by Ward 1995: 43).

## **Acknowledgements**

Research for this paper was supported by the University of Winchester, and ethical clearance for interviewing human subjects was given by the University Research Ethics Committee. In Barbados the kind help, assistance and input of the following individuals is greatly acknowledged: Clement Armstrong, Mike Bowey, Dan Carsten, Alissandra Cummins, Kevin Farmer, Adrian Roache, Karl Watson and Paul Wragg. On Bequia, Nicola Redway, Pat Mitchell and Herman Belmar were great sources of help and information

about the whaling industry and Bequia maritime culture in general. Mr Herman Belmar of the Bequia Heritage Trust in particular generously gave of his time in interviews in 2014 and 2015 which formed the basis for much of the Bequia material described herein, and facilitated boat transportation for the team, as well as allowing us complete access to the collections of the Bequia Boat Museum. The 2015 University of Winchester Bequia archaeological team of Harvey Doolan, Dan Heale, Alice McGahon, Adela Murray-Brown and Alex Rowbottom contributed towards the survey, excavation and planning of the material described herein. Their help is gratefully appreciated.

## **Note**

Recording of the boat hulls in the Bequia Boat Museum was undertaken by the student team from Winchester as part of a training exercise in boat survey. Douglas Pyle had produced an excellent lines drawing of the *Dart* in 1973. (1988: 36); the drawing published herein was produced in a museums context rather than on the beach as Pyle had to do, so there may inevitably be some small variance between the end results. Given the amount of work the team put in, it was thought appropriate to publish 'our' version, which it is hoped in no way detracts from Pyle's original and excellent work, which saved for posterity a vast amount of information which would otherwise have been lost. Although the author has never met him or corresponded with him, this paper is dedicated to Douglas Pyle, a pioneer who showed us the way.

## Bibliography

Adams, J., 1971, Historical Geography of Whaling in Bequia Island, West Indies. *Caribbean Studies* **11/3**, 55-74.

Agorsah, K., 1993, Archaeology and resistance history join the Caribbean, *African Archaeological Review* **11**, 175-195.

Animal Welfare Institute, 2012, *Humpback Whaling in the Grenadines: the IWC's failed responsibility*. Unpublished Report available online at:  
<https://www.awionline.org/sites/default/files/uploads/documents/SVGReport072012.pdf>  
(accessed 6th January 2016)

Armstrong, D., 2010, Degrees of freedom in the Caribbean: archaeological explorations of transitions from slavery, *Antiquity* **84/323**, 146-160.

Armstrong, D. and Hauser, M., 2009, A Sea of Diversity: historical archaeology in the Caribbean, in T. Majewski and D Gaimster (eds.) *International Handbook of Historical Archaeology*, 583-609. New York.

Barkham, S., 1984, The Basque whaling establishments in Labrador 1536-1632: a summary, *Arctic* **37/4**, 515-519.

Basberg, B., 2004, *The Shore Whaling Stations at South Georgia: a study in Antarctic industrial archaeology* (No. 30). Oslo.

Beckles, H., 2002, Creolisation in action: the slave labour elite and anti-slavery in Barbados, in V. Shepherd and G. Richards (eds.), *Questioning Creole: creolisation discourses in Caribbean culture*, 181-201. Kingston, Jamaica.

Bolster, J., 1998. *Black Jacks: African-American Seamen in the Age of Sail*. Cambridge, Mass.

Brown, H., 1942, The sea fisheries of Barbados: a report, in F. Stockdale (ed.) *Development and Welfare in the West Indies 1940-1942*, 1-18. London.



Carney, J., 2003, African traditional plant knowledge in the circum-Caribbean region, *Journal of Ethnobiology* **23/2**, 167-185.

Chenoweth, J., 2011, *Religion, Archaeology and Social Relations: a study of the practice of Quakerism and Caribbean slavery in the Eighteenth-Century British Virgin Islands*. Unpublished PhD Dissertation, University of California, Berkeley.

Coutts, P., 1976, An approach to the investigation of colonial settlement patterns: Whaling in Southern New Zealand, *World Archaeology* **7**, 291–305.

Cresswell, J., 2002, *The Exploitative History and Present Status of Marine mammals in Barbados, WI*. Unpublished Honours Paper, Macalester College Department of Environmental Studies, St Paul, Minnesota.

Curet, L. and Hauser, M. (eds.), 2011, *Islands at the Crossroads: migration, seafaring and interaction in the Caribbean*. Tuscaloosa.

Deagan, K., 1988, The Archaeology of the Spanish contact period in the Caribbean, *Journal of World Prehistory* **2/2**, 187-233.

Delle, J., 1999, Landscapes of class negotiation on coffee plantations in the Blue Mountains of Jamaica, *Historical Archaeology* **33/1**, 136-158.

Delle, J., 2000, The material and cognitive dimensions of creolization in nineteenth-century Jamaica, *Historical Archaeology* **34/3**, 56-72.

Douglas, M; Smol, J; Savelle, J. and Blais, J., 2004, Prehistoric Inuit whalers affected Arctic freshwater ecosystems, *Proceedings of the National Academy of Sciences USA* **101/6**, 1613-1617.

Duran, L., 2008, Whaleboats, try pots and blubber: underwater archaeology in the study of the whaling station on the island of Bom Abrigo, southern coast, State of Sao Paulo, *Revista de Arqueología Americana* **26**, 223-240.

Ezratty, H., 2002, *500 years in the Jewish Caribbean: the Spanish and Portuguese Jews in the West Indies*. Baltimore.

Ewen, C. and Deagan, K., 1988, The short unhappy life of a maverick Caribbean colony, *Archaeology*, **July 1988**, 41-47.

Farnsworth, P., 2001, (ed.) *Island Lives: Historical Archaeologies of the Caribbean*. Tuscaloosa.

Fellowes, K. and Delle, J. 2014, Marronage and the dialectics of spatial sovereignty in colonial Jamaica, in P. Funari and C. Orser (eds.) *Current Perspectives on the Archaeology of African Slavery in Jamaica*, 117-132, New York.

Finneran, N., 2012, Community Archaeology at Speightstown, Barbados 2010-2012: retrospect and prospect, *Journal of the Barbados Museum and Historical Society* **58**, 110-136.

Finneran, N., 2013, 'This islande is inhabited with all sortes' Creolising the townscape: towards an archaeological biography of Speightstown Barbados, *Antiquaries Journal* **93**, 319-351.

Gibbs, M., 2005, The archaeology of subsistence on the maritime frontier: faunal analysis of the Cheyne Beach whaling station 1845-1877, *Australasian Historical Archaeology* **23**, 115-122.

Grier, C. 1999, The organization of production in prehistoric Thule whaling societies of the central Canadian Arctic, *Canadian Journal of Archaeology/Journal Canadien d'Archéologie* **23/1**, 11-28.

Hamilton, D., 2006, Pirates and Merchants: Port Royal, Jamaica, in C. Ewen (ed.) *X Marks the Spot : the Archaeology of Piracy*, 13-30, Gainesville.

Handler, J., 1997, An African-Type Healer-Diviner and his grave goods: a burial from a plantation slave cemetery in Barbados, West Indies, *International Journal of Historical Archaeology* **1/2**, 91-130.

Handler, J., 2009, The middle passage and the material culture of captive Africans, *Slavery and Abolition* **30/1**, 1-26.

Harris, L., 2014, *Patroons and Periaguas: enslaved watermen and watercraft of the lowcountry*. Columbia, SC.

Haviser, J., 2001, Historical Archaeology in the Netherlands Antilles and Aruba, in P. Farnsworth (ed.), *Island Lives: Historical Archaeologies of the Caribbean*, pp. 60-81, Tuscaloosa.

Higman, B., 2008, *Jamaican Food: History, Biology, Culture*. Kingston, Jamaica.

Hoffman, C., Mol, A., Hoogland, M. and Royas, R., 2014, Stage of encounters: migration, mobility and interaction in the pre-colonial and early colonial Caribbean, *World Archaeology* **46/4**, 590-609.

Hoffman, C., Bright, A., Boomert, A., and Knippenberg, S., 2007, Island Rhythms: the web of social relationships and interaction networks in the Lesser Antillean Archipelago between 400 BC and 1492 AD, *Latin American Antiquity* **18/3**, 243-268.

Horsford, J., 2001, *From the Caribbean to the Atlantic: a brief history of the Barbados Railway*. Alcester.

Hoyt, E. and Hvenegaard, G., 2002, A review of whale watching and whaling with applications in the Caribbean, *Coastal Management* **30**, 381-399.

Kalland, A., 1993, Management by totemization: whale symbolism and the anti-whaling campaign, *Arctic* **46/2**, 124-133.

Kannada, S., 2006, *Environmental history and current practices of marine mammal exploitation in St Vincent and the Grenadines*. Unpub MA Thesis, Arkansas State University.

Keegan, W., 1986, The ecology of Lucayan Arawak fishing practices, *American Antiquity* **51/4**, 816-825.

Keegan, W., Fitzpatrick, S. Sealey, K., Lefebvre, M. and Sinelli, P., 2008, The role of small islands in marine subsistence strategies: case studies from the Caribbean, *Human Ecology* **36/5**, 635-654.

Kelly, K., 2009, Where is the Caribbean? French colonial archaeology in the English lake, *International Journal of Historic Archaeology* **13/1**, 80-93.

Kelly, K., Hauser, M. and Armstrong, D., 2011, Identity and opportunity in post-slavery Jamaica. In J. Delle, M. Hauser and D. Armstrong (eds.) *Out of Many, One People: Historical Archaeology in Jamaica*, 243-257. Tuscaloosa.

Lawrence, S., and Staniforth, M. (eds.) 1998, *The Archaeology of Whaling in Southern Australia and New Zealand*. Canberra.

Leshikar-Denton, M. and Erreguerena, P. 2008, *Underwater and Maritime Archaeology in Latin America and the Caribbean*. Walnut Creek.

Leshikar-Denton, M., 2011, Caribbean maritime archaeology, in B.Ford, D. Hamilton and A. Catsambis (eds.) *Oxford Handbook of Maritime Archaeology*. 629-659, Oxford.

Martin, A., Katona, S., Matilla, D., Hembree, D. and Waters, T., 1984, Migration of humpback whales between the Caribbean and Iceland, *Journal of Mammalogy* **65/2**, 330-333.

Mason, O., 1998, The contest between the Ipiutak, Old Bering Sea, and Birnirk polities and the origin of whaling during the first millennium AD along the Bering Straits, *Journal of Anthropological Archaeology* **17/3**, 240-325.

Mcllroy, J., 1986, Bathers Bay Whaling Station, Fremantle, Western Australia, *The Australian Journal of Historical Archaeology* **4**, 43-50.

McNeary, R., 2007, 'Guns, harpoons, lances, casks and every [necessary] article': An account of the history and archaeology of an eighteenth-century shore-based whaling and basking shark fishery in Donegal Bay, *Historical Archaeology* **41/3**, 115-124.

Meniketti, M., 2012, Now they are gone: documenting the last sailing lighter of Nevis, West Indies, *International Journal of Nautical Archaeology* **41/1**, 134-147.

Meyers, D., 1999, West African tradition in the decoration of colonial Jamaican folk pottery, *International Journal of Historical Archaeology* **3/4**, 1-24.

Moore, D., and Malcolm, C., 2008, sSeventeenth century vehicle of the middle passage: historical and archaeological investigations on the Henrietta Marie shipwreck site, *International Journal of Historical Archaeology* **12/1**, 20-38.

Pearson, M., 1983, The technology of whaling in Australian waters in the 19<sup>th</sup> century, *Australian Journal of Historical Archaeology* **1**, 40-54.

Papadopoulos, J. and Ruscillo, D., 2002, A Ketos in Early Athens: An Archaeology of Whales and Sea Monsters in the Greek World, *American Journal of Archaeology* **106/ 2**, 187-227.

Penmorfa, 2016, Old bricks: history at your feet, available online at: <http://www.penmorfa.com/bricks/england19.html> (accessed 20th January 2016).

Philpot, D., 2003, *St Lucia: Landmark Visitors Guide*. Ashbourne, Derbyshire.

Price, N., 1984, *Behind the Planters Back: Lower Class Responses to Marginality in Bequia Island, St Vincent*. London.

Price, R., 1966, Caribbean fishing and fishermen: a historical sketch', *American Anthropologist* **68/6**, 1363-1383.

Price, W., 1985, Whaling in the Caribbean: historical perspective and update', *Report of the International Whaling Committee* **35**, 413-420.

Prickett, N., 2002, *The Archaeology of New Zealand Shore Whaling*. Wellington.

Putney, M., 1987, *Black sailors: Afro-American Merchant Seamen and Whalemen prior to the Civil War*. Westport, CT.

Pyle, D., 1998, *Clean Sweet Wind: Sailing with the Last Boatmakers of the Caribbean*. New York.

Reeves, R., 1988, Exploitation of cetaceans in St Lucia, Lesser Antilles, 1987' *Report of the International Whaling Commission* **38**, 445-457.

Reeves, R. 2002, The origins and character of aboriginal subsistence whaling, *Mammal Review* **32/2**, 71-106.

Reid, B., 2009, *Myths and Realities of Caribbean History*. Tuscaloosa.

Reilly, M., 2014, *At the Margins of the Plantation: alternative modernities and the archaeology of the 'poor whites' of Barbados*. Unpublished PhD Dissertation, Syracuse University.

Romero, A., 2006, More private gain than good': whale and ambergris exploitation in seventeenth century Bermuda, *Bermuda Journal of Archaeology and Maritime History* **17** 5-27.

Romero, A., 2009, Chasing fools' gold: whaling in 19th and 20th century Bermuda, *Bermuda Journal of Archaeology and Maritime History* **19**, 141-163.

Romero, A., 2012, Yankee Whaling in the Caribbean Basin: Its Impact in a Historical Context, in A. Romero and E. Keith (eds.) *New Approaches to the Study of Marine Mammals*, 223-232, Rijeka, Croatia.

Romero, A. and Hayford, K., 2000, Past and present utilisation of marine mammals in Grenada, West Indies, *Journal of Cetacean Research and Management* **2/3**, 223-226.

- Romero, A., Baker, R., Creswell, J., Singh, A., McKie, M., and Manna, M., 2002, Environmental History of marine mammal exploitation in Trinidad and Tobago, W I and its ecological impact, *Environment and History* **8/3**, 255-274.
- Romero, A. and Creswell, J., 2005, In the land of the mermaid: how culture, not ecology, influenced marine mammal exploitation in the southeastern Caribbean, in A. Romero and S. West (eds.) *Environmental Issues in Latin America and the Caribbean*, 3-30. New York.
- Romero, A. and Creswell, J., 2010, Deplete locally, impact globally: environmental history of shore-whaling in Barbados, *The Open Conservation Biology Journal* **4**, 19-27.
- Sadler, N., 2008, The Trouvadore project: search for a slave ship and its cultural importance, *International Journal of Historical Archaeology* **12/1**, 53-70.
- Seetah, K., 2015, The archaeology of Mauritius', *Antiquity* **89/346**: 922-939.
- Shoemaker, N., 2005, Whale meat in American history, *Environmental History* **10/2**, 269-294.
- Singleton, T., 2001, Slavery and spatial dialectics on Cuban coffee plantations, *World Archaeology* **33/1**, 98-114.
- Smith, T. and Weir, C., 1999, Where are the whalers?: The whaling wreck site potential of New South Wales, *Bulletin of the Australian Institute for Maritime Archaeology*, **23**, 40-45.
- Tuck, J. and Grenier, R., 1981, A 16th-century Basque whaling station in Labrador, *Scientific American* **245/5**, 180-190.
- US.Whales.Org, 2014, Caribbean whaler turns whale watcher, available online at: <http://us.whales.org/blog/2014/04/caribbean-whaler-turns-whale-watcher> (accessed 20th January 2016).
- Vlach, J., 1976, The shotgun house: an African architectural legacy, *Pioneer America* **8/1**, 47-56.

Ward, N., 1995, *Blows Mon, Blows. A History of Bequia Whaling*. Woods Hole Mass.

Watters, D., 2001, Historical archaeology in the British Caribbean, in P. Farnsworth (ed.) *Island Lives: Historical Archaeologies of the Caribbean*, 82-102. Tuscaloosa.

Weaver, D., 2002, English Harbour, Antigua: the rise and fall of a strategic military site, *Caribbean Quarterly* **48/4**, 1-11.

Whalingmuseum.org 2016, The Height(s) of Yankee whaling, available online at: [www.whalingmuseum.org/learn/whalingheights](http://www.whalingmuseum.org/learn/whalingheights) (accessed 6th January 2016)

Whitridge, P., 2004, Landscapes, houses, bodies, things: "Place" and the archaeology of Inuit imaginaries, *Journal of Archaeological Method and Theory* **11/2**, 213-250.

Wilkie, L., 2000, Culture bought: evidence of creolisation in the consumer goods of an enslaved Bahamian family, *Historical Archaeology* **34/3**, 10-26.

Wing, E., 2000, Economy and subsistence 1: animal remains from sites on Barbados and Tortola, in P Drewett (ed.) *Prehistoric Settlements in the Caribbean*. 147-153. London:



## Captions for illustrations

Figure one: map of the SE Caribbean region (Windwards) indicating locations discussed in the text

Figure 2 Copper Trypot on display at Barbados Museum 2013.

Figure 3 Map of Speightstown 1898 and rectified with modern satellite imagery

Figure 4: 1919 photograph of whaling jetties (courtesy Arlington House Museum); aerial view looking east of the remaining whaling jetties c. 1940s (courtesy Karl Watson)

Figure 5 remains of Challenors Jetty looking westwards. The alignment of the structure conforms to the aerial photo Fig. 4 above. Scale is one metre.

Figure 6 remains of the gears from whale boat davit from the end of Archers Jetty at c. 5 metres depth in Speightstown Bay. The gear wheel is approximately 20 centimetres in diameter.

Figure 7 map of Bequia and surrounding waters showing key sites mentioned in the text

Figure 8 Herman Belmar explaining the configuration of the bow on the whaleboat *Dart*, note the knee chock and pegs which keep the manila line running through the lead, or bow chock, and prevents uncontrolled movement of the line when under tension.

Figure 9 Lines of the whale boat *Dart* (l) and Blackfish boat *Faith* (r). *Faith* is slightly beamier and has more depth in the hull.

Figure 10 Bequia tender. Approximate distance bow to stern 3.5 metres; beam 1.3 metres.

Figure 11 The modern whaling works at Semple Cay, Bequia. Behind are the islets of Batowaye and Balliceaux. Many whales were caught in that channel.

Figure 12 Plan of Petit Nevis whaling station

Figure 13 Trying furnace, Petit Nevis. Scale 1 metre.

Figure 14 Shore tryworks at Friendship Bay; before excavation in 2014 (a) and same view of furnace after excavation (b) in 2015; plan (c)