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ARCHAEOLOGICAL FIELDWORK 1989 Further Test-Pit Excavations South of Quarter Wall

By

A.J.SCHOFIELD* and C.J.WEBSTER** with a contribution by A.Gavira and S.Pennington **

- * 6 Shamrock Villas, Adelaide Road, St Denys, Southampton SO2 1TY.
- ** Department of Archaeology, University of Southampton, Highfield, Southampton, SO9 5NH.

INTRODUCTION

This report describes the results of a second season of archaeological investigations on Lundy. The philosophy and background to the survey were described in a previous report (Schofield 1988) where it was suggested that although several sites had been investigated on the island, such information only provides a partial view of occupation and land-use. It was stressed that the excavation of individual sites provides a 'key-hole' into the evolution of past landscapes, but that we also need to understand the relationship between such places and the space in which they occur.

Islands are particularly well-suited to archaeological investigation (eg. Evans 1973), providing a unique combination of factors against which to assess the nature of human adaptation (eg. Blache 1950). This is an advantage exploited by archaeologists in recent years (eg. Evans 1986; Mellars 1987; Thomas 1985; Renfrew and Wagstaff 1982). Indeed as Renfrew and Wagstaff (1982,2) pointed out in their introduction, "the opportunity of studying a localised unit which behaves as a region is important. All too often regional analysis starts from a definition of the region formulated by observers, yet with little empirical basis on the ground".

An 'off-site' approach, constrained by the topography and physical characteristics of the island, formed the basis of research design for both the 1988 and 1989 seasons, the objectives of the latter depending largely on the results achieved in the previous year. The research aims for the second season of fieldwork may be defined as follows:

A To investigate further the mesolithic flint concentration situated on the east side of Brick Field and previously interpreted as an occupation area. This would comprise test-pit excavations identical in size to those dug the previous year (Im x Im x 0.2m) but at the reduced interval of 10m (fig. 1). These were aligned in the form of two transects running east-west and north-south with the point of intersection being TP19 (see Schofield 1988, 32 for location of previous years test-pits). The aim was to produce a larger sample of flint artefacts from the concentration, thus allowing a more detailed investigation of lithic technology and providing a greater spatial control over the distribution.

B To investigate further the post-medieval pottery concentration located on the west side of Brick Field and centred on TPs 12 and 16. Geophysical survey suggested the presence of a linear feature to the east of a possible farmstead and acting as a boundary to the distribution of pottery. Additional test-pits at 10m intervals across the concentration would determine the precise structure of the distribution as well as locating any discrete activity areas within it. Again two transects, orientated east-west and north-south, were defined (fig. 1).

C To extend the previous year's extensive test-pit survey (fig. 2). This was only possible in areas previously cultivated and where artefacts were likely to occur within the plough soil. Lighthouse Field and the Airfield were considered suitable for this purpose, as well as allowing a continuous archaeological distribution to be investigated.



Figure 1: Location of test-pits for the intensive survey of Brick and Tillage Fields. Closed boxes represent excavated test-pits; open boxes represent test-pits not available for excavation (all drawn 4x actual scale).



Figure 2: Location of test-pits for the extensive survey of Lighthouse Field and Airfield (Key as for Figure 1.)

In addition to fieldwork objectives, research was carried out into the availability and source area for flint material on Lundy. This is crucial to understanding the nature of occupation and the most likely season for settlement. Pottery recovered in 1988 and 1989 was also the subject of further investigation with thin-sections of Bronze Age pottery, North Devon wares and Lundy Brick being studied.

RESULTS

a LITHICS

The extensive test-pit survey conducted in 1988 produced a total of forty-seven chipped stone artefacts from forty-eight test-pits. In the 1989 season a further 152 artefacts were recovered of which sixty-two were derived from the intensive test-pit survey on the eastern cliff-edge. From the extensive survey in Airfield and the Lighthouse Field, eighty-five chipped stone artefacts were collected from 112 test-pits, twenty-five deriving from a single test-pit (TP94) in the north-west corner of the Airfield (fig. 3a).

In terms of the mesolithic concentration identified in 1988, a number of further points arose from the intensive survey (fig. 3a). The extent of the concentration appears clearly defined with a gradual fall-off occurring only to the SW. An area of 60m E-W by 90m N-S contains much of the concentration, similar in size to the area of mesolithic activity investigated on Trevose Head which had dimensions of 60m by 100m (Johnson and David 1982). Within the distribution, specific types of human activity can be defined. Two small areas contain the only evidence for primary reduction, while tertiary waste material is more widely dispersed, relating presumably to the more general practice within settlements of tool curation and maintenance activities. Cores occur only in isolation throughout the survey area and only a single fragmented example appears within the concentration. Within this area flint was generally small in size and finely worked. A high proportion of blade segments, backed blades and a few microlithic pieces confirm the view that the concentration relates to an area of mesolithic occupation.

An area at the northern end of the Airfield (fig. 3a) produced a second lithic concentration and one of greater density and very different character to that previously described. Flint was coarsely struck, cores were discarded with only single or dual flakes removed and the majority of artefacts were significantly larger than those in the cliff-top concentration. Flake size distributions, plotting length and breadth of individual artefacts from each of the two areas, produced a marked contrast displayed in figs 4a and 4b. The former appears as a tight distribution, small artefact size being characteristic of mesolithic activity. The latter is widely dispersed with a greater variation in flake size, more typical of later core reduction possibly dating to the Bronze Age, the introduction of metal technology having reduced the demand for quality flint products (Ford *et al* 1984). Statistical analysis using the Student's t-test demonstrated that variation in flake length, breadth and thickness between the two concentrations was significant at a 0.005 level of confidence.

The concentration centred on TP94 is clearly defined, more so than the cliff-top scatter in Brick Field. The suggestion of a Bronze Age date and the clear focus of human activity within a limited area may indicate the location of a habitation site, possibly with structural remains similar to those surviving on the north of the island and preserved, in this case, beneath the accumulation of top-soil. This possibility will be investigated by further test-pit excavations and geophysical prospection in 1990.

Elsewhere in the survey area the flint distribution is widely dispersed with small concentrations occurring 1) in the centre of the Airfield, 2) in the south-west corner of the Airfield and northern edge of Lighthouse Field and 3) in the south-east corner of Lighthouse Field. The first concentration is confined to a single test-pit and displays no indication of its function. The second is more distinctive with a high proportion of tertiary flakes combined with a higher number of retouched artefacts than occur in any other test-pit investigated to date. Again a mesolithic date is suggested by the nature of lithic reduction. The third area contained two small rolled flint artefacts in an area thick with beach-derived materials, mainly pebbles and gravel, presumably cleared from the adjacent pond.



Figure 3: Artefact distributions and density from all test-pits investigated to date: A) chipped stone artefacts (contour interval =4); B) pottery — North Devon fabrics (contour interval =5).



Figure 4: Scattergrams showing flake size variations from A) test-pits 77-89 and B) test-pits 91-94. Flake size is shown in mm, length on the X-axis and breadth on the Y-axis. In each graph, the right endpoint on the X-axis is 100mm and upper endpoint on the Y-axis is 45mm.

With the exception of the concentration in the north-east corner of the Airfield, the entire collection appears to be mesolithic and derived from beach material, the origin of which is discussed in the following section. The raw material varies in colour between grey flint, predominant in the collection as a whole, to blue, yellow and brown, some of which is transluscent. Many of the artefacts are small in size, 44% of flakes being less than 20mm in length, but only 6% less than 10mm long. This contrasts with the collection from a late mesolithic site at Westward Ho!, north Devon, where 40% of artefacts in the assemblage were less than 10mm in length (Balaam *et al* 1987, 254), although in this case small pebbles were known to be the source material. Core size also suggests a mesolithic date with a mean length of 25.7mm (excluding the cores from TP94 which had a mean length of 49.1mm, a difference which proved to be statistically significant) corresponding closely with the average core size for mesolithic industries on the south-west coast (Balaam *et al* 1987, 254).

b PALAEOGEOGRAPHY AND THE POSSIBLE ORIGIN OF BEACH FLINT

The following discussion is intended as an outline of recent literature relating to the palaeogeography of Lundy between 12000 and 4000bp, a period during which the island was occupied, perhaps seasonally (Schofield 1988, 34) and possibly for only short periods of time. It presents the changing configuration of the island in relation to rising sea-levels and suggests a possible explanation for the origin of beach flint on Lundy during this period.

Figures presented by Heyworth and Kidson (1982, 110) suggest that between 9000 and 4000bp the sea was between 35m and 4m below the present level. They suggest that the most significant expression of sea level change is not mean sea level but rather the interface between saline and fresh water as indicated by living organisms. Such a level is considerably higher and more variable from place to place than is mean sea level. They further suggest that recent figures from both Bridgwater Bay and Cardigan Bay are comparable. Two points emerge from this: 1) that sea levels were not as low during the early postglacial as has previously been suggested, and 2) that figures from mainland contexts should apply to other parts of the Bristol Channel, Lundy included.

The suggestion that Lundy "last became an island circa 7000BC" and that a "postglacial sea level of at least -150ft existed in the Bristol Channel" (Gardner 1967, 25) is not supported by more recent research (eg. Evans and Thompson 1979; Heyworth and Kidson 1982; Harris *et al* 1986). Instead Lundy should be regarded as an extended island in the early post-glacial with a sea-level 35m below the present and a land-area ten-times that of the present area (fig. 5a). At 8000bp sea levels were 20m below the present with the island still four-times its present size (fig. 5b). At 6500bp, in the later mesolithic, a sea-level of c.10m below the present gave the island an additional surface area twice its current size (fig. 5c). Even at the beginning of the Bronze Age, a period during which a series of communities were established on the island, sea levels were 3m below the present providing an additional strip of land, largely in the form of wider pebble beaches (fig. 5d). Only during the middle and upper Palaeolithic, a period of human occupation yet to be discovered on the island, might Lundy have appeared as a promontary connected with the mainland.

It is important, therefore, when considering the prehistoric settlement of Lundy, or indeed any coastal area, to look in some detail at the palacogeography of the region. For the duration of the mesolithic period Lundy was an island, although with a greatly extended area which gradually reduced through time. That areas around the present island were exploited is suggested by the recovery of well-rolled flint artefacts from the Landing Beach. This leads into another problem in understanding the Lundy mesolithic; where was the raw material for flint manufacture coming from? All the mesolithic material recovered from test-pits so far appears to be derived from well-rolled beach pebbles suggesting a marine source. However no flint is visible on the beach today, at least not on the eastern side of the island. Three explanations can be offered: 1) that flint does appear on the beaches but not on the east side of the island and therefore has not been found to date. 2) that flint pebbles only appear on the beaches at certain times of the year and under specific tidal conditions. They are washed up during storms and disappear just as quickly. 3) that flint pebbles were readily available in the past but on areas of beach now submerged.



Figure 5: Reconstruction of the Lundy coastline. Stippling represents the likely areas of flint deposition on pebble beaches around the island. A) 9000 years bp (land area = 10 x that of present); B) 8000 years bp (land area = 4 x that of present); C) 6500 years bp (land area = 2 x that of present); D) 3500 years bp.

To examine the alternatives, it is important to understand both the location of flint source areas and the tidal patterns likely to draw material onto the Lundy beaches. As far as a source is concerned, the most likely possibility for marine-derived flint are the offshore Haig-Frais Cretaceous upper chalk deposits 30km west of the island, but only 17km west of the westernmost extent of beach deposits in the early postglacial. In terms of tidal transfer, Collins (1987, 376) suggests a pattern of non seaward movement of both fine- and coarse-grained material in the centre of the Bristol Channel with only limited landward transfer. In other words it appears unlikely that flint pebbles from the Haig-Frais deposits would be transported west-east to Lundy's west coast against the present pattern of seaward transfer. However, with a geographic map similar to that for the early mesolithic (fig. 5a and 5b), and the closer proximity by 13km of beach deposits to flint source, seasonal variation in tidal patterns might account for limited availability of raw material during a particular time of the year. Murray and Hawkins (1977, 396), for example, suggest clear variations in the net transport of material in the Severn Estuary. They note the influence of tides and gales, frequent in the Irish Sea, over water movement and suggest that with spring and neap tides, different sediment size sections may have variable transport directions within the same estuary.

It is suggested, therefore, that although only the occasional flint pebble may now appear on Lundy's west coast, it was available as a reliable seasonal resource in the early mesolithic. Hunter-gatherers depended to a considerable extent on reliable resources and were well versed in the practicalities of 'risk-management'. Seasonal hunting/ foraging groups would not have ventured to Lundy without either 1) taking ready-prepared flint artefacts or prepared nodules for tool manufacture on the island, or 2) knowing that flint would be available. The occurrence of primary knapping debris on the island suggests the latter to be the case. This model of flint availability in the spring and/or autumn corresponds with the ecological model already presented (Schofield 1988, 34). Here it was suggested that spring and/or early autumn were favourable for hunting and gathering and that areas such as Lundy and coastal promontaries were exploited during these periods as part of a seasonal cycle.

By this argument, flint availability in the Bronze Age would have been limited, a point which appears contradictory to the apparent disregard for what should have been a precious resource as displayed in the flint collection from TP94. One possibility was that flint was being imported, when necessary, from the mainland. Here landward transfer of coarse-grained materials along the coast (Collins 1987, 377) still provides the north Devon beaches with a constant supply of beach flint, presumably from the same Haig-Frais deposit (Roberts 1987). No other coastal sources are known and by this exchange mechanism, Bronze Age flint would still appear as beach flint, suggesting it to be a local resource. However, it appears unlikely that a community manufacturing their own pottery (below) and generally self-sufficient would import flint as a raw material from the mainland. Items such as the barbed-and-tanged arrowhead found at North End (Gardner 1987) were most likely imported as finished products but these would have been the exception rather than the rule. The alternative is that, for a community which relied less on flint, the occasional pebble which appeared on western beaches, which were wider than they appear today (fig. 5d), would have been sufficient.

In conclusion, the models presented above provide a context within which prehistoric occupation of Lundy may be more clearly understood. In particular it is stressed that the palaeogeography of Lundy changed dramatically throughout the postglacial and to view mesolithic settlement solely in terms of the present land-area is inaccurate. That areas around the island were also exploited is suggested by the occurrence of rolled flint artefacts on the beach. Further observations are also required on the current availability of flint pebbles, particularly on the western beaches and at varying times of the year (such a project, to be undertaken by A.C.Langham, is planned for 1990).

c NON-LITHIC MATERIAL (CJW)

As in the previous season the majority of the finds were ceramic. A total of 654 sherds were collected, a mean of 5.84 per test pit compared with 5.69 in 1988. This figure provides a better indication of the background scatter, however, as 46% of the 112 test-pits contained two or fewer sherds.

The fabrics were grouped as follows:

1. Prehistoric Pottery: Eleven sherds of a coarse dark-brown fabric (see appendix 1) were recovered from the test-pits and a further fourteen from non-systematic searching of spoil heaps resulting from drainage work on Tibbett's Hill. Some of the latter appear to be Bronze Age and since the fabric of all sherds is similar it is likely that all the pieces are of this date (for further detail see petrological report below).

2. Roman Pottery: no Roman material was identified this year.

3. Medieval Pottery: no sherds could be certainly identified as medieval although some of the few rims could have come from late-medieval jars. These may be associated with the sand/slate tempered fabric identified last year.

4. Post-medieval Pottery: 65% of the collection (425 sherds) comprised North Devon Gravel Tempered wares, a higher percentage than in 1988. The forms were again bowls and jars but none of the fourteen sherds of gravel-free fabric could be assigned to a form. Other fabrics included a sherd from an early eighteenth-century stoneware tankard and a sherd from a press-moulded plate with combed decoration, possibly of slightly earlier date. A few sherds of white salt-glazed stoneware formed the remainder of the material of this period.

5. Modern Pottery: Developed white earthenware formed the bulk of the modern material but only represented 0.06% of the total assemblage.

6. Other fabrics: Seventy-one sherds of brick (of the type used at the castle) and fifteen sherds of tile were recovered. The remaining fabrics formed small groups which could not be identified.

The distribution of pottery again showed a background scatter with a few areas of higher density. The concentration (A) located in 1988 on the west side of Brick Field was confirmed by additional test-pits at 10m intervals (discussed below). In the Airfield three concentrations of Gravel Tempered ware were located (fig. 2). In the north TP97 yielded eighteen sherds (concentration B) while the surrounding test-pits produced, at most, a single sherd. The concentration is, therefore, very localised and it is not unlikely that all these small sherds come from one vessel. Another concentration (C) centres on TPs 104, 105 and 108 although the number of sherds from test-pits in this concentration is fewer than in concentrations D and E. TPs 118 and 119 formed the centre of a larger concentration (D) with twenty-three sherds in each. This concentration was sharply defined to the north and west but decreased more gradually to the east and (particularly) the south. The western part of Lighthouse Field was almost devoid of Gravel Tempered ware but the frequency increased towards the modern settlement in the east with fourteen sherds in TP163 and six in several others next to the wall (concentration E). This probably represents dumping from middens in the area of modern settlement.

In Brick Field, the distribution of sherds comprising concentration A has been refined by the use of test-pits at 10m intervals (fig. 1). This has clarified the northern and eastern boundaries but the situation to the south and west is less clear. This is in part caused by the siting of the east-west line of test-pits aligned on TP12 whereas the north-south line now indicates that the centre of the distribution lies 30-40m south of this. Surface collection from the anti-glider trenches in 1988 (Schofield 1988, 37) produced a distribution which aligned radially on the centre and so provides a good estimate of the western boundary of the distribution, as does TP107 which lies just beyond the predicted edge and produced only two sherds. Unfortunately the eastern boundary is the least clear and it has previously been suggested that this might coincide with a major geophysical anomaly. None of the evidence recovered in 1989 disproves this suggestion and the number of sherds in the line of east-west test-pits does drop sharply just to the east of the anomaly.

That the centre of the distribution appears south of the east-west line is further illustrated by the distribution of brick sherds. If the pottery distribution was formed by the ploughing of an underlying settlement then the distribution of any brick (and other building materials) could be used to identify the location of structural remains. Indeed both brick and tile cluster at the southern end of the distribution, further south than the centre of the pottery scatter.

In conclusion, this year's survey has again indicated the large quantity of North Devon Gravel tempered ware that was present on Lundy in the 17th and 18th centuries. This pottery was produced in Barnstaple, Bideford and other sites in the Torridge Valley, is found widely in the West Country and South Wales and was also exported in large quantities to the North American Colonies. Its presence on Lundy is not, therefore, surprising but the relative quantities compared to material of other dates requires some explanation. The period is one for which much activity is known from historical sources (Thomas 1987), from the fortification of Lundy during the Civil War to the activities of Thomas Benson (Langham, this volume). Indeed the population during these centuries was probably higher than at any time before. This coupled with the availability of the pottery and its growing use within society in general, would explain the increase in pottery deposition. Post-depositional factors would further enhance the survival of this well-made, hard-fired fabric compared to that of softer material. The low frequency of later pottery could be explained by a reduction in population but more significant, perhaps, was the ending of the period when North Devon ware was being exported by sea in large quantities.

The pottery found on Lundy therefore falls into two groups: 1) a background scatter found in almost all test-pits, and 2) a series of concentrations. The background scatter is the result of spreading middens on the fields as manure and plough-movement over the years. Of the five concentrations found, B appears to comprise small sherds from a single vessel while E may represent the increase in manuring density closest to the modern settlement. Concentrations A and, possibly, D may well represent the remains of settlements. The smaller size and lower density in concentration C makes its interpretation as a settlement less certain and both this and area D need to be investigated further by geophysical techniques before more can be said.

d PETROLOGICAL ANALYSIS OF LUNDY POTTERY (AG and SP)

Examples of both Bronze Age and post-medieval pottery as well as pieces of Lundy brick were examined at Southampton University as part of the second year undergraduate ceramics option. The aim was to ascertain whether any of the material was made locally and if the clay was from a source on the island. The method used involves the identification of various mineral inclusions visible in the body of the pot when studied as a thin slice through a microscope. By studying the composition and proportions in which the various inclusions occur and comparing those to source materials, inferences can be made about the source and manufacture of the ceramic. All the pottery and brick studied derived from either test-pit excavations or were recovered as surface finds from other parts of the island. Descriptions of the various specimens are included in appendix 1.

One objective was to establish whether the so-called Lundy brick was manufactured on the island, presumably in the area now known as Brick Field (the subject of field investigations in 1988). In thin-section the three pieces investigated showed the same basic composition, including quartz, plagioclase and potash felspars, biotite mica, olivine and pyroxene. In addition the fragment from TP122 contained a large granite inclusion. The composition is therefore indicative of the granitic nature of Lundy geology while the olivine and pyroxene appear on the island in the form of greenstone dykes (Edmonds, Williams and Taylor 1979).

Two categories of pottery were represented by the remaining samples. The first comprises friable prehistoric pottery, dating to the Bronze Age. All but a single sherd were recovered from a spoil heap on Tibbett's Hill and all consisted of poorly sorted materials with a composition of quartz, muscovite and biotite mica, potash felspar and clay pellets. All also contain a rare heavy mineral called sillimanite and it is therefore not unreasonable to assume that the source of all sherds is the same. This mineral is associated with high grade metamorphic rocks, especially those of a pelitic nature, which could link it with the Devonian slate at the southern tip of the island. The second category comprises post-medieval pottery of a class known as North Devon ware (described by CJW in Schofield 1988, 36 and above). The present work identified minerals comparable to those found during earlier examinations (Vince 1978; Vince and Brown 1982) and which suggest the Torridge Valley, Devon as the probable source.

In summary, it is likely that all but the post-medieval pottery was manufactured on Lundy as the local geology contains all the minerals present in the samples analysed. However, it would obviously be useful to obtain samples of clay from Lundy, both for detailed analysis and to reinforce or disprove the possibility that the brick and the prehistoric pottery were manufactured locally. We hope to obtain these during the 1990 field season.

CONCLUSION

The 1989 season again produced evidence for aspects of human exploitation not available through surface investigations. Earthworks provide only a partial view of Lundy's past. They represent, for example, the construction of field walls or the presence of Bronze Age and medieval habitation. Such investigations (to be undertaken by the National Trust on Lundy over the next four years and described by Claris, this volume) are, of course, essential. However, to understand what earthworks represent in terms of human behaviour (ie. the dynamics behind the 'static' archaeological remains), an approach is required which provides a distribution of cultural material in a way that allows for interogation by both qualitative and quantitative means. The results this year, combined with last year's more exploratory approach, provide the necessary data from which to work. Archaeological survey in 1990 will pursue this theme as well as combining further the artefact distributions with results of geophysical prospection.

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Appendix 1

Fabric descriptions for pottery investigated by thin-section (compiled and identified by AG and SP)

a BRICK

1. very coarse dark red material with large inclusions of quartz and a black material. (source: TP48)

2. Very coarse deep purple material with small black inclusions and small quartz fragments. (source: TP122)

3. Similar to 1. (source: TP42)

b PREHISTORIC POTTERY (source: spoil heap on Tibbetts Hill)

1. dark brown/black 10YR 3/1 fabric with a couple of small quartz inclusions; very fine-grained fabric; no other inclusions.

2. Fine-grained brown/black 5YR 3/3 fabric with numerous very fine quartz grains scattered throughout and the occasional larger fragment. Very poorly sorted.

3. Dark brown fabric with very poorly sorted grains of quartz, most of which are small; fabric appears to be in two colours comprising a wider band 5YR 4/2 and a thinner band 5YR 5/4. The fabric appears less stable and more crumbly than sherd 4.

4. Brown chalky-like fabric with frequent quartz inclusions, very poorly sorted. The fabric appears as a sandwich with a grey/brown substance 5YR 4/2 flanked on both sides by a rusty-coloured fabric 7.5YR 5/6 quite crude in appearance.

5. Black charcoal-like fabric N 2/ with large angular inclusions of quartz; very poorly sorted; one surface appears to be orange/buff in colour 5YR 6/4 overlying the black fabric.

c POST-MEDIEVAL POTTERY

1. Very pale grey fabric comprising a chalky substance 10YR 5/1; has a smooth appearance with many 'craters', possibly the result of organic tempering; there are a few poorly sorted inclusions of a glassy substance; fabric is glazed on both sides in different colours: a) a yellow mustard green 5Y 5/6 and b) mustard yellow 10YR 5/6. (source: TP48)

2. Hard fabric with moderately sorted inclusions of quartz; the sherd is much eroded and burnt inside to a grey/brown 7.5YR 4/2 with a sandy-buff outer side 7.5YR 6/4; Large angular grains of quartz are visible, glazed on one side in a yellow mustard green colour 2.5YR 5/6. The glaze is very cracked. (source: TP16)

3. Orange fabric 5YR 7/6 with moderately sorted quartz grains. (source: TP16)

4. Rim sherd, pale orange buff colour 2.5YR 6/6; fabric is unglazed but smooth and soapy to touch. Visible grains of quartz and felspars. (source: TP12)

5. Completely different from the other sherds, this comprises a very fine close grained grey fabric N 6/; was wheel-made, the inside rings still visible. The inside is glazed in a yellow mustard green (again very cracked) 2.5YR 6/8; the outside is unglazed but fired to an orange colour 6/5YR 6/4; one quartz inclusion is visible. (source: TP16)

6. Similar to fabric described for sherd 5; smooth grey fabric N 7/; wheel-made, the inside rings again visible; inside and outside are glazed a pale lime mustard green 5Y 5/6. (source: TP16)

REFERENCES

Balaam, N., Bell, M., David, A., Levitan, B., MacPhail, R., Robinson, M. and Scaife, R. 1987. Prehistoric and Romano-British sites at Westward Hol, Devon: archaeological and palaeoenvironmental surveys 1983 and 1984. In N. Balaam, B. Levitan and V. Straker (eds), *Studies in Palaeoeconomy and Environment in south-west* England, 163-264. Oxford: BAR (British Series) 181.

Blache, J. 1950. Les particularités géographiques des îles. Bulletin de la Société de Géographie de Marseille 65, 5-22.

Collins, M. 1987. Sediment transport in the Bristol Channel: a review. *Proceedings* of the Geological Association 98, 367-383.

Edmonds, E.A., Williams, B.J. and Taylor, R.T. 1979. *Geology of Bideford and Lundy Island*. London: Institute of Geological Sciences Memoir.

Evans, J.D. 1973. Islands as laboratories for the study of culture process. In A.C. Renfrew (ed), *The explanation of culture change: models in prehistory* 517-520. London: Duckworth.

Evans, J.G. 1986. *Prehistoric farmers of Skomer Island: an archaeological guide*. West Wales Trust for Nature Conservation.

Evans, D.J. and Thompson, M.S. 1979. The geology of the central Bristol Channel and the Lundy area, SW approaches, British Isles. *Proceedings of the Geological Association* 90, 1-14.

Ford, S., Bradley, R., Hawkes, J. and Fisher, P. 1984. Flint working in the metal age. Oxford Journal of Archaeology 3, 157-173.

Gardner, K. 1967. Lundy — a mesolithic peninsula? Annual Report of the Lundy Field Society 18, 24-8.

Gardner, K. 1987. An Introduction to Lundy: Archaeology. Lundy Field Society.

Harris, P.T., Ashly, G.M., Collins, M.B. and James, A.E. 1986. Topographic features of the Bristol Channel sea-bed: a comparison of SEASAT and the side-scan solar images. *International Journal of Remote Sensing*, 7, 119-136.

Heyworth, A. and Kidson, C. 1982. Sea-level changes in south-west England and Wales. *Proceedings of the Geological Association* 93, 91-111.

Johnson, N. and David, A. 1982. A Mesolithic site on Trevose Head and contemporary geography. *Cornish Archaeology* 21, 67-102.

Mellars, P. 1987. Excavations on Oronsay: prehistoric human ecology on a small island. Edinburgh: Edinburgh University Press.

Murray, J.W. and Hawkins, A.B. 1977. Sediment transport in the Severn Estuary during the past 8000-9000 years. *Journal of the Geological Association* 132, 385-398.

Renfrew, A.C. and Wagstaff, M. (eds) 1982. An island polity: the archaeology of exploitation in Melos. Cambridge: Cambridge University Press.

Roberts, A.J. 1987. The later Mesolithic occupation of the Cornish coast at Gwithian: preliminary results. In P. Rowley Conwy, M. Zvelebil and H.P. Blankholm (eds), *Mesolithic North-West Europe: recent trends*, 131-137. Sheffield University Press.

Schofield, A.J. 1988. Archaeological fieldwork 1988: The results of test-pit excavations and geophysical prospection south of Quarter Wall. *Annual Report of the Lundy Field Society* 39, 31-45.

Thomas, C. 1985. Exploration of a drowned landscape: archaeology and history of the Isles of Scilly. London: Batsford.

Thomas, J. 1978. A History of Lundy from 1390 to 1775. Reports and Transactions of the Devonshire Association for the Advancement of Science 110, 113-154.

Vince, A. 1978. The petrology and source of the medieval pottery from Meldon Quarry, Devon. In D. Austin, Excavations in Oakhampton Deer Park, Devon. *Proceedings of the Devon Archaeological Society* 36, 235-236.

Vince, A. and Brown, D.H. 1982. The petrology of some pottery from Oakhampton. In R.A. Highham, J.P. Allen, and S.R. Blaylock, Excavations at Oakhampton Castle, Devon, *Proceedings of the Devon Archaeological Society* 40, 101-103.