

Leiden University

**Fieldwork Report from the work
carried out at La Poterie, Grenada
in January 2017 by the Faculty of
Archaeology, Leiden University**

Corinne L. Hofman (ed.)

2017



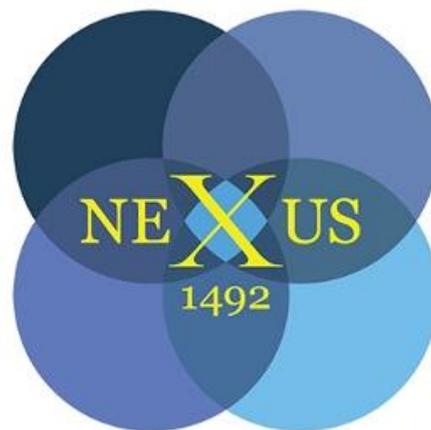
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Participants in the Archaeological Investigations at La Poterie, Grenada

Corinne L. Hofman, Menno L.P. Hoogland (Leiden University), Rebecca Scott (Leiden University/KU, Leuven), and Mark W. Hauser (Northwestern University, Chicago)

Team members: John Angus Martin, Finn van der Leden, Noortje Wauben, Rosanne Vroom, Bert Verleijdonk, Sven Ransijn, Olga Schats, Lou Jacobos, Wouter Kool, Ilone de Vries, Wayne Edward, Trina Antoine, Ray Antoine, Arkell Baptiste, Akimmon Andrew, Akim Andrew, Steyson Bernard, Alec Charles, Nicky Edgar, Rockim St. Bernard, Mia Belfon, Marsha Jones and Akima Charles.

1. La Poterie Excavation Report 2017

By Corinne L. Hofman and Menno L.P. Hoogland, Leiden University

1.1 Introduction and Previous Archaeological Research in Grenada

The state of Grenada consists of the islands of Grenada, Carriacou and Petite Martinique at the southern end of the Grenadines in the southeastern Caribbean Sea; other islets include Ile de Ronde, Diamond Island, Large Island, Saline Island, and Frigate Island. Grenada is located northwest of Trinidad and Tobago, northeast of Venezuela, and southwest of Saint Vincent and the Grenadines (Figure 1.1).

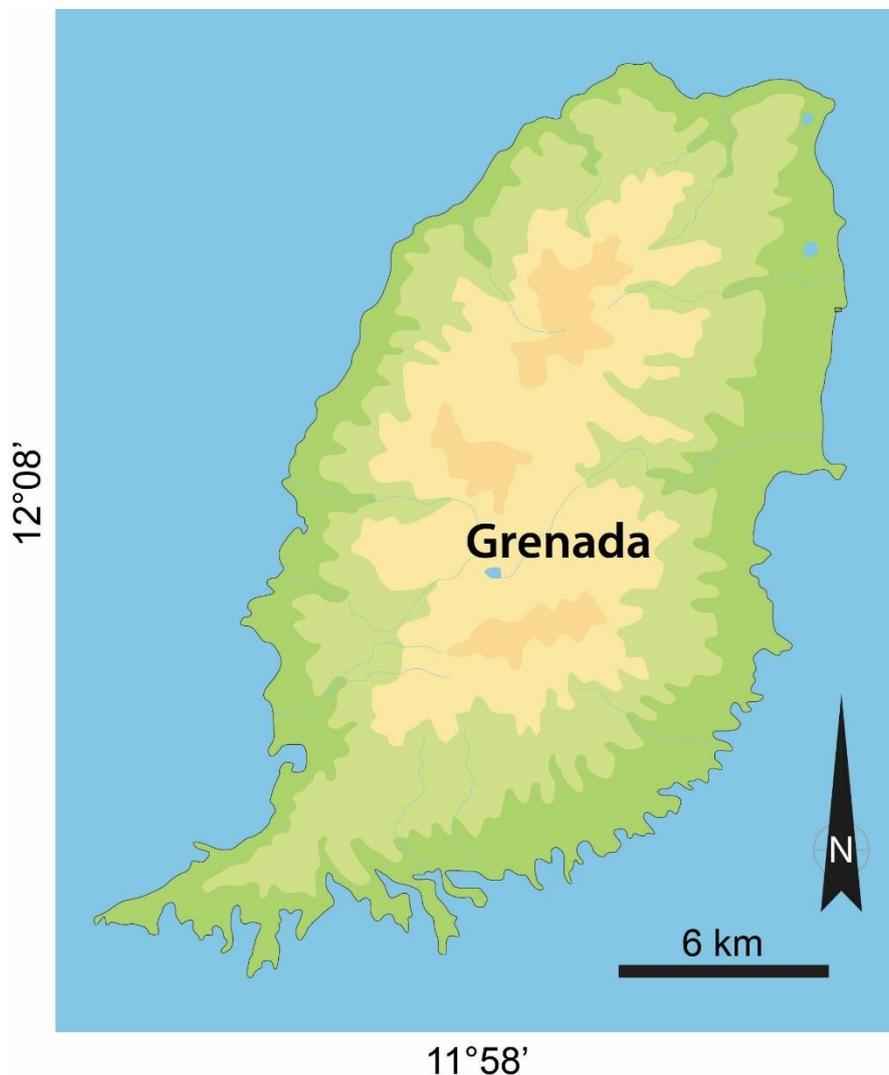


Figure 1.1 Island of Grenada.

After the early 20th century collection-based studies of Holmes (1907) and Fewkes (1922), and the survey of Huckerby (1921), the first archaeologist to carry out long-term investigations on Grenada was R. P. Bullen, who performed stratigraphic tests in five sites discovered through partial surveying of the island. Bullen (1964; 1965) studied over 30,000 sherds and arranged the major pottery series into culture and time-periods: Pearls, Calivini (Calivigny) and Suazey, also identifying four main Amerindian settler groups: pre-Ceramic, pre-Arawak agriculturalists, Arawaks and Caribs. With the exception of a survey carried out by Dr. Henry Petitjean Roget in 1981 and the work of vocational archaeologists, the island had not been further investigated until the late 1980's, when William Keegan and Annie Cody carried out surface surveys and test excavations at the Pearls site, with the objective of assessing its spatial configuration and to formulate future research strategies. Finally, the combined efforts of various specialists permitted a multi-disciplinary study of cultural development and diet in this extremely disturbed site (Keegan and Cody 1990; Keegan 1991), while Annie Cody continued to perform test excavations in the area during the 1990s (Cody 1990, 1995, Holdren 1998). Some archaeologists have since worked on particular materials from the Pearls site (Harris 2001b; Byrne and Keegan 2001; Boomert 2007). Between 2016 and 2017 Jonathan Hanna, as part of his PhD studies, has been surveying and inventorying pre-Colonial sites across Grenada, producing an extensive report (Hanna 2017).

Similarly, little archaeological work was undertaken in the Grenadines until the late 20th century. After the surveys and excavations of the Bullens (1972), Lesley Suttly carried out archaeological work throughout the 1980s and 1990s (Suttly 1978; 1985; 1991). In the last two decades, the efforts of collaborative teams have focused on the island of Carriacou, recovering evidence of various economic activities in Saladoid and post-Saladoid times in intensely occupied sites such as Grand Bay and Sabazan (Fitzpatrick et al. 2009, 2014; Kaye et al. 2005).

1.2 The La Poterie Investigations 2016-2017

The investigations at La Poterie have been conducted in the context of the project CARIB: Caribbean connections: Cultural Encounters in a New World Setting, financed by HERA, grant nr. 1133, NWO Island Networks, grand n^o 360-62-060 and

NEXUS1492, European Union's Seventh Framework Programme (FP7/2007-2013) / ERC grant agreement n° 319209. This project is a collaboration between Leiden University, KU Leuven, University of Konstanz, and Caribbean GO's and NGO's. It focusses on the cultural encounters between the Old and New Worlds which are among the most infamous in human history. The Caribbean was the center stage for interactions between cultures of dramatically different backgrounds, which after a turbulent colonial period eventually laid the foundations for the modern-day, multi-ethnic societies of the region. Our knowledge of the beginnings of this unsettled history is based on descriptions by early European chroniclers, who provide vivid but heavily biased and fragmented accounts of the indigenous Amerindian inhabitants of the islands. Archaeological research of this period, now virtually non-existent, is needed to provide a more balanced picture of the transformations of cultures and societies across the historical divide (AD 1000-1800). In a trans-national collaboration, the universities of Leiden, Leuven, and Konstanz, together with Caribbean governments and local communities employ a multi-disciplinary approach to study this epoch in the Lesser Antilles. This region is considered one of the key regions of the Caribbean in which the lasting effects of the encounters are represented. The unique combination of archaeology, history, archaeometry, and social network theory, is expected to produce major breakthroughs in understanding this important region and period in world history. The project also aims to make contributions to current societal discussions on climate change and coastal erosion, cultural encounters, indigenous resistance, and heritage valorization, ranging from local to global scales of inquiry (Hofman and Hoogland 2016).

1.3 La Poterie: Background to the Excavation

The archaeological site of La Poterie is located on the northeast coast of the island of Grenada (Figure 1.2) and dates to the 16th century on the basis of the mixed Amerindian (Cayo) and European material assemblage found at the site.

The site is characterized by a plateau with possible habitation features and an eroded cliff similar to contemporaneous sites in the region, notably at Argyle, St. Vincent (Hofman and Hoogland 2012). Cayo sites on St. Vincent and Grenada are

located on strategic locations near rivers on top of ridges overlooking the Atlantic Ocean, on the windward-side of both islands (Figure 1.3).



Figure 1.2 Cayo site of “La Poterie” in Grenada.



Figure 1.3 Rescue work on the eroded cliff just beneath the settlement site, La Poterie.

Currently more than 20 sites with Cayo ceramics are known across the Lesser Antilles between Grenada and Guadeloupe, with a vast majority on St. Vincent and Grenada. Besides the clear mainland (Koriabo from the Guyanas – Brazil) association in ceramic style, morphology and manufacture, some decorative motifs and associated cultural remains also clearly suggest affiliations to the Greater Antilles (Chicoid-Meillacoid). The latter emphasizes the possible role that Greater Antillean refugees or Carib raids on Greater Antillean settlements may have played in the transmission of stylistic traits from the larger islands to Lesser Antillean ceramic assemblages. At La Poterie, as at other Cayo sites in the region, the cultural material remains come from a cliff. This material consists of Cayo pottery, European faience pottery, coins and beads as well as faunal remains, of which some are worked into flutes and pendants. The Cayo pottery is similar to that from the site of Argyle, St. Vincent, excavated by Hofman and Hoogland in 2010, and which is radiocarbon

dated in the 16th-early 17th century, cal AD 1540-1620 (Hofman 2013; Hofman and Hoogland 2012; and Hofman et al. 2015, forthcoming).

1.4 The 2017 Fieldwork Campaign

The 2016 investigations were carried out under the Memorandum of Understanding (MOU) signed between the Ministry of Tourism, Civil Aviation and Culture and Leiden University in 2015 and legalized in 2016. Permissions were granted by Minister of Culture Senator Brenda Hood, landowners Mrs. Cleopatrice Daniel Andrew and Mr. Cheo Christopher, and the community of La Poterie. The team included researchers and students from Leiden University, northwestern University (Chicago), St. George's University, Grenada, and members of the La Poterie community.

1.5 Recapitulation of the objectives

The main objectives of the 2017 field campaign were similar to the 2016 objectives:

- 1) Determine the nature of the site and dating
- 2) Document the extent of the site and its stratigraphy
- 3) Determine the spatial organization of the settlement
- 4) Document features and eventual structures
- 5) Record the distribution of finds
- 6) Determine the nature of material culture remains
- 7) Position the site in the local and regional context
- 8) Raise historical awareness for the *Kalinago* history of La Poterie
- 9) Develop outreach activities for the community and school children

1.6 Methods

In order to meet the 2017 objectives, open area excavations have been conducted. This year, a total of 239 m² has been opened on the east side of the site, as an extension of units 7 and 18 from 2016. These extensions were labelled units 19 to 27. The 20-30 cm topsoil was removed, the excavation surface was shovel skimmed, and the features were recorded using a TOPCOM and CARLSON. The material in

the topsoil could not be sieved due to the very dense texture of the clay, so the finds were systematically collected by hand. In addition, the eroded profile on the coast has been cleaned and the stratigraphy has been described. Large numbers of artefacts have been eroding from the slope in November due to heavy rainfall. All of the artefacts were washed, catalogued and photographed. Samples have been retrieved for radiocarbon dating and starch grain analysis.

1.7 Preliminary Results

The surface area of the site is estimated at ca. 200 x 50 m, i.e. it stretches out 200 m along the coast and 50 m inland. In total, 355 m² have been excavated (Figure 1.4). The concentration of finds was higher towards the south (seaside) of the site. A first total of 1.074 features have been recorded. From the materials collected in the topsoil it appears that three phases of occupations took place at the site: a first one Troumassoid dated between AD 700 and 900. A second Cayo occupation dating between AD 1500 and 1600 and a third afro-Caribbean one dating to AD 1700. The occurrence of features and Cayo materials on the plateau confirms the presence of a Kalinago settlement in that location related to the materials found after the land slippage of 2010. Most of the materials found last November on the cliff side belong to the Cayo phase of occupation.

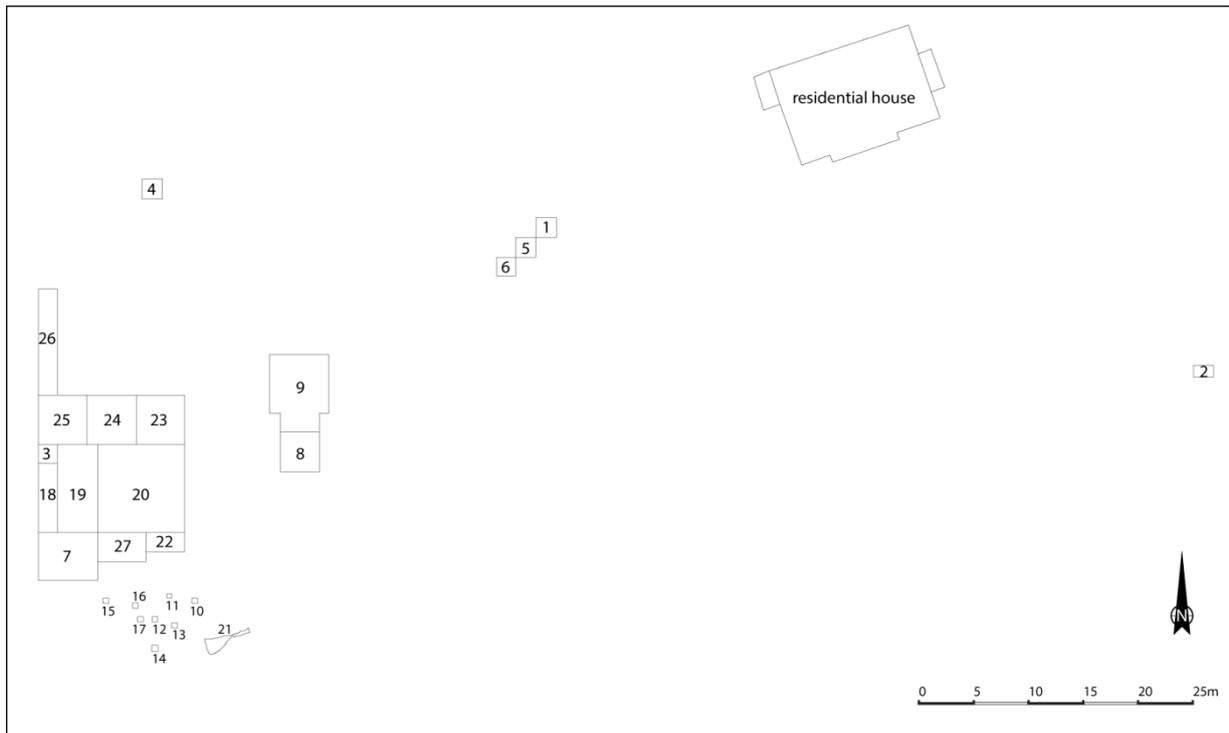


Figure 1.4 Excavation plan of La Poterie, 2016 and 2017.

1.8 Stratigraphy

The stratigraphy in the units on the plateau shows a homogenous clay layer covered by a very thin (10 to 30 cm) topsoil of humus materials. The geological profile along the shoreline is composed of a layer of beach sand, covered with a layer of limestone bedrock (limestone), covered with a layer of weathered bedrock, covered by a clay deposit (Figures 1.5 and 1.6). The lower part of the bedrock is covered with sediments from the cliff higher up, and this is where the archaeological materials (recovered after the land slippage of 2010) were present as a secondary deposit. These archaeological materials thus originally come from the upper half of the slope, where they were part of a sweeping deposit belonging to the houses that were situated on the plateau.

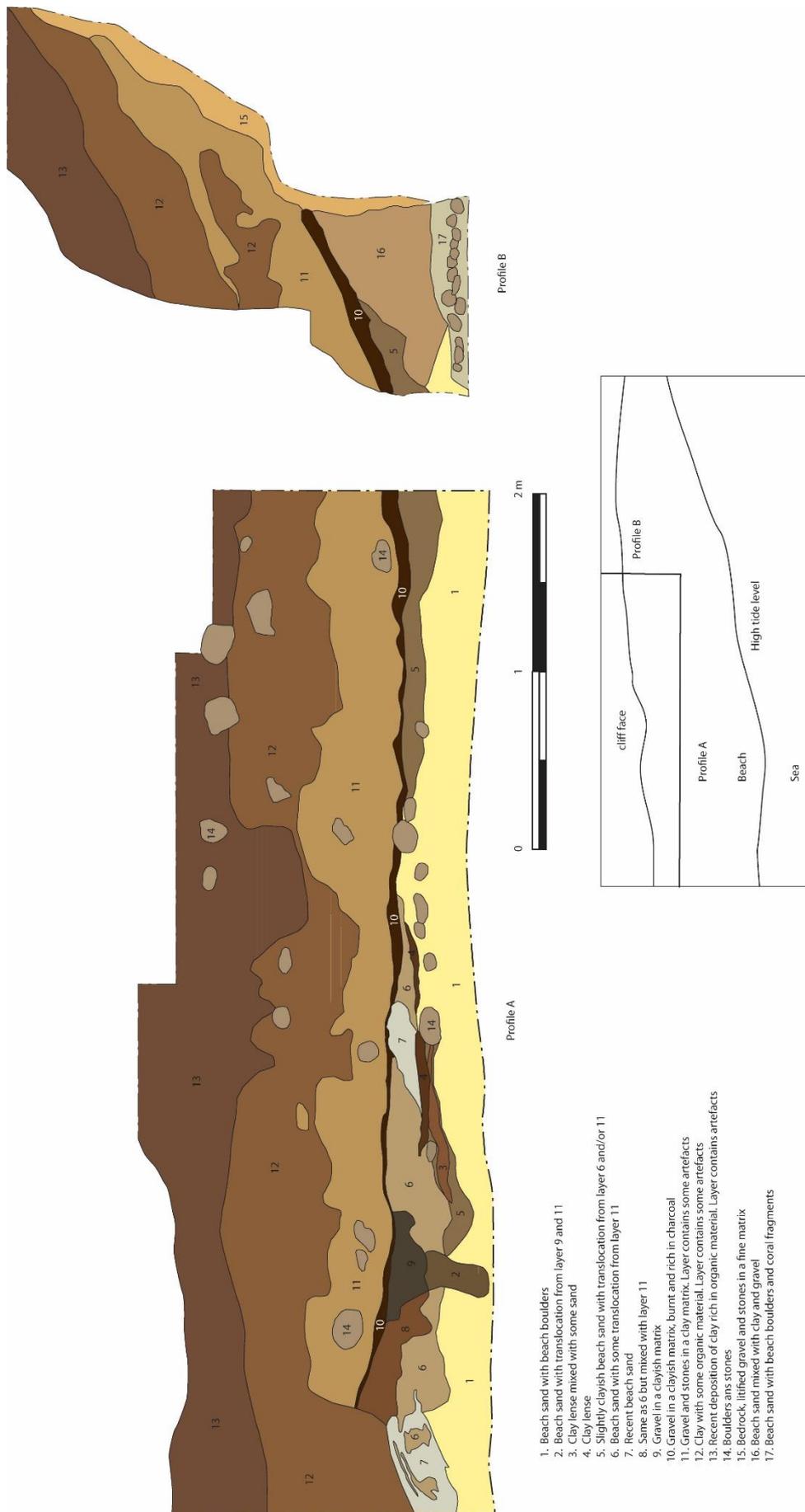


Figure 1.5 Stratigraphy of profiles A and B of the cliff, with a description of the layers.



Figure 1.6 Photo of profile B.

1.9 Features and structures

In 2016, the features in units 7-9 consisted of postholes (Figure 1.7), pits and burned floors. Two potential house structures were reconstructed on the basis of the configuration of postholes in units 7 and 9 (Figures 1.8 and 1.9) (Hofman 2016).



Figure 1.7 Example of a posthole feature from 2016.

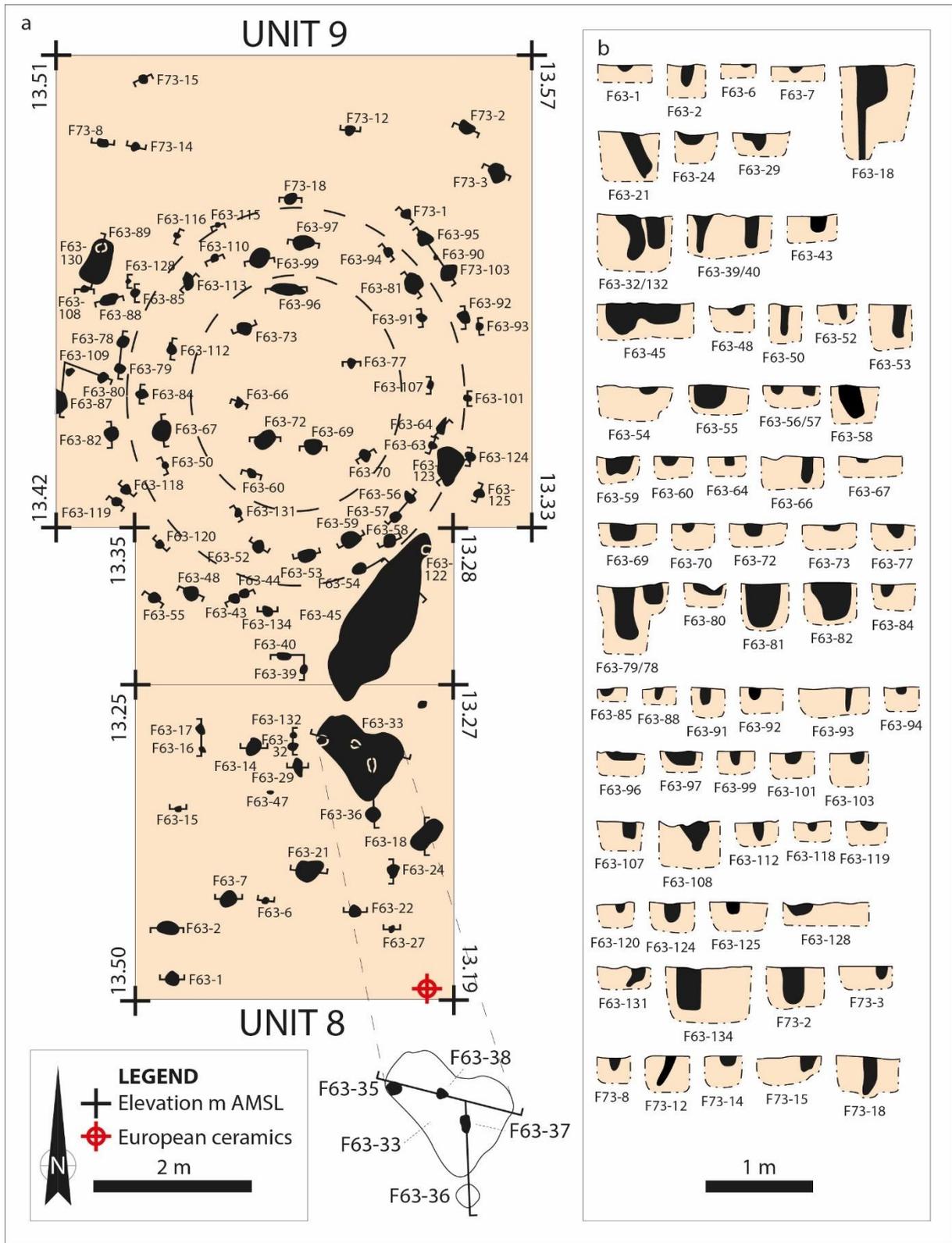


Figure 1.9 Features plan Units 8 and 9 (2016).

The excavations of 2017 have uncovered 17 more structures all round-oval in shape with diameters varying between 3.5 and 8 m in diameter (Figures 1.10 and 1.11). All structures consist of two rows of posts, an inner and an outer one. The average distance between the rows is between 0.90 and 1.20m. These structures belong to the Troumassoid and Cayoid occupation of the site. Other rectangular structures have been found as well, these clearly belong to the Afro-Caribbean occupation of the site around AD 1700. All the posts of two of the round-oval houses and one of the rectangular structures have been cross-sectioned.

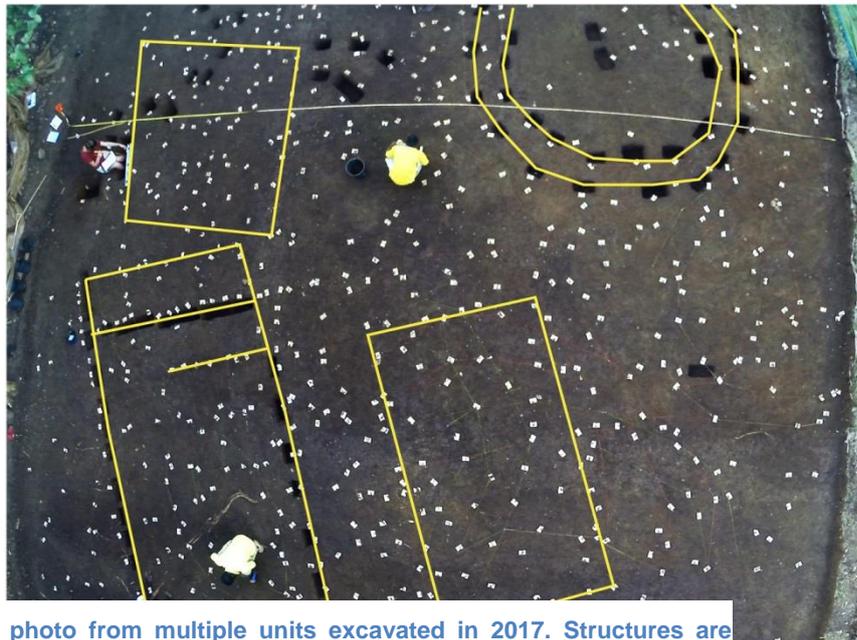


Figure 1.10 Drone photo from multiple units excavated in 2017. Structures are highlighted in yellow.

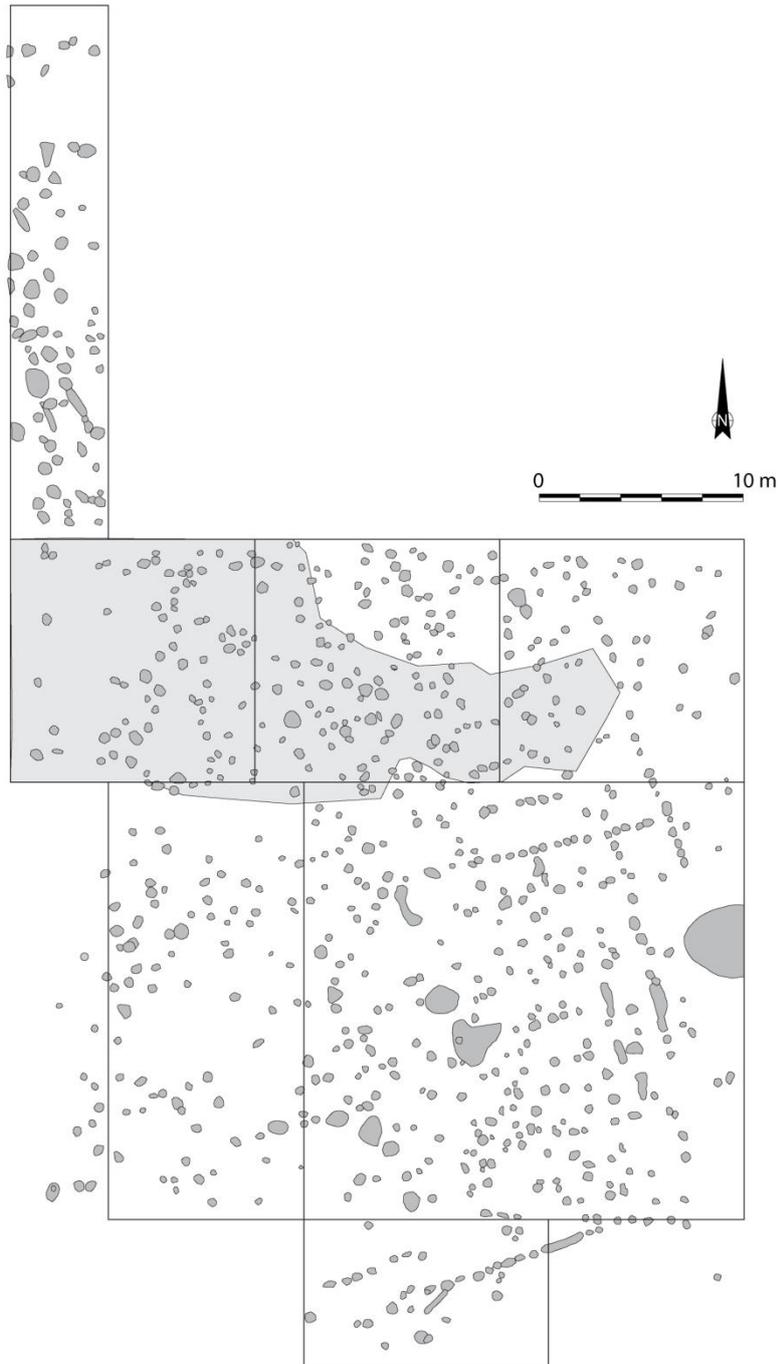


Figure 1.11 Overview of the features found in 2017.

1.10 Radiocarbon dates

15 samples have been sent to Beta Analytic for dating. The results confirm the three phases of occupation roughly between the 8th and 18th century (Table 1.1).

Sample	Lab ID	Material	Conventional Age (BP)	2 σ Calibration
LP16 F63-81	Beta-450531	Charred material	1930 +/- 30	AD 775-980
LP17 F32-01-1 FNR 471	Beta-455987	Charred material	320 +/- 30	AD 1470- 1650
LP17 F32-01-2 FNR 472	Beta-455988	Charred material	330 +/- 30	AD 1465-1645
LP17 F32-01-3 FNR 473	Beta-455989	Charred material	420 +/- 30	AD 1435-1610
LP17 Prof. B. L14 FNR 474	Beta-455990	Charred material	420 +/- 30	AD 1435-1610
LP17 Prof. A 8-10m L11 FNR 422	Beta-455991	Shell	1630 +/- 30	AD 675-780
LP17 Prof. A 8-10m L12 FNR 476	Beta-455992	Shell	680 +/- 30	AD 1520-1665
LP17 Prof. A 10-12m L1 FNR 416	Beta-455993	Bone collagen	710 +/- 30	AD 1495-1650
LP17 FNR 449	Beta-459943	Potsherd residue	440 +/- 30	AD 1425-1470
LP17 FNR 428	Beta-459944	Potsherd residue	560 +/-30	AD 1310-1360
LP17 FNR 412	Beta-459946	Shell	740 +/- 30	AD 1475-1630
LP17 FNR 559	Beta-459947	Shell	720 +/- 30	AD 1490-1645
LP17 F51-295/2	Beta-459949	Charred material	140 +/- 30	AD 1665-1950
LP16 F63-55	Beta-437575	Charred material	1120 +/- 30	AD 780-785
LP16 F51-01	Beta-437576	Charred material	70 +/- 30	AD 1690-1920

Table 1.1 Radiocarbon dates.

1.11 Material Remains

The largest find category is ceramics, followed by lithic materials, and then European wares. Lithics mainly consist of pebbles and pounding and rubbing tools from local rock types. Preservation of shell and bone is very poor. The shell assemblages include very weathered fragments (in particular tips) of *Lobatus gigas*. We are currently sending a sample out for radiocarbon dating as it is unclear as yet to what phase these belong to. The ceramic material is rather fragmented. The high fragmentation rate can be explained by heavy trampling that has taken place on the terrain probably for cultivation purposes. The materials recovered from the coastal profile, on the contrary, were far less fragmented and very large potsherds were collected.

The distributions of the different find categories are displayed in Figures 1.12 to 1.20 and Tables 1.2 to 1.10.

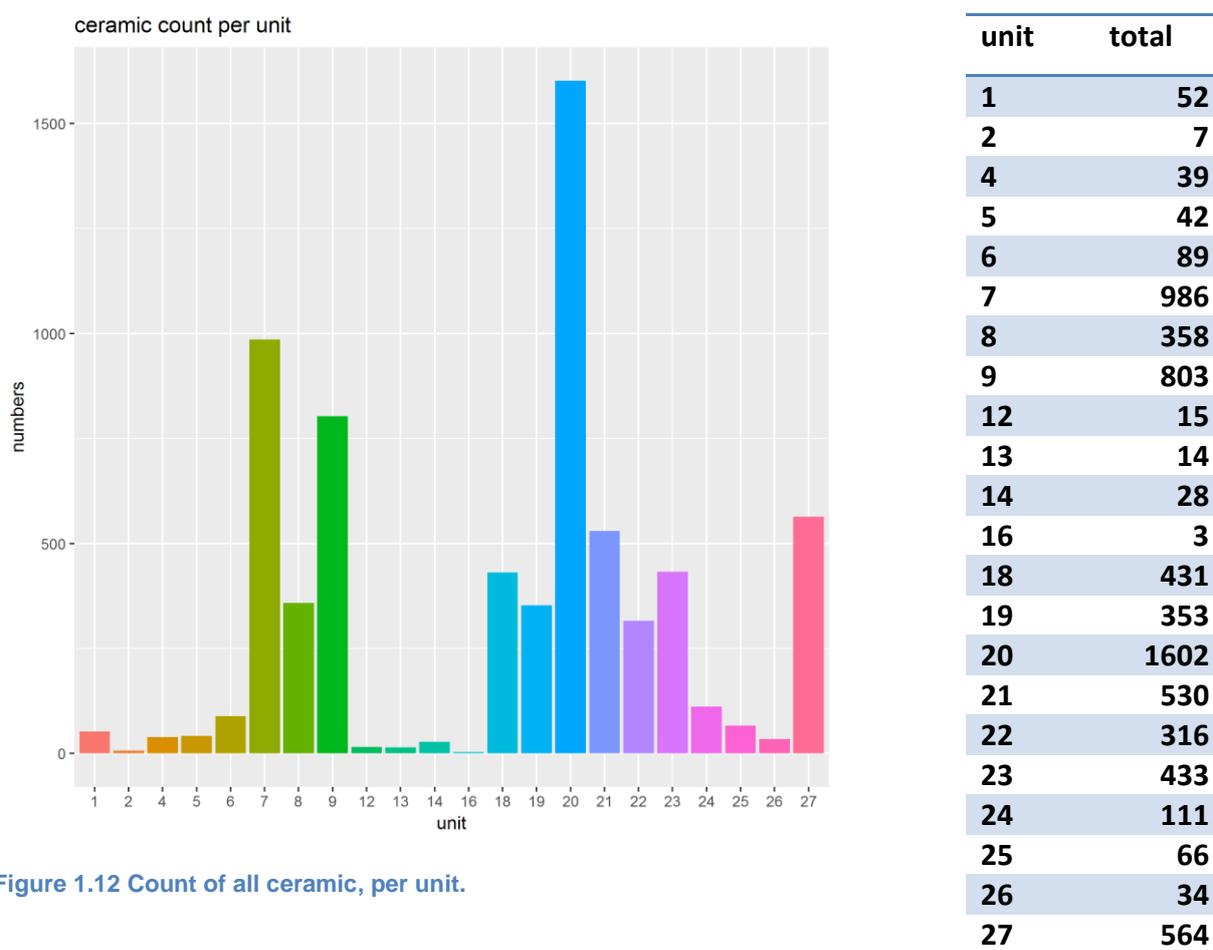
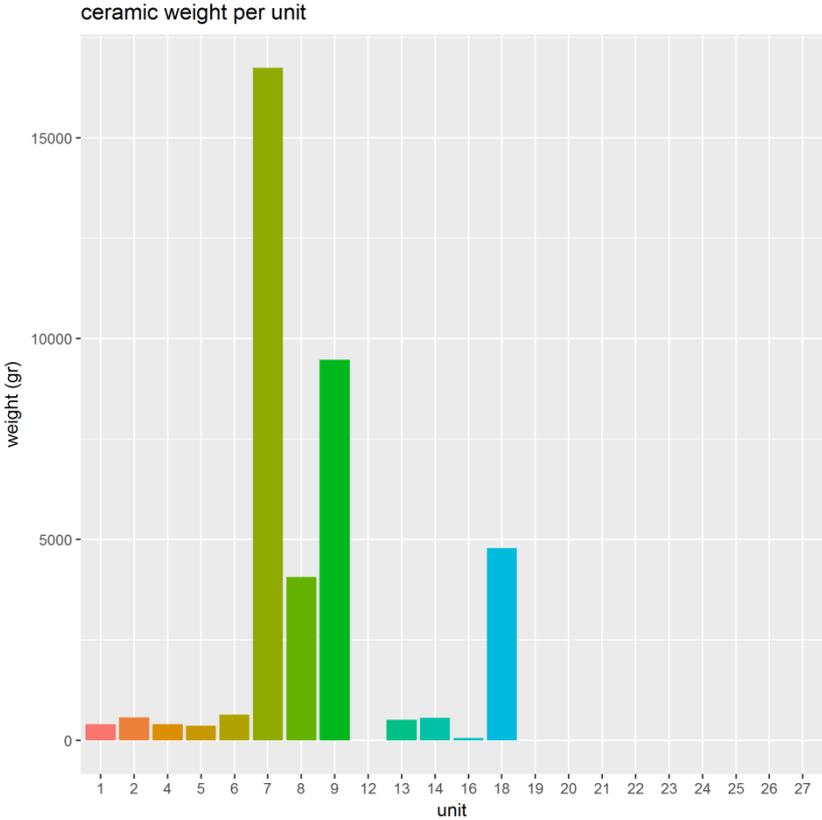


Figure 1.12 Count of all ceramic, per unit.

Table 1.2 Ceramic count per unit.



unit	Total (gr)
1	402
2	573
4	404
5	364
6	641
7	16740
8	4068
9	9469
12	0
13	510
14	566
16	66
18	4782

Table 1.3 All weighed ceramics.

Figure 1.13 All weighed ceramic, per unit.

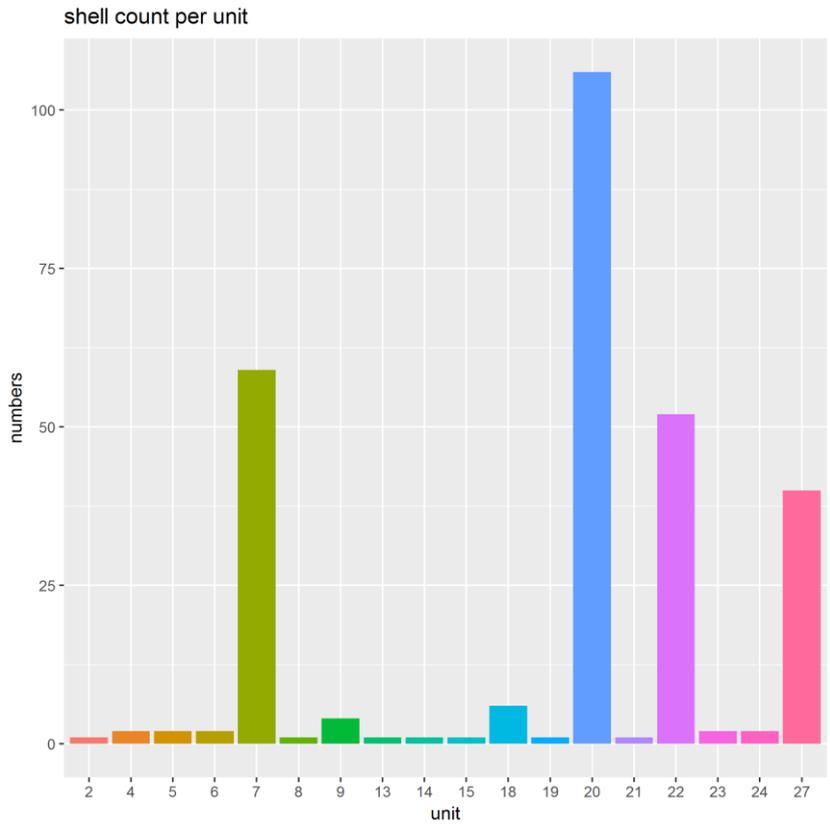


Figure 1.14 All shell finds, per unit.

unit	total
2	1
4	2
5	2
6	2
7	59
8	1
9	4
13	1
14	1
15	1
18	6
19	1
20	106
21	1
22	52
23	2
24	2
27	40

Table 1.4 Number of shell finds.

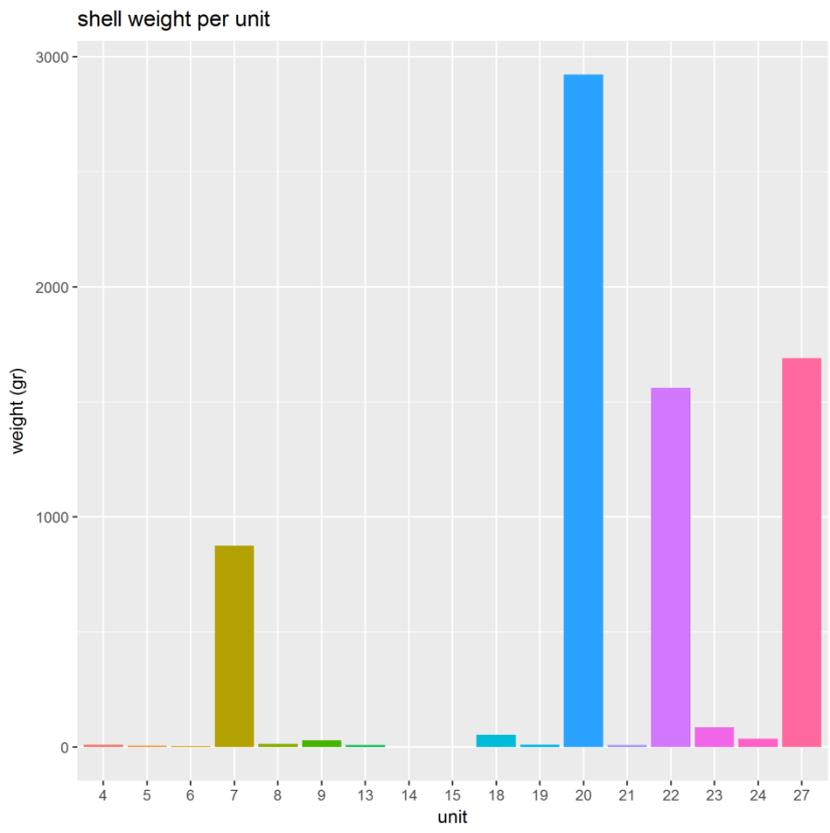
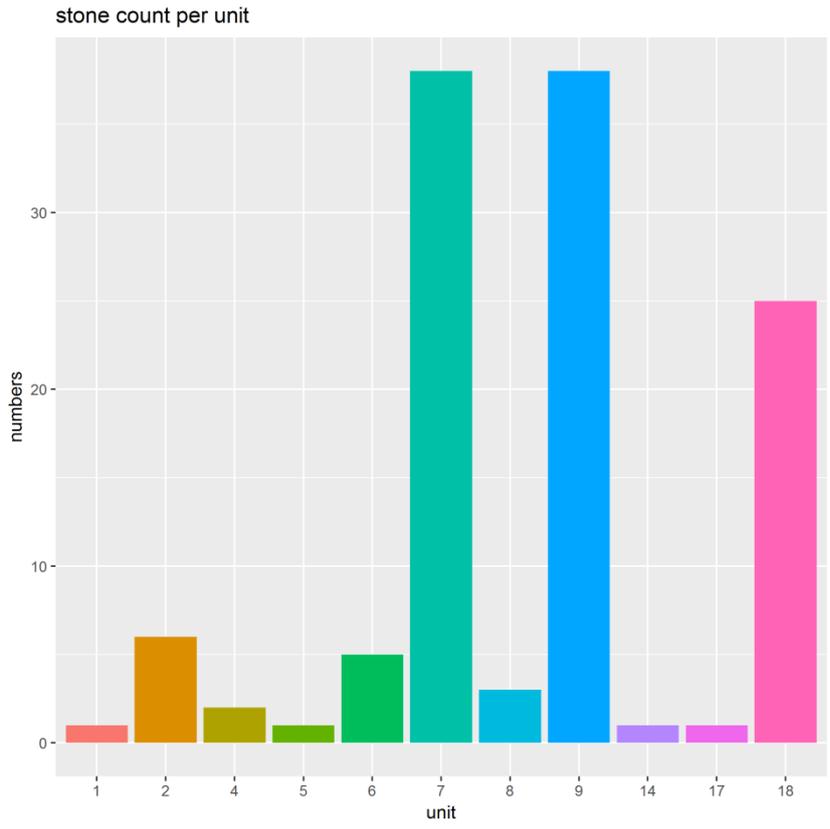


Figure 1.15 Weight of all shell finds.

unit	Total (gr)
4	11
5	5
6	4
7	876
8	15
9	30
13	9
14	1
15	1
18	54
19	10
20	2923
21	9
22	1562
23	87
24	36
27	1690

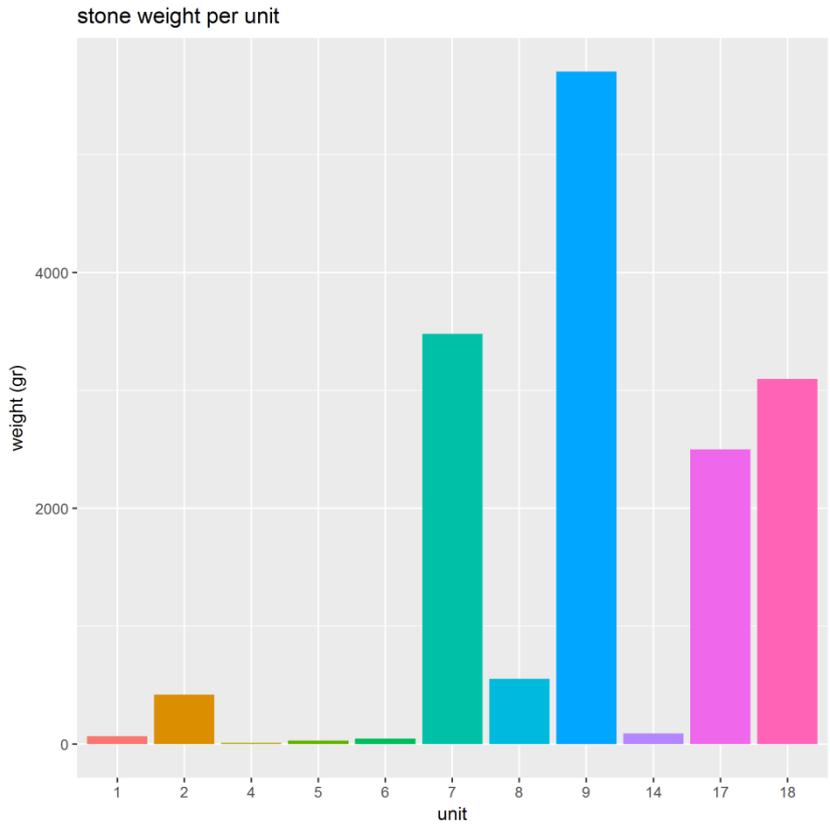
Table 1.5 Weight of shell finds.



unit	total
1	1
2	6
4	2
5	1
6	5
7	38
8	3
9	38
14	1
17	1
18	25

Table 1.6 Number of lithic finds in 2016

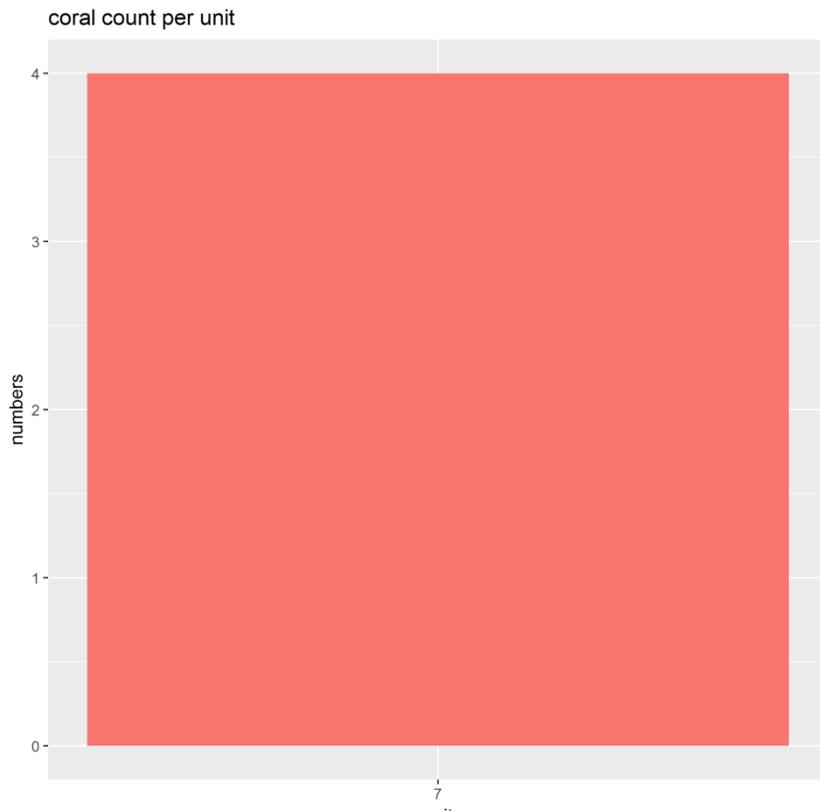
Figure 1.16 Lithic finds of 2016 with graph and exact numbers.



unit	Total (gr)
1	68
2	419
4	10
5	30
6	49
7	3481
8	554
9	5706
14	91
17	2500
18	3097

Table 1.7 Weight of lithic finds in 2016.

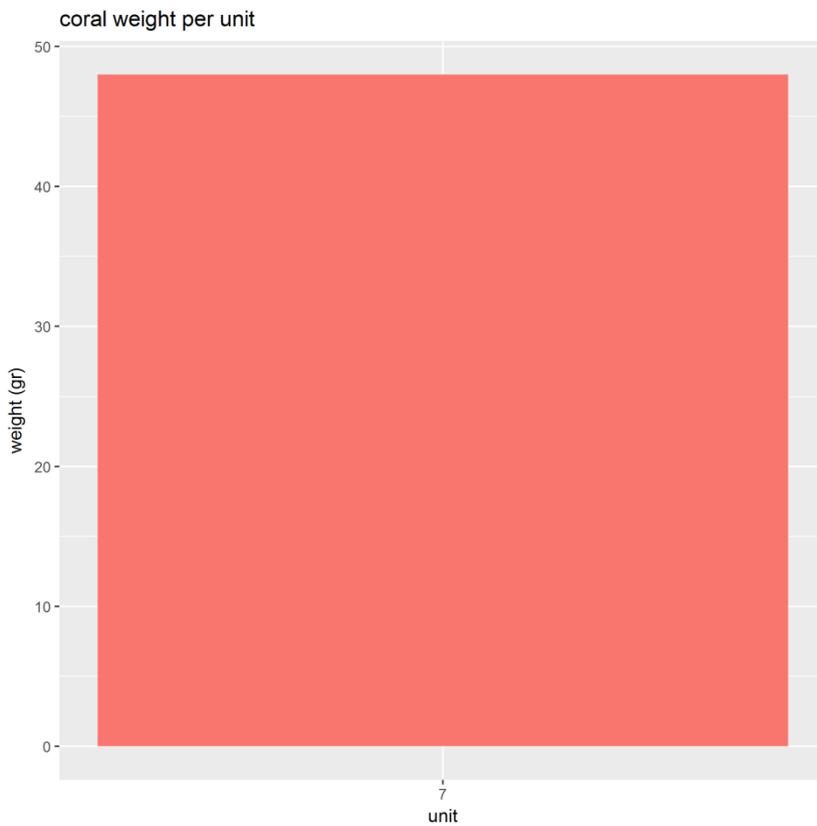
Figure 1.17 Weight of lithic finds from 2016.



unit	total
7	4

Table 1.8 Number of all coral found.

Figure 1.19 Total amount of coral.



unit	Total (gr)
7	48

Table 1.9 Weight of all coral found.

Figure 1.18 Total weight of coral.

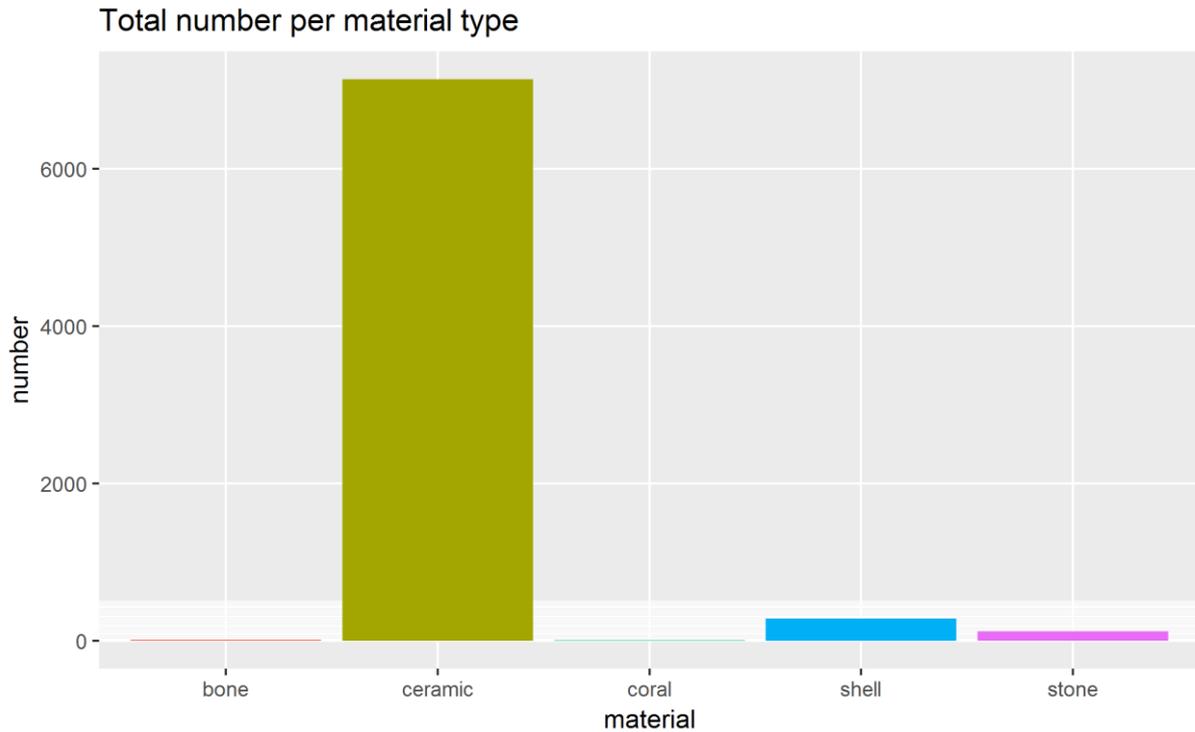


Figure 1.20 Number per category.

type	Total
bone	11
ceramic	7138
coral	4
shell	284
stone	121

Table 1.10 Total numbers per category.

1.12 Distribution of Finds

Ceramics were counted and weighted during on-site lab work and recorded following the Leiden Code Book for Ceramics. Numbers and weights of rim, base, body and giddle sherds were recorded, as well as slip and decoration (incision, modelling, painting), appendages (handles, lugs) and other ceramic features (spindle whorls, potstands, figurines, incense burners etc.). The three main phases of ceramics found are Troumassoid, Cayo, and Afro-Caribbean. Their distribution is shown in the

following figures, as well as a map with the distribution of the European earthenwares, which will be discussed further down (Figures 1.21 to 1.24).

Furthermore, all of the *Lobatus gigas* finds have also been put in a distribution map because they showed an interesting pattern (Figure 1.25).

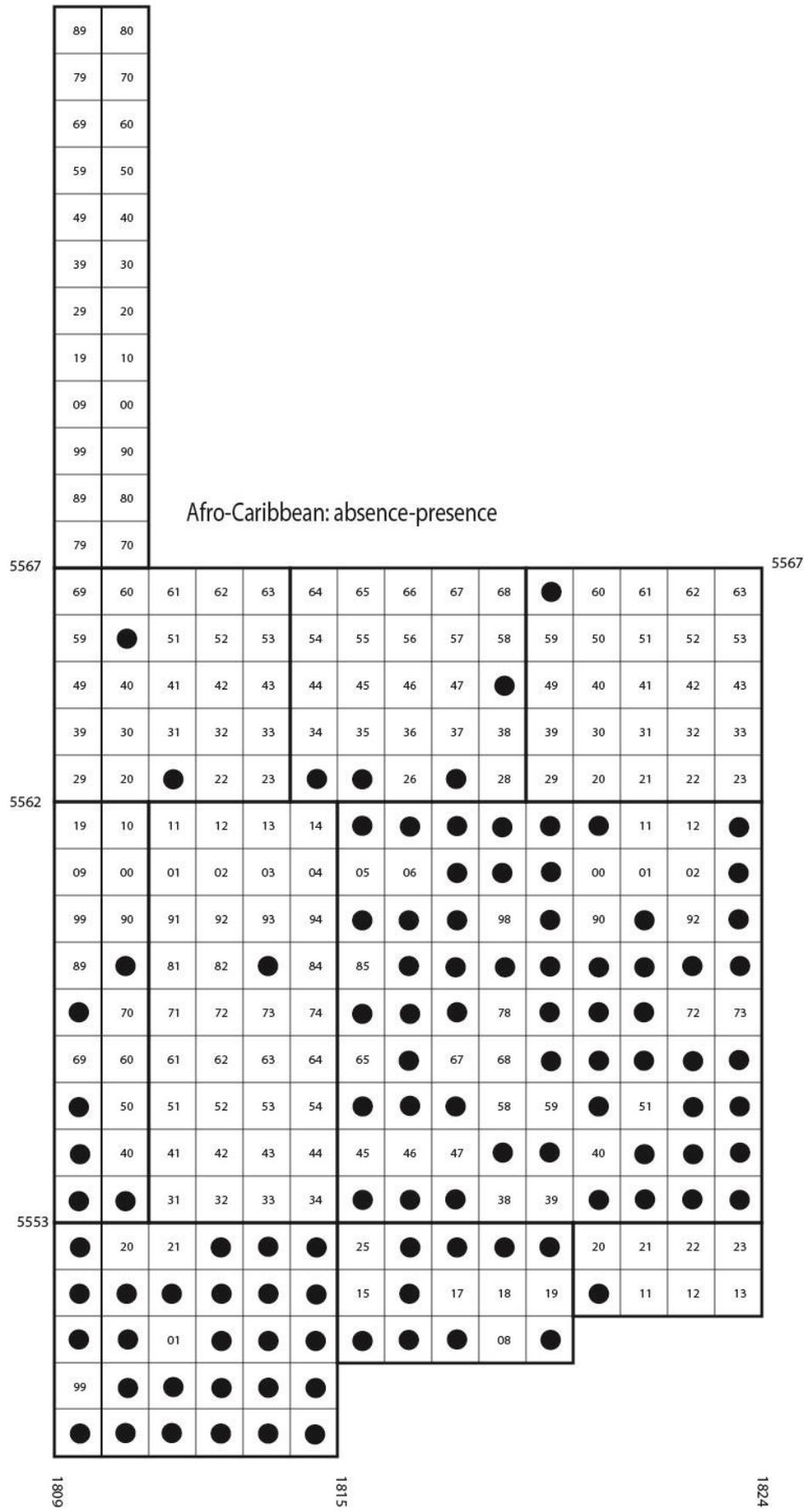


Figure 1.23 Distribution of the Afro-Caribbean ceramics.

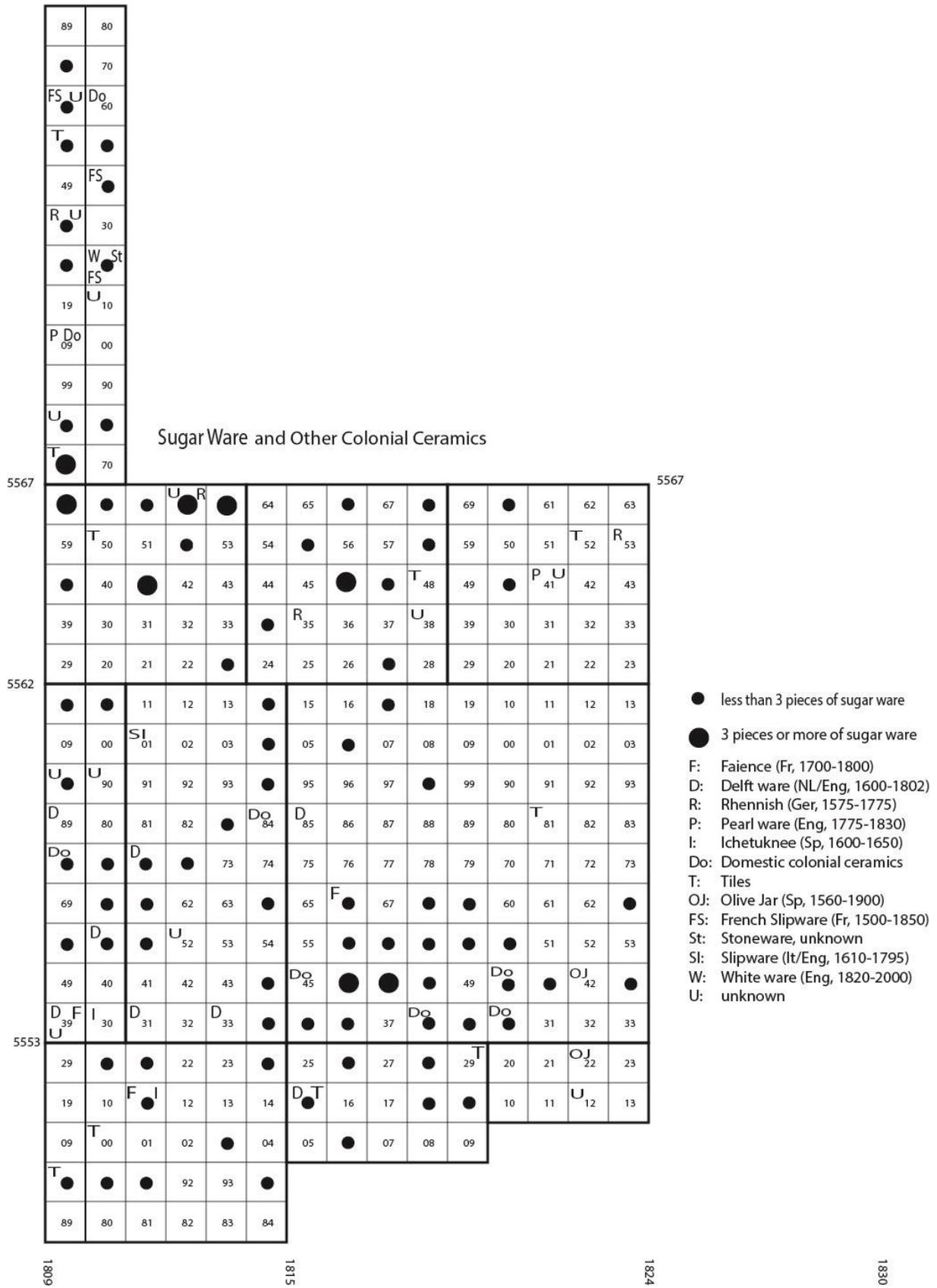


Figure 1.24 Distribution of Sugar Ware and other Colonial ceramics.

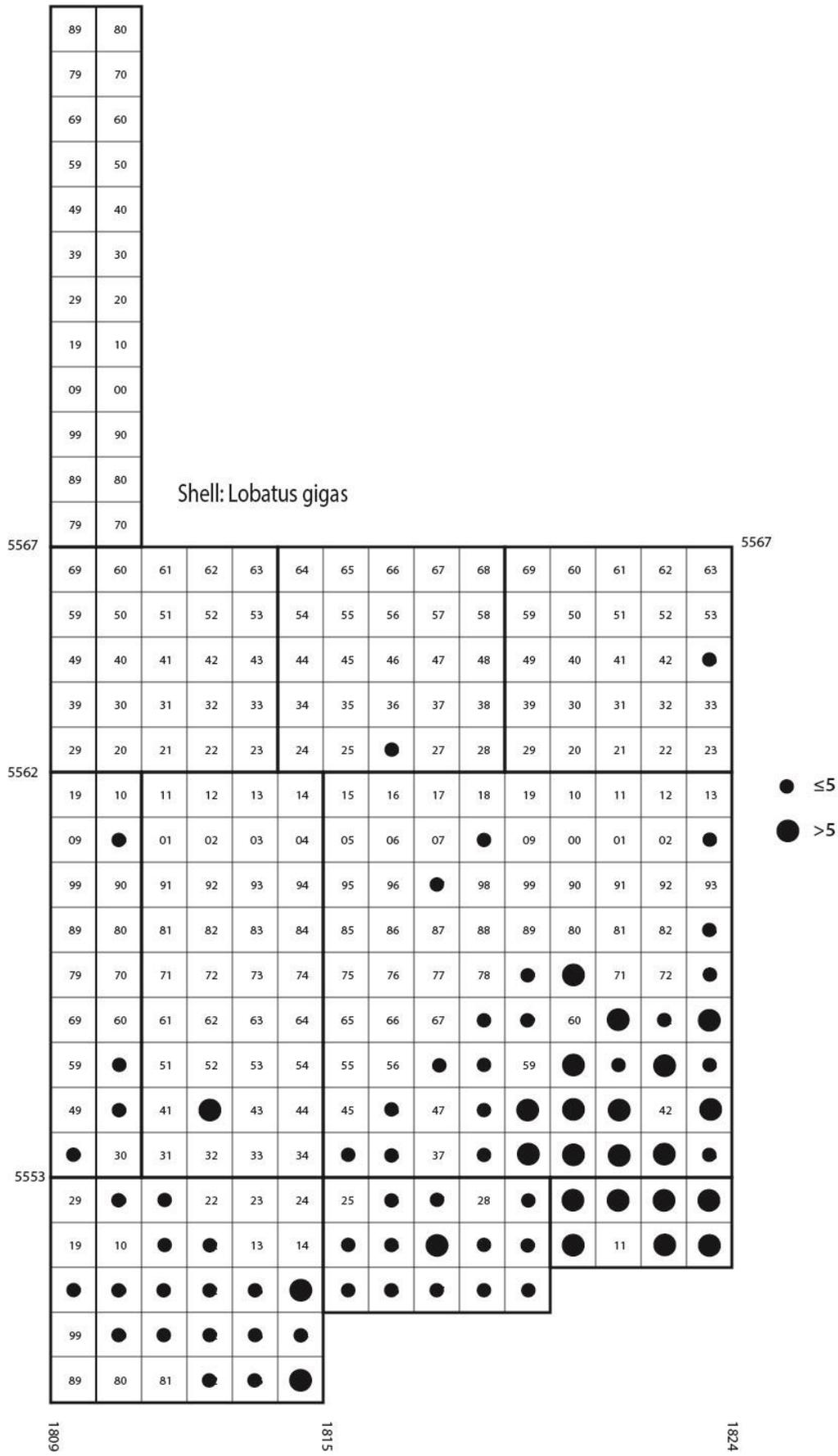


Figure 1.25 Distribution of the *Lobatus gigas* finds.

1.13 Pottery

The pottery recovered belongs to the three phases described above: Troumassoid, Cayoid and Afro-Caribbean. The Troumassoid pottery is characterized by a large number of open plates with red slipped rims. Because of the fragmentation and weathering of the sherds, decoration is very hard to distinguish, however, some clear Calivigny polychrome decoration has been identified.

The Cayo pottery confirms the finds of 2016 in style and decoration. Cayo vessels have a variety of shapes (Figure 1.26) and are sometimes embellished with decorations, modeled decorations, incisions and painting (Figures 1.27 and 1.28). Very characteristic are the unrestricted bowls with carinated rims, and often white painted inside surfaces. There are a few examples of red or yellow painted designs on the white paint. These bowls are very typical of the Koriabo pottery of the Guianas and can be found as far as northern Brazil. Another characteristic vessel is the large restricted jar made of reddish clay with very large diameters and sometimes decorated with a modelled face. These may have served as containers for cassava beer.

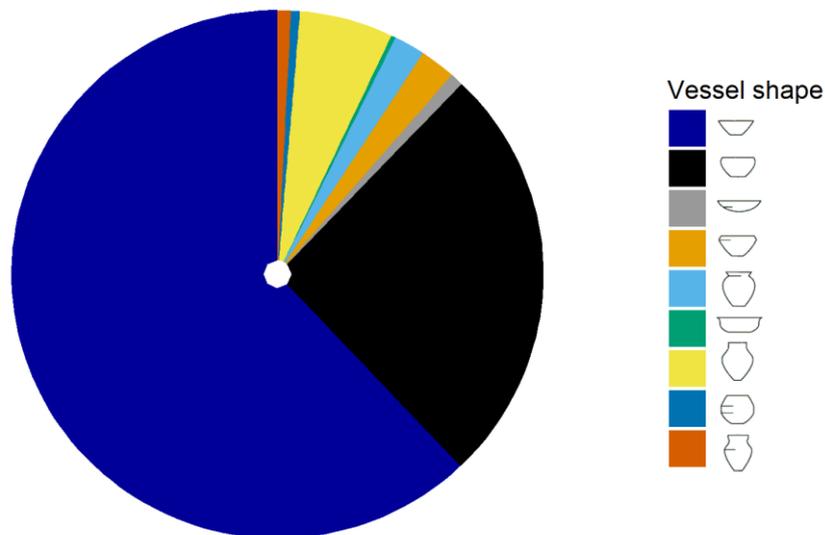


Figure 1.26 Vessel shapes and their respective percentages.



Figure 1.27 Ceramic with adorno.

These were called *ouicou* as mentioned by the early French 17th century chroniclers. In some cases, these jars have modeled decorations of human faces. A fair number of griddle fragments have been recovered from across the site.

The Afro-Caribbean ware recovered this year is quite particular and not immediately placeable in a known series. Stylistically both Amerindian (Suazoid) and Afro-Caribbean elements are recognizable (Figure 1.29). It is very well possible that it is a

mix between Kalinago and early Caribbean African pottery. Further studies are needed to be conclusive on this point. The large sample of the pottery from all phases has been tested with a portable X-ray fluorescence device in order to determine the geochemical compositions of the clays used to produce these vessels. The analyses have been carried out by Becky Scott.



Figure 1.28 Examples of Cayo ceramic, sherds from private collections, Grenada.



Figure 1.29 Afro-Caribbean grater.

1.14 European materials



Figure 1.30 European artefacts from La Poterie.

The European materials were classified and described by Nina Jansen, Konrad Antczak and Mark Hauser. Likewise, as in 2016, the collection shows a mix of European trade wares and pieces of gun flint (Figure 1.30). The assemblage also includes a tin-glazed fragment of a Beretino Ligurian Blue-on-Blue rounded plate with outwardly curved rim and footring. This is a faience dating to 1550-1610. It has a buff

fabric, it is blue tin-glazed on the front and back, with a decoration of a rosette with vegetable garland on the front and crossing arches on the back. The Ligurian Blue-on-Blue is the Italian prototype of the Seville Blue-on-Blue which was manufactured in Spain. On Seville Blue-and-Blue the motifs are simpler and less carefully executed than those of Ligurian Blue-on-Blue (www.floridamuseum.ufl/histarch/gallery). In addition, the assemblage is composed of several pieces of Dutch faience and majolica dating from the late sixteenth to early seventeenth century, such as a fragment of a Dutch majolica ('*kraakporcelein*') plate, with a buff fabric and a Chinese (Wanli)-motif of flowers and ribbons on the flange. It is a very common motif and similar to a dish representing Mother Mary with Christ, from the northern Netherlands, with similar floral motifs on the flange (Museum Boymans van Beuningen, Rotterdam; Scholten 1993, 76-77). It dates to the early seventeenth century (1610-1660). This is most likely the first evidence of Dutch trade ware in an archaeological context from the Lesser Antilles (Hauser, pers. communication 2017). A fair amount of the European finds were found in the house area, but without clear association to a particular house or feature.

1.15 Community Engagement and Outreach Activities

As in 2016, collaboration with the La Poterie community was our priority, and their daily involvement as part of the excavation team was extremely important in the joint interpretation of the past lifeways of the village.

The excavations were open to the public on a daily basis, and members from the La Poterie community and the general public paid regular visits to the excavation area. We organized two open days, which were very well attended by people from all over the island. Newspaper and television crews came by to interview the participants, and the excavations were broadcasted several times as news items.

Several school classes from the Tivoli primary school were invited to the site to engage with the Amerindian (*Kalinago*) past of the village of La Poterie, and to learn about the work of the archaeologists (Figure 1.31). They were also introduced to the production of pottery.

Special workshops have been designed for the school by one of our students, Sven Ransijn. Two days were spent at the school with six classes in total, which were taught various themes related to the indigenous past.



Figure 1.31 Tivoli schoolchildren receiving explanations on site.

1.16 Conclusions and Future Directions

The fieldwork was again considered to be very successful, with the objectives partially or completely met. The plateau is indeed the location where the proto-historic (*Kalinago*) village of La Poterie is located. Radiocarbon dating has indeed confirmed a date in the mid-16th-early 17th century as suggested earlier on the basis of the Cayo ceramic and the European earthenware encountered.

The materials found on the cliff side are not in context, but are materials swept from the actual village on the plateau. These end up down the cliff due to slope wash erosion. The continuous coastal erosion accelerates the amount of materials rolling down the slope. In this sense it is important to continue documenting the site. The recovery of so many houses with Troumassoid, Cayo and Afro-Caribbean artefacts as well as European materials at the La Poterie site is unique. The possibility to attribute artifact densities and specific artifacts (pottery, lithics, European wares) to particular loci and phases in the settlement provides the opportunity to identify possible functions for certain structures and activity areas. Exceptional of the La Poterie site is the succession of occupations from the 8th till the 18th century.

Future excavations will continue to be directed towards the excavations of structures, to be able to determine the entire spatial layout of the village(s). The next field campaign is planned for 2018.

During the coming years, an inter-disciplinary team will continue to work on the archaeology and heritage of Grenada amongst whom Grenadian scholars as Amanda Byer (heritage and legislation), Angus Martin (*Kalinago* history), and Lornadale Charles (heritage and education), all pursuing their MA or PhD at Leiden. Two members of the La Poterie community participated in the NEXUS1492 excavations in the Dominican Republic during the summer of 2017, in order to acquire experience in excavation techniques and heritage issues and learn about the indigenous past of the wider Caribbean region.

1.17 Acknowledgments

We would like to acknowledge Senator Mrs. Brenda Hood, Permanent Secretary Mrs. Arlene Buckmire-Outram, Permanent Secretary Mr. Aaron Francois, and Heritage Officer Mr. Michael Jessamy in the Ministry of Tourism, Civil Aviation and Culture for their permissions, help and trust in setting up the excavations at La Poterie. Great thanks to Mrs. Cleopatrice Daniel Andrew for the permissions she granted to excavate on her property and for organizing a wonderful stay at her home, and Mr. Cheo Christopher for permission to excavate on his property. We are very grateful to Wayne Edward, and Trina Antoine for the delicious meals and taking care of use while on Grenada. We also thank Ray Antoine, Arkell Baptiste, Alec Charles, Dolton Charles, Akimmon and Akim Andrew, and Steyson Bernard for their involvement in the excavations, their welcome and friendship. Special acknowledgments go to the community of La Poterie and specifically to the elders of the village, Evan Bholá, Kester Lyons, Bernard Alexander, and Livingston Krumah Nelson for hosting us, guiding us, and above all for their interest and trust in our work.

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2. La Poterie Petrography Report

2.1 Introduction

61 thin sections from ceramics from the site of La Poterie on Grenada were analysed petrographically. Table 2.1 shows the correspondence between the sample codes from Leuven and Leiden.

Sample Code Leuven	Sample Code Leiden	Sample Code Leuven	Sample Code Leiden
CB17AS001	LP1600081	CB17AS034	LP17000684.1
CB17AS003	LP16000139.2	CB17AS035	LP17000684.2
CB17AS004	LP16000146.1	CB17AS036	LP17000684.3
CB17AS005	LP16000146.2	CB17AS037	LP17000684.4
CB17AS006	LP16000146.3	CB17AS038	LP17000684.5
CB17AS008	LP17000158.2	CB17AS039	LP17000684.6
CB17AS010	LP16000230.2	CB17AS040	LP17000693
CB17AS011	LP16000230.3	CB17AS041	LP1700047
CB17AS012	LP16000255	CB17AS042/043	LP17000351.1/2
CB17AS013	LP16000373	CB17AS044/45	LP17000375.1/2
CB17AS014	LP17000414/6	CB17AS046	LP17000415
CB17AS015	LP17000415/1	CB17AS047/048	LP17000448.1/2
CB17AS016	LP17000416/35	CB17AS050/051	LP17000456.2/3
CB17AS018	LP17000423	CB17AS052/053	LP17000475.1/2
CB17AS019	LP17000424	CB17AS054	LP17000480
CB17AS020	LP17000429	CB17AS055	LP17000485
CB17AS021	LP17000448/2	CB17AS056	LP17000496
CB17AS022	LP17000448	CB17AS057	LP17000520
CB17AS023	LP17000522.1	CB17AS058/059	LP17000541.1/2
CB17AS024	LP17000522.2	CB17AS060/061	LP17000547.1/2
CB17AS025	LP17000525.1	CB17AS062	LP17000553
CB17AS026	LP17000525.2	CB17AS063/064/065	LP17000556.1/2/3
CB17AS027	LP17000525.3	CB17AS066	LP17000556
CB17AS028	LP17000525/6	CB17AS067	LP17000580
CB17AS029	LP17000547/2	CB17AS068/069	LP17000585.1/2
CB17AS030	LP17000584.1	CB17AS071	LP17000618
CB17AS031	LP17000584/1	CB17AS072	LP17000619
CB17AS032	LP17000584/2	CB17AS073/074	LP17000634.1/2
CB17AS033	LP17000593	CB17AS075	LP17000678
		CB17AS076	LP17000679
		CB17AS077/078	LP17000694.1/2
		CB17AS079	LP17000619.2

Table 2.1: Sample correspondence.

2.2 Results

F9

All samples except those discussed below (N = 57) can be assigned to petrographic group F9, as previously defined by Bert Neyt (Figure 2.1).

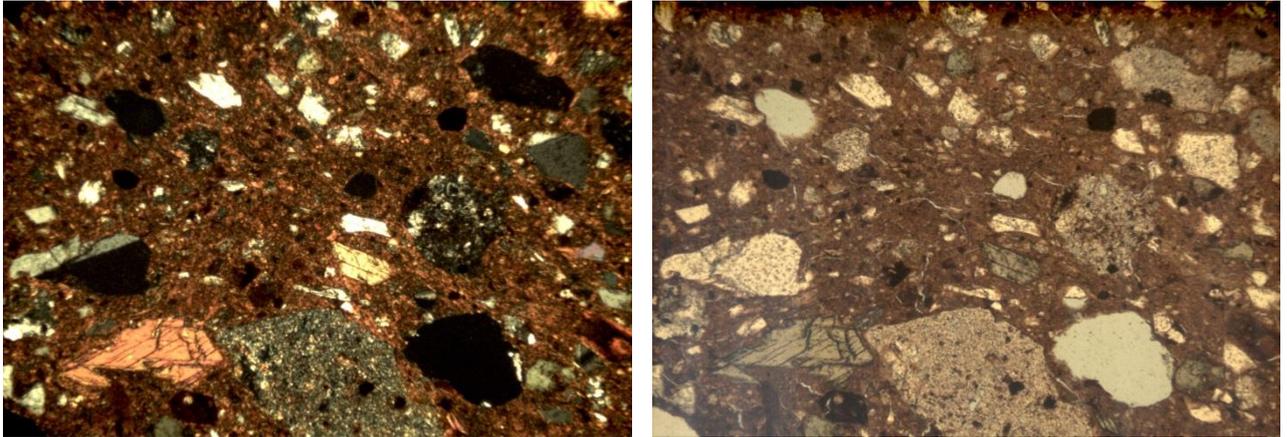


Figure 2.1 Sample CB17AS067, 5x enlarged.

F7?

Sample CB17AS013 petrographically strongly resembles group F7 (grog group) as encountered on Trinidad. Its chemical signature should be able to shed more light on whether this sample may have been imported from there (Figure 2.2).

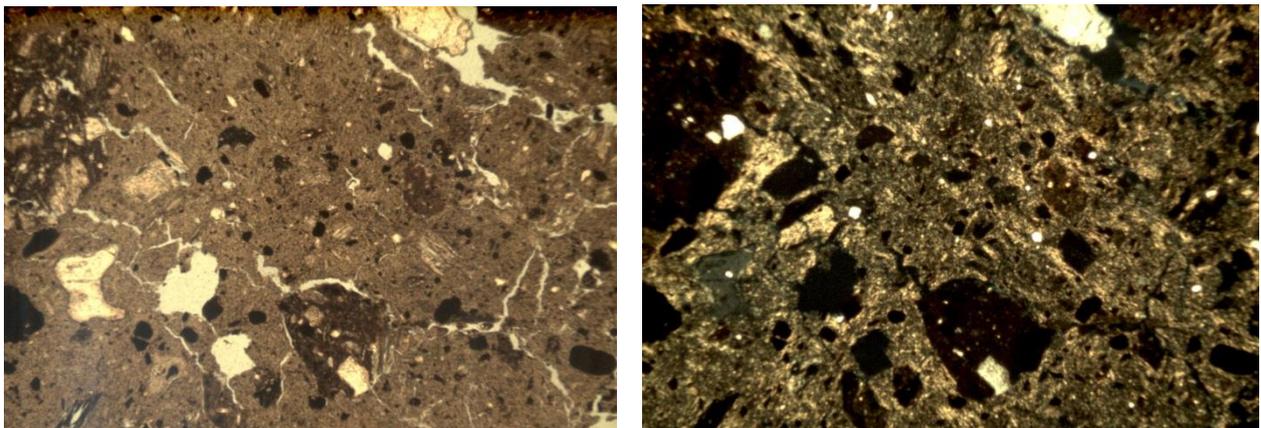


Figure 2.2 Sample CB17AS013, 5x enlarged.

F3

Samples CB17AS001 and CB17AS011 contain *caraipé* temper and therefore belong to F3, which is also local to Trinidad (Figure 2.3 and 2.4).

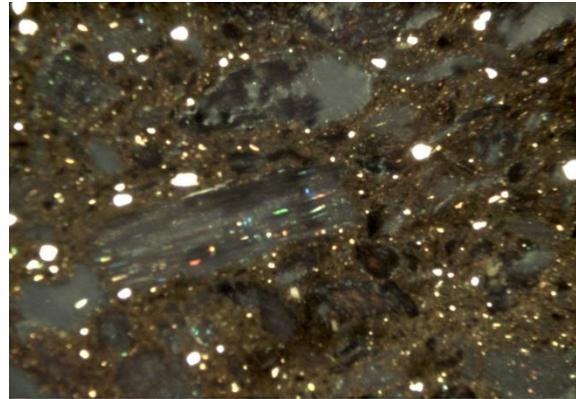
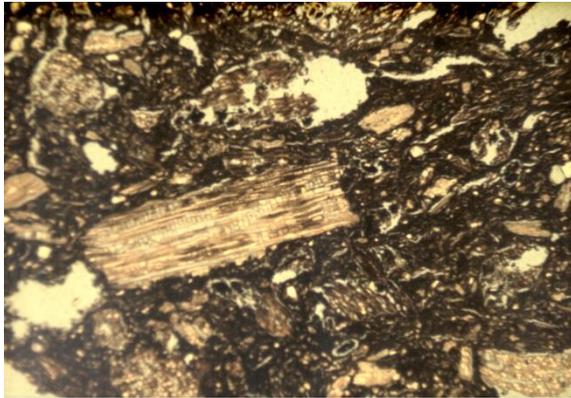


Figure 2.3 Sample CB17AS001, 5x enlarged.

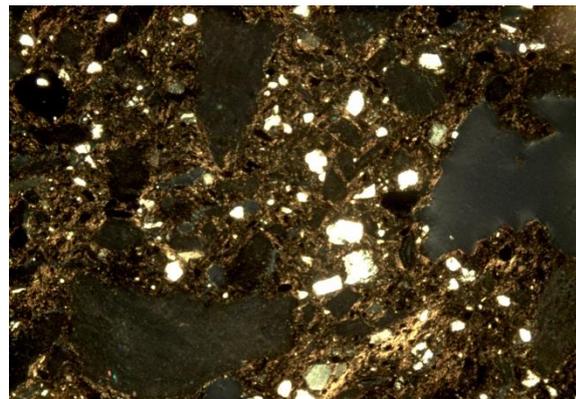
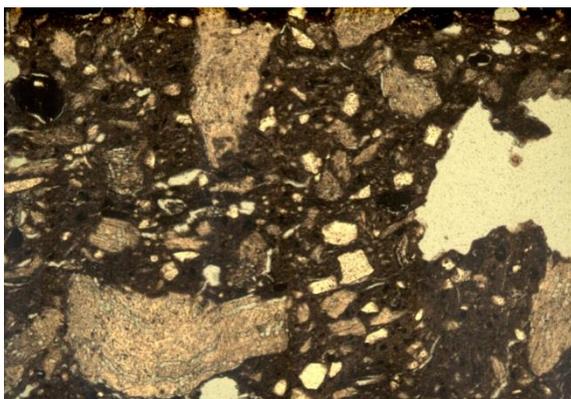


Figure 2.4 Sample CB17AS011, 5x enlarged.

F25

The colonial sample CB17AS038 does not fit in any of the categories previously defined for the pre-colonial material. A new description is provided in the appendix.

2.3 Discussion

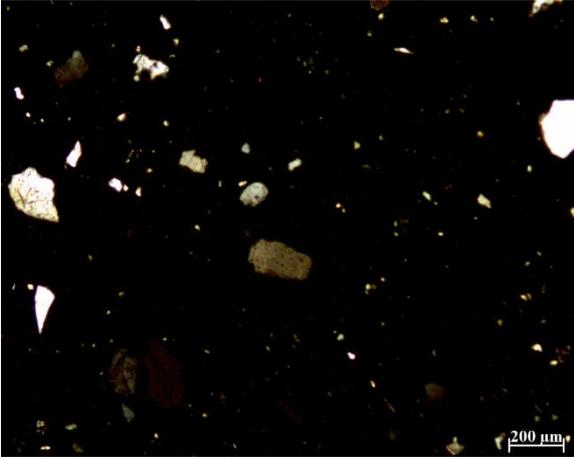
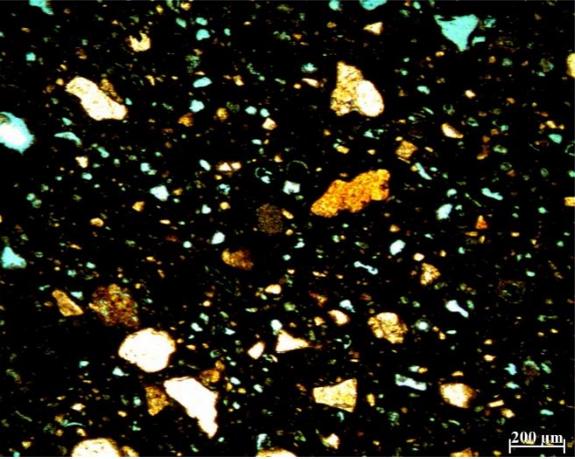
From a petrographical point of view, most pre-colonial and Afro-Caribbean samples appear to be local to Grenada. Moreover, no clear distinction can be made in thin

section between the different stylistic affiliations of the samples (Troumassoid, Cayo or Afro-Caribbean). 3 samples show a petrographical signature which has previously only been encountered on Trinidad. Only one of the two colonial samples in this database showed a markedly different paste composition.

2.4 Appendix

Group F25	DENSE MATRIX with QUARTZ
<p>This fabric is characterised by a very fine and dense matrix containing mostly quartz inclusions, which appear to have been added as temper. In terms of microstructure, sub-rounded meso-vughs can be perceived and the inclusions display hints of coiling. The groundmass is optically inactive and the matrix is dark, homogeneous and non-calcareous, suggesting a reducing firing atmosphere at relatively high temperatures. In terms of inclusions, the c:f:v ratio is 10:80:10 with f < 0.2 mm. The inclusions are generally sub-rounded and elongate with a mode of ca. 0.3 mm and a maximum size of ca. 0.8 mm. They are moderately to poorly sorted and display a bimodal distribution. <i>Quartz</i> is the predominant inclusion type with the aforementioned characteristics. There are also a few instances of a fine felsic to intermediate volcanic rock, which cannot be further determined due to its small size and a few clay pellets. A slip layer is present on the outside.</p>	

Sample	Island	Site	Remark
CB17AS038	Grenada	La Poterie	Colonial

Pictures	
<p>CB17AS038 – XP</p> 	<p>CB17AS038 – PPL</p> 

3. Analysis of un-glazed ceramic material from La Poterie, Grenada using pXRF

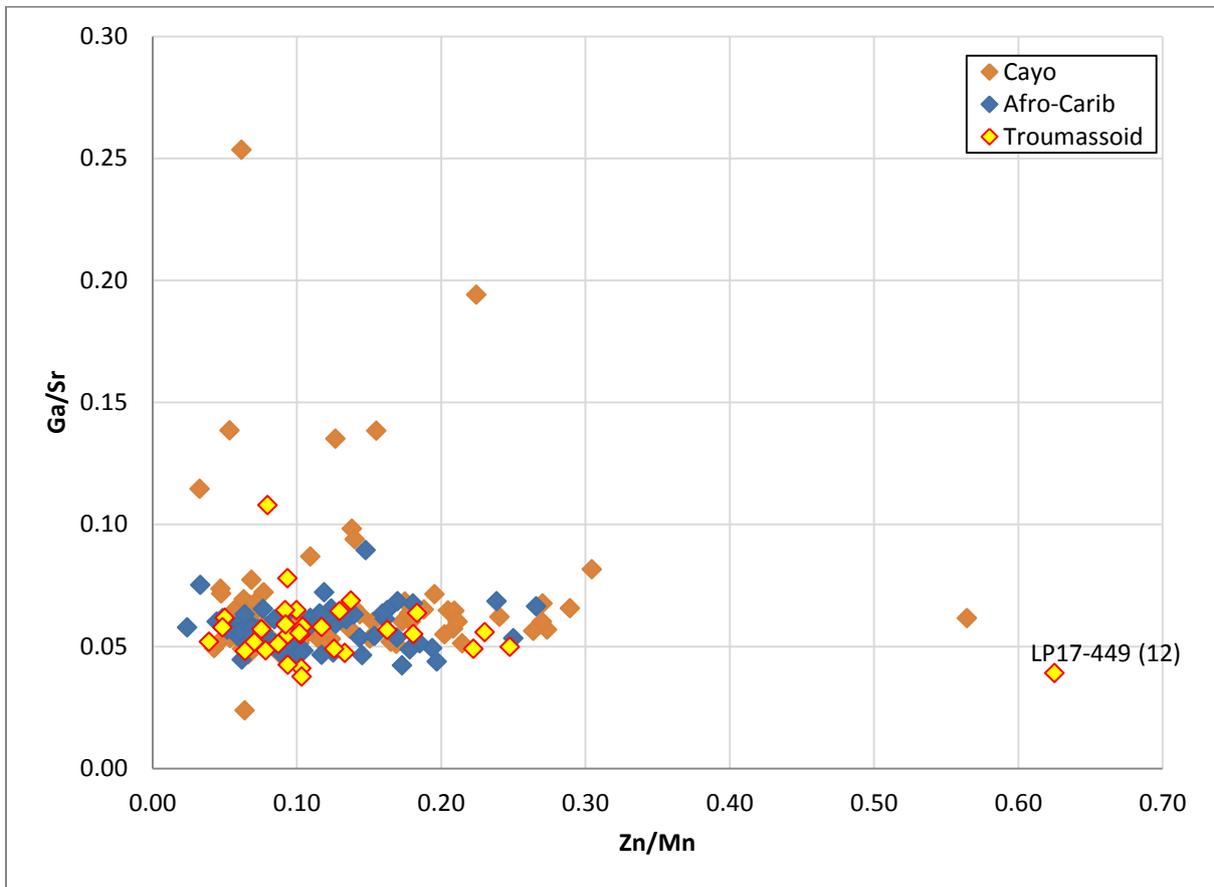
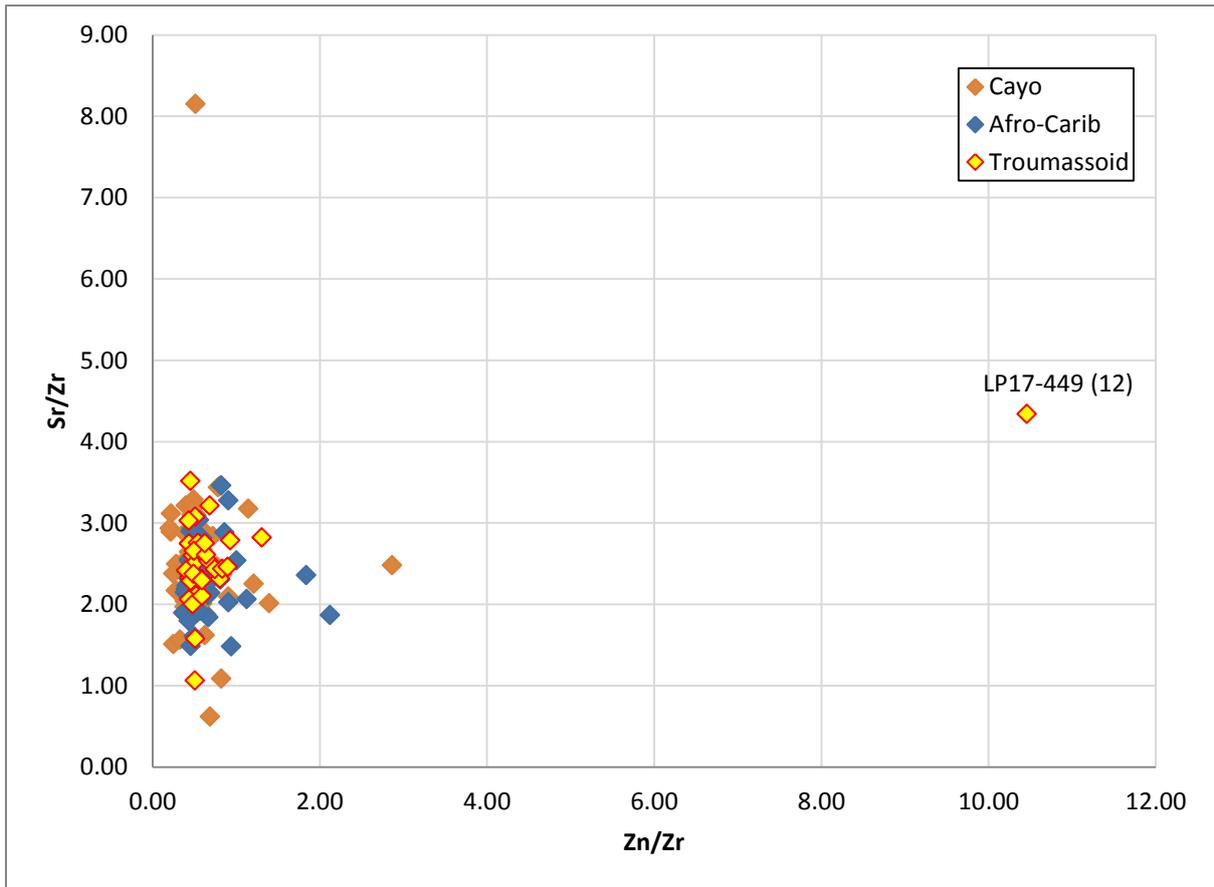
By Rebecca Scott (Leiden University/KU, Leuven)

A Bruker Tracer III SD portable XRF spectrometer (pXRF) was used to analyse the chemical composition of 191 un-glazed ceramic pieces (58 Afro-Caribbean, 16 Colonial, 80 Cayo, 32 Troumassoid, 5 Unclassified) from the excavation at La Poterie, and 10 surface finds of sugarware from the area around the kiln site in La Poterie.

The instrument was operated at 40kV, 30 μ A, no vacuum, no filter, for 60 seconds per sample. This is following the procedure established during the 2016 work season on Grenada (see Scott et al, forthcoming). The chosen operating parameters allow the screening of all the elements in the sample and make the results comparable to previous pXRF studies. Although 40 kV is not ideal for the analysis of light elements in the sample, it gives good results for the mid-range elements which previous laboratory tests indicated could be useful for provenancing purposes. Since the net peak area counts do not directly reflect the concentration of elements in the samples, ratios of peak areas were compared, as this is a better reflection of the relationship between the elements.

3.1 Results and Discussion

There is no real compositional difference between the Troumassoid, Cayo, and Afro-Caribbean ceramics. The bulk of this group can be characterised with Sr/Zr 1.48-3.52, Zn/Zr 0.22-1.40, Ga/Sr 0.04-0.08, Zn/Mn 0.02-0.29, Ti/Zr 3.11-6.56. Figure 3.1 shows that there are some outliers to this bulk group.



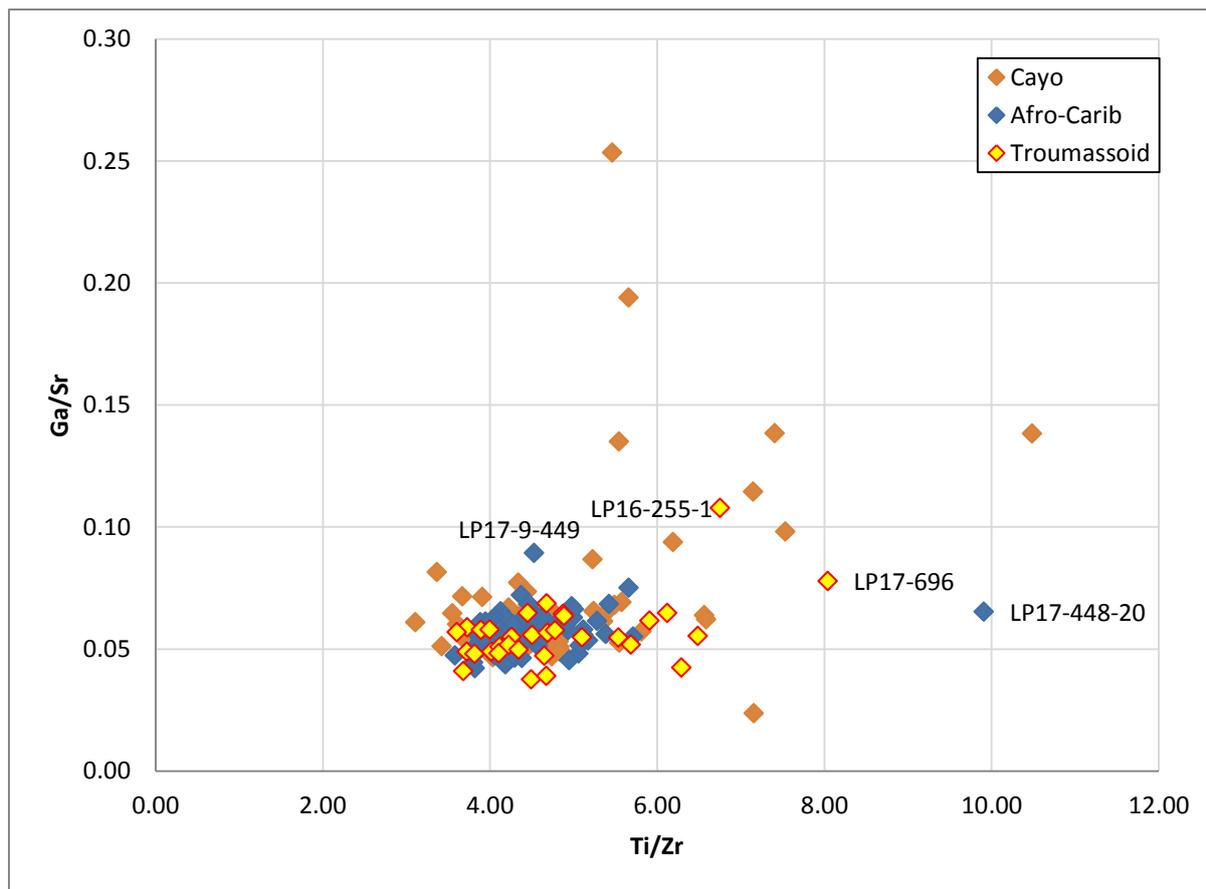


Figure 3.1 Biplots of a) Zn/Zr against Sr/Zr, b) Zn/Mn against Ga/Sr, and c) Ti/Zr against Ga/Sr.

The Afro-Caribbean samples which appear as outliers to the main group, vary in each case. This is most likely explained by natural variations in the clay raw material and/or the uneven shape and finish of the samples. This can be seen with the most noticeable outliers of this group in Figure 1c, LP17-448-20 (a fragment of a crudely finished unrestricted bowl) and LP17-9-449 (a fragment of a crudely finished restricted bowl). The convex shape and the crude surface finish will introduce additional air gaps which can influence the attenuation of the X-rays. It is therefore probable that these samples are made from the same clay as the rest of the Afro-Caribbean group.

Two of the Troumassoid outlying samples are of very uneven shape (LP17-696 (with noticeably higher Ti/Zr) is part of an appendage which meant that it could not be placed flush with the instrument detector. LP17-449 (12) (with higher Zn/Zr and Zn/Mn) is the curved neck of a vessel, designated either Troumassoid or Cayo, and again would not sit flush with the instrument). This introduced large air gaps between

the sample and the instrument detector which will have affected the attenuation of the X-rays. LP16-255-1 is a fragment of an unrestricted bowl with a polished surface. This sample had no noticeable major air gaps during the analyses. LP16-255-1 is an outlier in terms of its Sr contents with Ga/Sr 0.11 and Sr/Zr 1.07, it also has slightly higher Ti/Zr 6.75 compared to the other Troumassoid samples. It is possible that this sample may have been made from a different clay to the other Troumassoid samples.

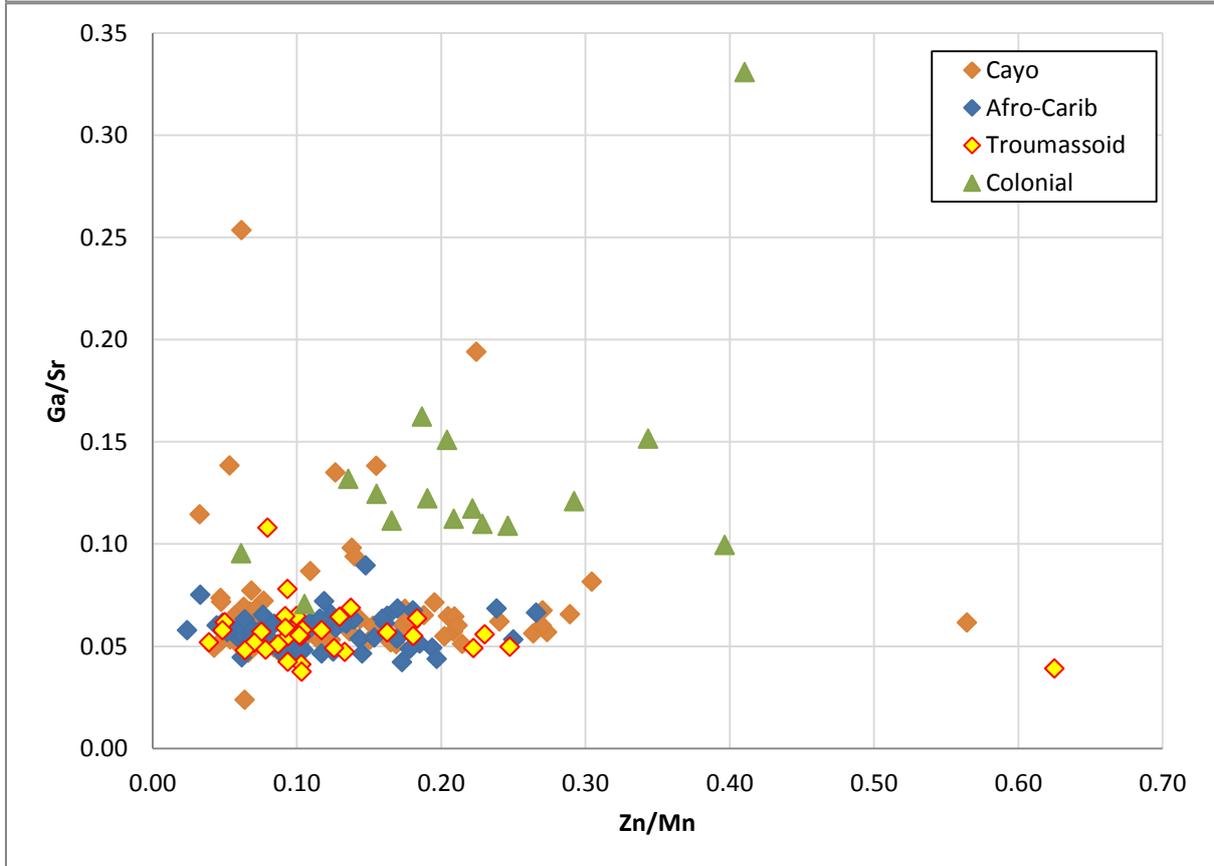
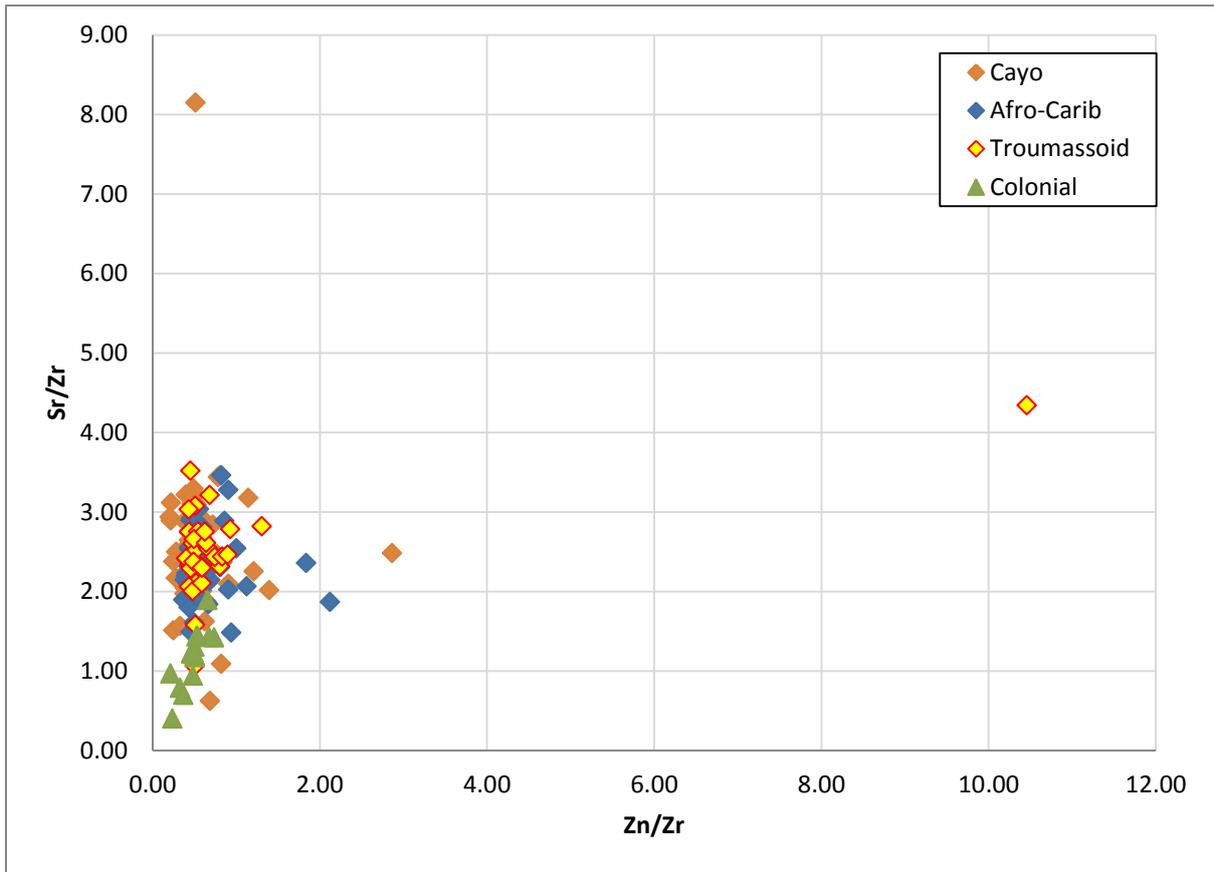
The majority of the outlying samples are fragments of Cayo vessels. These are outliers most noticeably in terms of the Ga/Sr (>0.09) and Ti/Zr (>7.1). No additional or overly large air gaps were noted during the analyses, suggesting that the variation in composition is a result of the raw material used, rather than a result of matrix effects. Table 3.1 lists all of the outlying Cayo samples.

Sample	Typology	Sr/Zr	Ga/Sr	Ti/Zr
LP16-139 (11)	Non-diagnostic	8.15	0.02	7.15
LP16-81	Non-diagnostic	1.09	0.19	5.66
LP16-230 (3)	Painted flower pot	0.62	0.25	5.46
LP17-422 (1)	Non-diagnostic	1.87	0.11	7.15
LP16-78-1	Restricted bowl with two inflection points and incurved rim	1.57	0.14	7.53
LP16-74-13		2.02	0.14	10.49
LP17-116-31	Handle	1.97	0.14	5.54

Table 3.1 Outlying Cayo Fragments.

It should be noted that one Cayo sample (LP17-509) appears as an outlier in terms of the Zn, with Zn/Mn 0.56 and Zn/Zr 2.87. However, it is only in respect to Zn that this sample is an outlier.

With the exception of one sample (LP17-548) the Colonial ceramics are a different composition to the bulk Afro-Caribbean, Cayo, and Troumassoid group. The compositional difference is mainly related to the Sr content in the samples, with lower Sr/Zr ratios and higher Ga/Sr ratios. Although there is no obvious difference in terms of Zn/Mn and Ti/Zr, when compared to the Ga/Sr, these samples can be clearly separated (Figure 3.2).



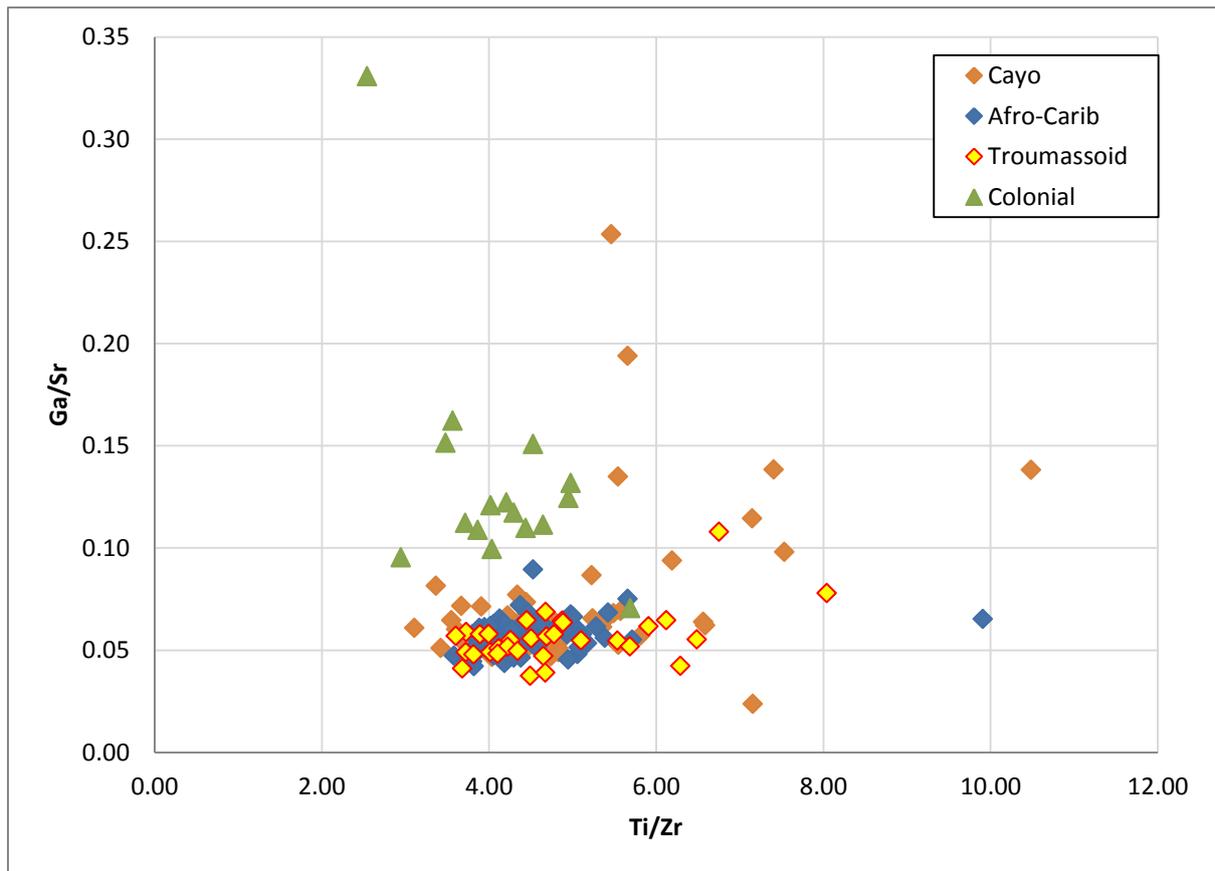


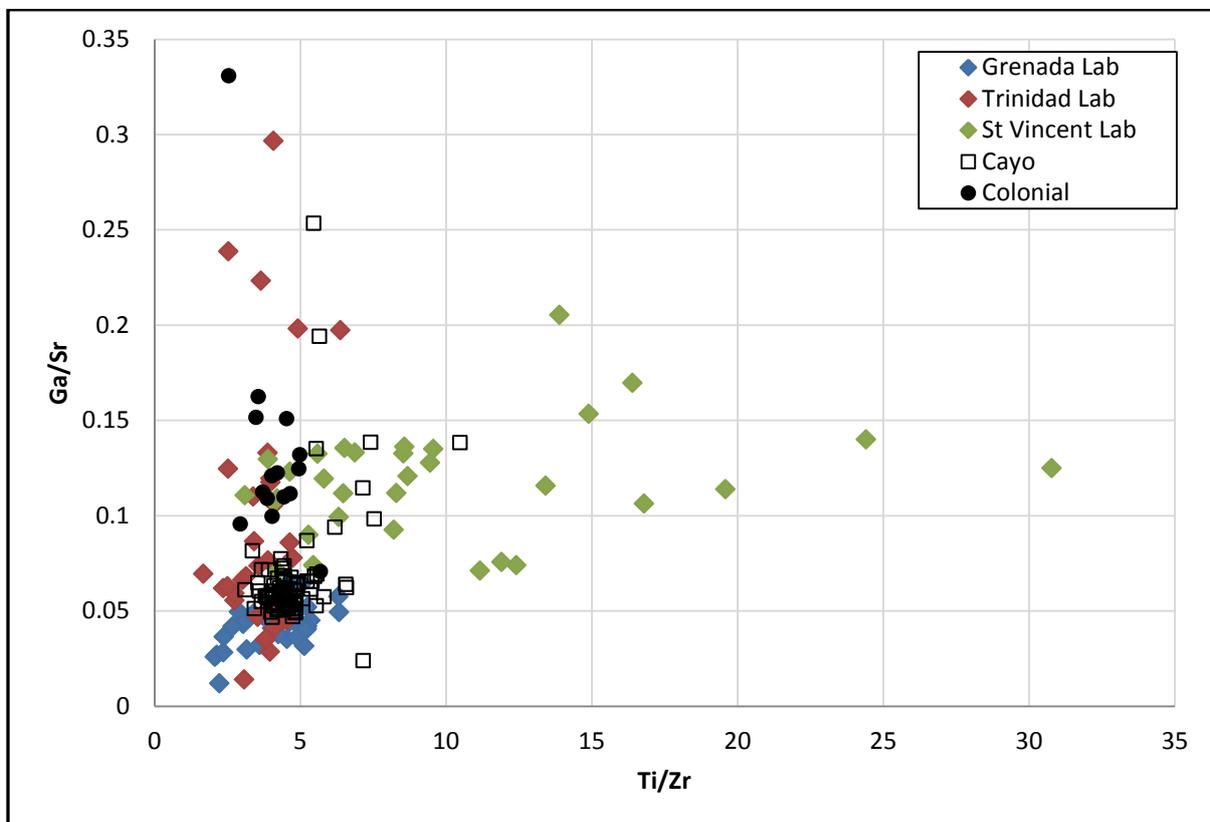
Figure 3.2 Biplots showing a) Zn/Zr against Sr/Zr, b) Zn/Mn against Ga/Sr, c) Ti/Zr against Ga/Sr.

Surface fragments of sugarware were collected from the kiln site in order to offer a comparison with the Colonial ceramics found on the excavation. These fragments group mostly with the Colonial samples but three plot between the two groups. It should be remembered however, that these surface samples were not cleaned prior to analysis, so the pXRF signal may be influenced by any soil adhering to the fragments. Four of the Unclassified samples (the surface find, LP17-622-1, Pt16-81-1, LP16-363-1) all group with the main group of Cayo, Afro-Caribbean, and Troumassoid samples, while LP17-443 (Figure 3.3) groups with the Colonial samples.



Figure 3.3 Sample LP17-443.

The data were compared to the baseline groups established for the 2016 work. Since there is no real compositional difference between the Cayo, Troumassoid, and Afro-Caribbean ceramics, only the Cayo group has been plotted in Figure 3.4, for ease of viewing.



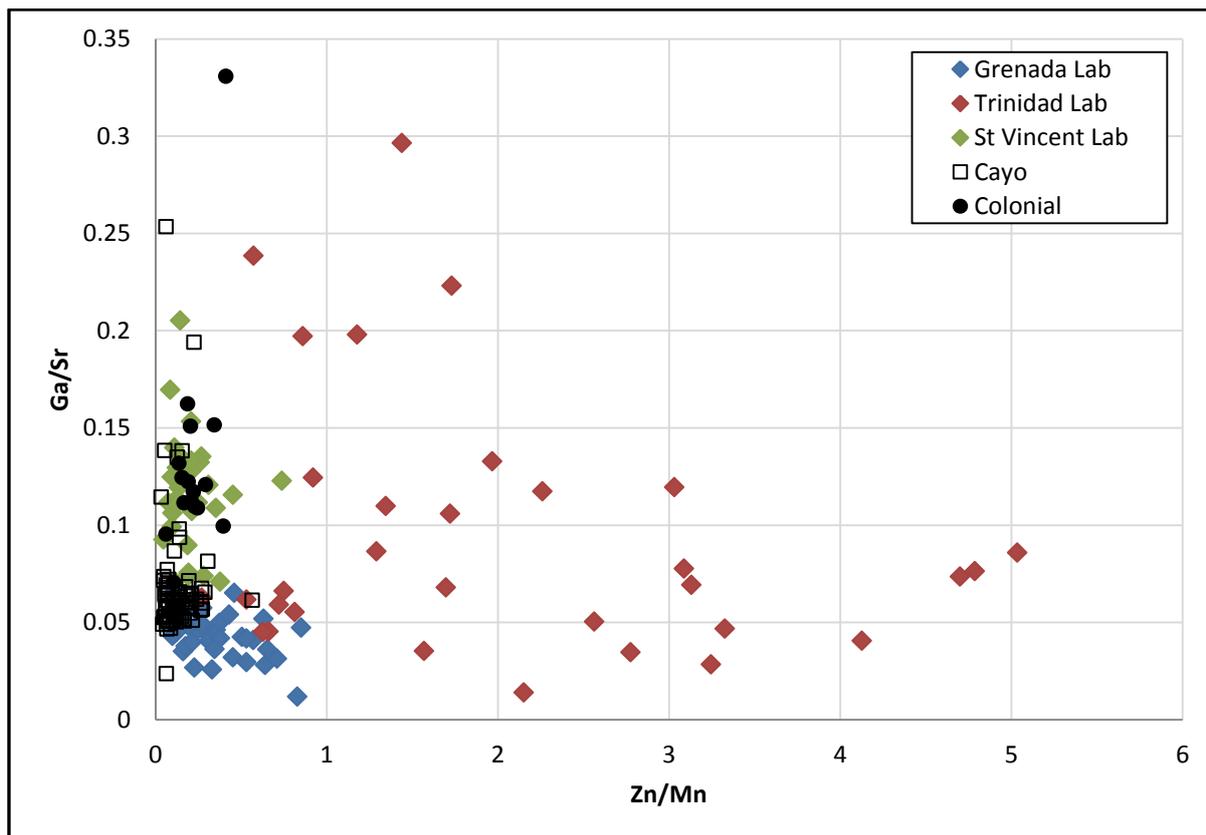


Figure 3.4 Biplots comparing the 2017 field data to the 2016 baseline.

The bulk Cayo group plots with the Grenada baseline data, while the Cayo outliers appear to plot with the St. Vincent material. However, the Colonial material also appears to plot more with the St. Vincent material. Due to the presence of the remains of a kiln at La Poterie, it has previously been assumed that the Colonial material was made locally. A survey of clays from Grenada was conducted and Figure 3.5 illustrates the sites where clay raw material was located and sampled. Lou Jacobs conducted workability tests of the clay in the field, and suitable clay samples will be analysed compositionally. Until the clay analysis has been completed, it is impossible to say whether or not the Colonial ceramics were made from clay local to the island. Likewise, the Cayo outliers, while made from a different clay to the main Cayo group, may still have been made from a local Grenada clay.

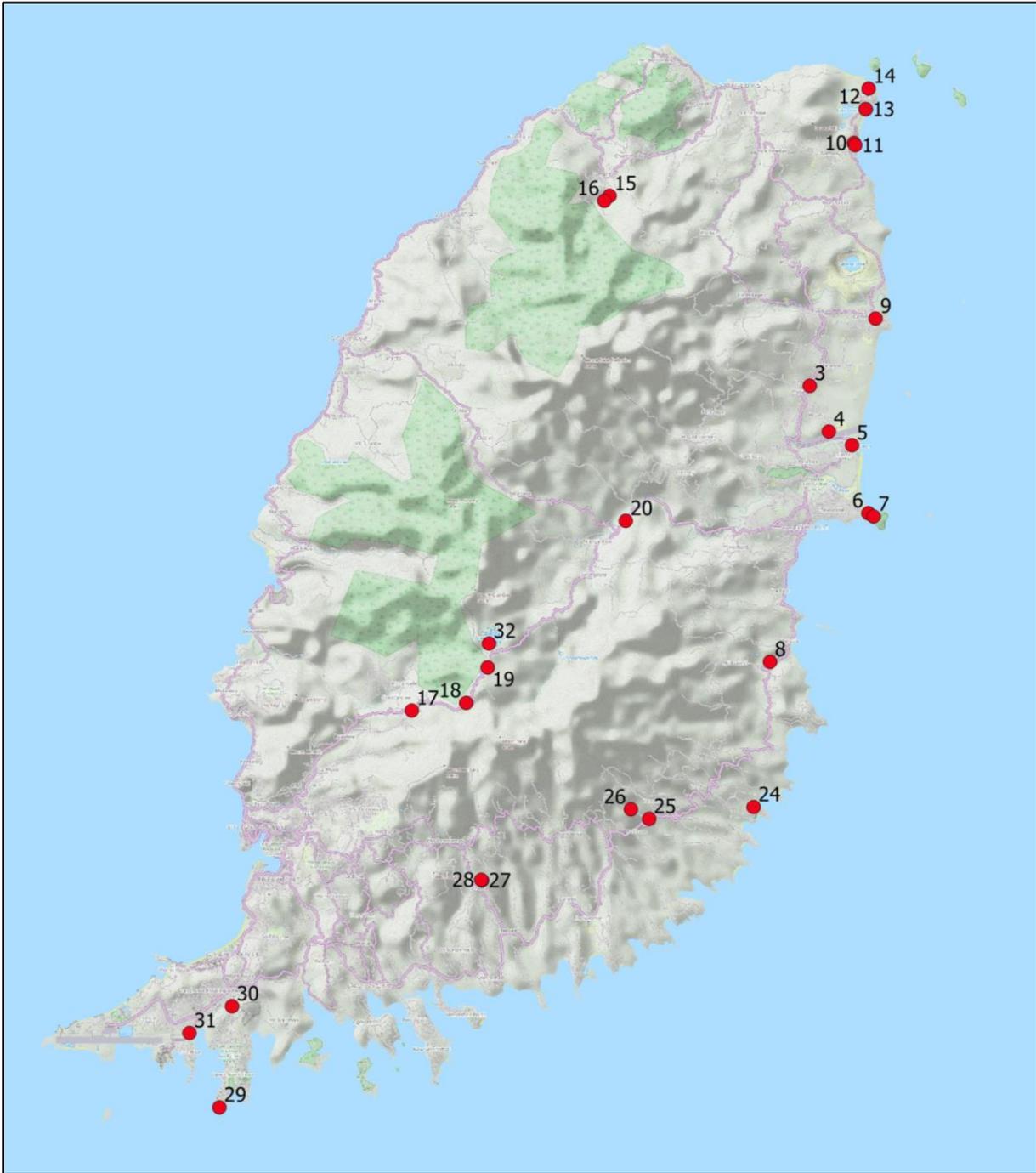


Figure 3.5 Location of sampled clays – La Poterie is located at point 9.

3.2 Conclusion and Future Recommendations

The ceramics excavated at La Poterie utilise at least two compositionally different clay sources. The majority of the Cayo, Afro-Caribbean and Troumassoid samples appear to be made from very similar clay(s), and when compared to other Grenada ceramics these appear to cluster very tightly, supporting this idea. The Colonial

ceramics are made from a different clay source, although without knowing the composition of all the workable clays on the island, it is impossible to say whether or not this is a Grenada clay. Likewise, while it is tempting to say that the Cayo outliers are products of exchange from another island, without a thorough understanding of the available Grenadian raw material sources, this is impossible to say.

Analysis of the clay from Grenada, along with a thorough petrographic and geochemical study of some of the La Poterie ceramics is necessary in order to further clarify the provenance of these finds.

4. Preliminary Results of Starch Grain Analyses from the La Poterie Plant Processing/Cooking Tools

Listed below are the preliminary results of the starchgrain analyses conducted by Dr. Jaime R. Pagán Jiménez on a selection of the ceramics found in La Poterie in 2016 and 2017.

LP17 FNR 678:

An artifact identified as an Afro-Caribbean ceramic grater.

Traces of *Triticum*, (wheat) and/or *Hordeum* (barley) specimens, *Capsicum spp.* (chili peppers) in both unaltered and fermented state (Figure 4.1), *Zea mays* (maize) and several unidentified starches that are likely from tubers, have been found on this artifact.

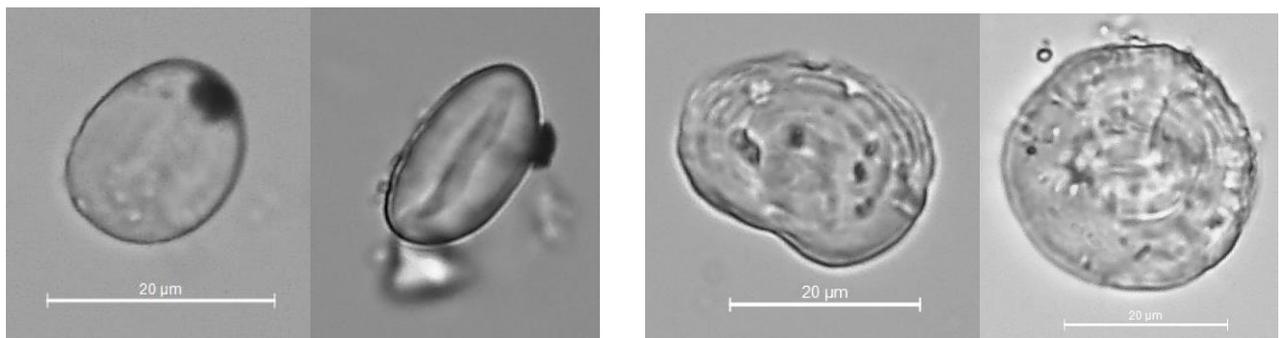


Figure 4.1 *Capsicum spp.* starches in unaltered state (left) and in the initial state of fermentation (right).

LP17 FNR 589:

This artifact is likely another Afro-Caribbean ceramic grater.

Starched from *Capsicum spp.* (chili peppers), *Manihot esculenta* (manioc) have been found, together with several unidentified starches, one of which might be *Dioscorea spp.* (yam).

LP17 FNR 422:

Ceramic pot from the Cayo assemblage found on the cliff.

On this pot, traces of *Capsicum spp.* (chilipeppers), *Triticeae hordeum* (barley) or *Triticeae triticum* (wheat), *Phaseolus vulgaris* (beans) and palm phytoliths have been found.

LP17 FNR 449:

Rim fragment of a Cayo pot, possibly a kashiri pot, which was found after a landslide by local community members.

The fragment contains *Capsicum spp.* (chili pepper) traces, many of which have been altered by heat, and traces of *Phaseolus vulgaris* (bean) starches.

LP17 FNR 570:

Possible cooking pot or serving plate of Afro-Caribbean origin.

This artifact contains traces of *Capsicum spp.* (chili pepper) and many unidentified starches, both heavily altered by heat in a dry environment (Figure 4.2).

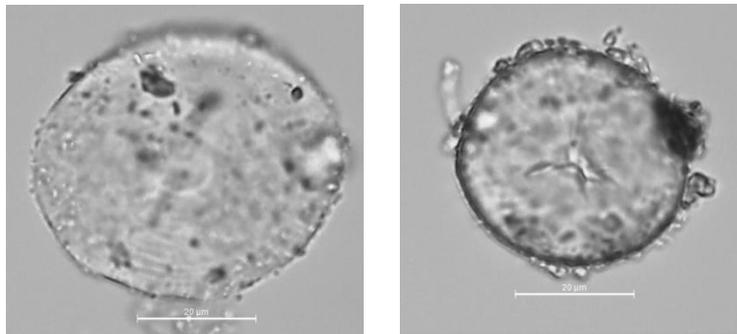


Figure 4.2 *Capsicum spp.* starches altered by heat in a dry environment.

LP16 FNR 268:

Ceramic artifact identified as a cooking pot.

It contained traces of *Manihot esculenta* (manioc) (Figure 4.3), possible *Maranta arundinacea* (arrowroot) and a cluster of unidentified starches.

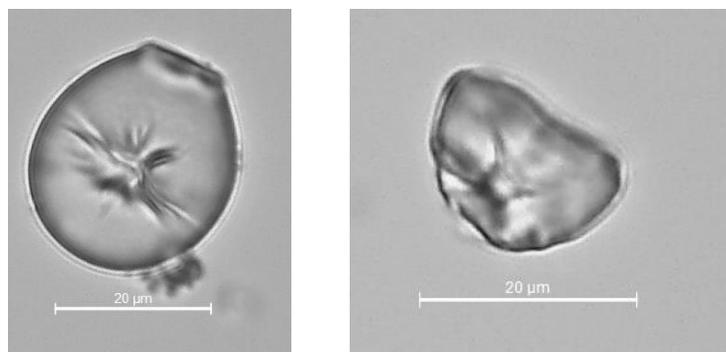


Figure 4.3 Diagnostic *Manihot esculenta* starches.

LP16 FNR 171:

Artifact (pebble), was identified as a possible mano.

The artifact contained hundreds of starches, many of these were identified as from the *Phaseolus* family (legumes). Most of the starches were altered by heat in a dried environment, suggesting they were heated on low temperatures for a prolonged period of time, directly over a fire or in a cooking pot.

LP16 FNR 82:

Ceramic cooking pot.

Only four starches have been found on this artifact. One of these is probably *Zea mays* (maize), the rest are from the *Phaseolus* family (legumes), both domestic and wild species.

LP16 FNR 128:

Clay griddle.

No starches were found on this artifact.

5. Report on clay collection on Grenada January 18 - 28 2017

By Lou Jacobs (Leiden University)

A short 10 days stay at La Poterie, in Grenada was filled with four main activities.

1. Collecting clay-samples
2. Processing the materials and a firing experiment
3. Restauration of about 40 vessels and vessel parts
4. Some teaching and explanation to local people from the neighborhood

1). To start, 32 clay samples were collected. The goal of this is to get an impression about the availability of clays on the Island, which in respect with pottery making in the past possess reasonable to good workability properties. The idea is that such clays were used by indigenous people to be prepared for pottery making. The presence of exploitable quantities of good clays on a location implies that pottery production most likely has been local. Alternatively, the absence of such materials means that pottery, or remains if found, must have been imported from abroad. A knowledge of the spread of ancient crafts, like pottery production is important in relation to the question of the existence of old networks.

Anyhow, the insights in the technological chain is highly improved by reconstruction experiments with local materials which are to be executed if possible, best on location. Considering the sampling activity, in three days the most accessible and most likely parts of the Island were covered. Roughly a broad zone of about 10 km. along the shore and depending on the reachability was searched. A first criterion was accessibility, however due to the local morphology of the landscape, the last part of the trajectory to a chosen location most often had to be passed by foot. A start was made at the Eastern part of the Island, roughly from La Poterie downwards till Mt. Carmel. At the same day in the afternoon the North-Eastern area, from La Poterie up till Sauteurs Bay was sampled. Some good clays were already found there. Next day the entire North-Western and Western part were sampled. This part of the Island is

rather rocky and as a result was a bit disappointing, however near the old “Indian village” named “Red-mud” some good samples could be taken. After that the whole costal area below, including that of St. George was covered. This area however as already mentioned, proved not to be rich in deposits of suitable clays. As an example, following the advice of some local inhabitants, we attempted to find a suitable clay deposit near Black-Bay. After a nice, but exhausting foot trip following muddy mountain tracks, we returned empty handed. The day after, the area along the mountain road was investigated. Nearby Grand Etang Lake the clay did not prove to be very plastic. The deposits in the mountainous area prove to contain primary clays, most of which, due to the volcanic origin tend to be rather rich in iron components. Nevertheless, samples were taken here since their red color appeals to the eye and as such they may have been used for related activities. The last day of collecting clays was spent on sampling the entire Southern part of the Island, from Crochu till L’Anse Aux Epines and the most South- Western part. Finally, some samples taken nearby La Poterie proved to be promising.

Considering the strategy for predicting candidate locations where good clays are likely to be found, this is based on three thoughts. One of them is the presence of nowadays pottery production, or production in a recent past, like related to the sugar industry. In this respect historical information is considered as important. Next to that we try to receive indications from local peoples. Geological studies of the Island morphology form another track, whereas related to that a study of the recent landscape and a close observation of the real situation are important. During sampling a quick judgement of the situation is made and already in this stadium an estimation of the plasticity of each sample is made. A point of attention is to avoid the sampling of so called “Intratuin Earth”, which means to say recently applied deposits of imported soil. The situation on Grenada in this respect seems to be favorable however. There are quite some plants and old plants on the island, but it seems not to have been a habit to improve fertility by applying new layers of soil or earth from other locations. Probably this was because areas fertile by nature were abundant, thus the quality needed no improvement. Generally spoken, soils mostly seem to be in their original locations. A large part of the Island is simply overgrown with vegetation and as a result not so easily accessible. Our sampling, if possible, is taken where deeper layers form outcrops, like by already existing cuts through the upper

soils, for example at the edges of old gullies or nearby quarries and utility constructions.

Next to that the samples are brought to the excavation house and immediately processed. Most often this involves an addition or a withdrawal of moisture. The intention of the treatment is to bring the clay in an optimal plastic condition, which is typical for each clay and to mix it for a while. Eventually stones gravel and roots are removed by hand. Again, the clays are judged on some other workability properties like the combination of plasticity and cohesive strength. An ultimate test is the production of a small pinch bowl and the addition of some coils to this. Notes are made on the workability properties. From the samples which pass all these tests, a limited quantity is enveloped to be saved for further laboratory tests and eventually forming tests. In the laboratory specific material properties like shrinkage, color and firing behavior are tested. Apart from that a small quantity of each sample is saved for XRF-testing and isotope analysis. Therefore, during the complete testing procedure care is taken to avoid contamination and to keep the clays clean. The final test-results will be part of a D-base that allows to compare clay properties among several Caribbean Islands.

2). Some of the test vessels were used in a small firing experiment on location (Figure 5.1). For this experiment the hearth place normally used for cooking was adapted a bit and as such could be considered as a protected firing place. In about 3 hours the small pots were fired. The fire was built up by a glowing layer of ash and charcoal at the bottom, on top of which the pots covered with thick wooden branches were piled. The open spaces in between the branches were filled as much as possible with lumps of coconut shell. This way a rather closed cover of heat was created, like a kind of protecting cocoon, since the sides and the bottom of the fire were closed by a low wall of bricks. This construction proved efficient enough



Figure 5.1 unfired vessels.

to keep the heat in. Nevertheless, about halfway the firing process a strong wind blew through the openings and over the fire, causing long hot flames. By this the firing temperature during a relative short period must have increased till above 850 degrees and locally eventually even higher. About half of the 18 vessels came out well fired. The other half was broken, mainly by the abruptness of the aforementioned increase of temperature. Interesting is it to mention that all of the broken vessels were constructed of the clean but further untampered clays. The unbroken vessels however were made of part of the rather plastic clay samples, which had been intentionally improved by an addition of about 20% of mineral sand. This event again underlines the importance of clay preparation and reveals why the indigenous potters tended to temper their clays with amounts up to 35% of non-plastic grains. The most plastic clays behave like "wild" which means that they tend to dry uneven and shrink over 15%. As a result, vessels made of these materials tend to warp and crack, whether during drying or during firing. Obviously, the solution is tempering the clays.

3). About 40 vessels and vessel parts were restored, a job that took place at the Wilcox property in Westerhall. The collection of vessels contains a lot of unique items and it is of great importance from a scientific point of view that it is kept together. As such it was a pleasure for me that by restoring I could in some way contribute to this striving.

4). We consider it important to bring our activities to the attention of Grenadians. We are involved with revealing parts of their history and see it as our task to show them what we are looking for. In the beginning a small exhibition was organized by Prof. Corinne Hofman and later people from the neighborhood visited the excavation site, where the team members explained their work. Next few days some school classes visited the place where the children proved to be very enthusiastic about part of our work.

It is necessary to mention that the clay sampling was done in kind corporation with Rebecca Scott, who will be in charge of the XRF-scanning and isotope analysis of the materials as well. All the clay processing was hardly possible without the kind assistance of Olga and the interest of some local assistants, who also helped with clay sampling. The presence of Ilone de Vries, who was responsible for

administration tasks as a travel partner and her help with some general items was highly appreciated.

6. Grenada 2017, Testpits at La Poterie, Playing Field

By Mark W. Hauser (Northwestern University, Chicago) and Corinne L. Hofman, (Leiden University)

6.1 Plain Language Summary

This report describes research activities carried out in January 2017 at the playing field in La Poterie, Grenada (Figure 6.1), and presents preliminary findings from archaeological testing. A first archaeological survey was conducted at this location in 2016 (Hauser in Hofman 2016, and summarized in this report). Archaeological survey and testing at the site indicates the presence of a British Period Slave Village (1763-1834) and a French period masonry structure (1740-1760). We believe that the development of the area as planned will impact the slave village. If the development moves forward, we recommend that it be monitored by an archaeologist who can both detect and document features such as post holes, cooking hearths, and burials, as the landscape is manipulated.



Figure 6.1 Areal View of La Poterie

6.2 Purpose of Work

This research was conducted at the request of Minister Roland Bhola and community organizer Evan Bhola in the context of the MOU between Leiden University and the Government of Grenada, who with the verbal understanding of the Minister of Culture, wished to determine the archaeological significance of sites located in two parcels of land in La Poterie. The first parcel of land, 'the playing field,' has been in community use for considerable time. The second parcel of land, has been used for agriculture. As expressed to myself, the community intends to construct a football field, and a historical interpretive center among others. The purpose of this research was to determine the potential impact of the project. As such, our immediate goals were to determine the size, chronology, and if possible, the organization of archaeological sites identified in a survey conducted by the author in January, 2016.

6.3 Previous Work

There is a long history of archaeological research in the region beginning in the mid-twentieth century and extending sporadically up until the 21st century. In the 1980's the intensity of work in the region increased, with a research team from the Florida Museum of Natural History. Most of this work focused on the documentation of the Saladoid settlement at the Pearls site, though Annie Cody conducted a survey that also documented remains in or near coastal plains which remains the primary methodology of regional survey in the southern Lesser Antilles. The primary emphasis appears to have been documenting the size and location of settlements, though their preliminary reports sometimes also record the presence of landscape features, plantation sites, wells, factories, and aqueducts.

Despite its insularity, the region has had a very long history of human occupation. The Caribbean Archaic Age (about 3000-500 BC) is thought to represent the earliest migration of humans in the Lesser Antilles, though it is known only from a scattering of poorly reported (and mostly undated) sites. To date, only a single radiocarbon date derived from a Queen conch (*Lobatus gigas*) shell at the Heywoods site on Barbados. In the third millennium BCE, La Poterie appears to become a

location of human habitation. Peter Siegel identified anthropogenic fires from sediment cores recovered from Lake Antoine (Siegel in press).

In 2016, our survey region was defined to incorporate the outermost boundaries of the plantations and their hinterland (Figure 6.2). River Antoine runs from the southwest to the northeast across the portion of the region. To its north we extended our survey region by 3 kilometers to include the narrow floodplain surrounding a volcanic lake. The Great River runs from west to east. To its south we extended our survey region by 3 kilometers to include Telescope Point, a highly visible landscape feature from land and sea. To the western edges of the parish high hills quickly rise above it. These hills created an effective boundary though the terrain opens up to the north. In the center of the region there is a low-lying region surrounding Pearls. This area became a focus of intensive agricultural activity between 200 BCE and 500 CE and the complex ceremonial center for the region studied by a number of scholars over the years (Bullen and Bullen, Keegan, and Cody).

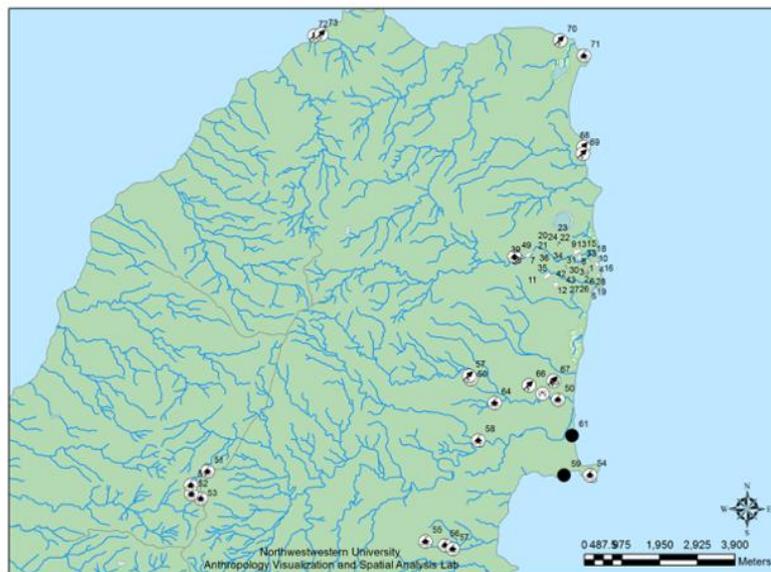


Figure 6.2 Sites Located in 2016 Survey.

The La Poterie Survey which provides most of the evidence for this discussion is the first systematic regional survey project in Grenada that accounts for both historic and ancient landscapes. The project was initiated by Hofman, Hoogland and Hauser in 2016. Our primary interests in designing this research were to examine the

changing economic, political, social and material networks in the region, and as noted earlier, these goals determined the delineation of our survey area. We began the project estimating that indigenous settlement at the time of European engagement was restricted to high outcrops close to the ocean, with command viewpoints. Thanks to the efforts of Hauser and Broodbank in tracing visual networks, we soon realized that this is a significant underestimate.

Our survey was a sample survey, focused most intensively around river valleys, landscape features and contemporary settlements. Over four weeks of systematic transect survey, we documented 56 sites, 39 of which lay within an intensive survey zone (Figure 6.3). The vast majority of these sites date to the British period (1763-1830) though, as will be discussed below, a significant number date to the pre-British period.

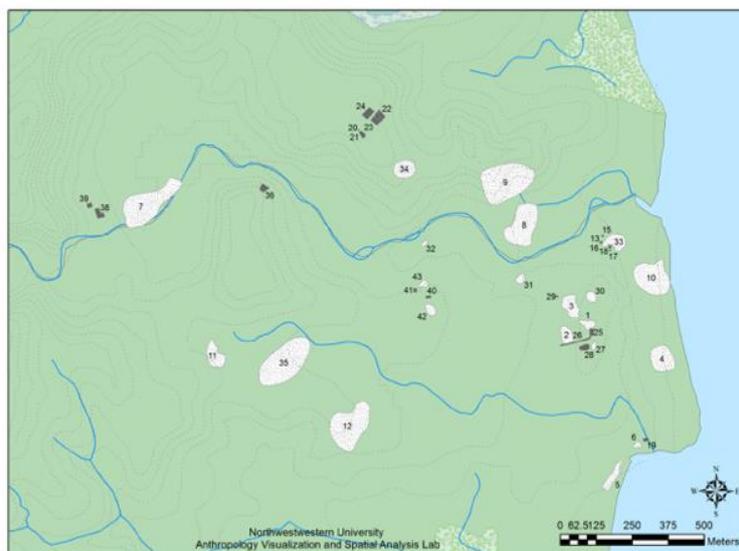


Figure 6.3 2016 Intensive Survey Zone.

Ten of the sites, if not more, are pre-Columbian. Three of the loci contained Saladoid material (Locus 4, 8, 10). One site contained Troummasoid materials, and two loci contained Cayo materials (Locus 4, 5). The survey also identified scatters that contained non-diagnostic Amerindian materials (Locus 1, 2, 6, 11, 12, 32). The earliest indication of habitation in the documentary record came before the French landed in Grenada in 1649 (Verrand 2001, Figure 6.1).

The survey also documented a possible encounter site. This site was located near the one that was the locus of the excavation (Locus 5) by Hofman and Hoogland (Hofman 2016). It concerns a scatter of artefacts that dates to the latter half of the 17th century (Locus 1). This latter scatter is located north of the abandoned primary school and could possibly be the location of the *carbet* documented on Blondel's 1667 map.

There are many late French scatters located in the survey region (1700-1763). Locus' 8, 30, and 33 all contain a high density of faience as well as French utilitarian pottery, including Vallauris. Feature eight is located on the north side of the River Antoine sugar estate on the north side of the river. The place name "Antoine," from which the river and estate are named, is after a Kalinago captain who resided in the area. On the south side of the river there are scatters which contained material from the 17th, 18th and 19th centuries (Figure 6.4). Features 1, 2, 3, 30 are the loci of particular interest to this study.



Figure 6.4 Materials recovered from feature 3 (La Poterie).

6.4 Archaeological Testing

La Poterie estate was located on the southern bank of River Antoine. It is eponymously named after a pottery kiln that began to produce drip jars and sugar cones for the burgeoning sugar industry in early eighteenth century Grenada. While this kiln was most likely in operation through the very earliest part of the British

occupation (after 1763), it appears to have been quickly abandoned in favor of growing and processing sugar. It also produced roof clay tiles.

In areas with a long complex settlement and land use history, such as St. Andrew in Grenada, later inhabitants of a landscape destroy, reuse and/or reinterpret material evidence of their predecessors. Our survey region was no exception. British colonialism had a massive impact, both in terms of population, but also in terms of the built environment. With populations of 100 people or more, extraordinary investments were made to enhance the region's agricultural potential through aqueducts, clearing woodlands, terracing and the like. These efforts, along with the construction of estate houses, fortifications, jetties and roads no doubt resulted in destruction, burial and transformation of many earlier uses of the landscape. This appears to be particularly the case close to the coast where colonial period habitation and construction reached its maximum intensity. The most recent modification to the landscape will be a proposed football field and structures for other uses (Figure 6.5). Therefore, subsurface testing was carried out to determine the potential impact of the community development program.

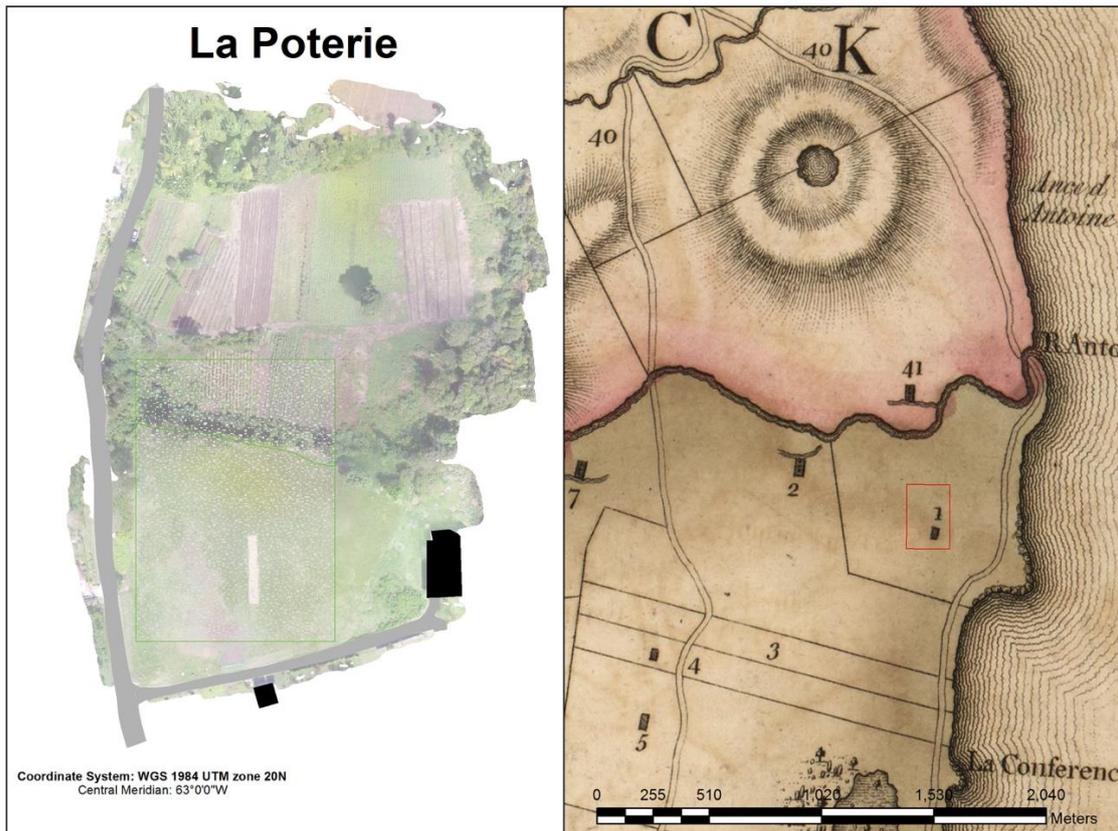


Figure 6.5 Proposed football field.

A combination of 50x50 cm shovel test pits and 2x2 meter excavation units were excavated to the size, chronology, and if possible organization of archaeological sites identified in a survey conducted by the authors in January 2016 (Figure 6.6).

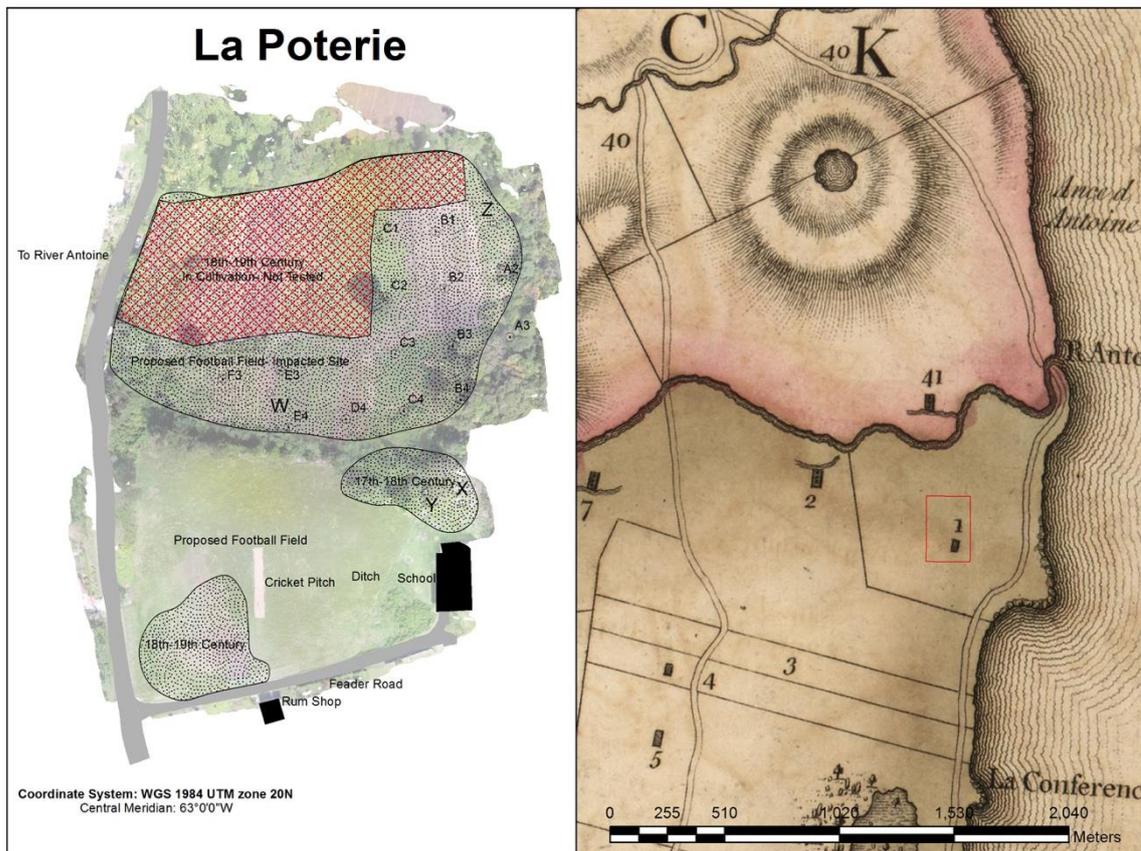


Figure 6.6 Excavation Strategy.

A. Test Units

Four excavations units were placed using a judgmental sampling strategy (Figure 6.7). Their location was informed by the density of artifact scatter. The placement of these units was also informed by consultation with community advocates Evan Bohla and Dolton Charles. All units were excavated until reaching subsoil.

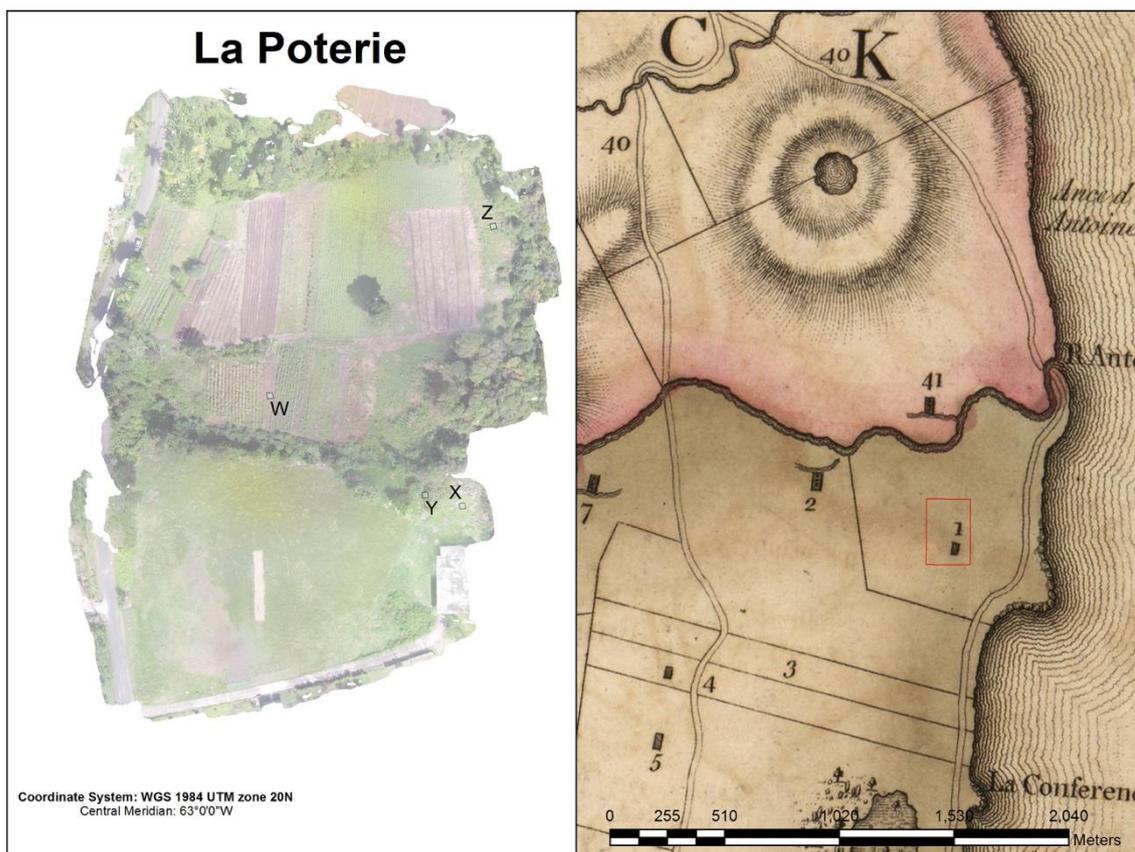


Figure 6.7 Location of 2x2 meter test units.

Results from the four 2 x 2-meter test units suggest that the two loci differ in age and function. Test units from loci 2 (Unit Z and Unit W) contained a high quantity of artifacts. Unit Z contained 90 artifacts. Sugar wares were the most common (n=43). The unit also contained faience, albisola, creamware, pearlware, whiteware, and glass bottle fragments. The *terminus post quem* for the unit is 1820. It has a mean ceramic date of 1801.625. Unit W contained 153 artifacts and the majority were sugar wares (n=106). Other vessel types included Afro-Caribbean ware, pearlware, and French slipware. The unit has a TPQ of 1788 with an mcd of 1772.25. Taken together the presence of creamware, pearlware, whiteware, French slipware and albisola, is consistent with slave villages on British period sugar estates excavated elsewhere in the ceded island (Hauser 2014). Noticeably absent from these contexts were gun flints, musket balls, and other items that slaves used to provision themselves. These are items that are also common in Ceded Islands' estates (Hauser and Armstrong 2012).

Test Units from loci 3 appear to have been occupied slightly earlier in the islands history. Test unit X had very few artifacts (n=2), both of which were undiagnostic earthenware. We determined that considerable erosion has effected this location. Test unit Y, on the other hand, was located in an interesting deposit. The unit contained 174 artifacts with a majority being locally made coarse earthenware (n=141). Specifically, 74 were fragments of sugar wares, 33 were Caribbean domestic coarse earthenware, and 35 were Afro-Caribbean ware sherds. Only two pieces of temporally sensitive material were recovered—Faience Brun and Albisola. The TPQ is the only reliable dating mechanism (ca. 1720). This material is not consistent with British period sugar estates in the Ceded Islands. It is therefore likely that this represents a deposit associated with the early French period pottery.

This test unit also revealed a partial masonry wall, with a lime mortar and brick floor. By chance, this excavation located the corner of the building. Unfortunately, inclement weather and scarce time meant that we were not able to identify the other corner. Given the investment of time and money required to build a masonry house, this is most likely associated with the owner of the French period pottery.

B. Shovel Test Pits (STP) survey

Given inclement weather and our limited time, the strategy of judgmentally sampling the survey area with 2x2s had to be abandoned in favor of a testing strategy that might more quickly ascertain the size and shape of Locus 2. Fifteen 50x50 cm shovel test pits were also excavated to get a sense of the spatial patterning of the artifact density. These test pits were placed using a systematic sampling strategy on a 20-meter magnetic north grid (Figure 6.8). Just over 50 percent of the survey area was untested as it was in cultivation. All test pits were excavated until reaching subsoil.

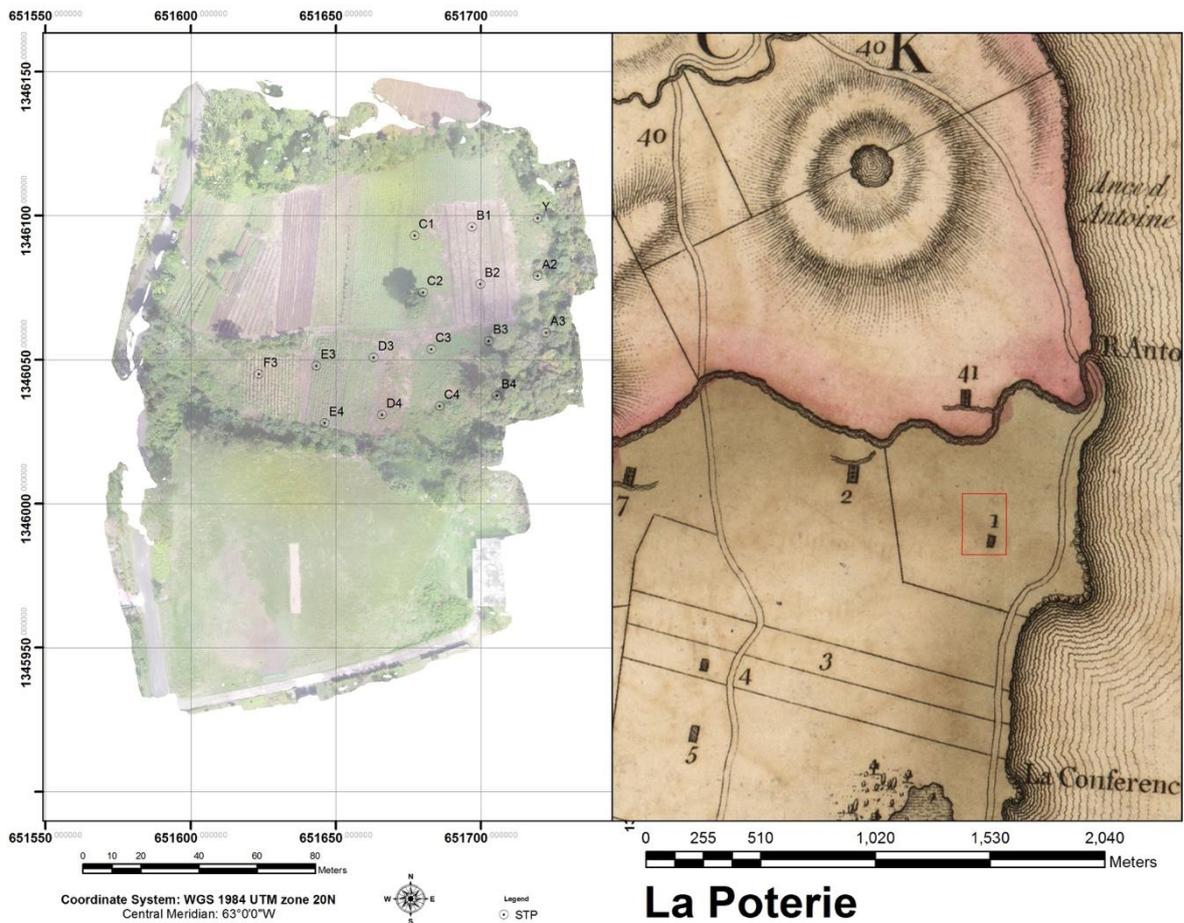


Figure 6.8 Location of 50x50 cm STP's.

All shovel test pits produced significant volume of material (n=303), including 198 sugarware fragments, 9 glass bottle fragments, 22 domestic Caribbean earthenware fragments, and 9 Afro-Caribbean ceramic fragments. In addition, there were fourteen sherds of European ceramics for which reliable dates can be assigned, including creamware, pearlware, whiteware, French slipware (Albisola), Rhennish stoneware, and brown stoneware. The Terminus Post Quesum (TPQ) of this assemblage is 1820. The mean ceramic date of this assemblage is 1775.8576 (Figure 6.9).

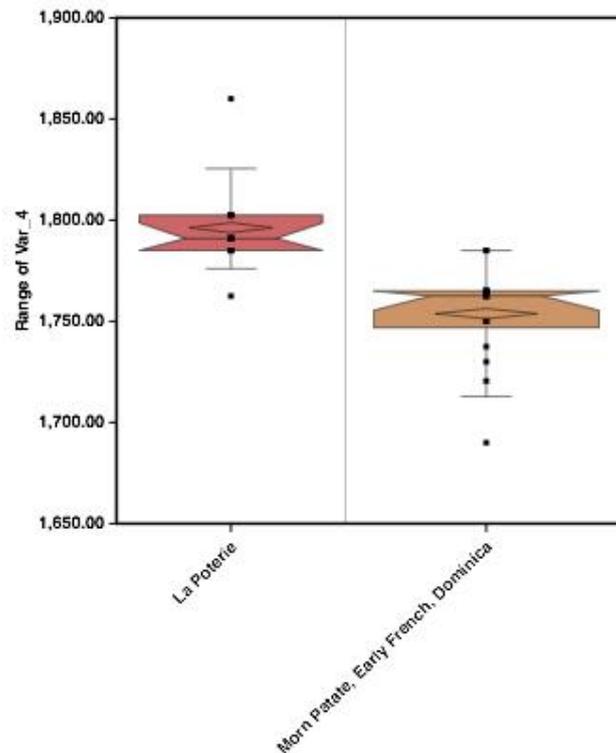


Figure 6.9 Distribution of Median ceramic dates for La Poterie compared to an early French Village in Dominica.

There are important spatial patterns to consider in the distribution of these ceramics. To begin with, our ability to analyze the spatial pattern was limited given the large size that was omitted due to land that was in cultivation. That being said, artifacts were concentrated in the western and southern part of the grid (Figure 6.10). More than half of the ceramics (n=158) were recovered from five of the fifteen test pits (F3, E3, D3, E4, D4). We suspect that the reason for this concentration is two-fold. First the distribution is an accurate representation of where some houses of the village were located. That is, that the area defined by these test pits most likely represents three or more House Yards of enslaved laborers. Second, given the centuries of cultivation as well as heavy rainfall, artifact densities are also likely the result of soil erosion from the top of the ridge on the eastern most boundary of the survey area. This interpretation is further supported by the shallower oil horizon in test pits that were up slope, as well as the high density of artifacts recovered from Unit Z.

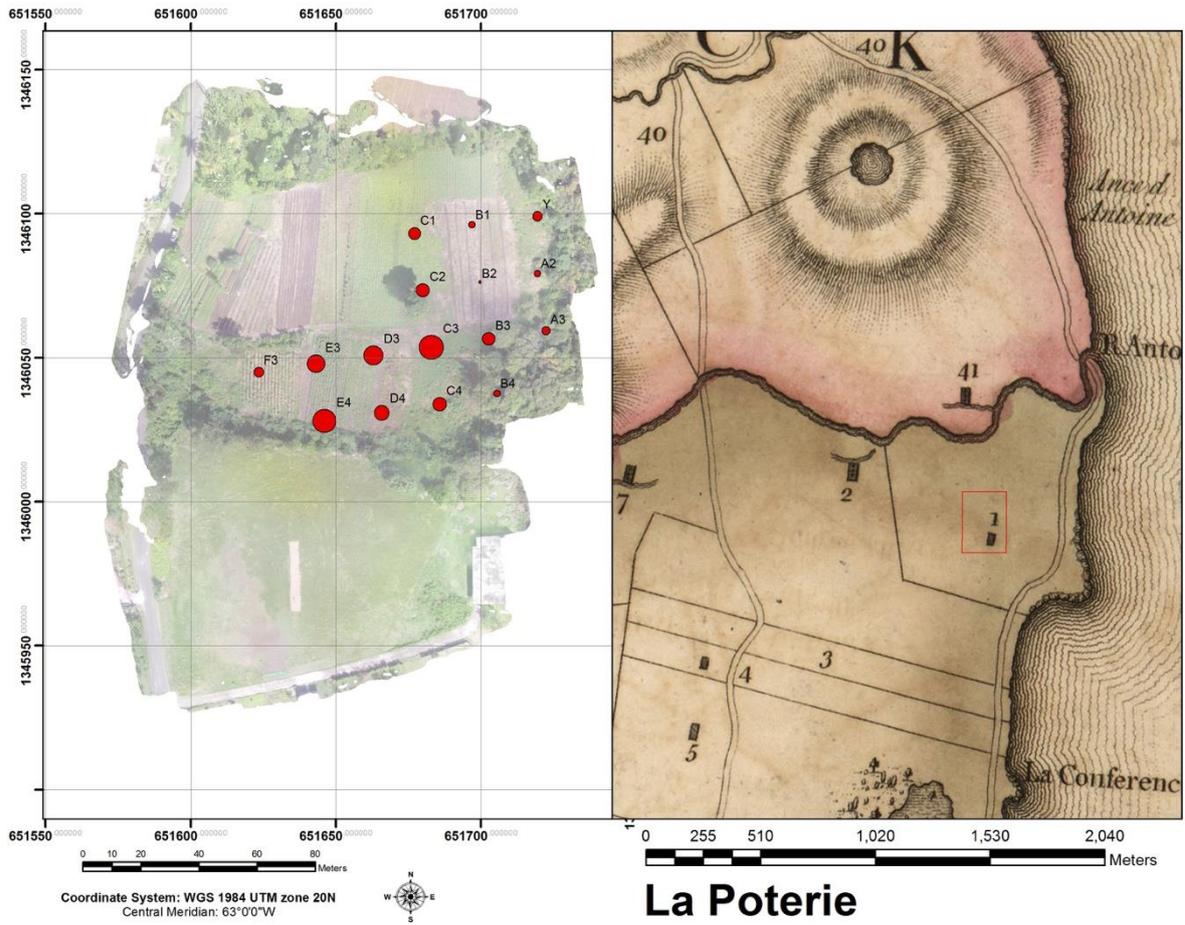


Figure 6.10 Test pits and the distribution of ceramics in them.

6.5 Discussion and Recommendations

The evidence from pedestrian survey, shovel test pits, and test units excavated in the La Poterie site suggest that there is sizeable settlements dating to the last quarter of the eighteenth century and the first quarter of the nineteenth century. The material culture is consistent with a British period village associated with a sugar plantation. Most likely the inhabitants were of African descent and labored on the sugar estate. In addition, Test Unit Y revealed the corner of a masonry structure whose material culture is consistent with an early French pottery estate. This could have been an industrial out building, such as a storehouse. Given the number of domestic wares, however, it is most likely a residential structure. This could either be the owner's house or the kitchen.

Therefore, archaeological testing of the La Poterie field indicates that modification of the land and construction will impact an archaeological site associated with enslaved Africans during Grenada's colonial history (ca 1740-1830). To create a football field and basketball court, significant modification of the landscape will occur. It will therefore impact evidence of enslaved housing, daily activities and possibly the remains of one of the earliest masonry structures in the village. If the community wishes to proceed with the project, we recommend that an archaeologist be retained to monitor the grading of the soil and document any archaeological features that might be revealed. This will ensure the documentation of materials of archaeological and patrimonial significance.

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7 Community Engagement in Grenada, School Project in La Poterie

By Sven Ransijn, Leiden University student

7.1 Introduction

In the school books on Grenada (Carter *et al.* 1967; Peters and Penny 1994; Morrissey 1992 and Albertin *et al.* 1991), the differences between the Caribs and Arawaks are discussed. In short, the Arawaks are portrayed as peaceful, while the Caribs are considered warlike. In the books, the migration from the mainland of South America to the Caribbean islands is mentioned and explained, the Arawaks moved from the mainland because the Caribs drove them away, where after they both started to inhabit the Caribbean islands. Also, the subsistence, cosmology, culture and artefacts are briefly discussed in these books. Some of the information presented in the old books, before the 1980s, is based upon misconceptions about the Caribs and Arawaks. For instance, how European settlers portray Caribs as Cannibals has more to do with propaganda than with reality (McGinnis *et al.* 2013, 2). Caribs never roasted parts of the human bodies on fires (Figure 7.1). These paintings were probably based upon misconceptions about their ancestral rituals, which included the manipulation of human bones that were transformed into propaganda in order to attack and subjugate them.



Figure 7.1: Painting of Theodore de Bry 1592
(http://www.history.org/Foundation/journal/Winter07/images/Eats04_R1.jpg).

In recent decades the knowledge about the Amerindians have improved, as a result of the application of archaeology. New ideas about the migrations to the Caribbean islands, the cosmology of the Amerindians, their subsistence and their tools have been developed based on archaeological evidence. It's important to discuss these new ideas during the classes, to make students aware of their heritage and let them engage in archaeological projects. By learning about the past, students can probably better understand how history affected their modern society.

Therefore, a teacher's kit had been developed by the Grenada National Museum to implement this different narrative of the Amerindian past in the school curriculum.

Last year, students of the Sacred Heart Catholic School in Tivoli were invited to visit the archaeological excavation in La Poterie to see how archaeology works and to

make them familiar with the material culture of Amerindians. Since the students enjoyed this experience, we are now thinking about a follow-up programme to keep the community engaged in the project. In order to do so, we would like to combine the already developed teacher's kit with a specific site, in this case La Poterie, so the students can combine theoretical presentations with practical experiences. Since it is important to attract the attention of all the different age groups in the school, different activities will be carried out specific to each grade.

The lessons will always start from the student's perspective. When presenting the different themes, the teacher will start with asking what the students already know. Although the Amerindian past might sound far away, it might be surprising how much the students will recognize, since the Caribbean islands are part of an historical continuity. Many techniques and concepts are preserved or slightly adapted through time. When the students' views on the themes are discussed in groups, the lesson will start, and in depth information will be provided, continuing from a student-centered approach.

7.2 Concept activities

In the Class room

The themes that are taught are based on the teacher's kit that was developed by the Grenada National Museum. The theoretical program will be given in an informal seminar style. The different classrooms will be divided into different themes, and the children will circulate between the different classes where they will have a lesson about a theme for 30 minutes. Inside the rooms, posters about the subject will be on display as well, so the teacher can refer to pictures and texts during the lesson. For every theme we use a poster that was developed by the Grenada National Museum (Appendix A), together with assignments (Appendix B).

The following themes will be discussed:

- Amerindian Migrations: During this session the different Amerindian groups that were present in the Caribbean will be discussed. A map of the different migration movements can be shown and different types of material culture from these groups can be shown as well. The migration history at La Poterie can be explained and discussed as well.
- Amerindian Foods: During this session some crops will be shown, and the children can guess in a quiz format what crops are indigenous to the new world and what crops were brought from other parts of the world. Afterwards, the students are taught about the Amerindian diet. As an assignment, the students can create their own Amerindian recipe and think about what the Amerindians could have cooked.
- Amerindian Tools: In this session the material culture of the Amerindians will be explained. For this session both the raw materials and the actual archaeological artefacts are brought to class, so the teacher can ask the students how they think the raw materials are transformed into the artefacts. The students are taught by the different production sequences and the usage of the tools. They will need this information when they visit the site and do the Field survey assignment.
- Amerindian culture: Students will be taught the basic principles of culture. First the teacher will ask the students about their views on culture, both their own and the Amerindian. Afterwards, some of the cultural phenomena of Amerindian society will be explained and the problems of reconstructing cultural phenomena with archaeology.
- Archaeological sites of Grenada: In this room a poster of the most important sites of Grenada will be on display. The students can answer a quiz in order to see what they already know about the most important sites on the island. By looking at the posters and seeing the artefacts and explaining the relevance of the sites, the students will become aware of the value of archaeology to

understanding the Amerindian past. In this room up to date information about the project in La Poterie will be given as well. This can be done by short video clips that show the progress of the excavation, and by reading the blog written by Dr. Rebecca B. Scott on the project (<http://drrbScott.wixsite.com/drBex-archaeometry/blog>).

During the site visit:

- A pottery workshop: Students can learn the Amerindian coiling technique under the tutelage of a real potter. After explaining the technique, the students can create their own pots by using local clays.
- Field survey: Students can learn about archaeological field techniques and identify and document archaeological materials on the site. For this activity a grid will be set out. Inside the grid actual artefacts are scattered throughout. The students will be asked to look for the artefacts, with the guidance of the archaeology students, and to document and collect them in a professional way. In this activity many skills can be learned, since concepts of geography, arts, math and culture and social studies are used in mapping and documenting archaeological finds.
- Stratigraphy: During the visit profiles can be shown. The different geological layers can be shown and explained, with students allowed to draw their own interpretations of the profile. In this way, the students learn about the process of site formation.

7.3 Activity specifications:

Theoretical sessions

Amerindian migration

Materials: Map with arrows, posters, short video about canoes, and artefacts from different types of cultures.

Lesson plan: Ask the students whether they have relatives that live abroad and ask them if they know why they left. Ask the students what kind of transport they took, and if they are familiar with traveling by sea. Explain to them the concept of migration after they relate their examples, and tell them about how the Indigenous peoples travelled from South America (show them on a map) to the Caribbean by canoe. Ask them if they have any ideas as to why these people made such a journey, and then share with them some of the reasons. Allow the children to watch the video about the indigenous canoe travel. Discuss the posters with the students and allow them to ask questions about what they see.

Amerindian Food

Materials: Posters about food, cooking pots, several crops used by Amerindian (maize, cassava, squash, beans, peppers, sweet potatoes, yams and peanuts), several foreign crops (sugar cane, coffee, bananas, oranges).

Lesson plan: Ask the students what is their favourite food and what ingredients it contains. Ask them if they know the origin of some of these ingredients. Present to the students the various crops and ask them the names. Let the students make the quiz about the origin of crops. Explain to the students about some of the indigenous foods and how they were prepared, using the posters. As an optional assignment, if there is any more time left, let the students think about a recipe in which they are allowed to use indigenous crops only.

Amerindian tools

Materials: posters about tools, raw resources (conch shell, clay, stones), artefacts (ceramics, axes, grinding stones, griddles and cooking slabs), some modern artefacts as comparison (cups, pans, rasp and an axe).

Lesson plan: Ask the students what kind of tools they use and for what activities. Show the students the raw materials and ask whether they have an idea what kind of artefact you can make from these materials. Let the students make a puzzle in which they need to combine the right artefact with the right parent material. Explain to the students the production techniques that indigenous people used to make these artefacts. Ask the students about the purposes of each tool (artefact) and compare them with modern tools. If there is any time left, show the students a short video about how indigenous groups produced their artefacts.

Amerindian culture

Materials: Posters about culture, short video about different aspects of Amerindian culture such as music or dance, art and cosmology.

Lesson plan: Ask the students about traditions they have or festivals they celebrate. Ask them whether they have a religion or not. Ask them if they know something about the concept of culture, and if they have no clue explain to them the concept in accordance with the teacher's kit. Let the students watch the video about aspects of Amerindian culture. Tell them about the problems in archaeology when culture is studied and explain to them what we do know about the Island Carib/Kalinago culture.

Archaeological sites of Grenada

Materials: Posters showing the most important sites in Grenada, archaeological finds of La Poterie, video on the work at La Poterie that shows how archaeology works, a projector to show the blog of Rebecca B. Scott to the students.

Lesson plan: Give the students a guided tour of the poster of the important archaeological sites in Grenada. Ask the students if they know anything about the sites. Explain to them the relevance of the sites and the stories behind them. Let the students engage with the finds from La Poterie, and let them watch the video about archaeology. Let the students read the blog and let them ask questions.

Practical sessions

Pottery workshop

Materials: Oven/fire for baking the pottery, tools to make and decorate the pots, clay, examples of different type of pots that can be made.

Lesson plan: The students are instructed on the coiling technique and how to decorate ceramics. Afterwards, the students can start making the clay coils and attach them to each other in order to make the pot. If the students have any questions they can ask one of the staff members. When the students are done with making the pots, they can either bake them/let them dry, or take them home.

Field survey

Materials: picks, rope, measuring tape, drawing paper, pencils, finds (fake finds or out of context finds).

Lesson plan: Before this activity begins, a grid is set out in which finds are scattered. Members of the team will explain to the students how they should look for finds and how they should be mapped and drawn. Afterwards, the students can carry out the activity and some members of the team will assist them, if they have questions. When the activity is over, the finds can be scattered in the grid again for the next group.

Stratigraphy

Materials: profile, drawing paper, pencils.

Lesson plan: Explain to the students about stratigraphy by using the example of a bin. Show the students the profile and explain to them how stratigraphy works, showing them all the geological or anthropogenic layers. Let the students ask question if they have any, and let them draw their own interpretation of the profile based on chronology.

7.4 Evaluation of the school visit

Before the school lessons were carried out, some students on the archaeological team, both from Leiden University and the St. George's University in Grenada, prepared the themes that are discussed in the teachers' kit.

For the classes, the themes needed some adjustments since they were taught in kindergarten, grade 3 and grade 6. This became clear after some contact with the school's principal, and that we were not able to divide different classrooms into different themes because we needed to move between the classes. So we divided each grade into four groups and discussed the themes: migration, culture, tools and food. The theme archaeological sites of Grenada, was not included, due to the limited amount of time we had for each class. This theme might be discussed during the field visit.

Since we were able to visit the schools twice during our campaign, we wanted to test different educational approaches in which we first visited the school with the Grenadian students (SGU) and during the second visit we went to the school with the Dutch students (Leiden). By doing this we wanted to compare the response of the students if local students were presenting, with the response of the students when international students were presenting.

In general, both sessions were prepared in the same way. For the themes food and tools, we had some of the crops, raw materials and artefacts available to show during class in combination with the posters we printed. For the themes migration and culture, we decided to make a PowerPoint beside the poster since these themes are very abstract and difficult to grasp for the younger children. Therefore, we decided to prepare a more structured talk for these themes. For all the themes we decided to illustrate them from a child-centred perspective and therefore we approached these topics by asking the students if they knew anything about these themes. Sometimes we told them an anecdote from contemporary life to show them that the life of the Amerindian peoples were not entirely different from us. Besides, some ancient practices are still carried out today, however sometimes in a different way, due to the fact of historical continuity.

Evaluation of the first session

During the first session the Grenadian students presented. For this session we wanted to show short videos for the different topics, but due to the lack of equipment to project these videos, we decided to present the PowerPoint's as well in the same groups as the rest of the lesson. In the end this worked out way better, since it is more stimulating for the students to participate actively. What we immediately noticed is that the abstract themes were difficult for the younger students to grasp, they were more interested in the themes such as food and tools because they could hold, touch and experience real materials with their senses. However, for the older students, the more abstract themes were interesting, because they asked more questions about them and they were able to visualize them better.

Besides the lectures, we also prepared some assignments, in which for instance the students had to connect the right artefact with the right raw materials, or in which they had to draw their own petroglyph. Unfortunately, we only had half an hour per grade, so for each theme we had less than ten minutes, which made it impossible to carry out all these assignments as well. Sometimes it was already impossible in this limited amount of time to discuss all the themes.

However, for the younger students this was not really a problem because it was difficult for them. They had difficulties to focus on these topics at the end of our session. But for the older students, it would have been better if we had more time because they were in general very interested in the topics. Since certain topics are less interesting for certain age groups, some of the lessons about the themes went faster than others, resulting in part of the group being distracted easily at the end of one of the lessons because other students were still busy with the assignment. Therefore, it would be better if we have more time for each grade the next time, so that the presentation of the themes are more balanced.

Working with the Grenadian students was very useful, because they were able to adjust the archaeological information that we wanted to present to the local situation. For instance, they were able to come up with examples of contemporary objects that are still in use, contemporary recipes that contain the indigenous and introduced crops, certain national festivals or religious themes that could be mentioned to illustrate the concept of culture, all in order to compare ancient and modern life.

Besides, they taught the students in a way they are used to being taught. However, this way of teaching is a very top down approach, so the students were not stimulated to come up with their own questions or to participate in an active way. The presentation was given in a one-way direction, instead of a dialogue and the assignments were done classically. Another positive point of working with the local students was that they speak the same language as the students on the school, so it was easier for them to understand them. Also they were less distracted by the differences in our physical appearances.

Evaluation of the second session

For the second session we went to the school with a Dutch team of students, in order to compare the different approaches to the lessons. We prepared in the same way as we did the first time, so we divided the four themes among the students and they made a PowerPoint presentation about the topics. With the experience of the first time, we tried to adapt the presentation about migration and culture since this topic was very abstract for the younger students. So migration was more focussed on traveling and reasons why to migrate to other areas, also in comparison with contemporary ways of travelling and labour migrations. Culture was now more focussed on the petroglyphs, so we tried to explain the different animals and other beings that are represented in present petroglyphs on the island. By doing this, the students could guess the different animals and try to draw their own petroglyph.

The classes provided by the Dutch students were given in a more bottom-up approach, so the students were questioned about their own experiences and were stimulated to participate in a more active way. The students are normally not taught in such a way so they were sometimes quite hyperactive and easily distracted. On the other hand, this way of teaching provided more input from the students and they also had more attention for the topic, because they were able to participate in an interactive way.

All the Dutch students were archaeology students, which is also an advantage because they have more background knowledge about the topics, however this might also be a handicap since you have to explain this knowledge in a very easy and understandable way, in a way, children are able to associate themselves with their

history. With the bottom-up approach the children were also more active in their participation, so it would be good to use this technique if a similar course is given. Since the Dutch students are obviously foreigners, it was sometimes more difficult for the students to focus on the lessons, because our English accent is different and the area of the school is not very touristic, so the students were not used to foreigners. Also, it was sometimes difficult to come up with examples that were close to the children's imagination, since we are not familiar with the local costumes.

Evaluation of the site visit

Due to bad rainy weather conditions, it was unable for the students to visit the site. The soil of the site is very rich in clay, so it was a mud pool. However, the students were able to visit the site for the pottery workshop. For this occasion, Loe Jacobs explained the students about the *chaîne opératoire* of the pottery production. Afterwards, the students were able to make their own pottery by either coiling or pinching and we explained them how to dry and bake them back home. Besides, Loe Jacobs showed the students the baking process, because he was working on his experiments and baked the pots that day in natural fire. The students really liked this activity because they were able to experience the possibilities of clay as a material and they were surprised about the transformation of clay from a soft and plastic material into a static hard material.

7.5 Conclusion

It is quite possible to carry out a successful school project to engage the local community in a short period of time. The way in which we taught the students the lessons, by providing information about different themes and characteristics of Amerindian life worked well because the lessons were quite intensive and given in small groups so the students were very actively involved. The posters that were made by the Grenada National Museum were perfect to illustrate the topics for the students since they were made in a cartoon style, with child-friendly descriptions next to the illustrations. The posters are therefore accessible for all the age groups, and it gives the students the ability to come up with their own questions. Besides the

posters, it is important to bring real artefacts and objects into the class so they are recognizable for the students who get to experience the material culture. If a project like this can be extended to other schools, it would be a good idea to make plastic casts of different types of artefacts of different types of cultures. A greater variety and more complete objects can then be shown to the children, and they are able to touch them as well.

For the younger students, it would be better to only give them the themes that are less abstract, and to come up with more interactive assignments in which they can physically experience the objects. For the younger children, it is also better to give the lessons in a more top-down approach, followed by an interactive assignment, because they need some more structure during the lesson. For the older students, a more bottom-up approach is suitable because this gives the students the ability to come up with their own experiences and questions. This also stimulates the cognitive development of students; it allows them to be creative.

It is extremely important to involve local people in presenting the lessons because they are able to come up with more appropriate stories for the students. Besides, the project can reach a larger public audience since more people from the local community get involved in the archaeological project and connected with their heritage. However, since most Grenadians are educated with the old school textbooks that represent their Amerindian history in a very outdated approach, it is important to create new textbooks, especially for the teachers. The most appropriate way to create such textbooks would be in cooperation with Grenadians so they can add their oral traditions and comparisons with contemporary customs that are clearer for the students, which can be included with the updated archaeological data.

In order to have the greatest impact, it would be advisable to include teachers in a school engagement project so they are able to provide these lessons by themselves. If the teacher kit, which has been developed by the Grenada National Museum, can be appended to include the experiences that were gained during this project, a standard guideline, including the posters and objects, can be made created and used in schools across the islands. In this way, new and old generations are actively involved in their own heritage.

7.6 References

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7.7 Appendices:

Appendix A:

Posters that were used during the class were created by John Swogger for the Grenada National Museum.

WHO WERE THE AMERINDIANS?

TOOLS

CARVING A DUGOUT CANOE FROM A TREE TRUNK WITH SMALL FIRES AND A SHELL AXE

DEVELOPING EFFECTIVE TOOLS MADE SKILLS LIKE BOAT-BUILDING POSSIBLE, AND ENABLED THE AMERINDIAN PEOPLES TO SUCCESSFULLY TRAVEL ACROSS THE CARIBBEAN SEA.

CONCH SHELL IS HARD AND STRONG, AND WAS USED BY AMERINDIANS TO MAKE AXES.

THE CONCH SHELL BLADE WAS PUT INTO A WOODEN HANDLE.

POLISHING TOOL MADE FROM TURTLE BONE

SHELL FISH HOOK

CORAL GRINDING STONE

ANIMAL BONE POINT FOR MAKING BASKETS

AMERINDIAN TOOLS WERE MADE FROM MANY DIFFERENT MATERIALS.

STONE AXE

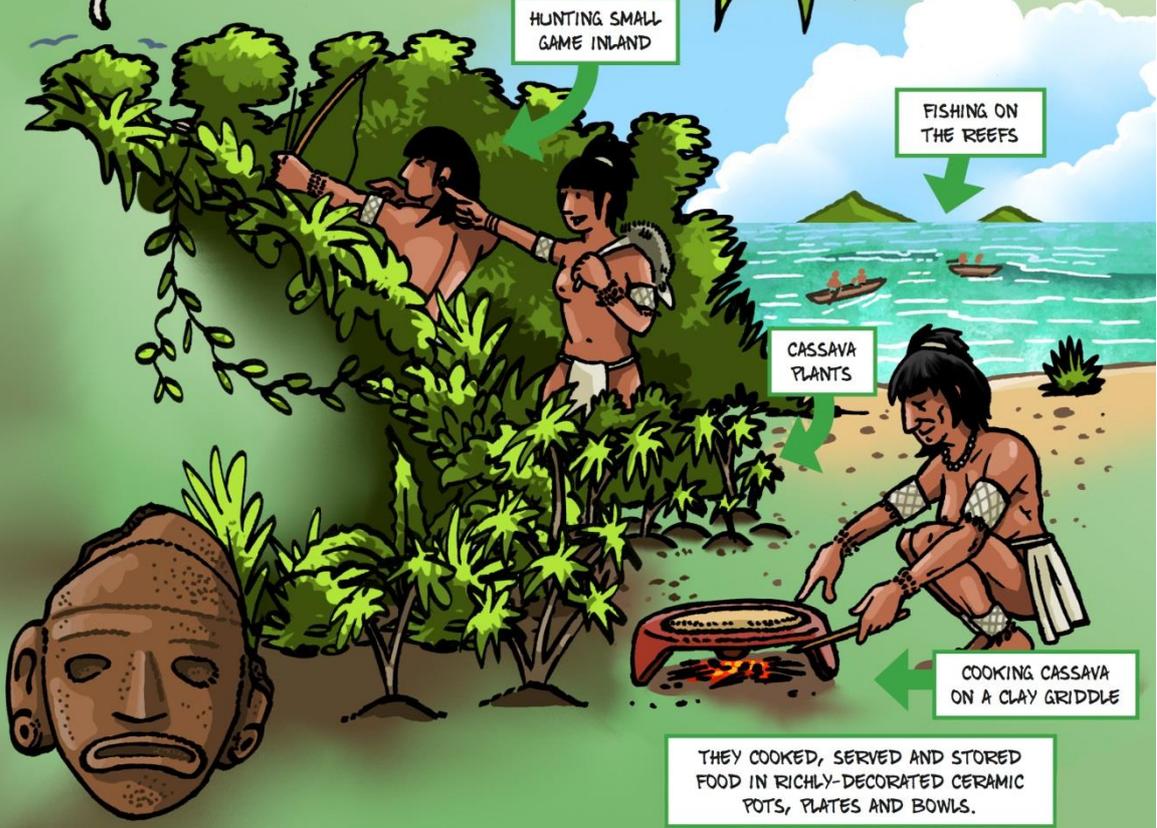
DIFFERENT KINDS OF STONE WERE USED TO MAKE ELABORATE AXES AND GRINDING STONES.



WHO WERE THE AMERINDIANS?

WHEN AMERINDIAN PEOPLES CAME TO THE CARIBBEAN ISLANDS, THEY BROUGHT WITH THEM PLANTS AND ANIMALS FROM THE MAINLAND.

FOOD



WHO WERE THE AMERINDIANS?



POT WITH SMALL FACE DECORATION CALLED AN "ADORNO"

POTTERY WAS IMPORTANT TO THE AMERINDIANS. NOT ONLY WAS IT USEFUL FOR COOKING AND STORING FOOD, BUT IT WAS DECORATED WITH SYMBOLS OF THEIR SPIRITUAL BELIEFS.

CULTURE

THE CENTRE OF AMERINDIAN LIFE WAS THE SETTLEMENT. THEY WERE LOCATED NEAR THE SHORE, NEXT TO FRESH-WATER STREAMS. THE HOUSES WERE MADE OF WOODEN POSTS AND BEAMS AND ROOFED WITH GRASS.



OTHER OBJECTS WERE DECORATED AS WELL.



CARVED STONE "ZEMI"



PESTLE FOR GRINDING, SHAPED LIKE AN OPOSSUM

PEOPLE WERE BURIED NEAR THE HOUSES SO THAT THEY COULD BE CLOSE TO THEIR LIVING RELATIVES.

RUBBISH WAS THROWN INTO PILES CALLED "MIDDENS" OUTSIDE THE SETTLEMENT.



SHELL

BROKEN POTS

ANIMAL BONE

STONE

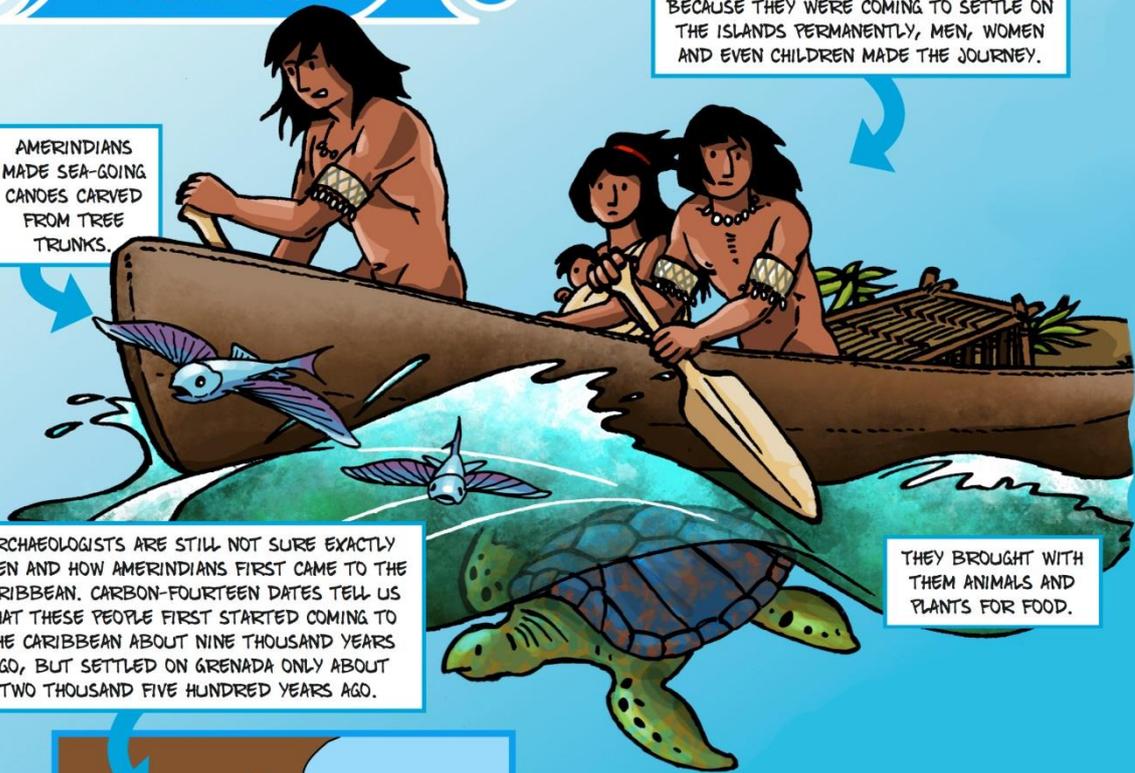
STONES NEXT TO STREAMS WERE CARVED WITH FACES. WERE THESE SPIRITS - OR ANCESTORS? OR BOTH?



WHO WERE THE AMERINDIANS?

MIGRATIONS

AMERINDIANS MADE SEA-GOING CANOES CARVED FROM TREE TRUNKS.



BECAUSE THEY WERE COMING TO SETTLE ON THE ISLANDS PERMANENTLY, MEN, WOMEN AND EVEN CHILDREN MADE THE JOURNEY.

ARCHAEOLOGISTS ARE STILL NOT SURE EXACTLY WHEN AND HOW AMERINDIANS FIRST CAME TO THE CARIBBEAN. CARBON-FOURTEEN DATES TELL US THAT THESE PEOPLE FIRST STARTED COMING TO THE CARIBBEAN ABOUT NINE THOUSAND YEARS AGO, BUT SETTLED ON GRENADA ONLY ABOUT TWO THOUSAND FIVE HUNDRED YEARS AGO.

THEY BROUGHT WITH THEM ANIMALS AND PLANTS FOR FOOD.



GRENADA AND CARRIACOUL

BUT DID THEY COME FROM SOUTH OR CENTRAL AMERICA?

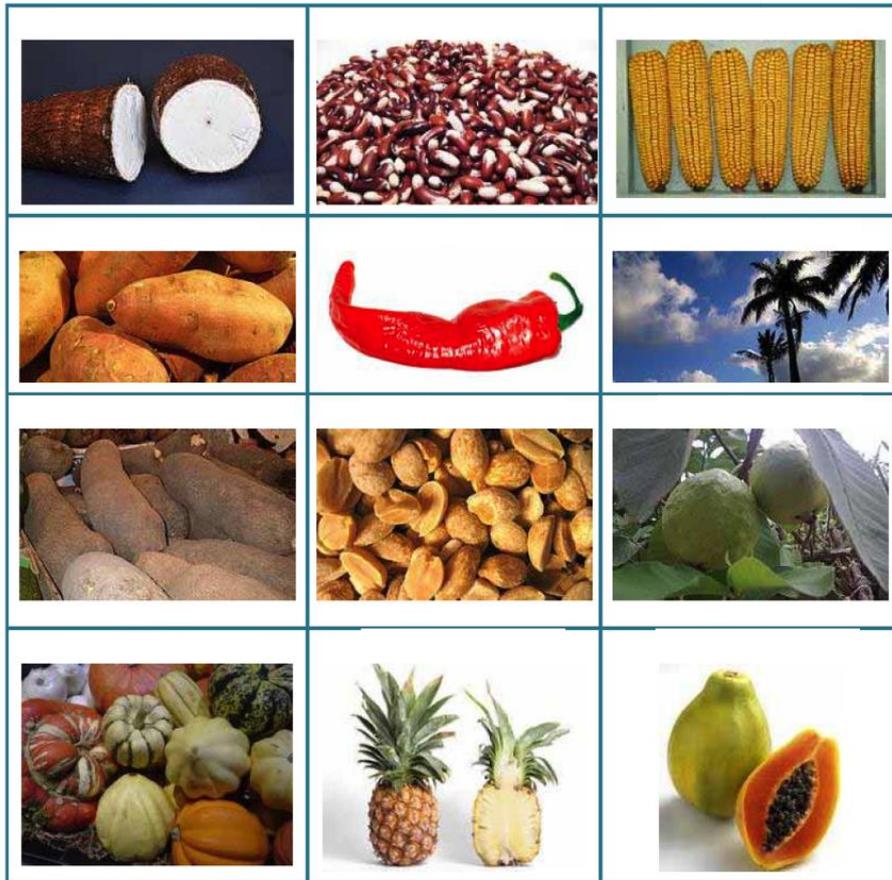
ARCHAEOLOGISTS WILL KNOW MORE ABOUT HOW AND WHEN AMERINDIANS CAME TO ISLANDS LIKE GRENADA AND CARRIACOUL BY DOING MORE RESEARCH AND MORE EXCAVATIONS. NEW DISCOVERIES - LIKE THOSE BEING MADE ON CARRIACOUL - WILL TELL US EVEN MORE ABOUT HOW THE ORIGINAL AMERINDIAN INHABITANTS OF THE CARIBBEAN LIVED.



Appendix B:

Fill in the right names of the New World crops

1) Use: Beans, Papaya, Yams, Cassava, Maize/Corn, Squash, Peanuts, Palm nuts, Guava, Peppers, Sweet potato, Pineapple !



All images retrieved from en.wikipedia.org

2) Think about where the crops come from, on display in front of the class room. Are they coming from the old world or are they coming from the new world?!

3) Imagine your are one of the first indigenous settlers of the caribbean. Make a recipe that contains indigenous crops. !

!

Petroglyph Puzzle

Match the words with their symbols carved into the rock.

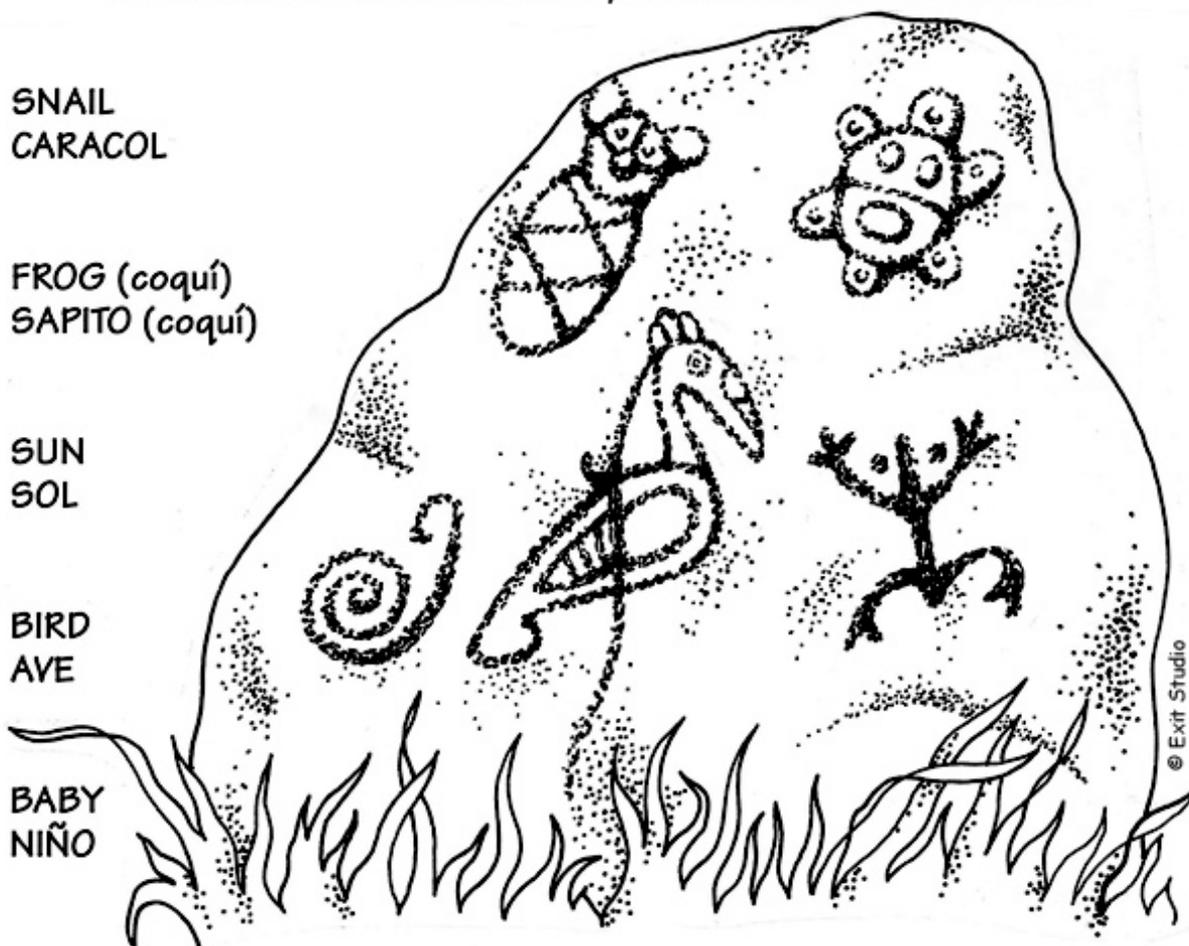
SNAIL
CARACOL

FROG (coquí)
SAPITO (coquí)

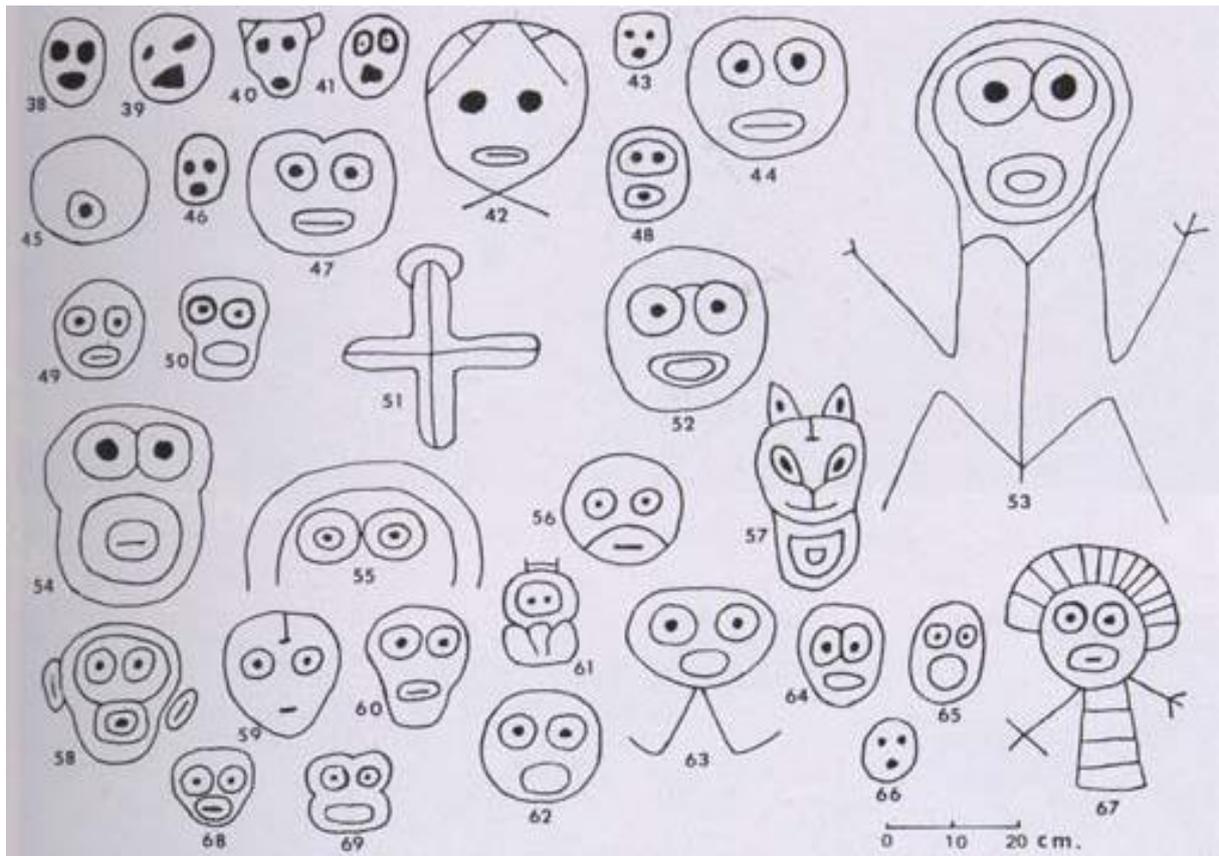
SUN
SOL

BIRD
AVE

BABY
NIÑO



© Exit Studio



Combine the modern tools with the Indigenous tools



Combine the right raw materials with the artefacts

