APPENDIX 4. PETITE TERRE SITE CATALOGUE

4.1 BALEINE DU SUD (97110-003; S2SC02)

4.1.1 Site location and preservation

The Baleine du Sud site (x: 701,800; y: 1788,800) is situated near the central lagoon on the southern coast of Terre de Bas, partly on rocks and partly on sand (fig. 5.3). It was discovered and surveyed by Bodu (1985[c]) and restudied in 1999. The dimensions of the site are 110 m east to west and 100 m north to south. The archaeological material on the surface consists of an even distribution of small pottery sherds and shell fragments, including *Strombus gigas*, *Cittarium pica*, *Chiton* sp. and *Charonia variegata*. In this distribution, four small concentrations can be identified, measuring 5 x 4 m, 6 x 3 m, 15 x 3 m and 6 x 3 m, that are separated by areas with much lower find densities. A test unit was excavated in

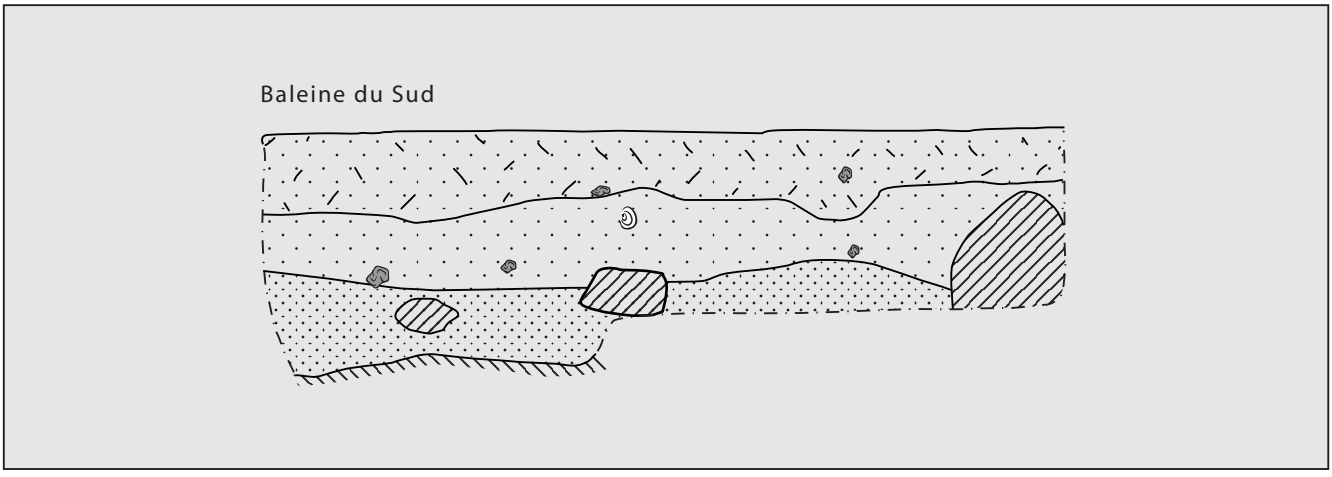


Fig. A4.1. Baleine du Sud, unit 2 (2 x 2 m), north section.

two of these concentrations. A very small amount of ceramic off-site material was found. Thorny brushwood with acacias in the inland part of the site and a coastal strip of mancenilla trees and sea grape cover 21-40 percent of the soil, which consists of coarse, moderately well drained clayey sandy soil. Passage across the terrain is rather troublesome but surface visibility is good. The site appears to have been moderately disturbed as a result of erosion and iguana digging activities. Although Bodu mentioned possible site destruction by illegal excavation, no evidence has been found to support this idea and the midden areas situated near the coast appear to be intact. As the site is situated in a protected area, no human destruction appears to take place nowadays.

4.1.2 Test units and stratigraphy

Two test units were excavated. The first unit (1 m^2) was situated in a surface concentration in the interior part of the site consisting largely of ceramic fragments. This part of the site was rather shallow and most of the archaeological material was found 0-20 cm below the surface. A very small amount of archaeological material was found in this unit. A second unit, measuring 2 x 2 m, was excavated in a concentration of archaeological material closer to the coast. A rather deep archaeological deposit was found here, up to a depth of 50 cm below the surface (fig. A4.1). The northwest corner of unit 1 was located at 702049.224; 1788847.258; 4.22 (Guadeloupe - Ste. Anne system) or 16°10′8.0868″; -61°6′51.0666″; -38.37 (WGS84). The northwest corner of unit 2 was located at 702033.017; 1788816.916; 3.32

	Number	Number %	Weight	Weight %
Rim	37	29.4	945	33.5
Body	74	58.7	1404	49.7
Base	7	5.6	233	8.3
Griddle	7	5.6	207	7.3
Appendage/other	1	0.7	34	1.2
Total	126	100.0	2823	100.0

Table A4.1. Number, percentages and weight (g) of sherds from the 1999 Baleine du Sud collection.

	Number	Number %
Incision	6	85.7
Modelling (geometric)	1	14.3
Total	7	100.0

Table A4.2. Number and percentages of sherds with particular decoration modes from the 1999 Baleine du Sud collection.

	Number	Number %
Straight	1	14.2
Legged	3	42.9
Unidentified	3	42.9
Total	7	100.0

Table A4.3. Number and percentages of sherds within griddle shape categories from the 1999 Baleine du Sud collection.

(Guadeloupe - Ste. Anne system) or 16°10′7.1046″; -61°6′51.6214″; -39.28 (WGS84).

4.1.3 Archaeological materials

The pottery described was collected at the surface in 1985 and 1999 and from the 1999 test units. Shellfish remains, faunal remains and coral artefacts were collected in 1999.

4.1.3.1 Pottery

Bodu collected five rims and 20 body sherds, weighing 838 g, in 1985. His sample does not include any fragments belonging to the appendages/other category, bases or griddles. One sherd has red slipped surfaces and no decorated sherds have been found. The morphological description of the pottery has been based on the analysis of four rims larger than 5 cm. Three of these are part of jars with unrestricted simple contours and one belongs to an unidentified vessel shape. Three rims are rounded and one is outward thickened. Wall thicknesses range between 6-8 mm (50%) and 9-11 mm (50%) and orifice diameters range between 11-20 cm (25.0%), 31-40 cm (25.0) or 41-50 cm (25.0%) or remains unidentified (25.0%). Surface colours are reddish brown (75%) and red (25.0%), firing techniques include complete reduction (25%) and incomplete or relatively good oxidation (75%) and outer surfaces are lightly burnished (25.0%) or the surface finishing could not be identified (75%).

A total of 126 sherds was collected in 1999, mostly body sherds (58.7%), weighing 2823 g (table A4.1). One fragment belonging to the appendages/other category (0.7%), a spindle whorl, was found. A total of 30 sherds has red slipped surfaces (23.8%) and incision (fig. A4.2) and geometric modelling decorate seven sherds (5.6%); (table A4.2). Seven flat bases and fragments of straight, legged or unidentified griddles were collected as well (table A4.3).

The morphological description of the pottery has been based on the analysis of 20 rims larger than 5 cm, half of which have heavily weathered surfaces. These demonstrate that the characteristic vessel shapes include jars, bowls and dishes with unrestricted simple contours (75.0%); (table A4.4). The dominant rim shape is rounded (65.0%); (table A4.5; fig. A4.2). Most of the wall thicknesses range between 6-8 mm (35.0%) and 9-11 mm (45.0%) and most of the orifice diameter range between 11-20 cm (15.0%), 21-30 cm (35.0%) and 41-50 cm (15.0%), while 30.0% remains unidentified (tables A4.6-A4.7). Surface colours are predominantly reddish brown (50.0%) and red (30.0%); (table A4.8). Firing techniques include mainly incomplete or relatively good oxidation (40.0%) and complete reduction (40.0%); (table A4.9). One of the incompletely or relatively well oxidised sherds was irregularly fired. Surface finishing is predominantly characterised by burnishing (40.0%) and for 55.0% the surface finishing could not be identified (table A4.10).

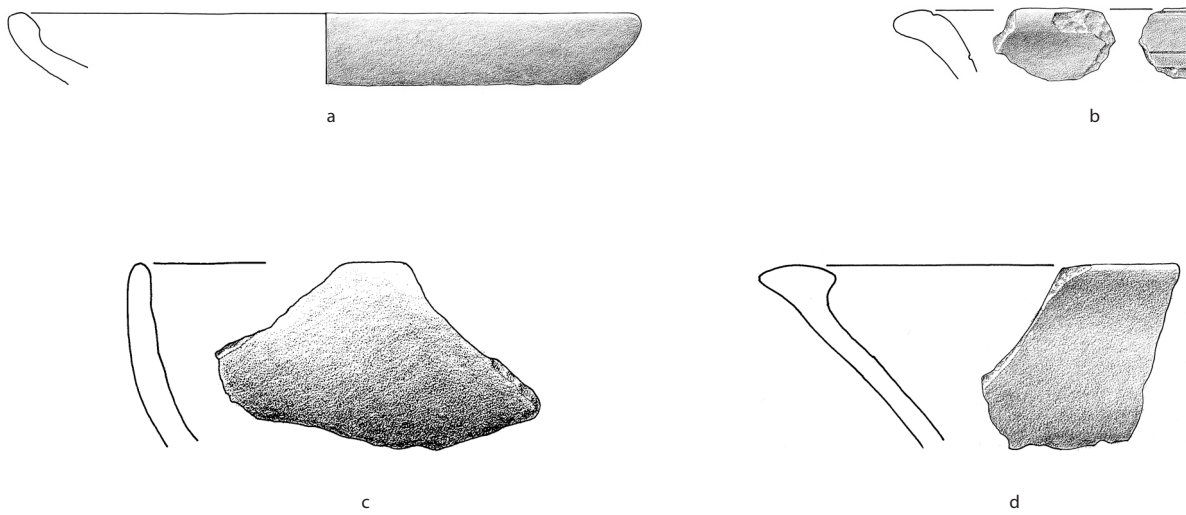


Fig. A4.2. Ceramics from the surface of Baleine du Sud (a: scale 1:3; b: scale 1:3; c: scale 1:3; d: scale 1:2).

	Number	Number %
Jar with unrestricted simple contour	9	45.0
Bowl with unrestricted simple contour	5	25.0
Dish with unrestricted simple contour	1	5.0
Bowl with restricted simple contour	1	5.0
Bowl with unrestricted inflected contour	1	5.0
Unidentified	3	15.0
Total	20	100.0

Table A4.4. Number and percentages of sherds within vessel shape categories from the 1999 Baleine du Sud collection.

	Number	Number %
Rounded	13	65.0
Flattened	2	10.0
Inward thickened	2	10.0
Outward thickened	1	5.0
Unidentified	2	10.0
Total	20	100.0

Table A4.5. Number and percentages of sherds within rim shape categories from the 1999 Baleine du Sud collection.

	Number	Number %
1-5 mm	1	5.0
6-8 mm	7	35.0
9-11 mm	9	45.0
12-15 mm	1	5.0
Unidentified	2	10.0
Total	20	100.0

Table A4.6. Number and percentages of sherds within wall thickness categories from the 1999 Baleine du Sud collection.

	Number	Number %
11-20 cm	3	15.0
21-30 cm	7	35.0
31-40 cm	1	5.0
41-50 cm	3	15.0
Unidentified	6	30.0
Total	20	100.0

Table A4.7. Number and percentages of sherds within orifice diameter categories from the 1999 Baleine du Sud collection.

	Number	Number %
Dark brown/very dark brown	2	10.0
Reddish brown	10	50.0
Red	6	30.0
Unidentified	2	10.0
Total	20	100.0

Table A4.8. Number and percentages of sherds within exterior surface colour categories from the 1999 Baleine du Sud collection.

	Number	Number %
Complete reduction	8	40.0
Incomplete oxidation or reduction	1	5.0
Complete oxidation	1	5.0
Incomplete or relatively good oxidation	8	40.0
Unidentified	2	10.0
Total	20	100.0

Table A4.9. Number and percentages of sherds within firing colour categories from the 1999 Baleine du Sud collection.

	Number	Number %
Smoothed	1	5.0
Lightly burnished	5	25.0
Highly burnished	3	15.0
Unidentified	11	55.0
Total	20	100.0

Table A4.10. Number and percentages of sherds within exterior surface finishing categories from the 1999 Baleine du Sud collection.

	Rasp fragment	Grinding tool fragment	Total
Acropora cervicornis	13 81.2		13 81.2
Acropora palmata		2 12.5	2 12.5
Unidentified		1 6.3	1 6.3
Total	13 81.2	3 18.8	16 100.0

Table A4.11. Number and percentages of coral species and artefact types from the 1999 Baleine du Sud collection.

	MNI count	MNI weight	Fragment weight	Total weight
Strombus gigas	10 5.0	7828 53.8	744 26.6	8572 49.4
Cittarium pica	67 33.5	6092 41.9	1650 59.0	7742 44.6
Other	123 61.5	638 4.3	368 13.1	1006 5.8
Unidentified	0 0.0	0 0.0	35 1.3	35 0.2
Total	200 100.0	14,558 100.0	2797 100.0	17,355 100.0

Table A4.12. MNI counts, MNI weights (g), fragment weight (g), total weight (g) and percentages of the main shell species from the 1999 Baleine du Sud collection.

4.1.3.2 Coral artefacts

A total of 16 coral artefacts was found in 1999, consisting of 13 heavily used *Acropora cervicornis* rasp fragments, two heavily used *Acropora palmata* grinding tool fragments and one grinding tool fragment of an unidentified coral species. The latter is part of an active or passive grinding tool (table A4.11).

4.1.3.3 Shellfish remains

Main shellfish remains, collected in 1999, consisted of *Cittarium pica* and *Strombus gigas* (table A4.12). Other shell species represented in very low numbers and weights at the site included *Acanthopleura granulata, Acmaea leucopleura*, *Ampulladoria* sp., *Arca Zebra*, *Astraea* sp., *Bulimulus guadalupensis*, *Cassis flammea*, *Chama sarda*, *Charonia variegata*, *Chiton tuberculatus*, *Codakia orbicularis*, *Columbella mercatoria*, *Conus* sp., *Cyphoma gibbosum*, *Cypraecassis testiculus*, *Diadora dysoni*, *Fissurella* sp., *Hipponix antiquatus*, *Nerita* sp., *Nodilittorina tuberculata*, *Purpura patula*, *Tectarius muricatus*, *Tellina* sp., *Thais* sp., and *Tonna maculosa*.

4.1.3.4 Animal remains

MNI counts, excluding the intrusive elements, show that the Baleine du Sud 2/5 inch faunal sample (total MNI 33, total weight 69 g) consists of crab (72.8%), fish (18.1%), reptile (3.0%) and sea urchin (3.0%). It has a terrestrial component (75.8%), including black land crab, iguana and land hermit crab. As for MNI counts, black land crab makes up an important percentage of this component and iguana makes an important contribution to its weight. Leaving out land hermit crab the terrestrial component makes up 69.7% of the total sample. The majority of invertebrate remains has been explained by small sample size or by unrecognised recent

intrusive fragments. Reef carnivores (3.0%), including grouper, reef herbivores/omnivores (15.1%), including parrotfish and surgeonfish, and inshore species (3%), in this case red rock urchin, were found as well (Nokkert in appendix 5).

4.1.4 Chronological assignment

The site yielded Late Ceramic A pottery (unidentified style).

4.2 SITE DU PHARE (97110-004; S2SC03)

4.2.1 Site location and preservation

Bodu and Petitjean-Roget surveyed the Site du Phare (x: 702,100; y: 1789,100) in 1985, although Barbotin, Clerc and Pierre Verin already knew of its existence and Nicholson (1975) excavated a 2 m^2 unit. The site was restudied in 1999. It is situated on an elevated plain at some distance from the coast, extending from the east of the lighthouse at Terre de Bas towards the easternmost salina (fig. 5.3). Site dimensions are approximately 300 m west to east and 50-150 m north to south, which is slightly larger than the 12000 m^2 surface estimated by Bodu in 1985. The archaeological material on the surface consists of a dense distribution of moderately fragmented pottery sherds, lithic and coral artefacts and shellfish remains, mainly *Cittarium pica* and *Strombus gigas*. Eight concentrations of shell and pottery were found, located very close to one another, that are considered different patches belonging to one midden area. The pottery from the different concentrations appears to represent a single period. A small amount of ceramic and shell off-site material is evenly spread over a large area, in north-western and south-western direction towards the Est de Mouton de Bas site (97110-005). Thorny brushwood with acacias covers 60-90 percent of the soil, which consists of rather compact, well-drained sand with a humic component. Passage across the terrain is difficult but surface visibility is rather good. Although Bodu reported that the site was partially destroyed by illegal excavation, no evidence has been found to confirm this idea. Superficial perturbation has taken place as a result of cultivation in the past and intensive iguana action.

4.2.2 Test units and stratigraphy

A 1 m^2 unit and a 2 x 2 m unit were excavated in two of the concentrations identified on the surface. The 1 m^2 unit was situated somewhat inland on the elevated plateau. The site appeared to be rather shallow there, with a thin archaeological layer 0-20 cm below the surface. Unit 2 (fig. A4.3) was located on the lower-lying area closer to the mooring bay where deeper deposits were encountered. This unit was originally excavated as a 1 m^2 unit, but in order to prevent collapsing of the section while digging, an additional 1 m^2 unit was added. A hearth feature was identified in the 1 x 2 m unit thus created and it was decided to excavate an additional 1 x 2 m unit south of the original unit in order to investigate the feature and to obtain a clearer section. The northwest corner of unit 1was located at 702368.391; 1789184.131; 4.54 (Guadeloupe - Ste. Anne system) or 16°10′18.9491″; -61°6′40.2200″; -38.08 (WGS84). The northwest corner of unit 2 was located at 702337.711; 1789264.812; 1.37 (Guadeloupe - Ste. Anne system) or 16°10′21.5827″; -61°6′41.2278″; -41.26 (WGS84).

4.2.3 Archaeological materials

The materials described include pottery and lithic artefacts from the 1985 and 1999 surface collections and the 1999 test units. The shellfish remains, faunal remains and shell and coral artefacts described were collected in 1999. Nicholson (1975) only reported on the ceramics he excavated. His collection has been stored in the Yale University collections (Nicholson personal communication 1999). This description is added to the pottery analysis presented below.

4.2.3.1 Pottery

Bodu collected 44 heavily weathered sherds in 1985, weighing 1506 g (table A4.13). The appendages/other category represents 15.9% of the sample. This includes a handle, a lug, spindle whorls, a griddle leg and unidentified appendages (table A4.14). Four sherds have red slipped surfaces (9.1%) and four sherds (9.1%) are decorated by incision and geometric modelling (table A4.15). One concave high base was collected, together with straight, triangular and legged griddle fragments (table A4.16).

The morphological description of the pottery collected in 1985 has been based on the analysis of 14 rims larger than 5 cm, of which 12 have heavily weathered surfaces. These demonstrate that the characteristic vessel shapes include jars, bowls and dishes with unrestricted simple contours (85.7%); (table A4.17). Dominant rim shapes are rounded (50.0%) and inward thickened (35.8%); (table A4.18). Wall thicknesses range between 6-8 mm (50.0%) and 9-11 mm (42.9%) and orifice diameters range between 11-20 cm (35.7%) and 21-30 cm (50.0%), while 14.3% remains unidentified (tables A4.19-A4.20). Surface colours are predominantly reddish brown (85.8%); (table A4.21). Firing techniques include mainly incomplete or relatively good oxidation (85.7%) and 14.3% of the surfaces are highly burnished, while for most of the rims (85.7%) surface finishing could not be identified (table A4.22).

A total of 1035 sherds was collected in 1999, mostly body sherds (78.4%), weighing 15,069 g (table A4.23). The appendages/other category represents 0.7% of the sample. This includes the body attachment part of a handle, four spindle whorls (fig. A4.4a), a figurine leg fragment and a bird *adorno* (fig. A4.4b). A total of 232 sherds has red slipped surfaces (22.4%). Nine sherds (0.9%) are decorated by small, narrow incision on red slip (fig. A4.4c-d), geometric modelling in the form of an *appliqué*, zoomorphic modelled incised *appliqué* in the shape of a frog-foot on a red slipped sherd (fig. A4.4e) and punctation on red slipped rim smaller than 5 cm (table A4.24). Most of the bases are flat, and straight, rounded, legged and unidentified griddle fragments were found as well (tables A4.25-A4.26; fig. A4.4f).

The morphological description of the pottery collected in 1999 has been based on the analysis of 43 rims

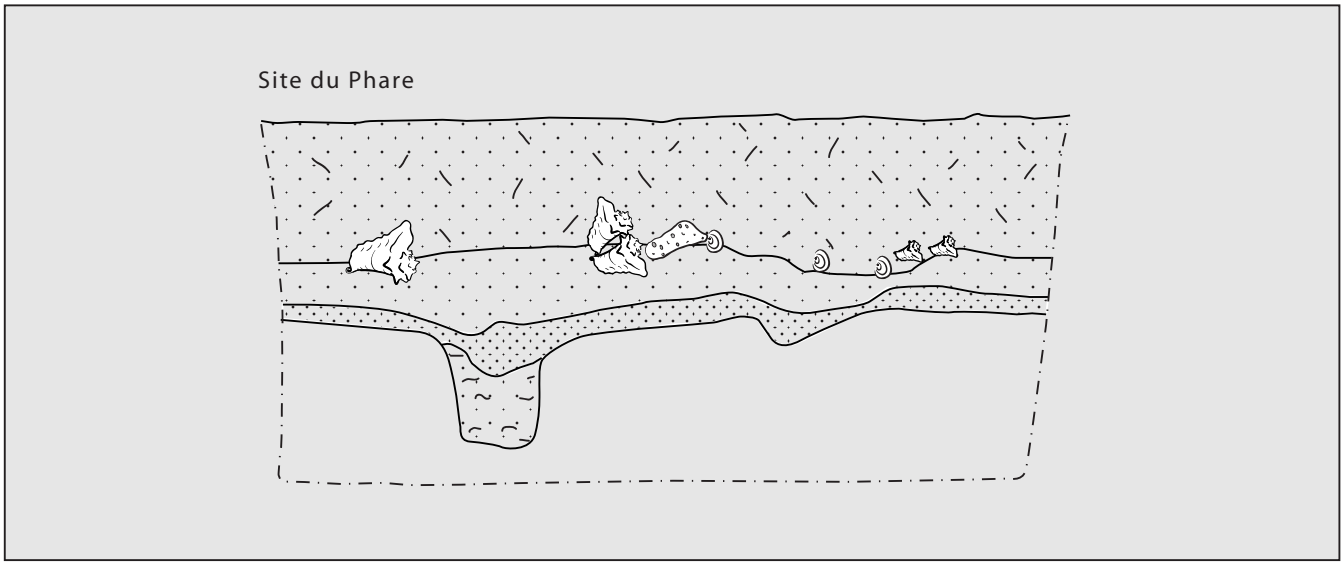


Fig. A4.3. Site du Phare, unit 2 (2 x 2 m), south section.

	Number	Number %	Weight	Weight %
Rim	20	45.5	532	35.3
Body	10	22.7	268	17.8
Base	1	2.3	54	3.6
Griddle	6	13.6	368	24.4
Appendage/other	7	15.9	284	18.9
Total	44	100.0	1506	100.0

Table A4.13. Number, percentages and weight (g) of sherds from the 1985 Site du Phare collection.

	Number	Number %
Handle	1	14.3
Lug	1	14.3
Spindle whorls	2	28.6
Griddle leg	1	14.3
Unidentified appendage	2	28.6
Total	7	100.0

Table A4.14. Number and percentages of sherds within appendages/other categories from the 1985 Site du Phare collection.

	Number	Number %
Incision	3	75.0
Modelling (geometric)	1	25.0
Total	4	100.0

Table A4.15. Number and percentages of sherds with particular decoration modes from the 1985 Site du Phare collection.

	Number	Number %
Straight	4	66.6
Triangular	1	16.7
Legged	1	16.7
Total	6	100.0

Table A4.16. Number and percentages of sherds within griddle shape categories from the 1985 Site du Phare collection.

	Number	Number %
Jar with unrestricted simple contour	1	7.1
Bowl with unrestricted simple contour	7	50.0
Dish with unrestricted simple contour	4	28.6
Bowl with restricted simple contour	2	14.3
Total	14	100.0

Table A4.17. Number and percentages of sherds within vessel shape categories from the 1985 Site du Phare collection.

	Number	Number %
Rounded	7	50.0
Inward thickened	5	35.8
Outward thickened	1	7.1
Inwardly bevelled	1	7.1
Total	14	100.0

Table A4.18. Number and percentages of sherds within rim shape categories from the 1985 Site du Phare collection.

	Number	Number %
1-5 mm	1	7.1
6-8 mm	7	50.0
9-11 mm	6	42.9
Total	14	100.0

Table A4.19. Number and percentages of sherds within wall thickness categories from the 1985 Site du Phare collection.

	Number	Number %
11-20 cm	5	35.7
21-30 cm	7	50.0
Unidentified	2	14.3
Total	14	100.0

Table A4.20. Number and percentages of sherds within orifice diameter categories from the 1985 Site du Phare collection.

larger than 5 cm, of which 16 have seriously weathered surfaces. The characteristic vessel shapes include jars, bowls and dishes with unrestricted simple contours (67.5%); (table A4.27; fig. A4.4g-h). Dominant rim shapes are rounded (60.5%) or flattened (14.0%); (table A4.28). Wall thicknesses range between 1-5 mm (27.9%), 6-8 mm (51.2%) and 9-11 mm (18.6%) and orifice diameters range between 11-20 cm (11.6%), 21-30 cm (48.8%), 31-40 cm (18.6%) and 41-50 cm (7.0%), while 14.0% remains unidentified (tables A4.29-A4.30). Surface colours are predominantly red (20.9%), reddish brown (18.6%), dark gray-black (11.6%) and dark brown/very dark brown (11.6%); (table A4.31). Firing techniques include mainly incomplete or relatively good oxidation (65.1%) and incomplete oxidation or reduction (16.3%); (table A4.32). One incomplete or relatively well oxidised sherd had been irregularly fired. Surface finishing is predominantly characterised by burnishing (34.9%) and smoothing (16.3%). For 37.2% the surface finishing could not be identified (table A4.33).

The pottery excavated by Nicholson (1975) was reported to be very thick, coarse and tempered with coarse sand. Surfaces are predominantly red slipped and scratched and decoration includes simple linear incision, circular flat *appliqués* and small, rounded appendages. Griddle shapes include legged, straight, triangular and overhanging griddles and vessel rims are mostly unmodified, although inward thickened rims are found as well. This pottery appears to have been quite similar to the pottery collected in 1985 and 1999, although scratched surfaces are rare in these samples.

	Number	Number %
Reddish-gray/dark reddish-gray	1	7.1
Reddish brown	12	85.8
Red	1	7.1
Total	14	100.0

Table A4.21. Number and percentages of sherds within exterior surface colour categories from the 1985 Site du Phare collection.

	Number	Number %
Incomplete oxidation or reduction	2	14.3
Incomplete or relatively good oxidation	12	85.7
Total	14	100.0

Table A4.22. Number and percentages of sherds within firing colour categories from the 1985 Site du Phare collection.

	Number	Number %	Weight	Weight %
Rim	134	12.9	2953	19.6
Body	811	78.4	8766	58.2
Base	46	4.4	2043	13.6
Griddle	37	3.6	1076	7.1
Appendage/other	7	0.7	231	1.5
Total	1035	100.0	15,069	100.0

Table A4.23. Number and percentages of sherds and their weight (g) from the 1999 Site du Phare collection.

	Number	Number %
Incision	6	66.7
Modelling (geometric)	1	11.1
Modelled incised *appliqué* (zoomorphic)	1	11.1
Punctation	1	11.1
Total	9	100.0

Table A4.24. Number and percentages of sherds with particular decoration modes from the 1999 Site du Phare collection.

	Number	Number %
Flat	42	91.3
Concave	2	4.3
Pedestal/annular	1	2.2
Unidentified	1	2.2
Total	46	100.0

Table A4.25. Number and percentages of sherds within base shape categories from the 1999 Site du Phare collection.

	Number	Number %
Straight	5	13.5
Rounded	1	2.7
Legged	13	35.1
Unidentified	18	48.7
Total	37	100.0

Table A4.26. Number and percentages of sherds within griddle shape categories from the 1999 Site du Phare collection.

	Number	Number %
Jar with unrestricted simple contour	15	34.9
Bowl with unrestricted simple contour	8	18.6
Dish with unrestricted simple contour	6	14.0
Bowl with restricted simple contour	3	7.0
Bowl with unrestricted composite contour	4	9.3
Jar with independent restricted inflected contour	5	11.6
Unidentified	2	4.6
Total	43	100.0

Table A4.27. Number and percentages of sherds within vessel shape categories from the 1999 Site du Phare collection.

4.2.3.2 Lithic artefacts

The lithic material from the Site du Phare is rather poor, taking into account that it consists of the 1985 surface collection by Bodu and of material from the 1999 surface collections and test units. Although it is possible that Bodu collected more lithic artefacts, only three rather large pieces from his collection were available for analysis. These include a non-modified water-worn pebble of La Désirade hypabyssal/plutonic rock, one unidentified plutonic rock water-worn pebble with flake removal (possible shapeless core) and one passive rubbing/grinding/abrading stone fragment of an unidentified hypabyssal rock that was flaked on at least three sides for unclear reasons after usage.

The 1999 investigations yielded 11 lithic artefacts, among which are three artefacts of limestone/chalk including a

	Number	Number %
Rounded	26	60.5
Flattened	6	14.0
Inward thickened	3	6.9
Outward thickened	2	4.7
Double thickened	2	4.7
Flanged	3	6.9
Unidentified	1	2.3
Total	43	100.0

Table A4.28. Number and percentages of sherds within rim shape categories from the 1999 Site du Phare collection.

	Number	Number %
1-5 mm	12	27.9
6-8 mm	22	51.2
9-11 mm	8	18.6
Unidentified	1	2.3
Total	43	100.0

Table A4.29. Number and percentages of sherds within wall thickness categories from the 1999 Site du Phare collection.

	Number	Number %
11-20 cm	5	11.6
21-30 cm	21	48.8
31-40 cm	8	18.6
41-50 cm	3	7.0
Unidentified	6	14.0
Total	43	100.0

Table A4.30. Number and percentages of sherds within orifice diameter categories from the 1999 Site du Phare collection.

	Number	Number %
Gray	2	4.7
Dark gray-black	5	11.6
Brown-gray/gray-brown	1	2.3
Dark grayish-brown	2	4.7
Light brown-yellow	2	4.7
Light brown/brown	3	6.9
Dark brown/very dark brown	5	11.6
Reddish-gray/dark reddish-gray	2	4.7
Reddish brown	8	18.6
Red	9	20.9
Unidentified	4	9.3
Total	43	100.0

Table A4.31. Number and percentages of sherds within exterior surface colour categories from the 1999 Site du Phare collection.

	Number	Number %
Complete reduction	2	4.7
Incomplete oxidation or reduction	7	16.3
Incomplete oxidation	2	4.7
Complete oxidation	3	6.9
Incomplete or relatively good oxidation	28	65.1
Unidentified	1	2.3
Total	43	100.0

Table A4.32. Number and percentages of sherds within firing colour categories from the 1999 Site du Phare collection.

	Number	Number %
Crude	1	2.3
Scratched	4	9.3
Smoothed	7	16.3
Lightly burnished	1	2.3
Highly burnished	14	32.6
Unidentified	16	37.2
Total	43	100.0

Table A4.33. Number and percentages of sherds within exterior surface finishing categories from the 1999 Site du Phare collection.

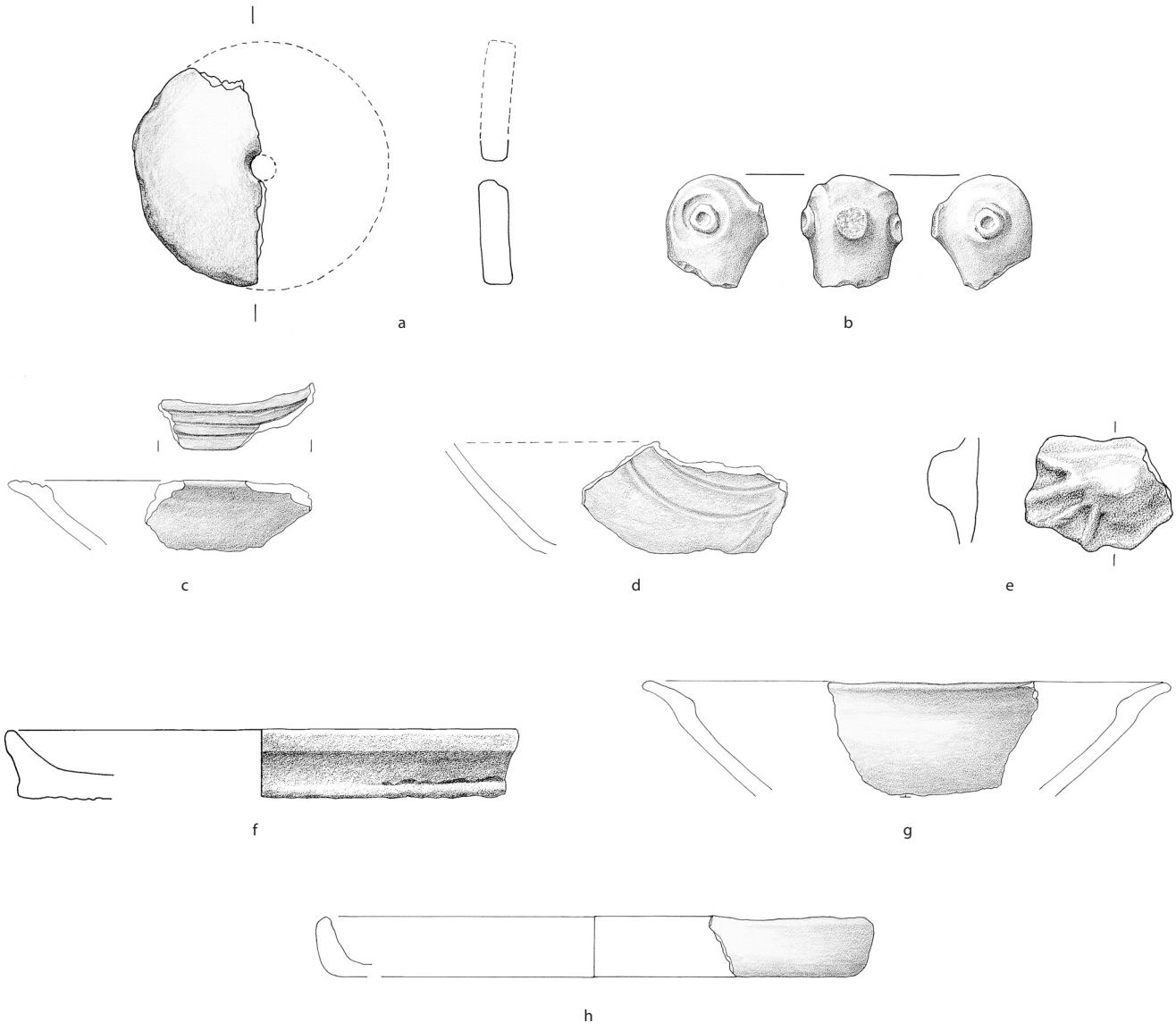


Fig. A4.4. Site du Phare ceramics (a: surface, scale 1:2; b: unit 2, level 5, scale 1:3; c-e and g-h: surface, scale 1:3; f: unit 1, level 1, scale 1:3).

beautifully carved *zemi* (fig. A4.5), one non-modified flake artefact and an unidentified core artefact fragment (tables A4.34-A4.35). One non-modified Long Island flint flake, one non-modified fire-cracked unidentified flint flake fragment, a distal part of a small ground petalloid axe of possible St. Martin/St. Barths chert, and a large water-worn pebble with flake removal of an unidentified material were found as well. In addition, an unidentified flake artefact and a non-modified water-worn pebble of a possible La Désirade hypabyssal rock and one water-worn pebble fragment and one small rubbing/grinding/abrading stone fragment of a possible La Désirade volcanic rock were collected.

4.2.3.3 Shell artefacts

Two possible shell artefacts were collected in 1999, including one bead with an irregular perforation for which the upper part of a *Murex* sp. shell was used and another possible bead of *Oliva* sp. shell with a polished edge and an irregular perforation.

4.2.3.4 Coral artefacts

A total of 205 coral artefacts was found at Site du Phare (table A4.36). These include 166 rasp fragments (most of these had been heavily used, except for seven fragments that are without use wear and six fragments that have a ground tip) and eight unidentified objects of *Acropora cervicornis* (three without use wear and five intensively used). In addition, 26 heavily used active grinding tool fragments and two unidentified pieces of *Acropora palmata* and three unidentified objects of an unidentified coral species were found.

Fig. A4.5. Carved limestone/chalk *zemi* (c. 8.5 cm base-length) from Site du Phare.

	Total
Long Island flint	1 9.1
Unidentified flint	1 9.1
La Désirade volcanic rock	2 18.2
La Désirade hypabyssal rock	2 18.2
St. Martin/St. Barths chert	1 9.1
Limestone/chalk	3 27.2
Unidentified	1 9.1
Total	11 100.0

Table A4.34. Number and percentages of rock types from the 1999 Site du Phare collection.

	Total
Core	1 9.1
Pebble	2 18.2
Pebble fragment	1 9.1
Grinding-stone	1 9.1
Flake	3 27.2
Axe	1 9.1
Zemi	1 9.1
Unidentified	1 9.1
Total	11 100.0

Table A4.35. Number and percentages of lithic artefact types from the 1999 Site du Phare collection.

4.2.3.5 Shellfish remains

The main shellfish remains consisted of *Strombus gigas, Cittarium pica* and *Nerita* sp. (table A4.37). Other shell species represented in very low numbers and weights at the site included *Acanthopleura granulata, Acmaea leucopleura*, *Antigona listeri*, *Arca zebra*, *Astraea* sp., *Bulimulus guadalupensis, Cerithium litteratum*, *Chama* sp., *Charonia variegata, Chione cancellata*, *Chiton* sp., *Codakia orbicularis, Columbella mercatoria*, *Conus* sp., *Cypraea zebra*, *Cypraecassis testiculus*, *Diadora* sp., *Fissurella* sp., *Hipponix antiquatus*, *Linga pensylvanica*, *Natica canrena*, *Nitidella ocellata*, *Nodilittorina tuberculata*, *Olivea* sp., *Ostrea frons*, *Polia aritula*, *Serpulorbis decustatus*, *Tectarius muricatus*, *Tellina* sp., *Thais* sp., *Tonna maculosa*, *Trachycardium magnum*, *Trivia pediculus* and *Turbo casteana*.

4.2.3.6 Animal remains

MNI counts show that the Site du Phare 2/5 inch faunal sample (total MNI 48, total weight 269 g) consists of fish (73.2%), crab (18.8%), reptile (6.3%) and mammal (2.1%). It has a terrestrial component (23.0%) that consists of unidentified mammal, iguana, land hermit crab, coral crab and black land crab. Leaving out land hermit crab the terrestrial component makes up 20.9% of the total sample. Many reef herbivores/omnivores (41.7%) have been found, including parrotfish, surgeonfish and triggerfish, while the reef carnivores (25.2%), that make a smaller contribution

	Rasp fragment	Active grinding tool fragment	Unidentified	Total
Acropora cervicornis	166		8	174
	81.0		3.9	84.9
Acropora palmata		26	2	28
		12.7	0.9	13.6
Unidentified			3	3
			1.5	1.5
Total	166	26	13	205
	81.0	12.7	6.3	100.0

Table A4.36. Number and percentages of coral species and artefact types from the 1999 Site du Phare collection.

	MNI count	MNI weight	Fragment weight	Total weight
Strombus gigas	178	83,593	13,594	97,187
	18.2	86.6	63.8	82.6
Cittarium pica	188	10,201	6801	17,002
	19.2	10.6	31.9	14.4
Nerita sp.	312	488	124	612
	31.9	0.5	0.6	0.5
Other	301	2224	712	2936
	30.7	2.3	3.3	2.4
Unidentified	0	0	92	92
	0.0	0.0	0.4	0.1
Total	979	96,506	21,323	117,829
	100.0	100.0	100.0	100.0

Table A4.37. MNI counts, MNI weights (g), fragment weight (g), total weight (g) and percentages of the main shell species from the 1999 Site du Phare collection.

to the sample consist of squirrelfish, grouper, jack, snapper, grunt and Spanish hogfish. Inshore (4.2%) species are represented by sea turtle, porgy and offshore-pelagic (4.2%) species by tuna/mackerel. Unidentified invertebrates make up 2.1% of the sample (Nokkert in appendix 5).

4.2.4 Chronological assignment

The site yielded Late Ceramic A pottery (unidentified style).

4.3 EST DE MOUTON DE BAS (97110-005; S2SC01)

4.3.1 Site location and preservation

The Est de Mouton de Bas site (x: 701,900; y: 1789,300) is situated on the northern coast of Terre de Bas, close to the easternmost salina (fig. 5.3). The site was discovered during a survey in 1985 by Bodu and it was restudied in 1999. Site dimensions are 140 m east to west and 75 m north to south. The archaeological material on the surface is characterised by a dense but patchy distribution of large ceramic fragments, coral artefacts, lithic and shellfish remains. Four clear concentrations of midden material could be identified. A small amount of ceramic and shell off-site material is evenly spread over a large area, in south-eastern direction towards the Site du Phare (97110-004). A dense coastal strip of mancenilla trees and sea grape and some *Gaïac* trees cover 10 percent of the soil, which consists of medium textured, well-drained, loose beach sand. Passage across the terrain is easy and surface visibility is very good. The site is seriously threatened by coastal erosion and iguana nests are another important factor in the destruction of the archaeological layer. The inland part of the site appears to be better preserved. At least, no human destruction takes place, as the site is situated in a protected area.

4.3.2 Test units and stratigraphy

Two 2 x 2 m test units were excavated in two of the surface material concentrations. The first unit was situated in a concentration consisting largely of *Cittarium pica* and *Strombus gigas*. From 50 cm onwards, a 50 x 50 cm unit was excavated in the centre of the 2 x 2 m unit, as merely sterile layers were identified. Auger tests were carried out in the corners and the centre of the unit in order to identify bedrock depth. The second unit was situated in a concentration consisting largely of pottery (fig. A4.6). At a depth of 70 cm, a 50 x 50 cm unit was excavated in the centre of the 2 x 2 m unit, as only sterile layers were identified. When level 8 was reached, auger tests were carried out in the corners and the centre of the unit in order to identify bedrock depth. Bedrock had still not been reached but at a depth of 220 cm, the ground water level was reached instead. The southeast corner of unit 1 was located at 702077.779; 1789273.165; 1.34 (Guadeloupe - Ste. Anne system) or 16°10′21.9319″; -61°6′49.9741″; -41.27 (WGS84). The northwest corner of unit 2 was located at 702092.804; 1789305.925; 1.67 (Guadeloupe - Ste. Anne system) or 16°10′22.9930″; -61°6′49.4582″; -40.95 (WGS84).

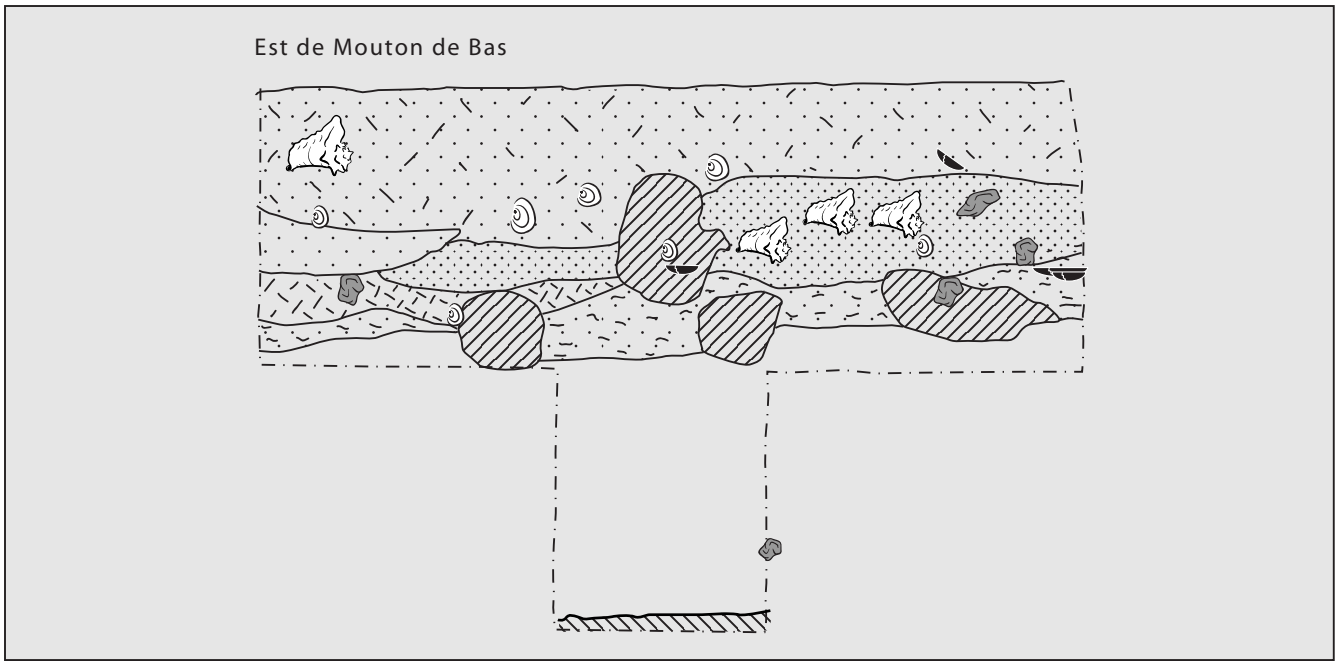
4.3.3 Archaeological materials

All the material described is from the 1999 surface collections and test units.

4.3.3.1 Pottery

A total of 1425 sherds was collected, mostly body sherds (70.9%), weighing 39,689 g (table A4.38). The appendages/other category represents 0.6% of the sample. This includes handles and lugs (fig. A4.7a-d), spindle whorls and griddle legs (table A4.39). A total of 270 sherds has slipped surfaces (18.9%). One rim, larger than 5 cm and belonging to a boat-shaped vessel, has beige slipped surfaces and the other sherds are red slipped. Incision (fig. A4.7e-f) and punctation decorate 22 sherds (1.5%); (table A4.40). Two boat-shaped vessel fragments (fig. A4.7g) were found in the sample (0.1%). Most of the bases are flat or unidentified and most griddles are straight or unidentified (tables A4.41-A4.42).

The morphological description of the pottery has been based on the analysis of 174 rims larger than 5 cm, of which 26 have weathered surfaces. These demonstrate that the characteristic vessel shapes include jars, bowls and dishes with unrestricted simple contours (64.3%), bowls with unrestricted composite contours (12.6%), bowls with restricted simple contours (7.5%) and bowls with independent restricted complex contours (6.3%); (table A4.43; fig. A4.8-A4.9). Dominant rim shapes are rounded (55.2%), flattened (17.8%), outward thickened (10.9%) and inward thickened (10.3%); (table A4.44). Wall thicknesses of most rims range between 9-11 mm (62.1%) and 6-8 mm (28.7%) and orifice diameters range mainly between 21-30 cm (25.3%), 31-40 cm (30.5%) and 41-50 cm (11.5%), while 17.2% remains unidentified (tables A4.45-A4.46). Surface colours are predominantly reddish brown (32.8%) and red (43.7%); (table A4.47). Firing techniques include mainly incomplete or relatively good oxidation (60.4%), complete reduction (12.6%) as well as complete oxidation (10.9%); (table A4.48). Ten of the incompletely or relatively well-oxidised rims had been irregularly fired, as well as one of the complete oxidised rims and one of the incomplete oxidised rims. Surface finishing is predominantly characterised by burnishing (54.6%) and smoothing (11.5%). For 16.1% the



0 to 22-40 cm: Rather loose, medium, dark grayish brown (10YR;4/2) beach sand with a small humus component and a lot of plant roots, containing a lot of ceramics, shell food remains (mainly *Strombus gigas* and *Cittarium pica* fragments), faunal remains and lithic and coral artefacts.

30-35 to 46 cm: More compact, dark brown (10YR;3/3) beach sand with a small humus component, appearing only in the northern part of the section.

22-38 to 42-50 cm: Less compact, coarse, grayish brown (2.5YR;5/2) beach sand with a smaller humus component, seriously disturbed by an iguana nest consisting of pale yellow (2.5YR;7/3) sterile beach sand. This layer contains a lot of archaeological material, including ceramics, large *Strombus gigas* and *Cittarium pica* shells, faunal remains and lithic and coral artefacts.

45-50 to 55-60 cm: Rather compact, coarse, very dark gray (10YR;3/1) sand, with rather abundant archaeological material including pottery, shell food remains, faunal remains, lithic, shell and coral artefacts. The lower part of level 6 showed the existence of a hearth with ash, charcoal and chalky concretion. The south-eastern corner of the upper part of level 6 contained a ceramic concentration, one isolated *Cittarium pica* shell and a *Cittarium pica* fish hook associated with this hearth feature.

45-58 to 60-67 cm: Loose, brown (10YR;5/3) beach sand containing rather abundant archaeological material, seriously perturbed by three large iguana nests.

Perturbations (igunana nests).

58-66 to 131 cm: Sterile, pale yellow (2.5Y;7/3) beach sand with much less archaeological material. From 70 cm depth onwards no archaeological material was found.

At a depth of 131 cm bedrock was reached.

Pottery

Rock

Cittarium pica

Strombus gigas

Fig. A4.6. Est de Mouton de Bas, unit 2 (2 x 2 m), south section.

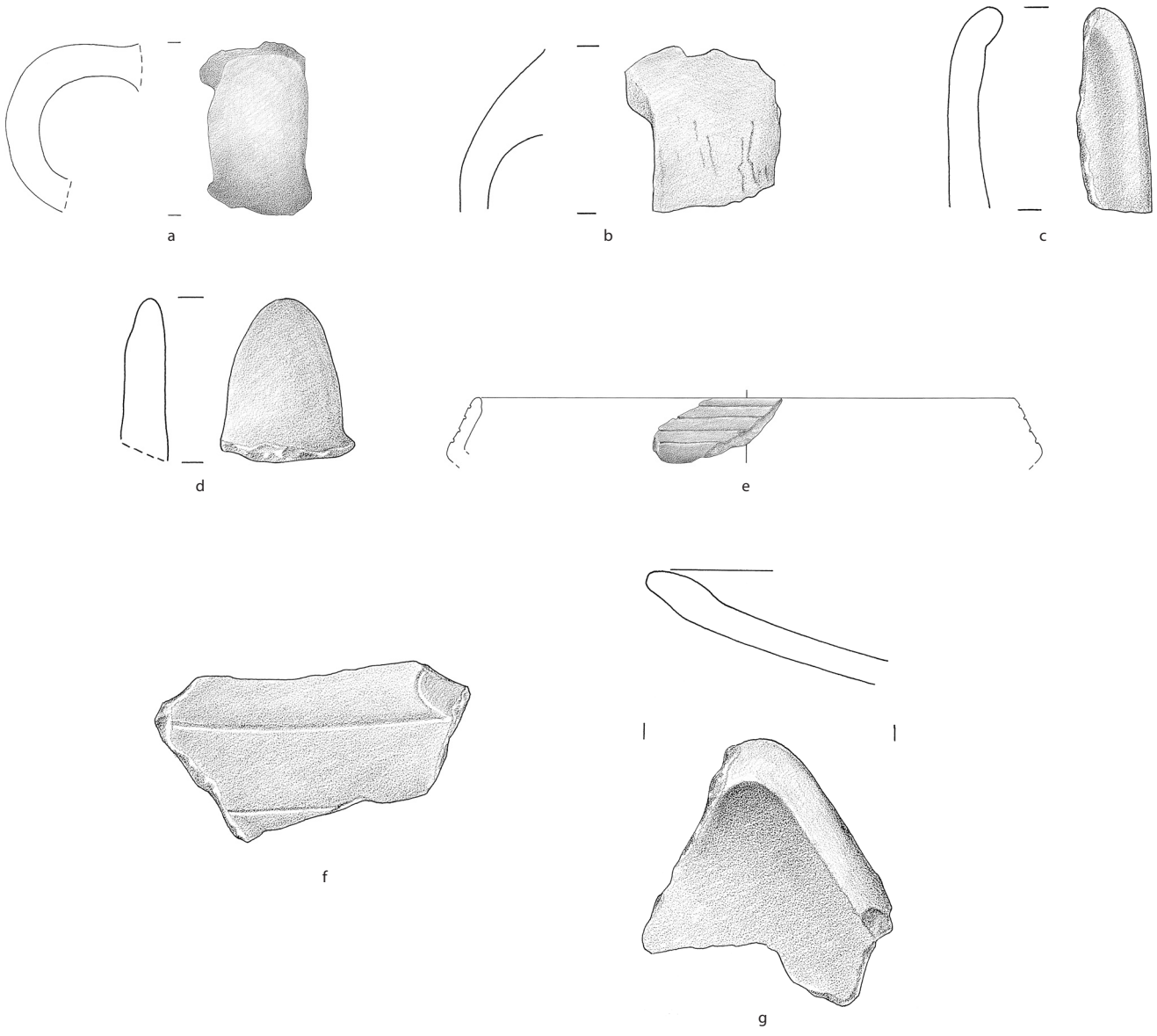


Fig. A4.7. Handles and lugs from Est de Mouton de Bas (a: unit 2, level 6, scale 1:3; b: unit 2, level 1, scale 1:2; c: unit 2, level 1, scale 1:2; d: unit 2, level 6, scale 1:2; e: unit 2, level 2, scale 1:4; f: unit 2, level 2, scale 1:2; g: surface, scale 1:2).

	Number	Number %	Weight	Weight %
Rim	264	18.5	11,978	30.2
Body	1011	70.9	22,241	56.0
Base	105	7.4	3566	9.0
Griddle	37	2.6	1646	4.1
Appendage/other	8	0.6	258	0.7
Total	1425	100.0	39,689	100.0

Table A4.38. Number, percentages and weight (g) of sherds from the 1999 Est de Mouton de Bas collection.

	Number	Number %
Handle	3	37.5
Lug	2	25.0
Spindle whorls	2	25.0
Griddle leg	1	12.5
Total	8	100.0

Table A4.39. Number and percentages of sherds within appendages/other categories from the 1999 Est de Mouton de Bas collection.

	Number	Number %
Incision	20	90.9
Punctation	2	9.1
Total	22	100.0

Table A4.40. Number and percentages of sherds with particular decoration modes from the 1999 Est de Mouton de Bas collection.

	Number	Number %
Flat	81	77.1
Convex	3	2.9
Concave	8	7.6
Unidentified	13	12.4
Total	105	100.0

Table A4.41. Number and percentages of sherds within base shape categories from the 1999 Est de Mouton de Bas collection.

	Number	Number %
Straight	8	21.6
Triangular	1	2.7
Unthickened	1	2.7
Legged	3	8.1
Unidentified	24	64.9
Total	37	100.0

Table A4.42. Number and percentages of sherds within griddle shape categories from the 1999 Est de Mouton de Bas collection.

	Number	Number %
Jar with unrestricted simple contour	66	37.9
Bowl with unrestricted simple contour	31	17.8
Dish with unrestricted simple contour	15	8.6
Bowl with restricted simple contour	13	7.5
Bowl with unrestricted composite contour	22	12.6
Jar with restricted composite contour	4	2.3
Bowl with unrestricted inflected contour	6	3.5
Jar with independent restricted inflected contour	1	0.6
Bowl with independent restricted complex contour	11	6.3
Unidentified	5	2.9
Total	174	100.0

Table A4.43. Number and percentages of sherds within vessel shape categories from the 1999 Est de Mouton de Bas collection.

	Number	Number %
Rounded	96	55.2
Flattened	31	17.8
Inward thickened	18	10.3
Outward thickened	19	10.9
Flanged	6	3.5
Unidentified	4	2.3
Total	174	100.0

Table A4.44. Number and percentages of sherds within rim shape categories from the 1999 Est de Mouton de Bas collection.

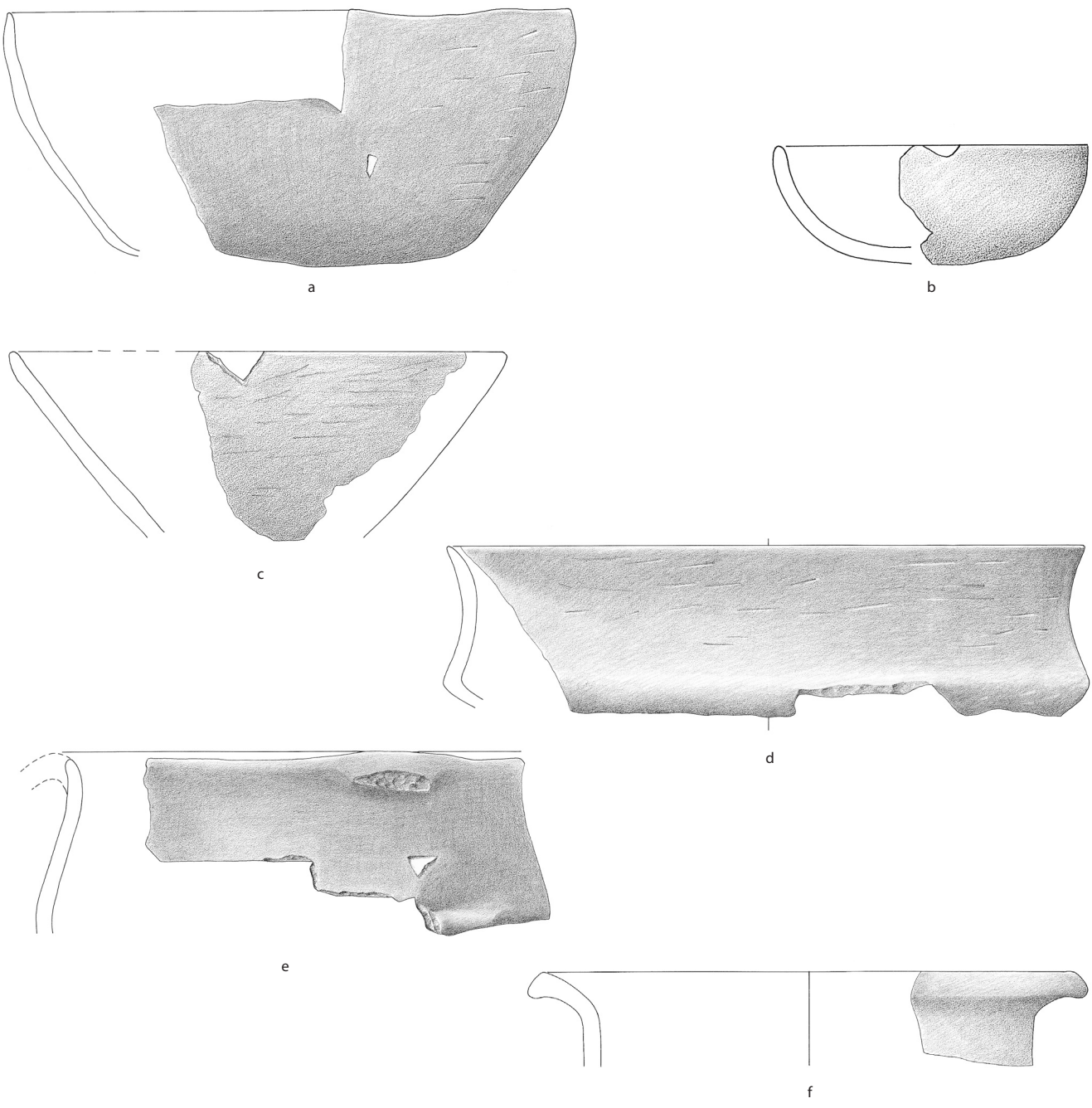


Fig. A4.8. Open vessel shapes from Est de Mouton de Bas (a: unit 1, level 6, scale 1:4; b: unit 1, level 2, scale 1:2; c: unit 1, level 2, scale 1:3; d-f: unit 2, level 6, scale 1:4).

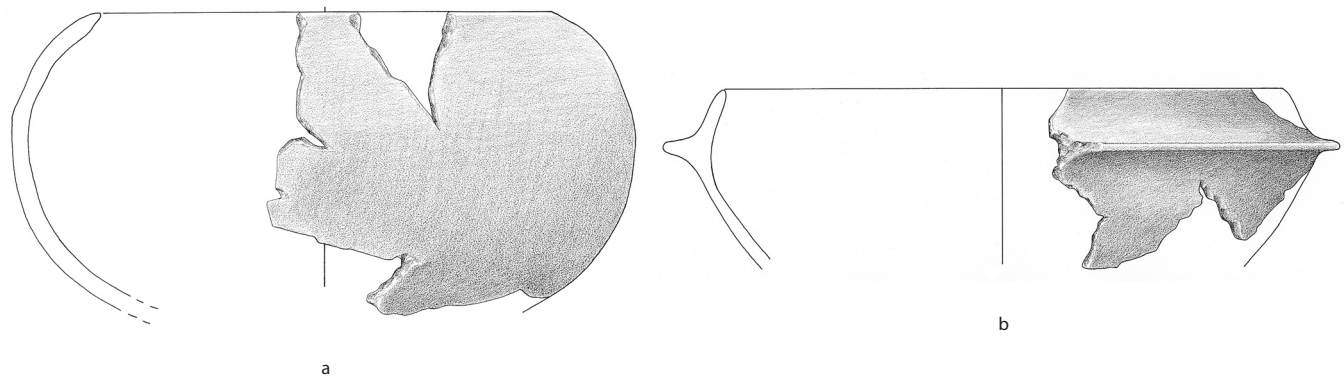


Fig. A4.9. Restricted vessel shapes from Est de Mouton de Bas (a: unit 1, level 1, scale 1:3; b: unit 2, level 6, scale 1:4).

	Number	Number %
1-5 mm	3	1.7
6-8 mm	50	28.7
9-11 mm	108	62.1
12-15 mm	9	5.2
Unidentified	4	2.3
Total	174	100.0

Table A4.45. Number and percentages of sherds within wall thickness categories from the 1999 Est de Mouton de Bas collection.

	Number	Number %
1-10 cm	1	0.6
11-20 cm	11	6.3
21-30 cm	44	25.3
31-40 cm	53	30.5
41-50 cm	20	11.5
51-60 cm	15	8.6
Unidentified	30	17.2
Total	174	100.0

Table A4.46. Number and percentages of sherds within orifice diameter categories from the 1999 Est de Mouton de Bas collection.

	Number	Number %
Dark gray-black	5	2.9
Light brown-yellow	6	3.4
Light brown-gray	6	3.4
Light brown/brown	3	1.7
Dark brown/very dark brown	9	5.2
Reddish-gray/dark reddish-gray	4	2.3
Reddish brown	57	32.8
Red	76	43.7
Unidentified	8	4.6
Total	174	100.0

Table A4.47. Number and percentages of sherds within exterior surface colour categories from the 1999 Est de Mouton de Bas collection.

	Number	Number %
Complete reduction	22	12.6
Incomplete oxidation or reduction	17	9.8
Incomplete oxidation	5	2.9
Complete oxidation	19	10.9
Incomplete or relatively good oxidation	105	60.4
Unidentified	6	3.4
Total	174	100.0

Table A4.48. Number and percentages of sherds within firing colour categories from the 1999 Est de Mouton de Bas collection.

	Number	Number %
Crude	9	5.2
Scratched	11	6.3
Smoothed	20	11.5
Lightly burnished	28	16.1
Highly burnished	67	38.5
Polished	11	6.3
Unidentified	28	16.1
Total	174	100.0

Table A4.49. Number and percentages of sherds within exterior surface finishing categories from the 1999 Est de Mouton de Bas collection.

surface finishing could not be identified (table A4.49). Three rims have highly burnished surfaces that show the slightest traces of light scratching.

4.3.3.2 Lithic artefacts

A total of 23 artefacts was found (table A4.50). These include one large flake fragment that could originally have been a blade and one small flake fragment of Antigua flint, two square La Désirade pieces of jasper and two pebbles of fine-grained La Désirade sedimentary rock. Seven pebbles and three pebble fragments of fine-grained local volcanic rock, seven water-worn limestone artefacts with signs of abrasion (two burnt, three flaked, one possible core-artefact preform) and six other, probably natural, limestone fragments were collected as well.

4.3.3.3 Shell artefacts

Three shell artefacts were found, including a beautifully polished axe fragment and a *spatula* with polished edges, decorated with a carved design, both of *Strombus gigas*. A small, beautifully carved, polished and incised *Cittarium pica* fishhook was also found (fig. A4.10).

4.3.3.4 Coral artefacts

A total of 115 coral artefacts was collected (table A4.51). These include 86 heavily used *Acropora cervicornis* rasp fragments (four without use wear and seven with a ground tip), 22 *Acropora palmata* active grinding tool fragments, four heavily used *Acropora palmata* passive grinding tool fragments, an unidentified object of *Acropora palmata* and

Fig. A4.10. Carved *Strombus gigas spatula* (c. 9 cm long) and carved and incised *Cittarium pica* fishhook from Est de Mouton de Bas.

	Pebble	Pebble fragment	Flake	Core preform	Unidentified	Total
La Désirade volcanic rock	7 30.4	3 13.1				10 43.5
Antigua flint			2 8.7			2 8.7
La Désirade jasper					2 8.7	2 8.7
Limestone				1 4.3	6 26.1	7 30.4
La Désirade sedimentary rock	2 8.7					2 8.7
Total	9 39.1	3 13.1	2 8.7	1 4.3	8 34.8	23 100.0

Table A4.50. Number and percentages of rock types and lithic artefact types from the 1999 Est de Mouton de Bas collection.

two unidentified objects of an unidentified coral species.

4.3.3.5 Shellfish remains

The main shellfish remains consisted of *Acanthopleura granulata*, *Strombus gigas*, *Cittarium pica* and *Nerita* sp. (table A4.52). Other shell species represented in very low numbers and weights included *Arca zebra*, *Astraea* sp., *Bulla striata*, *Chama* sp., *Charonia variegata*, *Chiton tuberculatus*, *Codakia orbicularis*, *Conus* sp., *Cymatium femorale*, *Cypraea* sp., *Cypraecassis testiculus*, *Diadora* sp., *Olivea* sp., *Purpura patula*, *Tectarius muricatus*, *Tellina* sp., *Thais rustica*, and *Thyfela fausta*.

4.3.3.6 Animal remains

MNI counts (excluding the intrusive species) show that the Est de Mouton de Bas 2/5 inch faunal sample (total MNI 118, total weight 1325 g) consists of fish (51.3%), crab (33.7%), reptile (10.1%), mammal (1.7%) and bird (1.7%). It has a terrestrial component (40.6%) that consists of rice rat, unidentified bird, iguana, unidentified reptile, land hermit crab, great land crab, black land crab, land crab and unidentified crab species. Leaving out land hermit crab the terrestrial component still makes up 37.2% of the total sample. Reef herbivores/omnivores, including parrotfish, surgeonfish and triggerfish, represent 28.0% of the sample,

	Rasp fragment	Active grinding tool fragment	Passive grinding tool fragment	Unidentified	Total
Acropora cervicornis	86 74.8				86 74.8
Acropora palmata		22 19.1	4 3.5	1 0.9	27 23.5
Unidentified				2 1.7	2 1.7
Total	86 74.8	22 19.1	4 3.5	3 2.6	115 100.0

Table A4.51. Number and percentages of coral species and artefact types from the 1999 Est de Mouton de Bas collection.

	MNI count	MNI weight	Fragment weight	Total weight
Acanthopleura granulata	95 6.9	1578 0.7	980 1.5	2558 0.9
Strombus gigas	264 19.1	148,026 69.5	19,777 30.4	167,803 60.4
Cittarium pica	432 31.2	61,232 28.8	43,931 67.6	105,163 37.8
Nerita sp.	536 38.8	826 0.4	174 0.3	1000 0.4
Other	56 4.0	1313 0.6	103 0.2	1416 0.5
Unidentified	0 0.0	0 0.0	7 < 0.1	7 < 0.1
Total	1383 100.0	212,975 100.0	64,972 100.0	277,947 100.0

Table A4.52. MNI counts, MNI weights (g), fragment weight (g), total weight (g) and percentages of the main shell species from the 1999 Est de Mouton de Bas collection.

and reef carnivores, consisting of shark, squirrelfish, grouper, jack, snapper, grunt and wrasse, make up 19.2% of the sample. Inshore species (7.4%) are represented by sea turtle, needlefish, porgy, common spider crab and coral crab, and offshore-pelagic (2.5%) species by barracuda and tuna/mackerel. Unidentified invertebrates make up 0.8% of the sample (Nokkert in appendix 5).

4.3.4 Chronological assignment

The site yielded Late Ceramic A pottery (unidentified style).

4.4 MOUTON DE BAS (97110-009; S2SC04)

4.4.1 Site location and preservation

The Mouton de Bas site (x: 701,750; y: 789,150) is located somewhat inland east of the easternmost salina containing water (fig. 5.3). It was discovered and surveyed by Bodu in 1985 and restudied in 1999. Site dimensions are approximately 150 m north to south and 75-150 m west to east. The site is characterised by a dispersed surface distribution, consisting almost exclusively of heavily fragmented ceramics and *Cittarium pica* fragments. The 1999 survey demonstrated that the site has two main parts, the northernmost part containing more sherds than the southern part, separated by areas with far less dense surface material. Small amounts of ceramic off-site material have been found west of the site. As the dispersed distribution, the limited number and the heavy fragmentation of the finds suggested that the site was rather shallow, no test units were excavated. Although thorny brushwood with acacias, which severely hinders passage across the terrain, covers 41-60 percent of the soil, which consists of coarse, moderately well drained sand, surface visibility is rather good. As the site is situated in an area that is nowadays protected, no recent human destruction appears to have taken place, but cultivation in the past may have caused superficial damage to the site.

4.4.2 Archaeological materials

The archaeological materials described comprise the 1999 surface collection, which consists exclusively of a small pottery sample. Although shell fragments were observed on the surface these were not collected and no other archaeological materials were found. A total of 20 sherds was collected, weighing 534 g (table A4.53). No fragments belonging to the appendages/other category were found. Two sherds (10.0%) have red slipped surfaces and one rim (5.0%) larger than 5 cm has beige slip. Four decorated sherds (20.0%) were decorated by incision. Bases are flat, concave, concave high or unidentified (table A4.54) and two triangular griddle rims were collected as well.

The morphological description of the pottery was based on the analysis of three rims larger than 5 cm. These are part of two jars with unrestricted simple contours and one bowl with an unrestricted simple contour, all three with rounded rims. For two vessels wall thicknesses range between 9-11 mm and for another it is between 12-15 mm. Orifice diameters are 11-20 cm, 41-50 cm and 60-70 cm. The outer surfaces of two rims are reddish brown and the other is red. The firing technique for one of the rims included complete reduction and the two other were incompletely or relatively well-oxidised. Surface finishing includes smoothing, light burnishing and high burnishing.

4.4.3 Chronological assignment

The site yielded Late Ceramic A pottery (unidentified style).

4.5 TROU CANARD (97110-017; S2SC05)

4.5.1 Site location and preservation

The Trou Canard site (x: 701,700; y: 1789,800) is situated on a flat terrain, bordering the rocky southern coast of Terre de Bas (fig. 5.3). It was discovered and surveyed by Bodu in 1985 and restudied in 1999. As hardly any material was found on the surface during the 1999 surveys it was impossible to estimate site dimensions. Off-site material is very scarce as well. Although thorny brushwood with acacias, which severely hinders passage across the terrain, covers 41-60 percent of the soil, which consists of coarse, moderately well drained sand, surface visibility is rather good. Bodu (1985[c]) reported illegal excavations at the site, which at that time had already partially destroyed it. As the site appeared completely destroyed in 1999 no test units were excavated.

4.5.2 Archaeological materials

A very small surface collection could be made in 1999, consisting exclusively of one body sherd and one fragment of a legged griddle, weighing 240 g. No other archaeological materials were found. As it had been decided to use rims larger than 5 cm for further investigation, and no such rims were found, no morphological and technological description could be provided for the ceramics of this site.

4.5.3 Chronological assignment

The site yielded Late Ceramic A pottery (unidentified style).

	Number	Number %	Weight	Weight %
Rim	8	40.0	228	42.7
Body	6	30.0	178	33.3
Base	4	20.0	82	15.4
Griddle	2	10.0	46	8.6
Appendage/other	0	0.0	0	0.0
Total	20	100.0	534	100.0

Table A4.53. Number, percentages and weight (g) of sherds from Mouton de Bas.

	Number	Number %
Flat	1	25.0
Concave	1	25.0
Concave high	1	25.0
Unidentified	1	25.0
Total	4	100.0

Table A4.54. Number and percentages of sherds within base shape categories from Mouton de Bas.

4.6 POINTE SABLÉ (97110-050; S1SC01)

4.6.1 Site location and preservation

The Pointe Sablé site (x: 702,275; y: 1789,650) is situated on the southern coast of Terre de Haut (fig. 5.3). It was excavated in 1965 or 1968 and Mr. H. Petitjean-Roget, director of the Edgar Clerc Museum, suggested that Mr. M. Barbotin was the excavator. The 1965/1968 excavations have not been documented. The site was revisited in 1995 and 1997 and restudied in 1999 and it has been registered in the DRAC archives since then. In 1999, site dimensions were estimated at 120 m east to west and 75 m north to south. The archaeological material collected at the site in 1965/1968 is quite abundant and it was deposited in the depot of the Edgar Clerc Museum. Presently, the site is characterised by a very poor and patchy surface distribution consisting of modestly fragmented ceramics and shell fragments, notably *Cittarium pica*, *Strombus gigas*, *Chiton* sp. and *Nerita* sp. Shell fragments are mainly found near the coastline, in the inland part of the site they are less abundant. Ceramic and shell off-site material has been found. Mancenilla trees and sea-grape at the coast and cactaceous vegetation in the inland part of the site cover 41-60 percent of the soil, which consists of medium textured, poorly drained sandy clay. Passage though the terrain is relatively easy and surface visibility is good. Coastal erosion and excavations in the past almost completely destroyed the site.

4.6.2 Test units and stratigraphy

As the 1965/1968 excavations have not been documented, there is no information on unit location, unit number and excavation methodology. The only information available mentions the levels in which the pottery was collected. These had been labelled 0-20 cm, 0-40 cm, 0-60 cm and 40-60 cm. One 1 m^2 test unit has been excavated in 1999 (fig. A4.11), demonstrating that the archaeological layer at this part of the site has been completely destroyed. The unit was located in a high find density area. The northwest corner of unit 1was located at 702328.070; 1789711.984; 1.59 (Guadeloupe - Ste. Anne system) or 16°10′36.1309″; -61°6′41.4140″; -41.05 (WGS84).

4.6.3 Archaeological materials

The archaeological materials described include surface collections and test unit material from the 1965/1968 and

1999 fieldwork campaigns. Most of the pottery was collected in the 1965/1968 units, although a small amount was surface collected in 1995, 1997 and 1999. No pottery was found in the 1999 unit. Lithic artefacts and faunal remains are also from both fieldwork campaigns. The coral artefact and the shellfish remains are from the 1999 fieldwork.

4.6.3.1 Pottery

A total of 722 sherds was collected during the 1965/1968 excavations, mostly body sherds (51.9%), weighing 43,785 g (table A4.55). The appendages/other category represents 1.8% of the sample. This includes handles (one knobbed item), lugs, pot-stands, a spindle whorl, griddle legs and a ceramic disc (table A4.56; fig. A4.12). A total of 218 sherds has red slipped surfaces (30.2%) and 51 sherds (7.1%) are decorated by broad shallow incision, often on red slip (fig. A4.13), geometric modelling and finger indentation (table A4.57). A human face bowl was found as well (fig. A4.14). Most of the bases are flat (table A4.58), while griddle fragments are mainly from legged, unidentified or straight griddles (table A4.59; fig. A4.15).

The morphological description of the pottery from the 1965/1968 collection has been based on the analysis of 196 rims larger than 5 cm. These demonstrate that the characteristic vessel shapes include jars, bowls and dishes with unrestricted simple contours (78.6%) and bowls with restricted simple contours (11.7%); (table A4.60; fig. A4.16-A4.17). The dominant rim shape is rounded (69.9%), although a lot of inward thickened rims (16.9%) have been found as well (table A4.61). Wall thicknesses range mainly between 6-8 mm (43.4%) and 9-11 mm (41.8%) and orifice diameters range mainly between 11-20 cm (11.2%), 21-30 cm (35.8%), 31-40 cm (12.8%) and 41-50 cm (10.7%), while 26.0% remains unidentified (tables A4.62-A4.63). Surface colours are predominantly dark brown/very dark brown (25.0%), reddish brown (22.9%) and red (22.4%); (table A4.64).

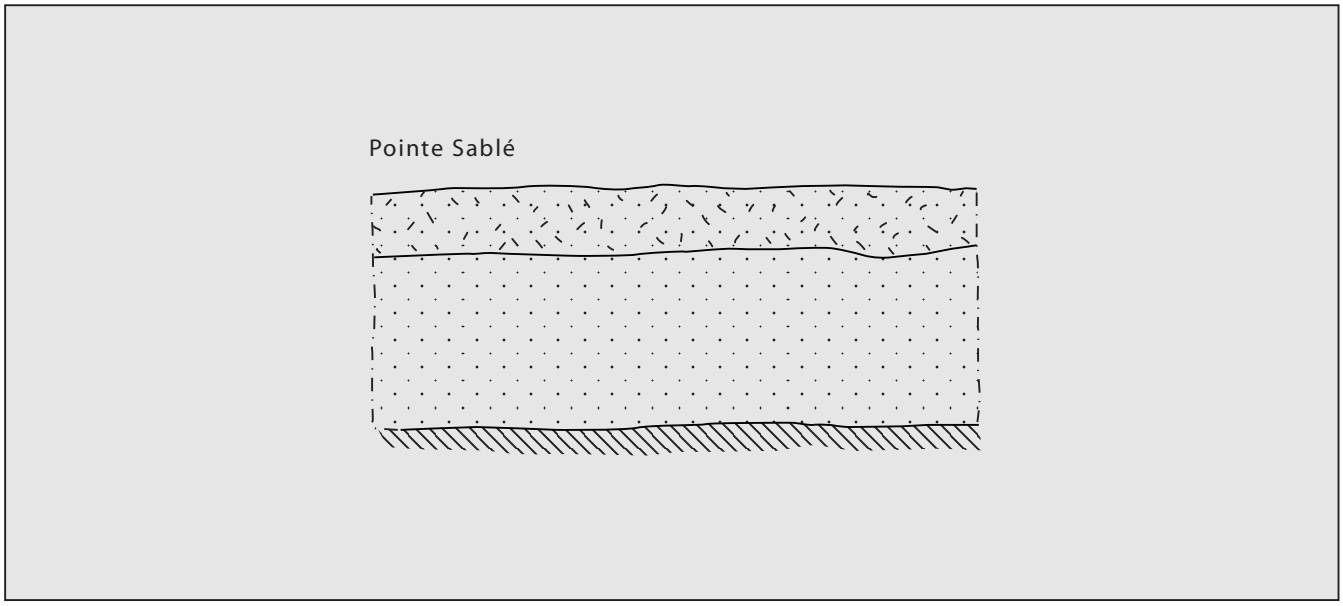


Fig. A4.11. Pointe Sablé, unit 1 (1 m^2), south section.

Firing techniques include incomplete or relatively good oxidation (77.0%) and complete reduction (14.3%); (table A4.65). A total of 35 sherds (17.9%) has been irregularly fired. Surface finishing is predominantly characterised by burnishing (49.5%) and smoothing (26.0%). For 13.3% the surface finishing could not be identified (table A4.66).

In 1995, 1997 and 1999, a total of 13 rims, one body sherd and one flat base fragment was collected, weighing 988 g. Six sherds (46.2%) with red surfaces and two decorated sherds (15.4%), embellished by incision and a modelled incised anthropomorphic design, were found as well. The morphological description of the pottery has been based on the analysis of 12 rims larger than 5 cm, of which three had weathered surfaces and two had probably been burnt. These demonstrate that the characteristic vessel shapes include jars, bowls and dishes with unrestricted simple contours (83.4%); (table A4.67). Rim shapes are rounded (50.0%), inward thickened (41.7%) or outward thickened (8.3%). Wall thicknesses range between 1-5 mm (8.3%), 6-8 mm (41.7%) and 9-11 mm (50.0%) and orifice diameters range between 11-20 cm (33.3%), 21-30 cm (33.3%) and 31-40 cm (16.7%), while 16.7% remains unidentified. Surface colours are predominantly reddish brown (50.0%), red (25.0%) and dark brown/very dark brown (16.7%); (table A4.68). Firing techniques include mainly incomplete or relatively good oxidation (75.0%) and complete reduction (16.7%); (table A4.69). Three rims belonged to irregularly fired vessels. Surface finishing is characterised by high burnishing (25.0%) and for 75.0% the surface finishing could not be identified.

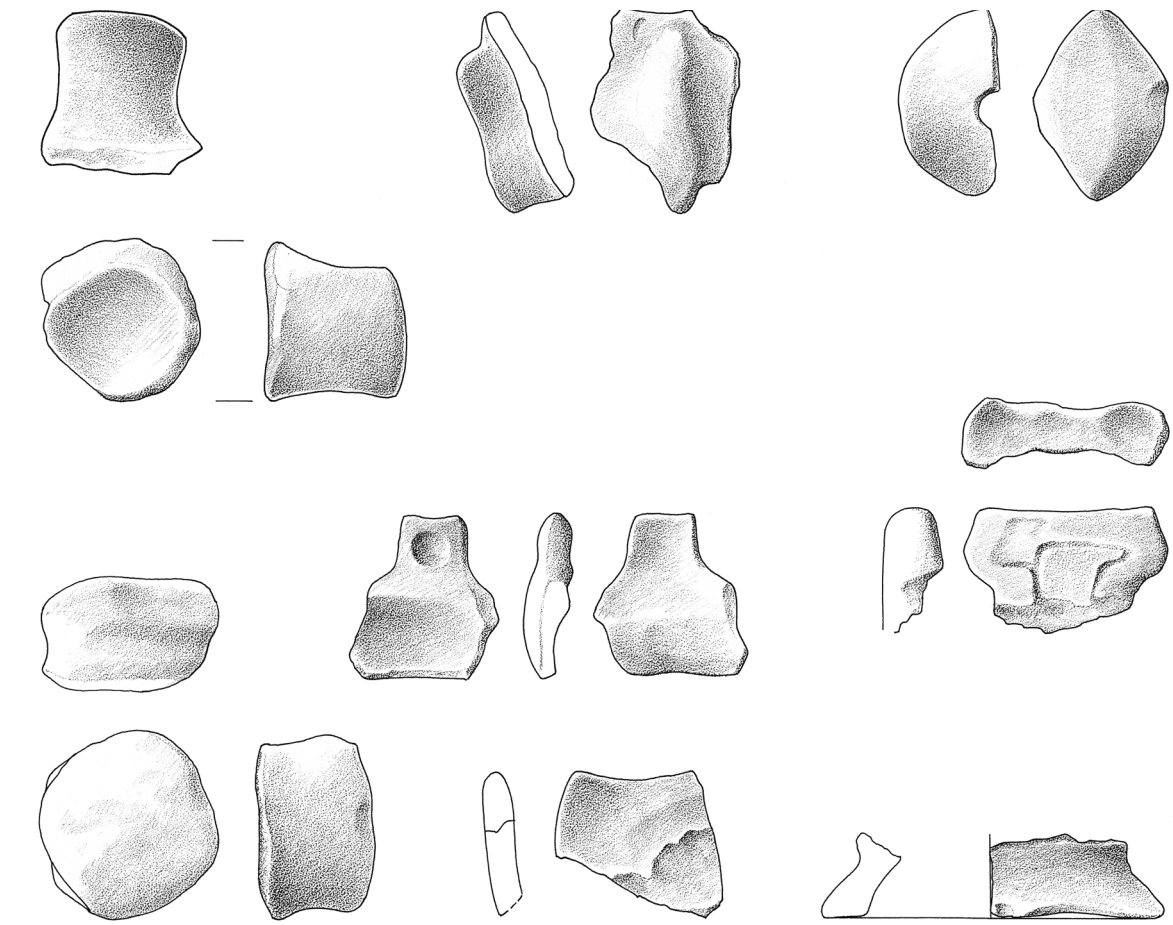


Fig. A4.12. Handle, *appliqué*, spindle whorl, handle, three lugs and a pot-stand from Pointe Sablé (scale 1:1, except for the upper lug on the left which is scale 1:3).

	Number	Number %	Weight	Weight %
Rim	221	30.6	19,230	43.9
Body	375	51.9	14,998	34.3
Base	87	12.1	5994	13.7
Griddle	26	3.6	2941	6.7
Appendage/other	13	1.8	622	1.4
Total	722	100.0	43,785	100.0

Table A4.55. Number, percentages and weight (g) of sherds from the 1965/1968 Pointe Sablé collection.

	Number	Number %
Handle	2	15.4
Lug	3	23.1
Pot-stand	2	15.4
Spindle whorls	1	7.7
Griddle leg	4	30.7
Ceramic disc	1	7.7
Total	13	100.0

Table A4.56. Number and percentages of sherds within appendages/other categories from the 1965/1968 Pointe Sablé collection.

	Number	Number %
Incision	48	94.1
Modelling (geometric)	2	3.9
Finger indentation	1	2.0
Total	51	100.0

Table A4.57. Number and percentages of sherds with particular decoration modes from the 1965/1968 Pointe Sablé collection.

	Number	Number %
Flat	69	79.3
Convex	1	1.2
Concave	2	2.3
Concave high	1	1.2
Unidentified	14	16.0
Total	87	100.0

Table A4.58. Number and percentages of sherds within base shape categories from the 1965/1968 Pointe Sablé collection.

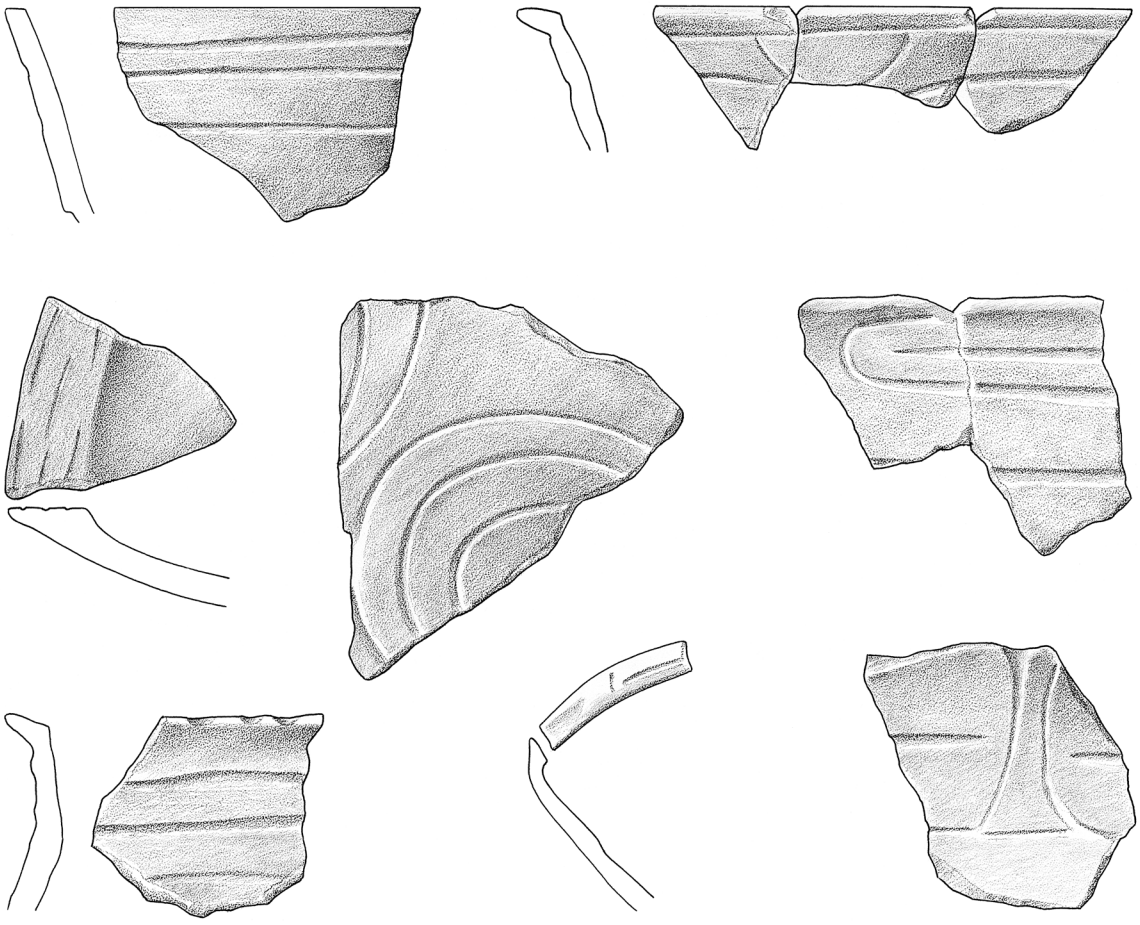


Fig. A4.13. Ceramics from Pointe Sablé, decorated by incision (scale 1:2).

	Number	Number %
Straight	3	11.6
Triangular	1	3.8
Unthickened	1	3.8
Legged	13	50.0
Unidentified	8	30.8
Total	26	100.0

Table A4.59. Number and percentages of sherds within griddle shape categories from the 1965/1968 Pointe Sablé collection.

Fig. A4.14. Human face bowl from Pointe Sablé (surface, scale 1:2).

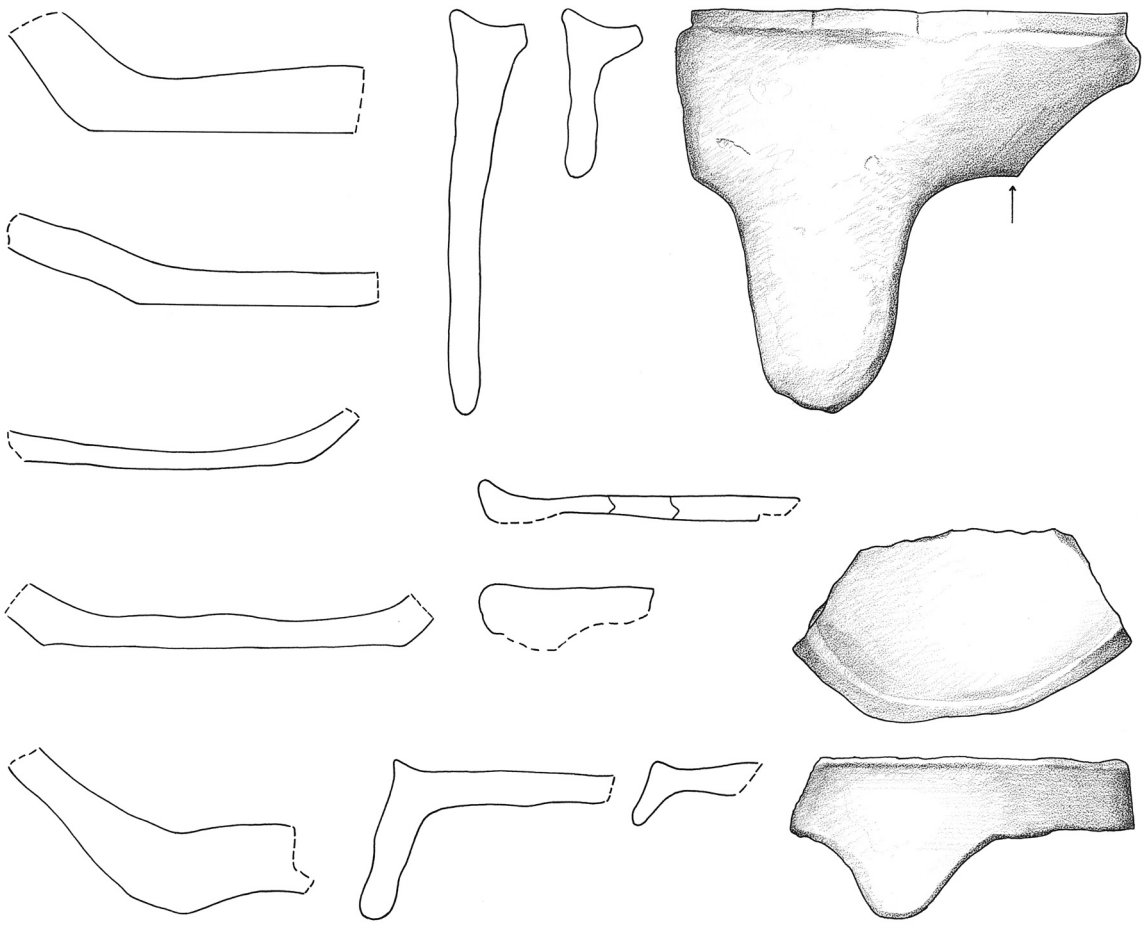


Fig. A4.15. Pointe Sablé base shapes and griddle rim shapes (scale 1:4).

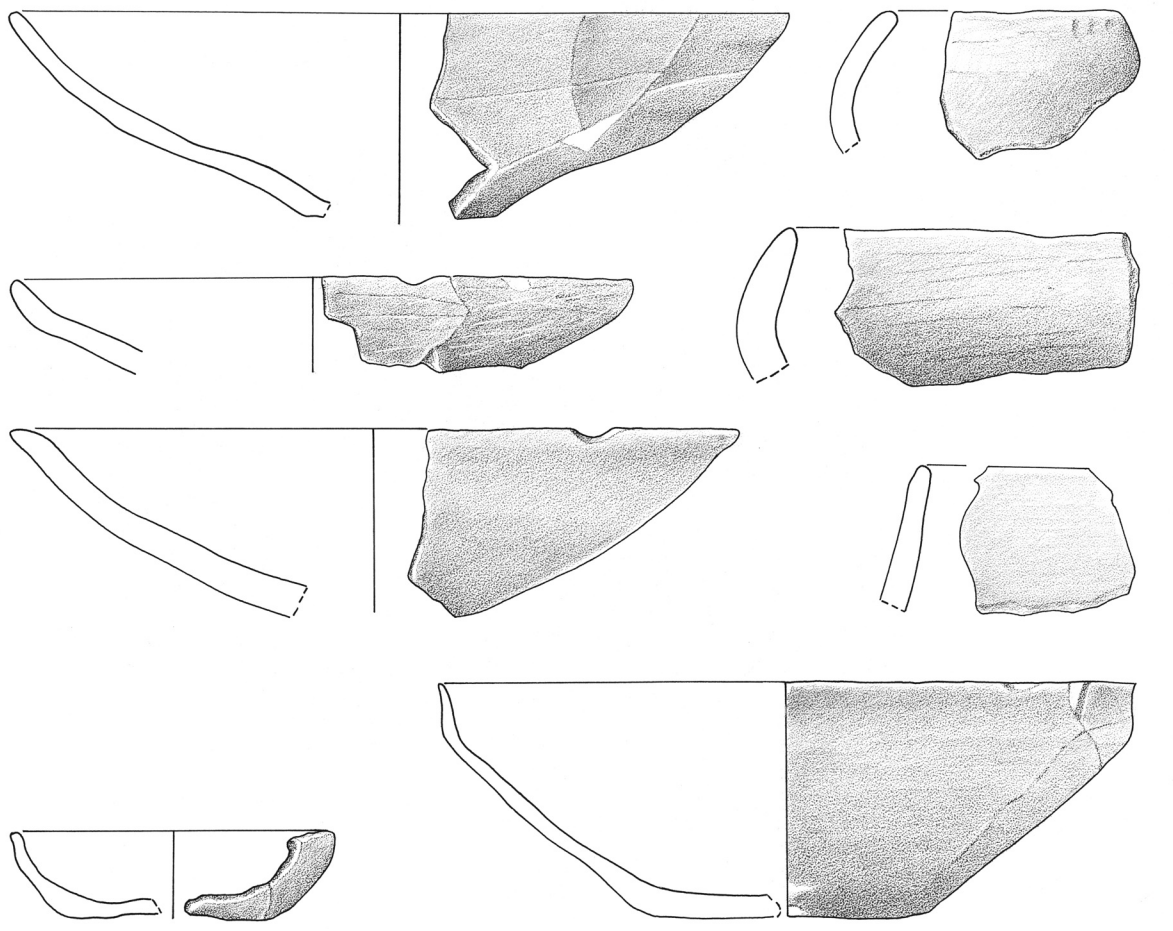


Fig. A4.16. Pointe Sablé vessel shapes (from left to right, from top to bottom scales 1:5, 1:3, 1:3, 1:5, 1:3, 1:4, 1:3, 1:3).

	Number	Number %
Jar with unrestricted simple contour	50	25.5
Bowl with unrestricted simple contour	79	40.3
Dish with unrestricted simple contour	25	12.8
Bowl with restricted simple contour	23	11.7
Bowl with unrestricted composite contour	6	3.6
Jar with restricted composite contour	1	0.5
Bowl with unrestricted inflected contour	3	1.5
Bowl with independent restricted inflected contour	1	0.5
Unidentified	7	3.6
Total	196	100.0

Table A4.60. Number and percentages of sherds within vessel shape categories from the 1965/1968 Pointe Sablé collection.

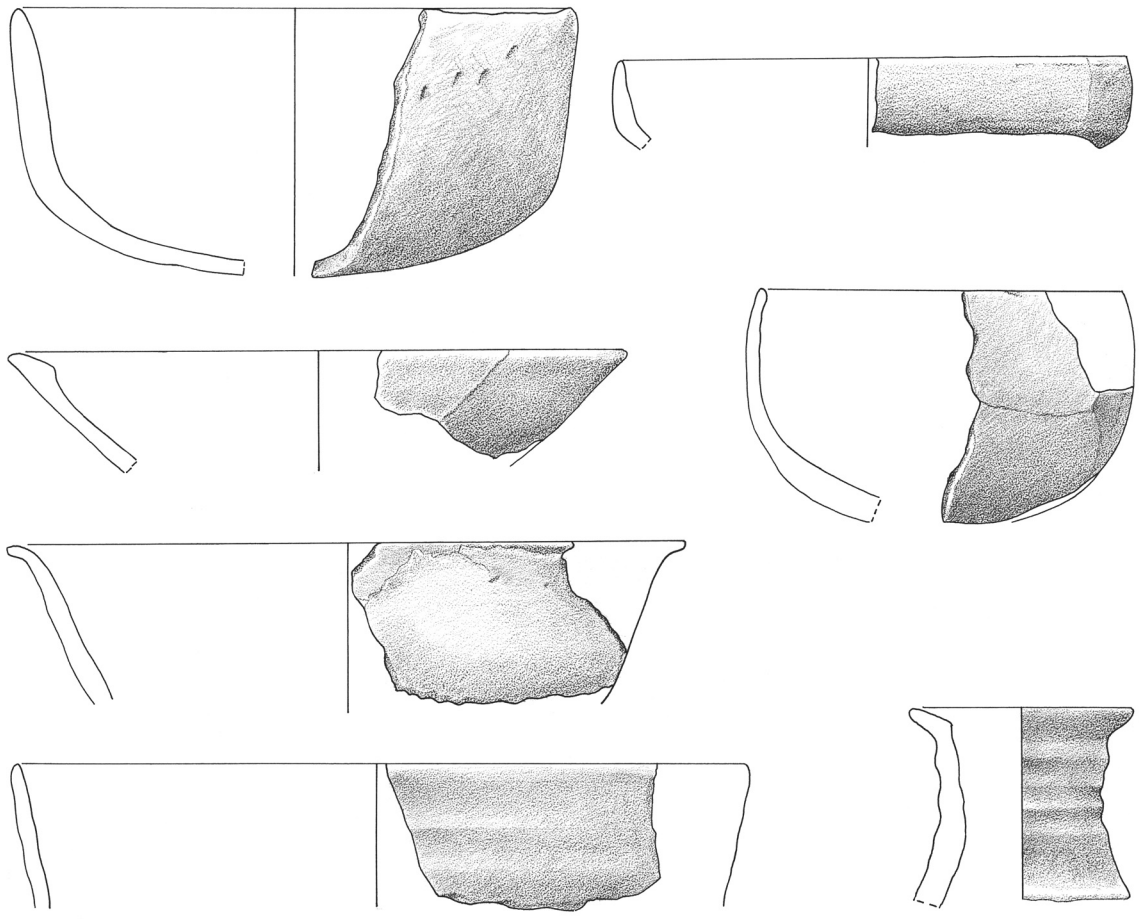


Fig. A4.17. Pointe Sablé vessel shapes (from left to right, from top to bottom scales 1:3, 1:2, 1:2, 1:3, 1:2, 1:5, 1:1).

	Number	Number %
Rounded	137	69.9
Flattened	9	4.6
Inward thickened	33	16.9
Outward thickened	2	1.0
Double thickened	3	1.5
Inwardly bevelled	1	0.5
Flanged	3	1.5
Unidentified	8	4.1
Total	196	100.0

Table A4.61. Number and percentages of sherds within rim shape categories from the 1965/1968 Pointe Sablé collection.

	Number	Number %
1-5 mm	10	5.1
6-8 mm	85	43.4
9-11 mm	82	41.8
12-15 mm	19	9.7
Total	196	100.0

Table A4.62. Number and percentages of sherds within wall thickness categories from the 1965/1968 Pointe Sablé collection.

	Number	Number %
1-10 cm	4	2.0
11-20 cm	22	11.2
21-30 cm	70	35.8
31-40 cm	25	12.8
41-50 cm	21	10.7
51-60 cm	3	1.5
Unidentified	51	26.0
Total	196	100.0

Table A4.63. Number and percentages of sherds within orifice diameter categories from the 1965/1968 Pointe Sablé collection.

	Number	Number %
Light gray	1	0.5
Gray	7	3.6
Dark gray-black	16	8.2
Brown-gray/gray-brown	6	3.1
Dark grayish-brown	12	6.1
Light brown-yellow	2	1.0
Light brown/brown	1	0.5
Dark brown/very dark brown	49	25.0
Reddish-gray/dark reddish-gray	6	3.1
Reddish brown	45	22.9
Red	44	22.4
Unidentified	7	3.6
Total	196	100.0

Table A4.64. Number and percentages of sherds within exterior surface colour categories from the 1965/1968 Pointe Sablé collection.

	Number	Number %
Complete reduction	28	14.3
Incomplete oxidation or reduction	16	8.2
Incomplete or relatively good oxidation	151	77.0
Unidentified	1	0.5
Total	196	100.0

Table A4.65. Number and percentages of sherds within firing colour categories from the 1965/1968 Pointe Sablé collection.

	Number	Number %
Scratched	4	2.0
Smoothed	51	26.0
Lightly burnished	33	16.8
Highly burnished	64	32.7
Polished	18	9.2
Unidentified	26	13.3
Total	196	100.0

Table A4.66. Number and percentages of sherds within exterior surface finishing categories from the 1965/1968 Pointe Sablé collection.

	Number	Number %
Jar with unrestricted simple contour	6	50.0
Bowl with unrestricted simple contour	2	16.7
Dish with unrestricted simple contour	2	16.7
Bowl with unrestricted composite contour	1	8.3
Bowl with independent restricted complex contour	1	8.3
Total	12	100.0

Table A4.67. Number and percentages of sherds within vessel shape categories from the 1995, 1997 and 1999 Pointe Sablé collections.

	Number	Number %
Dark brown/very dark brown	2	16.7
Reddish brown	6	50.0
Red	3	25.0
Unidentified	1	8.3
Total	12	100.0

Table A4.68. Number and percentages of sherds within exterior surface colour categories from the 1995, 1997 and 1999 Pointe Sablé collections.

	Number	Number %
Complete reduction	2	16.7
Incomplete or relatively good oxidation	9	75.0
Unidentified	1	8.3
Total	12	100.0

Table A4.69. Number and percentages of sherds within firing colour categories from the 1995, 1997 and 1999 Pointe Sablé collections.

	Pebble	Core artefact	Flake	Hammer-stone	Axe	Total
Long Island flint		1				1
		8.3				8.3
Volcanic rock	1		2		1	4
	8.3		16.8		8.3	33.4
Hypabyssal rock	3			1		4
	25.1			8.3		33.4
La Désirade, sedimentary rock	1					1
	8.3					8.3
Sedimentary rock	1					1
	8.3					8.3
La Désirade, unidentified material	1					1
	8.3					8.3
Total	7	1	2	1	1	12
	58.3	8.3	16.8	8.3	8.3	100.0

Table A4.70. Number and percentages of rock types and lithic artefact types from the 1965/1968 Pointe Sablé collection.

4.6.3.2 Lithic artefacts

Most of the Pointe Sablé lithic artefacts are from the 1965/1968 excavations. These include 12 artefacts such as one Long Island flint polyhedral core-artefact, and an eared axe butt-part, one non-modified complete flake and one broken flake, and a non-modified volcanic rock water-worn pebble. Two sedimentary rock pebbles with polished surfaces (one from La Désirade), three pebbles and one complete hammer-stone of hypabyssal rock and one pebble of an unidentified material (probably from La Désirade) were collected as well. The heavily pitted areas on this artefact suggest that it may have been used as a hammer-stone before being flaked (table A4.70).

One small shapeless core-artefact from La Désirade jasper without patination and with some cortex was found during a 1997 visit to the site. Two other lithic artefacts were found during the 1999 excavations. These include a non-modified, broken, La Désirade hypabyssal rock flake without retouch, which could probably be the last part of a core, and a possible Basse-Terre hypabyssal rock hammer-stone fragment.

4.6.3.3 Coral artefacts

One lightly used passive *Acropora palmata* grinding tool fragment was found in the 1999 test unit.

4.6.3.4 Shellfish remains

A very small number of shellfish remains were found in 1999. All shellfish remains could be identified. They include *Cittarium pica, Nerita* sp., *Strombus gigas, Tectarius muricatus* and *Tellina fausta* (table A4.71).

4.6.3.5 Animal remains

MNI counts (excluding the intrusive species) show that the

	MNI count	MNI weight	Fragment weight	Total weight
Strombus gigas	0	0	16	16
	0.0	0.0	55.2	4.7
Cittarium pica	2	306	9	315
	33.3	98.7	31.0	92.9
Nerita sp.	2	1	4	5
	33.3	0.3	13.8	1.5
Tectarius muricatus	1	1	0	1
	16.7	0.3	0.0	0.3
Tellina fausta	1	2	0	2
	16.7	0.7	0.0	0.6
Total	6	310	29	339
	100.0	100.0	100.0	100.0

Table A4.71. MNI counts, MNI weights (g), fragment weight (g), total weight (g) and percentages of all shell species from the 1999 Pointe Sablé collection.

Pointe Sablé hand-collected faunal sample (total MNI 12, total weight 737 g) consists of fish (66.6%) and reptile (25.0%). It represents reef carnivores (41.7%) such as grouper and jack. It further consists of inshore species (25%), in this case sea turtle and manatee, as well as reef herbivores/omnivores (16.6%), including parrotfish, triggerfish. The manatee bone and some turtle costals have been worked (fig. A5.5-6). Offshore-pelagic barracuda (8.3%) were found as well. It is remarkable that a lot of sea turtle, and quite some grouper and jack were collected. This may be due to collection biases (Nokkert in appendix 5).

It has been suggested that the hand-collected sample of the unknown site on Petite Terre actually belongs to Pointe Sablé as well. MNI counts demonstrate that this sample (total MNI 9, total weight 418 g) consists of fish (66.6%), crab (11.1%), mammal (11.1%) and reptile (11.1%). It represents terrestrial fauna (22.2%), including great land crab, inshore (33.3%) species such as sea turtle and porcupinefish, and reef herbivores/omnivores (22.2%), in this case parrotfish. Reef carnivores (11.1%) were represented by grouper and offshore-pelagic fish (11.1%) by barracuda (Nokkert in appendix 5).

4.6.4 Chronological assignment

The site yielded Late Ceramic A pottery (unidentified style).

4.7 EST DE TROU CANARD (97110-052)

4.7.1 Site location and preservation

The Est de Trou Canard site (x: 701,000; y: 1788,800) was discovered at the rocky southern coast of Terre de Bas, immediately east of a sandy beach, during the 1999 surveys (fig. 5.3). Site dimensions are 40 m north to south and 140 m west to east. Surface material is evenly distributed and characterised by modestly fragmented ceramics and *Cittarium pica*, *Strombus gigas*, *Chiton* sp. and *Nerita* sp. fragments. Hardly any off-site material has been found. No test units were excavated. Mancenilla trees and sea grape at the coast and thorny brushwood with acacias in the inland part of the site cover 21-40 percent of the soil, which consists of coarse, well-drained sand. Passage across the terrain is seriously hindered but surface visibility is rather good. The site appears to be heavily disturbed as a result of coastal erosion and cultivation in the past.

4.7.2 Archaeological materials

A small surface collection was made, consisting of a very small amount of non-diagnostic pottery. Although shell fragments were observed on the surface, these were not collected. No other archaeological materials have been found. The pottery collection consisted of four rims and four body sherds, weighing 192 g. One of the body sherds has been drilled and is considered a spindle whorl preform. Two sherds had red slipped surfaces and one sherd was decorated by incision.

The morphological description of the pottery has been based on the analysis of three rims larger than 5 cm. Two of these belong to bowls with unrestricted simple contours and one is from a dish an unrestricted simple contour, all three with rounded rim shapes. Wall thicknesses are between 6-8 mm and orifice diameters range between 11-20 cm, 21-30 cm or is unidentified. Two sherds have a red outer surface, while the other is reddish brown and incomplete or relatively good oxidation is the firing technique. Two sherds have highly burnished outer surface while the surface finishing of the other is unidentified.

4.7.3 Chronological assignment

The site yielded Late Ceramic A pottery (unidentified style).