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REPORT

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Rescue recovery of the earliest known burials from Barbuda, West Indies (ca. 3560–3220 cal years BP)

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ABSTRACT

The majority of archaeological sites in the Caribbean are under threat from various natural and cultural processes. This is particularly true for the smaller and more vulnerable islands in the Lesser Antilles. Here we report on the 2001 rescue recovery of human skeletal remains that were observed to be actively eroding into the sea at Boiling Rock, an Archaic Age site along the southeast coast of Barbuda. Analysis of the remains, representing three individuals, included an osteological inventory, stable isotope analysis to infer paleodiet, and direct radiocarbon dating. While excavation and recording were expedited due to the need for salvaging the skeletal remains and associated archaeological material, the results are an important contribution to the early stages of settlement on the island. This includes adding to the inventory of known Archaic Age sites on Barbuda (from six to seven), providing the only directly dated Archaic individual on the island going back to 3560–3220 cal years BP, isotopic analysis revealing a reliance on endemic marine protein and terrestrial C_3 carbohydrates, and the description of grave goods, which is generally rare for burials of this age.

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Skeletal remains; salvage archaeology; Archaic; Lesser Antilles; Caribbean

Introduction

Archaeological sites in the Caribbean are under threat from a host of natural and cultural processes, ranging from infrastructure development, tourism, sand mining, tsunamis, earthquakes, hurricanes, and tidal action (Bain et al. 2018; Boger, Perdikaris, and Rivera-Collazo 2019; Fitzpatrick 2012; Fitzpatrick, Kappers, and Kaye 2006; Rivera-Collazo 2020). In 2001, a team led by one of the authors (SH) and students from Central Washington University (CWU), conducted a rescue excavation of human burials at the Boiling Rock site on the southernmost tip of Barbuda in the northern Lesser Antilles. Here, large waves had actively eroded and reshaped the raised beach rock and dunes that form the spit-like feature named Spanish Point (Figure 1). The Boiling Rock burials were located approximately 10 m from the high tide line where waves break over

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Figure 1. (A) Regional map showing position of the Caribbean within the Americas; (B) the Caribbean; (C) inset of Barbuda and location of Spanish Point, which island lore attributes to an early Spanish shipwreck and small stone landmark; (D) southeastern Barbuda showing the location and extent of the Boiling Rock Site along with other nearby sites and features mentioned in the text.

and up through 1–2 m high coral and beach rock faces. Storm generated waves have continually eroded the higher coral sand beach, dunes, as well as exposed the deeper orange clay-like subsoil. Here we provide a summary report on the recovery, dating, and analysis of these remains, contextualize these results for Barbuda, and then compare them with what is observed for other similarly aged burials in the Caribbean.

Background

The first arrival of humans in the Caribbean initiates what is generally referred to as the Archaic Age (see chapters in Hofman and Antczak 2019). This population dispersal likely originated from somewhere along the South American littoral as evidenced by the settlement of Trinidad around 8000 years ago. However, even today the island is close to the mainland and can be reached at two different points that are less than 20 km away and was even closer or connected during the late Pleistocene/early Holocene due to lower sea levels. For the Antillean chain to the north, colonization took place at least two thousand years later when a scattering of islands across the region were reached between ca. 5500–2500 years ago, including those in both the Greater and Lesser Antilles (Napolitano et al. 2019).

On most of the smaller islands, Archaic Age sites are relatively few in number and often found along the coast with shell midden deposits (Fitzpatrick 2015; Hofman and Antczak 2019; Keegan and Hofman 2017). The island of Antigua is one exception where dozens of Archaic sites have been found, largely related to the presence of chert ("Long Island flint"). This material is frequently seen on other islands in the northern Lesser Antilles and was probably obtained both directly and through exchange between different groups (Davis 1993). Once considered to be foragers who primarily used shell and stone tools for harvesting locally available marine and some terrestrial resources, archaeological evidence demonstrates that Archaic people were cultivating plants and, in some cases, selectively targeting specific animals such as birds and land crabs (Hofman, Bright, and Hoogland 2006). Research suggests that they may have also produced pottery (Keegan 2006). After 2500 BP a new influx of ceramic-making horticultural peoples known as Saladoid migrate into the region, occupying much of the Lesser Antilles and Puerto Rico over the course of the next millennium (Keegan and Hofman 2017).

On Barbuda, nearly 70 archaeological sites have been identified thus far with the majority dating to the Ceramic Age and seven to the Archaic (e.g., see Bain et al. 2018; Rousseau et al. 2017; Watters 1980, 2001; Watters, Donahue, and Stuckenrath 1992). Most of the latter are situated along the southern coast near the Strombus Line and include not only this distinctive feature (described below), but the River Site, Cattle Field, Paradise 4, Paradise 5, Burton's Field, and the newly reported Boiling Rock site discussed here, the only known Archaic Age site on the island with human remains.

Relatively few Archaic Age burials have been discovered in the region compared to later Ceramic Age ones (i.e., post-2500 BP), with the vast majority being found in the Greater Antilles and on islands skirting the margins of northern South America. In the Greater Antilles, the site of Canímar Abajo, located on the northern coast of Cuba, contains evidence for two discrete periods of burial activity separated by a shell midden. The older cemetery component, which dates to 3330–2750 cal years BP, consists of more than 50 burials (Roksandic et al. 2015). A number of sites on Puerto Rico, including Angostura, Maruca, and Puerto Ferro, have also yielded evidence for Archaic period interments (Crespo-Torres, Mickleburgh, and Rojas 2013). In the southern Caribbean, Archaic burial sites have been identified on Aruba and Curaçao: the Malmok cemetery site, which contains more than 60 burials and burial clusters; Canashitu, a rockshelter found to contain five individuals (including a cluster interpreted as a family group); and three individuals from the St. Michielsburg site (Tacoma 1991; Versteeg 1991). Additionally, a single burial was recovered in the 1970s from Banwari Trace on Trinidad, which is the oldest known Caribbean site, though the remains have never been directly dated (Tankersley et al. 2018). In the Lesser Antilles, an Archaic burial was identified at the Morne Rita cave site on Marie-Galante (Fouéré et al. 2015). Recent ancient DNA studies have also included individuals dating to the Archaic period from many of these and other sites on Cuba, Puerto Rico, and Hispaniola. Results lend support for population origins in Central and northern South America with little evidence for admixture with Ceramic Age groups (Fernandes et al. 2021; Nägele et al. 2020). On Barbuda, human remains have been found eroding out of the sea cliff at the site of Seaview, and some burials have been found in association with dogs (Grouard, Perdikaris, and Debue 2013; Perdikaris et al. 2008). A single direct burial date of

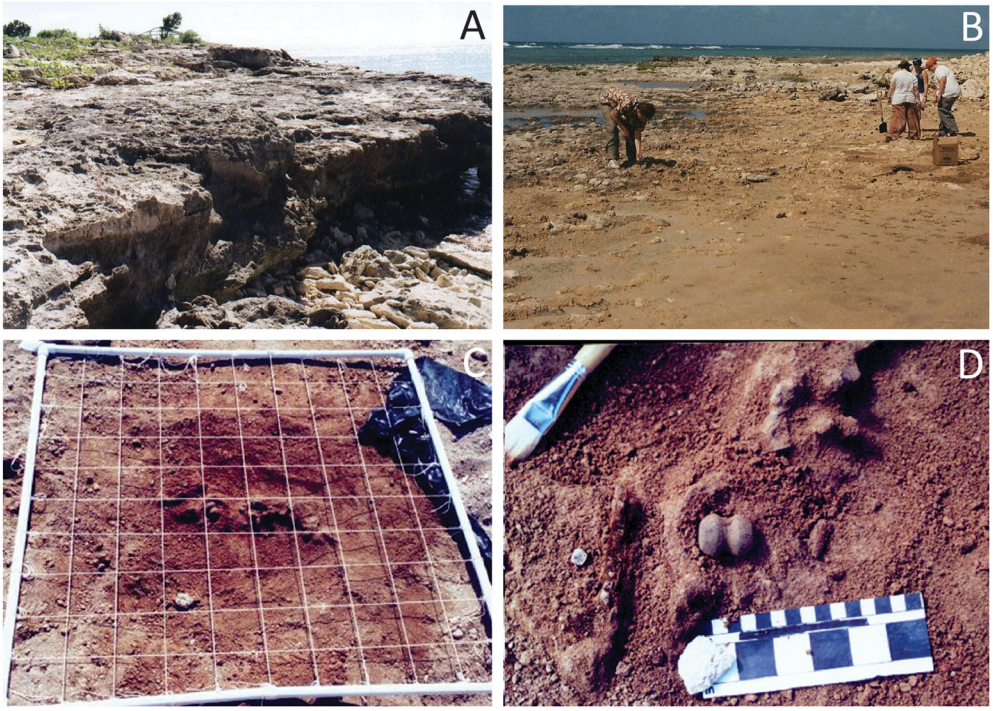

Figure 2. (A) Raised beach rock characterizing much of the outer coasts of south and southeast Barbuda; (B) location of Boiling Rock burial discovery (view southeast); (C) Quadrant One, Level Two with 10 × 10 cm grid overlaying area where Individual 1 was recovered; (D) close-up of possible stone amulet found in association with Individual 1.

1540 ± 30 years BP has been reported from Seaview, which, along with early Saladoid artifacts, places the site firmly in the Ceramic Age (Kendall et al. 2011).

The Spanish Point Site (BA2) and the Barbuda Strombus Line

Shell deposits, composed primarily of queen conch (*Aliger* [*Lobatus*; *Strombus*] *gigas*), are distributed along the upper margin of the coral sand beaches of the western shore of Spanish Point and the larger Gravenor Bay on Barbuda, which together are designated as the Spanish Point Site (BA2). Based on the density of shell deposits and their elevation above tidal beaches, it is thought that the site includes early Archaic (ca. pre-2500 years BP) occupations.

The shell deposits are similar to "shell middens" identified along portions of the Strombus Line, a nearly continuous stretch of *Strombus* (*Aliger*) shells found along the southwestern shore of the island's southern tip (Watters 1980; Watters, Donahue, and Stuckenrath 1992). This feature was once thought to be a natural feature but is definitively anthropogenic. The cultural affiliations and chronology of conch deposits identified along portions of the Strombus Line, however, have been debated (see discussion by Watters, Donahue, and Stuckenrath [1992] and more recent assessments by Friðriksson et al. [2011], Rousseau et al. [2017], and Vésteinsson [2011]). It is now suggested that Indigenous occupants were probably utilizing much of the shoreline, reefs,

and bays that ultimately contributed to the formation of these deposits from at least as early as 3800 BP (Rousseau et al. 2017).

Boiling Rock is a place name derived from the surf pounding on beach rock along the Atlantic side of the Spanish Point spit. Given that the human remains and associated shell are distant enough from the *Strombus* deposit on the inner shore (Gravenor Bay), and from the nearby Sufferers site (BA3), we believe they can be designated as a separate site (Figure 2). The Boiling Rock shell deposits found exposed in sand blow-outs are largely devoid of ceramics and the majority of shells show no obvious cultural modifications. This suggests that they may be associated with Archaic groups and/or represent a task-specific activity by peoples who inhabited the nearby Sufferers site (BA3), a known Ceramic Age (ca. post-2500 years BP) village that was largely destroyed by sand mining operations in the 1970s. However, the Boiling Rock vicinity had not been investigated in detail and the composition and chronology of deposits was unknown (see Figure 2[A,B]).

Recovery

In 2001, skeletal remains were observed eroding from the site by a tourist who shared photographs and a letter with a Barbuda resident, Mrs. Claire Frank, spouse of M.A. Frank, then Secretary of the Barbuda Council. Members of the Barbuda Council, who shared their letter of approval for the CWU field program, recommended recovery of the remains.

The remains were probably first exposed by waves generated during Hurricane George in 1998 and appeared to be partly disturbed by a backhoe, presumably for sand mining, before and/or after the hurricane. Such operations are common as part of grading and filling work needed to maintain the unpaved road to Spanish Point. Given the sensitive location and likelihood that future mining activities and storm surges would further destroy the site, a small team from CWU's summer field program conducted three systematic surface surveys—each a few days apart—of the area in which the remains were reported. The four-week long 2001 CWU summer field study, and two other 10-day visits (2000 and 2002), were an effort to build longer term collaborations with the Antigua-Barbuda Department of National Parks and the Barbuda Council. However, reorganization of CWU's international programs and reorientation of the anthropology graduate program impeded project development. As such, the sole documents resulting from the three visits consists of a description and evaluation of the historic Martello Tower at River Fort (Wilson 2006) and our current study. Fortunately, a City University of New York (CUNY) program developed under the leadership of Sophia Perdikaris and colleagues (2008) between 2000 and 2006 ultimately led to the formation of such an initiative.

During investigation in 2001, at least one backhoe spoil area remained; however, no bone or artifacts were observed on the surface of the spoil. The nearest conch shell debris was exposed in road tracks and blow-outs some 20–30 m to the south and west of the burial features. Because the human remains were highly fragmented, very friable, and of unknown cultural affiliation, it was decided in consultation with the Barbuda Council that they should be rescued rather than risk further destruction due to erosion

Table 1. Inventory of teeth, with provisional identification. Three teeth were used for analysis (dating, DNA, and isotopes).

Individual quadrant	ID #	Maxilla/Mandible	Tooth	Side
Ind. 1 Q1	1 of 1	Mandible	Molar #3	L
Individual 2				
2 (C14)	1 of 16	Mandible	Molar #3	R
2 (aDNA)	2 of 16	Maxilla	Molar #1	R
2	3 of 16	Mandible	Molar #3	L
2	4 of 16	Mandible	Molar #1	L
2	5 of 16	Maxilla	Molar #2	R
2	6 of 16	Maxilla	Premolar #2 Polish	L
2	7 of 16	Maxilla	Premolar #1 Polish	L
2	8 of 16	Maxilla	Molar #1 Polish	L
2	9 of 16	Maxilla	Molar #2 Polish	L
2	10 of 16	Mandible	Molar #2	R
2	11 of 16	Maxilla	Molar #3	L
2 (Isotope)	12 of 16	Mandible	Canine	L
2	13 of 16	Unknown	Molar Root	?
2	14 of 16	Mandible	Molar #2	L
2	15 of 16	Maxilla	Canine	L
2	16 of 16	Mandible	Molar #1	R
Individual 3				
2	1 of 2	Maxilla	Premolar #1	R
2	2 of 2	Maxilla	Molar #1	L

or exposure. Under the direction of Hackenberger, several students with forensic osteology experience helped to excavate and inventory the remains. Given various constraints, including the time required to travel to the remote site, recovery of the burials had to be expedited. A datum was placed near the burials and a 10 m square was established over the area. Excavations at the outline of the burial features indicated that the undisturbed portions of these features were quite shallow. Two 1×1 m units (Quadrant 1 and Quadrant 2) were placed over the observable human remains to provide provenience control (Figure 2[C]).

Sketches and photographs were taken as excavations proceeded over a period of three days. Recovered skeletal remains were numbered and bagged by unit along with assessment of their condition (e.g., whole vs. fragmented). Field inventories were completed in the temporary project lab using Buikstra and Ubelaker (1994) before leaving Barbuda. Due to the compaction of the clay-like sediments and the fragmentary nature of most remains, few whole elements could be neatly exposed and photographed. Once bagged and transported to the field lab, even the more consolidated bones continued to fragment due to exposure and poor preservation. The remains were labeled, packaged, and then stored in a museum collection room as had been arranged with the Barbuda Council. In his notes on human remains from the site, M. Brown (see Perdikaris et al. 2008) lists those that he identified from Boiling Rock (Q-I MNI 1 and Q2 MNI 2) and reports that they were discovered in a disused storage room. As part of his study, Brown rehoused and stored them with the CUNY collections in a new storage area provided by the Barbuda Council (Perdikaris et al. 2008).

Burial features

Quadrant One (Q1): This quadrant contained human skeletal remains, including fragments of several long bones, a cranium, mandible, and phalanges, belonging to a single

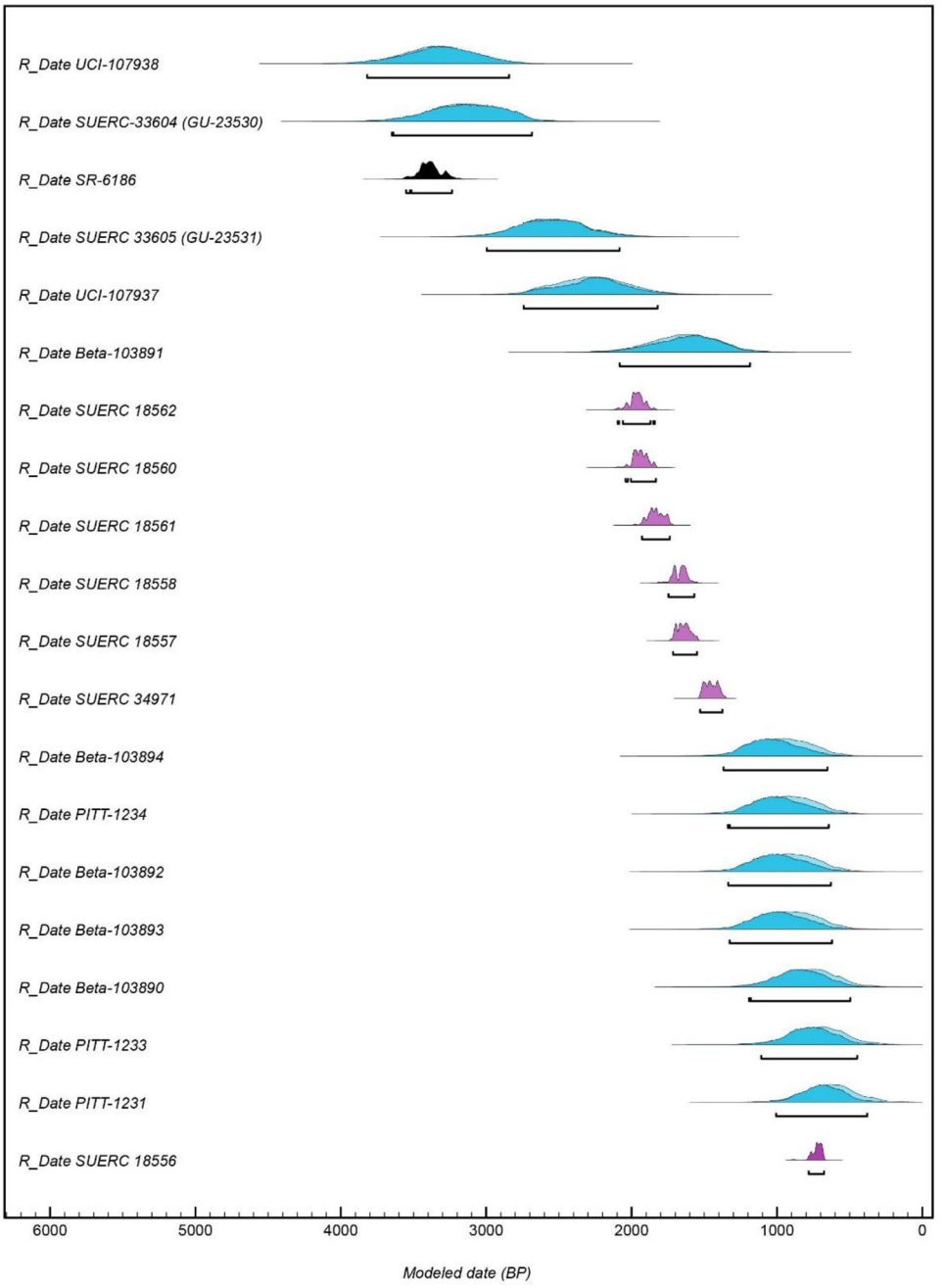

Figure 3. Calibrated radiocarbon dates from Barbuda. Note date reported here in black (SR-6186) with others from marine shell (blue) and charcoal (purple).

individual (Individual 1). Several teeth were also recovered near the skull. The long bones and cranial fragments were removed, revealing vertebrae (cervical and thoracic) and metatarsals. The remains were found to be fairly complete and arranged in anatomical position. The burial was flexed and the individual was laying on their right side

Table 2. Radiocarbon dates for Barbuda from reliable contexts (see Napolitano et al. 2019).

Site	Sample material	Sample type	Provenience	Lab number	Conventional radiocarbon age (BP)	Error	$\delta^{13}C$ (‰)	Reference
Boiling Rock	Tooth	Human bone/teeth	Individual 2	SR-6186	3265	35	−14.3	This publication
Burton's Field	*Strombus gigas*	Marine shell	Basal Cultural Deposit	UCI-107937	2565	20	—	Rousseau 2012; Vésteinsson 2011
Burton's Field	*Strombus gigas*	Marine shell	Highest Undisturbed Layer	UCI-107938	3430	15	—	Rousseau 2012; Vésteinsson 2011
Gravenor Bay Transect	*Strombus gigas*	Marine shell	BA- GB2	PITT-1234	1365	45	—	Watters 1999; Vésteinsson 2011
Gravenor Bay Transect	*Strombus gigas*	Marine shell	BA-GB1	PITT-1233	1135	50	—	Watters 1999; Vésteinsson 2011
Gravenor Bay Transect	*Strombus gigas*	Marine shell	BA-GB3	Beta-103890	1210	60	—	Watters 1999; Vésteinsson 2011
Gravenor Bay Transect	*Strombus gigas*	Marine shell	BA-GB4	Beta-103891	2030	60	—	Watters 1999; Vésteinsson 2011
Gravenor Bay Transect	*Strombus gigas*	Marine shell	BA-GB5	Beta-103892	1360	60	—	Watters 1999; Vésteinsson 2011
Gravenor Bay Transect	*Strombus gigas*	Marine shell	BA-GB6	Beta-103893	1350	60	—	Watters 1997, 196
Indian Town Trail (BA1)	Charcoal	Charcoal/charred material	BA01-C [2005]	SUERC 18556	820	35	−24.5	Kendall et al. 2011
River (JA1)	*Strombus gigas*	Marine shell	Area A; Context 005 ("Cultural Layer" c. 50–70 cm)	SUERC 33605 (GU-23531)	2790	35	+3.0	Friðriksson et al. 2011; Kendall et al. 2011; Rousseau 2011
River (JA1)	*Strombus gigas*	Marine shell	Area B; Context 103 (Lower Shell Midden, 27–35 cm)	SUERC-33604 (GU-23530)	3280	35	+4.0	Friðriksson et al. 2011; Kendall et al. 2011; Rousseau 2011
Seaview Erosion	Charcoal	Charcoal/charred material	BA016-A1 [804]	SUERC 18557	1755	35	−26.5	Kendall et al. 2011
Seaview Erosion	Charcoal	Charcoal/charred material	BA016-A2 861-863	SUERC 18558	1785	35	−25.3	Kendall et al. 2011
Seaview Erosion	Charcoal	Charcoal/charred material	Sample 154, sample 71	SUERC 34971	1565	35	−27.3	Kendall et al. 2011
Seaview Inland	Charcoal	Charcoal/charred material	BA016 TRB-5 posthole	SUERC 18560	2005	35	−25.7	Kendall et al. 2011
Seaview Inland	Charcoal	Charcoal/charred material	TRB-5 [1002] h = 78 cm	SUERC 18561	1920	35	−25.8	Kendall et al. 2011
Seaview Inland	Charcoal	Charcoal/charred material	Ba016-TRB-5 [1003] h = 232 cm	SUERC 18562	2025	35	−25.0	Kendall et al. 2011
Sufferers	*Strombus gigas*	Marine shell	BA3-RC1	PITT-1231	1050	30	—	Watters 1999; Vésteinsson 2011
Sufferers	*Strombus gigas*	Marine shell	BA3-RC2	Beta-103894	1400	60	—	Watters 1999; Vésteinsson 2011

Note that *Strombus gigas* is currently classified as *Aliger gigas*. Lab codes: SR: Stafford Research Laboratories, Inc.; UCI: University of California, Irvine; PITT: University of Pittsburgh; Beta: Beta Analytic; SUERC: Scottish Universities Research Center.

with the calotte facing south. A grooved hourglass-shaped stone that may have been an amulet was also found positioned underneath the skull near the atlas (Figure 2[D]). The position of this artifact suggests that the head and neck were most likely still in anatomical position at the time of burial.

Quadrant Two (Q2): Surface excavation of this second quadrant revealed another burial feature with the remains of two individuals. Each set of remains included long bones, cranial fragments, and teeth. Part of one individual (Individual 3) was recovered from the northeast corner of the quadrant. At the center of the quadrant, a second more complete set of remains (Individual 2) were buried in a flexed position laying on their right side (calotte facing south). The majority of the skeletal elements were found in anatomical position and likely represent a primary interment.

Age: All three of the individuals appear to have been between the ages of 15–35 based on observed fusion of long bone epiphyses (Buikstra and Ubelaker 1994). The crania were not well preserved, but most cranial sutures appeared open as they might for younger adult individuals (Buikstra and Ubelaker 1994). All of the teeth recovered were adult, some of which exhibited heavy wear. This tooth wear alone is not indicative of advanced age (ca. post-35 years of age) as attrition rates are known to reflect a combination of masticatory and non-masticatory activities (Littleton and Frohlich 1993; Milner and Larsen 1991; Molnar et al. 1972). Table 1 includes an inventory of the teeth with provisional identification. The majority of teeth (n = 16) are from Individual 2. It is notable that there is limited evidence of caries, obvious polish on premolars, significant wear and calculus on the molars, and an absence of incisors. The combination of low caries rates with heavier rates of wear is a pattern that has been observed during the Early Ceramic Age across the Caribbean and is thought to reflect a diet lower in agricultural, cariogenic carbohydrates in comparison to Late Ceramic Age people (Mickleburgh 2016).

Sex: The fragmentary nature of the skeletal material, including the os coxae, prevented a definitive determination of sex for any of the individuals. The crania and mandibles were also fragmentary; however, the mandible of Individual 1 appeared to belong to a robust male, while the crania of Individual 3 suggested that this individual might have been a female. Robust femurs may also indicate that Individual 2 was male, though this could not be readily discerned and remains speculative.

Analyses and results

With permission from the Barbuda Council, a single tooth (mandibular right third molar) from Individual 2 (Unit Q-2) was submitted to Stafford Research Laboratories, Inc. for dating using accelerated mass spectrometry. A XAD-Gelatin (KOH-collagen) fraction from the tooth (BRQ2-1) yielded a conventional radiocarbon age of 3265 ± 35 years BP (SR-6186), which was calibrated with a mixed curve using IntCal20 (Reimer et al. 2020), Marine20 (Heaton et al. 2020), an estimated 30% marine diet, and a regional marine reservoir correction (ΔR) of −165 ± 185 years (DiNapoli et al. 2021) in OxCal v4.4 (Bronk Ramsey 2009). The date calibrates to 3560–3220 cal years BP (Figure 3), which is one of the oldest reliable radiocarbon dates from Barbuda and falls within the island's Bayesian-modeled colonization estimate of *3715–3225 cal years BP*

(95% highest posterior density) previously reported by Napolitano et al. (2019). This date generally falls in line with others from Barbuda, including two dates reported for two *Aliger* (*Strombus*) *gigas* celts (3650 ± 35 years BP and 3825 ± 25 years BP) from the Rivers Site (BA4) (Watters, Donahue, and Stuckenrath 1992) and the same species of shell (n = 13) from the Strombus Line on the southwest coast range, which date between 5500–1000 years old (uncorrected) (see Table 2). However, the two celts were collected from surface contexts and are not directly associated with a dated anthropogenic event. Similarly, many of the previously reported radiocarbon dates from the Strombus Line lack sufficient provenience to consider them reliable (see Napolitano et al. 2019). The Archaic Age estimates for most of the shell from the lithified ridge suggest that these earlier occupations of the southwest coast occurred on the margins of the Codrington Limestone Formations. It is highly probable that the lithified beach was formed by relatively high sea levels prior to 4000–5000 years ago. Therefore, the subsequent human occupations of the fossil beach between 4000 and 1000 years ago placed them above the once higher beach lines.

Evidence for relatively lower Eastern Caribbean Sea levels (−7–3 m) at 5000 to 3000 years ago (Khan et al. 2017), would place most of the postulated Archaic Age shell middens and settlements dozens of meters, or in some cases hundreds of meters, inland from ancient shorelines. According to the isobath map and projections of exposed lands proposed by Watters, Donahue, and Stuckenrath (1992), Spanish Point would stand as a ridge line that extended to within less than 100 m of the sea. This prominence, though unprotected, would therefore have been far more habitable than it is today.

In 2015, Tiffany Hansen (Central Washington University) analyzed a mandibular left canine belonging to Individual 2 for stable isotope ratios ($\delta^{13}C$, $\delta^{15}N$, $\delta^{18}O$) as part of an Honor's thesis investigating diet in the eastern Caribbean. Results, although limited to a single individual, indicated a reliance on marine protein with some contribution of C_3 carbohydrates, similar to what has been observed in other isotopic studies of the pre-Columbian Lesser Antilles (Hansen 2015; Krigbaum, Fitzpatrick, and Bankaitis 2013; Laffoon et al. 2016; Norr 2002). Compared to samples from Barbados that were also included in Hansen's (2015) study, the individual from Boiling Rock appears to have had a heavier dietary reliance on terrestrial C_3 plants. This could be due to temporal or geographic differences; however, given the small sample size, the possible explanations for this difference must remain speculative. In addition, a maxillary right first molar from Quadrant 2 (tooth number 2/16) was sent to Hannes Schroeder (Center for Geogenetics, Copenhagen, Denmark) in 2015 for aDNA analysis, but endogenous DNA could not be obtained.

Conclusions

Many coastal sites in the Caribbean are archaeologically rich, but exposed to a host of natural and anthropogenic impacts that often result in the displacement and/or destruction of archaeological remains (Douglass and Cooper 2020; Fitzpatrick 2012; Fitzpatrick, Kappers, and Kaye 2006; Rivera-Collazo 2020). Unfortunately, it is not uncommon to observe artifacts, faunal assemblages, human remains, and other cultural materials eroding from coastal zones across the region. Without monitoring or intervention, these

materials at best are displaced from their original contexts, or worse, lost forever. While salvage archaeology is far from ideal, it may be the only option to preserve, protect, or record archaeological material in certain situations. In this case, the reporting of human remains eroding from the coast at Boiling Rock by a tourist and local community member triggered notification to the local government (Barbuda Council), which was then routed to archaeologists already on island who were able to recover them before further destruction or displacement could occur. The ad hoc collaboration that developed between these groups has not only led to an increase in the number of known Archaic Age sites on Barbuda—which are relatively few across the northern Lesser Antilles—but provided the first dates and other associated information (e.g., stone amulet) for human remains dating to this time period on the island.

Archaeological investigation at Boiling Rock was able to recover the majority of three human burials, one of which was dated to the Archaic period between about 3560–3220 cal years BP. This is the only directly dated Archaic individual from Barbuda and overlaps with a Bayesian-modeled colonization estimate for the island (Napolitano et al. 2019). Overall, the salvage excavation of early skeletal remains at the site provides an important contribution to the pre-contact record of Barbuda, representing a time when portions of the Strombus Line were forming during the Archaic period. While necessarily incomplete due to the eroded and impacted nature of the site, it also demonstrates the importance of salvage recovery and analysis in situations where more rigorous and systematic archaeological excavation is not possible.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

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