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# HENDHYSCANS KERNOW

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Arrowhead from Caerloggas Barrow III HENRIETTA MILES

## Editorial

The papers in this volume cover an unusually wide range for a single issue of *Cornish* Archaeology, both chronologically and in the balance of excavation reports and artefact studies. New ground (for Cornwall) is broken by the paper on Bodwen, demonstrating the density of material to be produced by intensive fieldwork over a long period and the long, if intermittent, chronology of occupation of a favoured locality. May this be the first of many such Cornish studies! The papers on artefacts, Mesolithic from Constantine Island, Bronze Age from Tredarvah, provide long due high standard studies on material not so far given much coverage in these pages. Excavation reports - interim and final - are unlikely to be in short supply as long as means in hands and money are available to deal with threatened sites. But too many county journals tend to contain little but reports on rescue sites. It should be the aim of our Society to publish a balanced mixture of excavation reports, artefact studies and more general articles; fortunately we are still at present able to afford this. To achieve this it will be necessary to encourage research both in fieldwork, in artefact studies and, hopefully, research excavation designed to answer outstanding problems in Cornish archaeology. The contents of Cornish Archaeology reflect the standard and amount of research currently undertaken. The Society needs to continue to identify the major lacunae in present knowledge and to encourage research into these.

Another encouraging fact about papers in the present volume is the rapidity with which excavation reports are now presented. Killibury, Harlyn Bay, Bodwen and Woolley Barrow were all dug during 1976. We still have a backlog of unpublished excavation reports but it is a hopeful sign that most excavations undertaken in Cornwall are now being published within two years.

1976 (the year covered by this volume) was effectively a year of consolidation. The training excavation at Killibury and the survey of Bodmin Moor continued, as did members' response to minor rescue threats. The Cornwall Committee for Rescue Archaeology completed its second year of operations with the initiation of a Sites & Monuments Register, designed as a comprehensive record of archaeological sites for researchers and planners alike; it also established the most comprehensive surveillance ever of rescue threats by setting up wide ranging contacts with local authorities and public utilities. It is to be hoped that ways will be found either to conserve or record and excavate at least the most important sites, otherwise all the effort and expense (provided by the Department of the Environment) of establishing threats will be effectively wasted.

The Society welcomed Paul Ashbee as its new President in April. We are indeed fortunate that scholars with a long tradition of work within the County but based so far away continue to undertake this role. Another major event was the annual Holbeche Corfield Memorial Lecture, this time given by Professor Glyn Daniel on 'Fakes, Frauds and Forgeries in Archaeology'. A seminar on Urban Archaeology held in March, at which James Barber and Peter Leach were speakers, focused attention on this over neglected aspect of Cornish archaeology — there has never yet been an excavation to investigate any Cornish town!

Once again thanks are due to the Assistant Editor, Brenda Duxbury, for the tremendous amount of work she has put into the production of this volume.

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## A Flint Assemblage from Constantine Island, North Cornwall

#### **CHRISTOPHER NORMAN**

The purpose of this article is to draw attention to a most interesting assemblage of flints recently recovered from a site on the north coast of Cornwall. The salient features of the flint industry will be described and an assessment made of the possible economic and cultural affinities of the site.

Constantine Island lies within the parish of St Merryn and is approximately 1.5 kilometres south west of Trevose Head. Having a maximum elevation of 11.6 m OD and an area of about 0.5 hectares, it forms the western tip of a small promontory which separates Booby's Bay from Constantine Bay. However, the island is isolated from the rest of the promontory at high water during medium and spring tides. The solid geology of the area consists of Upper Devonian slates, low eroded platforms of which form much of the foreshore in the immediate vicinity of the island. Extensive deposits of wind-blown sand are present between Booby's Bay and Treyarnon Point and at Constantine Island these reach a maximum depth of approximately 3 metres.

The existence of Mesolithic sites along this part of the Cornish coast has been known for many years. During the late nineteenth and early twentieth centuries several large collections of flints belonging to this period were made from sites between Trevose Head and Booby's Bay. In his classic study of the Mesolithic industries of Britain, Clark (1932, 42-3) described the collections of microlithic material made by Drs A.C. Haddon and A.E. Relph. Of particular interest is his quotation from Dr Haddon's notebook which states that those flints found on Constantine Island occurred '... in a layer of broken slates and flint nodules, resting on from 12 to 18 inches of oolitic sand and covered by some 4 or 5 feet of sand'. Unfortunately, Clark gives no description of the artefacts found at that time.

In July 1973, the present writer visited the island and found several flint flakes in loose scree beneath an eroded edge of the sand deposit (SW 85677510). Early in 1976, a further visit revealed that erosion was proceeding at a significant rate, this probably being due in part to the activities of holidaymakers during the summer months. On this occasion a large quantity of flint artefacts was soon recovered from the scree and subsequent visits have added sufficient material to form a representative sample of the industry.

The site is situated on the south western edge of the island, at a point where a series of superficial deposits has been eroded into a bare slope covering an area of about 15 square metres. The lower part of this slope is covered by a scree composed largely of slate fragments and loose sand and the deposits rest upon an abandoned wave cut platform at approximately 7 metres above the level of the present beach. Brief details of the depth and composition of the exposed layers are given below:

| Approx. depth below surface |   |
|-----------------------------|---|
| in centimetres              |   |
| 0 - 120                     | Blown sand with an abundance of complete<br>and fragmentary molluscan remains. A few<br>angular slate fragments up to 10 mm in<br>length. Approximately 80% of sample finer<br>than 1.5 mm. |
| 120 - 129                   | Archaeological layer partially cemented by a fine calcareous material.  |
| 129 - 165                   | Deposit containing approximately 45% coarse<br>sand and fine gravel (1.5 mm - 6.0 mm) and<br>55% finer grade material. Some small slate<br>fragments and small molluscan remains.           |

A sample weighing 883 g was taken from the layer containing the archaeological material and an analysis by weight gave the following results:

| Slate fragments between 10 mm and 50 mm in length      | 180 g (20.4%) |
|--|---------------|
| Unworked flint and chert pebbles                       | 30 g (3.4%)   |
| Flint and chert artefacts greater than 10 mm in length | 320 g (36.3%) |
| Limpet shell fragments greater than 10 mm              | 3g(0.3%)      |
| Unsorted material between 1.5 mm and 10 mm in length   | 90 g (10.1%)  |
| Unsorted material finer than 1.5 mm                    | 260 g (29.5%) |

#### THE FLINT ASSEMBLAGE

Over 1,570 pieces of flint and chert have been examined to date. As all of these were derived from the archaeological layer described above, there seems to be little doubt that the entire assemblage forms part of one industry and is free from admixture with material belonging to other periods. In view of the unusual nature of the industry, the following account does not attempt to follow any of the typological schemes normally used to describe flint assemblages of Mesolithic or later date. Traditional nomenclature has deliberately been avoided in order to allow maximum flexibility and although many finished pieces can be recognised, these have not been placed in rigid typological classes.

#### **Raw materials**

Small beach pebbles appear to have formed the sole supply of flint and chert used in the industry and the thirty-six complete examples which have been found vary between 19 mm and 57 mm in length. The raw materials represented vary widely in colour and texture, but dark grey flint and an inky black flint or chert appear to be predominant. The latter material bears some resemblance to the black chert which occurs within the Upper Jurassic lime-stones on the Isle of Portland in Dorset. Coarser, lustreless chert is also common, varying in colour from light grey to reddish brown. Some of this resembles the grey Carboniferous chert which outcrops on the coast at Fire Beacon Point, near Boscastle. Also present are a few pieces of Greensand chert, a material which occurs in gravel deposits on the Isles of Scilly (Barton, 1964, 142).

It would seem possible that these pebbles were obtained locally from a beach gravel deposit of Tertiary or Quaternary date. Flint and chert is known to occur in such deposits from the Isles of Scilly to Barnstaple Bay (Edmonds *et al.*, 1969, 80) and can be found in quantity on some present day beaches in the Padstow and Polzeath areas. A particularly large concentration of small flint and chert pebbles exists at Loe Bar, Porthleven, some thirty-five miles to the south west of Constantine Island (Barton, 1964, 165).

#### Technique

A large proportion of the artefacts present in the assemblage are likely to have been produced by one simple method. Small pebbles of flint and chert appear to have been placed upon a suitably shaped anvil stone, usually with their narrowest ends facing upwards. Vertical blows were then delivered with a striker on to the unprepared end of the pebble. Repeated blows seem often to have removed flakes and spalls from both sides of the pebble



Fig. 1 Constantine Island, flints (2/3).

producing a crude, chopper-like edge. Further attempts at flake removal were frequently abortive and usually resulted in the bruising and blunting of the previously sharp edge. However, experiments carried out by the writer suggest that the use of a striker made from a relatively soft material such as sandstone or bone will allow further working to take place without undue bruising of the edge. The use of a soft striker was also found to produce numerous small flake scars which can effectively sharpen the edge of the pebble. Although these scars normally terminate in step-like hinge fractures, the same process can cause the detachment of thin invasive flakes, thus producing a delicate 'scaled' effect on the artefact. It would seem possible that many of the battered pebbles with carefully prepared edges (Fig. 1 nos. 1-7) were produced in this way and a similar technique may have been used for retouching flakes.

Although capable of producing artefacts with effective working edges, the use of this simple method is liable to result in the haphazard fracture of unprepared pebble cores. Thus much of the debris from the site consists of irregular fragments which are impossible to classify with any precision. The technique can also give rise to battering and rebound flaking at the end of the pebble which is resting on the hard stone anvil. This effect is particularly apparent on artefacts which have been subjected to much working, such as those illustrated by Fig. 1 nos. 1, 4, 5 and 9.

#### **Flaked** pebbles

A total of 134 artefacts consisting of more than one half of a flint or chert pebble has been examined to date. Approximately 15% retain more than two thirds of the original pebble cortex and, of the remainder, only 5% have had more than three-quarters of their cortex removed. On the majority of these pieces it can be seen that flakes have been struck from one or both ends without any prior platform preparation. About one third show much superfluous battering and most of this is probably the result of unsuccessful attempts at working or rebound from the anvil stone. However, the possibility that on some pieces it has been caused by heavy utilisation cannot be ruled out. The majority of the flaked pebbles are poorly formed and, if cores, cannot have yielded many useful flakes. However, some neater pieces do occur, including a few elongated examples showing more or less parallel flake scars (Fig. 1 no. 24). These appear to have produced long, corticular flakes similar to Fig. 1 nos. 14, 17.

In addition to the above group, a total of 33 pebbles with well defined working edges has been found (Fig. 1 nos. 1-7). In each case, the sharp working edge has been formed by the removal of a large number of spalls and it is likely that these artefacts were produced for subsequent use as implements. The majority have a broad cutting edge which suggests that they might have served as chopping tools. (Fig. 1 nos. 1, 3, 4 and 5).

#### Flakes and irregular fragments

Approximately 1,200 flakes and fragments greater than 1 cm in length have been found which bear no marks of additional flaking or battering. A further 78 pieces may show additional working, but most of these are poorly formed battered flakes and only 16 possess a well defined scaled edge. These scaled flakes vary in size and shape, but all appear to have been retouched by the removal of large numbers of small flakes and spalls (Fig. 1 nos. 8-12).

Of particular interest is a group of 111 corticular flakes which bear flake scars on the bulbar surface at one or both ends. Although most of these are probably the accidental products of a crude flaking technique, the writer suspects that at least a few well defined pieces might represent a distinct form of scaled flake (Fig. 1 nos. 14-19). Perhaps the most convincing examples are those from which several flakes have been detached to produce a scoop-like end to the tool (Fig. 1 nos. 18, 19). In these instances there seems little doubt that the retouching was carried out after the detachment of the flake from its parent nodule. In the writer's opinion, the existence of such neat examples increases the probability that the simpler forms illustrated by Fig. 1 nos. 14-17 are also the result of deliberate flaking.

Only eight flakes showing normal marginal retouch have been found. All of these are extremely crude and, with the exception of a possible hollow scraper (Fig. 1 no. 23) and a



Fig. 2 Constantine Island, pebble tools (½).

poor truncated flake (Fig. 1 no. 22), appear to be small denticulated scrapers (Fig. 1 nos. 13, 20 and 21).

#### STONE ARTEFACTS

The archaeological layer contains many fractured pebbles and flakes of various rock types including dolerite, quartzite, vein quartz and mica schist. Of particular interest is a flattish pebble of coarse grained grey quartzite which weighs 550 g (Fig. 2 no. 1). One face shows a small area of battering which suggests that the object was used as an anvil stone. One small hammer stone weighing 170 g has also been found and this shows evidence of battering at both ends (Fig. 2 no. 2). It consists of a fairly soft greenish brown rock which may be a variety of serpentine. Also of interest is a large flake from a cobble of dolerite (Fig. 2 no. 4). This has also been extensively battered at one end and may have served as a crude chopping tool. Amongst the many small pieces present is a pebble of brownish quartzite which has had a few flakes struck from one end (Fig. 2 no. 3).

#### DISCUSSION

Taken as a whole, this assemblage can be seen to possess a number of features which contribute towards its rather distinctive appearance. It is characterised by a crude flaking technique which seems well suited to the use of very small beach pebbles as a source of flint and chert. Common retouched forms such as convex scrapers or projectile tips appear to be absent and the majority of those pieces regarded as implements have been subjected to much scaling and battering. Also of interest is the small series of stone artefacts, most of which are very crude in appearance.

On purely typological grounds, it is difficult to compare this group with other industries of Mesolithic or later date which have been recorded from south-western England. It bears little resemblance to typical Neolithic or Bronze Age flintwork and its patinated condition seems to preclude a very late date for the industry which it represents. Similarly, although variations do occur in the coastal Mesolithic industries of southern Britain, they all appear to possess well developed micro-blade technologies and a range of common retouched forms including microliths. However, these coastal industries frequently contain such tools as limpet scoops and picks and in this respect differ from their contemporaries found further inland (Palmer, 1976, 324-7).

In searching for parallels to the Constantine assemblage, attention is rapidly focused upon the Obanian industries of western Scotland. These industries are mainly found in large shell middens, a few of which have been dated to the fourth millenium bc, and they appear to represent a late stage of the Mesolithic period in this part of northern Britain (Mellars, 1974, 91-2). The flint assemblages from these sites are of poor quality, consisting largely of heavily scaled pieces (*outils écaillés*) and a few crudely worked scrapers. Large numbers of bone implements occur in the middens, and include barbed 'harpoon heads', awls and quantities of chisel shaped tools with roughly worked ends. These latter objects are known as 'limpet scoops' and also occur in the form of small elongated pebbles with bevelled ends. The Obanian industri<sup>5</sup> appear to be well adapted to an economy based upon fishing and shore gathering and bear little typological resemblance to those microlithic industries of Later Mesolithic date which occur in the same geographical area. Indeed, the cultural and economic relationships between these two types of Scottish Mesolithic industry are as yet imperfectly understood.

When comparing the Obanian flint industry with the assemblage from Constantine Island, a significant degree of similarity can be seen to exist. They both show a marked scarcity of traditional retouched tool types and a corresponding abundance of battered and scaled pieces. The *outils écaillés* of the Obanian closely resemble the scaled tools of the Constantine assemblage and the flakes with 'scooped' ends (Fig. 1 nos. 14-19) from the Cornish site might possibly be the functional equivalent of the pebble limpet scoops. In view of these common features, it seems reasonable to suggest that both industries may have been adapted to the exploitation of similar economic resources. Although fishing and foreshore gathering were clearly the mainstay of the Obanian sites, direct evidence of a littoral economy is less apparent at Constantine Island. However, the absence of projectile tips and other flint types associated with a traditional hunting economy suggests that the Constantine industry may have been specialised to serve the needs of a human group primarily engaged in fishing or food collecting activities.

At present, the occurrence of outils écaillés within flint assemblages from England and Wales is very poorly documented. However, recent research by Dr R.M. Jacobi has indicated that such material is frequently included in surface assemblages along the west coast from Cumberland to South Wales. Although little direct dating evidence is as yet available, Dr Jacobi has suggested that, in southern Britain, the écaillé technique may have served as a method of working small flint pebbles during the Neolithic and Early Bronze Age (Jacobi, pers. comm.). Of particular significance is a typical outil écaillé which was recovered from a layer of peat at Drigg in Cumberland. An analysis of the pollen contained within the peat showed that the latter had formed at a period subsequent to the elm decline in this area, which suggests that the *outil écaillé* is likely to be of Neolithic or later date (Pennington 1965). This is to some extent confirmed by surface finds from Walney Island, Cumberland. Here, *écaillés* occur in assemblages containing typically late Neolithic or Early Bronze Age flintwork but lacking artefacts diagnostic of a Mesolithic industry. A similar situation appears to exist along the Welsh cost, where mixed surface assemblages of Mesolithic and later material often include numbers of typical outils écaillés. Dr Jacobi has noted that, in many cases, both the *ecaillés* and the post-Mesolithic artefacts are majoritatively unpatinated, whereas the typically Mesolithic material is mainly well patinated. This again would seem to suggest that the *écaillé* material may belong in a Neolithic or Early Bronze Age context. Furthermore, the excavation of a flint working site at Freshwater West in Pembrokeshire yielded a number of outils écaillés, including one made on a fragment of a Neolithic polished flint axe (Wainwright, 1959).

On the basis of the evidence outlined above, it seems reasonable to suggest that the manufacture of *outils écaillés*, although clearly associated with Late Mesolithic coastal communities in Scotland, may have continued well into the second millenium BC in parts of western Britain. In view of this, the writer feels that it would be unwise to assign the Con-

stantine Island assemblage to any particular cultural stage until firm dating evidence becomes available.

It would seem likely that other sites with flint assemblages of this type await discovery along the north Cornish coast and possibly elsewhere. Of particular interest is a collection of flints from Booby's Point, approximately 200 metres from the Constantine Island site, which was discussed in a recent article by Mr P. Whitehead (Whitehead, 1973, 5-15). Judging from the typological details and the illustrations included in this report, the Booby's Point assemblage appears to be very similar to that from Constantine Island. Another intriguing site existed a few hundred metres to the south of Penhale Point, near Newquay and, according to Harding (1950, 156-70), yielded 'some thousands of rough flakes and chippings'. Apparently no typical retouched pieces were found and the assemblage was thought to consist entirely of debris characteristic of a microlithic industry. In the present writer's opinion, the absence of common retouched forms makes this assemblage worthy of re-examination. Furthermore, it seems reasonable to suggest that some early collections of flints from the Cornish coast may contain outils écaillés, most of which could have been dismissed as debris by collectors who were primarily interested in obtaining specimens for their cabinets. Thus a re-examination of those collections now housed in museums might lead to the identification of other sites with a Constantine type industry.

In conclusion, it is hoped that future research will provide an objective date for the Constantine Island site and help to clarify its cultural affinities. In view of the excellent conditions for the preservation of shell and bone which exist in the archaeological layer, there can be little doubt that a detailed investigation could contribute significantly to our knowledge of prehistoric activity along the northern coast of Cornwall.

#### Acknowledgements

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#### **Bibliography**

Barton, R.M., 1964. An Introduction to the Geology of Cornwall

Clark, J.G.D., 1932. The Mesolithic Age in Britain

Edmonds, E.A., McKeown, M.C. and Williams, M., 1969. British Regional Geology, South-West England (Third Edition)

Harding, J.R., 1950. 'Prehistoric sites on the North Cornish coast between Newquay and Perranporth', Antiq. J., 30, 156-70

Mellars, P.A., 1974. 'The Palaeolithic and Mesolithic', in Renfrew, C., British Prehistory, a new outline, 41-99

Palmer, S., 1976. 'The Mesolithic habitation site at Culver Well, Portland, Dorset: interim note', Proc. Prehist. Soc., 42, 324-7

Pennington, W., 1965. 'Pollen analysis at a microlithic site at Drigg', Trans. Cumberland and Westmorland Antiq. and Archaeol. Soc., LXV, 32-5

Wainwright, G.J., 1959. 'The excavation of a Mesolithic site at Freshwater West, Pembrokeshire', Bull. Board Celtic Studies, XVIII pt. II, 196-205

Wainwright, G.J., 1963. 'A re-interpretation of the Microlithic industries of Wales', Proc. Prehist. Soc., 29, 99-132

Whitehead, P.F., 1973. 'Neolithic and Upper Palaeolithic working sites, Booby's Bay, Cornwall', Cornish Archaeol., 12, 5-18

> 14, Broadlawn, Woolavington, Bridgwater, Somerset.

## **Excavations at Woolley Barrows, Morwenstow**

#### EDWARD A.K. HIGGINBOTHAM

Excavations prior to road straightening at Woolley Barrows demonstrated that the long barrow would not be destroyed except for the extreme end of its north flanking ditch. The round barrow, already excavated, is now totally obliterated and further destruction by road building is inconsequential.

#### **INTRODUCTION**

The site of Woolley Barrows, Morwenstow, at SS 26251655, comprises two prehistoric burial mounds, the larger a presumed Neolithic long barrow, the other, a now ploughed-out Bronze Age round barrow. These are situated near to the crest of a ridge, at approximately 214.40 metres OD, and 212.60 metres OD respectively, on the laminated silt and sandstone of the N Cornish and mid-Devon plateau of Carboniferous culm measures. At Woolley Barrows the bedrock outcrops near to the surface, but is generally covered by a yellow clay subsoil of varying thickness and a gleyed clay loam topsoil.

The purpose of the excavation, undertaken in October 1976, was to obtain archaeological and environmental information from the two barrows prior to partial destruction due to the straightening of the A39 Fraddon to Bideford Road. The threatened area traversed the western half of the round barrow and the very end of the long barrow and its flanking ditch (Fig. 3). Excavation proved that little or no damage would be caused by road construction to the structure of the long barrow, although the western end of its north ditch will be situated under the new road. The round barrow was previously excavated, in 1967, by the late Miss Dorothy Dudley on behalf of the then MPBW, and a report is now being prepared for publication by Dr A.M. ApSimon of Southampton University. The barrow mound was subsequently levelled to facilitate ploughing. The present excavations confirmed that apart from the surrounding ditch scoop the structure of the barrow was completely eradicated, and that no further destruction would be done by road construction.

Finds and site records are deposited at the Museum of the Royal Institution of Cornwall, River Street, Truro.

#### THE LONG BARROW

#### Structure

Initially it was necessary to establish that part of the long barrow which was under threat of destruction. This problem was approached by making a contour survey of the mound and surrounding area (Fig. 4) and by laying out trenches within the threatened area parallel to the grid used in the survey. The survey showed that the present dimensions of the long barrow are 62 m in length with a maximum width of 21 m, the mound rising to a height of approximately 2.45 m above the present topsoil. In plan the barrow mound is lozenge shaped, possibly slightly wider to the east, tapers in both height and width towards either end and is orientated 247°-67° or approximately WSW-ENE. There was no surface indication of any chambers or other structure within the mound but exposures of the barrow material revealed that it was constructed of angular blocks of the local silt and sandstone and with yellow clay, these derived from the quarry ditch that flanks the barrow on its north side.



Fig. 3 Woolley Barrows: site location plan.

The symmetric layout of the long barrow has, according to local information, been recently disturbed by trenches dug into the mound at either end and across its apex, and these are plainly visible on the contour plan (Fig. 4). Trench 4, 17 by 2 m, was laid out approximately parallel with the axis of the barrow to investigate the area beyond the western terminal of the mound and also the nature of the mound itself. It confirmed that the spur projecting from the northern side of the barrow at its western end was upcast material of small angular siltstone chippings in a loosely packed clay matrix, derived from adjacent disturbances into the mound itself (Fig. 5). There is no published record of archaeological investigations at this site previously though this does not rule out the possibility of these having been undertaken. Recent quarrying activity can be seen in the two small circular depressions into the outcropping bedrock on the north side of the barrow, between it and the quarry ditch.



Fig. 4 Woolley long barrow. Contours at 0.25 m intervals.

#### The quarry ditch

Flanking the northern side of the barrow there is a broad and shallow depression, its northern side now obscured by the main road. It is apparent that it was originally lozenge shaped, similar to the long barrow, and was approximately 72 m long and from 15-20 m wide. Trench 1, 15 by 2 m, was laid out across this presumed quarry ditch, to establish the nature of its fill and to what depth it had been quarried (Fig. 5). Excavation showed that it was in fact a broad scoop with gently sloping sides, and had been excavated to a depth of at least 1.60 m below the surrounding land surface. Subsequently the ditch gradually filled up with homogeneous fine clay silt until it was deliberately backfilled in 1967 with clay derived from the neighbouring round barrow. This silt deposit was not considered suitable for environmental sampling, its homogeneity and similarity with the topsoil both suggesting that it was deposited only recently.

At its western end the quarry ditch diverges from the alignment of the barrow mound leaving a berm up to 10 m in width between the two. The probable cause for this divergence was the outcropping of weathered bedrock, visible in trench 1 (Fig. 4), this being exceedingly difficult to dislodge and quarry away and so avoided. Similarly the shallow nature of the quarry ditch and its great width may be due to this same factor as the more easily extracted clay and loose stone is restricted to the upper portion of the weathered bedrock.

Although outside the threatened area, a soil augur was used to establish whether there was another quarry ditch to the south of the mound. There was no surface indication for this and the use of the soil augur suggested its absence. In all instances the clay subsoil was here located at 0.20 to 0.40 m below the present surface.

#### Stone surface

Excavation revealed an area of scattered angular stones, under the modern topsoil and recent upcast from disturbance of the barrow mound in trenches 1 and 4, not carefully laid but thrown down to form a consistent stone surface up to 0.10 m thick. Trenches 2 and 3, in total 13 by 2 m, were opened up to further define the boundary of this stone surface on its north side (Fig. 4), and demonstrated that it extended up to 9 m from the conjectured edge of the mound, the present spur shaped projection being modern disturbance. To the



Fig. 5 Woolley long barrow, sections through quarry ditch and disturbed barrow mound.

west, ploughing may have removed the surface beyond the end of the mound while its eastern extent was outside the threatened area and thus not defined. Resting upon this stone surface in trench 4 (Fig. 4) was a small hearth, consisting of an oval area, 0.60 by 0.70 m, bounded by siltstone blocks, at the centre of which the soil had been scorched to a light red colour. However this hearth need not be contemporary with the stone surface since it was only thinly covered with topsoil, and prior to the deposition of upcast from the nearby barrow disturbance, would have been close to the land surface. Similarly a small area, 0.50 m in diameter, of burning in the natural clay was located under modern topsoil in trench 4 beyond the end of the barrow mound (Fig. 4). It is impossible to date this since there is no stratigraphical relationship with other archaeological contexts.

#### THE ROUND BARROW

Investigation of the round barrow, approximately 22 m in diameter, was confined to an environmental investigation, since the mound had already been excavated in 1967 prior to the levelling of the site. A single trench, 49 by 1 m, was excavated within the threatened area across the barrow and parallel with the proposed new road alignment (Fig. 3). The 5 m wide ditch scoop surrounding the barrow was located on both sides, its maximum depth varying from 0.50 to 0.70 m below the present surface. Subsequently a smaller trench, 7.80 by 2 m, was excavated at right angles to the first to establish the edge of the round barrow within the threatened area, and again the ditch scoop was located. Nowhere was the ditch fill considered suitable for environmental sampling as its fill of silty clay loam was indistinguishable from the present topsoil, and had been disturbed during the levelling of the barrow in 1967. The excavation showed that the barrow mound had been totally removed and that no old land surface remained.

#### THE FINDS

#### Flint (Fig. 6)

Only a small sample of flint tools and waste flakes were recovered from the long barrow. All the tools along with several waste flakes were located in topsoil in trench 4, while the remaining flakes were resting on the stone surface in trenches 3 and 4.

- 1. Plano-convex knife, 46 mm by 20 mm, and 8 mm thick, retouched only on one side. Cortex visible. Honey coloured flint.
- 2. Fragment of thumbnail scraper, 15 mm by 14 mm, and 9 mm thick. Black flint.
- 3. Fabricator, slightly broken, 31 mm by 19 mm, and 17 mm thick, retouched on both sides. Black flint.

The remaining nine flints were small thin flakes up to 26 mm long and 8 mm thick. All excepting two were of dark grey flint, the others being honey coloured (not illustrated).

In addition two waste flakes of flint were found in topsoil in the trench across the round barrow, the longest being 37 by 18 mm, and 11 mm thick (not illustrated).

The small size and inferior quality of the flint material from the long barrow leaves little doubt that it is pebble flint, available in quantity along the coastline. The technical restrictions imposed by this material makes comparison with flintwork produced from tabular or nodular flint of doubtful validity. Furthermore the small size of the sample and the impossibility of ascertaining whether the flints from the long barrow form a single assemblage or not limits the information that can be derived from comparative material.

Flintwork similar to that from Woolley is found in both Neolithic and Bronze Age contexts in South West England. For example, a plano-convex knife was found at Sperris Quoit (Thomas and Wailes, 1967, Fig. 4, no. 6), another at the Neolithic settlement site on Haldon (Willock, 1936, 253, 258, no. 212), and also at Hembury causewayed enclosure (Liddell, 1931, 90-120, nos. 296, 384?, and 496). Fabricators have been found at Beer, SE Devon, a source for good quality quarried black flint in the Neolithic period (McAlpine Woods, 1929, 11-12). Small thumbnail scrapers similar to the fragmentary one at Woolley are widespread in Mesolithic to Bronze Age contexts (Mercer, 1970, 31) and indeed all the above mentioned flint tools are found also on Bronze Age burial sites (Miles and Miles, 1971, 20-21) and settlements (Mercer, 1970, 42-44).

Such continuity of flint industries in SW England only allows the flint tools from Woolley



Woolley long barrow, flints (1:1).

to be bracketed within the Neolithic and Bronze Age in general. It must be added that the location of the flint material within the topsoil or at its juncture with the stone surface cannot with certainty suggest a date for the latter.

#### Stone

A single water rounded quartzite pebble, 51 by 33 mm, and 23 mm thick, was located in topsoil in trench 4. These pebbles have been located elsewhere in SW England associated with ritual and ceremonial monuments, for example, the standing stone at Long Stone, St Stephen-in-Brannel, or the round barrow, Cocksbarrow, St Mewan (Miles and Miles, 1971, 10 and 21).

#### Clay

Small fragments of amorphous, slightly burnt and reddened clay were located in topsoil over the stone surface in trench 4, and are probably contemporary with the deposition of the flintwork.

#### DISCUSSION

As already stated the flintwork cannot be closely dated nor can it be used to date the stone surface or the presumed long barrow. Furthermore there is no definite evidence to relate the barrow to the stone surface and without more extensive excavation it can only be assumed that they are contemporary. Presumably the long mound falls into the general class of Neolithic long barrow common in England and Wales. Its pointed oval shape is not closely paralleled but may be loosely compared with more oval earthen long barrows (Ashbee, 1970, 15-18) and with the mounds of chambered tombs, for example the laterally chambered tombs of the 'Severn Cotswold Group' (Daniel, 1950, 70-74). The mound may incorporate one or more chambers and other associated structures within it, either constructed using a timber framework, as in earthen long barrows, or with dry stone walling of locally available siltstone. There were no surface indications of any such structures and it is likely that anything substantial would be located near to the centre of the mound rather than at its ends, since the barrow diminishes in both height and width at these points.

The presence of a single flanking quarry ditch deserves some comment. Earthen long

barrows, situated in the main on chalk, frequently have quarry ditches flanking them on either side (Ashbee, 1970, 8; Daniel, 1950, 41). The obvious conclusion to be drawn is that chalk was considered the most suitable source of barrow material. Similarly at Woolley the easiest option was taken, and the barrow material was derived from a broad shallow scoop into the natural clay and loose stone, this hardly touching the bedrock that is extremely difficult to dislodge. Indeed sites situated on intractible bedrock often do not have quarry ditches (Daniel, 1950, 41), the barrow or cairn material being derived from a large area around the site. It is apparent that the mound itself is the focus and that any ditches, if they exist, are merely convenient quarries.

The location of the long barrow is significant for, as with many monuments of its class, it is situated near to the crest of a ridge, and in close proximity to water sources including the River Tamar. It is also associated with the coast and with a steep sided valley or combe providing access to the latter, the barrow itself being 5 km from the sea.

It was originally hoped to obtain environmental information from both the Neolithic and the Bronze Age burial mounds and to compare this with data obtained from the present day moorland that surrounds the site, and thus to construct an environmental sequence. However in the event no suitable horizon or layers were located from which samples might be taken.

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#### Bibliography

Ashbee, P., 1970. The Earthen Long Barrow in Britain

Daniel, G.E., 1950. Prehistoric Chamber Tombs in England and Wales

- Liddell, D.M., 1931. 'Excavations at Hembury Hill, Devon', Proc. Devon Archaeol. Soc., 1 part 3, 90-120
- McAlpine Woods, G., 1929. 'A stone age site in East Devon (Beer Head)', Proc. Devon Archaeol. Soc., 1, 10-14
- Miles, H., and T., 1971. 'Excavations at Longstone Downs, St Stephen-in-Brannel and St Mewan', Cornish Archaeol., 10, 5-28
- Mercer, R., 1970. 'The Excavation of a Bronze Age hut-circle settlement, Stannon Down, St Breward, Cornwall, 1969', *Cornish Archaeol.*, 9, 17-46
- Thomas, C. and Wailes, B., 1967. 'Sperris Quoit: the excavation of a new Penwith Chamber Tomb', Cornish Archaeol., 6, 9-23
- Willock, E.H., 1936. 'A Neolithic Site on Haldon', Proc. Devon Archaeol. Soc., 2, 244-63

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## Excavation of a Cairn at Crowdy Marsh, Advent, near Camelford

#### PETER TRUDGIAN

A small flat-topped cairn had been built with care overlooking Crowdy Marsh. It was covered with vegetation and earth which could have arrived naturally. In the centre of the cairn a small space had been left free of stones, or had been so made at a later date. Another hole had been dug into the northern part of the cairn after the covering by soil, and had then been refilled. The reason for the holes is unknown. There was no sign of funerary activity. There were no flints underneath the cairn. Of those lying on and around the cairn, one was a Bronze Age barbed and tanged arrowhead, but the remaining 63, including seven geometric microliths, were a mixed Early and Late Mesolithic assemblage. The pattern and density of the flint scatter on and around the cairn, but not under it, might suggest that the cairn was of no later date than the Mesolithic flints, but for the lack of known Mesolithic parallels.

The existence of the cairn (SX 14018342) was first noticed during fieldwork in advance of the enlarging of the reservoir at Crowdy Marsh. The new dam has since been built slightly downstream of the old dam, which itself had been built at the point where three ancient trackways converged at a ford. The cairn lay 25 m north west of the marsh, and 5 m above it (282 m OD), on a slight slope, 125 m north of the ford. There are several larger barrows nearby (Fig. 9).

The surrounding land was grassland overlying granite and had not been ploughed in living memory, but had been harrowed; it has since been ploughed. There were occasional flattened heaps of stones in the fields, right down to the edge of the marsh, over which soil and grass had grown so that they could hardly be seen. They were not large enough to be called clearance heaps, and there were no remnants of field walls or lynchets nearby to suggest some agricultural origin as in the instances of the larger clearance cairns reported by Feachem (1973). Similar spreads of stone have been reported near the Shallowmead ring cairn, North Molton (H. Miles ex. 1977; per. comm.).

When first seen the cairn was a grass-covered mound 0.4 m high and 10 m in diameter. It appeared, at first sight, to have a slight ditch around it, and had a depression in the top which had been used by a burrowing animal. It was completely excavated using offset quadrants, the excavation being continued well beyond the confines of the mound (Fig. 7).

At the edge of the excavation the grass was growing on a black humose surface horizon from which iron had been leached to be deposited extensively in the form of a hard, thin, iron-pan of globular structure at a uniform depth of 10 to 15 cm. Beneath the pan an ochreous horizon passed gradually into granitic head. The soil can be correlated with the Hexworthy Series. The continuous iron-pan confirmed that the land had not been ploughed for many years at least. The grass and grey and black soil continued evenly over the cairn, but, around the mound, the iron pan and subsoil had been disturbed (not amounting to a ditch) over a distance of 4-7 m from the centre. It is possible that the cairn stones had been taken from this area. The iron pan was not present under the cairn where the black old land surface could be recognised with difficulty.



Fig. 7 Crowdy Marsh Cairn.

The circular cairn of stones, slightly eccentric to the covering mound of black earth, lay directly on the old land surface. The cairn had been constructed with some care, and could hardly be the result of field clearance. Except to the north west the stones at the edge formed a solid and fairly precise circle, the edge having a clear vertical face which, in most places, was two stones in depth. The stones were of coarse moorland granite apart from a few pieces of local spar (white quartz). Most of the stones were of two-fist size, but some were much larger, and a few required two men to lift them. The cairn became slightly higher towards the centre, but the general appearance was of a round, flat-topped structure of about 0.25 m in height and of 4 m in diameter.

In the centre of the cairn was a very small hole 0.2 m across (barely visible in the plan and section) which did not quite reach the old land surface and which had filled with the earth of the overlying mound — apart from four stones around the edge which seemed to have slipped slightly into the hole. The hole was immediately below, and had caused the previously mentioned depression in the grass. Part of the north side of the cairn had either never been completed, or, more probably, had had the stones removed, thus leaving a gap; immediately to the west of this gap the stones of the cairn were loosely placed and could have been disturbed. The gap had been filled with the earth of the covering mound in which were a few haphazardly-placed cairn-type stones.

The mound of black earth covering the cairn was about 10 m in diameter and of varying depths (section, Fig. 7). It had a somewhat peaty consistency, and was almost free of grit, but did contain a few cairn-type stones, nearly all being in the area of, and immediately outside, the gap just mentioned, from which they may have been derived. If so, this gap or hole must have been dug after the covering of the cairn. It seems unlikely that robbery or stone-removal was the motive because the hole was small and had been reasonably carefully refilled. Indeed the hole may have been made quite soon after the completion of the mound, but there was nothing to suggest the reason for this. There is, of course, a natural tendency for any low mound of stones to accumulate, quite quickly, a shallow covering of soil and vegetation. This could have happened here, but, equally, there could have been a deliber-ate covering with soil, at least in part. No turves were visible in section.

Apart from the distrubed area around the mound there were no signs of disturbance, pits, postholes or stakeholes either under the cairn or elsewhere. The absence of any sign of burial is in line with the evidence from the cairn at Castle Hill (Hooper, 1976).

64 flints were found, four lying actually on the cairn, none underneath it; four lay under the mound and one on top of it. The remainder came from the disturbance in the NW quadrant, at the extreme edge of the mound where the stratigraphy was uncertain, or outside the mound, mainly to the NW (Fig. 7). Considering the area covered by the cairn and the widespread scattering of the flints on and around it, it is unlikely that the flints could have been present on the ground when the cairn was being built. Indeed it can be seen by visual comparison that the odds against this happening by chance would be about 6 to 1. Furthermore, since the 64 flints, except for the barbed and tanged arrowhead, represent a typical Mesolithic assemblage including seven geometric microliths, a case could be made for suggesting that the cairn is of similar date, or earlier, but without being in any way positive about it. Beyond the mound the concentration of flints to the north west (Fig. 7) suggested some special activity there, but without sign of any structure. The concentration included five geometric microliths.

No charcoal or pottery was present. Some use had been made of a few scraps of slate (not a local stone, but available nearby), one of which (not illus.) was of microlith blade shape. The other finds were all of flint or chert apart from three pieces from a broken stone of Devonian or Carboniferous Siltstone such as is found on the North Cornwall coast. It was probably a water-worn pebble from the beach, but had three very definite faces, so smooth as to suggest utilisation for rubbing. The stone would have been too soft for use as a whetstone, but could have been used for polishing.

*Flint and Chert Finds* The 64 struck flints (including two of chert) have been examined by Dr Roger Jacobi. All appear to come from mottled grey beach pebbles, and a few show signs of crazing through fire. Seven (k - q) are geometric microliths. With the exception of a single barbed and tanged arrowhead, all the flints appear to be typical of a mixed early and late Mesolithic assemblage. Seventeen of the most significant are illustrated in Fig. 8.

- (a) Barbed and tanged arrowhead (one barb missing). On old land surface at edge of mound. N.W.
- (b) Bulbar fragment of blade or flake with retouch along one side. On old land surface under mound. NW.
- (c) Notched flake with some additional trimming. On edge of mound. SW.
- (d) Flake with slight notch at end. Utilisation on both sides at end. On old land surface just outside cairn. NE.
- (e) Broken blade with small convex scraper at distal end. Below modern turf. Outside mound. NW.
- (f) Flake. Utilised on both sides. Below modern turf. Outside mound. NW.
- (g) Flake. Heavily utilised on both sides. In disturbed area just outside mound. NW.
- (h) Flake. Utilised on both sides & at each end. On old land surface at edge of mound. SE.



Fig. 8 Flints from Crowdy Marsh Cairn (1:1).

- (i) Blade with light trimming on one side of pointed tip. Below modern turf. Well outside mound. NW.
- (j) Small blade with notch on one side at bulbar end. In disturbed mound. Just outside cairn. NW.
- (k) Obliquely blunted point. End broken. Below modern turf. Well outside mound. NW.
- (l) Obliquely blunted point. Heavily worn. On top of mound. SW.
- (m) Obliquely blunted point with convex backing. Below modern turf. Well outside mound. NW.
- (n) Blunted back point. In disturbed area outside edge of mound. NW.
- (o) Scalene triangle. Worked on three sides. In disturbed area outside edge of mound. SE.
- (p) Obliquely blunted point with tip lost. Below modern turf. Well outside mound. NW.
- (q) Obliquely blunted point. Below modern turf. Well outside mound. NW.

The finds have been deposited at the County Museum, Truro.

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#### Bibliography

Feachem, R.W., 1973. 'Ancient Agriculture in the Highland of Britain', Proc. Prehist. Soc., 39, 332-53

Hooper, S., 1976. 'Excavation of a Ring Cairn on Castle Hill, Luxulyan', Cornish Archaeol., 15, 86-9

Camelford

## Mesolithic Flint scatters around Crowdy Marsh

#### PETER TRUDGIAN

During and since the extension of the Crowdy Marsh Reservoir in 1970 concentrations of worked flint, with a few other utilised stones, have been noted in the area around the former marsh (Fig. 9) at a height of from 280 to 305 metres above sea level. With the exception of the few flints from site F, all the flints were of beach origin and of Mesolithic types. Most of the flint sites could be identified as being Early Mesolithic, but the flints from Site A appeared to belong to the Later Mesolithic. The finds add considerably to the increasing catalogue of Maglemosian finds in South West Britain.

Site A (Fig. 10) NGR 15488355. Later Mesolithic material from the bed of a small stream feeding the marsh and from its bank, over an area of about 10 m.

- 1. Conical flake core (not illus.).
- 2. Conical flake core.
- 3. Conical blade core.
- 4. Two-platform flake core.
- 5/6 Two unclassified cores (not illus.).
- 7. Steep scraper at bulbar end of blade (not illus.).
- 8. Blade utilised each side.
- 9. Blade with slight retouch.
- 10. Blade with notch on right hand side.
- 11. Broken blade with retouch across tip.
- 12. Broken blade with retouch on each side.
- 13. Blunted-back microlith.
- 14. Hammerstone.

and 62 other flakes (not illus.), and three rubbing or smoothing stones.

Site B (Fig. 10) NGR 14488332. Early Mesolithic material from a 10 m area near the south edge of the reservoir.

- 1. End scraper.
- 2. Burnt scraper on distal end of blade.



3. Broken blade with notch at one end.

and 29 other flakes (not illus.).

Site C NGR 14058328. Two flakes (not illus.) from south of reservoir.

Site D (Fig. 11) NGR 14228354. Mesolithic material from a 20 m area north of and jutting into the marsh. Probably Early Mesolithic.

- 1. Middle section of large obliquely-blunted point.
- 2. Blade with retouch along one side.

and 19 other flakes (not illus.).

Site E NGR X 13858330. One flint flake (not illus.).

Site F NGR 12778320. Not within area of plan. Several hundred metres from marsh on site of new water treatment plant. Black flint, probably not of beach origin. Possibly Beer flint. Period uncertain. 4 flakes (not illus.).

Site G NGR 14128346. Above reservoir on north side. Possibly Early Mesolithic. 4 flakes (not illus.).

Site H (Fig. 11) NGR 14018352. In and alongside old hedge leading up from the marsh on the north side. Early Mesolithic flints which compare well with examples from other Maglemosian deposits such as Dozmary Pool (Wainwright G., *Proc. Prehist. Soc.*, **26**, 1960, 193-201).

- 1. Large Scalene triangle.
- 3. Micro-intermediate with notch on side.
- 4. Thick convex-backed knife blunted on side.
- 9. Broken serrated flake.
- 14. Core-rejuvenating flake.
- 16. Micro-burin with notch at side.
- 18. Conical blade core.
- 20. Two-platform core.
- 21. Blade with notch, possibly for hafting, at either side at bulbar end.

and 8 other flakes/blades (not illus.).

Also marked on the accompanying map (Fig. 9) are the following features:-

- I. Cairn excavated (present volume p.17).
- J. Ancient trackways leading to -
- K. Former ford.
- L. New dam just downstream of old dam.
- $M. \ Scheduled \ barrow-not \ excavated.$
- N. Scheduled triple barrow not excavated.



Fig. 10 Flints: Sites A and B, Crowdy Marsh (1:1).



Fig. 11 Flints: Sites D and H, Crowdy Marsh (1:1).

I am grateful to Dr Roger Jacobi who has examined the flints (now lodged in the County Museum, Truro) whose descriptions and comments are given above.

Camelford

## The Bronze Age Find from Tredarvah, Penzance

#### SUSAN M. PEARCE and TIM PADLEY

Tredarvah is a Bronze Age settlement site of unknown form, which was discovered under salvage conditions in 1963. There were no structures found, only pottery, bronzes, and domestic debris including a large saddlequern. The pottery belongs to the Trevisker series and contains both style 1 and style 3 wares, and so belongs to the middle of the sequence, dating to the Middle Bronze Age. Between ten and seventeen vessels are represented. The bronzes belong to the 'Taunton' phase, and consist of an axe, a spearhead, two blades, a quoit-headed pin, a side-looped pin, and a double spiral, forming a domestic assemblage which can be dated to the Middle Bronze Age. However, as the pottery and the bronzes cannot be shown to belong to the same stratigraphic layer, they cannot be said to be associated together, though they date to approximately the same period.

#### **INTRODUCTION**

The initial find of a number of bronze objects was made by workmen cutting into a hillslope during preparations for the erection of a bungalow in the summer of 1963 (NGR SW 464303). These were acquired for the Royal Institution of Cornwall by Mr H.L. Douch who, together with Professor A.C. Thomas and Mr R. Penhallurick, salvaged other finds and made such records as circumstances permitted. An interim report was published soon after the initial discovery (Douch, 1964).

Since this interim publication, the Tredarvah find has been referred to in print a number of times. ApSimon related its pottery to that from Ash Hole, Brixham, Devon (ApSimon, 1969), and to that from Trevisker, St Eval, Cornwall (ApSimon, Greenfield, 1972). The metalwork was included by Rowlands in his summary of the Middle Bronze Age industries (Rowlands, 1976), and was described by Pearce in connection with material from Kent's Cavern, Torquay, Devon (Pearce, 1974). In addition, unpublished notes on the various pieces of metalwork were compiled by Britton (Britton MS), who also organised the analysis of four of the pieces (see descriptions). It is the intention of the present report to place this important find on record as fully as possible in the light of available information.

#### THE STRATIGRAPHY

The stratigraphy at the site was recorded under salvage conditions, which allowed only a general record and a sketch section to be made. The topmost layer (layer 1) consisted of modern turf. This covered a thick, dark layer of topsoil, which seems to have been made up of hill-creep (layer 2). In turn, this covered a compact, fine red/brown clayey soil (layer 3). Layer 3 was in all probability the old land surface. The presumed occupation layer (layer 4) was under layer 3, and was a very dark brown/red containing fragments of charcoal, burnt clay, and pottery sherds. The natural Rab (layer 5) underlay the whole find area. It was noticed that layer 5 was 'dirty' where it was overlain by layer 4.

The pottery was placed as coming from layer 4, the presumed occupation layer, but no finer sequence was recoverable so all chronological inferences have been made from a study of the pottery in conjunction with that from other published sites (see below).

The bronze objects appear to have been found close together, but the exact findspot is unknown. It is unclear whether they derive from layer 3, the old land surface above the occupation layer, or from layer 4, the occupation layer which contained the pottery (Douch, 1964, and MS records). Any association between the bronzes and the pottery is, therefore, not clear and the bronzes could have been deposited at the site during the currency of the pottery or afterwards. Like the pottery, the dating of the bronze objects is dependent on a consideration of similar, published objects.

#### THE FINDS

#### The pottery (Figs. 12, 13, Pl. I)

Introduction The pottery from the site falls into three groups, based on observable differences in the ware. The major division is between fine wares (Groups 1 and 2) which are 8 mm or less thick, and coarse wares (Group 3) which average 13 mm in thickness. The former is subdivided into those having a smooth surface, but a gritty fabric (Group 1) with an average thickness of 8 mm, and those with a thin body and burnished surface (Group 2) 5 mm thick on average. Further inspection showed that there were also differences in the decorative features of the different groups. Group 1 vessels are decorated with plaitedcord and finger-tip impressions, Group 2 vessels with either incised lines or stamp patterns, and Group 3 vessels have cordons and double or single twisted-cord impressions. These sets of traits hold true for all the identifiable vessels from this find, and there are no hybrids spanning the groups.

The pottery belongs to the Trevisker series of the South Western Bronze Age pottery (ApSimon, Greenfield 1972). Group 1 can be assigned to Trevisker style 1, because of its plaited-cord and finger-tip impressions, and the gritty texture of its fabric. Group 2 falls within the Trevisker styles 3 and 4. The fine fabric, and incised decoration of vessel 4 fits well with Trevisker style 3, while the stamped decoration of vessel 6 is very similar to style 4, but the fabric is more like style 3. Group 3 pottery is again Trevisker style 1. It is, however, much thicker than that in the other two groups. This is no problem as some of the pottery from the type site is of similar thickness (ApSimon, Greenfield 1972, Fig. 14, no. 3). Detailed analysis of the parallels for the different vessels is given after the description of each.

Seventeen separate vessels are mentioned in the description of the pottery, not including the miscellaneous sherds not assigned to any specific vessel. However, in fact rather fewer vessels may be involved, because in order to take into account the minor differences that exist, some of the pieces have been treated separately, even though they may derive from the same pot; Group 1, for example, may consist of only one vessel. The minimum number of vessels that could have produced the remains of the decorated vessels from this site is ten.

The colour of the pottery is described by using the CBA (Council for British Archaeology) RESCUE pottery colour chart. The sherds were examined in accordance with the instructions contained in the chart, and under standard lighting conditions. The colour quoted is the nearest match found for the colour of the surface, ignoring any grits present. When the colour of the core of the fabric is different from that of either surface, this is indicated.

#### Group 1

Vessel 1 - No. 1. Description This consists of about one third of the upper part of the vessel. The base is missing. The fabric is gritted, and there is variation in the grit size. The surface of the interior was originally smooth, and the remains of the marks left by the potter's fingers are visible as fine striations. Where the colour of the vessel is lighter, the texture is rougher. The exterior surface was also originally smooth, and the remains of finger smoothing is again visible. The decoration is confined to a zone around the upper part bounded at the top by the rim, and at the bottom by a row of finger-tip impressions that



Fig. 12 Tredarvah Pottery, Groups 1 and 2 (1/4)

surround the girth of the vessel. The zone is filled by rows of plaited-cord impressions, all but two pointing to the right. Some of the lines do meet, but the general effect is one of a short plaited cord being wound a number of times a short way round the vessel. The width of the zone of decoration is 85 - 100 mm. The spacing (edge to edge) of the finger-tip impressions averages 15 mm. The width of the paired cord impressions averages 4 mm while there are 3 - 4 pairs of impressions per 10 mm. The body of the vessel averages 8 mm in thickness. The rim is an out-turn, and is curved on the inside. The interior of the vessel is closest to Green/Brown 1A in colour, while the exterior ranges from Yellow/Brown 4B to Brown/Red 4A.

#### Weight - 886 g.

*Parallels* The vessel lacks diagnostic features such as pierced, rather than paired dimple, handles. Similar pottery, though the plaited-cord impressions point to the left, found at Yes Tor Bottom in Devon (Radford, 1952, ApSimon, 1958, 217, Fig. 35) has been assigned to Trevisker style 2 (ApSimon, 1969, 26). The body of the vessel is thinner than most of the style 1 wares from Trevisker, but style 1 wares thinner than those at the type site have been recognised at Ash Hole, Brixham, Devon (ApSimon, 1969). A single piece of pottery carrying parallel lines of plaited-cord decoration, from Kent's Cavern, Torquay, Devon (Pearce, 1974, 185-6, Fig. 1, 3, plate I, 3), was assigned to style 1. Thus, even though there are some style 2 characteristics, the vessel seems best assigned to style 1 (ApSimon, Greenfield, 1972, 341). Similar pottery was discovered during the excavation of the settlement at Dean Moor, Devon (Fox, 1957, 60, no. 4, Fig. 20, no. 4), although here, as at Yes Tor Bottom, the impressions point to the left. At Gwithian, from which the pottery has as yet been only published in part, plaited-cord decoration was found in layers 7 and 8, but not apparently in layers 3 and 5 (Thomas, Megaw, Wailes, 1961, 202; Megaw, 1976).

Vessel 2 — Nos. 2, 3, 4 and 5. Description The vessel consists of a number of fragments similar in appearance to vessel 1. The fabric is gritted, and there is variation in the grit size. The texture of the inner surface is rough, as is that of the outer in places. One piece is so abraded that no decoration survives (no. 2). Again the decoration is confined to a zone around the upper part of the pot, bounded at the top by the rim, and at the bottom by a row of finger-tip impressions round the girth. The decoration consists of rows of plaited-cord impressions going round the pot. There are some minor differences between this vessel and vessel 1. The zone of decoration is narrower, being only  $80 \cdot 90$  mm wide. There are fewer lines of cord, and only one points to the left. The edge to edge spacing of the finger-tip impressions per 10 mm. The paired cord impressions are 4 mm wide, and there are  $3 \cdot 4$  impressions per 10 mm. The body of the vessel averages 8 mm in thickness. The rim is very similar to that of vessel 1. The colour of the interior ranges from nearly Green/Brown 1A to areas of Brown/Red 4A, while the exterior is Brown 4B with areas of Brown 2A. The abraded surface of no. 2 is Green/Brown 5/6A in colour.

Weight -1689 g.

*Parallels* The vessel is so similar to vessel 1 that it may come from the same pot, but the pieces do not join, and there are the minor differences between the two that were noted above. Because of this close similarity, the parallels quoted for vessel 1 also serve as parallels for vessel 2.

Vessel 3 - no. 6. Description This consists of the reconstructed base of a pot. The fabric is gritted, and there is variation in the grit size. Both the outer and the inner surfaces are smooth. The base itself is complete and in one piece. The sides have been fitted to it and go almost the whole way round. At their highest they extend 153 mm from the bottom of the vessel. As there is no decoration on the vessel, it can be described as a plain, straight sided flaring shape, rather like a flower-pot. The walls are 8-10 mm thick. The interior surface is closest to Green/Brown 1A with areas of Brown 3A, while the exterior ranges from Yellow/Brown 4B in colour to Green/Brown 4A.

Weight -1327 g.

*Parallels* This vessel has been assigned to group 1 because it is similar to vessels 1 and 2 in colour and texture. It may be the base of either of them, but none of the pieces join. The parallels for vessel 1 are also those for this vessel.

Miscellaneous Fragments As well as the three vessels itemised above, there are a number of plain body sherds that cannot be assigned to any of the three, but are very similar in colour and texture. They are most similar to vessel 3.

#### Weight - 834 g.

#### Group 2

Vessel 4 – nos. 7, 8 and 9. Description. This is a fine ware. The fabric is gritted with small grits, which are of mixed sizes. The interior surface is smooth. The exterior surface is very smooth, and was originally burnished. The decoration, judging from the fragments that survive, was confined to the upper part of the vessel, above the base of the pierced lug handles. The decoration is incised, formed from 'V' sectioned, sharply defined slashes on the surface of the vessel that vary from 24 mm to less than 6 mm long, and are about 1 mm wide. They make, as far as can be reconstructed, a rough running chevron design. The lugs are applied to the surface with a neat join. They are decorated with simple inverted 'V' patterns, as can be seen from the drawings of pieces 7 and 8. The lugs seem functional, and have holes roughly 10 x 7 mm pierced through them. The base (no. 9), seems to have been flat. The body is thin, averaging only 5 mm in thickness. The interior is Brown 3A in colour, while the exterior ranges from Yellow/Brown 4B to Brown 3B.

#### Weight -59 g.

*Parallels* This urn is paralleled by the style 3 pottery at Trevisker which is a fine ware decorated with incised decoration, some pieces having similar handles (ApSimon, Greenfield, 1972, Fig. 18, 50). The Trevisker report refers to the fact that the latest pottery at Tredarvah resembles style 3 (ApSimon, Greenfield, 1972, 358). There are also parallels with the Gwithian sequence. The pottery from layers 3, 5 and 7 is described as being decorated with incised lines (Thomas, Megaw, Wailes, 1961, 202. Megaw, 1976).

Vessel 5 - no. 10. Description. This is one piece which could be either base or rim, and which is very similar in colour, thickness and texture to vessel 4. It has the remains of a row of stamped comb decoration, consisting of a line of impressed 1 mm squares, of which 3 remain. This form of decoration is not found on any other piece of pottery in this group, or in the rest of the Tredarvah find.

#### Weight -5 g.

*Parallels* Comb decoration as such is not found on many of the vessels from published sites that have produced pottery that can be paralleled by the Trevisker series, though it is found in layer 7 at Gwithian (Megaw, 1976, 61, Fig. 4.7, 6), and also on the unpublished Bronze Age pottery from Ash Hole, Brixham. This piece has been placed in group 2 because of its similarity with vessel 4 in texture and general appearance.

Vessel 6 – nos. 11 and 12. Description Again this is a fine ware. The fabric is gritted with small grits, but there is variation in their size. Both the interior and exterior surfaces are smooth, the outer one and the bevel of the rim, perhaps having been burnished. The decoration is found just below the rim and consists of rows of circular impressions made by pressing a hollow object into the clay, such as a bird-bone. There were at least two rows of impressions, but how many more (if any) is unknown. The actual impressions average 5 mm in diameter. The body averages 6 mm in thickness. The rim is out-turned. The colour of the interior ranges from Brown 4B to Brown/Red 5A, while the exterior is Yellow/Brown 4B. Weight - 46 g.

*Parallels* This vessel can be paralleled by style 3/4 Trevisker ware, in that it has a fine fabric, but stamped decoration. One of the pieces of style 4 Trevisker ware at the type site has decoration of similar appearance to vessel 6, though the rings are larger. (ApSimon, Greenfield, 1972, Fig. 18, no. 54). As is mentioned in the article, styles 3 and 4 represent artificial stages in the development of a pottery tradition, and so hybrid pieces that span more than one style should be expected (ApSimon, Greenfield, 1972, 333). The use of circular stamped impressions has been noted at other South Western Bronze Age sites, which have pottery that can be tied in to the Trevisker series. The pottery from Ash Hole, Brixham, Devon, includes a vessel that has two rows of circular impressions, but they are larger (8 mm diameter), and are found in association with twisted cord, and incised decora-



Fig. 13 Tredarvah Pottery, Group 3(1/4)

tion, as well as being on style 1 fabric (ApSimon, 1969, 22, Fig. 1). ApSimon suggests that this form of decoration was used to delimit the decorated zone in the same way as the fingertip impressions on vessels 1 and 2 (ApSimon, 1969, 27). However, there is no evidence either way for this on vessel 6, as only the rim sherds survive.

Vessel 7 – no. 13. Description This vessel is represented by a single rim sherd. The fabric, texture, rim shape, and colour is similar to vessel 6. It is catalogued separately, because it is undecorated.

Weight -23 g.

*Parallels* This is so similar to vessel 6 that it might be part of it. If so, then the pattern would probably have been further down on the side that this sherd came from; if not, then it would seem that it is a plain form of vessel 6. There are no published parallels for undecorated vessels. It has been assigned to this group because of its similarities with vessel 6.

#### Group 3

Vessel 8 – nos. 14, 15, 16, 17 and 18. Description The vessel is made from a gritted fabric, which contains grits up to 5 mm across. The inner surface was originally smooth but, except for a few places, is now rough. The outer surface has a rough but even texture. The decoration is generally very clear. There are two main decorative features, lines of twisted-cord impressions and an applied cordon. The use of twisted cord to make the impressions is in contrast to the vessels in Group 1. The pattern formed by the lines of twisted cord is one of filled triangles, or a running chevron. The single cord impressions are 2 mm wide, and there are about 2 impressions per 10 mm. The decoration seems to have been confined to the upper part of the vessel, bordered at the top by the rim, and at the bottom by the cordon. This is 4 mm thick, and about 30 mm wide. It is a flat-faced cordon which looks like a flat ribbon of clay applied to the surface of the vessel. The rim is heavy and out-turned with an internal bevel. The body of the vessel averages 15 mm in thickness. The interior ranges from Yellow/Brown 5B to Brown 4B in colour, while the exterior ranges from Yellow/Brown 5A/B to Brown 5B.

Weight -921 g.

*Parallels* The thick, gritted fabric and twisted cord decoration place this vessel in style 1 of the Trevisker series (ApSimon, Greenfield, 1972). This vessel (or vessel 9, which may be a part of it) was referred to by ApSimon (1969, 27) as the cordoned Tredarvah pot approximating to style 1. Flat-faced cordons have been found on vessels that form part of the Trevisker series at a number of sites in the South West. At Ash Hole, Brixham, Devon, there were two style 1 vessels with such cordons, though the body of the second one is thinner than vessel 8 (ApSimon, 1969, Fig. 1, Fig. 2, no. 5). Cordons of this type occur throughout the Trevisker series. Kent's Cavern, Torquay, Devon, produced two cordoned vessels, one of which has incised decoration above the cordon, and should belong with Trevisker style 3 (Pearce, 1974, 183-4, no. 3, Fig. 2, no. 6, Pl. I, no. 8). They appear on style 3 ware from Raddick Hill, Dartmoor (Radford, 1952, Fig. 12), and on style 4 ware from Tunhill Rocks, Dartmoor (Radford 1952, Fig. 11, ApSimon, 1958, Fig. 34).

Vessel 9 – no. 19. Description The texture, appearance, and colour of vessel 9 is very similar to that of vessel 8, as is the rim form, being heavy and out-turned. However, the piece has what looks like the remains of a vertical cordon. It may be that the piece of clay adhering under the rim is the remains of something that was intended to be a strap handle, or it may be a fault in the potting. Nevertheless it is regular, and does not flare away from the body as a strap handle would. It is 27 mm wide and 4 mm maximum thickness. The cord impressions are similar to those on vessel 8. Indeed, one of the pieces of vessel 8 (no. 17), has impressions that stop at a straight line which might be to accommodate a vertical cordon. This can be interpreted in two ways: these may be the remains of one vessel, which had three decorative traits, impressed twisted-cord, a vertical, and a horizontal cordon; or that the straight edge is fortuitous, and there are two vessels. The core of the fabric is Brown 4B in colour.

Weight -122 g.

Parallels This vessel has been assigned to Group 3, because of its close similarity with

vessel 8. In its own right, in any case, it would be best paralleled by style 1 Trevisker ware (ApSimon, Greenfield, 1972). There are no parallels for a vertical cordon from within the published work on the Trevisker series. The closest to such is on a piece of pottery excavated at Dean Moor, Dartmoor, which is undecorated, has a horizontal cordon and a strap handle (Fox, 1957, 61 no. 7, Fig. 20 no. 7). However, vertical cordons are known from Bronze Age contexts outside the South West. In the collections of the Devizes Museum, there are two from Wessex each having both vertical and horizontal cordons, but the cordons are decorated with finger-tip impressions (Annable, Simpson, 1964, 67 nos. 576 and 578, Figs. 576 and 578).

Vessel 10 - nos. 20 and 21. Description This is made from a gritted fabric, and there are variations in the grit size, which can be up to 12 mm long. The inner surface is worn, but it was originally smooth, as was the outer one. The decoration is formed by lines of paired twisted-cord impressions. Some of the impressions are clear enough to show that the cord was fibrous. There are about two impressions per 10 mm and they are about 3 mm wide. The lines are arranged in a rough running chevron pattern. This is bounded at the top by the rim, but what happened at the bottom is unknown. The rim is out-turned and has an internal bevel. The body of the vessel averages 13 mm in thickness. The colour of the interior of the vessel ranges from Brown 2A, through Brown 4B, to Brown/Red 5B, while the exterior ranges from Brown 2/3A to Brown 4B.

Weight -484 g.

*Parallels* Except for colour, and the lack of a cordon, vessel 10 is very similar to vessel 8, and so can be said to belong to Trevisker style 1 (ApSimon, Greenfield, 1972).

Vessel 11 - nos. 22 and 23. Description The fabric is gritted, and there are a variety of grit sizes present. Both the inner and the outer surfaces are smooth where they are undamaged. The decoration is formed by double rows of twisted-cord impressions. The pattern is formed by winding the twisted cord around the upper part of the vessel (it is similar to the technique used on vessels 1 and 2). There are three to four impressions per 10 mm and the double cord impressions are 3 mm wide. The decoration is bounded at the top by the rim. The rim itself is flat topped and has an outward bulge, while the interior is straight. The body averages 10 mm in thickness. The colour of the interior ranges from Brown/Red 5B to Brown 3B, while the exterior ranges from Red/Brown 4B to Brown 3B.

Weight -161 g.

*Parallels* This vessel is paralleled by style 1 Trevisker ware. One piece from the type site has similar decoration, but has wider cords set closer together, though the rim form and body thickness are similar to those of vessel 11 (ApSimon, Greenfield, 1972, Fig. 18, No. 45). However, vessel 11 is made from style 1 fabric, while the Trevisker piece is made of style 2 fabric.

Vessel 12 - nos. 24 and 25. Description The fabric is gritted, and there are grits up to 6 mm long present. The inner surface is eroded, and the grits stand up above the surface. The outer surface is smoother, and the large grits are not so clearly visible. The decoration, which is indistinct in some places, is formed of paired twisted-cord impressions. The pattern formed by the cord impressions is a rough running chevron design. It forms a zone that seems to be defined top and bottom by a line of single cord impressions. No rim fragments survive, but it looks as if the sherds come from the sloping upper part of the vessel. The zone of decoration is more than 60 mm wide. There are three to four impressions per 10 mm. The paired impressions average 5 mm wide, while the single ones average 2 mm. The body of the vessel averages 10 mm in thickness. The interior of the vessel is Yellow/Brown 5B in colour, while the exterior ranges from Yellow/Brown 3B through Green/Brown 4A to Yellow/Brown 4B.

Weight -106 g.

Parallels This vessel is paralleled by style 1 Trevisker ware (ApSimon, Greenfield, 1972).

Vessel 13 - no. 26. Description The fabric is gritted and contains a variety of grit sizes. The inner surface is worn, and the grits stand out from the surface. The exterior surface is so abraded that it has lost any decoration that it might have had. The rim is out-turned, and

it has an internal bevel. The body averages 10 mm in thickness. The interior ranges from Green/Brown 5A in colour to Brown 5B, while the exterior ranges from Brown/Red 4A to Yellow/Brown 5B, and the core of the fabric is Green/Brown 1A.

*Parallels* The rim is similar to that on vessels 8 and 10 (nos. 14 to 19). This vessel is again paralleled by Trevisker style 1 pottery (ApSimon, Greenfield, 1972).

Vessel 14 - no. 27. Description The fabric is gritted, and there is variety in the size of the grits. The interior surface was originally smooth, but is now rough. The same can be said for the exterior. The main decoration is an applied flat-face cordon, 30 - 35 mm wide and 4 mm thick. This vessel has been separated from vessel 8 because it lacks any impressed cord decoration. If it were part of vessel 8, it would mean that there was a vessel which had more than one horizontal cordon round it, a thing that is unparalleled in any of the published references to the Trevisker styles of pottery. The rim is a flat-topped one, different in form to that of vessel 8. The body averages 16 - 19 mm in thickness. The interior is Yellow/Brown 5B in colour, while the exterior ranges from Brown/Red 5B, through Brown/Yellow 5A, to Yellow/Brown 5B.

#### Weight - 1416 g.

*Parallels* The main sites which have produced Trevisker style 1 pottery are given in the parallels for vessel 8. There are two that should be mentioned here, because they are of cordoned plain ware. The first of these is Dean Moor, Dartmoor, which has also produced the remains of the strap handle (Fox, 1957, 61 no. 7, Fig. 20 no. 7). The second comes from Kent's Cavern, Torquay, Devon, and is plain except for a flat-faced cordon 26 mm across (Pearce, 1974, 185 no. 9, Fig. 2 no. 7).

Vessel 15 (not illus.). Description The fabric is gritted, and there is variation in the grit size. The interior is eroded, and the grits stand clear of the surface. The exterior was originally smooth, and is well preserved in places. The decoration is made up of double lines of twisted-cord. The pattern formed is a running chevron. It is confined by horizontal double lines of twisted-cord impressions. There are two impressions per 10 mm. The double lines are 7 mm wide. The body averages 14 mm in thickness. The interior is Yellow/Brown 6B in colour, while the exterior ranges from Green/Brown 6A, through Yellow/Brown 6A to Brown 4B.

#### Weight -2172 g.

*Parallels* This vessel is similar to vessel 10, except for the colour, and so the parallels for it are the same.

Vessel 16 - (not illus.). Description The fabric is gritted, and there are grits up to 3 mm long. The interior is smooth, while the exterior is very smooth and shows signs of burnishing. There are some accidental fingernail marks on the interior. There is one base sherd. The body averages 12 mm in thickness. The interior is Brown 4A/B in colour, while the exterior is Yellow/Brown 4B.

#### Weight -217 g.

*Parallels* No close ones can be given, because of the lack of decoration. It can however be indentified as belonging to Group 3.

Vessel 17 - (not illus.). Description The fabric is gritted with pieces up to 13 mm long. The inner surface of the vessel is very worn as the grits stand clear of the surface. The outer surface is only partially worn and is very smooth where it is not. No decoration survives. The surviving base sherds show that it had a flat bottom and gently sloping sides. The surviving thickness of the body is 8 mm. The interior ranges in colour from Brown/Red 5A, through Yellow/Brown 5B, to Brown 4A, while the exterior is Yellow/Brown 5B, smoked Green/Brown 3A in places.

Weight – 985 g. Parallels As vessel 16

#### Miscellaneous fragments

Besides the enumerated vessels that form the bulk of Group 3, there are a number of sherds

Weight -154 g.

that cannot be assigned to specific vessels. They include many body sherds, some base sherds, an abraded rim and what looks like the remains of a large pierced lug handle. It is possible that these sherds include vessels that come from Trevisker styles other than style. 1, but they have not been recognised, as they are undecorated, and so lack diagnostic features.

Weight -3980 g.

#### The bronzes (Fig. 14)

The Axe - no. 1. Description A heavily made axe with high flanges, unemphatic stop with 'sloping shelf' rather than a real stop-ridge, undecorated, relatively outcurved blade and curved cutting edge.

Length - 149 mm Width of Butt - 21 mm

Width across Flanges - 34 mm Width of Blade - 63 mm

Analysis of the Metal The analysis was performed by the optical emission spectroscopy method. The figures represent the percentage of each element present. They were supplied by Dennis Britton, but they have also been published by Rowlands in his survey of Middle Bronze Age metalwork (Rowlands, 1976; Britton MS.).

Cu 88.0, Sn 10.4, Pb 0.5, As nd, Sb -, Ni 0.071, Bi nd, Fe 0.058, Zn -, Ag 0.0077, Mg -, Au -.

*Parallels* High flanged palstaves are well known in South Western contexts, especially from the Taunton area (Smith, 1959, 167-8). The palstaves in the Taunton Workhouse Hoard (*Inv. Arch.* GB 43, 2(2) 32), and those in the Grimstone, Dorset, find (Dorset County Museum) where they were associated with heavy incised armrings, may be cited as typical. Further west, palstaves of this type are rarer. The find from County Hall, Truro, contained four (Hencken, 1932, 80-1, 309, Royal Institution of Cornwall). Single finds of high flanged palstaves are known from Perranzabuloe (University Museum of Archaeology and Ethnology, Cambridge), St Mawgan-in-Pydar (RIC), and near Portreath (Cambridge). Outside the South West, high flanged palstaves are known from the North Welsh hoards of Acton Park and Mynachdy-Gwyn (Smith, 1959, 187). All these pieces are similar to, but not directly comparable with, the Tredarvah axe.

The important hoard from Glentrool, Kirkcudbrightshire, contained an axe with high flanges bent inwards, and with the flange running down the blade to just above the outturned cutting edge, together with a rapier blade, a spearhead, two razors, a tanged knife, fragments of twisted neckring, a pin, four punches, one glass bead, thirteen amber beads, and a bronze pendant (Coles, 1959-60, 113-4, Pl. 1). The lower half, especially, of this axe is comparable with the Tredarvah piece, and both have features which recall wing-flanged axes (Coles, 1959-60, 114; Smith, 1959, 171-3; Burgess, 1974, 313-4, note 229; Britton MS).

The Spearhead - no. 2. Description Two joining parts of a side looped spearhead. The socket is oval-sectioned above the loops, and the somewhat abraded blade appears to have been leaf-shaped. The base of the socket is decorated with two lines of grooving, or possibly punched dots.

Length – 163 mm Width across Socket Mouth – 17 mm

Width across Blade - 22 mm

Analysis of the Metal As piece 1.

Cu 91.5, Sn 8.2, Pb nd, As nd, Sb -, Ni 0.096, Bi nd, Fe 0.18, Zn -, Ag 0.0067, Mg -, Au -.

*Parallels* Chance-find side looped spearheads are known at Mawnan and Roche, Cornwall (RIC). The base of a piece survived in the Monkswood Hoard, Bath, Somerset together with knobbed sickles, and assorted ornaments (*Inv. Arch.* GB 42, 2(2), 23). A similar piece was found at the occupation site at Thorny Down, Wiltshire, in probable, but not certain, association with the occupation material from the site characterised by Deverel-Rimbury pottery (Stone, 1941, 114-33). Rowlands placed the spearhead within his side looped Group 2 (Rowlands, 1976, 54). Comparative material for the decoration is rare in Britain. Rowlands suggests that similar decoration appears on the unassociated armring from West Buckland, Somerset (Evans, 1881, Rowlands, 1976, 87). One of the Arreton Down type


Fig. 14 Tredarvah Bronzes (½)

spearheads from Waddon Hill, Dorset, has pointillé decoration on the blade, and a late peg-hole spearhead from Jordan Hill, Weymouth, has pointillé and line decoration on the shaft (both Dorset County Museum). However, a good parallel for the decoration is a basal-looped spearhead from Glentrool which has a similar feature around its socket mouth (Coles, 1959-60, 114).

The Tanged Knife - no. 3. Description Two joining pieces of a knife blade with a rivet hole in the tang. The blade is double sided and the tip is missing.

 $Length - 86 \text{ mm} \quad Width - 20 \text{ mm}$ 

Analysis of the Metal. As piece 1.

Cu 89.6, Sn 10.4, Pb nd, As nd, Sb -, Ni 0.085, Bi nd, Fe 0.089, Zn -, Ag 0.009, Mg -, Au -.

*Parallels* A rather larger (length 127 mm) otherwise similar rivet-holed blade is in the Ashmolean Museum. Its provenance is given just as 'Cornwall'. Two very similar pieces, one complete, formed part of the Monkswood Hoard (*Inv. Arch.* GB 42, 2(2), 20, 21), and a comparable blade appeared in the Glentrool find (Coles, 1959-60, 114, Pl. 1, 4).

The Blade - no. 4. Description Three badly corroded, but joining fragments forming part of a triangular section blade. The piece is too poorly preserved for further comment. Length - 55 mm Width - 14 mm

The Central Portion of a Quoit-Headed Pin - no. 5. Description Two joining pieces survive of this bronze, forming the upper part of a pin stem with slightly curved projections on both sides of the stem head. There is no reason to doubt that this represents the central portion of a quoit-headed pin. The shaft is sub-rectangular in section, while the projections are flattened.

Length - 47 mm Width - 21 mm

Analysis of the Metal. As piece 1.

Cu 88, Sn 11.1, Pb 0.17, As nd, Sb -, Ni 0.45, Bi nd, Fe 0.2, Zn 0.32, Ag 0.019, Au -, Mg -.

*Parallels* No other quoit-headed pins are known from Devon or Cornwall, but they form a well recognised group in southern England (Smith, 1959, 154, map). Such pins occurred in the Monkswood Hoard (*Inv. Arch.* GB, 42, 2(2), 1), the Taunton Workhouse Hoard (*Inv. Arch.* GB 43, 2(1), 1-10), and the Barton-Bendish, Norfolk Hoard (*Inv. Arch.* GB 7, 2(1), 4). The Norfolk pin was decorated with incised triangles, diagonally hatched. The narrow, thick loop of the Tredarvah pin brings it into line with the Somerset group, but the rectangular section is a feature of the Sussex finds (Rowlands, 1976, 87).

The Side-Looped Pin - no. 6. Description Thirteen joining parts making up a side-looped pin. The piece is very corroded and the tip is missing. On one side of the central part of the pin there is a loop (broken). Above the loop the shaft swells out, with a more decided bulge on one side than the other, and since the junction of the fragments on this part of the pin is not entirely certain, it is not clear whether the loop is on the more decidedly bulged side or on the other. The piece terminates in a nail head. The decoration is very unclear, but it appears to consist of zones of horizontal and diagonal grooved ornament, above the loop. Length - 147 mm Width at Swelling - 7 mm

Parallels A similar pin which has cross-hatched, apparently incised, decoration, and an amber mount set into the head was found in the Fowey River (*Archaeologia*, 12, 1809, 414, Pl. 51). Hawkes defined a class of 'Picardy Pins' with swollen shafts horizontally pierced, expanded heads and incised linear decoration, of which five examples are known from southeast England (Hawkes, 1942). He related this group to northwest French material, which included a pin with a side-loop set on its swelling from the Villers-sur-Athie hoard found with a torc of twisted bronze wire and sixteen cast bracelets, the majority of which had engraved decoration (Hawkes, 1942, 36). A further two side-looped pins are known from the Amiens district (Hawkes, 1942, 37, Fig. 7, 2, 3). A comparable pin, the swelling of which carries oblique decoration, was found at Plaitford, Hampshire, together with two cast torsion torcs, and with Deverel-Rimbury pottery nearby (Hawkes, 1942, 44-7, Fig. 11).

Related to these pins are a group with straight shafts carrying side-loops, one of which

was found at Amiens (Hawkes, 1942, 37, Fig. 7, 1) and another in the Le Plainseau hoard, Amiens (Rowlands, 1976, 88). They have been related to a small series from Brandenburg (Butler, 1963, 148-9). An example occurred in the Glentrool hoard (Coles, 1959-60, 114, Pl. 1). A pin, similar but with an elaborately spiked head, and a lozenge set on the shaft came from Dorchester, Dorset, and comparable pieces are known from Lakenheath, Suffolk, and Ingleton, North Yorkshire (Piggott, 1949). From Hanley Cross, Sussex, came a pin with a disc head, pierced shaft, and lozenge side plate, together with two Sussex loops and a quoit-headed pin; possibly they came from a barrow (Curwen, 1954, 202, Fig. 62).

The Double Spiral - no. 7. Description Two apparently joining pieces of an object formed of bronze rod of rectangular section bent into two opposed coils or spirals. It is not known what proportion this represents of the original object.

Length - 13 mm Width - 22 mm

*Parallels* The fragmentary nature of the piece renders comparison difficult. A pin with flat, opposed double spiral head where the shaft divides to curl over into the spirals, was found in a barrow in Dorset (British Museum), and a similar pin came from a burial at Sewell, Totternhoe, Bedfordshire, together with a Wessex Middle Rhine Beaker (Clarke, 1970, pt. 2, 574, Pl. 3, British Museum P1976, 4-1, 1-4). Spectacle spirals are a common form of ornament throughout the Bronze Age over a large area of northern Europe. These are formed by bending a length of rod double and coiling the ends, leaving the loop for suspension (Ottoway, 1973, 300-1). The Saint-Brieuc-des-Iffs group from Brittany contained a rather larger object of single coil form. Briard placed this group in his *Bronze Final II* (Briard, 1965, 175-6, Fig. 61). The opposed double spiral motif reappears as the decorative mount on the hilt of a carp's tongue sword from Lincoln (Evans, 1881, Fig. 350). As a decorative form, spirals were common generally throughout the Bronze Age, although much more apparent in Europe than in Britain. British material which may be compared directly with the Tredarvah piece is apparently lacking.

The Fragments of Pin Shaft - no. 8. Description There remains five joining fragments of pin shaft and a further single fragment (latter not drawn), all in a corroded state. The joined section is probably part of the shaft of the quoit-headed pin previously described, but it could be part of another piece.

Length of joined section -93 mm Width -5 mm

#### The stone objects (not illus.)

The Whetstone This is a sub-rectangular lump of fine grained granite elvan. Originally it was at least 120 mm long.

# Length at longest - 114 mm Width at widest 38 mm

Whetstones have been found at other South Western Bronze Age sites which have produced pottery that falls into the Trevisker series, including Dean Moor (Fox, 1957, 71-3, Fig. 23, 24). The granite elvan from which this is made appears to be of local origin.

The Saddlequern (Pl. I) This is a fine grained granite block, which has been roughly shaped, as can be seen by the signs of dressing that are visible on all the outer surfaces. The base has been roughly flattened; the upper surface is smooth and even, and has a rectangular depression worn in it. The bottom of this is very smooth indeed. The depression has a maximum depth of 79 mm.

Length at longest – 460 mm Width at widest 355 mm

Saddlequerns have been found at a number of South Western Bronze Age sites, including Trevisker, Dean Moor, and Dainton (ApSimon, Greenfield, 1972, 345; Fox, 1957, 70, Fig. 24; R.J. Silvester, per. comm.). The ones found at these other sites are flattish pieces of stone, rather than being hollowed out as this one is.

# Other objects (not illus.)

A lump of Iron Ore A lump of goethite was found. This form of iron oxide is common in the mineral veins of the St Just area.

The fact that iron ore was discovered does not mean necessarily that the inhabitants of the site experimented with iron working, as it shows no signs of having been heated. At Dean Moor, 5 lb of unworked iron ore was analysed from the Bronze Age site (Fox, 1957, 73-4).

Slag There was some slag found at the time of the initial work on the site, but it is not now available.

*Charcoal* There was some charcoal found at the time of the initial work on the site, but it is not now available.

# DISCUSSION

#### The pottery

The stratigraphical problems of the site have been discussed in an earlier section, and it appeared that the pottery, charcoal, burnt clay, goethite and stone objects came from layer 4 while the position of the bronzes is uncertain.

The Trevisker series was determined originally to explain the different styles of pottery current during the Bronze Age at Trevisker, St Eval (ApSimon, Greenfield, 1972) but has since proved useful in the chronological discussion of that and other sites in the South West (ApSimon, 1969, Pearce, 1974). The differing amounts of Trevisker style 1 pottery and Trevisker style 3 pottery at Tredarvah must be borne in mind, as the preponderance of style 1 vessels may mark the main period of occupation of the site. However, as the style 3 vessels are represented by very fine wares (5-6 mm thick) it might be expected that there would be fewer sherds surviving. Evidence for the contemporaneous use of cord impressions, sharply incised lines, bird-bone impressions, flat-face cordons, and pierced lug handles on Trevisker series vessels comes from Ash Hole, Brixham, Devon. Here a vessel in style 1 fabric has all five elements on it (ApSimon, 1969, 22, Fig. 1). The single sherd of group 2 pottery with impressed comb decoration, vessel 5, Fig. 12 no. 10, could be a Beaker sherd because of the decoration but equally comb impressions could be part of the Trevisker series potter's repertoire along with bird-bone stamps. As far as dating is concerned it is considered as part of Group 2.

It may be that Groups 1 and 3 are the earliest at the site, but it must be remembered that Group 1 may represent a single vessel. At Trevisker, sharp incisions predate 'U' shaped ones, although the reverse appears to be the case at Gwithian (Thomas, Megaw, Wailes, 1961, 202). However, it must be remembered that styles 3 and 4 represent artificial stages in a developing pottery style (ApSimon, Greenfield, 1972, 333). The pottery therefore, is not inconsistent with an assemblage of one occupation sequence dating to the middle of the Trevisker series, when cord impressions were being superseded by stamped and incised decoration.

The pottery from this site, because it relates to the Trevisker Series, can be placed in its relative position within the Bronze Age of the South West, and the country as a whole. Trevisker style 1 pottery can be placed as contemporary with Wessex II, that is the Camerton-Snowshill tradition (ApSimon, Greenfield, 1972; Patchett, 1944, 31). This places it late in the Early Bronze Age. Later in the sequence, there are two C14 dates, one from the end of the settlement at Trevisker, associated with style 4 wares (NPL 134, 1110  $\pm$  95 bc), and one from layer 5 at Gwithian (NPL 21, 1120  $\pm$  103 bc) which are roughly contemporary. It seems, therefore, that the Trevisker series starts in the late Early Bronze Age, and runs through to at least an early phase of the later Bronze Age. The main decorative feature of the pottery changes from cord impressions to slash decoration, but when this happened is unknown, as is the length of time covered by the overlap between the two types. The pottery from Tredarvah probably dates from this period of overlap, which can reasonably be seen as fairly early in the conventional Middle Bronze Age, but the exact chronological position and the length of the occupation sequence is unknown.

#### The bronzes

The circumstances of the find probably do not justify the treatment of the bronzes as a group deliberately deposited at one time to form a close association. Nevertheless, the find circumstances, the evidence of form and appearance, and such metal analysis as has been performed suggest a coherent group accumulating over a relatively short period of time.

The group of bronzes is of mixed character, containing as it does tools, a weapon (or weapons) and personal ornaments. The quoit-headed pin brings the group into clear relationship with those Somerset and eastern British finds which have this feature, and were considered by Smith to belong to her 'Ornament Horizon' (Smith, 1959, 151-5), and by Butler to belong to his Taunton-Barton-Bendish phase of the Bronze Age (Butler, 1963, 218-23). The Tredarvah side-looped pin is brought into association with the same horizon or phase since the comparable pin from Plaitford, Kent, was found with two cast spiral torcs of the kind which are very familiar in Ornament Horizon contexts (Hawkes, 1942, 44-7).

Metalwork of Ornament Horizon character has been previously recognised in Cornwall in the gold hoard found at Towednack, which included spiral twisted torcs (Hawkes, 1932, 177-86), and in the stray side-looped pin from the River Fowey. The probable group from the Helston area, with its three penannular armrings with swollen central ribs and punched decoration on their outer surfaces, falls into the same broad phase (Thomas, 1964, 4-6; Rowlands, 1971, 183-99), although the Helston armrings differ in detail from the more characteristic examples from Grimstone (Dorset County Museum), and Norton Fitzwarren (Langmaid, 1970, 105-6). Two pin fragments, and the lower shaft of a third pin came from layer 3 at Gwithian (Thomas, Megaw, Wailes, 1961). One of the fragments had a ribbed pyramidical head and a zone of incised herringbone decoration on the shaft, and the other had a biconical ribbed head decorated with a herringbone pattern and a zone of crosshatching on the shaft (Rowlands, 1976, 203-4, Pl. 19, 166; Megaw, 1976).

In Devon 'Ornament Horizon' material is at present represented only by the presumably stray fragment of armring from the Mount Batten site (Clarke, 1971, 145), and the coiled finger ring and perhaps the amber beads from Kent's Cavern, Torquay (Pearce, 1974, 186-8). Finds of this nature are, of course, comparatively common in Somerset and Dorset.

The spearhead and knife blades belong comfortably with the metalwork of the Taunton phase, although the ornamented base of the spearhead is unusual. Rowlands has suggested that the high flanges, which Smith regarded as a diagnostic feature of the axes, may have had an Irish origin, although further study is needed to clarify this position (Rowlands, 1976, 188). The wing-flanged affinities of the Tredarvah axe bring it into association with axes of this type which are widely distributed over northern Britain and Ireland, but rare in southern Britain (Smith, 1959, 172; Rowlands, 1976, 25; Herity, Eogan, 1977, 167-8, 173).

As a group, the Tredarvah find embraces Ornament Horizon forms which derive ultimately from Northern France/North West Germany, and elements which figure in the Irish/North British tradition. In this it is closely matched by the corresponding Glentrool find from the North West. The northern European influences perceptible at Tredarvah appear again in the South West in the, presumed Baltic, amber mount in the head of the Fowey pin, the lost amber beads found with torcs from Wedmore, Somerset, (Evans, 1881, 376), and perhaps the amber beads from Kent's Cavern (Pearce, 1974, 186-7), together with the range of jewellery forms already mentioned. Western connections again appear in the presumed Irish gold from which the Towednack pieces were made and the Irish-type palstave found near Penzance (Hencken, 1932, Fig. 226; Rowlands, 1976, 300).

Any absolute dating of Middle Bronze Age material from Britain is still very uncertain (Rowlands, 1976, 161-2). The currency of Ornament Horizon and other associated bronzes may for the present be regarded as falling within the period c. 1300-950 BC, but further work may well modify this dating.

#### The site and its implications

Thomas initially interpreted the site as a hut of standard South Western Bronze Age type (1969, 5). No structures are recorded but the domestic nature of the site is a reasonable inference in view of the activity indicated by the pottery and the saddlequern. The quern especially adds to this impression because it is plainly an awkward object to move. The bronzes and the slag together may suggest that metalworking was carried out at the site either during or fairly immediately after its currency as an occupation site, although no examination of the slag has been carried out and the character of the group of bronzes is consistent with a domestic assemblage.

Tredarvah appears to be a domestic site which was occupied with no observable break from perhaps the later part of the Early Bronze Age through to at least the early part of the Middle Bronze Age. Gwithian is its nearest parallel as a coastal site in the same area, although at Gwithian occupation appears to have been interrupted.

Trevisker, with its timber-built huts, represents the lowland equivalent of the stone huts that are a feature of Dartmoor and Bodmin Moor (ApSimon, Greenfield, 1972). The rough contemporaneity of the two types of site is demonstrated by the fact that both Dartmoor sites and the Trevisker site have produced pottery of developed Trevisker style 1 (ApSimon, 1969, 26) and the difference in constructional material and technique represents utilisation of the local environment. The length of time that the settlement continued on the high moorland is unknown, though the presence of Trevisker style 4 pottery from Dartmoor sites suggests that these sites do continue into the conventional Middle Bronze Age between about 1300 BC and 1000 BC (ApSimon, 1969, 26), in spite of the recently suggested but less likely terminal date of c.1300 BC (Burgess, 1974, 218). This suggests that Tredarvah was a domestic site forming part of a settlement pattern that covered both the moors, and lowland areas of the Bronze Age South West.

The lack of association between the bronzes and the pottery at Tredarvah means that there is still no fully published site in the far South West that has produced stratified deposits of both pottery and bronzework.

#### Note

In this publication S.M.P. was responsible for the description and discussion of the metalwork, and T.P. was responsible for the description and discussion of the pottery and other finds and for the preparation of the illustrations. We are jointly responsible for the final form of the report and for the discussion of the site and its implications.

# Acknowledgments

We should like to thank Mr A. ApSimon who commented on the pottery and Miss Bryony Orme who examined vessel 5. We are grateful to Mr Douch who allowed us easy access to the material and to records, and Mr D. Britton for access to his notes on the bronzes. Petrological analysis of the pottery proved not to be a practical possibility, and it must await examination as part of a wider undertaking. The charcoal from the site is not available but in view of the lack of detailed stratigraphy it would be unsuitable for radiocarbon dating.

# Bibliography

- Annable, F.K. and Simpson, D.D.A., 1964. Guide catalogue of the Neolithic and Bronze Age collections in Devizes Museum
- ApSimon, A.M., 1958. 'Bronze Age pottery from two Dartmoor hut groups', in Fox, 1958, 216-19
- ApSimon, A.M., 1969. 'The Bronze Age pottery from Ash Hole, Brixham, Devon', Proc. Devon Archaeol. Soc., 26, 21-30
- ApSimon, A.M., and Greenfield, E., 1972. 'The excavation of Bronze Age and Iron Age settlements at Trevisker, St Eval, Cornwall', Proc. Prehist. Soc., 38, 302-81
- Briard, J., 1965. Les depôts Bretons et l'age du Bronze atlantique
- Britton, D., MS. Tredarvah, Penzance: objects of bronze
- Burgess, C., 1974. 'The Bronze Age' in Renfrew, 1974, 165-232, 291-329
- Burgess, C. and Miket, R., 1976. 'Settlement and Economy in the Third and Second Millenia BC', Brit. Archaeol. Rep. 33
- Butler, J.J., 1963. 'Bronze Age connections across the North Sea', *Paleohistoria*, 9 (whole volume)
- Clarke, D.L., 1970. Beaker Pottery of Great Britain
- Clarke, P.J., 1971. 'The Neolithic, Bronze and Iron Age, and Romano-British finds from Mount Batten, Plymouth, 1832-1939', Proc. Devon Archaeol. Soc., 29, 137-61
- Coles, J.M., 1959-60. 'Scottish Late Bronze Age Metalwork . . .', Proc. Soc. Antiq. Scot., 93, 16-134

Council for British Archaeology, Study Group for Romano-British Coarse Pottery. Colour chart for use in describing earthenware pottery in archaeological reports

Curwen, E.C., 1954. The Archaeology of Sussex, 2nd edition

Douch, H.L., 1964. 'Tredarvah, Penzance', Cornish Archaeol., 3, 85

- Evans, J., 1881. The ancient bronze implements, weapons, and ornaments of Great Britain and Ireland
- Fox, A.E., 1957. 'Excavations at Dean Moor, in the Avon valley, 1954-6', Trans. Devonshire Assoc., 89, 18-78
- Fox, A.E., 1958. 'Twenty-fourth report on the archaeology and early history of Devon', Trans. Devonshire Assoc., 90, 213-29
- Hawkes, C.F.C., 1932. 'The Towednack gold hoard', Man, 32, 177-86
- Hawkes, C.F.C., 1942. 'The Deverel urn and the Picardy pin, a phase of Bronze Age settlement in Kent', Proc. Prehist. Soc., 7, 26-47
- Hencken, H., 1932. The Archaeology of Cornwall and Scilly
- Herity, M., and Eogan, G., 1977. Ireland in Prehistory
- Inv. Arch. Inventaria Archaeologia

Langmaid, N., 1970. 'Excavations at Norton Fitzwarren', Somerset Archaeol. Natur. Hist., 114, 105-6

- Megaw, J.V.S., 1976. 'Gwithian, Cornwall: Some notes on the evidence for Neolithic & Bronze Age Settlement', in Burgess, Miket, 1976, 51-79
- Ottoway, B., 1973. 'The earliest copper ornaments in northern Europe', Proc. Prehist. Soc., 39, 294-331
- Patchett, F.M., 1944. 'Cornish Bronze Age pottery', Archaeol. J., 101, 17-48, and Archaeol. J., 107, (1950), 44-65
- Pearce, S.M., 1973-4. 'The finds of Bronze Age material from Kent's Cavern, Torquay', Trans. Proc. Torquay. Natur. Hist. Soc., 16, 176-94
- Piggott, C.M., 1949. 'A late Bronze Age hoard from Blackrock and its significance', Proc. Prehist. Soc., 15, 107-21
- Radford, C.A.R., 1952. 'Prehistoric settlements on Dartmoor and the Cornish moors', Proc. Prehist. Soc., 18. 55-84
- Renfrew, C. (ed), 1974. British prehistory, a new outline
- Rowlands, M.J., 1971. 'A group of incised decorated armrings and their significance for the middle Bronze Age in southern Britain', *Brit. Mus. Quart.*, 25, 183-99
- Rowlands, M.J., 1976. 'The production and distribution of metalwork in the middle Bronze Age in southern Britain', *Brit. Archaeol. Rep.*, **31**,
- Smith, M.A., 1959. 'Some Somerset hoards and their place in the Bronze Age of southern Britain', Proc. Prehist. Soc., 25, 144-87
- Stone, J.F.S., 1941. 'The Deverel-Rimbury settlement on Thorny Down, Winterbourne Gunner, south Wiltshire', Proc. Prehist. Soc., 7, 114-33
- Thomas, A.C., 1964. 'An unrecorded Ornament Horizon hoard from the Helston area', The Lizard Magazine, 2, 4-6
- Thomas, A.C., 1969. 'The Bronze Age in the South West', Archaeol. Rev., 4, 3-13
- Thomas, A.C., and Megaw, J.V.S., and Wailes, B., 1961. 'The Bronze Age settlement at Gwithian', Proc. West Cornwall Field Club, 2, 200-15

Exeter City Museums

#### NOTE

Dr C.A. Shell suggests that the double spiral may sit on the upper surface of the pin head here referred to as part of a quoit headed pin on the basis of the fact that the lower side of one spiral has a mark in the patination which suggests possible contact with the upper surface of one side of the pin, which itself has a similar curvature. If this was correct the two objects would then make up as a double spiral headed pin with the spirals above the pin head. At present exact parallels are illusive and clearly this possibility must be investigated further.

# Review

The Stone Circles of the British Isles by AUBREY BURL . 10 x 71/2 in. xxii + 410 pp., 36 plates, 50 figs., ISBN 0 300 019726. London, Yale University Press, 1976: £10

For the first time our British and Irish stone circles, more than nine-hundred (900) of them, have been the subject of a scholarly scrutiny, which has involved classification. identification of regional groups and variations. Three centuries have passed since John Aubrey portrayed them, in Part I of his still unpublished Monumenta, seeing them as temples and peopling them with Druids. In Cornwall William Borlase described our own circles in The Antiquities of Cornwall (1754) and corresponded with William Stukeley concerning them. A century later, William Collings Lukis, better known for his work on Brittany's Carnac megaliths, and William Copeland Borlase, compiled Prehistoric Stone Monuments: Cornwall (1885), published by the Society of Antiquaries of London. Cornwall was to be the first section in a series about British circles and other prehistoric stone monuments. In the event, however, only Cornwall was published because of a disastrous fire at the printers. Cornish circles were examined in a series of papers by A.L. Lewis, published in the Journal of the Royal Institution of Cornwall (1896, 1898, 1899, 1905) and further considered in the first volume of the Victoria County History (1906) by G.F. Tregelles.

In Aubrey Burl's book, Cornwall is contained within a chapter on Western Britain. Bodmin Moor and Land's End being accorded especial sub-sections, and in the Gazetteer, which lists name, condition, grid reference, diameter, architecture and other details, the county has twenty-five (25) entries. These circles are on high ground and, as the author stresses, the number is arbitrary because the march of earlier destruction is impossible to establish. We should recall that William Borlase recorded what might have been the largest standing stone in the county, perhaps the remnant of a great circle. It stood at Mên-Perhen, in the parish of Constantine and 'made above twenty Stone Posts for gates. when it was clove up by the farmer'. Thus the peculiar behaviour of a country lane or a

field boundary may still preserve some remnant of an erstwhile circle!

An extended consideration of function is included in the section on Cumbria which has large circles, large enough, it is claimed, to dance within. Although folklore and legend are skilfully attached to archaeological reality, one is left with the feeling that these considerations might have been accorded an especial chapter and separate listing. Aubrev Burl is also careful not to people his circles with Druids, although he recounts Caesar's comments on the British origin of their practices and the continuity of design inherent in certain later prehistoric ritual monuments. Notwithstanding, he makes a point that should be reflected upon, namely the correlation between certain groups of circles and later Iron Age provinces. After all, designations such as Druid and Damnonii, derived from the classical writers, merely indicate the point at which our ancestors first stepped upon the stage of written history. Thus the circles and barrows of the South West could be considered as social artefacts marking the earlier stages of a distinctive people.

Megalithic yards and celestial bodies are treated with commendable caution while claims for Neolithic computers are adroitly avoided. Aspirants in this area would do well to consider the permutations of dimension and alignment that our traffic islands, as on the Bodmin bypass, afford. Such an exercise would make an interesting addition to the current moonshine, mostly beamed upon poor Stonehenge.

As a source for details of stone circles this book is unique and will take its place as the vade mecum, and quarry, for many years to come. Its price, £10 at the time of publication, and clear, pleasing style of publication should make this a book that many of our members will wish to buy. It is ever apparent that Aubrey Burl has found searching after antiquities (pace John Aubrey) a far from wearisome task, for we are faced with the distillation of a decade's pleasance of fieldwork, precisely ordered and appetisingly presented. Thus he can be forgiven for giving, in the Gazetteer, measurements solely in metres. All that has gone before was in feet and thus, as on the admirably lucid plans, the two expressions should have been side by side

# **PAUL ASHBEE**

# Bodwen, Lanlivery: A Multi-period Occupation

# **DAPHNE HARRIS**

with SUSAN PEARCE, HENRIETTA MILES, MARY IRWIN

Bodwen Farm has produced finds ranging from Neolithic to Medieval. Flints, a greenstone adze, and a rapier mould are described; excavations of an Iron Age round with Glastonbury style pottery, and of two Medieval pillow mounds are reported.

#### **PART 1: INTRODUCTION**

Bodwen farm (SX 068608), in Lanlivery parish, is six kilometres south of Bodmin and four kilometres north-west of Lostwithiel. It is situated on Helman Tor granite, and occupies an area of higher land in the marshy expanse of Red Moor, forming, in this waste moorland, a cultivated island or rather peninsula reaching out to the east of the north-south ridge which culminates at its northern end in Helman Tor. The granite is very near the surface, and in places emerges from the plough soil in large rounded outcrops. Some of these have been removed, and lie on top of the field hedges; others, which are part of the underlying bedrock, remain, forcing plough or tractor to make a detour around them. In places the solid granite is capped by a variable depth of rab, the product of sub-aerial weathering in situ.

The Bodwen fields (Fig. 15) have produced chance finds which cover many periods. The farmer, Mr J.F. Pollard, has carefully preserved these, and in 1970 he took some of his flints to an archaeological day school in Bodmin organised by the Extra-mural Department of Exeter University. Since then both he and members of the Cornwall Archaeological Society have done regular fieldwork, especially after ploughing. Two mounds, which were excavated by Henrietta Miles in 1971, proved to be pillow mounds; there is a note on them in part 6. The flints which have turned up in considerable numbers are described by Mary Irwin in part 2. A greenstone adze found in a garden near the farmhouse is discussed by Susan Pearce in part 3. One find of considerable interest was a portion of a stone rapier mould, which was seen after deep ploughing. Later, a careful watch was rewarded by the finding of another piece of the same mould. For a report on this by Susan Pearce see part 4.

In the summer of 1976 another discovery was made from crop marks. One of Mr Pollard's fields was planted with maize, and owing to the very dry summer the maize grew to an average height of only 1.2 metres, except for one place where, in the arc of a circle, it grew nearly double, to an average height of 2.1 metres. In the two adjacent fields, under grass and kale, the circle was completed by a line of greener grass and an earlier flowering of charlock. The line of the supposed ditch was planned, and when the maize had been cut a small-scale excavation was carried out, which showed the feature to be an Iron Age round (part 5).



Fig. 15 Map to show location of Bodwen Farm and of features and find spots described. Based on an Ordnance Survey map of 1907.

#### PART 2: THE FLINTS Mary Irwin

Over 218 flints have been collected at Bodwen, chiefly from fields on the edge of Red Moor. Flint is not natural to Cornwall; it is only found on the beaches; and thus the pieces at Bodwen were probably brought from the south coast where flint pebbles are plentiful. Most of it is grey, medium to dark, but there are some pieces of brown, notably the blade (Fig. 16, 5). The broken adze (Fig. 16, 1) is of brown chert. There are also several pieces of poor quality flint.

Of the 218 pieces examined, eleven are water-worn pebbles which had not been struck. Fourteen other pieces of pebble retained most of the cortex. The rest were broad flakes, chips and a few blades, the product of flint working on the site. There were two fine platform cores.

Two main types of implement can be distinguished: knives made from trimmed blades (Fig. 16, 5, 7) and scrapers (Fig. 16, 8-11). Two of the scrapers (9, 10) were small with fine working round most of the edge. These small circular scrapers are typical of the South West, the 'thumbnail scrapers' which are found here from the Neolithic onwards.

In addition, a small adze, four arrowheads and a fabricator have been distinguished. The adze, which is broken, is of light brown chert, and either Neolithic or Early Bronze Age (Fig. 16, 1). Two roughly-shaped triangular arrowheads (Fig. 16, 3) and one leaf-shaped one with a rough tang (Fig. 16, 2) are late Neolithic in type; the fourth arrowhead is very small, barbed and tanged, and finely pressure flaked (Fig. 16, 4). The flints are too general in type to be diagnostic; they merely suggest Neolithic or Early Bronze Age occupation. It is not clear whether triangular and barbed-and-tanged arrowheads are contemporary in South-Western contexts. Triangular types originated in the late Neolithic before the intro-



Fig. 16 Flints found in Bodwen fields (1/2).

duction of barbed and tanged arrowheads in the Beaker period. In Devon and Cornwall a large number of flint scatters produce not only triangular and barbed-and-tanged arrowheads but also the leaf-shaped type of the early Neolithic (Miles, 1976). It remains to be demonstrated whether such assemblages indicate long use or re-use of a site, or whether all types were contemporary. At Bodwen all the arrowheads were picked up from ploughsoil.

The position of the flint-yielding fields on the edge of Red Moor suggests that traces of earlier occupation of the site might yet be found.

#### Flints illustrated in Fig. 16

- 1 Chert adze, chipped. Neolithic/Early Bronze Age.
- 2 Leaf arrowhead with rough tang. Late Neolithic.
- 3 Roughly shaped triangular arrowhead. Late Neolithic. (Another not illustrated)
- 4 Finely worked barbed and tanged arrowhead, one barb broken.
- 5 Knife made from blade, brown flint, broken.
- 6 Fabricator. Edge battered. Fabricators are suggested to have been strike-a-lights. Late Neolithic/Early Bronze Age.
- 7 Blade, retouched along one edge, traces of use along the other; broken.
- 8 End scraper. Neolithic or Early Bronze Age.
- 9 Thumbnail scraper; edge carefully worked.
- 10 Thumbnail scraper.
- 11 End scraper, edge carefully worked.

# PART 3: THE ADZE Susan Pearce

The adze (Fig. 17) was discovered as a chance find in the orchard close to the house of Bodwen Farm (approximately SX 06896071) two fields away from the site of the univallate enclosure. It measures now 145 mm long by 55 mm at its widest point. It is flat on one side, rounded on the other, and broken off short. Petrological examination (serial number 1535) shows that the implement is made from Group 1 greenstone from the Mount's Bay area (Evens, Smith, Wallis, 1972, 239, 269). A tool of this kind is allotted a precise function with difficulty, but the flat side of the piece suggests that it was used as an adze.

In 1972 it was possible to distinguish, from the South West, thirteen adzes without shaftholes and several other possible examples, of which the Bodwen piece is one. They are made of a variety of rocks, and most of them come from Cornwall (Evens, Smith, Wallis, 1972, 238). The rocks belonging to Group 1 seem not to have been exploited much before the end of the third millennium, and their exploitation continued into the earlier part of the second millennium (Smith, 1974, 122).

# PART 4: THE RAPIER MOULD Susan Pearce

#### **Circumstances of the find**

The rapier mould (Fig. 18) was found in 1971 during ploughing on Bodwen Farm, near Helman Tor, at approximately SX 069610. About sixty metres from the find spot is the site of a univallate enclosure, or 'round', excavated during 1976. Excavation produced a range of Iron Age finds, but also one sherd of cord impressed ware found in the top of the subsoil under the base of the ploughsoil at a point where it would have been under the bank if any trace of the bank had survived. The piece, which measures approximately 75 mm by 85 mm, is of heavy gritted ware, red coloured on the outside and black inside. Non-microscopic examination suggests that it is of gabbroic ware. On the upper part of the sherd is a row of cord impressions set at an angle of about 60° above a slight cordon running across the piece (Fig. 21, no. 1). The sherd fits into the sequence of South-Western Bronze Age pottery, and there is no reason to doubt that it is of Bronze Age date.

# Description

The rapier mould survives in two non-joining stone pieces. The larger piece measures 253 mm long by 68 mm at its widest point. The second piece measures 56 mm long by 50 mm wide. These pieces form the greater part of one half of a bivalve mould which, when



Fig. 17 Bodwen. The greenstone adze  $(\frac{2}{3})$ .

complete, would have measured approximately 530 mm in length.

The outside of the mould is rounded, and the inner face flat. Cut into the matrix of the inner face is a hollow which would have moulded one side of a rapier blade, flattened lozenge shape in section and with a rather rounded trapeze shaped butt. No provision is made for rivets in the butt. The rapier would have measured 29 mm in width at its widest point and approximately 500 mm in length.



Fig. 18 Bodwen. The rapier mould (1/3).

The stone face of the mould hollow is darkened, presumably with use. There are no traces of dowel holes on the inner face so when in use the two halves must have been carefully bound together. The molten bronze would have been poured in through a vent giving onto the tip of the blade. Incised into the flat face of the mould, rather irregularly if not indeed half-heartedly, are a series of gas escapes, seven running from one side of the mould hollow, and eight from the other.

Petrological analysis (serial number 1536) shows that the mould is of greenstone and belongs in the epidiorite group (Evens, Smith, Wallis 1972, 273).

#### Discussion

A number of important issues are raised by the Bodwen find. It is necessary, first, to consider the chronological position of the Bodwen rapier mould in relation to the directly relevant finds from Cornwall and Devon, and to the sequence of Middle Bronze Age metal work as a whole. From North Crofty, Illogan, comes a similar rapier with a blade of flattened lozenge section and an apparently unnotched simple trapeze hilt; with it was a shield-decorated, unlooped palstave (Royal Institution of Cornwall). A second rapier and palstave pair, now lost, are known from Benalleck, Par. Judging by the available drawing (Borlase, 1872, 5) the rapier had two rivet holes, and may have had a flat central rib. Nothing is known of the palstave; Borlase likens it to the shield pattern piece from Godolphin (1872, 5, 41) but the comparison may not be very exact. The Lanherne, Mawgan-in-Pydar, group (Iago, 1814) seems to have contained a rapier, said by Evans (1881, 250) to have been twenty-one inches long with two rivet holes, a palstave, a saw blade, and several socketed axes, some of square-mouthed type (Hencken, 1939, 89). Unfortunately no further details appear to have survived.

From Crediton, Devon, comes the well-known group of two rapiers and two palstaves, believed to be an association on the authority of Sir John Evans (Inventaria Archaeologica, GB4, 1 - 2). One of the rapiers is unfinished, with an unnotched butt and a central flat rib on the blade. The blade of the other is a flattened lozenge in section with bevels; its butt has two rivet holes and two side rivet notches. One of the palstaves is unlooped and shield decorated, while the other is looped, slender, and with a trident decoration. The lost Chudleigh Knighton stone rapier moulds are equally well known. Complete plaster casts of these moulds show that both would have produced rapiers with flattened lozenge section blades and unnotched butts, one a rapier measuring 640 mm in length, and the other 565 mm. The shorter mould has a series of gas vents incised on both flat faces running back from the mould hollow. These are represented on the plaster casts as numbering seven irregular pairs on one face, and seven strokes on one side of the other face and nine on the other side. The vents do not match when the two faces are put together. In addition, the longer mould has cut into the matrix on one of its inside faces a second mould hollow which would produce a bronze strip 350 mm long by 16 mm wide, decorated with five longitudinal ribs (Exeter City Museum). Six rapiers with notches in the top corners of the butts were found together at Talaton (British Museum, Exeter Museum). Finally, there are two chance finds from Devon: the lost rapier from Winkleigh which was bevelled flattened lozenge in section with two rivet holes (Jewitt, 1873, Plate 5), and the weapon from Fice's Well, near Princetown, which has two notches in the butt and a lozenge section blade (Thompson, 1907).

A study of the origin and development of the British rapiers was published by Trump in 1962. She distinguished a Group II category which included well-made trapeze butted weapons of more than 355 mm in length; the earlier Group I series included experimental-looking smaller pieces, and the later Group III poorly produced and badly designed pieces (1962, 84 - 9). Within Group II could be defined five broadly contemporary classes: Wandsworth with two rivet holes in the butt; Chatteris of similar form; Mortlake with two rivet holes and two side rivet notches; Thetford with two rivet notches at the corners of the butt; and Keelogue, an Irish manufactured variant. All the Devon and Cornish rapiers fell into classes of Group II, except the Fice's Well piece considered to belong to Group III.

In distinguishing his group of North French trapezoidal-butted rapiers with British connections, Briard used much the same criteria as Trump had done for her Group II (1965, 96 - 100). Associations with rapiers in Britain are not common, and Trump had to rely upon the Crediton find to give a broad context for the whole of Group II, which seemed to indicate a currency contemporary with the Taunton metal-work phase, in spite of the later look of the transitional palstave (Trump, 1962, 88 - 9).

Burgess approached the rapier sequence by considering that those with a rounded midrib (his Group 1) are earliest, those with a flattened lozenge section come next (his Group II), and those with a triple ridge (Group III), a flattened mid-section (Group IV), in conjunction with the side notched butt feature, represent the final phases. This lifts Trump's Mortlake class and similar pieces out of her Group II and places them towards the end of the rapier sequence. The rapiers in the Crediton find are probably best placed within this later group and this, together with the transitional palstave, brings the hoard into the early part of the Penard phase (Burgess, 1974, 170 - 1).

The rapiers have been again considered by Rowlands (1976, 64 - 74, 195 - 201) who made a broad division between the earlier trapezoidal butted pieces, and the later notched forms. Within the earlier division he recognised an early Class 1 with rounded or slightly trapezoidal hilt and provision for four rivets, a Class 2 with two rivets which included in its Group 1 the lozenge sectioned blades and in its Group 2 elaborate lozenge or flat mid-rib sections, and a Class 3 with flat mid-ribs and notches or rivet holes. Rowlands dated the Class 2 series by the North Crofty find where the rapier was associated with a palstave of a type considered to have been current in the Taunton-Penard phases (1976, 36). The Brighton and Callander associations may suggest that these rapiers remained in use into the last millennium  $BC_1(1976, 70)$ .

The Crediton find apart, the South Western rapiers and rapier moulds generally fall into Burgess's Group II or Rowlands's Class 2 and should be very broadly contemporary. The North Crofty palstave looks earlier than the developed 'south-western' type and belongs to a style which began in the Acton Park phase but continued in currency into the Taunton phase (*Inventaria Archaeologica* GB 43, 2 (2), 32-4). The second mould on one of the Chudleigh pieces would have produced a type of decorative strip with a long currency throughout the earlier Bronze Age: a similar piece comes from a hoard of Taunton character from Norton Fitzwarren (Langmaid, 1971). Across the Channel, a Group II type rapier comes from the Lessart find in the Côtes du Nord belonging in the Tréboul phase (Briard, 1965, Fig. 26, 1) and from Tréboul, Finisterre, itself come fragments of Group II pieces (Briard, 1965, Fig. 29, 1, 3, 4). The hoard from Malassis (Cher) dated by Briard to his MBA III - LBA 1 transition contained a number of broken trapeze-hilted rapier fragments (Briard, Cordier, Gaucher, 1969, 48).

The currency of the Burgess Group II rapier seems to have been during the Acton Park phase of the early middle Bronze Age, contemporary with the shield-decorated palstaves and the side-looped and leaf shaped basal looped spearheads, but probably continuing into the succeeding Taunton phase. In real terms this, at present, might be considered as the fourteenth and thirteenth centuries BC.

The Bodwen rapier mould reinforces the evidence of the Chudleigh moulds and the Talaton group that rapier smithing was a relatively thriving industry in the South West during the early Middle Bronze Age. Like the Chudleigh pair, the Bodwen mould is in the Highland tradition of stone moulds. The Bodwen mould shares with one of the Chudleigh pieces the feature of incised gas vents which would have facilitated a good casting. Hodges drew attention to the extreme rareness of this feature on British moulds and its not uncommon appearance on Northern European pieces (Hodges, 1960, 154). The links between the British Acton Park phase and the Ilsmoor phase of north Germany have been demonstrated by Butler(1963, 211-15), and the connection continued into the succeeding Taunton phase, so that the transference of a casting technique would find a place here. Nevertheless, the Bodwen vents, and perhaps those on the Chudleigh mould, although judgement is difficult in the absence of the original, look very tentative; and the idea did not catch on in the British industries.

Nothing is known of the find circumstances of the Chudleigh moulds, or of the Talaton rapiers. The sherd of Bronze Age pottery found during the excavation of the Bodwen Iron Age round suggests the possibility of a Bronze Age living or working site in the immediate

vicinity. The sherd and the rapier mould appear to be broadly contemporary and, indeed, it is possible that the adze found in the vicinity was still current at the same time. The accumulation of evidence in the South West shows that a significant number of groups of bronzes, or of finds of bronze casting equipment, were associated with occupation débris (Pearce, 1976), and the Bodwen find may be included here. This may help to suggest a modification of the 'itinerant Bronze Age smith' model into, perhaps, something closer to the 'village bronzesmith' image.

# PART 5: THE ROUND

The existence of a circular ditch was indicated by the exceptional growth of maize in the dry summer of 1976 (Part 1). As the farmer wished a trench to be cut across the line of the ditch to investigate the cause of this growth, the Cornwall Archaeological Society undertook a limited excavation to confirm the suggested presence of a round. This was carried out by a small group over a four week period in November and December 1976. The site has now been ploughed again. The finds remain in the possession of Mr Pollard at Bodwen, and the records will be deposited at the Royal Institute of Cornwall Museum, Truro.

The round is situated (Fig. 15) on a slight north-facing slope at the lower end of the field called 'Middle Plain' on the Tithe Apportionment map of 1841. It is cut by old-established field hedges, and so extends into the adjacent fields on the north and east, called 'Great Plain' and 'Lower Plain' respectively. The fields have been continuously cultivated in recent times, and there was no sign at all of any feature until the crop mark appeared. Probing gave a very good indication of the exact course of the ditch, which was confirmed by the excavation, and also of the probable position of the entrance.

Three cuttings were made across the line of the ditch (Fig. 19). Cutting A was dug entirely by hand; in Cutting B the top soil and much of the ditch fill was removed by a mechanical digger belonging to the farmer and driven by his son; in Cutting C the top soil was removed mechanically and the rest excavated by hand. Cutting B was extended to look for evidence of a bank and of features inside the round; an area 5 m by 2 m was investigated further down the slope, in Cutting D, where it was hoped that the ploughsoil might be deeper and occupation features might have been preserved.

#### The ditch

In general, the ditch was V-shaped with a flattened bottom (Fig. 20). Cutting A is probably the most typical. The natural was a hard yellowish rab derived from the underlying granite. At the bottom and on the sides of the ditch (layer 1) it had weathered to a looser, more orange-coloured gritty soil, which held a lot of water in wet weather. The primary silt (2) was a very soft, dark brown soil, almost completely free of stone. Over this was a rather lighter brown soil layer (3) with some stone at the base, and resting on this layer, on the northern, or internal, edge of the ditch, were ten large blocks of stone, which could represent the tumble from a stone edging to the destroyed bank. Above this was a further dark brown, rather gritty soil (4), with small stones, containing flecks of charcoal and fragments of pottery, including the decorated sherds, and slate. This was covered by the dark fairly compact lower part of the ploughsoil, which was under a looser top soil; these could be distinguished by feel when trowelling, but looked the same dark brown colour in section.

Cutting B at first sight seemed rather different in section from A. Layer 1, the orange weathered subsoil, was present, and extended thinly up the southern slope as a capping to the natural rab. There were many stones, often quite large, sitting on this. In the northern half of the ditch the rab had hardened to a very smooth impenetrable yellow surface, with frequent rounded hollows. A level step of solid granite bedrock stretching right across the cutting formed the base of the ditch at the northernmost end. Over the granite and over part of the compacted yellow surface was a layer (2) of black gritty material, clearly distinguishable from layer 3 above it, which was a lightish brown soil, here providing the rest of the ditch fill up to the lower ploughsoil. This merged gradually into the fill at the southern end, a soft dark brown soil (4), virtually indistinguishable from the ploughsoil above it. It seems likely that the southern slope of the ditch is the true one, and that the northern end has been distorted by the removal, in the past, of large granite blocks, some of which



Fig. 19 Plan of Bodwen Round, with the position of excavation cuttings. The dotted line shows the course of the ditch, as indicated by crop marks and probing.

occupied the smooth rounded hollows, and whose weight compressed the natural subsoil into its present smooth texture.

Cutting C showed a similar outline to A. A hard yellow and brown layer (1) covered the lower slope on the east side; this was at first taken to be part of the natural subsoil, but later seemed to be a deposit in the fill of the ditch. There was a great deal of small stone at the bottom of the ditch, at the base of the primary silt, a layer (2) of very fine soft dark brown soil. Over this was another layer (3) of brown soil, similar to 2 though not quite so fine. This was overlain on the east side by a lens (4) of lightish brown gritty soil, and on the west by a darker soft soil (5) which merged into the ploughsoil. There was much stone on the slope below the lip of the ditch on either side, and a large block at the top on the inner side which could have been part of a bank revetment. Some of the Iron Age pottery was recovered from the very bottom of the ditch here among the stones at the base of layer 2, where some small quartz pebbles were also found.

#### The interior

Cutting B was extended to explore the position of the bank and an area inside the round, and the topsoil removed mechanically. This area was trowelled down to the subsoil. No evidence of a bank was found, although the subsoil immediately inside the ditch was rather harder than that further in; and no occupation features were seen. A scattering of pottery was found at the base of the ploughsoil, including Iron Age and Medieval sherds, and one sherd of Bronze Age ware (part 4; Fig. 21 no. 1).

Cutting D was opened, by hand, to look for evidence of occupation in an area in the downhill part of the interior where the soil should have been deeper and features better preserved. In fact, however, the ploughsoil was not as deep here as, for instance, in Cutting A, being only some 20 cm thick. No features were seen, and no finds made, except for one possible whetstone and one water-worn pebble.

# Finds

Stone

Five pieces of flint were found, all at the base of the ploughsoil. Only one had been worked (Fig. 21), and seems to be a broken portion of a knife.

Quartz pebbles were found frequently, four in A 1, one in the north extension of B in ploughsoil, five in C 2.

C 2 also produced part of a rubbing stone.

The ploughsoil in D contained one water-worn pebble and a small stone which seemed to have been used for sharpening, and to bear traces of rust in its cracks.

#### Metal

One very corroded fragment of a square-section nail was found in the ploughsoil in B, north extension.

#### Pottery (Fig. 21)

Four main groups of pottery can be distinguished at Bodwen, of which the first three are of a gabbroic fabric:

a) the Bronze Age sherd (Fig. 21, no. 1)

b) a few sherds of a coarse, gritty, gabbroic ware, red on the outside and very black on the inside, which are presumed to be Iron Age, but could possibly be Bronze Age.

c) necked jars of Iron Age Glastonbury style, with rounded bodies and everted rims, of fine brown gabbroic fabric with very little grit, the outer surface smooth and burnished, black or warm brown in colour, occasionally decorated.

d) a fairly coarse red ware with very fine grits, occasionally glazed; late Medieval.

1 Wall sherd of red-brown gabbroic ware with large grits, grey-black on the inside. Decorated with a cord-impressed line along the shoulder with traces of three similar lines going off at an angle from the first. From Cutting B, northern extension, at base of ploughsoil.

Cutting A

2 Wall sherd of coarse fabric with medium grits, group b, warm red on the outside, thick



Fig. 20

Ditch sections of Bodwen Round. The interior of the Round is on the left in each case.

black on the inside. One of four similar in layer 4.

- 3 Rim of smooth brown ware, burnished to a brownish-black on the outside and inside of the rim; group c.
- 4 Wall sherd of ware as 3, with curved incised line and rouletted decoration.

One other sherd has similar decoration to 4, but is so badly abraded that this can hardly be seen.

5 Rim sherd of similar ware, but lighter brown on both surfaces and black between them, and with an internal groove. These and thirteen other wall sherds of group c came from layer 4, six more from

These and thirteen other wall sherds of group c came from layer 4, six more from layer 3.

Four sherds of coarse red unglazed Medieval ware, group |d, came from the topsoil.

Cutting B

- 6 Rim sherd of fine brown ware, with a few small grits, burnished on the outside, and with internal groove, group c. Unstratified, thrown up by mechanical digger.
- 7 Base and wall sherd of fine light brown fabric, some grit towards the base, group c. Unstratified, as above.

From layer 4 two small sherds of group c, and one glazed rim of group d, not illustrated.

In the southern extension to cutting B, at base of ploughsoil, five sherds of group d, one a rim, not illustrated.

In the northern extension, at base of ploughsoil, as well as sherd no. 1, were seven wall sherds of group c, four of group b, four of group d, not illustrated.

Cutting C

8 Rim, neck and body sherds of group c), burnished black on the outside and for two cm on the inside of the rim. From layer 2.

One fragment of group d in layer 5, not illustrated.

Dr D.F. Williams, Department of Archaeology, University of Southampton, has kindly examined two of the group c sherds. He writes:

- Two sherds were submitted for petrological examination.
- 1 Medium thick, moderately hard fabric, dark greyish brown (10 YR 4/2) throughout.
- 2 Medium thick, fairly hard fabric, reddish-brown (5 YR 4/4) throughout.
- Thin sectioning of both sherds reveals an anisotropic matrix of baked clay containing large angular grains of altered felspar and fibrous aggregates of brown amphibole. Also present are frequent grains of quartz and a few grains of pyroxene and serpentine. The



Fig. 21 Pottery and one flint from the excavation of the Bodwen Round. No. 1 Bronze Age; Nos 2-8 Iron Age (%).

mineralogy closely resembles Peacock's description of the gabbroic clays of the Lizard peninsula (1969a, 146) and there seems little doubt that this material was used for the samples from Bodwen.

#### Discussion

Apart from the cord-impressed Bronze Age sherd, and the scatter of Medieval pottery, nearly all the Bodwen pottery is of this group c, gabbroic, South Western B style. There are parallels for it in the St Mawgan series (Thriepland, 1956) in Type A 1, where the everted rims have internal grooves, and in Type B, where some pieces (Fig. 16, nos. i - m) have rouletted decoration not unlike that of Bodwen, although not of exactly the same pattern. The undecorated but well burnished Bodwen ware would fit into the St Mawgan Type E (e.g. Fig. 18, no. 29), or into Type M, though not all this group is burnished.

Castle Dore produced similar forms (Radford, 1951, Fig. 14, nos. 3, 26; Fig. 16, nos. 1, 2), and the internally grooved lip was a common feature, and one which Dr Peacock mentions as distinctive of his gabbroic South Western B wares, Group I (Peacock, 1969b, 44). There was some rouletted decoration (Fig. 16, nos. 1, 2), but usually in single lines, rather than the infilling of a scroll as at Bodwen. A more exact parallel comes from Bodrifty, where amongst similarly shaped pottery there are some sherds (Dudley, 1956, Fig. 10, nos. 16 - 20) with what seems to be exactly the same decoration as the Bodwen sherd 4. For this a date of about 200 BC is suggested (Dudley, 1956, 24).

The Trevisker Iron Age sequence shows similar forms (ApSimon and Greenfield, 1972, Fig. 20, no. 1), and contains a fragment of what could be similar decoration (Fig. 23, no. 37). A radiocarbon date of 2135  $\pm$  90 bp for charcoal from the occupation layer on the floor of house 2 indicates a calibrated real age of about 160 BC (ApSimon and Greenfield, 1972, 369).

Still more pottery of similar type came from the Rumps cliff castle (Brooks, 1974, Fig. 22, no. 14; Fig. 24, no. 2). There was also comb decoration (Fig. 22, nos. 8, 11, 12, 13), but again not very like the Bodwen pattern, being mostly in single, or in one case, double, lines. Here 'the commencing date may be tentatively ascribed to the second century BC by reference to Castle Dore, where the rouletted pottery of comparable appearance to Group 1 pottery was earlier than the other decorated ware' (Brooks, 1974, 29).

Finally the excavation of an Iron Age round at Threemilestone has produced pottery of the same style, including one jar with very similar decoration to the Bodwen sherd 4 (Schwieso, 1976, Fig. 24, no. 42).

All the sites mentioned have also produced cordoned ware, as has Killibury. No cordoned ware has (yet) been found at Bodwen, which might indicate an early date in the South Western B sequence. On the published evidence this could be the early part of the second century BC. However Henrietta Miles has suggested elsewhere in this volume, in relation to Killibury, that the starting date for our South Western B pottery might be as far back as the fourth or even the fifth century BC, and the Carn Euny radiocarbon dates support this suggestion (*Cornish Archaeol.* 15, 72). Bodwen, with its absence of cordoned ware, would be a candidate for a fairly early position in this expanded date range. It would of course be foolish to presume too much from an excavation consisting of three sections across a ditch. If the site were totally excavated, other pottery types might well be found to clarify or to complicate the dating. Enough evidence has been recovered, however, to establish Bodwen as one more Iron Age round, containing a presumed settlement that has still to be explored.

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# PART 6: THE PILLOW MOUNDS Henrietta Miles

The Round Mound appeared before excavation as a slight eminence about 12 m across and 0.4 m high situated at the base of the slope north east of Bodwen farm at about 460 ft OD. The Long Mound was situated 150 m away up the slope at about 500 ft OD; it was roughly rectangular in shape, 16 m x 4 m, and about 1.5 m in height. Both were trial dug in 1971 to test their nature before levelling for agricultural purposes. The Round Mound has now been obliterated but the Long Mound still survives.

The Round Mound was tested by a 6 m by 1.3 m trench running SE from its apparent centre. Under topsoil about 0.3 m thick, the mound was composed of a single layer of brown soil which appeared to consist of topsoil and rab subsoil thoroughly mixed 0.7 m thick. Beneath this lay an old land surface of compressed dark brown soil, very intermittent at its top. The real height of the mound, 1.2 m, had been obscured by subsequent hillwash, which had covered over its outer edges. The trial trench thus proved to provide a cross-section of only about half the radius of the actual mound. A few fragments of late Medieval cooking pot in coarse orange micaceous ware were found in the body of the mound, together with some fragments of coal and two struck flint flakes.

The Long Mound was sectioned mechanically with a trench 0.75 m wide at right angles to its long axis and extending about 3 m beyond its apparent flanks on both sides. Topsoil over the mound was about 0.15 m thick. The mound itself was constructed of a homogeneous layer of light gritty brown soil about 1.2 m thick over an intermittent old land surface of compressed dark brown soil. A spread of large granite pieces rested on the old land surface under the SW edge of the mound. Shallow ditches about 2 m wide and 0.6 m deep were located on either side. These were filled with dark brown silt with a scattering of large stones on their surfaces; they were not visible before excavation. Several fragments of pottery similar to those from the Round Mound were found in the body of the structure.

Both mounds are therefore of late Medieval, possibly fifteenth century date. They had been constructed of a mixture of topsoil and rab subsoil, which in both appeared to have been much disturbed. In particular the old land surface beneath both was interrupted by hollows and pockets infilled with material identical to that forming the body of the mounds. It seems reasonable to interpret both as *Pillow Mounds*. Pillow Mounds, normally long, sometimes round, have a superficial similarity to long or round barrows but tend to preserve crisper profiles with slight ditches often clearly defined around their perimeters. They are often sited in groups, sometimes on sloping or low ground. The British evidence was initially summarised by Crawford (1928, 18 - 24). It is today generally accepted that pillow mounds were constructed as artificial warrens to encourage the multiplication of rabbits. They are common on Dartmoor, for example on Trowlesworthy Warren where documentary evidence exists for the breeding of rabbits as early as 1279 (Havinden and Wilkinson, 1970, 173). Some of these can be seen to have a layer of larger stones at base, for example that in Sheepstor parish at SX 58266757, presumably to form spaces to encourage the formation of burrows. No other pillow mounds have so far been identified in Cornwall.

There appears to be no modern excavation of pillow mounds, but a number of early accounts are summarised by Crawford (1928, 23) which describe make-up of 'fine garden earth mixed with stones'. Crawford also quotes, from an informant, General Pitt-Rivers' views on the subject; he considered that they were specially constructed as rabbit warrens and had been told in 1879 that they were still being constructed for this purpose on Dartmoor. The make-up of the Bodwen mounds is consistent with what is known of the internal construction of pillow mounds, the large stones beneath the Long Mound being paralleled by Dartmoor examples as at Sheepstor. The mixed nature of the make-up and the disturbed old land surface beneath the mounds are best explained as the results of extensive burrowing. Round and long pillow mounds are known on the same site, for example on Minchinhampton Common in Gloucestershire. It is hoped that with the publication of the Bodwen examples further pillow mounds will be identified in Cornwall.

#### PART 7: CONCLUSION

Since Professor W.G. Hoskins first published *The Making of the English Landscape* in 1955, we have become increasingly conscious of the effect man has had, and is still having,

on his natural environment. We are beginning to understand that in this field also the whole is greater than the sum of its parts, and that a study of the gradual development of a particular locality, such as that of Whiteparish in Wiltshire (Taylor, 1967), reveals much more than would the examination of isolated sites. Recently Professor Barry Cunliffe has shown convincingly at Chalton the archaeological value of a systematic observation of one area; there he was able to find 120 new sites, 'together with a complex of roads and field boundaries allowing the landscape of successive periods to be isolated and showing the effects, often destructive, which the activities of one period have had on the survival of earlier remains' (Cunliffe, 1973, 174).

Bodwen does not claim to be a Chalton - yet. Much information remains to be discovered: there should be a Neolithic settlement site, and possibly a Mesolithic one, somewhere in the area; the middle fragment of the Bronze Age rapier mould is still to be found, and also the living and working sites of the people who used it; the settlement inside the ditch of the Iron Age round needs to be explored, to establish the plans of any houses, and their density; and the Medieval field system should be plotted, though this seems unlikely to be very different from that of the present day. A start had been made, however. Much can be done when an active county archaeological society is supported by professionals and has the willing co-operation of the farmers whose land holds our knowledge of the past. One day soon we may be able to produce a more detailed account of the evolution of Bodwen.

#### Bibliography

ApSimon, A.M. and Greenfield, E., 1972. 'The Excavation of Bronze Age and Iron Age Settlements at Trevisker, St Eval, Cornwall', Proc. Prehist. Soc., 38, 302-81

Borlase, W., 1872. Naenia Cornubiae

Briard, J., 1965. Les Dépôts Bretons et l'Age du Bronze Atlantique.

- Briard, J., Cordier, G., Gaucher, G., 1969. 'Un dépôt de la fin du Bronze Moyen à Malassis, commune de Chéry (Cher)', *Gallia préhistoire*, **12**, 37-73
- Brooks, R.T., 1974. 'The Excavation of the Rumps Cliff Castle, St Minver, Cornwall', Cornish Archaeol., 13, 7-50
- Burgess, Colin, 1974. 'The Bronze Age' in Renfrew, 1974, 165-232

Butler, J.J., 1963. 'Bronze Age Connections Across the North Sea', Palaeohistoria, 9, 1-286 Crawford, O.G.S., 1928. Wessex from the Air

- Cunliffe, Barry, 1973. 'Chalton, Hants: The Evolution of a Landscape', Antiq. J., 53, part 2, 174-90
- Dudley, D., 1956. 'An Excavation at Bodrifty, Mulfra Hill, near Penzance, Cornwall', Archaeol. J., 113, 1-32
- Evans, John, 1881. The Ancient Bronze Implements, Weapons, and Ornaments of Great Britain and Ireland.
- Evens, E.D., Smith, I.F., Wallis, F.S., 1972. 'The Petrological Identification of Stone Implements from South-Western England', Proc. Prehist. Soc., 38, 235-75
- Havinden, M. and Wilkinson, F., 1970. 'Farming' in Gill C. (ed.), Dartmoor: a New Study, 139-81
- Hencken, H.O'N., 1939. The Archaeology of Cornwall and Scilly.

Hodges, H., 1960. 'The Bronze Age Moulds of the British Isles', Part 2, Sibrium, 5, 153-9

- Hoskins, W.G., 1955. The Making of the English Landscape.
- Iago, V., 1814. 'Celts from Mawgan, Cornwall', Archaeologia, 17, 337-8
- Jewitt, Llewellynn, 1873. A History of Plymouth

Langmaid, Nancy, 1971. 'Norton Fitzwarren', Curr. Archaeol., 28, 116-20

- Miles, H., 1976. 'Flint Scatters and Late Prehistoric Settlement in Devon', Proc. Devon Archaeol. Soc., 34
- Peacock, D.P.S., 1969a. 'Neolithic Pottery Production in Cornwall', Antiquity, 43, 145-9
- Peacock, D.P.S., 1969b. 'A contribution to the study of Glastonbury ware from southwestern Britain', Antiq. J., 49 part I, 41-61
- Pearce, S.M., 1976. 'The Middle and Late Bronze Age metalwork of the south-west and its relationship to settlement', *Proc. Devon Archaeol. Soc.*, 34

Radford, C.A.R., 1951. 'Report on the Excavations at Castle Dore', J. Roy. Inst. Cornwall, n.s., I, appendix 1

Renfrew, C., 1974. British Prehistory

- Rowlands, M.J., 1976. The Organization of Middle Bronze Age Metalworking, British Archaeological Reports, 31 (i, ii)
- Schwieso, J.J., 1976. 'Excavations at Threemilestone Round, Kenwyn, Truro', Cornish Archaeol., 15, 51-66

Smith, Isobel, 1974. 'The Neolithic' in Renfrew, 1974, 100-36

Taylor, C.C., 1967. 'Whiteparish: A Study of the Development of a Forest-edge Parish', Wiltshire Archaeol. Natur. Hist. Mag., 62, 79-101

Thompson, B., 1907. 'Find at Fice's Well', Trans. Devonshire Ass., 39, 75-7

- Threipland, L.M., 1956. 'An Excavation at St Mawgan-in-Pydar, North Cornwall', Archaeol. J., 113, 33-81
- Trump, Bridget, 1962. 'The Origin and Development of British Middle Bronze Age Rapiers', Proc. Prehist. Soc., 28, 80-102

# **Excavation News 1976**

Final reports on work at Woolley Barrows, Bodwen, Harlyn Bay and Killibury are printed elsewhere in this volume, as is an interimaccount of work at Launceston Castle.

# EAST MOOR, ALTARNUN

Stone constructed linear and field boundaries or 'reaves', similar to those which are currently being investigated on Dartmoor by Andrew Fleming, have now been identified on the East Moor of Bodmin Moor. The East Moor boundaries are probably Middle/Late Bronze Age in date. This dating is based on the Dartmoor boundaries which are themselves dated by associated Bronze Age structures and the growth of peat deposits (Proc. Devon Archaeol. Soc. 31(1973), 1-21). The evidence from East Moor itself seems to confirm this chronology and a definite pre-medieval date is indicated by the slighting of the boundaries by medieval ridge and furrow.

Following the survey of the boundaries on East Moor in March, 1976, the excavation of the junction of a boundary with a tumulus at SX 24147821 was conducted in June and July in an attempt to determine the relationship between the two features. It was found that the boundary post-dated the tumulus, as expected. It was also discovered that the boundary itself lacked constructional features, such as bedding or facing stones. The limited area excavation on the periphery of the stone built tumulus produced evidence which suggests that an internal revetment incorporating large natural boulders formed part of the constructional sequence of the cairn.

No trace of burial was found. Numerous samples of soils and pollen were collected from beneath the boundary, the cairn, and from an area of undisturbed moorland. It is intended that the results of this work will form part of an on-going study of the Moor's paleo-environment, through which we may be able to explain the ancient landuse pattern that is so intriguingly wellpreserved in this area.

> Mark Brisbane Stephen Clews

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Fig. 22 Harlyn Bay: Location maps and distribution of south-western Iron Age inhumation sites.

# Harlyn Bay Reconsidered: the Excavations of 1900-1905 in the Light of Recent Work

# **ROWAN WHIMSTER**

Excavation carried out in advance of building work in 1976 revealed the foundations of a circular stone building lying beneath the levels of the later Iron Age cemetery discovered in 1900. Reappraisal of the earlier evidence now permits a partial reconstruction of the cemetery plan and allows the Harlyn Bay burial tradition to be compared with those from other parts of southern and eastern Britain.

# **THE 1976 EXCAVATION**

#### INTRODUCTION

Harlyn Bay lies in the parish of St Merryn some four miles west of Padstow on the north coast of Cornwall and takes the form of a wide, sandy beach sheltered by projecting headlands to the east and west (Fig. 22). A shallow cliff, rarely rising more than 25 ft above the high water mark, lies behind the beach, while a small freshwater stream running down a shallow valley from its source near St Ervan emerges into the eastern corner of the bay. On either side of the stream the ground rises gently, reaching heights of little more than 150 ft to the east and south and rarely exceeding 100 ft in the direction of Constantine Bay to the west. The natural topography of the undulating ground to the west of the stream and immediately south of the bay is now hard to visualise, for the natural bedrock of Upper Devonian slate was at some stage inundated by a series of massive dunes of blown sand which now cover the entire isthmus between Constantine Bay and Harlyn. O.G.S. Crawford observed that this belt of shell sand must have accumulated as a result of prevailing westerly winds blowing onshore at Constantine, although the chronology of the main phases of dune formation remains obscure (Crawford, 1921, 295-6).

Early settlement of the Constantine raised beach by Mesolithic and Neolithic communities has long been recognised from numerous occupation deposits exposed in eroding cliff faces between Constantine Bay and Trevose Head, while Early and Middle Bronze Age barrows and cairns have been excavated or destroyed on a number of occasions between Cataclews Point and the village of Trevone (Crawford, 1921; Bullen, 1912, 95-106; Buckley, 1972; additional information provided by N. Johnson from the Cornwall Committee for Rescue Archaeology Sites and Monuments Register). Although the nearest excavated Iron Age settlement site is the hillfort at St Mawgan-in-Pydar, some six miles to the south west of Harlyn Bay (Threipland, 1956), a cliff castle with multiple ramparts has been identified closer to hand at Warren Cove. Further indisputable evidence for the presence of Iron Age communities is provided by two separate discoveries of later Iron Age burial grounds in the area, although the settlements to which these belonged have yet to be identified. The first cemetery was discovered at Trevone in 1848, although its pre-Roman origins were not confirmed until an additional burial was excavated in 1955 (Trollope, 1860, 312; Dudley and Jope, 1965).

The more important Harlyn Bay burial ground was not encountered until 1900 when a Mr Reddie Mallet began to lay foundations for the first house in what was subsequently to become a sizeable community of seaside hotels, private houses and holiday bungalows (Bullen, 1901). In the course of exploratory well-digging (Figs. 22 and 28) the slate cover slabs of a stone-lined grave were found at a depth of 15 ft (4.5 m) in the blown sand that covered the site. As a result, an extensive campaign of excavation was mounted during the later summer and autumn of 1900 and resumed, on a more modest scale, in each of the years up to 1905, after which no further discoveries were ever reported. The principal achievement of this work was the excavation of approximately 130 Later pre-Roman Iron Age inhumations from beneath the massive overburden of sand, an undertaking whose scale is clearly indicated in a contemporary photograph of the site and its spoil heaps taken from the hillside to the east (Pl. II). Few formal excavation records were kept, however, and the reassessment of the cemetery that forms the second part of this paper is based on a series of short published articles, the rambling and often deeply obscure guide to Harlyn Bay written by the Rev Ashington Bullen apparently without first-hand experience of the excavation (Bullen, 1901, 1902a, 1912), a consideration of the available evidence by Crawford, who visited the site in 1917, and a group of manuscript field notes happily preserved in the museum of the Royal Institution of Cornwall at Truro.

On completion of the excavation Mallet resumed construction of the house now known as 'Tamariska' and went on to build a small museum for the display of material recovered from the cemetery and a contemporary midden found some 50 m to the south (Fig. 28). This museum, which lay with the main house in the deeply scooped terrace formed by the removal of at least 4 m of surmounting sand, drew large attendances from holidaymakers during the 1920s and 1930s. In 1974 it was closed to the public before being sold for convers-



Fig. 23 Harlyn Bay: Location of 1976 trenches and conjectural plan of circular building.

ion into a private house. Its contents were then removed to Truro Museum, which already held many of the more important objects found during the 1900 excavations.

An application to convert the museum building by providing an extension to the existing structure immediately adjacent to the small scheduled section of the cemetery provided an opportunity for further excavation designed to determine whether the earlier work had removed all archaeologically significant levels, or had merely investigated immediately obvious graves (Fig. 23). As a result, a short season of excavation took place between 2-14 August 1976.

# **EXCAVATION**

The work carried out in 1976 was restricted to areas and levels directly threatened by building proposals (SW 87787529). A main area (1) abutting on to the north wall of the museum and measuring 6.5 m x 3.5 m was excavated to bedrock (c. 1.5 m) and provided the only archaeologically significant evidence (Fig. 23). A second area intended for use as a hard-standing (2) was examined to a depth of 0.4 m without result. The intended route of a sewerage pipe was dug as a 0.5 m trench (3) from the north-western corner of Area 1 for a distance of 19 m, terminating at the site of a proposed septic tank. A trial area (4) 2 m square was excavated at this point to a depth of 2.5 m, but had then to be abandoned in the interests of safety. Subsequent machine excavation of this pit revealed the slate bedrock and a thin ancient soil capping at a depth of 3 m. A further trial trench (5) dug westwards from Area 4 revealed, together with Trench 3, nothing other than an homogeneous layer of apparently undisturbed blown sand. Bedrock was not reached in either Trenches 3 or 5, nor did these or Area 4 reveal anything of archaeological significance.

The removal of up to 4 m of sand from the entire site in 1900 had carved a wide, bowlshaped hollow from the main dune, leaving a steep bank of undisturbed sand to the west. It was therefore apparent that work in Area 1 would be concerned only with the lowest levels of the site and that there would be no opportunity for relating these to the complete stratigraphic sequence that had once existed. In view of the possibility of encountering disturbed or previously unexcavated graves, an open area excavation was begun (Fig. 24). Turf and an upper level (Layer 1) representing early 20th century consolidation and the subsequent erection of a summerhouse were stripped to reveal deposits of loose shell sand (Layer 3) and partially disturbed fine compacted sand (Layer 4). Excavation of a secondary feature (F.2) then revealed the presence of a length of dry-stone walling running beneath Layers 3 and 4. On the basis of this discovery it was decided that the remaining levels should be excavated in quadrants to allow the temporary retention of baulks and control sections through the centre of the site. These main baulks were later removed, although in the interests of safety an additional 1 m baulk along the northern wall of the museum building was left in position. In the course of the excavation the whole of Area 1 was cleared down to bedrock, although no attempt was made to dismantle the stone wall thus revealed.

The following layers were recorded and can be listed together for ease of identification:

- 1 Turf and grey sandy topsoil, containing charcoal and modern debris.
- 2 Compacted light orange powdery sand with limited shell inclusions, restricted to thin layers at the western and eastern ends of Area 1.
- 3 White shell sand, without slate fragments, over the whole of Area 1.
- 4 Compact sand with some slate flecking, lying beneath Layer 3 in the centre of the site. Absent in the north-west corner and east of F.3.
- 5 Compact reddish-brown clay soil, with large amounts of broken slate, filling the interior of the building.
- 6 Softish brown sand dropping from the crest of the wall beneath Layer 5 but above Layer 7 (Fig. 25, Sections b·b', c·c')
- 7 Tipped deposit of slate fragments dropping from northern and eastern wall faces beneath Layers 5 and 6 (Fig. 25, Sections b-b', d-d').
- 8 Clean soft sand into which the eastern wall was cut.
- 9 Lightly compacted clean sand with brown mottling, lying beneath Layer 8, east of the wall (F.3). Underlies the wall and merges into Layer 10. Heavy scattering of charcoal fragments.

- 10 Reddish-brown compact clayey soil with large deposits of slate, spar and water worn pebbles, lying directly on natural slate beneath Layer 9 east of the wall.
- 11 Thin deposit (c. 5 cm) of fine red clayey soil on the floor of the building in the northeastern quadrant. Fire-marked and containing scattered charcoal fragments.



Fig. 24 Harlyn Bay: Area 1.

#### Phase 1

Before the main occupation of the site an ancient land surface composed of about 0.3 m of red, clayey soil (Layer 10) had developed over a natural layer of shattered slate shillet. The upper levels of this soil, which only survived in the extreme eastern section of Area 1, contained a liberal scattering of charcoal fragments and may have been covered by a thin sandy turf. A deposit of fine-grained and relatively compact wind-blown sand (Layer 9) subsequently accumulated over the old soil surface to a depth of 0.2 to 0.3 m, only to be buried by a further layer of coarser shell sand (Layer 8), stratigraphically related to the deeper deposits located in Trenches 3 and 5 and Area 4. The original depth of this layer and its relationship to the main dune cannot be established as its upper levels had been removed or contaminated during the work of 1900.

#### Phase 2

At some stage after the accumulation of Layer 8, an area was dug through the sand and buried soil to the solid slate bedrock beneath. A dry-stone revetment (F.3) was then constructed to form the single-faced inner retaining wall of a roughly circular building whose floor must have lain some distance below the existing outer ground level (Figs 24, 25. Pls. III, IV). The bedding course of this wall was composed of relatively massive slate slabs. resting either on the natural slate or, on the eastern downhill side of the site, on a shelf of the old clay soil left in position to provide a continuous level surface for the foundations. Traces of a fine, grey clay bonding were found on the upper surfaces of a number of these bedding stones at a point where the upper courses of the wall had been removed by the secondary pit, F.2. The surviving upper levels of the wall were constructed without any form of mortaring, irregular courses of thin flat slates having been simply, but skilfully, rammed back into the exposed sand cutting to provide a neat inner face. On excavation the wall survived to a maximum height of about 10 courses (0.4-0.5 m; Fig. 27), although parts of the eastern section had begun to slump towards the interior at the time of the building's destruction. No trace of an entrance was found in the area under examination and it was assumed that this must have lain somewhere within the remaining two-thirds of the structure's circumference that still lie buried beneath the old museum to the south and the scheduled area to the west (Fig. 23). The original shape of the structure, which may have had a diameter of about 9 m, cannot be confirmed, although a slight but marked change in direction within the northern section indicates that its plan, though essentially curvilinear, may never have been truly circular (Figs. 23 and 24).

The existence of a roof over the enclosed area was indicated by a series of three post holes (F.4, 5 and 6) spaced at regular intervals around the interior and once presumably part of a complete ring of post supports (Figs 24 and 26). Each of these holes had been cut into the bedrock and contained slate and water-worn packing stones for supporting central posts. Careful examination of the fillings showed, however, that the posts themselves had not been allowed to decay *in situ*. Instead, the core of each hole was filled with sand (F.4) or clayey soil (F.5 and 6) associated with the Phase 2 consolidation of the site, thus suggesting that the posts had been deliberately removed at the time of the building's destruction.

With the exception of a single patch of charcoal resting on a thin layer of fire-marked soil in the north-western corner of the area (Layer 11), there were no traces of burning within the interior of the building, although a second small deposit of charcoal was found embedded behind the lowest courses of the eastern section of the wall. In general the interior showed remarkably little evidence of occupation, the essentially clean, but uneven and unworn slate floor yielding nothing more than a single intrusive pottery sherd and the lower mandible of an ox.

#### Phase 3

Soon after the small fire had burned on the floor it was decided, for reasons that cannot yet be determined, to demolish the building and backfill its sunken interior with up to a metre of sand, soil and slate fragments. This levelling process began after the removal of the internal roof supports and within the eastern and northern sections involved the preliminary dumping of a mass of thin slate fragments (Layer 7) into the interior from approxi-



Fig. 25 Harlyn Bay: Sections across Area 1; b-b' (south-north); c-c' (west-east); d-d' (east-west).

mately the level to which the wall stood on excavation. The angle of the tip-lines (Fig. 25) strongly suggests that the upper and perhaps free-standing courses of the wall had already been dismantled, leaving in position only those which would subsequently be buried below ground level. The remainder of the interior was then filled mainly with compact, slatey soil (Layer 5), identical in texture to that forming the old ground surface outside the build-ing (Pl. V). In the eastern corner, however, a deposit of sand (Layer 6) had been shovelled in after the initial slate tips, but before the main soil filling which overlay it (Fig. 25, b-b').

The consolidation material showed little overall variation in depth, except towards the north, where it sloped downwards to the level of the upper surviving wall course. This deviation from an otherwise level surface cannot easily be explained in terms of the original backfilling procedure and may instead derive from secondary disturbance of the site by Mallet's workmen. An intermittent capping of fine compacted sand (Layer 4) sealed the upper surface of the main filling in the centre of the area, but was, significantly, absent towards the north, where Layer 5 was directly overlain by Layer 3, an accumulation of loose sand possibly replaced after the completion of the 1900 excavations.

#### Phase 4

Although archaeologically sterile, the fine sand of Layer 4 appeared to represent the base of a secondary accumulation laid down shortly after the filling operation had been completed. The upper levels of this deposit, together with all succeeding layers had been removed during the earlier excavation of the cemetery. Two further features relating to this, or a subsequent phase of occupation were encountered, although interpretation of each is difficult.

The first and most ambiguous of these comprised a formation of six flat slate slabs (F.1) protruding from a small pit cut through Layers 4 and 5 and apparently representing the tightly wedged footing for a narrow post. The absence of accompanying evidence, coupled with its proximity to the heavily disturbed modern surface suggests that the feature may relate to recent occupation of the site, although its association with a later Iron Age phase cannot be ruled out.

Of greater potential significance was a roughly rectangular pit (F.2) dug through Layer 5 to the bedrock beneath (Fig. 24). The base of this pit, which contained a homogeneous filling of loose, clean shell sand, had cut through the lower courses of the buried wall, fragmentary stones from which were found scattered over the slate floor. In the absence of obvious alternative explanations, it is possible that this secondary feature represents the site of a cist grave constructed after the consolidation of the building, excavated in 1900 and subsequently backfilled with clean sand. The north-south alignment and overall dimensions of the pit are compatible with the majority of the recorded graves, while a reconstruction of the earlier excavation indicates that burials were indeed found in this part of the site (Fig. 28).



Fig. 26 Harlyn Bay: Post hole profiles, F4, F5, F6.



Fig. 27 Harlyn Bay: Photographic sketch of wall face, F3 (north-western section).

#### Discussion

The discovery of a stone-built structure at the centre of a site previously believed to have been used exclusively for burial was entirely unforeseen and appears at first sight to provide evidence of permanent settlement at Harlyn Bay. Closer consideration of the building in the light of earlier discoveries nevertheless indicates that an alternative hypothesis may provide a more logical, if unproven, explanation of its function in terms of ritual rather than purely secular activity (see below). Interpretation of the structure's relationship to the main sequence of burials is made difficult by the destruction of critical elements in the stratigraphical sequence and by the remarkable poverty of material finds. Two tiny body fragments of coarsely gritted pottery are undiagnostic and any attempt to date the structure rests with two charcoal samples submitted for Carbon-14 analysis. The first of these (HAR 1923), representing the destruction phase, was collected from the area of burning on the floor of the building, but is too small to yield a reliable result until more sensitive equipment is installed at Harwell in 1978. A separate note on this determination and its implications will appear in a subsequent volume of Cornish Archaeology. The second sample (HAR 1922), collected from the old soil surface outside the building, has yielded a reading of  $1600 \pm 90$  bc on the basis of an assumed half life of 5570 years and provides a useful terminus post quem for the initial phase of dune formation at the site. Adjustment of this reading in terms of Clark's calibration curve would, however, provide a revised date of 1975 BC (Clark, 1975).

The excavated portion of the building is too limited to allow close comparison with other Iron Age or Romano-British settlement structures from Cornwall in terms of plan, while the basic constructional elements are sufficiently familiar to merit only brief comment. The use of a single faced revetment wall is well-known both in the context of complex Penwith Courtyard houses and simple isolated huts from settlements such as Porth Godrevy (Fowler, 1962, 35), although such walls normally take the form of stone facings to existing above ground structures such as banks or massive enclosure walls. Although the relationship of the Harlyn building to other possible features at the site is unknown, there can be little doubt that in this instance the lower levels of the wall lay below ground level and provided the facing to an exposed section of entirely natural sand and soil.

Assessment of the building's original function and the factors leading to its destruction of necessity rely on a reconsideration of the results of the earlier excavations, and in particular Bullen's description of an apparently similar stretch of walling encountered beneath the deepest sand deposits in 1900 (Bullen, 1912, 54). Although the location of this wall is not indicated on any surviving manuscript plans, there can be little doubt that it lay within the same north-western area of the site as the 1976 wall and that it, too, was bedded at the level of the natural slate. Like the present wall, it was constructed of thin slates over a foundation course of more massive slate slabs and stood to a maximum height of three feet (0.9 m). In all a length of 20 ft (6 m) was excavated, but it is implied that this represented only a section of a more extensive feature. The principal argument for equating the two lengths of walling as part of a single structure rests with the relationship of the 1976 section to the old museum. Excavation confirmed that the foundations of the latter building had cut through the buried wall, at least a third of whose circumference, on the basis of an assumed oval or circular plan, must have lain beneath the museum site (Fig. 23). Because Mallet reported no more than one length of masonry for the whole site and could hardly have failed to recognise a further section beneath his museum, it is probable that these are one and the same feature, together forming the southern perimeter of the 1976 building. Acceptance of this conclusion leads, however, to a further piece of evidence that might cast doubt on the nature of the building as a conventional domestic structure.

On removing one of the largest of the foundation stones, a slab measuring  $4\frac{1}{2}$  ft x 2 ft (1.35 m x 0.6 m), Mallet encountered a pair of crouched human skeletons, crushed flat by the weight of the wall deliberately erected above them (Bullen, 1912, 54 and Pl. 12). Subsequent examination of adult and milk teeth retrieved from the shattered skulls indicated the burial of a child and an adult, the latter of whom was accompanied by a bronze ring and two iron objects, one of which was identified as a bracelet. In describing this double burial, Bullen was quick to conclude that the two individuals had been placed beneath the wall as a sacrificial offering when the burial ground was first established. Although his assumption that the wall was part of a cemetery boundary may now be disputed, there seems little room for arguing with Bullen's votive hypothesis, which can be supported by evidence of similar practices from other parts of Britain. Among the best known of these are the contracted foundation burials found beneath or within the fabric of hillfort ramparts. Examples from Maiden Castle and Hod Hill, Dorset and South Cadbury, Somerset (Wheeler, 1943, 38 and Pl. XLIV; Richmond, 1968, 16; Alcock, 1970, 16-17 and Pl. IVa) all involved the burial of individuals in small pits immediately prior to the erection or reconstruction of defensive elements within the main rampart systems during the 1st century BC and seem to be paralleled by similar discoveries from other western hillforts, including Grovely Castle, Wilts (VCH, 1957, 107), Little Solsbury, Avon (Collins and Cantrill, 1909, 331), Sutton Walls, Hereford (Kenyon, 1953, 11) and possibly Badbury Camp, Wilts (Wainwright, 1970, 153).

Votive burials from contemporary house sites in Britain are unknown, although skeletons of both adults and children are recorded from Iron Age and Romano-British ritual structures. A young adult female and an infant buried inside a stake-built enclosure at Frilford, Oxon, have been interpreted as foundation deposits within an Iron Age shrine (Harding, 1972, 61-9) while the skeletons of crouched infants in each of the four internal corners of Temple IV at Springhead, Kent, demonstrate the survival of the votive principle into the 2nd century AD (Penn, 1960, 121-7).

Although the absence of occupational debris could simply indicate that the Harlyn building was inhabited and kept clean until the time of its deliberate destruction, the presence of a foundation burial beneath its walls would add weight to the notion that it might have been some form of covered shrine or mortuary house, rather than a conventional domestic structure. Undisputed buildings of this type are unfortunately rare in Britain and can usually be identified only through their relationship to later Romano-British shrines constructed on the same sites. In a detailed assessment of the available evidence Harding has nevertheless shown that most Iron Age shrines in lowland Britain adopt the circular plan normally used for domestic structures (Harding, 1974, 103-11), although the precise purpose and original appearance of these remains uncertain. Examples associated with pre-Roman cemeteries have in the past tended to be elusive, but their former existence may be implied by at least two Romano-British temples erected on or near later Iron Age burial sites at Lancing, Sussex and Jordan Hill, Weymouth, Dorset (Frere, 1940, 167; RCHM, 1970, 617). At Jordan Hill, moreover, the use of low dry-stone walls to define burial plots containing small groups of earth-dug, or more rarely stone-lined graves, is of particular interest in view of Warne's report that skeletons were sometimes found buried within the fabric of the walls themselves (Warne, 1872, 225-35). At least one of these structures was described as crescent-shaped but may, like the Harlyn wall, have been but an arc of a complete enclosure, either roofed or open to the air. Bearing in mind that the Dorset and Cornish later Iron Age burial rites represent local modifications of a single British inhumation tradition (Whimster, 1977), this parallel use of intra-mural burial may provide further support for interpreting the Harlyn structure as a component element of the adjacent cemetery. It would nevertheless be dangerous to adopt the often loosely used term 'shrine' with its underlying implications of consecration and formal worship, for a building whose interior was devoid of obviously ritual features. In the absence of further evidence it can only be suggested that the building might have served some form of funerary or mortuary function, rather than having been a conventional house.

Interpretation of the chronological relationship between the building and the cemetery is also difficult. Although some graves may have been found at higher levels within the site, indicating a continuation of burial after the main phases of dune formation had begun (Bullen, 1912, 39-40), the majority undoubtedly belong within the earlier period that saw the construction and abandonment of the building. Verbal descriptions and a simple sketch section reproduced by Bullen (1912, Fig. 9) clearly indicate that most graves had been dug from the level of a secondary land surface, probably identical to that in which the building was set, into the primary sand deposits (Layers 8 and 9) overlying the original land surface (Layer 10). There is, however, no way of assessing whether the earliest of these burials were performed before or after the supposed mortuary house was built; nor is it possible to determine the length of time that elapsed between the construction and demolition phases and the onset of the main sand incursion. The documentary sources and the evidence of the probable cist site (F.2) nevertheless suggest that burial continued after the building was destroyed and that the deliberate levelling may have been carried out either to allow the projected, but unaccomplished, construction of a successor, or to provide an area of madeground for further burials.

While the argument carried to this stage seems to provide the most reasonable and economical explanation of the available evidence, it can only be considered as an interim reconstruction of events based on the excavation of an admittedly limited sample area. Further excavation designed to test this provisional interpretation and at the same time provide the basis for a more adequate reappraisal of the entire Harlyn site is therefore urgently needed. In particular, attention deserves to be given to the undisturbed deposits of sand that lie immediately to the west. In addition to providing a complete stratigraphic section of the entire dune sequence, these may well seal a further series of intact graves, whose detailed examination would be of immense value.

### THE FINDS

### Pottery

Two body sherds, each less than 2 cm in diameter, comprised the entire ceramic evidence. Both are of a well-fired, quartz-gritted black fabric, but without other distinguishing characteristics. One was associated with the upper surface of the old soil level to the east of the building (Layer 9), and the other was found incorporated within the lowest levels of the material imported to consolidate the interior (Layer 5). Neither sherd can therefore be shown to be contemporary with the main structure, both probably deriving from earlier occupation of the site.

#### Flint

Two flint flakes from Layers 6 and 9 were examined by Prof. C.B.M. McBurney who considered both to be primary flakes deliberately removed from small flint pebbles. Neither flake was found in a position that would allow it to be proved contemporary with the buried building.

#### Bone

Dr F.A. Turk has kindly reported on the small samples of animal bone recovered from the site. Leaving aside a group of fragmentary material from Layer 1 which probably represented early 20th century kitchen waste, the following species were represented in the main archaeological levels:

Horse: Fragmentary metacarpal (Layer 4); possible metacarpal (Layer 5).

Pig: Fragment of pelvic girdle (Trench 3).

*Ox:* Lower mandible of animal aged c. 2 years 9 months (Layer 11); distal end of left radius; fragment of 2nd cervical vertebra; canine tooth (Layer 6).

Duck: Femur (Layer 6).

Of this small collection, only the ox mandible from the floor of the building was specific ally associated with the main occupation. For what it is worth, the present sample broadly
reflects, with the exception of sheep bones, the list of domestic species recorded from cists and the general grave level in 1900 by Mr (later Prof.) E.T. Newton (Bullen, 1912, 52).

### Mollusca

In view of Bullen's published record of the species encountered in 1900 a series of handpicked samples of land and marine shells was submitted to Mrs S.M. Turk for identification. Because of the potentially significant results of her examination of these, a more detailed study of the land snails will now be carried out using larger soil samples extracted during the excavation.

### Non-marine mollusca

The four samples so far examined (Table 1) were obtained from the undisturbed old soil surface (Layer 9), the two main consolidation layers of the interior of the building (Layers 5 and 6) and the upper surfaces of the eastern section of the dismantled wall (Layer 4). Of these samples, only the first relates specifically to an undisturbed sealed deposit, although the soil of Layer 5 is derived from a similar source. Species names are those used by J.G. Evans (1972).

Although no serious environmental assessment can be made on the basis of so small a sample, the presence of a number of species characteristically associated with shaded woodland habitats is of considerable interest when compared with Bullen's 1900 samples. In his report Bullen lists the non-marine mollusca under three broad stratigraphical headings (1912, 164-7). His series 'A' from the 'clayey soil' beneath the grave level should be compatible with our own Layer 9 sample, but his series 'B' and 'C' belong to higher levels, associated respectively with the general grave level and the main dune deposits above this. By listing the 1976 and 1900 species in terms of the basic ecological groups defined by Evans (1972, 194-203) it can be seen that the majority of snails from the site are shadeloving or intermediate species and that open-country forms were entirely absent from the 1976 sample and only lightly represented in Bullen's 'A' series (Table 2). Although Bullen's 'B' series of snails gathered from in and around excavated graves contains many of the same forms, distinctly shade-loving species are less frequent, their place being taken by five strongly xerophitic dune-dwelling snails. Three of these latter species were also the only snails encountered in the main dune sand of Bullen's layer 'C'. Although Evans has expressed some doubts regarding the stratified presence of the three alien forms, Helicella caperata, H. virgata and Cochlicella acuta, a reconsideration of Bullen's evidence leaves little room for doubt that at least two of these were specifically associated with the sealed grave level (Evans, 1972, 179). For our present purposes, however, it is more important to note the contrast between these open-country species and the woodland and intermediate snails found in the lower levels of the site. While the presence of shells belonging to the latter groups in the old ground surface confirms that the site was covered with scrubby undergrowth in the pre-dune phase, the recording of xerophitic species in or near a number of graves demonstrates that burial must have continued at the site after the dunes had begun to form. Although the occurrence of two woodland species and several members of the intermediate group among other burials may imply that graves were already being dug in a pre- or primary dune phase, it must be borne in mind that these samples could have been contaminated with shells excavated from lower levels in the course of grave-digging. That the dune-loving species were entirely absent from the 1976 samples from beneath and above the buried building nevertheless adds weight to the assumption that the site may have been used as a cemetery before appreciable quantities of sand had begun to accumulate. Parallel studies of snail populations from beneath and within sand deposits are unfortunately scarce (Evans, 1972, 292-3), although samples from the nearby dunes on Towan Head, Newquay, show a similar progression from woodland to dune conditions and point to the need for further and more controlled sampling at Harlyn (Kennard and Warren, 1903; Woodward, 1908; Evans, 1972, 292 and Fig. 105).

#### Marine mollusca

The only marine species represented in the 1976 excavation were fragmentary mussels

(*Mytilus edulis*) and limpets (*Patella vulgata*) whose shells cannot specifically be related to the occupation of the building. Both species were, however, reported by Bullen from the 1900 grave level and nearby middens and would almost certainly have formed an important part of the diet of any local prehistoric community.

| Species             | Layer 9 | Layer 5 | Layer 6 | Layer 4 |
|---------------------|---------|---------|---------|---------|
| Pomatias elegans    | 6       | 36      | 4       | 4       |
| Cepea nemoralis     | 3       | 5       | 1       | 5       |
| Cepea hortensis     | 1       | 2       | 3       | 4       |
| Lauria cylindracea  |         | 1       | _       | _       |
| Discus rotundata    |         | 1       | _       |         |
| Monarcha granulata  | 1       | 3       | _       | 5       |
| Cochlicopa lubrica  | 1       |         | —       | —       |
| Retinella nitidula  |         | _       | —       | 3       |
| Clausilia bidentata | _       | _       |         | 1       |

Table 1: Harlyn Bay land snail species, 1976.

| Bullen                                  |                 |   |                         |   |                                     |  |  |
|---|-----------------|---|-------------------------|---|-------------------------------------|--|--|
| Species                                 | 1976            | Α | В                       | С | Habitat                             |  |  |
| Retinella nitidula<br>Discus rotundatus |                 | • |                         |   | Woodland and                        |  |  |
|   |                 |   |                         |   |                                     |  |  |
| Lauria cylindracea                      | •               |   |                         |   | shaded species                      |  |  |
| Clausilia bidentata                     | •               |   | •                       |   |                                     |  |  |
| Pomatias elegans                        | •               | • | •                       |   | Shaded and disturbed ground species |  |  |
| Agriolimax reticulati                   | us <sup>1</sup> |   | •                       |   |                                     |  |  |
| Cochlicopa lubrica                      | •               | • | •                       |   | Intermediate or                     |  |  |
| Helix hortensis                         | •               |   | •                       |   | catholic species                    |  |  |
| Helix nemoralis                         | •               | • | •                       |   |                                     |  |  |
| Monarcha granulata                      | •               | • | •                       |   |                                     |  |  |
| Helicella itala                         |                 |   | •                       |   |                                     |  |  |
| Helix aspersa<br>Hygromia subvirescens  |                 |   | Open country<br>species |   |                                     |  |  |
|   |                 |   |                         |   |                                     |  |  |
| Pupilla muscorum                        |                 |   | •                       |   |                                     |  |  |
| Vallonia excentrica                     |                 | • | •                       |   |                                     |  |  |
| Helicella virgata                       |                 |   | •                       | • | Alien open country                  |  |  |
| Helicella caperata                      |                 |   | •                       | • | species                             |  |  |
| Cochlicella acuta                       |                 | • | •                       | • |                                     |  |  |

<sup>1</sup> Listed as A. agrestis by Bullen, but now identified as A. reticulatus.

Table 2: Harlyn Bay land snail species, 1976 and 1900-1905, listed by ecological groups.

### THE HARLYN BAY EXCAVATIONS, 1900 - 1905

The second part of this paper is devoted to a reconsideration of the results and implications of the work carried out at Harlyn Bay following the discovery of the Iron Age cemetery. Between 1900 and 1905 a Harlyn Bay Excavation Committee set up by the Royal Institution of Cornwall and comprising amongst others, the Rev William Iago of Bodmin, Prof O.V. Muller of Newquay and formerly the University of Hyderabad, and the Rev Sabine Baring-Gould of Lewtrenchard in Devon, excavated over 130 individual graves under the direction of Mr Reddie Mallet. No formal report of this work was ever published however, and apart from a number of short and often confused reports describing the circumstances of the discovery and ascribing the cemetery to a Neolithic community (Whitley, 1902; Anon., J. Roy. Inst. Corn. 14, 1901, 319-20, 325-32), the main contemporary account is provided in the three progressively enlarged editions of the Rev Ashington Bullen's guide to Harlyn Bay (1901, 1902a and 1912). It is however doubtful whether Bullen himself played any large part in the main season of excavation and his very limited description of the graves and their contents forms only a minor part of a work which prefers to ramble more widely amongst problems of general antiquarian and zoological interest. This guide nevertheless provided the only major source for subsequent discussions of the site by Crawford and Hencken between the wars, and more recent references to its importance in the context of the Cornish Iron Age by Prof Charles Thomas and Lady Aileen Fox (Crawford, 1921; Hencken, 1932; Thomas, 1966, 77; Fox, 1964, 113).

Although providing useful verbal description of the cists, the overriding defect of Bullen's account is the absence of an overall excavation plan. A set of some forty pages of manuscript field notes compiled during the summer of 1900 by Mallet or the Rev William Iago and recently recognised in the library of the Royal Institution of Cornwall is therefore particularly important in providing rough drawings or descriptions of nearly 50 graves, together with sketch plans and detailed measurements which allow the position of 59 burials to be plotted with reasonable accuracy (Fig. 29 and Appendix I). The relationship of this sequence to the remaining 70 graves is unknown, although the plotted burials can be placed with tolerable confidence immediately south of the 1976 excavation, in the area now occupied by 'Tamariska' and the old museum.

Although incomplete, this plan provides a large enough sample to confirm some of Bullen's basic observations. The first striking feature is that bodies were almost invariably placed in graves lined and covered with flat slabs of slate. Only three burials were without any protective stone structure (Nos. 21, 37 and 49: Bullen, 1912, 40) and the majority of cists take the form of rectangular boxes varying from 0.9 m and 1.2 m in length and from 0.5 m to 0.75 m in width. The only deviations from this standard form were five relatively tiny cists used for the burial of young children (Nos. 1, 8, 20, 31, 35), an oval cist containing a single adult skeleton (No. 32) and an exceptional circular grave divided by a central partition (No. 56, location unknown). This latter cist, which contained the skeletons of two crouched adults and an infant in its western compartment and a single adult in the eastern half, may, on the basis of marked skeletal disturbance, represent a reopened family grave.

In addition to the pair of skeletons found beneath the buried wall, four further graves were used for the apparently simultaneous burial of two individuals (Nos. 21, 23, 35, 39). The practice of double burial, though best known in the context of La Tène I and II inhumation cemeteries in northern France (Dechelette, 1914, 1035-6; Bretz-Mahler, 1971, 182-3), can be paralleled in eastern Yorkshire at both Danes Graves (Stead, 1965, 105-10), and at Burton Fleming (Stead, 1976, 223) and in southern England by several recordings of pairs of skeletons from the fillings of storage pits or conventional earthen graves (Pitt-Rivers, 1887, 35-6; 1888, 97-8; Bulleid and Gray, 1917, 684; Cunnington, 1913, 77-9; Musty, 1961, 35; Farrar, 1954, 90-4). In both these areas, bodies lie side-by-side or above one another, although it is not yet clear how closely British examples reflect the French practice of regularly burying together the bodies of a man and a woman. Returning to Harlyn it can be seen that the illustrated skeletons always lie in crouched, or more rarely contracted, positions and that almost all the cists are aligned on a common NNE-SSW axis. Of the 17 recorded skeletons, 11 lie on their left sides and six on their right. Moreover, with the single excep-



Fig. 28

Harlyn Bay: Plan reconstructed from contemporary field notes showing probable location of graves excavated in 1900.

tion of the occupant of the uniquely trapezoidal cist 51, every individual lay with its head to the north, a preference whose importance will shortly become apparent in a discussion of the origins of the Harlyn rite.

One shortcoming of our partial plan is that it may not fully represent the reported arrangement of graves in regular rows running from north to south, nor can it show whether the illustrated graves lay at the same or different stratigraphic levels. Bullen's remarks on this point are revealing and provide the most positive evidence for a prolonged burial period. 'The graves are placed methodically in regular lines and in some cases four cists have been put one above the other. Probably through the centuries during which the place was used for interments, the sand encroached and covered up the lower levels'. (Bullen, 1912, 39-40). That earlier graves may sometimes have been forgotten and as a result disturbed by secondary burials is indicated both by the field notes, which record the disturbance of earlier graves by burials 22, 26 and 34, and by Bullen's description of a 'prehistoric charnel-house' used for the 'promiscuous reception of human bones taken from other cists previously existing, the cists of those thus dispossessed being again devoted to the use of



## Fig. 29

Harlyn Bay: Reconstructed plan of burials excavated in 1900. Numbers refer to the list of burials in Appendix 1. Graves recorded in field notes were unnumbered and the location of 70 further excavated graves is unknown.



Fig. 30

Harlyn Bay: Metalwork from graves excavated 1900-1905. 1-2, Bronze disc-footed brooches;
3, Iron ?brooch fragment; 4-5, Bronze wire bracelets; 6, Bronze wire ring-headed pin;
7, Bronze ring; 8, Flat bronze ?bracelet fragments; 9, Decorated flat bronze strip; 10,
Spiral bronze finger ring; 11, Iron object, ?disc-footed brooch; 12, Iron bracelet fragments;
13, Iron ring-headed pin.

fresh tenants. The bones in the charnel-house occur pell-mell as though thrown in care*lessly*' (Bullen, 1912, 40). Whether this collection of bones had been placed in a specially built cist is uncertain, although it is specifically stated that the deposit was found in a secondary level immediately above the buried wall. It would also appear that the 'charnelhouse' has nothing to do with either the group of disturbed, but uncisted skeletons (No. 50) found to the south, or two small graves containing collections of human skulls. In one of these (No. 10) four skulls had been arranged in a square formation with a fifth placed 'over them'. In the other example (No. 46) three skulls lay in a north-south line and all faced towards the west. Interpretation of these two cists is not easy, as detached skulls are otherwise unknown from Iron Age cemeteries in Britain, and the question whether the skulls from Harlyn had served as battle trophies, as at Glastonbury, Somerset, and Bredon Hill, Worcestershire (Bulleid and Gray, 1917, 667-8; Hencken, 1938, 21-5) or merely represent the formal reburial of ancestral heads is beyond speculation. Descriptions of two otherwise normal Harlyn burials nevertheless make it apparent that deliberate beheading sometimes took place before burial. A manuscript sketch of burial 37 clearly shows the skull positioned close to the feet, while Prof A.C. Haddon's description of a cist excavated in 1905 includes the remark that 'the skull is quite dissevered from the body and rests on its under surface and jaw' (Bullen, 1912, 162).

General pathological data on the excavated skeletons are very limited, the only major reported abnormality being a set of severe sword-cuts to the skull of an adult from burial 58. Skeletal and cranial reports by Beddoes and Haddon (Bullen, 1912, 65-75) nevertheless indicate that the cemetery was used for the burial of adults of both sexes, while the additional presence of at least seven child graves is remarkable in view of the rarity of formal juvenile burials in the British Iron Age.

### Grave goods and chronology

No detailed description of objects associated with the burials has ever been published, and although the exact number of skeletons provided with formal grave goods is unknown, field note descriptions suggest that the majority were unaccompanied. With the exception of pieces that may have been dispersed at the time of the excavation, the surviving material is now preserved in Truro Museum, some of it having previously been held in the private museum at Harlyn, where inadequate labelling and the passage of time had unfortunately confused the provenance of a number of objects. The following discussion therefore deals only with those items that can positively be related to the cemetery. *Metalwork* 

The best-known pieces are a closely matched, but not identical, pair of disc-footed brooches (Fig. 30, 1 and 2), each member of which has as its principal element a high arched bow, sharply returned foot and long skeuomorphic bilateral spring-bar with knobbed terminals. The enlarged decorative disc was cast separately and then rivetted to the bulbous foot. The pins of both brooches are now missing, but one in position at the time of excavation swung from the false spring-bar by means of a simple ring-swivel. In addition to the cast grooves on the terminal disc, each brooch is decorated with a series of fine spinal ridges running the length of the bow. The only other recognised examples of this brooch form from Britain are a pair of similar bronze specimens from the Stamford Hill inhumation cemetery near Plymouth (Fox, 1958, Pl. 38, Nos. 24 and 25), although a severely corroded iron object (Fig. 30, 3) from Harlyn can probably be regarded as a further member of the series, despite a missing spring-bar.

E.T. Leeds followed Sir Herbert Read in identifying northern Spain as the source for both the characteristic knobbed spring terminals and the massive disc feet of the Harlyn brooches (Read, 1907, 372-4; Leeds, 1927, 229-30, and Fig. 10), although more recent work now confirms that these same elements are also found amongst brooches from later Hallstatt cremation burials in the Aquitaine region of south-western France (Fabre, 1952, Pl. VIII; Leeds, 1927, Fig. 10; Louis and Taffanel, 1960, Fig. 107; J.-P Mohen, per. comm.). The orthodox coiled springs and 6th or 5th century BC date of these pieces nevertheless prevents closer comparison with the Harlyn and Stamford Hill brooches, whose accompanying metalwork strongly militates against the establishment of inhumation cemeteries in



Fig. 31

Harlyn Bay: Objects of pottery, glass, bone and stone from graves excavated 1900-1905. Spindle whorls, 1-3, 6, stone; 4-5, Pottery; 7, bone, (1/3); 8-9, shale bracelet fragments; 10, segmented blue glass bead; 11-12, perforated slate needles; 13, slate borer; 14, slate 'knife' (2/3).

south-western England much before the 4th or 3rd centuries BC. Although a single Cornish brooch might therefore be treated as an heirloom acquired two or three centuries earlier, a series of five examples can only be viewed as imports from an area in which Hallstattderived brooches were still current during the La Tène Iron Age. Because no such source can be identified in south-western France and as the concept of the false bilateral springbar is paralleled in Britain only on a single La Tène I brooch from Hunsbury (Hodson, 1971, 52 and Fig. 1a), the appropriately archaic metalworking tradition must once again be sought to the south of the Pyrenees. Recent work has indeed confirmed that typologically developed brooches with swivelling pins do occur in this area and it has been suggested, moreover, that the type may not have developed here until the later 3rd century BC. (I am indebted to Prof C.F.C. Hawkes for this information, which was provided in advance of more detailed discussion in his forthcoming report on *castro* excavations in Portugal.)

The remainder of the Harlyn metalwork is less exotic and belongs more happily within the context of the middle or later British Iron Age. Two thin bronze wire bracelets and a fragmented iron specimen are undiagnostic (Fig. 30, Nos. 4, 5 and 12), but a simple bronze ring-headed pin (Fig. 30, No. 6; Dunning, 1934, Fig. 3, No. 3), a more massive example in iron (Fig. 30, No. 13, not listed by Dunning) and a spiral bronze finger ring (Fig. 30, No. 10) are all familiar southern British forms, though rare in the south-western peninsula (Dunning, 1934, 281-2 and Fig. 6; Jope and Wilson, 1957, 81 and Fig. 3). The function of a flat bronze strip decorated with an infilled pair of incised wavy lines is uncertain (Fig. 30, No. 9), but a second bronze fragment is apparently the bow of an early Romano-British, or perhaps La Tène III brooch (Fig. 30, No. 3). Although this piece cannot be closely compared, 1st century AD brooches have been encountered amongst all the main inhumation cemeteries in the south-west. In addition to a Nauheim-derived brooch from Trelan Bahow (Jope and Wilson, 1957, 90) there are seven bow brooches from burials in the Isles of Scilly (Ashbee, 1954, Figs 5 and 6), two from Stamford Hill (Bate, 1866, Pl. 31) and a single specimen from Trevone (Trollope, 1860, Pl. facing p. 315, Fig. 12). Most of these examples have general affinities with Collingwood's later 1st century AD Group H and although difficult to date in a Cornish context, may have continued in the region until the middle of the 2nd century AD (Fowler, 1962, 53). Glass

The only glass object is a small bead formed in two segments (Fig. 31, No. 10). Although conventional spherical beads are known from Trelan Bahow and Hughtown (Rogers, 1873, 271-2; Ashbee, 1954, 18 and Fig. 6, No. 10), the only other segmented example from Cornwall is a green triple-bead from the Romano-British settlement at Goldherring (Guthrie, 1969, 27 and Pl. IVb).

### Spindle whorls

Seven spindle-whorls, made from slate, stone, pottery and bone were associated with the cemetery, although it can only be assumed that each was in a different grave (Fig. 31, 1-7). The four flattened slate and stone examples contrast with the taller pottery specimens, one of which (Fig. 31, No. 4) belongs to a southern British class of biconical whorls largely abandoned by the time of the Claudian conquest (Wainwright, 1965, 5-6 and Fig. 3). The use of spindle-whorls as grave goods cannot be matched in the south-west and is generally rare in central southern England, although examples are known from female burials at Arras, Danes Graves and Burton Fleming in eastern Yorkshire (Greenwell, 1906, Figs 20 and 56; Stead, 1977, 219).

### Pottery

No complete pottery vessels were associated with graves and with the exception of a single triangular shaped sherd said to have been found by the mouth of a skeleton, all surviving body and rim fragments appear to derive from the kitchen midden explored to the south of the burial ground. These mainly represent plain, well-fired late Iron Age or Romano-British vessels, although three decorated sherds belong to Peacock's Group I Glastonbury series (Peacock, 1969, 57 and Fig. 1).

### Slate and shale

Several hundred supposedly worked and polished fragments of slate retrieved from graves and the occupied land-surface beneath the blown sand are in fact natural pebbles whose resemblance to implements is purely coincidental (Bullen, 1912, Pl. 8). At least four of the surviving specimens nevertheless represent the products of a polished slate industry without parallel elsewhere in southern Britain. A sharply pointed 'knife' (Fig. 31, No. 14) may derive its basic shape from a natural beach stone but has undoubtedly received second-ary working to its facetted blade. The remaining three implements are all narrow pointed borers or needles, two of which (Fig. 31, Nos.11 and 12) are distinguished by small basal perforations and thread-worn grooves that suggest their use for manufacturing or repairing fishing nets.

Although difficult to date, this slate-using technique is illuminating as an example of the localised exploitation of an available raw material in an area where metal was generally scarce (Fowler, 1962, 54). The superficial resemblance of this Cornish phenomenon to the more sophisticated Kimmeridge shale industry of the Isle of Purbeck is all the more striking in the light of two shale bracelet fragments from Harlyn graves (Fig. 31, Nos. 8 and 9). Both are roughly oval in section and represent narrow bangles similar to a complete example recovered from the outlying Trevone cist in 1955 (Dudley and Jope, 1965, 21-2, Fig. 8).

Taken alone the Harlyn grave goods indicate a materially impoverished community whose few ornamental possessions were obtained as a result of sporadic, wide-ranging trade with both central southern England and south-western Europe during the later centuries of the pre-Roman Iron Age. In turning to the south-western cist burial tradition as a whole this reliance on outside markets will be seen as a recurrent theme, although some individual communities show signs of greater wealth than others.

### Cist burial in south-western England

Although Harlyn Bay remains the largest excavated Iron Age cemetery in the Cornish peninsula, several other burial groups allow the recognition of a distinct funerary tradition whose shared characteristics may be compared with related burial forms from other parts of southern Britain.

Geographically closest to Harlyn is the cemetery discovered two miles to the north-east at Trevone in 1848. No formal reports on the site survive but it is recorded that two superimposed groups of graves were encountered beneath, and possibly separated by, layers of blown sand (Trollope, 1860, 312). The upper level comprised a series of supposedly early Christian or medieval cists directed east-west, beneath which were several rows of similarly constructed graves aligned on a north-south axis. The number of graves, their dimensions and the posture of individual skeletons are all unrecorded and the only known associated object is the Romano-British brooch illustrated by Trollope (1860, Pl. facing p. 315, Fig. 12). An additional cist discovered in 1955 nevertheless confirms the Iron Age origins of the cemetery. Though larger than most of the Harlyn graves, this latter slate cist was similarly oriented and contained the remains of a skeleton whose head lay to the north. In addition to iron and shale bracelets the body was accompanied by a pair of 2nd or 3rd century BC La Tène II brooches probably imported from a manufacturing source somewhere in central southern England (Dudley and Jope, 1965).

Another extensive cemetery was destroyed during military clearance operations on Stamford Hill, Plymstock in 1864-5. Once again the majority of the skeletons lay crouched or contracted in graves lined and covered with flat stone slabs, although comments that individual graves occasionally cut one another at 'right-angles' suggest that variations in orientation may have occurred over an extended period (Bate, 1866, 501). The majority of the grave goods associated with these burials were unfortunately destroyed during the Second World War, but had previously been examined and photographed by Sir Cyril Fox, whose account together with Bate's descriptions and P.J. Clarke's subsequent discussion, provides the only reliable basis for assessing the date of the cemetery (Bate, 1866, 502-7; Fox, 1958, and Pl. 31; Clarke, 1971).

In his contemporary account Bate stated that at least six bronze bracelets, four bow brooches, a penannular brooch and parts of three bronze mirrors were found in graves, together with a fragmentary glass bowl or vase and a series of Romano-British pottery



I Bronze Age Pottery from Tredarvah.



II Harlyn Bay, 1900, looking SW.



III Harlyn Bay, Area 1, looking W.



IV Harlyn Bay, Area 1, looking E.



V Harlyn Bay 1976, Area 1, Section b-b<sup>1</sup>.



VI Aerial view of Killibury from West.



VII Killibury 1975; the West hollow with oven base 57.

Mein yn dans In Maddern Parish, Cornwal. 60. Paces in Circum ference. 0 0 J 13. Standing

VIII Boskednan Stone Circle, 1700. Stowe MSS 1023 No. 13. Photo: British Museum





IX Chún Castle, 1700. Stowe MSS 1023 No. 16 Photo: British Museum

vessels (1866, Pls. 30-2). Fox subsequently illustrated three early or middle La Tène bracelet fragments, two La Tène I brooches, a matched pair of bronze disc-footed brooches, a swan's-neck pin, two straight-shafted pins and an unusual disc-headed pin, although it is not confirmed that these pieces were all directly associated with burials (Fox, 1958, Pl. 31; Clarke, 1971, Pl. 1).

Although important in their own right, it is at present sufficient to accept that all three bronze mirrors belong to a short-lived insular manufacturing tradition that flowered towards the middle of the 1st century AD (Fox, 1949; 1958, 93; Stead, 1965, 56; Spratling, 1970). The bronze bracelets cannot yet be so closely dated, although a group of 'knobbed' examples allied to specimens from La Tène II contexts in eastern Yorkshire and Lincolnshire may have been imported to Stamford Hill direct from northern France. At least three of the remaining four bracelets had rounded bodies, hinged opening sections and raised curvilinear decoration reminiscent of the elaborately decorated Newnham Croft example. Like the knobbed bracelets these latter pieces probably belong within the 2nd or 1st centuries BC, although earlier dates could be considered (Bate, 1866, 502-3 and Pl. 31, Figs. 1 and 2; Fox, 1958, Pl. 31 and Fig. 6a; Stead, 1965, 49-54; Clarke, 1971, 147).

Of the recorded brooches, two examples from north-western Spain or Portugal have already been discussed in relation to the Harlyn brooches. Four remaining bow brooches fall into two distinct cultural horizons, one represented by two later 1st or early 2nd century brooches broadly compatible with the examples from Trevone and Hughtown (Bate, 1866, Pl. 31, Figs 5-8), the other by a pair of La Tène Ic specimens (Fox, 1958, Pl. 31, Figs 26 and 27). The association of these latter early La Tène pieces and the even older-looking swan's neck and disc-headed pins with graves has never been confirmed, but if accepted would inevitably push the origins of the cemetery back as far as the 4th or 3rd centuries BC. The only other brooch known to be from a burial is a Class A.1 penannular specimen with knobbed terminals (Bate, 1866, Pl. 31, Fig. 3; Fowler, 1960, 174).

The fourth mainland cemetery of importance was discovered in 1833 at Trelan Bahow on the Lizard peninsula (Rogers, 1873, 267; Dowson, 1970, 7-10), where 'several' graves composed of flat side and cover slabs lay with their long axes directed east-west. The posture of the bodies is unknown, but the elaborate grave group associated with an assumed female skeleton confirms that the burial ground was in use during the middle of the 1st century AD. In addition to another decorated bronze mirror, this group included a La Tène III Nauheim-derived flat-bowed brooch, fragments of a second brooch, several bronze rings and at least two glass beads. Although the appearance of such a rich burial in a remote corner of the Lizard is at first sight surprising, Peacock's demonstration that the area was closely linked to the rest of south-western England through its export of local gabbro clays (Peacock, 1969) could nevertheless allow the Nauheim brooch to have been imported, along with the bronze mirror, from central western England where insular versions of the form are relatively plentiful (Jope and Wilson, 1957, Fig. 2).

Although further groups of cists have been discovered near Phillack Church and at Crantock (Thomas, 1961, 11-12; L. Olson, pers. comm.), there is as yet insufficient evidence to confirm that these and several isolated grave sites actually belong to Iron Age cemeteries. Better qualified, but nevertheless unconfirmed contenders are a long cist containing a pottery vessel and an unidentified iron object from Calartha, St Just (Hencken, 1932, 121 and 305), and single cists aligned on distinctive north-south axes, but without grave goods from Penmenner in Landewednack and Little Trendeal, Bissick (Thomas, 1955; Flint, 1885, 211-12). A further cist associated with 1st or 2nd century AD pottery fragments from Woodleigh, near Kingsbridge in Devon, is geographically peripheral but merits inclusion as the skeleton was again crouched with the head directed north (*Archaeological Newsletter*, CBA Group 13, 7, 1961, 118).

Of greater interest, however, are the dry-stone walled or boulder-built cists from the Isles of Scilly (Ashbee, 1974, 120-47). Seven or eight isolated examples from St Mary's and St Martin's are not closely dated, but two small cemeteries on St Mary's and single graves from St Martin's and Old Man Island indicate a strong 1st century AD tradition of crouched inhumation. In discussing the eleven burials from Hughtown, Ashbee initially distinguished a predominant group of oval cists (Type 1) and a secondary class of more massive rectangular graves (Type 2). Five graves from Poynter's Garden, St Mary's, and the single cists from St Martin's and Old Man confirm this pattern and the characteristic use of weathered granite boulders as a building material, although it is doubtful whether these local morphological and constructional variations provide any fundamental distinction between the Scillonian and mainland cist traditions (Dudley, 1961, 224 and Fig. 27; Tebbutt, 1934, 302-4 and Fig. 2; Lewis, 1949, 84-5 and Pl. X). Much more significant is the adoption within the Scillies of the same funerary prescriptions that were in use at Harlyn Bay and elsewhere. At Hughtown, Poynter's Garden, Old Man and St Martin's it is either confirmed or implied by cist size that bodies always lay crouched in graves directed roughly northsouth. Despite poor preservation of bones it is also known that four skeletons from Poynter's Garden and seven from Hughtown lay with their heads to the north, while two other Hughtown examples were directed respectively north-east and north-north-east.

Although Poynter's Garden provided little dateable material, three penannular brooches and eight later 1st century AD bow brooches from Old Man and Hughtown confirm that the Scillonian burials are broadly contemporary with some of their mainland counterparts (Tebbutt, 1934, Fig. 3; Ashbee, 1954, 24 and Figs. 5 and 6; Fowler, 1960, 175-6). An additional disc brooch from the same Hughtown grave as a Class C penannular brooch has, however, been treated in the past as a 3rd century AD piece, even though this late date seems incompatible with the earlier bow brooches and Romano-British pottery vessels from adjacent graves (Ashbee, 1954, 16-19 and Fig. 7).

### Summary and conclusions

Despite often fragmentary surviving evidence it is now possible to define a Cornish and Scillonian inhumation tradition characterised by the use of stone-lined graves, a distinctive crouched body position, a predominant preference for northerly orientation and the limited, but occasionally quite lavish, provision of grave goods. Although much of the associated metalwork belongs to the 1st century AD, La Tène II brooches, decorated bronze bracelets ring-headed pins and the imported disc-footed brooches confirm that the Harlyn, Trevone and Stamford Hill cemeteries were all in operation by at least the 2nd century BC.

Acceptance of the doubtful assumption that the Stamford Hill swan's neck pin and La Tène I brooches were genuine grave goods would, moreover, force the origin of south-western cist inhumation back into the 4th or 3rd centuries BC. Although comparable evidence from other parts of Britain now indicates that such an early introduction is technically feasible, it remains hard to overlook the effects of imposing a 400 year life-span on the few Cornish burial grounds that have so far been recorded. In the case of even a comparatively large cemetery like Harlyn, 130 graves spread over 400 years would allow only one burial to have been performed every three years, assuming that all individuals were interred in the same fashion. Add an hypothetical average human life-expectancy of 30 years to this figure and it becomes apparent that the cemetery could never have served a living population of more than ten people. The contention that a handful of communities of this size could have sustained a distinctive, stable burial rite in apparent isolation over such a long period is so difficult to accept that it would seem wiser to argue in terms of a considerably compressed time scale until further cemeteries or better dating becomes available.

In turning to the critical question of the tradition's origins, a total absence of earlier Iron Age and later pre-Christian Romano-British burials in Cornwall adds weight to the impression that inhumation was never widely adopted and may instead have emerged only temporarily in peripheral parts of an area with a stronger native cultural preference for a different and archaeologically indetectable method of disposal. Earlier attempts to trace an insular source for the inhumation principle were persistently hampered by an apparent absence of parallel burial forms in central southern Britain, Crawford and Hencken implicitly concluding an independent Cornish development. Prof Charles Thomas has more recently suggested an alternative origin among the analogous stone grave cemeteries from the coastal sand-dunes of Brittany (Thomas, 1966, 77; Giot, 1960, 184-6), although this initially attractive hypothesis is weakened by the near universal adoption of an extended body position in Brittany and Giot's subsequent demonstration that several of the better known cemeteries belong to the later Roman and sub-Roman periods rather than to the La Tène Iron Age (Giot, 1973).

A second possible source are the Channel Islands of Alderney and Guernsey, where a series of cist burials provide positive evidence of the survival of inhumation into a continental La Tène III or even post-Caesarean horizon (Kendrick, 1928, 186-98). An invariable preference for extended burial with grave goods that include cordonned pottery vessels and items of warrior equipment nevertheless distinguishes the Channel Island rite from the Cornish tradition, whose characteristic elements can only be matched by returning to southern and eastern England.

Although the earlier Iron Age funerary practices of this area remain difficult to detect, two newly recognised inhumation traditions from central southern England and southern Dorset are at last emerging to provide a geographical and cultural link between the recognised later Iron Age rites from Cornwall and eastern Yorkshire (Whimster, 1977). The first, and most widespread of these is represented by nearly 200 isolated burials found on hillfort and settlement sites between Somerset in the west and Cambridgeshire in the east. While the majority of these inhumations had been placed in disused storage pits or simple earthen graves, a significant number were associated with slab built cists morphologically similar to those from Harlyn Bay and other south-western sites. It would, however, be unwise to conclude that the examples from Birdlip and Hailes in Gloucestershire (Bellowes, 1881; Clifford, 1944), Clevedon in Avon (Gray, 1942, 73-6) or Sheepwash on the Isle of Wight (Crawford, 1913) are therefore directly related to their south-western counterparts. It is instead much more likely that these are parallel local inventions of the technique in those areas where suitable stone was easily obtained and could provide an effective form of lining for an inhumation grave.

Of more profound significance than this simple parallel development of cists is the recurrence of the Cornish rules of orientation and body position amongst all the other regional inhumation groups. Although the burial traditions in Wessex, Cornwall and eastern Yorkshire differ from one another in the form of their graves and choice of funerary offerings, a universal adoption of the distinctive crouched body posture and an equally widespread preference for burial with the head to the north seem to point to a shared and essentially insular ritual theme. While the reappearance of this combination of funerary rules in areas as widely separated as the Isles of Scilly and the Yorkshire Wolds amply demonstrates the authority of the tradition, it nevertheless remains difficult to trace the way in which the prescriptions were transmitted to regional rites that are at present known only in their mature, developed forms and which seem to emerge almost simultaneously during the 4th or 3rd centuries BC. As no one sub-tradition can yet be seen as ancestral to any other, it seems apparent that the crucial shared elements must have been introduced to the various zones during the earlier phases of the Iron Age through the medium of a preexisting, but archaeologically invisible method of burial. What stimuli then suddenly, and apparently independently, transferred the prescriptions to visible traditions of inhumation, both in the south-west and in Wessex and Yorkshire, remains for the moment obscure, as does the form of the indetectable ancestral rite. Within a specifically Cornish context, the much needed answers can only emerge through the discovery and excavation of further cemeteries.

### APPENDIX

Burials 1900 - 1905. Numbers refer only to reconstructed burial plan (Fig. 29) and do not indicate order of excavation. Quotations and dimensions are from annotations to MS field notes in Truro Museum. Accuracy of location is indicated as either *probable* or *possible*.

- 1. 'Baby's basket grave'. Circular cist. Dimensions: Diameter, 1 ft 8 in (0.50 m). Probable.
- 2. 'Child', flexed on left side, head to north, hexagonal cist. Dimensions: Length, 3 ft 4 in (1.00 m). Probable.
- 3. Single surviving stone of cist. Possible.
- 4. 'Wet' cist. Probable.
- 5. 'Wet' cist. Possible.
- 6. ?Cist. Dimensions: 3 ft 5 in x 2 ft 3 in (1.02 m x 0.67 m). Possible.

- 7. ?Cist. Dimensions: 3 ft 2 in x 2 ft (0.95 m x 0.60 m). Possible.
- 8. 'Child's Grave'. Dimensions: 11 in x 11 in (0.28 m x 0.28 m). Possible
- 9. 'Unopened rough cist', possibly circular, as No. 10. Possible.
- 10. Circular cist. '4 skulls and one over them'. Dimensions: Diameter 4 ft x 3 ft (1.2 m x 0.90 m); Depth 2 ft 10 in (0.85 m). Probable.
- 11. Cist, 're-used'. Dimensions: 4 ft 10 in x 2 ft 1 in (1.45 m x 0.62 m). Probable.
- 12. Cist, 'watery grave'. Dimensions: 4 ft 10 in x 2 ft 4 in (1.45 m x 0.75 m). Probable.
- 13. Square cist. Possible.
- 14. ?Cist. Dimensions: 3 ft x 2 ft (0.90 m x 0.70 m). Possible.
- 15. ?Cist. Dimensions: 4 ft x 1 ft 10 in (1.20 m x 0.55 m). Possible.
- 16. ?Cist. Dimensions: Length, 4 ft 6 in x 2 ft 5 in (1.35 m x 0.72 m); Depth, 1 ft 7 in (0.47 m). Possible.
- 17. ?Cist. Dimensions: 4 ft 7 in x 2 ft 3 in (1.37 m x 0.67 m). Possible.
- 18. Cist with skeleton flexed on left side, head to north. Second sketch indicates legs in crouched position. Described as 'mid-deep'. Probable.
- 19. Cist with skeleton crouched on right, head to north. Another sketch indicates full contraction of legs. *Dimensions:* 4 ft x 2 ft (1.20 m x 0.60 m). *Probable*.
- 20. Cist marked 'child'. Relationship to 19 is not clear, although both graves appear to be at the same level and contiguous. Dimensions: 2 ft x 1 ft 9 in (0.60 m x 0.52 m). Probable.
- 21. Earth grave marked 'no proper cist'. Contained two skeletons 'much decayed' with the comment that these were 'crouched' or 'crushed'. Probable.
- 22. Cist with 'child' crouched on right side with head to north. Probable.
- 23. Cist, 'deep down', 'water'. Apparently underlies 22. Containing '2 Sk[eletons], much decayed'. Probable.
- 24. Cist with skeleton crouched on left side, head to north. *Dimensions:* 4 ft 1 in x 1 ft 9 in (1.22 m x 0.52 m). *Probable*.
- 25. Small irregularly shaped cist, apparently underlying or disturbed by 26. Probable.
- 26. Cist, apparently overlying 25, or cutting it. Skull on right side at north end. Probable.
- 27. Cist. Probable.
- 28. Cist. Probable.
- 29. Cist. Probable.
- 30. Cist with skeleton crouched on right side, head to north, possibly overlying grave 31. 'High One' written in relation to head and foot stones. Further note indicates 'beheaded and [?] chief'. Dimensions: Length, 3 ft (0.90 m). Probable.
- 31. Cist of child, either annexed to, or under, grave 30. 'front 2 teeth, each row'. Dimensions: Length, 2 ft (0.60 m). Probable.
- 32. Oval cist with skeleton crouched on left side, head to north. Grave indicated as 'shallow'. Dimensions: 4 ft x 3 ft (1.20 m x 0.90 m). Probable.
- 33. Cist marked 'deep', 'water'. Probable.
- 34. Cist with skeleton crouched on the left, with head to north. 'Very high stone' at head. Detailed drawing appears to show skull and other bones of an underlying burial perhaps diturbed by 34. Probable.
- 35. Square cist containing two infants. Detailed drawing shows these crouched with heads to north and south. *Probable*.
- 36. Cist with skeleton flexed on left side. Head directed to north. *Dimensions:* 4 ft 4 in x 2 ft 4 in (1.30 m x 0.70 m). *Probable*.
- 37. Earth grave with skeleton crouched on left side. Body directed north, although head had been removed and placed by feet. *Probable*.
- 38. Cist. '*Ring-head*' presumably refers to one of the ring-headed pins preserved in Truro Museum. *Dimensions*: 4 ft x 2 ft (1.20 m x 0.60 m). *Probable*.
- 39. Cist containing two bodies, 'one east, one west, much decayed'. Directions probably indicate orientation of face. Grave orientation suggests heads pointed north and that bodies would have lain left and right sides respectively. *Dimensions:* 2 ft 6 in x 1 ft 9 in (0.75 m x 0.52 m). *Probable*.
- 40. Small cist, overlying 39. 'Water. Body much decayed, facing east'. Therefore on left

side with head to north. Probable.

- 41. Cist. Semi-legible comment 'Another . . . ring'. Probable.
- 42. Cist. Probable.
- 43. Cist. With 'ring'. Dimensions: 3 ft 2 in x 1 ft 9 in (0.95 m x 0.52 m). Probable.
- 44. Cist composed of 'thick single stones' and containing a 'kind of pearl earring'. Probable.
- 45. Cist with skeleton flexed on left side, head to north. Probable.
- 46. Cist apparently sharing its eastern wall with 45. Contained three skulls and 'ring'. Skulls appear in sketch to have been placed in a north-south line, all facing right (West). *Probable*.
- 47. Cist with skeleton crouched on left, head to north-north-east. 'Bronze bangle'. Probable.
- 48. ?Cist. No details, but sketches seem to indicate a disturbed grave. Probable.
- 49. Earth grave with skeleton crouched on right side, head to north. Probable.
- 50. No cist. Collection of bones and skulls. 'Several in three or more layers' Apparently a group of disturbed uncisted burials disctinct from the 'charnel house' deposit found to the north (Bullen, 1912, 40). Probable.
- 51. Trapezoidal cist. Skeleton flexed on left side with head to the east. Dimensions: Length, 3 ft (0.90 m); Width, 2 ft (0.60 m) at east end, 1 ft (0.30 m) at west. *Probable*.
- 52. Cist. Dimensions: Length, 4 ft 4 in x 2 ft 5 in (1.30 m x 0.72 m); Depth, 1 ft 11 in (0.57 m). Possible.
- 53. Cist. (Location confusing, as this grave seems to lie in the unexcavated area to the extreme south of the burial ground.) *Dimensions:* 5 ft x 2 ft 6 in (1.50 m x 0.75 m). *Possible.*

Graves, locations unknown, described by Bullen, 1912.

- 54. Skeleton found '*under enclosure gate*', 24 Feb. 1902. Two human teeth found on the pelvis (Bullen, 53).
- 55. Skeleton found with bronze ring and iron bracelet, 1 March 1902 (Bullen, 53, 95 and Pl. 18, Figs. 4 and 5).
- 56. Circular cist with internal partition running from north to south. Western compartment contained two adults, both crouched on left sides with head to north. (Dislocation of skulls and presence of femurs outside the grave suggests post-mortem mutilation or subsequent disturbance.) Associated with the adults was the skeleton of an infant. Eastern compartment contained a single adult skeleton lying on the left side, with head to north. Grave included 23 human teeth unrelated to occupants. Excavated 1 March 1902 (Bullen, 53, 108-12; Pl. 21 and Fig. 15).
- 57. Skeletons of adult and child flattened immediately beneath buried wall under 'charnel house' area. Skeletons covered by a flat slab 4 ft 6 in x 2 ft (1.35 m x 0.60 m) and believed by excavators to be foundation sacrifices (Bullen, 54).
- 58. Skeleton with major sword cuts to face and head (Bullen, 58).
- 59. Cist excavated by A.C. Haddon, April 1905. Adult male contracted on left side with head to north-north-east. Right arm flexed with hand to head, left arm partly under body and extending to chest. Frog skeleton found near mouth (Bullen, 159-62 and Fig. 21). *Dimensions:* 4 ft 6 in x 2 ft 4 in (1.37 m x 0.70 m).
- 60. Burial of an adult male examined by A.C. Haddon, April 1905. The skull was found 'dissevered from the body and rests on its under surface and jaw' (Bullen, 162). Skull facing east, head probably directed north.
- 61-130. No recorded information.

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### **Bibliography**

Alcock, L., 1970. 'Excavations at South Cadbury Castle, 1969', Antiq. J., 50, 14-25

- Ashbee, P., 1954. 'The excavation of a cist grave cemetery and associated structures near Hughtown, St Mary's, Isles of Scilly, 1949-50', Archaeol. J., 111, 1-25
- Ashbee, P., 1974. Ancient Scilly
- Bate, C.S., 1866. 'On the discovery of a Romano-British cemetery near Plymouth', Archaeologia, 40, 500-10
- Bellowes, J., 1881. 'On some bronze and other articles found near Birdlip', Trans. Bristol and Gloucs. Archaeol. Soc., 5, 137-41
- Bretz-Mahler, D., 1971. La civilisation de La Tène I en Champagne. (Ve. supplement à Gallia)
- Buckley, D.G., 1972. 'The excavation of two slate cairns at Trevone, Padstow', 1972', Cornish Archaeol., 11, 9-18
- Bulleid, A. and Gray, H. St G., 1917. The Glastonbury Lake Village, 2
- Bullen, R.A., 1901, 1902a, 1912. Harlyn Bay and the Discoveries of its Prehistoric Remains (1st, 2nd and 3rd editions)
- Bullen, R.A., 1902b. 'Notes on the Holocene mollusca from North Cornwall', Proc. Malacological Soc., 5, 185-8
- Clark, R.M., 1975. 'A calibration curve for radiocarbon dates', Antiquity, 49, 251-66
- Clarke, P.J., 1971. 'The Neolithic, Bronze and Iron Age and Romano-British finds from Mount Batten, Plymouth, 1832-1939', Proc. Devon Archaeol. Soc., 29, 137-61
- Clifford, E.M., 1944. 'Graves found at Hailes, Gloucestershire', Trans. Bristol and Gloucs. Archaeol. Soc., 65, 187-98
- Collins, W.G. and Cantrill, T.C., 1909. 'Solisbury Hill Camp, near Bath', *The Antiquary*, **45**, 326-31
- Crawford, O.G.S., 1913. 'Report on the discovery of a cist burial at Sheepwash, Isle of Wight', Proc. Soc. Ant. Lond., 25, 189-92

Crawford, O.G.S., 1921. 'The Ancient Settlements at Harlyn Bay', Antiq. J., 1, 281-99

Crawford, O.G.S., 1928. 'Stone cists', Antiquity, 2, 418-22

- Cunnington, M.E. and B.H., 1913. 'Excavations at Casterley Camp', Wilts. Archaeol. Mag., 38, 53-105
- Dechelette, J., 1914. Manuel d'Archaeologie, 2, Part 3, Second Age du Fer.
- Dowson, E., 1970. 'Note on Trelan Bahow', The Lizard, 4, 7-10
- Dudley, D., 1961. 'Some cist graves in Poynter's Garden, St Mary's, Isles of Scilly', Proc. West Cornwall Fld Club, 2, 221-31
- Dudley, D. and Jope, E.M., 1965. 'An Iron Age cist burial with two brooches from Trevone, North Cornwall', Cornish Archaeol., 4, 18-23
- Dunning, G.C., 1934. 'The swan's neck and ring-headed pins of the Early Iron Age in

Britain', Archaeol. J., 91, 267-95

Evans, J.G., 1972. Land Snails in Archaeology

Fabre, G., 1952. Les Civilisations Protohistoriques de l'Aquitaine

- Farrah, R.A.H., 1954. 'A celtic burial with mirror handle near West Bay, Bridport', Proc. Dorset Nat. Hist. and Archaeol. Soc., 76, 90-4
- Flint, R.S., 1885. 'Note on the discovery of an ancient burial place in the parish of Ladock', Proc. Royal Inst. Cornwall, 8, 211-12
- Fowler, E., 1960. 'The origins and development of the penannular brooch in Europe', Proc. Prehist. Soc., 26, 149-77
- Fowler, P.J., 1962. 'A native homestead of the Roman period at Porth Godrevy, Gwithian', Cornish Archaeol., 1, 17-60
- Fox, A., 1964. South West England
- Fox, C.F., 1949, 'Celtic mirror handles in Britain with special reference to the Colchester handle', Archaeol. Cambrensis, 100, 24-44
- Fox, C.F., 1958. Pattern and Purpose, a Survey of Early Celtic Art in Britain
- Frere, S.S., 1940. 'A survey of the archaeology near Lancing', Sussex Archaeol. Coll., 81, 140-72
- Giot, P-R., 1960. Brittany
- Giot, P.-R., 1973. 'Armoricains et Bretons: perspectives nouvelles sur les Bretons', Annales de Bretagne, 80, 129-36
- Gray, H. St. G., 1942. 'Glass beads found in a cist at Clevedon', Proc. Som. Archaeol. and Nat. Hist. Soc., 88, 73-6
- Greenwell, W., 1906. 'Early Iron Age burials in Yorkshire', Archaeologia, 60, 251-324
- Guthrie, A., 1969. 'Excavation of a settlement at Goldherring, Sancreed, 1958-1961, Cornish Archaeol., 8, 5-39
- Harding, D.W., 1972. The Iron Age in the Upper Thames Basin
- Harding, D.W., 1974. The Iron Age in Lowland Britain
- Hencken, H. O'N., 1932. The Archaeology of Cornwall and Scilly
- Hencken, T.C., 1938. 'The excavation of the Iron Age camp on Bredon Hill, Worcestershire', Archaeol. J., 95, 1-111
- Hodson, F.R., 1971. 'Three Iron Age brooches from Hammersmith', Brit. Mus. Quarterly, 35, 50-7
- Jope, E.M. and Wilson, C.S., 1957. 'A burial group of the first century A.D. near Donaghdee, Co. Down', Ulster J. Archaeol., 20, 73-95
- Kendrick, T.D., 1928. Archaeology of the Channel Islands, vol. 1, the Bailiwick of Guernsey
- Kennard, A.S. and Warren, S.H., 1903. 'The blown sands and associated deposits of Towan Head, near Newquay, Cornwall', *Geological Mag.*, 10, 19-25
- Kenyon, K.M., 1953. 'Excavations at Sutton Walls, Herefordshire, 1948-1951', Archaeol. J., 110, 1-87
- Leeds, E.T., 1927. 'Excavations at Chun Castle in Penwith, Cornwall', Archaeologia, 76, 205-40
- Lewis, H.A., 1949. 'Cist at St Martin's, Scilly', Antiq. J., 29, 84-5
- Louis, M. and Taffanel, O. and J., 1960. Le Premier Age du Fer Languedocien
- Musty, J.W.G., 1961. 'Note on Tinker Pit, Salisbury', Wilts. Archaeol. Mag., 58, 35
- Peacock, D.P.S., 1969. 'A contribution to the study of Glastonbury ware from south-western Britain', Antiq. J., 49, 41-61
- Penn, W.S., 1960. 'Springhead Temples III and IV', Archaeol. Cantiana, 74, 113-40
- Pitt-Rivers, A.H.L.F., 1887. Excavations in Cranborne Chase, 1
- Pitt-Rivers, A.H.L.F., 1888. Excavations in Cranborne Chase, 2
- Read, C.H., 1907. 'Report on the bronze brooches from Harlyn Bay', Proc. Soc. Ant. London, 21, 372-74
- Richmond, I.A., 1968. Hod Hill, 2
- Rogers, J.J., 1873. 'Romano-British, or late Celtic remains at Trelan Bahow, St Keverne, Cornwall', Archaeol. J., 30, 267-72
- Royal Commission on Historical Monuments (England), 1970. Dorset, Vol. 2, South-East Spratling, M.G., 1970. 'The late pre-Roman Iron Age bronze mirror from Old Warden',

Beds. Archaeol. J., 5, 9-16

Stead, I.M., 1965. The La Tène Cultures of Eastern Yorkshire

Stead, I.M., 1977. 'La Tène burials between Burton Fleming and Rudston, North Humberside', Antiq. J., 56, 217-26

Tebbutt, C.F., 1934. 'A cist in the Isles of Scilly', Antiq. J., 14, 302-4

- Thomas, A.C., 1961. Phillack Church: an illustrated history of the Celtic, Norman and Medieval foundations
- Thomas, A.C., 1966. 'The character and origins of Roman Dumnonia', in Thomas, A.C. (ed.), Rural Settlement in Roman Britain (CBA Research Report No. 7) 74-98

Thomas, 1., 1955. 'Note on a cist at Penmenner', The Lizard, 1

- Threipland, L.M., 1956. 'An excavation at St Mawgan-in-Pydar, North Cornwall', Archaeol. J., 113, 33-81
- Trollope, E., 1860. 'Roman remains in the vicinity of Padstow, Cornwall', Archaeol. J., 17, 311-16

Victoria County History of England, 1957. Wiltshire, 1, Part 1

- Wainwright, G.J., 1965. 'The excavation of a cairn at St Neot, Bodmin Moor', Cornish Archaeol., 4, 4-9
- Wainwright, G.J., 1970. 'An Iron Age promontory fort at Budbury, Bradford-upon-Avon, Wiltshire', Wilts. Arch. Mag., 65, 108-66
- Warne, C., 1872. Ancient Dorset
- Wheeler, R.E.M., 1943. Maiden Castle
- Whimster, R.P., 1977. 'Iron Age burial in southern Britain', Proc. Prehist. Soc., 43, 317-27

Whitley, J.G., 1902. 'The Harlyn burials in the light of recent discoveries in Europe', J. Royal Inst. Cornwall, 15, 97-106

Woodward, B.B., 1908. 'Notes on the drift and underlying deposits at Newquay, Cornwall', Geological Mag., 5, 10-18

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# **Short Notes**

# AN UNRECORDED HORSEMILL IN ZENNOR PARISH

On Trendrine Farm, to the west of the main group of farm buildings, and beside an old barn built on the hill slope to give groundlevel access to both floors, at SW47553940, is a granite-walled earth drum. The structure was approximately 15 ft in diameter, with a central group of stones, and stands above a rectangular grass plot, which appears to be roughly paved below the turf. There is no stream of milling potential on the farm.

### A POSSIBLE UNRECORDED STANDING STONE AND BARROW IN TOWEDNACK

Among the burrows and bound stones of Giew Mine at the eastern extreme of Towednack parish (SW50223714) stands a substantial moorstone block, 6 ft 6 in high, one face sub-rectangular 2 ft wide, the other tapering up from 2 ft 9 in, quite weathered. It appears to have no relation to the mine workings, and to have weathered as it stands. Nearby is a much damaged and reduced mound more akin to a dug barrow than to the mine workings all about. Experienced opinions would be welcomed.

A. Guthrie

A. Guthrie

# Excavations at Killibury Hillfort, Egloshayle 1975-6

### HENRIETTA MILES,

# WITH URSULA DAVEY, DAPHNE HARRIS, SANDRA HOOPER PETER MORETON, OLIVER PADEL STEPHEN STAINES

Excavation of 210 sq m adjacent to the inner rampart revealed a long sequence of timber buildings, including four-post structures and a seven post frame for the ring-beam of a round house 9 m across. Cornish La Tène decorated pottery (Glastonbury Ware) was associated with all structural phases, with a little Cordoned Ware mainly from the later levels. Radiocarbon dates suggest that the initial use of the hillfort may have been in the third century BC. The inner ditch and the ploughed down ramparts were sectioned. A trial strip between the ramparts produced curved gullies, not found in the interior.

Radiocarbon dates of 930 and 840 bc  $\pm$  70 together with a lugged sherd suggest some occupation during the Later Bronze Age.

Two small sherds of fifth/sixth century AD Bi amphora were found in the base of ploughsoil.

### **INTRODUCTION**

Killibury or Castle Killibury (NGR SX 008737), known locally as Kelly Rings or Rounds, is a bivallate Iron Age hillfort with widespaced ramparts. It is situated at 85 m OD on top of a rounded hill without natural defences but with extensive views of the Camel valley and the surrounding countryside (Fig. 32). The parish boundary between Egloshayle and St Kew skirts the NE side of the earthworks, which are crossed by the present road from Three Holes Cross on the A39 to Dinham's Bridge on the Allen to the East (Fig. 33).

The hillfort lies on Upper Devonian grey mudstone, which has been mildly metamorphosed and massively indurated. The original bedding is not readily discernible; there has been much fracturing and several cleavages on different strikes and dips, with the result that the mudstone breaks at the surface into small blocky fragments. White quartz from intrusive dykes and sills occurs locally. There are at present four springs within 500 m. The hillfort covers an area of c. 3 ha, with the inner rampart enclosing c. 0.75 ha. The earthworks survive well to the N of the Three Holes Cross to Dinham's Bridge road and are here scheduled as an Ancient Monument. Both ramparts here stand to c. 2 m high and vary between 6 and 9 m in width. The ditches appear about 6 m wide at their tops and have partially silted, giving a present depth of between 1 and 2 m. South of the road the earthworks have been almost completely levelled; the SE quadrant is regularly ploughed and the



Fig. 32

The location of Killibury, Tregilders and contemporary sites. Contours at 76 m, 159 m and 229 m. Drawing: Daphne Harris.

SW has been covered by pig-farm buildings and a bungalow. This levelling predated 1873, when Maclean (1873, 405) stated that the fortifications to the south of the road had 'given way to the process of cultivation though, throughout, the walls can be distinctly traced'. The lines of both ramparts show as slight scars on the surface today and clearly in aerial photographs (Pl. VI); spreads of shillet are visible in the ploughsoil. The interior is fairly level with a very slight slope to the south; the whole is under plough where not built on.

Originally, there were probably two entrances in the positions where the road now crosses the defences, and both may have been protected by similar outworks or appended enclosures. For the east entrance Maclean describes a double barbican and his plan (1873, Pl. XII) shows one small section of bank intact. At the west he describes defences consisting of a single wall which shows up clearly on recent air photographs (in author's possession); a small section of the associated ditch to the south of the road survived until 1975 when it was infilled. The data from surface indications, Maclean's observations and air photographs have been correlated to produce Fig. 33.

A complex of earthworks exists adjacent to the A39 at Tregilders some 300 m north of, and down hill from, the hillfort; rescue excavations during 1975 are described in the following paper (p.122). A small rectangular enclosure some 60 x 40 m was indicated by crop

marks 100 m south of, and downhill from, the hillfort (air photograph taken 1975 in author's possession).

A watch on works connected with new pig farm buildings had been maintained since 1971 by Peter Trudgian; these demonstrated that extensive archaeological features still survived in the ploughed south part of the site. In 1974 Peter Trudgian started an excavation in the area to be taken in by the next planned extension to these buildings; this indicated complex levels and features in an area immediately inside the inner rampart. In 1975 the Society in conjunction with the Extra-Mural Department of Exeter University decided to mount a training excavation primarily to equip members to deal with minor rescue threats within the County. Killibury was selected as its site because a rescue threat existed here which could not be dealt with by other resources and because Trudgian's excavation had demonstrated the presence of good surviving stratigraphy. A second season took place in 1976, supported by grants from the Society of Antiquaries and the British Academy for the radiocarbon dating of levels containing Glastonbury pottery. The present report covers both seasons' excavations together with Trudgian's 1974 work. It was prepared largely by those who had attended the training excavation, in a series of seminars organised by the Extra-Mural Department. Those responsible for individual sections or illustrations are indicated in the text or captions. The overall responsibility for report presentation remains with the author who prepared in toto the discussion and interpretation sections.

### **EXCAVATION PROCEDURE**

A JCB 3c mechanical excavator was used to clear ploughsoil; the outline of the main area of 210 sq m inside the inner rampart was conditioned by farm buildings and activities. The machine was also used to trace the inner edge of the inner ditch and to remove its upper silt (down to f, Fig. 36), to clear a 0.25 m strip across the inter-rampart area and to section the surviving remnants of the outer bank. This work was principally intended to allow the survival of archaeological features in this heavily ploughed area to be assessed. Section lines were laid out when the general lie of features had been established. The whole area, including section baulks, was subsequently completely excavated.

### PRESENTATION

The term *shillet* is used to indicate redeposited fragments of the mudstone bedrock.

In all cases where groups of interrelated features occur on the plan, Fig. 37, these are numbered in sequential order, the earliest number relating to the earliest feature. Definite postholes are indicated on plan by postpipes shown black or by packing stones; in all other cases the interpretation of a feature as a post setting is uncertain. Depths are given in a table on p.99. Fill of all features, unless otherwise described, consisted of mixed fragments of shillet (redeposited mudstone) in brown soil.

### STRATIGRAPHY by Daphne Harris and Sandra Hooper

### The outer defences (Figs. 35, 36 a-b)

At the base of the outer rampart was an old land surface (a), a hard red-brown soil with some small shillet. On this lay the main rampart material (b), a level of large fairly loose shillet pieces and brown soil. To the south, over the outside edge of the rampart, was a further layer (c) of similar shillet material in a rather greyer soil. To the north, over the inside edge, was a thin layer of whitish grey clay soil with small shillet (d). Overlapping this was a layer (e) of clay soil, buff coloured to greyish white, with shillet fragments which tended to dip at an angle over the edge of the rampart. The old land surface underneath (e), where this extended beyond the main rampart material (b), was much disturbed and degraded, and on it lay a patch of charcoal (f), covered by a layer (g) of loose grey brown soil with small and medium shillet, which seemed to represent slip from the rampart. Over this again was a layer (h) of large shillet in grey brown soil, the stones lying in all directions and suggesting a spread of rampart material which had been much disturbed by the plough.

The front edge of the rampart had been eroded by the plough, leaving between it and the ditch lip an apparent berm of 3.5 m, where ploughsoil lay directly on bedrock.



Fig. 33

The relationship of Killibury to Tregilders and the position of excavated areas. Dotted lines represent features based on crop marks and Maclean's observations. Dawing: Daphne Harris.



Fig. 34

Killibury: profile of the earthworks on the north of the hillfort (see Fig. 33) with the excavated outline of the inner ditch shown projected. Drawing: Geoffrey Berridge.

The top levels of ditch silt excavated were a loose light grey brown soil (j), covered by a slightly redder layer (k).

### The inter-rampart area features 1 - 12 (Fig. 35)

Between the ramparts several patches of brown soil filling depressions in the natural shillet represent plough-eroded features. A possible post hole 1 was cut by another 2. Two gullies 3 and 4 curved across the trench, the latter with signs of a possible recut. A pit 5 was extended by another shallow gully similarly orientated. This was intersected by a gully 6 curving along the line of the trench, with a stake hole 7 at its southern tip, and with another 8 near the north end. A small depression 9 and a stake hole 10 lay close to a curving gully 11, which could be a return of 3 or 4. Another stake hole 12 lay outside the gully. These features were sealed only by the base of the ploughsoil.

### The inner ditch (Figs. 35, 36 c-d)

The inner ditch was cut 2.80 m deep into bedrock. At the bottom, especially against the southern outer side, was the primary silt (a), a gritty soil mixed with a little blue grey clay and some charcoal. Over this, coming down from the north side, lay a tumble of stone (b), containing a high proportion of pillow lava, with some grey brown clay over it which had filtered down between the stones, but not filled all the air pockets between them. This presumably represents a first collapse of a revetting wall for the inner rampart. Next came a silt layer (c) of blue grey gritty material originating from the decayed rock face, and stretching right across the ditch, with a thin capping of pure grey clay over it in the central dip. Over (c) on the north slope was a layer (d) of a light brown sandy soil with a line of shillet slip at its base; whilst over (c) in the centre of the ditch was a mass of stones (e), up to 0.40 m thick, mostly shillet pieces, but containing a few blocks of pillow lava. Above this, and on the north side above (d), was a clay layer (f), blue grey in colour except towards the south where it was affected by iron staining. The clayey blue-grey nature of these levels derives from gleying due to intermittent waterlogging. (f) appears to represent slow silt with a stable turf line above.

Just below the edge of the ditch on the southern side was a patch of dark brown loam (h) which may possibly be the remains of a large animal burrow. Down the northern slope was a further slip of stone of varying sizes in a brown soil (j), and over it a thin, sloping layer (k) of small shillet gravel. Then over the whole ditch spread a grey green clay soil (l) with small and medium shillet which lay at all angles, and appeared to be a deliberate infill of the ditch over the natural silting. Above this was a band of shillet (m) lying horizontally, upon which lay the ploughsoil.

The upper layers (j - m) of the inner ditch could be seen also in the south west corner of the main excavation cutting, but this area was too limited for any deeper exploration.

#### The inner rampart (Figs. 37, 38 & 39)

The inner rampart had been ploughed flat and survived only as a somewhat disturbed layer of soil and shillet, 15, 0.20 m thick. Beneath it survived undisturbed the old land surface 13, an almost stone-free red brown soil. A single pit 14 0.27 m deep had been cut in this soil; the lower 0.15 m of its fill was composed almost entirely of charcoal; a wider



Fig. 35 Killibury: left – the excavated areas; right – the inter-rampart area. Drawing: Daphne Harris.

scoop over its tip appeared to represent turves cut out and replaced. The circumference of the pit showed as a slight charcoal smear on the surface of the soil 13. This pit yielded two radiocarbon determinations (p. 100). It was sealed by 15 which here appeared undisturbed.

The inner edge of both the old soil 13 and the primary rampart level remnants 15 was marked by a slight slope. At this point the soil 13 passed into a more stoney layer 16 which appeared to represent the remnants of the pre-hillfort soil, unprotected by original rampart levels. Traces of this soil 16 were also found over bedrock in hollows in the interior (see


Killibury: Section through the outer rampart and inner ditch. Drawing: Geoffrey Berridge.



Fig. 37 Killibury: area excavated within Inner Rampart. Drawing Daphne Harris.

below). A series of features  $17 \cdot 50$  had been cut into 16 and were sealed by a series of soil and shillet levels  $51 \cdot 53$ ; 51 large shillet in fine yellow-grey soil, underlay 52, compact redbrown soil with shillet occuring only to the west, and both were overlain by loose shillet in grey soil 53. These levels lapped up over the edge of the primary rampart layers 15. They are interpreted as an addition to the original rampart resulting in its widening and are referred to as the second stage rampart. It is possible in fact that they represent spread and demolition of the early rampart. Their extent was responsible for most of the preservation of soil 16.

## The interior (Figs. 37-39)

The bedrock in the interior was roughly level and in places had been scraped by the plough, which had removed much of the later stratigraphy. It dipped into two shallow natural hollows which had been slightly scarped around their edges. Both hollows had remains of former soil 16 in places at their base and were infilled by a sequence of soil layers, and spreads of shillet, into which features were cut at different levels. Outside the hollows features could be phased to the south by their relationship to the second stage rampart but to the north only by their immediate stratigraphic contexts. Most features were presumably postholes; this is only definitely indicated by the presence of postpipes or packing stones. In other features function must remain problematic. A series of small stone rings set on the contemporary soil level may demarcate post bases, 24, 73, 82, 109, 149; these occur throughout the stratigraphic sequence on the site. Stones used for packing were either shillet blocks or waterworn igneous material which would have been available in the bed of the River Allen. A group of holes made by driven stakes 59 occurred at the base of the west hollow possibly connected with the oven 57, in which a circular area of laid clay with a rim 0.04 m thick had been burnt bright orange red; there was much charcoal on the surface around it. Two large pits in the west hollow have no obvious function; 56 0.40 m deep had unweathered almost vertical sides and had been back-filled with clean shillet: 64 0.85 m deep had a clean shillet fill but with a layer containing quantities of charcoal and a little carbonised grain at its top; both were sealed by the lowest soil in the hollow 71.

The West Hollow (Pl. VII, Fig. 38, sections e - f and g - h) was about 0.40 m deep; a broad gulley 54 led from it to the north; originally this was probably natural but had been worn by use as a trackway and a layer of compressed shillet and yellow soil 55 on its base results from this use. Features 56 - 70 were cut in the base of the hollow before the accumulation of a dark grey silty soil layer with much charcoal 71. Pit 64 produced the radiocarbon determination HAR-1950 230  $\pm$  70 bc. 71 extended up the side of the hollow to overlie layers in the second stage rampart. Features 72 - 75 were cut into the top of 71 and were sealed by a layer of loose brown shillet 76, into which were cut 77 - 80. The next level was another dark grey-brown silty soil layer 81, similar to 71 but with much more charcoal. 81 produced the radiocarbon determination HAR-1953 160  $\pm$  70 bc. The post setting 82 lay on 81. A thick layer of soil and shillet 83 sloping down into the hollow from the south was next deposited. 84 and 85 were cut into this level, which was covered by another similar layer 86 which effectively infilled the hollow; this was very stony and compact and its surface seemed worn in places. 87 - 98 were cut into its surface. A patch of red-brown shillet 99 extended over 97 and 98. Layer 103, a brown soil with little shillet but with flecks of charcoal, accumulated in the very top of the hollow covering the surface of 86 and the features cut into it; it also extended N of the hollow to seal 100 - 102. Features 104 - 111 were cut in the base of gully 54 and were covered by its fill of soft brown soil.

The East Hollow (Fig. 39) 0.40 m deep contained features 112 - 129 cut into bedrock or the remnant soil 16 and sealed by the lowest soil layer 130, a smooth brown soil with much charcoal which spread up over the second stage rampart layer 53. (Features 173 - 217 on the N of the site were cut directly into bedrock and were only sealed by ploughsoil layers 218 and 219.) In the NE corner of the hollow a spread of charcoal and soil lay directly on bedrock under a spread of yellowish clay, possible collapsed daub. This in turn was covered by 130. Features 131 - 136 were cut into the soil 130, which was covered by reddish brown soil and shillet 137. Features 138 - 142 were cut into 137 and were sealed by a reddish-brown soil and shillet layer 143. Features 144 - 161 were cut into 143 and were sealed by a hard red-brown



Fig. 38 Killibury: sections of interior area. Drawing: Geoffrey Berridge.

soil and shillet layer 172 which infilled the hollow and extended beyond it, also sealing 162 - 171 which were cut into bedrock to the west. 130 yielded the radiocarbon determination HAR-1951 230  $\pm$  70 bc.

Over the whole site lay ploughsoil, a rich dark brown soil treated in two layers; 218 was its base, harder and more compact, containing horizontal shillet pieces and thickening slightly over the tops of the hollows; 219 was the topsoil.



Fig. 39 Killibury: section of the interior area. Drawing: Geoffrey Berridge.

## **DEPTHS OF FEATURES**

| 1.   | 0.30 m | 23. | 0.24 m | 42. | 0.66 m | 68.          | 0.15 m   |
|------|--------|-----|--------|-----|--------|--------------|----------|
| 2.   | 0.25 m | 24. | 0.05 m | 43. | 0.42 m | 69.          | 0.06 m   |
| 3.   | 0.11 m | 25. | 0.44 m | 44. | 0.50 m | 70.          | 0.15 m   |
| 4.   | 0.15 m | 26. | 0.11 m | 45. | 0.66 m | 72.          | 0.31 m   |
| 5.   | 0.15 m | 27. | 0.15 m | 46. | 0.42 m | 74.          | 0.15 m   |
| 6.   | 0.10 m | 28. | 0.15 m | 47. | 0.50 m | 75.          | 0.40 m   |
| 7.   | 0.10 m | 29. | 0.30 m | 48. | 0.40 m | 77.          | 0.55 m   |
| 8.   | 0.05 m | 30. | 0.05 m | 49. | 0.35 m | 78.          | 0.20 m   |
| 9.   | 0.10 m | 31. | 0.30 m | 50. | 0.30 m | 79.          | 0.16 m   |
| 10.  | 0.07 m | 32. | 0.45 m | 56. | 0.40 m | 80.          | 0.40 m   |
| 11.  | 0.17 m | 33. | 0.37 m | 58. | 0.10 m | 84.          | 0.30 m   |
| 12.  | 0.07 m | 34. | 0.15 m | 60. | 0.16 m | 85.          | 0.15 m   |
| 17a. | 0.40 m | 35. | 0.10 m | 61. | 0.15 m | 87.          | 0.28 m   |
| 17b. | 0.46 m | 36. | 0.81 m | 62. | 0.12 m | 88.          | 0.45 m   |
| 18.  | 0.09 m | 37. | 0.54 m | 63. | 0.12 m | 89.          | 0.20 m   |
| 19.  | 0.10 m | 38. | 0.15 m | 64. | 0.85 m | 90.          | 0.30 m   |
| 20.  | 0.30 m | 39. | 0.61 m | 65. | 0.10 m | 91.          | 0.10 m   |
| 21.  | 0.04 m | 40. | 0.62 m | 66. | 0.61 m | 92.          | 0.20 m   |
| 22.  | 0.06 m | 41. | 0.42 m | 67. | 0.42 m | continued of | n p. 100 |

| 00          | 0 5 7  |      |        |      |        |      |        |
|-------------|--------|------|--------|------|--------|------|--------|
| 93.         | 0.57 m | 124. | 0.55 m | 160. | 0.40 m | 191. | 0.40 m |
| 94.         | 0.53 m | 125. | 0.10 m | 161. | 0.40 m | 192. | 0.40 m |
| <b>95</b> . | 0.15 m | 126. | 0.10 m | 162. | 0.42 m | 193. | 0.12 m |
| <b>96</b> . | 0.20 m | 127. | 0.50 m | 163. | 0.50 m | 194. | 0.12 m |
| 97.         | 0.06 m | 128. | 0.56 m | 164. | 0.32 m | 195. | 0.12 m |
| 98.         | 0.08 m | 129. | 0.35 m | 165. | 0.15 m | 196. | 0.13 m |
| 100.        | 0.10 m | 131. | 0.40 m | 166. | 0.25 m | 197. | 0.38 m |
| 101.        | 0.43 m | 132. | 0.10 m | 167. | 0.32 m | 198. | 0.10 m |
| 102.        | 0.40 m | 133. | 0.28 m | 168. | 0.14 m | 199. | 0.40 m |
| 104.        | 0.04 m | 134. | 0.30 m | 169. | 0.60 m | 200. | 0.40 m |
| 105.        | 0.03 m | 135. | 0.40 m | 170. | 0.49 m | 201. | 0.43 m |
| 106.        | 0.12 m | 136. | 0.18 m | 171. | 0.45 m | 202. | 0.18 m |
| 107.        | 0.05 m | 138. | 0.42 m | 173. | 0 20 m | 203. | 0.35 m |
| 108.        | 0.05 m | 139. | 0.46 m | 174. | 0.53 m | 204. | 0.45 m |
| 109.        | 0.10 m | 140. | 0.44 m | 176. | 0.48 m | 205. | 0.45 m |
| 110.        | 0.19 m | 141. | 0.10 m | 177. | 0.54 m | 206. | 0.42 m |
| 111.        | 0.22 m | 142. | 0.30 m | 178. | 0.72 m | 207. | 0.34 m |
| 112.        | 0.51 m | 144. | 0.56 m | 179. | 0.40 m | 208. | 0.05 m |
| 113.        | 0.30 m | 145. | 0.47 m | 180. | 0.40 m | 209. | 0.33 m |
| 114.        | 0.18 m | 146. | 0.31 m | 181. | 0.29 m | 210. | 0.34 m |
| 115.        | 0.10 m | 148. | 0.07 m | 182. | 0.29 m | 211. | 0.17 m |
| 116.        | 0.10 m | 151. | 0.37 m | 183. | 0.20 m | 212. | 0.17 m |
| 117.        | 0.04 m | 152. | 0.55 m | 184. | 0.28 m | 213. | 0.20 m |
| 118.        | 0.10 m | 153. | 0.60 m | 185. | 0.22 m | 214. | 0.02 m |
| 119.        | 0.18 m | 154. | 0.36 m | 186. | 0.32 m | 215. | 0.38 m |
| 120.        | 0.44 m | 155. | 0.32 m | 187. | 0.14 m | 216. | 0.44 m |
| 121.        | 0.06 m | 156. | 0.10 m | 188. | 0.43 m | 217. | 0.50 m |
| 122.        | 0.07 m | 157. | 0.10 m | 189. | 0.40 m |      | 0.00   |
| 123.        | 0.10 m | 159. | 0.07 m | 190. | 0.77 m |      |        |
|             |        |      |        |      |        |      |        |

#### **RADIOCARBON DATING**

Six determinations were provided by AERE Harwell. HAR-1952 930  $\pm$  70 bc and HAR-2191 840  $\pm$  70 bc were on twig charcoal from pit 14 beneath the inner rampart. These dates cannot be demonstrated to be significantly different statistically (Barker, 1963, 132) and therefore provide reasonable confirmation for each other. Radiocarbon dates of c. 900 bc can now be demonstrated to be a century or so too late by comparison with the dendrochronological dates provided by long tree ring sequences in America. The precise amount of adjustment necessary has not yet been established and several slightly differing calibration tables have been published. Calibration of HAR-1952 against that of Ralph, Michael and Han (1973) gives 1020 BC and against that of Clark (1975) 1130 BC. Adjustment of HAR-2191 gives 910 BC and 1020 BC respectively. These differences demonstrate the uncertainties inherent at present in adjusting dates.

HAR-1950 230  $\pm$  70 bc derived from charcoal in the upper part of pit 64, dug in the west hollow before any deposits had accumulated over the remnants of the pre-hillfort soil. It calibrates to 200-250 BC according to Ralph, Michael and Han and to either 240, 300 or 355 BC following Clark.

HAR-1951 230  $\pm$  70 bc was taken from charcoal fragments scattered in soil 130 the basal layer in the east hollow. It also calibrates to 200-250 BC and 240, 300 or 355 BC following the alternative tables used above.

HAR-1953 160  $\pm$  70 bc derived from charcoal scattered through layer **81**, stratigraphically several stages later than HAR-1950. This date calibrates to 70-120 BC following Ralph, Michael and Han and to 160 BC following Clark. HAR-745 260  $\pm$  70 bc also derived from this context and calibrates to between 210 and 380 BC or to 370 BC. None of the dates HAR-1950, 1951, 1953 and 745 can be demonstrated statistically to be different and therefore no emphasis should be given to the apparent neat time gap of 70 years between HAR-1950 and HAR-1953. It is apparent that calibration of dates c. 100/200 is less straightforward than those of an earlier period and that these therefore can only be taken as a very rough guide to the likely dates of the samples in real years.

## IRON AGE POTTERY (Figs. 40 & 41) by Ursula Davey & Henrietta Miles

Some 650 sherds were found; visually these all seemed to be of similar fabric, confirmed on petrological examination to be of gabbroic clay from the Lizard.

#### Petrology by D.F. Williams, PhD

A selection of representative sherds were submitted for petrological examination. Many of the samples contain numerous small white angular fragments of felspar which protrude through the surfaces of the fabric. Thin sections were studied of six sherds. The most prominent inclusions are made up of large angular grains of altered felspar and fibrous aggregates of brown amphibole. Also present are frequent grains of pyroxene and serpentine. The mineralogy closely resembles Peacock's description of the gabbroic clays of the Lizard peninsula (1969a, 146) and there seems little doubt that this material was used for the samples from Killibury. There is now a growing body of information showing that the gabbroic clay of the Lizard was being used for pottery making on a large scale over a period stretching from the Neolithic to Late Roman (Peacock, 1969a, 1969b; Williams, 1976).

The gabbroic fabrics used covered a wide continuous range which can be subdivided for convenience into three groups:

Al Fine, hard with grits up to 1 mm; colour varies from pale grey to black but some surfaces are buff; internal surfaces are usually black, mostly used for pots with walls up to 6 mm thick; external surfaces well burnished.

A2 Similar to A1 but more open with grits up to 4 mm. Mostly used for pots with walls up to 9-10 mm thick.

**B** Soft, open fabric with grits up to 4 mm; colour tends to vary between pale buff and redbrown. Sherds usually abraded and less well burnished. Used for pots with walls up to 10 mm or more thick.

Post hole 1 Inter-rampart Area

P1 Four sherds from jar with upright neck, A2; rolled rim with internal groove; raised cordon at base of neck decorated with oblique incisions; curvilinear decoration infilled with incised lines. No precise comparanda. St Mawgan-in-Pydar Type A1.

Old Soil 16

P2 Neck sherd with oblique incisions, A1.

P7 Part of, remainder from 81. Also sherds joining from 27.

Pit 27

Sherds adjoining some from 16.

Post hole 37

P3 Shoulder sherd, A1; incised band infilled with stamped decoration.

Post hole 48

Body sherd with raised cordon.

Second Stage Rampart 51

P4 Rim sherd with internal groove, A1; part of iron rivet bent through specially prepared hole. A rivet was noted in gabbroic ware from Tregeare Rounds (Baring Gould, 1904) and another occurs in a vessel of apparent Cornish origin from Kent's Cavern, Devon (information R.J. Silvester). Iron rivets otherwise called clamps or dogs were found in large numbers at Croft Ambrey in Herefordshire, both in vessels and unattached; there all the pottery derives from the Malvern Hills about 20 miles away and the excavator was able to demonstrate an increase in the use of rivets proportionate to the distance away from the pottery source (Stanford, 1974, Fig. 81 & p. 174).



Fig. 40 Killibury: Iron Age pottery. All ½. Drawing Ursula Davey.

P5 Body sherd, B; coarse incised decoration.

Also rim sherd with internal groove and body sherds.

Post hole 68

Rim sherd with internal groove.

West Hollow Soil 71

P6 Jar, A1; internal rim groove, groove on neck, band of simple incised chevron decoration defined by single lines; interior below shoulder coated with carbonised material. This and P8 are in form similar to St Mawgan-in-Pydar A1 but have much simpler decoration.

P8 Part of; remainder from 81. Also many plain sherds.

Ten sherds of 'cordoned ware' with applied cordon on neck; these come from the extreme south of the layer where intrusion was possible.

West Hollow Shillet 76

Rim similar to P8 and other sherds.

West Hollow Soil 81

P7 Jar, A1; internal rim groove, raised cordon at base of neck with oblique incisions, simple incised criss-cross decoration; some carbonised material on interior. St Mawgan-in-Pydar. Type A2. Sherds also in 16, 83, 93, 103.

P8 Jar, A1; internal groove, simple incised chevrons as P6; some carbonised material on interior. Sherds in 71.

P9 Plain jar, A2; profile reconstructed from c.20 sherds; interior coated with carbonised material. Cognate St Mawgan-in-Pydar Type D.

Also c.20 sherds, one with applied and two with raised cordons.

West Hollow Shillet 83

P10 Shoulder sherd, A2; decoration of wide spaced incisions.

P7 Part of, remainder from 71.

West Hollow Soil 86

P11 Body sherd, A2; similar decoration to P10 and perhaps from same vessel.

P12 Cordoned ware jar with simple rolled rim and raised cordon at base of neck, A2. St Mawgan-in-Pydar Type J. Other body sherds.

West Hollow Pit 93

P13 Body sherd with stamped decoration, A1.

P7 Part of, remainder 81.

P14 Part of, remainder 103. Also rim and other sherds.

West Hollow Shillet Layer 99

Body sherd with cordon, A1. Also 12 sherds including rims with internal groove.

West Hollow Soil 103

P14 Large jar, A2; internal rim groove, raised cordon at base of neck; incised decoration of triangles infilled with parallel lines. Somewhat similar though smaller vessel from St Mawgan-in-Pydar (earlier occupation of Hut A) No. 7 Fig. 14 (Threipland, 1956, 54). Sherds also in 93, 217, 218.

P7 Part of, mainly in 81.

Also body sherd with narrow applied cordon, Al; another with wide applied cordon, A2; many other sherds including rims.

Post hole 110 in gulley 54

Sherd with applied cordon, B.

East Hollow Soil 130

P15 Body sherd, A1, with wide-spaced incised decoration; other sherds including base angles.

Sherd with narrow applied cordon, **B**.

East Hollow Shillet 137

P16 Jar reconstructed from sherds representing about half of it, A1; internal rim groove, band of decoration on shoulder consisting of triangles infilled with closely spaced incised lines; upper part black, fading to buff at base. St Mawgan-in-Pydar Type A1. Sherd also in 172.

East Hollow Post hole 142

P17 Body sherd, B, oxidised buff; wide applied cordon with irregular incised curvilinear



Fig. 41 Killibury: Iron Age Pottery 14-28, 32. Bronze Age Sherd 29, Early Christian B ware 30-31. All 1/3. Drawing: Ursula Davey.

decoration beneath. Possibly parallels for curvilinear decoration on a cordoned vessel occur at the Rumps (Brooks, 1974, Fig. 22, 10), at Threemilestone (Schwieso, 1976, Fig. 24, 42) and at St Mawgan-in-Pydar on vessel of Type J (Threipland, 1956, Fig. 21, Nos. 63 & 64). *East Hollow Soil 143* 

P18 Body sherd with horizontal band infilled with oblique incised lines, B.

P19 Body sherd, B, with triangle infilled with close spaced incised lines.

P20 Rim sherd, A1, with single band of rouletted or stamped decoration around exterior.

P21 Body sherd, A1, very similar to P20 and possibly the same vessel; apparent curvilinear decoration made by groups of stamped or rouletted impressions. Generally similar to No. 2 from beneath the rampart at Castle Dore (Radford, 1951, Fig. 16).

P22 Body sherd, A2, with wide-spaced incised decoration.

Also other sherds including rims.

East Hollow Post hole 151

P23 Body sherd, B, with wide-spaced cross-hatched incised decoration.

East Hollow Post hole 152

P24 Body sherd, A2, triangle decoration infilled with fine incised lines.

East Hollow Post hole 154

P25 Upper part of cordoned jar, **B**, oxidised buff; rolled rim, applied cordons; St Mawganin-Pydar Type H (Threipland, 1956, 60).

East Hollow Post hole 163

P26 Upper part of undecorated jar, A2. Other sherds including rim.

East Hollow Post hole 164

P27 Body sherd, A1, wide-spaced incised decoration; other sherds including rim.

East Hollow Post hole 169

P26 Part of, remainder in 163, St Mawgan-in-Pydar Type E.

P12 Part of or similar, remainder in 86.

East Hollow Soil 172

P28 Rim sherd, B, oxidised buff, probably from cordoned vessel of St Mawgan-in-Pydar Type J.

P16 Part of, remainder in 137.

Sherds similar to P19 from 143.

Sherds with narrow applied cordons.

Northern Area Post hole 197

Body sherd, B, with wide applied cordon.

Northern Area Post hole 217

P14 Part of, remainder in 103. Other sherds including rims.

Base of ploughsoil 218

Seventy-five sherds including parts of P10 and P14.

Ploughsoil 219

P32 Body sherd, **B**, with incised cross-hatched decoration. About 20 other sherds recovered.

Incised sherds were found in 57, 58 and plain sherds in 18, 64, 47, 72, 80, 89, 90, 91, 95, 96, 101, 102, 108, 109, 118, 135, 148, 153, 155, 156, 158, 176, 177, 179, 198, 199, 205, 206, 212, 213, 215, 216.

The Iron Age pottery all belongs to the period contemporary with La Tène on the continent. It comprises both the types commonly found in Cornwall, Cordoned Wares and South Western Third B or Glastonbury material, the latter in far greater quantity. The terms South Western Third B and Glastonbury are both unsuitable for use in Cornwall, the first because it relates to a nomenclature no longer in general use, the second because it implies that remarks made about the Somerset type site will be relevant to Cornish finds. There are undoubtedly close similarities between Somerset and Cornish wares, confirmed by a recent survey of British La Tène decorated pottery which proposed a South West British group (Avery, 1973). But pottery of this group can be demonstrated petrologically to have been made at a number of different centres (Peacock, 1969b) whose products display some stylistic differences and many indeed have slightly differing date ranges. It therefore seems appropriate to distinguish a Cornish La Tène Decorated pottery sub-group, manufactured entirely – as far as can be demonstrated at present – from gabbroic clays of the Lizard (Peacock's Group 1 (1969b). All the pottery from the recent excavation of Threemilestone Round, Truro (Schwieso, 1976) is of gabbroic clay and it appears from visual examination that all the pottery from Castle Dore is of similar origin as is that from Trevisker (ApSimon and Greenfield, 1972, 341). No other potting centre has yet been demonstrated for the Cornish Iron Age.

Cornish La Tène Decorated and Cordoned Wares were not clearly separated stratigraphically at Killibury and both could have been present throughout the occupation of the hillfort. A small sherd with a double cordon raised by heavy burnishing came from post hole 48 sealed by the second stage rampart. A group of sherds with an applied cordon came from the southern edge of 71, the lowest soil in the W hollow, and a single similar sherd derived from 130, the equivalent layer in the E hollow. A sherd came from 81, the second soil level in the W hollow, the decorated cordoned sherd P17 was in 142 sealed by soil 143, and P25 derived from 154, the penultimate of a post hole sequence post-dating the second soil layer 143 in the E hollow. The remaining cordoned sherds came from layers overlying the second soil layers in both hollows or from unrelated post holes. The sherds from 71 cannot be regarded as in a firm sealed context as they were found right on the edge of the layer. The small sherds from 48 and 130 could be intrusive; the earliest fragments stratigraphically should be P17 from post hole 142 and that from 81, the second soil in the W hollow. Reports on other Cornish sites show a similar lack of difference in the stratigraphic contexts of the finds of Cordoned and Cornish La Tène Decorated Wares - Threemilestone, St Mawganin-Pydar, the Rumps and Trevisker. Only at Castle Dore was Cornish La Tène Decorated material found on its own in early stratigraphic contexts (Radford, 1951, 81).

At present dating for La Tène decorated pottery groups in Britain is not at all precise. The radiocarbon determinations from Killibury have to be applied with caution because of uncertainties in regard to the size of the standard deviations, and also in regard to the actual chronometric range indicated, apart from the possibility that some old wood was present among the charcoal fragments dated. A date in the third century BC could be indicated, but occupation starting in either the fourth or the second century BC would not be inconsistent with the range allowed by the determinations. A single date is available from Trevisker of 185  $\pm$  90 bc (NPL-135) for a context apparently with both Cordoned and La Tène Decorated Wares. Tregilders (p.126) produced a date of  $30 \pm 70$  bc for Cordoned Wares only. The only other radiocarbon determinations for the Cornish Iron Age come from Carn Euny: S238 420  $\pm$  70 bc for an early phase with stamp-decorated La Tène sherds and HAR 334 130  $\pm$  80 bc for a deposit on the floor of the East entrance to the fogou containing decorated sherds in a style apparently unique to the site (Christie, 1976). It still appears probable that Cornish La Tène pottery relates to the decorated La Tène ceramics of Armorica; the case has been restated by Peacock (1969b, 53). Schwappach (1969, 272) has demonstrated that the Armorican decorated material starts in the fifth century BC and may have largely ceased by the second, although this is a matter of some controversy. This early Breton date is consistent with the early radiocarbon date from Carn Euny and it is quite possible that the Cornish La Tène Decorated pottery style had originated by 400 BC. Sites with undecorated Early Iron Age pottery are rare in Cornwall, a fact which provides some support for an early date for the local La Tène style. Further afield it has been suggested by Stanford (1974, 197) that the stamp decorated wares of Herefordshire were current by the early fourth century BC at Croft Ambrey; these form Avery's North West British La Tène decorated style (1973, 528) and may connect with the Breton decorated material. In the Isle of Man determinations of 205  $\pm$  75 bc UB 2027 and 285  $\pm$  45 bc UB 2028 have recently been obtained from early phases of Ballcagan Sites A and B respectively. Bersu's publication of these excavations (1977, 40-1 & 96) confirms some influence from Southern British La Tène-derived groups on the Manx Iron Age. It should be noted that at Castle Dore the second century BC starting date for Cornish Decorated La Tène pottery was published at a time when a compressed chronology for the British Iron Age was in vogue (Avery, 1976, 31). The excavator would now be quite happy to see the start of Castle Dore back-dated (C.A.R. Radford, per. coum.). A date for the initial occupation of Castle Dore in the third or fourth centuries BC would be consistent with the presence of a La Tène 1 glass bracelet (Radford, 1951, 68).

Even if the Cornish La Tène pottery sequence is eventually demonstrated to have started in the third, fourth or even fifth century BC, an early date must not be applied automatically to the start of the occupation at Killibury. Cordoned Wares may be present from the start of the occupation, for which the prototypes do not appear to have developed on the continent before the first century BC. On balance the excavator considers it possible that the small sherds from 48 and 130 and the group from the edge of 71 are intrusive; the earliest cordoned fragments would then be P17 from 142 (sealed by the second soil level 143 in the E hollow) and the sherd from 81 the equivalent soil in the West hollow; these contexts would then date from the first century BC. (Even this leaves a possible anomaly in that 81 produced radiocarbon determinations of 160 and 260 bc.) One further possibility is that cordons on simple jar forms such as P12 developed locally out of the cordons-raised-by-burnishing which occur e.g. on P7 and P1 and that these then predate the continental prototypes of vessels such as P25 which appear alien to the Cornish sequence. The maximum possible number of constructional phases can be estimated for the hollows, thirteen for the east and 10 for the west. Of these, the first firm Cordoned Ware associations occur in phase 7 or 8 in the E hollow and after phase 4 in the W; in both cases these are 6 structural phases back from the most recent. This phasing indicates a substantial period of time before the appearance of Cordon Wares at Killibury, taking the start of occupation of the hillfort reasonably back into the third century BC. (If the apparent indications of the Cordoned Ware findspots were adhered to, at least thirteen structural phases would have to be compressed into a 100 to 150 years.) There is no indication that Killibury continued to be occupied after the Roman conquest; it is quite possible that at this time or earlier in the first century AD the settlement moved to Tregilders (p.128) where only Cordoned Ware has been found. The end date for the production of Cornish La Tène Decorated wares cannot be defined at present; there was obviously considerable overlap with Cordoned Ware styles, demonstrated both stratigraphically at sites like Trevisker and stylistically by the decoration on cordoned vessels like P17.

The Killibury Decorated La Tène pottery — admittedly a small sample — provides few close parallels with vessels from other sites. The decoration on the better preserved vessels is geometric rather than curvilinear. Most curvilinear decoration present consists of simple swathes formed by paired lines defining narrow bands of cross hatching, a style not common on other Cornish sites. Another feature is the universal presence of an internal rim groove on decorated vessels, a feature apparently absent for example, from Trevisker. The groups for Castle Dore and from St Mawgan-in-Pydar on the other hand present many more vessels with complex curvilinear patterns. The differences may be chronological but more probably relate to slight stylistic differences amongst groups of potters working in gabbroic clays. This would imply the continuing connection of the occupants of Killibury, Castle Dore or Trevisker with different potting groups in the Lizard.

#### Possible Bronze Age pottery (Fig. 41)

P29 From 218. Lug with slightly dished top, decorated with incised herringbone pattern along outer edge; soft red-brown gabbroic fabric, abraded; its fabric is among the coarsest present at Killibury. This sherd finds no direct parallels in groups of Bronze Age material so far published from the West Country e.g. Trevisker (ApSimon and Greenfield, 1972) or Stannon (Mercer, 1970). The only recorded lug with a dished upper surface appears to be that on a nondescript vessel from St Just-in-Roseland (Patchett, 1950, Fig. 3 and p.62) reputedly found with a pot in the Food Vessel class which should belong in the earlier part of the Bronze Age. Lugs do not appear to be a feature of any Iron Age pottery traditions in the area. The narrow lugs on vessels from Bodrifty (Dudley, 1956, Fig. 9 Nos. 21 - 24) are variously described as Early Iron Age or Late Bronze Age but all in fact appear to be within the local Trevisker Bronze Age tradition, which shows a variety of lugged forms on other sites. The Bronze Age pottery from Bodrifty should belong to the very end of the period as the site appears to have been occupied continuously into the Early Iron Age. Otherwise all the firm indications of date for Bronze Age, e.g. metalwork associations at Gwithian (Megaw, 1976) and Tredarvah (Padley and Pearce, present publication) and the radiocarbon date from Trevisker itself of 1110  $\pm$  95 bc (NPL-134) (ApSimon and Greenfield, 1972, 356). The range of pottery used in Cornwall between 1000 and 600 bc has yet to be demonstrated and P29 from Killibury may well belong in this period, contemporary with the radiocarbon determinations of 930  $\pm$  70 bc and 840  $\pm$  70 bc from elsewhere on the site.

A few coarse gabbroic sherds from other contexts lack the typical Iron Age burnish and may be of comparable date. These come from post holes 101, 118 (in association with burnished sherds), 156, 158 and 213; of these only 101 and 213 could on stratigraphy or association belong to a pre-Iron Age phase.

#### Post Roman Mediterranean Import Wares (Fig. 41)

P30 and P31, from 218 (base of ploughsoil at its junction with 172), are both from combed amphorae of Class Bi; their identification has been confirmed by Dr D. Williams. The sherds are soft orange-red in colour with close-spaced combed grooves. (A drawing of a complete vessel is given in Alcock, 1971, Fig. 14). The source of these amphorae is still uncertain but the Athens area is a possibility (information Dr Williams). Their date range should extend from the late fifth century AD through to the early seventh.

#### Medieval pottery

Inner Ditch Layer (f)

Part of jug in soft pink fabric with quantity of waterworn grit; unglazed; probably late medieval.

#### IRON and SLAG (Fig. 42)

Layer 51 in Second stage rampart

No. 33 ?small punch; end burred over.

West Hollow Soil 81

No. 34 Small knife blade; possibly tang broken off. This appears to be the first recorded for the Cornish Iron Age; a good range paralleling this are recorded from Croft Ambrey (Stanford, 1974, Fig. 77).

West Hollow Shillet 86

No. 35 Strap fragment with possible rivet hole.

Northern Area Post hole 191

No. 36 Probably part of bow from brooch; possibly as one from St Mawgan-in-Pydar (Threipland, 1956, Fig. 33, 16).

Other small fragments were too corroded for any identification to be suggested. Small fragments of slag were found in 5 and 218.

## STONE ARTEFACTS (Fig. 42)

West Hollow Post hole 68

No. 37 Whetstone made on fine textured grit pebble; possibly from the Devonian Hangman's Grit Series on Exmoor.

West Hollow Shillet 76

No. 38 Pebble of volcanic tuff worn to high gloss through use as polishing stone. Could derive from the Wadebridge – Polzeath area.

West Hollow Soil 81

No. 39 Coarse grit pebble used as whetstone; possibly rock originated on Exmoor.

No. 40 Part of pebble of fine textured grit, as No. 37; worn to high gloss through use as polishing stone.

West Hollow Soil 86

No. 41 Small pebble of dolerite; very much worn; of suitable shape to be used as a counter. *East Hollow Soil 143* 

No. 42 Spindle whorl of fine sandstone; cylindrical bore; traces of radial line decoration on the surface. Rough radial patterns occur on spindle whorls at the Rumps (Brooks, 1974, Fig. 35, 8, 9) and a wider range at St Mawgan-in-Pydar (Threipland, 1956, Fig. 38).

These artefacts represent the normal range of stone tools, pebbles utilised during the Iron Age as whetstone, polishing stones, etc.



Fig. 42 Killibury: Iron 33-36, Drawings Nancy Reed; stone 37-42, flint 43-44, Drawings: Ann Miller, All ½.

#### **SLING PEBBLES**

A total of 165 pebbles up to 0.05 m in length and suitable for use as slingstones were found. These showed no significant concentrations.

#### FLINT (Fig. 42)

Twelve pieces were found all flakes or chips except Nos. 43 - 44. The flint used was all pebble. The style of both 43/44 suggests a possible late Neolithic/Early Bronze Age date for these pieces. Small quantities of rough flint are usually found on South West Iron Age sites e.g. Castle Dore (Radford, 1951, 71) or Trevisker, St Eval (ApSimon and Greenfield, 1972, 345), which appear to have been made after the techniques of producing good quality flakes and blades had been lost. 5 pieces at Killibury came from the old soil beneath the ramparts which might indicate they relate to previous use of the area. Other pieces may be contemporary with the use of the site. Two further pieces were found in ploughsoil away from the excavation.

No. 43 (old soil 13) Part of knife with pressure flaking and retouch.

No. 44 (post hole 49) beneath second stage rampart. Small flake, end retouched and heavily worn, ? borer.

## **BAKED CLAY**

A small fragment, with a carefully smoothed outer surface, possibly from a loomweight, came from 218,

## BONE

Tiny burnt fragments were found in 4 and 64; otherwise bone did not survive.

## GRAIN by G. Hillman, BSc

The entire upper fill of pit **64** was subjected to flotation by Diana Hardy and the charred grain recovered subsequently submitted for identification; the majority of charred material in the fill had proved to be comminuted charcoal.

| Triticcum dicoccum (emmer wheat)    | 2 spikelet forks            |
|-------------------------------------|-----------------------------|
| T. spelta/T. dicoccum               | 2 grains – poorly preserved |
| T. spelta (spelt wheat)             | 2 grains – well formed      |
| Triticum sp. (indeterminate wheat)  | 3 fragments of grains       |
| Avena sp. (wild or cultivated oats) | l grain                     |
|                                     |                             |

It is a little odd that the spikelet forks are from one species and the grains (of certain identity) from another. However, the numbers are so small that a chance mixture of this sort is far from improbable.

During the Iron Age, spelt seems to have replaced emmer in many parts of Britain. The combined presence at Killibury of both spelt and emmer may therefore be interpreted in three ways. First, the finds may represent a spelt crop contaminated by residual plants of emmer. (This seems to be the situation at a number of Romano-British sites). Secondly, spelt and emmer may have been separately cultivated as crops in their own right. Thirdly, the two wheats may have been sown together in the same fields as mixed crops.

With both spelt and emmer, a closely similar sequence of operations is required to free the grains from the ears. A mixture of ears would therefore have presented no problem on this account, regardless of how the mixture resulted. On the other hand, mixed sowing would have required the selection of varieties of either species carefully matched to ensure synchronous ripening. (Most spelt wheats ripen in advance of most modern emmers.) In addition, the taste and cooking properties of either type of grain are very different and, in recent times at least, the grains are never mixed but rather retained for preparing entirely different foods.

Whether at Killibury emmer was still cultivated as a crop in its own right along with spelt is impossible to tell.

## CHARCOAL by D.F. Cutler, Jodrell Laboratory, Royal Botanic Gardens, Kew

The following were identified: most groups submitted contained additionally a mass of unidentifiable material.

Inner Ditch (e) Quercus (Oak)

- 2 Probably *Alnus* (alder), *Quercus* and a member of the Pomoideae, sub family of the Rosaceae
- 13 Quercus
- 14 Quercus many fragments
- 22 Possibly member of Rosaceae
- 47 Quercus, Alnus, and a member of the Leguminosae
- 81 Quercus, Alnus
- 117 Quercus, member of Salicaceae (Poplars, Willows) Prunus, probably Corylus (Hazel)
- 149 Quercus
- 172 Quercus
- 81 Quercus robur L., Ulex (gorse), Betula (birch), Corylus avellana L.

Tiny fragments of charred hazelnuts came from 64.

## THE BURIED SOIL BENEATH THE INNER RAMPART by S. Staines, BSc

The soil examined beneath the inner rampart at Killibury is a fine loamy brown podzolic soil developed from Devonian slates. It is characterised by the presence of a brown surface horizon overlying an ochreous subsoil horizon (Bs) which in this case passes into shattered rock at fairly shallow depth. This soil type occurs widely over the south-west peninsula and is found mainly on slopes in areas of accented relief. Present day soils show little difference from the buried soil and the process of soil development would appear to have been complete by the time the rampart system was constructed. Soil conditions would have been similar to those of today, that is, medium textures and free drainage, and well suited to agricultural activities. The soil may be correlated with the Dartington series.

#### POLLEN by Roger Beck, PhD

A series of slides were prepared from a profile through the soil beneath the inner rampart. Pollen was never sufficiently abundant to be significant statistically, probably because of the large amount of oxidisation which had taken place. The pollen and spores present included Gramineae, Cyperaceae, Ericales and Filicales; no tree pollen was found.

#### DISCUSSION

The radiocarbon determinations of  $930 \pm 70$  bc and  $840 \pm 70$  bc from Pit 14 beneath the inner rampart imply some occupation of the site in the eleventh or tenth century BC (p.100). This occupation may have taken two forms, either an enclosed or else an open, and perhaps more casual, settlement.

The only reason for suggesting a XI/X BC enclosure is the apparent relationship of Pit 14 to the ploughed down inner rampart. The pit appeared to have been cut and infilled immediately before deposition of rampart material as a slight charcoal smear around its circumference was visible on the surface of the buried soil. The junction of this soil with the rampart shillet was distinct and there was no reason to suppose that plough disturbance had penetrated through the rampart shillet to the underlying soil. There was nothing to suggest paring of the surface of the soil. If the pit were covered over very soon after infilling, it follows that the covering rampart material was of a similar XI/X BC date. Slight variations appeared in the surviving 20 cm of rampart material but it had been disturbed by ploughing in its upper part; it may have incorporated deposits of different dates. The inner ditch showed no signs of recutting. However the extensive excavations at Balksbury, Hants, provide a salutory warning that traces of early ditch phases may only be found in places along a hillfort circumference and may prove to have been totally removed in some excavated sections (Wainwright, 1969, 26).

A number of hillforts throughout Britain have been demonstrated by recent radiocarbon determinations or metalwork association to belong to the later Bronze Age, for example Dinorben (Savory, 1971), the Breiddin (Musson, 1976, 298) or Ivinghoe Beacon (Cotton and Frere, 1968). All sites predating the starting of Iron Age pottery styles had timber framed or stone revetted ramparts with the exception of Norton Fitzwarren in Somerset (Current Archaeol. 18, 1971, 116-20) which appears to have had a simple dump rampart and small V-shaped ditch. Glacis-rampart construction has however been suggested for Balksbury, Hants, for the sixth or seventh century BC (Wainwright, 1969). There can be no doubt that future research will show a variety of construction styles ranging back to the start of the practice of hillfort construction. There are no post holes at Killibury to suggest an early box stage but there is nothing improbable in a simple dump rampart here in XI or X BC. So far no hillfort in Devon or Cornwall has been demonstrated to have been constructed before the Iron Age. Late Bronze Age metalwork finds in the vicinity of Castle Kenijack and at a number of other sites (Pearce, 1976) may indicate activity at these unexcavated sites. Some of the pottery at Hembury, E. Devon could well be Late Bronze Age and correlate with the early palisade stage defined by Cunliffe (1974, 228). It is to be expected that future research will establish the presence of Late Bronze Age hillforts in South West Britain as elsewhere.

The early radiocarbon determination for Pit 14 may be linked tentatively with the suggested Late Bronze Age sherd P29 (from the base of topsoil 218), and possibly with those

from features 101 and 213, to strengthen the case for some occupation before the Iron Age at Killibury. Any of the interior features which predate the second stage rampart might be similarly dated (except 18, 27, 37 and 48 which produced Iron Age pottery). These include one feasible four post structure 35 - 36 - 39 - 40, 2.40 by 1.20 m in size (Fig. 43). The features sealed by the lowest soil 71 in the W hollow, except 57, 58, 64, 67 and 68 with pottery, might be early in date as could the comparable group sealed by 130 in the E hollow (only 118 here has Iron Age pot in association with possible Bronze Age body sherds). 112 - 113 -120 - 125 form a rectangle 3 m square. The earlier features outside the hollows which do not contain pottery may also be pre-Iron Age.

The possible pre-Iron Age date for the above features applies whether or not the inner rampart was initially constructed in XI - X BC; if it was not, the apparent relationship of Pit 14 to the Rampart has been misinterpreted – perhaps some local disturbance removed a little soil which had developed over the top of the pit and which would otherwise have obscured the charcoal smear around its edge. It is entirely feasible that there should have been an open, perhaps slight settlement, at Killibury at this time. Settlements without surrounding earthworks or stone construction to leave surface traces will only normally be detected through excavation of later earthwork sites; Trevisker itself was discovered in this way (ApSimon and Greenfield, 1972). A number of Iron Age settlements in Cornwall in fact provide hints of Late Bronze Age occupation in their vicinity: there are sherds of pre-Iron Age date from Castle Dore in Truro Museum; a pit with a Late Bronze Age sherd was found beneath the bank at Castle Gotha (Saunders, 1961); there is a cord-impressed sherd from Carvossa (P.M. Carlyon, per. comm.) and a variety of sherds from Kelsey Head (L.J. Penna per. comm.). The exact nature of the pre-Iron Age occupation at Killibury has still to be established but the presence of activity in XI/X BC is consistent with evidence forthcoming from elsewhere in the country and the county.

Killibury hillfort appears a typical example of Dumnonian multiple enclosure hillforts as defined by Fox (1961) both in scale, siting and area enclosed. The defences can not be demonstrated to be all contemporary, in absence of good pollen data from the soils beneath them, but their symmetry is remarkable if the evidence for a barbican type entrance at both east and west is accepted. Dump ramparts always appear to have been used on South West multiple enclosure sites; none of the excavated examples have produced evidence for timber framing. The scale and profile of the inner ditch at 2.8 m in depth is consistent with other sites, the suggested 2.4 m depth for the first phase at Castle Dore (Radford, 1951, 11) 3 m at Embury Beacon (Jefferies, 1974, Fig. 3) and 3.1 m at Milber Down (Fox et al., 1949, Pl. XVII). The inner rampart would appear to have had at least two constructional phases and may well have had more; the outer rampart was too eroded for any indications of phasing. At one stage, not necessarily primary, the inner rampart would appear to have incorporated a structure of large shillet blocks (b and e in section C - D Fig. 36). These may have formed a revetment to the outer toe of the rampart; it is notable that the majority of primary silt beneath them derives from the outer side of the ditch, suggesting that the rampart was stabilised in a way that prevented downwash of soil; such a revetment was found in the second stage of the inner rampart at Castle Dore (Radford, 1951, 10). Alternately the blocks may have come from a breastwork sited on top of the bank; it is difficult to visualise how dump ramparts could have provided real security without a wall or breastwork on their tops. Evidence for substantial timber breastworks has recently been found at Woodbury Castle in East Devon, (a closed-space bivallate fort (Miles, 1975, Fig. 6), and suggested by a single post hole on the rampart of Embury Beacon (Jefferies, 1974, 139).

The trial trench across the outer enclosure (Fig. 35) produced evidence for a number of curving gullies of a type not found in the area of the interior excavated. Their fills with far more brown soil than shillet suggested features left open as drains, but the presence of a post hole 7 at the end of 6 and of a group of blocks in 3 makes this interpretation slightly less certain. They appear to have been irregular and far too large to have been structurally used for huts. Curved gullies defining and draining hut sites are found on SW Iron Age sites; the interior of the round at Threemilestone, Truro was covered by a network of these (Schwieso, 1976); they were also found at St Mawgan-in-Pydar

(Threipland, 1956) the Rumps (Brooks, 1974, Fig. 3), and in the area between the inner and second ramparts at Milber Downs (Fox et al. 1949, Fig. 4). They were not found in the extensive excavations at Castle Dore nor in the interior of Killibury. This may point to some differential in use of the two enclosures at Killibury, with the curved gullies either forming bases for small compounds, or defining the positions of light structures. Insufficient work has yet been done on the outer enclosures of SW multiple enclosure hillforts. Extensive stripping at Embury revealed no definite structural remains (Jefferies, 1974); Castle Dore produced circular huts but these were adjacent to the entrance (Radford, 1951, Fig. 7) and Milber Down (Fox et al, 1949, Fig. 4) gullies similar to Killibury. Tregeare Rounds also produced evidence for huts in the outer enclosure (Baring Gould, 1904, 78). As hillforts are dug more extensively it is to be expected that different uses will be established for different areas of the interior, (see Moel y Gaer, Clwyd, Guilbert, 1976, Fig. 8).

The palimpsest of features in the inner enclosure at Killibury indicates that this part of the interior at least was occupied by a succession of timber structures. Because of the stratigraphy in the hollows some general sequences of occupation and structures can be proposed. The earliest features comprise 17 - 50 sealed by the second stage rampart, 56 - 5070 sealed by soil 71 in the west hollow and 112 - 129 sealed by the equivalent soil 130 in the east hollow, and presumably some of those outside the hollows 173 - 217. It has been suggested above (p.112) that these may include four post structures (35 - 36 - 39 - 40 and 112 - 113 - 120 - 125) which if not late Bronze Age belong to the earliest Iron Age of the site. Four post structures are well attested in the British Iron Age; they have in the past been generally interpreted as granaries but recently at sites such as Credenhill Camp (Stanford, 1971) they have been found regularly laid out, in sufficient numbers to make it likely that they represent the central framing of rectangular buildings. As granaries four post structures had formed part of the chalklands Woodbury culture along with storage pits (Bowen, 1969), and as such had not been expected in SW Britain. However they have been found in Romano-British contexts at Trethurgy, St Austell (Miles, 1973, Fig. 12) and at Topsham near Exeter (Jarvis and Maxfield, 1975, Fig. 7). Soils 71 and 130 both overlapped the shillets of the second stage rampart 51 - 53 therefore some of the features sealed by these soils may post-date this suggested widening of the rampart.

Soils 71 and 130 were similar and appeared to form definite horizons without features cut during their formation; both contained quantities of comminuted charcoal. It is possible they represent a phase when there were no structures in the hollows which consequently became covered with soil wash and were used for dumping domestic ash. (It is possible that soil was stripped from the interior of the hollows before structures were initially built; oven 57 was constructed on subsoil with a scattering of charcoal and stakeholes 59 around; the rock around 116/117 had been levelled slightly and appeared worn.) Subsequently structures were built on the surface of successive soil levels without detectable traces of levelling. After the formation of the basal soils 71/130, assuming these are contemporary, the structural sequences are slightly different for each of the hollows, the West having a sequence of 76 shillet, 81 soil, 83 soil and shillet, 86 shillet and 103 soil, the East a simple sequence of 137 shillet, 143 soil and 172 soil and shillet mixed. Presumably the soil phases in each may indicate temporary abandonment phases of each area. The shillet - in some cases fairly clean - may have been put to level up, possibly to cover over, soft soil surfaces, or possibly derived as a spread from alterations to the ramparts – either heightenings or perhaps more likely periods of neglect when the ramparts were not properly maintained. The two uppermost layers 103/172 had no detectable features cut into them and presumably represent the gradual erosion of the defences after occupation of the hillfort ceased.

All dug features found may have held structural timbers with the exception of pits 56 and 64, both of which belong to an early phase of activity and appear to have been backfilled with clean shillet over a small amount of soil wash. The purpose of 56 and 64 is not known; they are of a size usually interpreted as for grain storage on lowland South British sites but no such pits have previously been noted in a SW context. Indeed it has become an accepted concept in Iron Age studies that grain storage pits were confined to the 'Woodbury' culture of the South British lowlands (Bowen, 1969, 13). However grain was undoubtedly available at Killibury (p. 110), presumably grown in the vicinity, and in an initial period underground storage may have been attempted.

The reconstruction of house plans from post holes is notoriously difficult. Gradually with improving excavation techniques, increasingly regular and structurally sophisticated buildings are being recognised. The best example to date is Moel y Gaer, Clwyd (Guilbert, 1976) where occupation fell into three well defined phases and virtually every feature found could be allocated to buildings of regular plan. The recognition of regular structures makes it inadmissible today to identify groups of post holes as 'houses' unless they present a reasonably regular layout. It is of course to be expected that Iron Age settlements will have included numerous irregular structures for workshops, animal pens and stores; these are best described as huts. Actual living quarters or houses should be identified only with plans on which a reasonable architectural reconstruction can be based. At Killibury with such a small area excavated it would be inadmissible to attempt to phase the majority of features in structural groups. The stratified groups of post holes in the W hollow present no obvious patterns. The evidence from the E hollow is more susceptible to interpretation. It is conceivable that, sealed by the lowest soil 130, there was a round house with an irregular ring 118 - 113 - 114 - 125 - 124 with 120 centrally placed and perhaps 117 part of a porch (if the suggestion of a four poster 112 - 113 - 120 - 125 is not accepted). In the next phase the post



Fig. 43 Killibury: Suggested Iron Age structures. Drawing: Daphne Harris.

hole pair 132 - 134 replaced by larger posts 133 - 135 with outlying posts 136 - and 131 suggests a structure of a type not yet understood. Subsequently we have a single line of post holes 142, 141, 139. In the latest structural phase, cutting soil 143, there is evidence for a regular round house (Fig. 43). (The E hollow was now almost completely infilled so that its contours need not be taken into account during building construction.) The house was built on an emplacement of 7 posts placed 2 m apart, 145 - 146 - 148 - 160 - 144 - 162 (or 163) - 151 (or 152); the distance between 145 and 151 is 3 m and the posts are symetrically arranged so that the rear post 160 was opposite the mid point of a line joining 145 - 151. These posts would have supported a ring beam; the exterior of the house would have been set beyond this, and the house would have had a diameter in excess of 5 m. If the smaller post holes 97, 159 formed part of the outer line the house would have been 9 m across. The outer wall, bearing no structural stress, could have been of light wattle and daub and set in a slot of which no trace need survive. This form of house is well established for the British Iron Age: the extra width opposite the door has been noted at Moel-y-Gaer (Guilbert, 1976, 307). Houses of similar size and with floor areas extending beyond the posts for the ring beam are published from Period III at Castle Dore (Radford, 1951, Fig. 5). It is possible that a similar but less regular house is represented by 89 - 92 - 93/94 - 87 in the W hollow.

Some post-Iron Age activity is indicated on the site by the two sherds of Bi ware from 218, base of topsoil. It is possible that some features are, like the sherds, of a post Roman date. Pottery tends to be sparse in Early Christian contexts in Cornwall, and the Iron Age sherds in some of the later features might be residual. Alternately features post-dating levels 103 and 172 infilling the tops of the hollows may have been totally ploughed away; the recent work at Wroxeter demonstrates the slight traces left by some buildings in V and VI AD (Barker, 1975). There was a considerable quantity of residual Iron Age sherds (p.105) in the base of ploughsoil 218, which presumably derive from the ploughing out of the related stratigraphy. The ditch profile showed no signs of recutting, and it cannot be said for either of the above alternatives that refortification rather than occupation is implied. A third alternative is to suggest casual loss of the Bi sherds. Chun Castle in West Penwith (Leeds, 1927) has produced post-Roman Mediterranean import sherds implying occupation. Construction and re-use of hillforts in the post-Roman period in Western Britain is now well accepted (Alcock, 1971, 209 ff). However even if future work at Killibury establishes V/VI AD refortification and occupation, there would not be grounds for claiming confirmation of the suggested identification of the Arthurian court of Kelli Wic with Killibury. The literary background to this is discussed below. The most it could do would be to suggest that an occupation at Killibury was remembered in oral tradition to be grafted on to a growing body of Arthurian legends centuries later. It can do nothing to demonstrate the historicity of Arthur.

## 'KELLI WIC IN CORNWALL' by Oliver Padel

The phrase 'Kelli Wic in Cornwall' occurs in two primary Welsh literary sources as the name for one of Arthur's courts, and it has been suggested that this could refer to Killibury. The purpose of this note is to examine the question, though it cannot provide any definite answer, which will probably never be possible.

It must be made clear from the start that this is not a historical question: the 'Arthur' who held court at *Kelli Wic* (amongst other places) did not live in the sixth, or indeed in any, century. He is a figure of story-telling, associated with giants, magical boars, and folklore in general, and has no historical data of any trustworthiness attached to his name. This has been recognised for a long time by Celticists and reiterated by the latest authority (Dumville, 1977, 187 - 8) in answer to recent books which suggest the contrary. So here we are not concerned with who, if anybody, may have lived at Killibury during the immediate post-Roman period, nor with the existence (or otherwise) of evidence for occupation at that time, but with this question: when the eleventh-century Welsh story-tellers said 'Kelli Wic in Cornwall' for a court of their legendary figure, were they thinking of any real place — and if so, where?

Welsh literary texts cannot be closely dated: at the time when they were first written

down, they had probably been in existence for some time as part of the oral tradition; moreover, the earliest written versions are themselves now lost, and survive only in later copies. The two sources which concern us are the folk-tale *Culhwch and Olwen*, which was probably first written down in the form we have it during the second half of the eleventh century, and the *Triads*, a collection of traditional lore, classified for ease of handling and memorising: the earliest manuscript of these dates from the thirteenth century, but the material they contain is mostly uninfluenced by Geoffrey of Monmouth, and probably goes back to the eleventh century or earlier.

As edited by Dr Bromwich (1961), three of the Triads mention one of Arthur's courts as being at 'Kelli Wic in Cornwall'. No. 1 (Bromwich, 1961), 'Three Tribal Thrones of the Island of Britain', gives Mynyw (the Welsh for St Davids), Kelli Wic in Cornwall, and 'Penn Ryoned in the north' as the three sites of Arthur's courts; the last name, like Kelli Wic, cannot be identified with assurance. Another one, no. 85 (Bromwich, 1961, 211), is almost a duplicate of this: for 'Arthur's Three Principal Courts' it gives Caerleon-on-Usk, Kelli Wic in Cornwall, and 'Penryn Rioned in the north'. As Dr Bromwich points out, this is likely to be a late version, influenced by Geoffrey of Monmouth (mid-twelfth century), since it was he who introduced Caerleon into the literary tradition; but an earlier version appears in the tract 'The Names of the Island of Britain' (Bromwich, 1961, 228 - 9), no. 4: '... the Crown should be worn in London, and one of the coronets at Penrhyn Rhionydd in the north, the second at Aberffraw (in Anglesey), and the third in Cornwall'. The other Triad which mentions the name does not add anything for the purposes of identification: it is no. 54 (Bromwich, 1961, 147), 'Three Unrestrained Ravagings of the Island of Britain'. The first was when Medrod came to Arthur's court 'at Kelliwig in Cornwall', and the second when Arthur paid a return visit.

The folk-tale *Culhwch and Olwen* five times mentions Arthur as having his court at *Kelli Wic*, usually qualified as being 'in Cornwall' (1). The Cornish connections of this tale have not been properly investigated in print: there are other aspects which seem to relate to the county as well as this one. Not only is *Kelli Wic* his only court named in the tale, but the extraordinary list of Arthur's followers in the tale incorporates several mentions of Cornwall in various connections. For our present purposes, however, the important thing is the fact that a text which was probably written down earlier than the Triads, and is presumably independent of them, puts Arthur's court at *Kelli Wic*.

Apart from these two early sources, the later Welsh court poets occasionally mention the place, but again without adding anything of note. However, there is one more text which may be relevant. The poem 'What man is the porter?' in the Black Book of Carmarthen is probably eleventh-century at the latest; it is concerned with Arthur, and contains a line, 'when *Kelli* was lost' (Evans, 1906, 95). This may refer to *Kelli Wic*, or to the district round it, and if so is important as showing that *Kelli* could be used without the qualifier *wic*.

With so little material to go by, one would be inclined to say that the place, like 'Penrhyn Rhionydd in the north', could not be identified, or even that the story-tellers may not have had any actual place in mind, but simply used the name that had been handed down to them. However, certain factors make it likely that it was a real place in Cornwall: for one thing this name, as a genuine place-name, does occur elsewhere — twice in Wales and twice in Brittany. The Welsh ones are a farm, Gelliwig, in Caernarvonshire (2), and a manor in the Grosmont district of Monmouthshire (Richards, 1969, 74). The two Breton instances, both attested in the mediaeval period, are in the Cap Sizun area of Cornouaille (3).

Moreover, it has been pointed out to us by the Revd. Mr W.M.M. Picken that the 1302 Assize Roll for Cornwall makes mention of a place *Kellewik* (4). The case appears in the Penwith section of the Roll, and concerns two men who were accused of murdering somebody at Lanestly (= Gulval). The murdered man was 'Thomas de Kellewik', and the accused men 'Walter de Kancia' (either Cant, in St Minver parish, or the county of Kent), and 'Oliver the parson'. Infuriatingly, there is no further clue as to whereabouts in Cornwall *Kellewik* was; but we may take it that the evidence, such as it is, points to Penwith hundred, or just possibly somewhere in the St Minver district. But the great importance of this document is that it shows there really was a place in Cornwall with the same name as that which the Welsh story-tellers used. There is a further issue, which complicates the issue considerably. This is the identification of an Anglo-Saxon manor in Cornwall, spelt either *Caellincg* or *Caellwic*. It may be a red herring, since there is no proof that it is the same place as *Kelli Wic*; moreover, this manor itself cannot be identified with certainty. There are two separate sources which mention this manor: the first is a record of the division of the sees of Wessex, purporting to date from AD 905, but actually a fake from later in the tenth century; its spelling of the name is *Caellincg*, which would be pronounced exactly as the first part of 'Calling-ton' (5). The second source is a letter from Dunstan, Archbishop of Canterbury, to King Ethelred, written between 980 and 988. This was in part dependent on the first document (or some copy of it), since it repeats certain historical errors contained therein, but it strangely contains a different form of the name, *Caellwic* (6). This discrepancy has not been satisfactorily explained; but it is possible, at least, that an original \**Caellwic* (a possible Anglo-Saxon borrowing of Cornish *Kelli Wic*; cf. the Assize Roll spelling) could have been corrupted, in written transmission, into the two different forms shown by the Anglo-Saxon sources.

The two most plausible suggestions for this Anglo-Saxon manor are Callington (of which the earliest definite spelling is *Calwetone/Caluuitona* in the two versions of Domesday Book), or Kelly in Egloshayle. Either remains possible, and it is not our concern to choose between them. Since the question may be irrelevant to the location of *Kelli Wic*, the matter must be left there; there has been further discussion of the problem by Picken (1958).

It should be emphasised that the firm identification of *Kelliwic* with Killibury, which has appeared in some writings since Henderson's time, depends entirely upon equating *Kelliwic* with the Anglo-Saxon *Caellincg*: once this is realised to be itself in doubt, the reason for the firmness disappears.

Even the meaning of *Kelli Wic* is a problem. The Cornish (and Welsh) word *kelli* means 'a grove'; the second element is a word which in Breton means the 'township' part of a parish (= Latin *vicus*), as opposed to the 'country' part, or *ploue*. In Welsh, however, the word has shifted in meaning, and it generally means 'forest', possibly because settlements were often built at clearings in the forest. This discrepancy is itself odd, and we cannot know which meaning the word had in our place-name, or indeed in Cornwall generally, though from the place-name Gweek the Welsh one of 'forest' seems more likely. Certainly to the Welsh audiences of the stories, the phrase *Kelli Wic* would have meant 'forest grove; grove of a forest'.

In trying to locate the name on the modern map, it is reasonable to assume that, if the Welsh story-tellers really had an actual place in mind, they will have attached the title of 'Arthur's court' to a notable field monument, most probably a hill-fort. Since we cannot now identify the 1302 form Kellewik, the only method available is to seek clusters of names starting with Kelly-, with which the lost Kellewik 'forest Kelly' could have belonged. Two such clusters can be found: one is in Egloshayle parish (Kelly itself; Killibury 'fort at Kelly'; perhaps Killigam, which is a lost name in the parish; and possibly Kellygreen in St Tudy and Bokelly in St Kew, though these are far enough away to be independent names); the other cluster is in Stoke Climsland parish, by Callington (Kellybray; Kellyhole; Kellibullok, now Deer Park Farm). It is unfortunate that neither of these groups is in Penwith, the hundred where the 1302 Assize Roll would naturally lead us to search for the name. Of the two, only the former one incorporates a suitable field monument, the fort at Killibury. It is important to note that this name, attested from AD 1215 Killiburgh, cannot mean anything except 'fort at Kelly'. Since Kellewik is recorded as late as 1302, it must have overlapped with Killibury if they both refer to the same place. This is suspicious, but it is not an insuperable problem: the fact that the basic name in the area is Kelly, on its own, means that the qualifiers like Cornish wic and English -bury could have been independently added to the basic name, and thus that the different compound names could happily have coexisted.

The conclusion, then, is that the Welsh story-tellers probably were thinking of a real place when they said 'Kelli Wic in Cornwall', and that Killibury in Egloshayle is a possible location. Unless new evidence comes to light, it will probably never be possible to say more than that.

## NOTES

- The text is printed by J. Gwenogvryn Evans, The Text of the Mabinogion from the White Book of Rhydderch (Pwllheli, 1907), from two manuscripts: the White Book of Rhydderch for the earlier part, and the later Red Book of Hergest for the latter section of the tale, missing in the White Book. The five occurrences are, by column and line, 464.26; 469.14; 495.25; 497.26; 505.22. Of these the first two are in both manuscripts, and the latter three only in the Red Book. In the translation by Gwyn Jones and Thomas Jones, The Mabinogion (Everyman, 1949, etc.), these occurrences appear on pp. 103, 106, 128, 129, 135.
- 2. Grid reference SH/257 302. Tomos Roberts, Bangor, kindly informs us that it can be traced back to the mediaeval period as a name here. It should be noted, however, that according to *Geiriadur Prifysgol Cymru / A Dictionary of the Welsh Language* (p. 459c, s.v. *celliwig*), the name here is a close-compound, stressed on the second syllable, unlike the Cornish name, which (from its spelling in *Culhwch and Olwen*) was obviously two separate words, with the main stress on *wic*.
- 3. Loth, 1924, 390-393; they are *Quilliuuic* 1426, near Cléden-Cap-Sizun (Quillivic on the modern map), and *Knech Quyllyvic* 1540, near Beuzec-Cap-Sizun.
- 4. Public Record Office, document no. JI. 1/117, membrane 68.
- 5. British Library, Additional Manuscript no. 7138. The text is printed by J. Armitage Robinson, The Saxon Bishops of Wells (London, British Academy, n.d.), pp. 22-23. Of several later copies of the original manuscript, one is found in the Leofric Missal (Bodleian Library, MS. 579), and has been printed in various places. This copy alters the spelling slightly, to Caelling (NB. not Coelling, as given in Devon & Cornwall Notes & Queries, vol. 27 p. 225).
- 6. Bodleian Library, Manuscript Eng. Hist. a.2, no. xiv; printed by A.S. Napier and W.H. Stevenson, *The Crawford Collection of Early Charters and Documents* (Oxford, 1895), no. 7, pp. 18-19. By far the best discussion of the relationship between these two documents, and the historical problems associated with them, is by Armitage Robinson, in the work cited above.

## KILLIBURY HILLFORT AND KELLI WIC IN ANTIQUARIAN STUDIES by Peter Moreton

Assuming that the Welsh bards had an actual place in mind (p.116) when they spoke of 'Kelli Wic in Cornwall', it is of interest to enquire which this may have been.

From the early eighteenth, to the late nineteenth century, the consensus of scholarly opinion favoured Callington as the site of *Kelli Wic*.

The earliest printed identification with Callington would seem to be that of Hals (1750), who gives no reasons for it. Presumably similarity in the names Kelli and Callington had been noted in scholarly circles during the eighteenth century, and Hals put this opinion into print. Polwhele (1803, 50) repeats Hals's statement, and shows the supposed progression from Kelli through Kellington, Killiwick, Callington. Hitchens and Drew (1824, 133), and Lake (1867, 168) follow Polwhele's example in quoting from Hals without comment of their own. Daniell (1854, 107) followed the trend in stating that King Arthur was said to have had a palace in Callington.

It is then clear that nineteenth century scholarship was generally content to follow Hals in identifying the Arthurian Kelli Wic with Callington. The early twentieth century was to introduce new theories. Calliwith was suggested (Lot, 1901, 13 - 14), but has not become a serious contender. Gweek Wood was a possibility suggested by Loth (1912, 64), only to be retracted by him in 1924 (390).

In the fourth edition of Daniell's History of Cornwall (Peter, 1906, 26) we have, apparently, the first identification of Kelli Wic with Killibury. The author favours the Bodmin area (Calliwith?) or Bodmin itself as the original 'Celliweg', but mentions other theories, including those of Callington and Kelly Rounds (a name often used to denote Killibury). Henry Jenner's paper, read in 1911 (1912-14, 57) refers to Callington and Kelly Rounds as the two possible identifications of 'Gelliwic', but admits to not knowing the grounds for these theories. That *Kelli Wic* was under discussion at this period, by more than

a restricted group of scholars, is shown by Mitton's reference to Killibury being identified with the Arthurian stronghold (1915, 84 - 5).

Charles Henderson introduced a new element (1925, 87). He believed that Kelli Wic was not only identical with Killibury but was also the Anglo-Saxon manor, Caellwic, (p.117). His reasoning was that the manors had been chosen for strategic reasons: thus Caellwic was a place of importance and its similarity to Kelli Wic is obvious. Hencken (1932, 249) followed Henderson's reasoning and tentatively connected Caellwic with Kelli Wic. He felt that the association of Kelli Wic with Arthur by later writers was indicative of its former importance. Hencken supported, too, the identification of Kelli Wic with Killibury. Later Henderson was to repeat his earlier theory of the Kelli Wic/Caellwic/Kelly connection (1935, 146).

Ekwall returned to the Callington identification (1936) and Johnstone (1945, 156 - 7) argued in favour of the same. Picken brings the argument up to date (1958, 225). He suggests that the Callington/Kelli Wic identification may be based on an eleventh-century mistranscription of *Caellwig* as *Caelling* (thus resembling *Callington*). He finds no reason for Callington to be connected with *Caellwic*, and sees the absence of a substantial fort as significant.

Picken's article is not a defence of Killibury as the bards' home for their hero, but is an attempted refutation of Callington's claim to be so considered, always assuming that Caellwig = Kelli Wic. The most recent authority Bromwich (1961) follows Henderson in supporting the Kelliwic/Killibury connection.

#### Postscript by Oliver Padel

By chance I have discovered what is almost certainly the first equation of Kelli Wic with Killbury, not referred to by the later writers. W. Howship Dickinson, King Arthur in Cornwall (London: Longmans, 1900) knew the Welsh references, and suggested that they meant 'Kelly Rounds', as he called it, for the following reasons (pp. 4, 40, 70-74, 80-81). First, Kelly is near Tintagel, which Geoffrey of Monmouth associated with Arthur. Secondly, it is also near Tregear Rounds, which in 1900 was believed to be the site of Damelioc, the second castle attributed by Geoffrey to Gorlois, Duke of Cornwall, husband of Ygerna. (Geoffrey's Damelioc is actually Domellick, near St Dennis, but from the time of Hals until after the First Edition of the O.S. Six-Inch Map, the name was spuriously attached to Tregear Rounds. Following the paper 'An exploration of Tregear Rounds', Journ. Roy. Inst. Cornwall 16 (1904-06), 73-83, by S. Baring Gould and others, the name was removed from the site in subsequent O.S. maps; however, the error misled Dickinson.) Thirdly, one remark in Culhwch and Olwen might imply Kelli Wic was thought by the Welsh story tellers to be towards the north coast of Cornwall, which Killibury is, of course. (Jones and Jones 1949, p. 106: the marksman who could hit a wren in Ireland from Kelli Wic.) Thus it is clear that of Dickinson's three reasons, one is wrong and the other two are extremely tenuous; yet it is undoubtedly from this book, directly or indirectly, that all twentieth-century writers have derived the identification. The tone of his comments implies that he thought himself to be the first one to make the equation, which was almost certainly true. Though now obscure, the book will have been popular for two or three decades, which would explain why the general literature, cited above, suddenly started to quote Killibury, without giving any references or reasons for the identification. The weakness of the original reasons does not mean that the equation is impossible or wrong, but it does mean that the attempts of later writers, especially Henderson, to justify a pre-existing equation which is now seen to be baseless, should be regarded with a certain scepticism.

It might also be added that Joseph Loth's retraction in 1924 of Gweek, his first suggestion, was not actually made, though it is implied, in his note in *Revue Celtique*, but in another article, 'Un parallèle au Roman de Tristan, en Irlandais, au Xe siècle': *Comptes Rendus de l'Académie des Inscriptions et Belles-Lettres*, 1924, 122-133, at 132n.

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#### **Finds and Records**

The finds and records have been deposited at the County Museum, River Street, Truro, except for P16 which has been retained by the owner, Mr G. Bray.

## Bibliography

Alcock, L., 1971. Arthur's Britain

- ApSimon, A.M., and Greenfield, E., 1972. 'The Excavation of the Bronze Age and Iron Age Settlement at Trevisker Round, St Eval, Cornwall', Proc. Prehist. Soc., 38, 302-81
- Avery, M., 1973. 'British La Tène Decorated Pottery: An Outline', Études Celtiques, 13, 522-51
- Avery, M., 1976. 'Hillforts of the British Isles: A Student's Introduction' in D.W. Harding (ed.), Hillforts: Later Prehistoric Earthworks in Britain and Ireland, 1-58
- Baker, H., 1963. 'The Applications of Radioactivity in Archaeology' in Pyddoke, E., (ed.), The Scientist and Archaeology, 120-40
- Baring Gould, S., 1904. 'An Exploration of Tregear Rounds', J. Roy. Inst. Corn., 16, 73-83

Barker, P., 1975. 'Excavations at the Baths Basilica at Wroxeter 1966-74: interim report', Britannia, 6, 106-17

Bersu, G., 1977. Three Iron Age Round Houses in the Isle of Man

Bowen, H.C., 1969. 'The Celtic Background' in A. Rivet (ed.), The Roman Villa in Britain, 1-48

Bromwich, R., 1961. Trioedd Ynyr Prydein/The Welsh Triads

- Brooks, R.T., 1974. 'The Excavation of The Rumps Cliff Castle, St Minver, Cornwall', Cornish Archaeol., 13, 5-50
- Christie, P.M.L., 1976. 'Carn Euny Interim Report on the final seasons 1970 and 1972', Cornish Archaeol, 15, 68-72
- Cotton, M.A. & Frere, S.S., 1968. 'Ivinghoe Beacon, excavations 1963-5', Records of Bucks, 18, 187-260
- Clark, R.M., 1975. 'A calibration curve for radiocarbon dates', Antiquity, 49, 251-66

Cunliffe, B., 1974. Iron Age Communities in Britain

- Daniell, J.J., 1854. A Geography of Cornwall
- Dudley, D., 1956. 'An Excavation at Bodrifty, Mulfra, near Penzance', Archaeol. J., 113, 1-32
- Dumville, D.N., 1977. 'Sub-Roman Britain: history and legend', History, 62, 173-92
- Ekwall, E., 1936. Oxford Dictionary of English Place-Names
- Evans, J.G. (ed.), 1906. The Black Book of Carmarthen
- Fox, A. 1961. 'South-Western Hill-forts' in Frere, S.S. (ed.), Problems of the Iron Age in Southern Britain, 35-60

Fox, A. et al., 1949-50. 'Report on the Excavations at Milber Down, 1937-8', Proc. Devon Archaeol. Ex. Soc., 4, pts 2 & 3, 27-66

- Guilbert, G., 1976. 'Moel y Gaer (Rhosesmor) 1972-1973: An area Excavation in the Interior' in D. Harding (ed.), Hillforts: Later Prehistoric Earthworks in Britain and Ireland
- Hals, W., 1750. The Complete History of Cornwall: Part II the Parochial History
- Hencken, H. O'Neil, 1932. The Archaeology of Cornwall and Scilly

Henderson, C., 1925. 'Parochial History of Cornwall', in Cornish Church Guide

Henderson, C., 1935. Essays in Cornish History

Hitchens, F. and Drew, S., 1824. History of Cornwall, II

Jarvis, K. & Maxfield, V., 1975. 'The Excavation of a Roman farmstead and a late Neolithic settlement, Topsham, Devon', Proc. Devon Archaeol. Soc., 33, 206-66

Jenner, H., 1912. 'Some Possible Arthurian Place-names in West Penwith', J. Roy. Inst. Corn., 19, 46-89

Jefferies, J.S., 1974. 'An Excavation at the Coastal Promontory Fort of Embury Beacon, Devon', Proc. Prehist. Soc., 40, 136-56

Johnstone, P.K., 1945. 'Kelliwig in Cornwall', Antiquity, 19, 156-7

Lake, W., 1867. Parochial History of the County of Cornwall, I

Leeds, E.T., 1927. 'Excavations at Chun Castle, in Penwith', Archaeologia, 76, 205-40

Lot, F., 1901. 'Nouvelles Etudes sur la Provenance du Cycle Arthurien', Romania, 30, 1-21

Loth, J., 1912. Contributions à l'Étude des Romans de la Table Ronde

Loth, J., 1924. 'Gallois Celliwig (etc.)', Revue Celtique, 41, 390-3

Megaw, J.V.S., 1976. 'Gwithian, Cornwall: some notes on the evidence for Neolithic and Bronze Age Settlement' in C. Burgess & R. Miket (Ed.) Settlement and Economy in the Third and Second Millenia B.C., 51-66

Mercer, R.J., 1970. 'The Excavation of a Bronze Age hut-circle settlement, Stannon Down, St Breward, Cornwall', Cornish Archaeol., 9, 17-46

Maclean, J., 1873. History of the Deanery of Trigg Major, I

Miles, H., 1975. 'Excavations at Woodbury Castle, East Devon, 1971', Proc. Devon Archaeol. Soc., 33, 183-208

Miles, H. & T.J., 1973. 'Excavations at Trethurgy, St Austell: Interim Report', Cornish Archaeol., 12, 25-30

Mitton, G.E., 1915. Cornwall

Patchett, F.M., 1950. 'Cornish Bronze Age Pottery: Part II', Archaeol. J., 107, 44-65

Peacock, D.P.S., 1969a. 'Neolithic pottery production in Cornwall', Antiquity, 43, 145-9

Peacock, D.P.S., 1969b. 'A contribution to the study of Glastonbury ware from South-Western Britain', Antiquaries J., 49, 41-61

Pearce, S.M., 1976. 'The Middle and Late Bronze Age metal work of the south west, and its relationship to settlement', *Proc. Devon Archaeol. Soc.*, 34

Peter, T.C. (ed.), 1906. J.J. Daniell's History of Cornwall, 4th ed.

Picken, M.M., 1958. 'Callington and Kelliwic', D. & C. N. & Q., 27, 225-7

Polwhele, R., 1803. History of Cornwall, II

Radford, C.A.R., 1951. 'Report on the Excavations at Castle Dore', J. Roy. Inst. Corn., n.s.I, Appendix

Ralph, E.K., Michael, H.N., & Han, M.C., 1973. 'Radiocarbon Dates and Reality', Masca Newsletter, 9, No. 1, 1-19

Richards, M., 1969. Welsh Administrative and Territorial Units

Saunders, A.D., 1961. 'Excavations at Castle Gotha, St Austell: Interim Report', Proc. W. Corn. Fld. Club, II.5, 216-20

Savory, H.N., 1971. 'A Welsh Late Bronze Age Hillfort', Antiquity, 45, 251-61

Schwappach, F., 1969. 'Stempelverzierte Keramik von Armorica' in O.H. Frey (ed.), Marburger Beiträge zur Archäeologie der Kelten 213-87

Schwieso, J., 1976. 'Excavations at Threemilestone, Kenwyn, near Truro, Cornish Archaeol., 15

Stanford, S.C., 1971. 'Credenhill Camp, Herefordshire'. Archaeol. J., 127, 82-129

Stanford, S.C., 1974. Croft Ambrey

Threipland, L.M., 1956. 'An Excavation at St Mawgan-in-Pydar, North Cornwall', Archaeol. J., 113, 33-81

Wainwright, G.J., 1969. 'The Excavation of Balksbury Camp, Andover, Hants.' Proc. Hants. Fld. Club, 26, 21-59

Williams, D.F., 1976. 'The petrology of the pottery' in Schwieso, J., 1976

# Excavation at Tregilders, St Kew, 1975-6 PETER TRUDGIAN

## S Milling States

The excavation revealed a rock-cut ditch 2.1 m deep and 2.8 m wide which appeared to be part of a sub-rectangular enclosure of about 0.4 hectares. Outside this enclosure was a living area containing an oven, part of a shale bangle, a spindle whorl, and cordoned pottery. Charcoal from the area gave a date of  $30 \pm 70$  bc. Alongside was a shallow boundary ditch, and, a little further away, a probable trackway apparently leading to the eastern entrance of the nearby hillfort of Killibury.

The ditched enclosure at Tregilders (SX 01837410, Figs. 32, 33) was first mentioned by the Revd W. Jago (1890-1, 213), quoting as his informant Corporal West of the Ordnance Survey who had surveyed the site in 1879. The latter's description and plan (1890-1, Pl. Z) shows a 10 ft wide ditch (Fig. 44, A) with 'very steep banks' and a rounded right-angled corner, but makes no mention of any rampart. West was able to follow the line of the ditch, less clearly, in a straight south-westerly direction, for about 100 yards, to a second corner, also rounded and right-angled, the ditch then disappearing to the north-west. He also mentions local reports that much more extensive remains had recently been levelled. Shortly afterwards, further levelling took place, and a dip in the surface at the first corner is all that can now be seen.

In 1975 the County Council decided to straighten the main Camelford - Wadebridge A39 road which lies immediately north of the site. As the new road would cut across the north end of the site, and through any return ditches which might exist, the Department of the Environment, through the Cornwall Committee for Rescue Archaeology, sponsored the excavation of the site, and provided funds for the hire of machinery to strip topsoil from the area of the new road. They also arranged for a geophysical survey of the area, and this was supplemented by the use of a magnetometer loaned by the University of Exeter and the Cornwall Archaeological Society's own instrument. The filling of some of the ditches with clean rock shillet limited the responses of these instruments, but the exceptionally dry summer made the cropmarks unusually clear on the air photographs which the Society obtained. It also became possible to walk the field and so plot the cropmarks from the ground before the stunted barley crop was cut for silage. The combined result of the aerial and ground surveys, and the areas actually excavated, are shown on the overall plan at Fig. 44.

#### The excavation

Throughout the area the underlying rock is a brown slate which shatters easily. In places it rises so as to lie immediately below the ploughsoil. Elsewhere a very finely gritted subsoil, red-brown on top and grey-green below, intervenes, the grits being minute fragments of the underlying slaty rock.



Fig. 44 Tregilders: crop-marks, shown in dotted outline, and excavated areas. Drawing: Daphne Harris.

Ditch BC One of the cropmarks (B, Fig. 44) could be seen as a probable ditch leading in a straight line northeast to the verge area of the new road, and then eastwards in a slight curve. Excavation at the corner (C, Fig. 44) revealed a vertical-sided ditch 2.1 m deep below the present turf, 1.6 m being rock-cut. The full width of the ditch at turf level was not excavated to avoid destroying standing corn, but could be closely estimated as having been 2.8 m wide (Fig. 46). The bottom was 0.75 m wide covered by a fine brown silt 1 cm thick containing a few flecks of charcoal. The ditch had been infilled with loads of clean rock-shillet, possibly soon after it was dug. A pebble of sling-stone size and shape was found at the bottom of the infill, and the rim of a gravel-tempered North Devon bowl (perhaps 18th century) on the top. The width of the ditch and the line of the cropmarks suggest that it was part of Corporal West's ditch, and this is confirmed by the absence of return ditches crossing the extensive area (D, Fig. 44) which was stripped and excavated along the line of the new road.

Trackway EF At the extreme east of the stripped area a rock-worn feature (E) was exposed over a length of 5.0 m (Fig. 44). This continued south up the hill as a very distinct cropmark (F) rising and curving gently with the slope. It also showed up well on the magnetometer readings as it had been filled with soil. The feature (Fig. 46) was cut 0.3 m deep into the rock with sides sloping at 45°, the bottom being 1.5 m wide. Above the rock-cutting was 0.4 m of ploughsoil. The sides and bottom had been worn smooth, and showed, at the edges, faint traces of ruts which were about 1.5 m apart (between outer edges). The depth



Fig. 45 Tregilders: area J/H. Drawing: Daphne Harris and Geoffrey Berridge.

and regularity of the exposed trackway was such as to suggest that it might have been deepened artificially, possibly so that surface water might run away. Use at any time as a boundary ditch, such as is sometimes found reaching out from hillforts, seems unlikely in view of the general lie, shape, and smoothness of the feature. No finds came from the trackway.

Ditch G A few metres to the west, roughly parallel, and probably contemporary, was a narrow, rock-cut ditch (Figs. 44, 46), 0.8 m deep and 1.2 m wide, sometimes V-shaped and sometimes U-shaped. It was not possible to infer a continuation of the ditch to the south either from cropmarks or from the magnetometer readings, but this may merely reflect its small size. The primary ditch-silt, fine brown sandy clay, was about 5 cm thick with a few flecks of charcoal. Above this were a few small stones which had weathered from the sides. The general infill was of earth, not easily distinguishable from ploughsoil, and containing, level with the top of the rock, one probable Iron Age sherd and, well down in the fill and just above the stone slip, two rounded beach pebbles, one being of sling-stone size. Probably this feature was an Iron Age boundary of some sort, which had filled up slowly.



Tregilders: sections. Drawing: Geoffrey Berridge.

Occupation Area Area J revealed an occupation layer with charcoal and small finds of exclusively Iron Age appearance. In the same layer was an approximately circular patch of bright red burnt clay about 0.7 m in diameter and 0.12 m thick. The feature was rectangular in section, and, although there was no longer any trace of a raised wall around the edge, it seemed reasonable to regard it as the base of an oven. Outside the oven there were concentrations of charcoal in several small heaps which tended to confirm the diagnosis. These have yielded a radiocarbon date of  $30 \pm 70$  be HAR 2227.

Most of the signs of occupation lay on the red-brown gritty subsoil, but there were no such signs in the extreme north-west corner of I, or in the northern part near the road hedge where ploughing had destroyed any level that may have existed. Traces of occupation were also largely absent where there were winding channels (Fig. 45) in the red-brown gritty subsoil. These channels, the result of periglacial cryoturbation, as seen elsewhere on the site, had filled with a gritty but darker and slightly loamy red-brown soil, and were, mostly, some 30 cm deep and wide. Small stones could be seen to have slipped down the sides of the channels. Fair quantities of charcoal and 18 artefacts of Iron Age appearance were found inside the channels as well as the carbonised remains of roots. From this it appeared that trees and shrubs had grown on the site after the occupational phase, and that their roots had tended to follow the periglacial channels. Later, when the site was being cleared by uprooting the trees and vegetation, artefacts and charcoal had fallen into the former root channels; indeed, the removal of one of these roots had bisected the supposed oven. At another point where the underlying rock gave way to the comminuted slaty soil, a larger than usual tree seems to have been pulled out, and into the hollow so formed a clay pipe stem had fallen (well below the general Iron Age level outside), thus suggesting the date of tree clearance.

Two large pieces of pillow-lava, which is found a few miles away near the village of Amble, were the only stones of any size located. They had apparently been placed deliberately in a probable post hole much disturbed by roots. Similar, but smaller, non-local stones, found in the fill of H, tended to confirm the existence of some structure hereabouts, possibly destroyed by H, although no other probable post holes were found.

Rectangular Cutting H A nearly rectangular cutting (Figs. 44, 45) measured 9.5 m up the slope of the ground, and 4.0 m across. On the uphill side the cutting had been dug to a depth of 1.25 m below turf, of which 0.75 m was in rock which shelved down steeply at this point. Elsewhere the cutting was into the grey-green subsoil. The bottom of the cutting was flat with a gentle downward slope from south to north, the sides being almost vertical, though reduced to a mere 0.25 m in depth (including 0.10 m of undisturbed subsoil) at the north end near the road hedge. The section at Fig. 45 shows how substantial wedges of red-brown or grey-green subsoil had been deposited in the western part of the cutting, tailing off at floor level on the eastern side. Under this deposit there was virtually no silt, charcoal or artefacts, but in the red-brown subsoil wedges there were a few sherds and some 3-to-4-fistsized pillow-lava stones lying diagonally where they had slipped down from the occupation area J to the west. Over this was the main scatter of charcoal and Iron Age sherds also sloping down from west to east, and evidently deriving from the occupation layer in I. There were further scatters in the mixed soil above this, presumably from the same source. There were no post holes in or on the edge of the cutting, and no sign of any entrance to it through the unbroken vertical walls.

The absence of charcoal from the floor of the cutting shows that it cannot have been open when the nearby area J, which had much, and which lay just above it, was in use. Indeed, the rectilinear regularity of the cutting suggests a later date — possibly much later.

## The Finds

*Pottery* 126 sherds of Iron Age type were found, 1 from G, 63 from H, and 62 from J. All appear to be of gabbroic fabric although the size and number of the white grits vary. The sherds have a good exterior burnish, mostly blackish-brown in surface colour with a redbrown core. Most, if not all, of the sherds come from jars having a rim diameter of 16 to



Fig. 47 Tregilders: pottery 45-50, stone 51-52. Drawings: Ann Miller. All 1/1.

20 cm. Nos. 45 to 50 of Fig. 47 illustrate the range. Several bases of 9 to 10 cm diameter were also present. At least three of the sherds have cordons, but otherwise there is no decoration.

There were also two post-medieval sherds from C and G (not illus.).

#### Other Finds

- (a) Small piece of thin bronze, possibly part of a strap, from J. Not illus.
- (b) Sandstone spindle whorl from J. Fig. 47, No. 51.
- (c) Part of a shale bangle of 6.0 cm internal diameter, 1.4 cm wide, and 1.0 cm thick. Possibly a child's bangle. Found in root channel in J. Fig. 47, No. 52.
- (d) Small worked fragment, almost certainly of jet. From H. Not illus.
- (e) One large quartz crystal from J and one small water-worn green pebble from H. Not local. Not illus.

## Discussion

The existence of a major ditch (BC) 2.8 m wide at ground level and 2.1 m deep with vertical rock-cut sides has been established. It probably joined the 10 feet wide ditch at A, surveyed in 1879, which would make a sub-rectangular enclosure of about 0.4 hectares. It is possible that the enclosure was not completed — certainly there was no sign of a collapsed bank on the sides or beneath the infill. The small amount of silt and the sling-stone near the bottom of the deliberate shillet infill may indicate an early infilling.

From its location it would seem that the enclosure may be related in some way to Killibury, and, for that matter, to the occupation area J and to the trackway. Rectangular and sub-rectangular 'rounds' have been reported before (Dudley (1954), Fox and Ravenhill (1969) and Harvey (1970)), and rounds are known to have existed within a few hundred

metres of the hillforts of Helsbury (NGR 084796) and Tregonning Hill (NGR 599300) amongst many others. Sometimes they come in pairs as those 250 m apart at Penhargard near Bodmin, or as at Castle Goff near Camelford and the round of Newberry only 350 m away.

The Revd Jago suggested (1890-1, 231) that Tregilders was a siege camp built by the Romans when investing Killibury, and certainly the enclosure is tactically sited within easy reach yet just below the brow of the hill so as to be out of sight. On the other hand the narrowness of the ditch would limit its defensive value, but would be quite adequate for stock control purposes.

In areas J and H the concentration of cordoned pottery and artefacts indicates an Iron Age presence at this point outside the enclosure. It seems likely that there was a structure there using posts secured by packing stones brought from a few miles away (as at Killibury). Apart from this, stone does not seem to have been used. It seems also that the occupation area J was contemporary with the small boundary ditch G and the parallel trackway EF. Apparently the occupation started later than at Killibury because there is no Glastonbury pottery. On the other hand occupation area J might well be contemporary with the later stages at Killibury where similar cordoned ware was found. This is confirmed by the radiocarbon date of 30  $\pm$  70 bc for occupation area J.

The trackway could be seen as a cropmark winding uphill in the direction of the eastern entrance to Killibury, and following an even gradient on the way. At the flat top of the hill the cropmark disappears as is only to be expected. North from Tregilders, in the opposite direction, the line of the field hedges suggests that the trackway may well have come from the bridge at Penpont (NGR 998753), which would be the logical crossing point over the river Amble for traffic from the north side of the Camel estuary where prehistoric and Romano-Cornish settlements are known, possibly en route to the river Fowey. (See also Maclean (1876, 81) regarding a possible road from Penpont.)

The rectangular cutting H proved to be of a later date. How much later is uncertain but it could be post-medieval.

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#### Bibliography

- Dudley, D., 1954. 'Sub-rectangular Earthworks with Rounded Corners', Proc. West Cornwall Fld. Club, 1.2, 54-8
- Fox, A: and Ravenhill, W.L.D., 1969. 'Excavation of a Rectilinear Earthwork at Trevinnick, St Kew, 1968', Cornish Archaeol., 8, 89-96
- Harvey, D., 1970. 'The Double Fort at Merthen, Constantine', Cornish Archaeol., 9, 103-6

Jago, W., 1890-1. 'On Some Recent Archaeological Discoveries in Cornwall', J. Roy. Inst. Cornwall, 10 (1890-1), 185-262

Maclean, Sir John, 1876. Parochial and Family History of the Deanery of Trigg Minor, Vol 2, 81

Camelford

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## Excavations at Launceston Castle 1970-76: Interim Report

## ANDREW SAUNDERS, F.S.A.

The annual season of excavation has continued at Launceston Castle without a break following the pattern of work set during the period 1965-69 (*Cornish Archaeol.* 9 (1970), 83 and 3 (1964), 63). This has led to a programme of investigation of the Castle's defences, the two gatehouses and a large area within the bailey. The work has been progressively determined less by the considerations of record before consolidation of standing structures; though this has still remained a factor, and more by the needs of a research project combined with a policy for displaying more of the monument to scholar and public alike. The period covered by this interim report coincided with an enlargement of the operation with much larger excavation teams and a corresponding wider spread of supervision.

Areas of the Castle under examination during this period were:

- (1) The secondary ditch at the foot of the motte and the structures associated with it.
- (2) The North Gatehouse and the bailey rampart on either side of it.
- (3) The South Gatehouse, more particularly the structures immediately to the north and east.
- (4) The south-west quarter of the bailey in the vicinity of the kitchen uncovered in 1965-69. This included a cross-section of the stratification which had developed against the back of the southern length of bailey rampart.

#### 1. Secondary ditch on south-west side of the motte (Fig. 48A)

The secondary ditch at the south and south-west foot of the motte was located in the 1960s when the sequence of bridge structures linking the bailey and motte was recorded. The ditch was part of the mid-13th century refurbishing of the Castle's defences and was associated with the tower at the foot of the reconstructed flight of steps up the motte slope and the stone wall retaining the small terrace that had been formed immediately west of the steps. These later medieval developments had, at this point, completely concealed the original ditch at the base of the motte.

The most recent filling of the ditch (17th - 19th century) was removed by machine to reveal more of its course and to enable the detailed examination of structures associated with it. The ditch curved round the terrace, whose revetment wall had broken and partially collapsed into it, to a point where it turned abruptly in a right angle and appeared to die out on the steep slope to the west.

On the southern counterscarp of the ditch was a clay bank which joined the eastern side of the bailey rampart. As the bank tailed off down the slope it was terminated by a low retaining wall. Further to the west, set close to the lip of the ditch, were the fragmentary stone footings of a rectangular building. This building had been rebuilt on the same plan but there was nothing to demonstrate either its date or function, particularly since its western end had been removed by modern disturbance. The upper edge of the ditch had been revetted in stone where the building came close to the edge but this revetment was earlier than a stone wall which crossed the ditch and oversailed the revetment. Since the cross wall was built on ditch filling containing 16th century pottery there is a strong possibility that the



Fig. 48 Launceston Castle: Excavations 1970-6.
rectangular building was late medieval.

This part of the Castle was much exploited during the 18th and early 19th centuries with pigsties and cabbage plots created on the western slope of the motte<sup>1</sup>. The cross-wall in the ditch had been patched with pitched hedging and other 'Cornish' hedges running east-west were uncovered further north. At right angles to these hedges was a well-made path 5 ft wide defined by pitched stone walls. This is probably the path known as Sting Nettle Lane which ran through the Castle from Castle Dyke on the north to the site of the old Exeter Inn outside the south-east angle of the bailey.

#### 2. The North Gatehouse (Fig. 48 B)

In the 18th century the gatehouse was demolished almost to the crown of the vaulted gate passage and the front of the gatehouse was probably removed at the same time. The surviving medieval masonry has now been consolidated following excavation within the chamber traditionally known as Doomsdale on the west side of the gate passage.

It had been apparent from an early stage that the late 13th century gatehouse had been built over an earlier structure. This appeared to have been a rectangular stone-lined cellar about 9 ft deep inserted into the bailey rampart. The long inner wall faces contained two lifts of put-log holes for scaffolding implying that the walls had been higher. A similar structure was found in the rampart in the south-west corner of the bailey and will be discussed later. After its walls had been cut down and the existing gatehouse built, the earlier structure remained as a cellar, or perhaps a prison cell, for a long period. A good deal of rubbish accumulated at the bottom including 15th and 16th century pottery and a remarkable Syrio-Frankish glass vessel of perhaps 14th century date<sup>2</sup>. A stone arch had been built across the cellar as some form of sub-division but this had been broken by the time the cellar was filled up.

Also earlier than the existing gatehouse was a short length of walling and a number of post holes on the clay surface of the surviving rampart below the gatehouse. There was however no evidence for an earlier gatehouse despite the strong presumption that one had existed here. The 13th century builders had cut back the rampart to the east and laid substantial foundations for a completely new structure. It is clear that any earlier gate was removed in the process.

A trench cut against the south face of the gatehouse in an attempt to establish the relationship between the 'tower' and the rear slope of the rampart failed in its objective, but it did demonstrate that the rampart at this point was revetted by a substantial stone wall which had previously collapsed and had been rebuilt on the same line. The need for revetment was demonstrated by the close proximity of a substantial stone walled building close to the back of the rampart. The association of late 11th or early 12th century pottery showed that this building belonged to the earlier periods of occupation on the site.

Other traces of earlier occupation on the east side of the gatehouse were observed at the back of the first phase of the bailey rampart where there was a hearth and a post and stakebuilt structure. The greater part of the front of the rampart had been cut away but a cross section showed that it was built in three main phases with traces of stone revetment at the rear of phase 1 and evidence of substantial timber construction on the crest in the second phase.

#### 3. The South Gatehouse (Fig. 48 C)

Of this gatehouse only the eastern side and the outer (south) entrance survive. Repair and consolidation of the masonry established that the early gatehouse was rectangular and the solid drum towers were applied to the front elevation during the major building campaigns of the 13th century. Subsequently, the stone bridge across the bailey ditch was built against a series of stone abutments against both the face of the towers and against the inner lip of the ditch. Much erosion had occured in the entrance passage with the result that the bottom of the portcullis slot behind the outer gateway is now over 4 ft above the present road surface.

The inside of the early gate passage was faced with Polyphant ashlar together with the buttressed respond of the eastern side of the inner gate arch. This east wall had been built into the bailey rampart. Against the outer side were the later foundations for a flight of steps up the slope of the rampart. The steps probably gave access to the room over the gate passage; they also returned eastwards and gave on to the wall walk of the bailey curtain wall. Embedded in the rubble at the back of the side wall of the steps and clearly associated with them was a penny of Henry III.

An area was examined between the gatehouse remains and the 19th century custodian's cottage nearby. This was done in advance of works to facilitate public access to the Castle through the cottage itself, and was an opportunity to examine various structures abutting the east wall of the gatehouse. It also enabled the exposure of a length of cobbled road surface with central drainage gully leading from the gatehouse into the Castle. The cobbled surface was associated with 16th century material but presumably repeated an earlier alignment.

Beneath the 18th and 19th century accretions to the rampart were two square stonebuilt structures. The earlier of the two had its south wall still standing over 6 ft high. The rubble filling contained a large amount of dressed stone detail from a fireplace, door and windows; seventeenth century pottery was on and under its cobbled floor. The floor had settled over the filling of a 13th or 14th century stone-lined garderobe pit which measured 8 ft by 9 ft and cut 7 ft deep into the rock. The pit contained several 14th century imported jugs as well as local wares and a glass urinal. The cobbled floor extended over the cutdown walls of the pit which were built of uncoursed rubble bedded in orange clay. The garderobe pit was not associated with the gatehouse. Its east wall continued northwards indicating that the garderobe was part of a residential building now under the 19th century cottage. Close to and parallel to the south side of the pit was an early wall which probably acted as a revetment against the bailey rampart.

The walls of the later building encased three sides of the pit and to the west was the other late building which was 17th century or later in date. Its construction had entailed the removal of the bottom flight of steps against the outside of the gatehouse and it abutted the remains of the gatehouse itself. Two further lengths of later walling were recorded continuing under the accumulation of earth over the rampart.

#### 4. Bailey, south-west quarter

Subsequent to the excavation of the kitchen an extensive area (9,500 sq ft) of the southwest quarter of the bailey was examined. Particularly towards the north there was a great deal of disturbance due to the levelling for the war time huts but near the curtain wall there had been a steady accumulation of soil and in the upper levels 6 skeletons were found in random distribution. As elsewhere these probably were burials of former inmates of the gaol. The depth of soil and rubble was progressively deeper towards the west.

#### (a) Kitchen Yard (Fig. 48 D)

The doorway in the north-east corner of the kitchen (*Cornish Archaeol.*, 9, 1970, 83) led into a walled yard. On its east side the yard was delimited by a much rebuilt rubble wall extending at least 40 ft to the north. There was the stub of a parallel wall at the north-west corner of the kitchen pierced by a drain but it did not survive for more than 3 ft. Despite considerable modern disturbance two stone yard surfaces remained.

Below the earlier yard floor and a levelling layer of clay were the fragmentary remains of as many as ten stone built structures including some buildings which were located but left unexcavated. These structures were of various periods of occupation and furthermore insufficient remained to distinguish any complete plans. That some were domestic in function may be judged by the presence of a deep cess pit.

These early medieval structures were themselves built on a clay and stone levelling-up process. Besides the exigencies of a pronounced slope, the levelling was also due to the fact that the old ground surface was pock-marked with quarry pits, perhaps dug to obtain clay for the construction of the bailey rampart. The quarry pits were themselves back-filled soon afterwards with clean clay and shillet. On the top of the filling of one of these pits was a hearth and the scrappy remains of a sub-rectangular hut. In the burnt clay were fragments of 'bar-lug' pottery suggesting an overlap between local pre-Conquest styles and the more usual early Norman pottery. Remains of timber buildings of this early period were

#### located not far away.

#### (b) Western rampart (Fig. 48 E)

Following on from the excavation of the kitchen yard, a wide trench was cut to the western side of the bailey in order to complete the general picture of the stratification. The modern accumulation of earth and rubble on this lowest part of the bailey was so great that the bottom few feet of the curtain wall, 8 ft 4 in wide at this point, together with the rampart on which it stood, were completely buried. Eighteenth century engravings show the wall standing high on this side of the Castle but it was almost completely reduced in the 19th century to provide a view over the valley and a pathway was formed over its remains. Four machine cut trenches exposed the line of the wall towards the north.

The curtain wall was of unitary construction at its base but in the south-west corner it had replaced earlier masonry on the rampart crest. Incorporated into it was a length of wall 6 ft long, 2 ft wide and still standing 2 ft high. Also in the south-west corner was the foundation for a flight of steps giving access to the wall walk. This had been added to the inner wall face and may have been linked with the heightening of the curtain wall which had been noted during repairs to the standing masonry.

The rear of the rampart was examined and shown to be similar in construction to the stretch on the south side of the bailey recorded in 1969. At least three main phases were detected. Over the surface of the last phase was a length of walling at right angles to the curtain wall extending up the rampart but it could not be established whether or not it was related to the short length of early walling on the rampart crest mentioned above. At the base of the first phase of the rampart was more 'bar-lug' pottery on the old ground surface. Below this surface a layer of yellow grey clay sealed brown humic soil which suggested early cultivation of the hill side.

A long sequence of layers had built up against the back of the rampart but the sequence was complicated by the existence of an early well between the rampart and the kitchen yard. It proved impossible to excavate it fully. It had gone out of use comparatively early in the Castle's history and the upper fill was largely black soil and burnt clay with a great deal of 13th century pottery. The drains from the buildings higher up the bailey discharged into this corner and must have assisted the build up of material.

West of the kitchens was a long narrow building constructed on top of the rear slope of the rampart and against the southern length of curtain wall and therefore likely to be late 13th century or later. Beneath it and sealed by the latest heightening of the rampart was an insubstantial rectangular building perhaps of the 12th century. It was of uncertain purpose. Only part of its foundation was of stone and it appeared that the remainder of the lower part was made of cob or perhaps timber.

#### (c) Tower(Fig. 48 F)

Immediately west of these buildings and set into the rear slope of the rampart was a detached structure which might be described as a stone-lined pit nearly 10 ft square internally. Its depth was 9 ft 3 in below the top of the surviving masonry and its walls were taken down to the rock. The east and west walls had three lifts of put-log holes. The south wall had almost entirely collapsed through the thrust from the rampart. From the pottery in the fill, the structure was destroyed in the 13th century, probably in advance of the construction of the curtain wall. It had been built within a pit cut into the back of the rampart. The walls were built against the rampart material and with the slope of the pit sides so that at its base it was only one stone thick.

This structure closely resembled the early feature found below the North Gate. The evidence for scaffolding suggests that the walls were intended to be taken higher and since both features are separate from any other building they are unlikely to be garderobe pits. They have therefore been identified as tower bases possibly in association with the timber palisade and breast-works which preceded the stone curtain wall. Nevertheless, this does beg the question of why, if they were towers, care was taken to make the bases hollow yet without any sign of use when a more solid platform could have been created. However, three similar stone-lined pits with evidence for scaffolding situated towards the back of the circular rampart of Restormel Castle before the building of the shell keep and its internal buildings may be a parallel.<sup>3</sup>

#### (d) Hall (Fig. 48 G and Fig. 49)

East of the kitchen, but detached from it, is a long narrow stone building 60 ft by 18 ft internally, subsequently described as a hall. It is set gable-end to the roadway leading from the South Gate. It is well built and, since its walls stand up to 4 ft in height like the kitchen, it is an impressive structure which will eventually be consolidated and displayed.

The hall was, on coin evidence, demolished about 1300 or soon afterwards and its interior filled with its own rubble. The site, once levelled off, was then used during the later Middle Ages for walled yards, one with an entrance wide enough for carts and another containing a timber lean-to structure which with its pitched stone hearth was possibly a workshop.

The destruction layer and the middens associated with the hall contained rich and varied objects in addition to a mass of food bones and coarse wares. Several whale bones were recovered from different parts of the site, much of a leaded window with unusually small cames, a wine glass and a number of incised pieces of slate, including a nine men's morris board and several pieces with faint cursive handwriting which is so far indecipherable.

The hall itself had three main phases of development. It was constructed on and over the remains of earlier stone structures and was a single storey building roofed in six bays with a single entrance near the centre of the long north side. The doorway retained the Polyphant stone blocks socketed for the timber door jambs. The principal roof trusses, probably crucks, were built into the walls. The hard packed clay floor had been patched and relaid frequently and a large hearth was sited near the upper end. At some stage the building suffered a social decline and the lower end was used as a workshop. A thick spread of charcoal covered the earlier floor and on this was a hearth, the base of an oven or kiln and large quantities of iron slag furnace bottoms though there was no direct evidence for iron working in the building. Later the hall was refurbished. The timber roof trusses were re-set, the walls themselves needed repair and one truss required an external stone buttress, new floors laid, the interior replastered and benching fixed round much of the long sides as well as the high end.

A doorway was forced in the south-west corner which gave on to a stone-lined garderobe pit adjacent. The pit was 7 ft 6 in deep with the lower masonry built over unmortared rubble in the south-west corner to allow for drainage. A deposit of lime had been tipped onto the interleaved layers of cess and clay which included an almost complete mid-13th century jug. The pit had been deliberately filled with a uniform clay and shillet. The garderobe arrangements were then improved by the provision of a walled and roofed passage over the filled pit to another stone-lined pit contrived between the back of the kitchen and the curtain wall. The back wall of this garderobe pit was subsequently destroyed by the insertion of an oven into the south wall of the kitchen. At the bottom (west) end of the hall the door to the garderobes was divided off by a timber screen the impression of which still remained in the plaster.

The hall is distinctive in having no provision for service and clearly had no domestic function. The high quality of the objects lost or broken within it and its immediate vicinity: purse mount, buckles and other bronze fittings, fine glass ware and dice suggest that, apart from its days as a workshop, its social status was high. In its final form with benching round the walls, the suspicion is that it might have served as a court room. In its earlier phase, while the evidence is not so good, it may have had a similar function.

The hall doorway opened on to a yard separating it from another substantial stone building in the same stratigraphical relationship to the hall but 38 ft distant. Both 13th century buildings possessed well built slate-lined, covered drains alongside their walls. The yard was also crossed by the covered drains leading from the direction of the residential block presumed to lie beneath the custodian's cottage. There were also a number of pits in the yard surface.

#### (e) 12th century structures (Fig. 48 H)

Beneath the hall and its associated yard to the north were two complex stone buildings



Fig. 49 Launceston Castle: Thirteenth Century Hall.

set side by side, separated by a narrow lane 6 - 8 ft wide which contained a succession of stone-lined drains. In their final 12th century form they appeared to be substantial houses with their gable ends to the roadway leading from the South Gate. The present path through the castle prevented more than a partial examination of their plan.

More of the plan of House I below the later hall was available. It consisted of a large ground floor hall, 17 ft 6 in wide internally and at least 40 ft long. It had a central hearth. An inserted cross-wall with a central doorway divided the hall from a smaller room. Masonry in the south-west angle may have indicated a stair base and it was certainly possible for the lower end to have been two-storeyed. A further doorway led to a yard area to the west crossed by a drain leading out of the house. There were other drains and pits including a cess pit. A small single-roomed structure had been added to the north-west corner of the house.

House II to the north was slightly larger and of similar plan as far as could be seen and four structural phases could be observed. The hall was 18 ft wide. The room at the lower end had been further sub-divided. Attached to the rear was another large square building much of whose walls had been destroyed but which had a floor of pitched slates of so rough a character that an additional floor surface was assumed.

Remains of another structure of similar date to the west of the yard belonging to House I was labelled House III. It appeared to lie partly under the garderobe passage belonging to the hall.

South of House I and the now destroyed west wall of the South Gate was a large rectangular walled yard, also 12th century in date, set into the back of the bailey rampart. The enclosing stone wall was substantial. Much of the east and west walls had been robbed and the long north wall which lay directly under the south wall of the hall entirely so, but the south wall survived for its complete length showing that it had been buttressed at the foot to withstand the thrust of the upper layers of the rampart. There were no signs of use or internal structures during its first phase though it had a lime mortar floor and in the south east angle the quantity of lime suggested that lime had been stacked or mixed there. Set upon the later floor surface of mortar and clay was a small two-roomed building in the north east angle which had largely been destroyed by the construction of the hall. Upon this surface was a remarkable Polyphant stone pedestal lamp with a pierced handle and a penny of Henry I dated 1120 - 1125<sup>4</sup>.

#### Summary

#### (a) The Defences

The bailey ramparts have been completely examined in three different locations. Their construction appears to have been in three principal phases although there may have been subsequent limited heightenings before the construction of the stone curtain wall in the middle of the 13th century. The initial rampart was associated in two different places with occupation levels containing 'bar lug' pottery and on general historical grounds might be assumed to belong to the first years of the Conquest. A restructuring of the rampart took place not long afterwards perhaps towards 1100 and certainly before 1120. This involved withdrawing the defensive line from the front of the rampart to the crest and timber work of considerable elaboration was erected. There was at least one further heightening but there is no clear evidence for timberwork though some form of palisade must be assumed.

It is not certain at what stage the stone tower bases were inserted but they clearly anticipate the transition to stone defences in the 13th century when the whole Castle was revived as a military work during the earldom of Richard of Cornwall. The stone South Gate would have formed part of a sequence of strong points along the circuit but although definitely of 12th century architectural style this gatehouse was inserted into and over the bailey rampart. It suggests that the original gatehouse was to the north, the traditional Town Gate, but no trace of early masonry other than the isolated tower base was observed. It could be that the late 13th century gatehouse totally removed evidence for a predecessor. It is also possible that the original gatehouse was sited elsewhere.

#### (b) Occupation pattern

Although the earliest levels have still to be elucidated, two important factors can be observed: (i) high density and variety of occupation and (ii) a strong sense of planning in the siting of buildings which had been followed through the active life of the Castle.

Rather more than a quarter of the usable ground area within the bailey has been examined in some way. Apart from functional buildings such as the hall and kitchen, there seem to be at least 4 sets of residential quarters including the two gatehouses in occupation during the 13th century. The two 12th century self-contained stone houses suggest the provisions of separate lodgings perhaps for such people as the holders of knights fees whenever they came in to perform their feudal service of castle guard from their more distant manors. It is also clear that from quite early in the 12th century building space was at a premium with the result that there was widespread encroachment upon the back slopes of the rampart for yard space and the humbler sort of building.

Unlike many castles, where the pattern of building is determined by the enclosing walls or does not appear to follow any consistent plan, Launceston gives definite indications of being determined by the internal 'street' plan. Certainly the bulk of the buildings examined, 12th century through to 14th, are parallel or at right angles to the roadway from the South Gate. Furthermore the buildings themselves are laid out symmetrically with each other and this seems to have been a pattern which was inherited from early in the Castle's existence.

#### Bibliography

- 1. The pigsties and cabbage plots are depicted in a number of early 19th century engravings.
- 2. The glass is now on loan to the Victoria and Albert Museum, London.
- 3. Ralegh Radford, C.A. Restormel Castle (pamphlet guide) HMSO. Plan.
- 4. Information kindly provided by S.E. Rigold.

Department of the Environment

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### **Excavation News 1976**

(continued from p. 59)

#### EXCAVATIONS IN HALANGY PORTH, ISLES OF SCILLY, 1976

As a result of severe cliff erosion early in 1975, it was possible to see rather more of the well-known early phase structures exposed in the cliff (Ashbee, 1972, 28; 1974, 159-64) and, moreover, to relate them to a hitherto isolated remnant of walling, thought at one time (Ashbee, 1953, 76-7) to have been part of a sandenshrouded entrance 'grave', because of its massive masonry. Thus, during the Easter weeks of 1976, an area was excavated to landward of this walling, where, unlike much of this substantial exposure which is bounded by a bulb-garden, it was coincident with the small cliff-top space adjacent to the Little Creeb rocks, where the walling was covered by some four (4) feet of fossil sand-dune.

Excavation showed that this massive walling was the remnant arc of a large stonebuilt round-house which, from a plan projection, was about forty (40) feet in diameter. Indeed, its erstwhile extent could be crudely calculated from the derived boulder scatter on the beach below. This remnant arc stood to a height of rather more than three (3) feet and was about four (4) feet in breadth. Its basal course was of boulders comparable in magnitude with those used to construct the Bant's Carn repository on the hill above, surmounted by progressively smaller selected stones. A stone-paved corridor entrance still remained and this had, in the interior, been flanked by substantial standing stones which were visible in the cliff in 1975. Although, over the years, the remaining small area of the interior flooring had been dug away, enough remained of some relaid rab, at a lower level than the exterior ancient soil surface, to see how this massive structure might have functioned. Indeed, the remains of chordal walling suggest a compartmentalised interior. Outside the arc of walling, scattered stones, perhaps remaining from deliberate dismantlement in the face of accumulating blown sand, lay upon the ancient surface, under the fossil sand-dune, and among them was the greater part of a plain pottery vessel comparable with the well-known early fabrics from Scilly, the sherds of which were in mint condition.

This large circular house would have had features in common with the so-called wheelhouses of Britain's north and west (Cunliffe, 1974, 224, for a convenient source) and could be considered as a rendering of a southern English timber hengehouse (Wainwright & Longworth, 1971, 201-34) in stone. Such a structure would have been well in keeping with the Late Neolithic and Beaker successor character of the material culture of the earlier phase of occupation on Scilly (Ashbee, 1974, 289).

It remains to relate the remnant arc of this large circular house to the remains of what appears to have been a range of cellular buildings, at least one of which was sub-rectangular, that still stand in the fasteroding cliff of Halangy Porth. In 1977 it was proposed to examine the great section exposed in the cliff and record such stratigraphical relationships as would have been offered. Because of the bulb-garden above, neither Mr D. R. May nor Major R. Maclaren, Land Steward of the Duchy of Cornwall, saw their way clear to allow this operation to proceed. It is to be trusted that cliff-fall observation will resolve these relationship problems before the remnants of these ancient Scillonian structures are finally destroyed by the sea.

#### **Paul Ashbee**

The University of East Anglia, Norwich

#### Bibliography

- Ashbee, P., 1953-4. 'Fieldwork in the Isles of Scilly'. Proc. W. Cornwall Fld. Club. I, no. 2, 76-7
- Ashbee, P., 1972. 'Prehistoric Habitation Sites on the Isles of Scilly' by Alec Gray, Cornish Archaeol., 11, 19-49.
- Ashbee, P., 1974. Ancient Scilly
- Cunliffe, B.W., 1974, Iron Age Communities in Britain
- Wainwright, G.J. and Longworth, I.H., 1971. Durrington Walls: Excavations 1966-1968.

#### STANNON DOWNS, ST BREWARD

A small barrow SX 133806 was excavated in advance of china clay working, partly funded by the Department of the Environment through Cornwall Committee for Rescue Archaeology. Permission and additional finance from English China Clavs Ltd is warmly acknowledged. When excavated the barrow measured 8 m by 7 m. A central pit 0.35 m deep contained evidence for three consecutive in situ burnings of wood, from which a sample has been submitted for radiocarbon dating. The main part of the barrow consisted of a cairn which had been constructed in a spiral with large moorstones on edge propped by small chocking stones, the whole very firmly interlocked. Possible evidence for a wall running up to the south of the barrow was found but this was much damaged. Two pieces of flint and a whetstone were the only finds.

#### Sandra Hooper

Ranelagh Road, St Austell

The cairn of a second barrow had been completely demolished down to the natural by a mechanical digger. Underneath, in the ginger subsoil, were two pits; one rectangular, 1.35 by 0.45 m and 0.30 to 0.40 m deep, orientated N-S, and the other a round hole 0.20 m in diameter, 0.15 m deep, filled with very black soil and a little charcoal. Between them lay an amorphous scrap of soft red pottery.

Park View, Truro

#### **Daphne Harris**

# Cornish Drawings by Edward Lhuyd in the British Museum

#### P.A.S. POOL, F.S.A.

The object of this paper is to list and describe some important drawings of Cornish antiquities by Edward Lhuyd (1660-1709) in the British Museum.

Lhuyd visited Cornwall in 1700 during his prolonged tour collecting material for a comparative study of the Celtic countries and their languages. He was accompanied by his assistant, a young draughtsman called William Jones. This visit was of prime importance in the modern history of the Cornish language, but no full study of it has been published; only parts of its results were published by Lhuyd (1707), and some of his letters to Thomas Tonkin were printed by Pryce (1790, 225). A good deal of unpublished material remains in manuscript, namely:-

- 1. A Cornish vocabulary (Nat. Library of Wales, Llanstephan MSS 84; Davies, 1939, 12).
- Notes on the parishes of Camborne, Illogan, Redruth, Gwennap, Perranaworthal, Stithians, Kenwyn, Probus, Grampound, Creed, St Stephen in Brannel, Roche, Bodmin, St Breward, Lanteglos by Camelford, Davidstow, North Hill, Linkinhorne, Lewannick and Lawhitton (Bodleian Library, Rawlinson MSS D 997). Only the section on Camborne has been published (Thomas, 1967, 171).
- 3. Drawings of antiquities and inscriptions, the subject of this paper (British Museum Stowe MSS 1023). Only one of these has been published (Hogg, 1961).

Stowe MSS 1023 and 1024 are two volumes of drawings and plans of sites, inscriptions and buildings in England, Wales, Scotland and Ireland, collected by John Anstis (1669-1744), Garter King of Arms. The English (mostly Cornish) and part of the Welsh sections are in 1023; the remainder of the Welsh section, and the Scottish and Irish, in 1024. The Cornish material comprises 1023 nos. 13-55, but some non-Cornish material has been bound with it in error, and there is one Cornish drawing (no. 151) in the Welsh section. No Cornish material appears in MS 1024.

These drawings undoubtedly originate from Lhuyd's visit to Cornwall in 1700, and were presumably prepared either by him or under his direction, but they do not seem to be in his hand. Campbell and Thomson (1963, 304) state that they are copies made for Anstis, the originals having been lost in a fire, but Emery (1971, 67) states that many are the original work of Lhuyd's assistant, William Jones.

Some of the drawings were apparently made available by Anstis to William Stukeley, and copies of three of the Cornish ones (13, 16, 151) appear in Stukeley's Commonplace Book at Devizes Museum.

Bound up with MS 1023 is the manuscript of an essay based on the drawings by Thomas Astle; this was subsequently published (Astle, 1800) with illustrations, but none of the Cornish material was illustrated.

The Cornish drawings listed below include a few of prehistoric antiquities and natural history specimens, but the majority illustrate Early Christian inscribed stones, and brasses and other monuments from churches. Most of these are well-known and have been frequently published; no attempt has been made to give full references for these, but careful note has been made whenever fresh information is given by Lhuyd, as with the Lanhadron cross (no. 29), the Tremain brass at Mawgan in Pydar (43), the Trenwith brass at St Ives (46, 47) and the inscribed bell at St Keverne (49).

The two drawings reproduced (Plates VIII and IX) are nos. 13 and 16, plans of Boskednan stone circle and Chûn Castle. They are of special interest as being the earliest known plans of West Penwith antiquities, with the possible exception of Tonkin's plan of the courtyard house site at Higher Bodinar, Sancreed (Pool, 1961), dated approximately at c. 1700.

The parishes represented are St Blazey (no. 26), St Buryan (31, 32), Callington (41, 55), Colan (45), St Columb Major (151), St Ewe (14, 29), Fowey (20), Gulval (13, 21), Helston (30, 42), St Ives (46, 47), St Just in Roseland (54), St Keverne (49), Kilkhampton (15), Landewednack (49), St Levan (25), Lostwithiel (48), Madron (22), Mawgan in Meneage (37, 38), Mawgan in Pydar (43, 51, 52, 53), Morvah (16) and Stratton (18, 40, 50). This list of parishes, and that from the Bodleian MS (above), are mutually exclusive, a fact which may prove significant when a full study is possible of Lhuyd's itinerary and work in Cornwall.

#### **STOWE MSS 1023**

#### (comments are given in brackets following the captions)

- (Plate VIII) Mein yn dans in Maddern Parish, Cornwall. 60 paces in circumference, 13 standing. (Boskednan stone circle, actually in Gulval not Madron, showing 18 stones with one gap; copied by Stukeley in Devizes Commonplace Book, 105/57.)
- 14. Above 2 foot long in St Iw church supposed to be a thigh bone. (St Ewe: object identified by Dr F.A. Turk as the apical portion of a rib of a whalebone whale.)
- 15. The castle and the house near it is called Iltom both which are fast by Kilkhampton in Cornwall. (Plan of motte and bailey at Ilcombe.)
- 16. (Plate IX) Karn Choone in the Parish of Morvah, Cornwall. (Plan of Chún Castle, showing double wall, entrance, well and internal enclosures. Copied by Stukeley in the Devizes Commonplace Book, 99/54, but very badly, so as to give a totally misleading impression of a circle of large upright stones inside the castle.)
- 17. (Not Cornish. Letter to Lhuyd from Richard Richardson dated 3 July 1709, some days after Lhuyd's death, and mentioned by Emery, 1971, 19.)
- 18. Krach y Mor Meirionens prope Straton, Cornub. (The Welsh means 'Merioneth barnacle', but Dr F.A. Turk has identified the object drawn as a fragment of a piddock shell, *Pholadidea loscombiana*, very rare in Cornwall, and certainly no part of a barnacle.)
- 19. (Scottish).
- 20. The inscription on the . . . grave stone of a Britain . . . from whom possibly Pol-Kiris . . . might receive its name. (The Cunomorus stone at Fowey, read as CIRVSIVS HIC IACIT CVNOWORI FILIVS.)
- An inscription on the lower side of a stone now a foot bridge at Gulval near Pensans
  ... (Bleu Bridge stone, read as QVENATAU IC DINVI FILIVS.)
- 22. On a common called Gwn Men Skrepha in Madern parish. (The Men Scryfa, Madron, read as RIALOBRAN CVNOVAL FIL.)
- 23. (Welsh).
- 24. (Inscription, SOLINI FILIVS VENDONI, probably Welsh.)
- 25. A corner stone in the court wall of hor Gwera, or the Higher Cove in St Levans pish . . . (Lost inscription . . . HS SPED at Porthgwarra, St Levan, published by Hogg, 1961.)
- 26. Near St Blary. (Inscribed cross-shaft from Biscovey, St Blazey, now in Par churchyard, published by Langdon, 1896, 368, and Macalister, 1929, 180; no clear reading by Lhuyd.)
- 27. (Welsh).
- 28. (Drawing of very ornate inscribed cross, no locality stated, not Cornish.)
- 29. Lanhadron Cross in St Iw Parish in Cornwall. (Two inscriptions: of that on the crossbase no clear reading is given by Lhuyd, and differing ones have been given by Iago, 1881, and Macalister, 1929, 184-5; Lhuyd gives another inscription, read as EMIANEINOSNOMINE +, hitherto unrecorded and presumably from the shaft of the cross itself, which had vanished before Iago's time.)

- 30. In the backside of Mr Hooker's house, Helston, Cornwall. (Inscription, RADALPHUS DE CAERLUDUBO (?) QUONDAM UN . . .)
- 31. In ye north isle of Byrrian Chancel, Cornwall. (Inscription from tomb of Clarice de Bolleit at St Buryan; Blight, 1865, 7.)
- At Burian Steeple. (Inscription from bell, VIRGINIS EGREGIE VOCOR CAMPANA MARIE, re-cast in 1738; Blight, 1865, 9; Dunkin, 1878, 12. Also some Scottish material.)
- 33. (Scottish).
- (Inscription, HIC IACET DNS BRIES VICARIUS, no locality stated but probably Scottish.)
- 35. Above the church door of Lhan D. Dyfnan, Cornwall. (Sic, actually in Anglesey.)
- 36. From Mr Martin. (Part of inscription to Armstrong, probably not Cornish.)
- 37. Carmynow in Mawgan. (Effigy of knight, with Carminow arms, at Mawgan in Meneage; Blight, 1865, 48; Rogers, 1866.)
- 38. At Mawgan. (Effigy of woman, with the last.)
- 39. (Norfolk).
- 40. In the north isle at Stratton. Radolphus de Albo Monasterio, als Ralph de Bowminster, et currupte Blowmanger. (Effigy of Sir Ralph de Blanchminster.)
- In ye north isle of Callington Church in Cornwall. (Tomb of Lord Willoughby de Broke, died 1502).
- 42. At Helston Church, Cornwall. (Inscription HIC IACET CORPUS PETRI BAVII CAPELLANI QUI OBIIT XIX DIE MAII ANO DNI MCCC XLIX CUJUS ANIME. PPICIETUR DEUS.)
- 43. Yn Mawgan in Cornwall. (Drawing of brass from Mawgan in Pydar, with inscription, HIC IACET . . . ES TREMAIN DE TREGONON GENEROSUS SEPULTUS DECIMO SEPTIMO DIE APRILIS ANNO DNI MILLESIMO . . . MISEREATUR OMNIPOTENS DEUS, and further border inscriptions JHU FILI DEI MISERERE MEI, MATER DIGNA DEI VIRGO MEMENTO MEI, and SANCTORUM PRECIBUS MEREAR MIE GAUDIA TUA. The figure from this brass is illustrated by Dunkin, 1882, pl. 39, and identified (with reservations) as Edward Arundell; for Dunkin's doubts see p.5 n.4 and p.48 n.3. He recorded the inscription as being fragmentary, less complete than when seen by Lhuyd (lacking the name Tremain), and in the custody of Lord Arundell at Wardour.)
- 44. (Scottish)
- 45. (Colan: Brass of John Cosowarthe, Receiver General of the Duchy of Cornwall, died 1575; Dunkin, 1882, 40 and pl. 35).
- 46. In ye Church at St Ives, Cornwall. (Brass of Oto (died 1463) and Agnes Treunwith, showing both male and female figures, inscription, and figure and invocation of St Michael, as compared with the mutilated and incomplete state recorded by Dunkin, 1882, 15 and pl. 14, and now subsisting).
- 47. (Inscription from above).
- 48. Lestwithiel Chancell, Cornwall. (Brass of Tristramus Curteys, died 1423; Dunkin, 1882, 13 and pl. 9; Lhuyd's drawing shows much less detail than Dunkin, and is probably unfinished).
- On Landewednock als. Lizzard Font, Cornwall. (Inscriptions from font and bells, as recorded by Blight, 1865, 56, and Dunkin, 1878, 29).
   On St Katarne Font, Cornwall. On the middle bell at St. Katarns. (St Keverne: font inscription as Blight, 1865, 43; bell inscription, SUM ROSA PULSATA MUNDI MARIA VOCATA, apparently not otherwise recorded, only bells dated 1731, 1831 and 1795 being noted by Dunkin, 1878, 29).
- 50. In the south Isle at Straton. (Brass of Sir John Arundell of Trerice, died 1561; Dunkin, 1882, 34 and pl. 30; the child's figure missing from Dunkin's drawing is present).
- 51. In ye chancel at Mawgan, Cornwall. (Brass of Mary Arundell, died 1578, at Mawgan in Pydar; Dunkin, 1882, 45 and pl. 37; figure complete, not as shown by Dunkin, who reports part missing and part at Wardour).
- 52. In ye chancel at Mawgan. (Brass of Jane Arundell, died 1577, Dunkin, 1882, 46 and

pl. 38 (right), reported by Dunkin as fragmentary and in part at Wardour).

- 53. In ye chancel at Mawgan. (Brass of Cyssell Arundell, died 1578, Dunkin, 1882, 46 and pl. 38 (left), reported as fragmentary and mostly lost).
- 54. At St Just in Roseland, in Cornwall. (Inscription . . . GLASNEY DUM VIXIT QUI OBIIT TERTIO DIE APRILIS ANNO DNI MILLESIMO QUINGEN . . . ; probably from the brass of a priest illustrated by Dunkin, 1882, 10 and pl. 5).
- 55. In ye chancel at Killington. (Brass at Callington of Nicholas (died 1466) and Margaret Assheton; Dunkin, 1882, 16 and pl. 15).

(End of Cornish Section)

(In Welsh Section)

151. The 9 Maids in the Parish of St Columb, near which stand Rick Kallog Burroughs. (Nine Maidens stone row, St Columb Major; the drawing shows nine stones in a row with the left end one higher than the others; copied by Stukeley in Devizes Commonplace Book, 93/51, with the comment, 'they seem to have been part of an avenue').

#### Acknowledgments

Thanks are due to the British Museum and to Devizes Museum for access to manuscripts, to the former for permission to reproduce the plates, and to Dr F.A. Turk and Prof. Charles Thomas for their help in response to enquiries. It is intended to deposit a microfilm of this material in the Museum of the RIC at Truro.

#### Bibliography

Astle, T., 1800. 'Observations on Stone Pillars, Crosses and Crucifixes', Archaeologia, 13, 208

Blight, J.T., 1865. Churches of West Cornwall

Campbell, J.L., and Thomson, D., 1963. Edward Lhuyd in the Scottish Highlands, 1699-1700

Davies, W.L., 1939. Cornish Manuscripts in the National Library of Wales

Dunkin, E.H.W., 1878. The Church Bells of Cornwall

Dunkin, E.H.W., 1882. The Monumental Brasses of Cornwall

Emery, F., 1971. Edward Lhuyd 1660-1709

Hogg, A.H.A., 1961. 'A Lost Inscription from Porthgwarra, St Levan', Proc. W. Corn. Fld. Club, II No. 5, 246

Iago, W., 1881. 'The Lanhadron Inscribed Stone', J. Roy. Inst. Corn., 23, 397

Langdon, A.G., 1896. Old Cornish Crosses

Lhuyd, E., 1707. Archaeologia Britannica (Cornish section, chap. 6)

Macalister, R.A.S., 1929. 'The Ancient Inscriptions of the South of England', Archaeol. Cambrensis, 84, 179

Pool, P.A.S., 1961. 'The Courtyard House Site at Higher Bodinnar, Sancreed – an Early Plan', Antiquity, 35, 314

Pryce, W., 1790. Archaeologia Cornu-Britannica

Rogers, J.J., 1866. 'A Mural Grave, Stone Coffin, and Two Effigies of the Family of Carminow, in Mawgan Church', J. Roy. Inst. Corn., 6, 143

Thomas, C., 1967. Christian Antiquities of Camborne

Boscovean, Heamoor, Penzance

# **Parochial Check-Lists of Antiquities**

This instalment contains lists for a further two parishes. That for St Neot covers a substantial area of Bodmin Moor and is therefore lengthy. The following new abbreviations should be added to the consolidated lists given in *Cornish Archaeol.* 1, (1962), 107ff., *Cornish Archaeol.* 6 (1967), 82ff., and in each subsequent issue. Users are reminded that each Reference Item is introduced by a number prefixed SMR; this refers to the Sites and Monuments Register established by the Cornwall Committee for Rescue Archaeology in Truro (see *Cornish Archaeol.* 15, (1976), p. 91).

| Axford      | E.C. Axford, Bodmin Moor (London 1975)                                    |
|-------------|---|
| Axworthy    | W.A. Axworthy, Historical sketch of the parish of St Neot (Paignton 1894) |
| Gorham      | G.C. Gorham, The history and antiquities of Eynesbury and St Neot's in    |
|             | Huntingdonshire, & St Neot's in Cornwall, (London 1820)                   |
| Malim       | J.W. Malim, The Bodmin Moor (London 1936)                                 |
| Mitchell SN | Mitchell James. Parochial history of St Neot's in Cornwall, (Bodmin 1833) |

## HUNDRED OF WEST 2: PARISH OF ST NEOT (13,997 acs.)

### PETER SHEPPARD

| PLA  | CE                 | GRID REF.                        | ANY<br>REMAINS<br>EXTANT | REFERENCES  |
|------|--------------------|----------------------------------|--------------------------|---|
| Flir | nt Working Sites ( | Mesolithic)                      |                          |   |
| 1    | Dozmary Pool       | 194745                           | Yes                      | SMR SX 17 SE 95; OS Index SX 17 SE<br>3; MSS (of 1886) Ply. Mus; PPS 26<br>(1960) 193-201; ? Lake III 411; ? Mitchell<br>SN 27; See Misc. 1 |
| Flir | nt Working Sites ( | Neolithic)                       |                          |   |
| 1    | Harrowbridge       | 20307435<br>20437435<br>20457415 |                          | SMR SX 27 SW 89; Information Mr A.C.<br>Clarke, Harrowbridge, sites of numerous<br>finds  |
| 2    | Dozmary Pool       | 194745                           | Yes                      | SMR SX 17 SE 95; See Misc. 3  |
| Ba   | rrows and Cairns   |                                  |                          |   |
| 1    | Berrydown          | 19606891                         | ?                        | SMR SX 16 NE 85; OS 1813; Lake III<br>413   |

|     |                                |                | ANY           |  |
|-----|--------------------------------|----------------|---------------|--|
| PLA | CE                             | GRID REF.      | REMAINS       | REFERENCES                               |
|     |                                |                | EXTANT        |  |
|     |                                |                |               |  |
| 2   | Berrydown                      | 19586887       |               | SMR SX 16 NE 86; As above                |
| 3   | Berrydown                      | 19626886       | 2             | SMR SX 16 NE 87; As above                |
| 4   | Berrydown                      | 19986918       | Yes           | SMR SX 16 NE 14; (As hut 7)              |
| 5   | Goonzion                       | 17766742       | Yes           | SMR SX 16 NE 40; OS 6" 'Tumulus';        |
|     |                                |                |               | OS Index SX 16 NE 6; (Apparently         |
|     |                                |                |               | excavated by persons unknown)            |
| 6   | Carboul Tor<br>(Muttons Downs) | 19616978       | Yes           | SMR SX 16 NE 4; Thomas 49 'dia 40ft'     |
| 7   | Carboul Tor<br>(Muttons Downs) | 19676976       | ?             | SMR SX 16 NE 5: Thomas 49 'dia 60ft'     |
|     | (NOTE: Carboul                 | For (Muttons I | Downs) 195869 | 978, marked 'Tumulus' by OS is a natural |
|     | outcrop, SMR SX                | 16 NE 2: OS I  | ndex SX 16 NF | (9)                                      |
| 8   | Northwood                      | Ap 909709      |               | SMR SX 97 SW 88. Thomas 49 'dia 80ft'    |
| 0   | Downs                          | 110.202702     |               | Shire Shi 27 5 W 00, Thomas 15 tha out   |
| 0   | Letter Meer                    | 17467000       | Vac           | CMD SV 17 SE SE, OS Indan SV 17 SE       |
| 9   | Letter Moor                    | 17467000       | ies           | SMR SA 17 SE 55; US Index SA 17 SE       |
| 10  | C HITT                         | 10000000       | 17            |  |
| 10  | Gold Hill                      | 17267056       | Yes           | SMR SX 17 SE 53; OS 1813; OS 6" 1962     |
|     |                                |                |               | Tumuli'; OS Index SX 17 SE 19 B;         |
|     |                                |                |               | Thomas 49 'dia 45ft'                     |
| 11  | Gold Hill                      | 17217051       | Yes           | SMR SX 17 SE 52; Thomas 49 'dia 65ft';   |
|     |                                |                |               | otherwise as above A                     |
| 12  | Whitebarrow                    | 19187018       |               | SMR SX 17 SE 39; 1480 Witeburghdon,      |
|     |                                |                |               | Gover 292; TA 2836 Whitebarrow; OS       |
|     |                                |                |               | 1813; OS 6" 1962 'Whitebarrow'; OS       |
|     |                                |                |               | Index SX 17 SE 21                        |
| 13  | Whitebarrow                    | 19087024       | Yes           | SMR SX 17 SE 38; OS 6" 1962 'Tumulus';   |
|     |                                |                |               | OS Index SX 17 SE 20                     |
| 14  | Fawton                         | Ap.173684      |               | SMR SX 16 NE 53; Borough Park DD BK      |
|     |                                |                |               | 442 CRO; TA 1713 Gt. Burrow Park         |
| 15  | Fawton                         | Ap.173683      |               | SMR SX 16 NE 90; TA 1714 Little Burrow   |
|     |                                |                |               | Park                                     |
| 16  | Fawton                         | 16716835       | ?             | SMR SX 16 NE 50; TA 1672 Burrow Park;    |
|     |                                |                |               | OS Index SX 16 NE 35                     |
| 17  | Browngelly                     | 19417284       | Yes           | SMR SX 17 SE 84; OS 6" 1962 'Tumuli';    |
|     |                                |                |               | OS Index SX 17 SE 14A; (Stone Cairn)     |
| 18  | Browngelly                     | 19467281       | Yes           | SMR SX 17 SE 24; OS Index SX 17 SE       |
|     | 2                              |                |               | 14B: PWCFCI No. 4 (1956) 132-3:          |
|     |                                |                |               | Disc Barrow                              |
| 19  | Browngelly                     | 19597271       | Yes           | SMR SX 17 SF 85: OS Index SX 17 SF       |
| 10  | Diowingeny                     | 10001211       | 100           | 15A: (Stone Cairn)                       |
| 90  | Browngelly                     | 10637965       | Ves           | SMP SY 17 SE 95: OS Index SY 17 SE       |
| 20  | browngeny                      | 15057205       | 105           | 15B: Malim 97: DWCEC I No. 4 (1056)      |
|     |                                |                |               | 189 S. (Pobbod)                          |
| 91  | Duce on graller                | 10657957       | Vac           | SMD SV 17 SE 96, OS Index SV 17 SE       |
| 21  | browngeny                      | 19057257       | 168           | SMR SA 17 SE 20; OS Index SA 17 SE       |
| 00  | D 11                           | 000 / 5000     | 17            | 15C; (Stone Cairn)                       |
| 22  | Browngelly                     | 20047229       | Yes           | SMR SX 27 SW 45; OS 6" 1962 'Tumu-       |
|     | Downs                          |                |               | lus'; OS Index SX 27 SW 20               |
| 23  | Browngelly                     | 20117232       | Yes           | SMR SX 27 SW 83                          |
|     | Downs                          |                |               |  |
| 24  | Dozmary                        | 18937456       | Yes           | SMR SX 17 SE 15; OS 1813; Hencken        |
|     |                                |                |               | 73; ? 1170 Pinnochesburge, Gover 290     |
| 25  | Treverbyn                      | 20616827       |               | SMR SX 26 NW 6; TA 1509 Burrow Park      |
|     |                                |                |               |  |

|      |                |                         | ANY     |  |
|------|----------------|-------------------------|---------|--|
| PLA  | CE             | GRID REF.               | REMAINS | REFERENCES   |
|      |                |                         | EXTANT  |  |
| 96   | Harrowbridge   | 90877807                | 2       | SMD SV 97 SW 91. TA 9597 Dound Field                               |
| 20   | Higher Dravnes | 20377397                | r       | SMR SX 27 SW 81, 1A 2527 Round Field<br>SMD SX 96 NW 9: OS 6" 1969 |
| 21   | (Carpuan)      | 20300333                |         | 'Tumulus': OS Index SX 96 NW 7: CA 4                               |
|      | (Carpuan)      |                         |         | (1965) 4-9   |
| 98   | Higher Dravnes | 91406969                | Vec     | SMR SX 26 NW 13: TA 1174 Burrow Park                               |
| 29   | Blacktor       | 15747854                | 105     | SMR SX 17 SE 78: OS 6" 1962 'Tumuli':                              |
| 20   | Diacitici      | 10111001                | Ves     | OS Index SX 17 SE 13A  |
| 30   | Blacktor       | 15757353                | Ves     | SMR SX 17 SE 47: As above B  |
| 31   | Blacktor       | 15767355                | Yes     | SMR SX 17 SE 77; As above C  |
| 32   | Blacktor       | 15767359                |         | SMR SX 17 SE 76; As above D  |
| 33   | E. Lewarne     | 17506577                |         | SMR SX 16 NE 89; TA 2222 Tump                                      |
|      |                |                         | Yes     | Meadow   |
| 34   | W. Colliford   | 17697109                | Yes     | SMR SX 17 SE 81; OS Index SX 17 SE 37                              |
| 35   | W. Colliford   | 17697108                | Yes     | SMR SX 17 SE 82; As above  |
| 36   | W. Colliford   | 17687107                | Yes     | SMR SX 17 SE 83; As above  |
| 37   | E. Colliford   | 17907130                | Yes     | SMR SX 17 SE 23; Local Inf; (Cairn)                                |
| 38   | E. Colliford   | 17937147                |         | SMR SX 17 SE 97; (Cairn)   |
| 39   | Tamar          | 16807025                |         | SMR SX 17 SE 96; TA 1698 Burrow Park;                              |
|      |                |                         |         | DD BK 442 CRO  |
| 40   | Woodland       | 19036624                |         | SMR SX 16 NE 26; TA 744 Lower                                      |
|      | X47 11 1       | 10100005                |         | Woodland Burrow  |
| 41   | Woodland       | 19106635                |         | SMR SX 16 NE 92; South Barrow,                                     |
| 40   | 147            | 10100048                |         | Lanhydrock Atlas; 1A 783 Noburrow Pk                               |
| 4Z   | woodland       | 19106643                |         | SMR SA 10 NE 95; NO BUITOW Park,                                   |
| 12   | Donkostlo      | 17006095                |         | CMD SY 16 NE 89, TA 899 Little Democra                             |
| 45   | renkestie      | 17900935                |         | SMR SA 10 NE 83; 1A 823 Little Burrow                              |
|      | D 1 1          |                         |         | SMD SV 16 NE 89, TA 899 Creat Burnary                              |
| 44   | Penkestle      | 17726945                |         | Dark   |
| 45   | Depleate       | 17000085                |         | SMR SY 16 NE 81. TA 885 Burrow Park                                |
| 40   | renkestie      | 17020955                |         | DD BK 442 CRO  |
| 46   | Penkestle      | 17806934                |         | SMR SX 16 NE 84: East Burrow.                                      |
| 10   | renkestie      | 17000331                |         | Lanhydrock Atlas: TA 827 Great Burrow                              |
|      |                |                         |         | Park   |
| 47   | Penkestle      | 17736934                |         | SMR SX 16 NE 69; West Burrow Park,                                 |
|      |                |                         |         | Lanhydrock Atlas; TA 827 Great Burrow                              |
|      |                |                         |         | Park   |
| 48   | Gazeland       | 16736958                |         | SMR SX 16 NE 91; TA 1476 Whiteburrow                               |
|      |                |                         |         |  |
| Pre  | historic       | 10070058                | Vec     | SMP SY 16 NE & Monhin OS Indox SY                                  |
| 1    | Muttons Downs  | 19976953                | 165     | 16 NF 90   |
| 9    | W. Colliford   | 17767199                | Ves     | SMR SX 17 SF 98: Cupped Stone                                      |
| 2    | Ruppings Bark  | 17707132                | Yes     | SMR SX 17 SE 90, Cupped Stork                                      |
| 5    | buillings Fark | 10407105<br>to 18597187 | 105     | Linked By A Semi-Circular Bank                                     |
|      |                | 10 10527107             |         | Zinica Dy Hoenin enfeatur Dunk                                     |
| Hill | Forts          |                         |         |  |
| 1    | Berrydown      | 19706895                | Yes     | SMR SX 16 NE 17; Berry Castle, Lake III                            |
|      |                |                         |         | 413; 1440 Byry, Gover 285; Thomas 49;                              |
|      |                |                         |         | VCH 462; Lysons I ccxlvii; Mitchell SN                             |
|      |                |                         |         | 18; Malim 83; Axford 77-8; OS 'Camp,                               |
|      |                |                         |         | Hut Circles'; OS index SX 16 NE 5                                  |

| PLA | CE                   | GRID REF.              | ANY<br>REMAINS<br>EXTANT | REFERENCES  |
|-----|----------------------|------------------------|--------------------------|---|
| 2   | Tredinnick           | 15906600               |                          | SMR SX 16 NE 31; 1201 Tredinac, Gover 291; TA 1982 Round Park   |
| Rou | inds                 |                        |                          |   |
| 1   | Penkestle            | Ap.175695              |                          | SMR SX 16 NE 95; 1310 Penkestel,  |
| 2   | Lestow               | Ap.179675              |                          | Gover 289<br>SMR SX 16 NE 94; TA 2134 Round<br>Meadow: 'Two Castles' DD BK 442 CRO  |
| 3   | Goonzion<br>(Lestow) | 17146771               | Yes                      | SMR SX 16 NE 66; (Adjoins the above,<br>see last ref.) 'Roman Camp' PWCFC I<br>No. 2 (1954) 56; OC VI 282; Axford 78;<br>'Farthwork' OS 6": OS Index SX 16 NF 1 |
| 4   | Bunnings Park        | 18967219               | Yes                      | SMR SX 17 SE 28; Air Photo ECLP<br>(Rectangular): OS Index SX 17 SE 6   |
| 5   | Carpuan              | 20736925               | Yes                      | SMR SX 26 NW 3; TA 934 Round Down;<br>(1443 Cutpuwen, From Cuit = Wood,<br>Gover 285)   |
| 6   | Carpuan              | Ap.209692<br>to 208688 |                          | SMR SX 26 NW 4; TA 1128, 1137, Lwr,<br>Middle Castilley, 1129 Ring-A-Bingey,<br>1138-1140 Higher Castilley  |
| 7   | Higher<br>Langdon    | 20737331               | Yes                      | SMR SX 27 SW 84   |
| 8   | West<br>Northwood    | 20176978               | Yes                      | SMR SX 26 NW 53   |
| -9  | Northwood            | 20426983               | ?                        | SMR SX 26 NW 1; TA 2470 Castle Park;<br>Thomas 49 'dia 150ft'   |
| 10  | Draynes              | Ap.216699              |                          | SMR SX 26 NW 11; TA 673 Coldgare  |
| Ro  | und Fields           |                        |                          |   |
| 1   | Tamar                | 16707030               |                          | SMR SX 17 SE 99; TA 1694 Round  |
| 2   | Trevina              | 17836900               |                          | Meadow<br>SMR SX 16 NE 96; TA 814 Round<br>Meadow: Laphydrock Atlas   |
| 3   | Westerlake           | 21677205               |                          | SMR SX 27 SW 80; TA 1270 Round Hill   |
| 4   | Fawton               | 16786790               |                          | SMR SX 16 NE 97; TA 2061 Round Field  |
| 5   | Linkindale           | 17806815               |                          | SMR SX 16 NE 56; TA 2085 Round<br>Meadow  |
| 6   | Luna                 | 17006685               |                          | SMR SX 16 NE 35; TA 2190 Round Field  |
| 7   | Treverbyn            | 20486783               | 3                        | SMR SX 26 NW 7; TA 1540 Round<br>Meadow   |
| 8   | Berrydown            | 19396878               | 3                        | SMR SX 16 NE 18; TA 484 Round Field   |
| 9   | Gazeland             | 16536929               |                          | SMR SX 16 NE 74; TA 1461 Round<br>Meadow; Rounda Meadow DD BK<br>442 CRO  |
| 10  | Draynes              | Ap.220697              |                          | SMR SX 26 NW 12; TA 676 Round Park  |
| 11  | Gillhouse            | Ap.186732              |                          | SMR SX 17 SE 62; TA 2792-3, 2795, 2798-2808 Round Hill  |
| 12  | Lantewey             | 16386872               |                          | SMR SX 16 NE 49; TA 1607 Round<br>Meadow; 1793 Rounda Park DD BK<br>442 CRO   |
| н., | ts                   |                        |                          |   |
| 1   | Gillhouse            | 19087302               | Yes                      | SMR SX 17 SE 21; 'Hut Circle' OS 6";<br>OS Index SX 17 SE 7   |

|     |                |            | ANY     |   |
|-----|----------------|------------|---------|---|
| PLA | CE             | GRID REF.  | REMAINS | REFERENCES  |
|     |                |            | EXTANT  |   |
| 9   | Gillhouse      | 19137998   | Ves     | SMR SX 17 SE 105: (1)   |
| 3   | Berrydown      | 19876938   | Yes     | SMR SX 16 NE 8: 'Hut Circle' OS 6".   |
| 0   | Denyaoni       | 10010000   | 100     | OS Index SX 16 NE 10  |
| 4   | Berrydown      | 19586927   | Yes     | SMR SX 16 NE 7; As above; OS Index  |
|     |                |            |         | SX 16 NE 11   |
| 5   | Berrydown      | 19686856   | Yes     | SMR SX 16 NE 19; As above; OS Index   |
|     |                |            |         | SX 16 NE 7  |
| 6   | Berrydown      | 19686901   | Yes     | SMR SX 16 NE 16; As above; OS Index   |
| 7   | <b>D</b>       | 10000010   | V       | SX 16 NE 5  |
| 1   | Berrydown      | 19986918   | res     | SMR SA 10 NE 14; US Index SA 16 NE  |
|     |                |            |         | Barrow 4)   |
| 8   | Stuffle        | 18167200   | Yes     | SMR SX 17 SE 107: (1)   |
| 9   | West           | 20196975   | Yes     | SMR SX 26 NW 47: Local information  |
|     | Northwood      |            |         | ,   |
| 10  | West           | 20176978   | Yes     | SMR SX 26 NW 53; (Several) Local  |
|     | Northwood      |            |         | information   |
|     | (Round 8)      |            |         |   |
| 11  | Great Hammett  | 18527010   | Yes     | SMR SX 17 SE 86; (Several) Local  |
| 10  | C              | 10467007   | V       | information   |
| 12  | Great Hammett  | 18467027   | Yes     | SMR SX 17 SE 106; Local Information (1)                                       |
| 15  | Lameigate      | 21817120   | 168     | 5MR 5A 27 5W 57; (9) 05 mdex 5A<br>97 SW 33                                   |
| 14  | Parsons Park   | 19657107   |         | SMR SX 17 SF 37: Hut Circle (site of) OS                                      |
| ••• | a uroono a ura | 10001101   |         | 6" 1907: OS Index SX 17 SE 8  |
| 15  | Black Tor      | 15757325   | Yes     | SMR SX 17 SE 10; (Approx 80 Huts) OS  |
|     |                |            |         | Index SX 17 SE 5; 'Hut Circles' OS 25"  |
|     |                |            |         | 1906; Lake III 413; Malim 52  |
| 16  | East Colliford | 18197070   | Yes     | SMR SX 17 SE 108; (1)   |
| 17  | East Colliford | 18427065   | Yes     | SMR SX 17 SE 51; (Several in settlement                                       |
| 18  | Harrowhridge   | 90157868   | Vec     | group)<br>SMP SX 97 SW 80: (7) OS Index SX 97                                 |
| 10  | Hill           | 20157505   | 103     | SWR 5X 27 5W 50, (7) 05 muex 5X 27<br>SW 10                                   |
| 19  | Higher         | 20507365   | Yes     | SMR SX 27 SW 31: OS Index SX 27 SW  |
|     | Langdon        | 20001000   |         | 11 (15)   |
| 20  | Higher         | 20557340   | Yes     | SMR SX 27 SW 86; (13) As above  |
|     | Langdon        |            |         |   |
| 21  | Higher         | 20337327   | Yes     | SMR SX 27 SW 87; (26) As above  |
|     | Langdon        |            |         |   |
| 22  | Browngelly     | 20107270   | Yes     | SMR SX 27 SW 33; (Approx 42) OS Index   |
| 99  | Downs          | 4 - 100790 | 2       | SX 27 SW 13; 'Hut Circles' US 25" 1906<br>SMP SX 17 SE 108, (9) NMP siz photo |
| 25  | Downs          | Ap. 199750 | r       | SMR 5X 17 SE 105; (2) NMR all photo<br>SX $1079/1/4$                          |
| 24  | Pinnockshill   | 18577450   | Ves     | SMR SX 17 SF 14: (1 Possibly more)  |
| 25  | Muttons Downs  | 19426960   | Yes     | SMR SX 16 NE 6: (1) OS Index SX 16  |
|     |                | 10 100000  |         | NE 32   |
| 26  | Muttons Downs  | 19876951   | Yes     | SMR SX 16 NE 12; (3) OS Index SX 16   |
|     | (Enclosure 4)  |            |         | NE 28; Inf. E.C. Axford   |
| 27  | Muttons Downs  | 19796965   | Yes     | SMR SX 16 NE 10; (5) OS Index SX 16   |
| 00  |                | 10550015   | N/      | NE 40   |
| 28  | Muttons Downs  | 19756945   | Yes     | SMK 5X 10 NE 9; (3) US Index SX 16  |
|     |                |            |         | NE 30   |

| PLA | CE                                  | GRID REF. | ANY<br>REMAINS<br>EXTANT | REFERENCES  |
|-----|-------------------------------------|-----------|--------------------------|---|
| 29  | Berry Castle<br>(Hillfort 1)        | 19706890  | Yes                      | SMR SX 16 NE 17/1; (8) OS Index SX<br>16 NE 5; 'Hut Circles' OS 6"  |
| Enc | losures                             |           |                          |   |
| 1   | Dozmary                             | 19087431  | Yes                      | SMR SX 17 SE 19; (3 adjoining circular)<br>TA Map   |
| 2   | Lords Park                          | 19477178  | Destroyed                | SMR SX 17 SE 32; OS 6" 1963; Air photos ECLP  |
| 3   | Stuffle                             | 18327190  | Yes                      | SMR SX 17 SE 75; 1382 Stodfold (O.E.<br>Stod-Falod = Horse Enclosure) Gover<br>290; Hend MSS (27) 55, (26) 276, (7) 1a  |
| 4   | Muttons Downs                       | 199695    | Yes                      | SMR SX 16 NE 12; OS Index SX 16 NE 28   |
| 5   | Searles Downs                       | 16697107  | Yes                      | SMR SX 17 SE 104  |
| 6   | Berry Down                          | 19776858  | Yes                      | SMR SX 16 NE 99   |
| 7   | Letter Moor                         | 17337031  | Yes                      | SMR SX 17 SE 54; OS Index SX 17 SE 32   |
| Fie | ld Systems                          |           |                          |   |
| 1   | Gillhouse                           | 191730    | Yes                      | SMR SX 17 SE 100  |
| 2   | Muttons Downs                       | 197694    | Yes                      | SMR SX 16 NE 13; OS Index SX 16 NE  |
|     |                                     |           |                          | 37; Information E.C. Axford   |
| 3   | Stuffle<br>(Enclosure 3)            | 18397190  | Yes                      | SMR SX 17 SE 75; OS Index SX 17 SE 40   |
| 4   | Stuffle                             | 181722    | Yes                      | SMR SX 17 SF 79: Med Arch VI/VII  |
|     | orunne                              |           |                          | (1962-3) 283: Lanhydrock Atlas  |
| 5   | Penkestle                           | 174705    | Yes                      | SMR SX 17 SE 101; Med. Arch. VI/VII   |
| C   | E                                   | 194707    | Vee                      | (1962-3) 283  |
| 0 7 | East Colliford                      | 104707    | 168                      | SMR SX 17 SE 51; Terraces   |
| 0   |                                     | 10/00/    | Vac                      | SMR SX 16 NE 98; Strip Fields, 1A Map   |
| 0   | Northwood                           | 202097    | 105                      | SMR SA 20 NW 55; Terraces, Local  |
| 9   | Browngelly                          | 199730    | Yes                      | SMR SX 17 SE 50; OS Index SX 27 SW 26   |
| 10  | Downs                               | 907784    | Vec                      | SMD SY 97 SW 00. 2Mod Arch VI/VII   |
| 10  | Langdon                             | 201151    | 105                      | 283 (Slight difference in map ref.)   |
| 11  | Berrydown                           | 19856845  | Yes                      | SMR SX 16 NE 20; OS Index SX 16 NE 7  |
| 12  | <b>Bunnings</b> Park                | 19007172  | ?                        | SMR SX 17 SE 29; OS Index SX 17 SE 38   |
| 13  | <b>Bunnings</b> Park                | 18707147  | 5                        | SMR SX 17 SE 35; OS Index SX 17 SE 39   |
| 14  | Whitebarrow                         | 18577111  | 3                        | SMR SX 17 SE 102; As above  |
| Cr  | osses, Cross Sites                  | ?         |                          |   |
| 1   | St Neot                             | 18596783  | Yes                      | SMR SX 16 NE 28/4; Shaft, Lake III 408;<br>Hencken 271, 276, 278; VCH 438, 442;<br>Langdon 406-7; Axford 71; JRIC VIII<br>19, X 37; Essays 193-4; DCNQ XXIX 35;<br>OS Index SX 16 NE 24 |
| 2   | Crowpound<br>(now in<br>Churchyard) | 18596783  | Yes                      | SMR SX 16 NE 28/1; Lake III 413 No. 1;<br>Langdon 201; Essays 195; DCNQ XXIX 2;<br>Baird; Gilbert H S III 938; OS Index SX<br>16 NE 24  |
| 3   | St Neot                             | 18596783  | Yes                      | SMR SX 16 NE 28/2; Lake III 413 No. 2;<br>DCNQ XXIX 3; Essays 195; Langdon<br>254: OS Index SX 16 NF 24   |
| 4   | St Neot                             | 18596783  | Yes                      | SMR SX 16 NE 28/3; Lake III 413 No. 3;  |

|        |                                |                       | ANY     |   |
|--------|--------------------------------|-----------------------|---------|---|
| PL/    | ACE                            | GRID REF.             | REMAINS | REFERENCES  |
|        |                                |                       | EXTANT  |   |
| 5      | Newtown                        | 19076806              | Yes     | VCH 434-5; Essays 195; DCNQ XXIX 4;<br>Langdon 255; OS Index SX 16 NE 24<br>SMR SX 16 NE 70; Langdon 247; Baird;<br>DCNO XXVIII 275-6; OS Index SX 16         |
| 6      | Hilltown                       | 18416845              | Yes     | NE 26<br>SMR SX 16 NE 59; Langdon 255; Baird;<br>Exercise 105: DCNO XXVIII 276 7: (Creece)  |
|        |                                |                       |         | OS 6"; OS Index SX 16 NE 15   |
| 7<br>8 | Tremaddock<br>Colliford        | 18806837<br>Ap.186712 |         | SMR SX 16 NE 61; TA 494 Cross Park<br>SMR SX 17 SE 36; TA 711, 2349 Cross   |
| 9      | Lords Waste                    | 17147495              | Yes     | SMR SX 17 SE 12; 'Fourhole Cross<br>(Remains Of)' OS 25" 1906; Langdon<br>386-9; Lake III 413; Baird; Hencken 278;  |
|        |                                |                       |         | JRIC (NS) VI 194; DCNQ XXVII 273-5;<br>Malim 36; Axford 85; OS Index SX 17<br>SF 9  |
| 10     | Polmenna                       | 18236656              | Yes     | SMR SX 16 NE 27; DCNQ XXIX 1; TA<br>2261 Cross Park; Baird; OC No. 2 (1932)<br>38 IV 242: OS Index SX 16 NE 3   |
| 11     | Tredinnick                     | 16626614              | Yes     | SMR SX 16 NE 33; DCNQ XXVIII 277-8,<br>XXIX 1; Baird; TA 297, 1754, 2025 Cross<br>Parks; OC V 538; Axford 87; OS Index SX                                     |
| 12     | Trenant                        | 21186853              |         | 16 NE 2<br>SMR SX 26 NW 16; Base, DCNQ XXIX 5;<br>'Removed to Grampound in 1968' OS   |
| 13     | Trenant<br>(Now at<br>Draynes) | 21516910              | Yes     | SMR SX 26 NW 11<br>SMR SX 26 NW 15; DCNQ XXIX 4-5;<br>JRIC (NS) II 45-6; Baird; OS Index SX<br>26 NW 10   |
| 14     | Wenmouth                       | 19666788              | Yes     | SMR SX 16 NE 78; Essays 195 (Lampen);<br>DCNQ XXIX 5-6; TA 378, 402, 1553 Cross<br>Parks, 14-15 Cross Fields; Langdon<br>258-9; OC No. 2 (1932) 38; Baird; OS |
| 15     | Wenmouth                       | 19466785              |         | Index SX 16 NE 19<br>SMR SX 16 NE 21; Base, Baird; Crosses<br>(Remains of) OS 6"; OS Index SX 16<br>NF 19   |
| 16     | Wenmouth                       | 19506785              |         | SMR SX 16 NE 22; Base. As above except<br>Baird   |
| 17     | St Neot                        | 18356810              |         | SMR SX 16 NE 100; TA 2441 Cross Park  |
| 18     | Draynes                        | 21886912              |         | SMR SX 26 NW 14; TA 1233-4 Cross  |
|        | ,                              |                       |         | Parks   |
| 19     | Lamelgate                      | 21887088<br>22147050  |         | SMR SX 27 SW 65; TA 1010 Cross Park,<br>1033 Craw Park  |
| 20     | Little Hammett                 | 19176908              |         | SMR SX 16 NE 101: TA 455 Cross Park   |
| 21     | Gazeland                       | 16606979              |         | SMR SX 16 NE 102; TA 1480-1 Cross<br>Parks  |
| 22     | Woodland                       | Ap.189662             |         | SMR SX 16 NE 24: TA 740 Cross Park  |
| 23     | Lower Bowden                   | 20476817              |         | SMR SX 26 NW 5; TA 358, 1532 Cross<br>Parks   |

(Note: Lantern Cross in Churchyard 18596783 is from St Kew: SMR SX 16 NE 28/5; Essays 195; OS Index SX 16 NE 24)

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|     |                        |                         | ANY     |   |
|-----|------------------------|-------------------------|---------|---|
| PLA | CE                     | GRID REF.               | REMAINS | REFERENCES  |
|     |                        |                         | EXTANT  |   |
| Ho  | ly Wells               |                         |         |   |
| 1   | St Neot                | 18356804                | Yes     | SMR SX 16 NE 58; 'St Neot's Well'<br>OS 6"; Lake III 408; Lane-Davies 7, 39;<br>CN 1587. CN 1606/1-3 CRO; Mitchell SN<br>28; Malim 95; Axford 158; Axworthy 23  |
| Lar | ns                     |                         |         |   |
| 1   | Lampen                 | 18576750                |         | SMR SX 16 NE 103; 1250 Lanpen, Gover 287  |
| 2   | Lewarne                | Ap.171656               |         | SMR SX 16 NE 104; 1086 Languer, Gover<br>288; (? Previously St Guerir, Lake III<br>407 IV Supplement 42)  |
| Ch  | anels                  |                         |         |   |
| 1   | St Luke                | 19407653<br>or 19447643 |         | SMR SX 17 NE 63; 1241 Chapel of<br>Fawymore, Hend VI 414; St Luke's<br>Chapel (Remains of) OS 25" 1906; Lake<br>III 412; Gilbert HS III 945; Mitchell SN<br>15; Gover 288; Lysons 246; DCNQ<br>XXVIII 275; Gorham 230; TA 2729 Bones<br>Field: OS Index SX 17 NE 18 |
| 2   | Trevenna               | 17386865<br>or 17446878 | 2       | SMR SX 16 NE 52; (Stones built into<br>hedge at second NGR) Hend. VI 414; TA<br>189, 1711, 2081 Chapel Parks; OS Index<br>SX 16 NE 27   |
| 3   | Trenant                | 21206860                |         | SMR SX 26 NW 19; 1425 Chapel of St<br>Anne, Hend. VI 414; DCNQ XXIX 4; TA<br>1146 Chapel Park; OS Index SX 16 NE<br>38 (? wrong sheet no.)  |
| 4   | Lower Trenant          | 20956830                | Yes     | SMR SX 26 NW 50; Chapel Park<br>Cemetery, Lake III 413; TA 1507 Chapel<br>Park; (early 19th century)  |
| Me  | dieval and Later       |                         |         |   |
| 1   | St Neot                | Ap.186675               |         | SMR SX 16 NE 103; Ecclesiastical<br>College, JRIC VII 52-3; Borlase Ant. 387;<br>Gilbert HS III 938; Axford 150; The docu-<br>mentary evidence is printed in Gorham<br>20-40, 251; (? as Lan 1)   |
| 2   | Harrowbridge<br>Bridge | 20677439                |         | SMR SX 27 SW 85; 1275 Horrebrugge,<br>Gover 287; CBS 71   |
| 3   | Bodithiel<br>Bridge    | 17656488                | Yes     | SMR SX 16 SE 30; 'Lergen Bridge' Early<br>Tours 45 (Leland); CBS 73   |
| 4   | Crowpound              | 17436775                | Yes     | SMR SX 16 NE 65; Pound, Lake III 408;<br>OS 1813; Mitchell SN 137-8; Axford 78;<br>OC VI 282; PWCFC I no. 2 (1954) 57-8;<br>OS Index SX 16 NE 4   |
| 5   | Goonzion               | 17146771                |         | SMR SX 16 NE 67; TA 2133 Gallows Park;<br>OC VI 282   |
| 6   | Panters Bridge         | 15926805                | Yes     | SMR SX 16 NE 79; 1241 Pontyesu, Gover<br>289; Present bridge 15th century CBS 29,<br>75 figs 11, 41; WMN 13.5.1972; Axford 20   |

|          |                              |                      | ANY     |   |
|----------|------------------------------|----------------------|---------|---|
| PLA      | CE                           | GRID REF.            | REMAINS | REFERENCES  |
|          |                              |                      | EXTANT  |   |
| 7        | Treverbyn<br>Bridge          | 20656744             | Yes     | SMR SX 26 NW 49; Dated 1412 CBS 20,<br>29, 71-2 figs 1, 10, 39; OC IV 241; WMN  |
| 8        | Trenay                       | 15866722             |         | SMR SX 16 NE 105; C.1720 'Timber  |
| 9        | Mennabroom                   | 16327057             | Yes     | SMR SX 17 SE 56; Farmhouse, Chesher<br>57: OS Index SX 17 SE 18   |
| 10       | St Neot                      | 18446786             | Yes     | SMR SX 16 NE 106; 18th Century bridge<br>CBS 78: Axford 95  |
| 11       | St Neot                      | 18636780             |         | SMR SX 16 NE 71; Manor House (Site<br>of) OS 67 1963: OS Index SX 16 NE 18  |
| 12       | Draynes Bridge               | 22826892             | Yes     | SMR SX 26 NW 55; 1362 Draynesbrigge,<br>Gover 286; Early Tours 45 (Leland);<br>CBS 71   |
| 13       | Higher Draynes               | 21336925             | Yes     | SMR SX 26 NW 54; TA 1231a Manor<br>Pound  |
| 14<br>15 | Ashford Bridge<br>Drawbridge | 20346600<br>15946530 | Yes     | SMR SX 26 NW 59; CBS 72<br>SMR SX 16 NE 108; 1503 Draabrygge<br>(1492 Drafurde) Gover 286: CBS 73   |
| 16       | Lantewey                     | 16506857             | Yes     | SMR SX 16 NE 48; 1640 Farmhouse,<br>Hend. VI 415; OS (Remains of Mansion)<br>6" 1963: OS Index SX 16 NE 12  |
| 17       | Woodland                     | 19486682             | Yes     | SMR SX 16 NE 107; TA 419 Pound<br>Meadow  |
| 18       | Pinnockshill                 | 18657434             | Yes     | SMR SX 17 SE 90; Abandoned Settle-<br>ment, TA Map; Lake III 412; OS 25"<br>1906  |
| 19       | East Colliford               | 18107087             | Yes     | SMR SX 17 SE 89; Farmhouse with datestone 1624; Hend, MSS (27) 7  |
| 20       | West Colliford               | 17937085             | Yes     | SMR SX 17 SE 31; Abandoned Settlement<br>with fields, Lanhydrock Atlas; (Since<br>Hend. MSS (27) 7 temp H.VIII specific-<br>ally refers to EAST Colliford one<br>presumes West also existed at that time) |
| 21       | Meadows                      | 18257287             | Yes     | SMR SX 17 SE 88; Abandoned Settlement<br>TA Meadows TNT   |
| 22       | Pengelly                     | ?17956573            |         | SMR SX 16 NE 127; TA 1894 Pound Park;<br>(The pound probably adjoining at NGR)  |
| 23       | Trenay                       | 16366687             |         | SMR SX 16 NE 37; TA 1813 Culver House<br>Meadow; Hend. MSS (17) 127   |
| 24       | Pantersbridge                | 15876810             |         | SMR SX 16 NE 109; TA2818-9 Butt Parks   |
| 25       | Stuffle<br>(Enclosure 3)     | 18397190             | Yes     | SMR SX 17 SE 75; Long Houses (2),<br>OS Index SX 17 SE 40   |
| 26       | Muttons Downs                | 19826959             | Yes     | SMR SX 16 NE 11; Long House, OS<br>Index SX 16 NE 39  |
| 27       | Browngelly<br>Downs          | 20107286             | Yes     | SMR SX 27 SW 50; Long Houses (4),<br>OS Index SX 27 SW 26; Med. Arch.<br>VI/VII 283   |
| 28       | Browngelly<br>Downs          | 20307320             | Yes     | SMR SX 27 SW 59; Long House, OS<br>Index SW 27 SW 37  |
| 29       | Harrowbridge                 | 20157363             | 5       | SMR SX 27 SW 30; ?Long House, OS<br>Index SX 27 SW 10   |

| 30    Gazeland    16676957    Yes    SMR SX 16 NE 7      31    Higher Fawton    16996832    SMR SX 16 NE 5      32    Hall    17126855    Yes    SMR SX 16 NE 1                                  | 5; TA 1482 Site of   |
|--|--|
| 31    Higher Fawton    16996832    Buildings      31    Higher Fawton    16996832    SMR SX 16 NE 5      House' OS 6" 190    NE 13    NE 13      32    Hall    17126855    Yes    SMR SX 16 NE 1 |  |
| NE 13        32 Hall      17126855      Yes      SMR SX 16 NE 1  | 1; 'On site of Manor<br>63; OS Index SX 16                                 |
| ment 1401 Halle  | 10; Abandoned Settle-  |
| 33 Trevenna 17906883 Yes SMR SX 16 NE 6<br>OS 6" 1963; OS I<br>UL 410; Hend VI   | 8; 'Remains of Mansion'<br>ndex SX 16 NE 14; Lake                          |
| 34 Luna 16696686 SMR SX 16 NE 3<br>of) OS 6" 1963; C   | 6; Manor House (Site<br>OS Index SX 16 NE 20;                              |
| 35 Hole 17916630 Yes SMR SX 16 NE 2<br>16 NE 21: Lake II   | 9; Mansion. OS Index SX  |
| 36      Treverbyn      20356789      SMR SX 26 NW        0S 6" 1963; OS 1  | 8; Manor House (Site of)<br>Index SX 26 NW 8                               |
| Mills  |  |
| 1 Dozmary Ap.188738 SMR SX 17 SE 9   | 1; Lake III 411  |
| 2 Trenant 20996843 SMR SX 26 NW<br>'Trenant Mills'   | 17; TA 1112, Map   |
| 3 Pantersbridge 15956794 SMR SX 16 NE 1<br>mill TNT; Essay<br>125 (27) 9   | 11; TA 2099 Tucking-<br>s 207; Hend. MSS (17)                              |
| 4 Pantersbridge 15926792 Yes SMR SX 16 NE 1<br>1793 'Grist Mill'<br>1982 CRO; Hend<br>(27) 9   | 12; TA 2101 West Mills;<br>DD BK 442 CRO; CF<br>1. MSS (17) 125, (20) 359, |
| 5 Treverbyn 20586744 Yes SMR SX 26 NW<br>BK 442 CRO: T   | 48; 1793 'Two Mills' DD<br>A 1577 Trevarbyn Mills                          |
| 6 Ashford Mill 20336620 Yes SMR SX 26 NW<br>Mills  | 10; TA 1338 Ashford  |
| 7 Moorlandsmill 16536965 SMR SX 16 NE 1<br>Mills'; Lanhydro<br>BK 442 CRO  | l 15; TA Map 'Moor<br>ock Atlas; Martyn; DD                                |
| 8 St Neot 18426785 Yes SMR SX 16 NE 1<br>DD BK 442 CRC   | 114; 1793 'Town Mill'<br>): Malim 95                                       |
| 9 Lampen 18656729 Yes SMR SX 16 NE 1<br>Inf. Cider Mill  | 113; TA 254 Mill; Local  |
| 10 Draynes Ap.224690 SMR SX 26 NW Parks  | 56; TA 1085, 1087 Mill   |
| 11      Milltown      Ap.181679      SMR SX 16 NE 8        CRO; TA 517 M      289  | 88; 1793 Mill DD BK 442<br>illtown TNT; 1717, Gover                        |
| Industrial   |  |
| 1 Menniridden 16857296 Yes SMR SX 17 SE 9<br>Barton-Clay 126<br>Clay Disused)  | 92; China-Clay Works,<br>5, 175; OS 25″ 1906 (China                        |
| 2      Dozmary      19377470      Yes      SMR SX 17 SE 1        3      Carnglaze      18656685      Yes      SMR SX 16 NE   | 16; Ice Works OC VIII 20<br>118: Slate Mine.                               |

| PLACE                 |                                     | GRID REF.  | ANY<br>REMAINS<br>EXTANT | REFERENCES   |  |
|-----------------------|-------------------------------------|------------|--------------------------|--|--|
|                       |                                     |            |                          | Trevithick Soc. Newsletter (4) 8-9, (6) 3;                           |  |
| 4                     | Wh Hammett                          | 187604     | Vac                      | AXIOID 104<br>SMP SX 16 NF 117: Mines XII 90                         |  |
| 4                     | Wh. Hammett                         | 18/094     | Yes                      | SMR SA 10 NE 117; Mines All 29<br>SMP SY 16 NE 116: 1516 Hobby Worke |  |
| 5                     | HODDS HIII                          | 180095     | 165                      | Cover 987: Mines XII 98: PCC 9 5 1874:                               |  |
|                       |                                     |            |                          | DDX 67 CRO   |  |
| 6                     | Wh Northwood                        | 20096976   | Ves                      | SMR SX 26 NW 52: Engine House (Tin                                   |  |
| U                     |                                     | 20000010   | 105                      | Mine) Ordish II 58: RCG 15.8.1874:                                   |  |
|                       |                                     |            |                          | Barton-Clay 126  |  |
| 7                     | Wh. Northwood                       | 20036949   | Yes                      | SMR SX 26 NW 51; Chimney (China-                                     |  |
|                       |                                     |            |                          | Clay wks); OS 6" 1963; Barton-Clay 126                               |  |
| 8                     | Gazeland                            | 16626982   | Yes                      | SMR SX 16 NE 120; TA 869 Clay Pits;                                  |  |
|                       |                                     |            |                          | Gazeland Works (China-Clay Disused)                                  |  |
|                       |                                     |            |                          | OS 25" 1882; Kelly (1873) 823; RCG                                   |  |
|                       |                                     |            |                          | 19.9.1874; Barton-Clay 126   |  |
| 9                     | Wh. Trevenna                        | 17496863   | Yes                      | SMR SX 16 NE 119; Tregeagle Mine,                                    |  |
|                       |                                     |            | 0225                     | Mines XII 27-8; X 185/3 CRO; Axford 162                              |  |
| 10                    | Gillhouse                           | 18577303   | Yes                      | SMR SX 17 SE 93; Old Tin Workings OS<br>25" 1906                     |  |
| 11                    | Golitha Falls                       | 22406863   | Yes                      | SMR SX 26 NW 57: Wheel Pits (Wh.                                     |  |
|                       | oonna i uno                         | 22456860   | 100                      | Victoria) Mines XII 29-30  |  |
| 12                    | Milltown                            | 17936800   |                          | SMR SX 16 NE 57; TA 580 Stamps                                       |  |
|                       |                                     |            |                          | Meadow   |  |
| 13                    | St Neot                             | 18376794   |                          | SMR SX 16 NE 124; 1689 Blowing House                                 |  |
|                       |                                     |            |                          | OC V 112-3; TA 132 Blowinge House                                    |  |
|                       |                                     |            |                          | Meadow   |  |
| 14                    | Lampen                              | 18506700   | Yes                      | SMR SX 16 NE 123; Chimney, Mines XII                                 |  |
|                       |                                     |            |                          | 18; Axford 161-2   |  |
| 15                    | Wh. Mary                            | 188673     | Yes                      | SMR SX 16 NE 122; Mines XII 15-21                                    |  |
|                       |                                     | to 193675  |                          | (Including Pouldiste & Wh. Sisters);                                 |  |
| 10                    |                                     | 00046005   | N/                       | Axford 161   |  |
| 16                    | Treverbyn                           | 20346805   | Yes                      | SMR SX 26 NW 58; Blacksmiths, OS 6"                                  |  |
| 17                    | St Noot                             | 10/96705   | Vec                      | SMP SY 16 NE 80: Blacksmiths   |  |
| 10                    | St Neot                             | 10430703   | 165                      | SMR SX 16 NE 191: 1613 Bell-Founding                                 |  |
| 10                    | SUMEOU                              | 1 10030703 |                          | Pit 24 4 1680 Terrier Devon & Corn                                   |  |
|                       |                                     |            |                          | Record Soc. (NS) XIX 115   |  |
| 19                    | Tamar                               | Ap. 164701 |                          | SMR SX 17 SE 66: TA 864 Stamp Park                                   |  |
| 20                    | Mennabroom                          | Ap.161707  |                          | SMR SX 17 SE 94; TA 1954 Stamp Field                                 |  |
| 21                    | Tredinnick                          | Ap.154659  |                          | SMR SX 16 NE 125; TA 2055 Woodstamp                                  |  |
| 1994 <del>-</del> 706 | s materi deseta en en districtiones |            |                          | Park, 2049-50 Stamp parks  |  |
| 22                    | Tredinnick                          | 16026600   |                          | SMR SX 16 NE 30; TA 1984 Tan-House                                   |  |
|                       |                                     |            |                          | Meadow; Local inf; 'numerous animal                                  |  |
|                       |                                     |            |                          | bones found'   |  |

(Note: Peat-drying platforms are numerous in the moorland areas and take various forms. They have not been included in the list because they are too recent.)

|     |                               |  | PRESENT   |  |
|-----|-------------------------------|--|---|--|
| PRO | VENANCE                       | OBJECT   | LOCALITY  | REFERENCES   |
| Mis | cellaneous Finds              |  |   |  |
| 1   | Dozmary<br>(Mesolithic 1)     | Microliths   | Plymouth<br>Torquay<br>Exeter<br>(Inst of Arch)<br>London | SMR SX 17 SE 95; Hencken 5,<br>304; PPS (26) 193-201; Ply.<br>Mus. Cat. 4623-4641. 4724.<br>118/21/9: Arch. 61 pt. 1 (1908) 11 |
| 2   | Dozmary                       | 'Spearhead &   | London  | SMR SX 17 SE 15/1; Hencken 73  |
| 3   | Dozmary<br>(Neolithic 2)      | Flint Flakes<br>Scrapers<br>Gravers, Pick<br>Arrowheads<br>Etc                             | Truro<br>Plymouth<br>British<br>Museum                    | SMR SX 17 SE 95; Hencken 304;<br>RIC Catalogue; Ply. Mus. Cat.<br>4623-4641. 4724. 118/21/9;<br>T. Plym Inst. VII 299-300      |
| 4   | Coppins Farm                  | Flint Arrowhead  | Truro   | SMR SX 17 SE 20: RIC Catalogue   |
| 5   | Parsons Park                  | Tin Bowl<br>(?Roman)   | Truro   | SMR SX 17 SE 34; RIC Catalogue;<br>Martin 111; JRIC XXIV 331-4   |
| 6   | Longlake                      | Ingot Mould  | Longlake<br>Farm  | SMR SW 17 NE 64  |
| 7   | Blacktor                      | Stone Implements<br>& Flint<br>Arrowheads  |   | SMR SX 17 SE 10/1; Malim 52-3  |
| 8   | St Luke<br>(Chapel 1)         | Font   | Tideford<br>Church  | SMR SX 17 NE 63; Mitchell SN 15;<br>H & D II 514; Lysons 246;<br>Lake III 412  |
| 9   | St Neot                       | Mortar Stone   | 18496787  | SMR SX 16 NE 126; OS Index<br>SX 16 NE 33  |
| 10  | Muttons Downs                 | Leaf Shaped<br>Flint Arrowhead   | Finder<br>R.L. Edwards                                    | SMR SX 16 NE 15; OS Index<br>SX 16 NE 36   |
| 11  | Tamar                         | Flint Scraper<br>& Perforated<br>Shale Disc  |   | SMR SX 17 SE 110; G.F. Woodhouse,<br>Tamar Farm  |
| 12  | Harrowbridge<br>(Neolithic 1) | Numerous<br>leaf-shaped<br>Flint Arrowheads  | (Given<br>away)   | SMR SX 27 SW 89; A.C. Clarke,<br>Harrowbridge  |
| 13  | St Neot<br>(Mill 8)           | Millstones (2)   | 18426785  | SMR SX 16 NE 114   |
| 14  | Pinnocks Hill                 | Flint Flakes   | Plymouth  | SMR SX 17 SE 112;<br>Ply. Mus. Cat. 461, 4637, 4666  |
| 15  | Harrowbridge                  | (Large Collection)<br>Tanged and Barbed<br>Arrows, Scrapers,<br>Borers, Nodules,<br>Flakes | Plymouth  | SMR SX 27 SW 95; Ply Mus Cat. 72.24<br>Ply. Mus. Cat. 72.24. 38-55:  |
| 16  | Harrowbridge                  | Neolithic<br>Arrowhead   | Plymouth  | SMR SX 27 SW 93;Ply. Mus. Cat.<br>72.24.45   |
| 17  | Harrowbridge                  | Stone Hammer   | Plymouth  | SMR SX 27 SW 94; Ply. Mus. Cat.<br>72.24.46  |

# HUNDRED OF PENWITH (EASTERN DIVISION) 9: PARISH OF PERRANUTHNOE (1127 acs.)

### PETER SHEPPARD

| PLA             | ACE   | GRID REF.            | ANY<br>REMAINS<br>EXTANT | REFERENCES  |
|-----------------|---|----------------------|--------------------------|---|
| <b>Axe</b><br>1 | e <b>Factory</b><br>Trenow<br>(Carn Perran) | Ap.534297            |                          | SMR SW 52 NW 1; PPS VII (1941) 55-6,<br>XVII (1951) 109 'the actual factory still<br>awaits discovery; TA 834 The Carn  |
| Bar             | rows  |                      |                          |   |
| 1               | Perran Downs                                | 55143060             |                          | SMR SW 53 SE 61; TA 141 Burrows<br>Destroyed by Mining  |
| 2               | Maen-Du                                     | Ap.536293            |                          | SMR SW 52 NW 14; TA 801-2 The Carns<br>(? natural features)   |
| 3               | Perranuthnoe                                | 54002947             |                          | SMR SW 52 NW 15; TA 765 Park An<br>Chamber  |
| 4               | ?Carters Downs                              | Ap.559293            |                          | SMR SW 52 NE 39; 1613 Creege Glas,<br>Hend. Top I 84; Mines XI 26; (Parish<br>Boundary)   |
| Rou             | unds, Round Fields                          | 5                    |                          |   |
| 1               | Perranuthnoe                                | Ap.540300            |                          | SMR SW 53 SW 88; TA 553 Aga Gar   |
| 2<br>3          | Perranuthnoe<br>Trebarvah                   | 53772945<br>54662914 |                          | SMR SW 52 NW 19; TA 794 Park Garland<br>SMR SW 52 NW 18; TA 732 Eastern<br>Castle, 736 Western Castle, 734 East<br>Round Field; (These surround the most<br>probable site which is known locally as<br>Caste-Luchens) |
| 4               | Trebarvah Lane                              | Ap.546299            |                          | SMR SW 52 NW 17: TA 520 Round Field   |
| 5               | Perran Downs                                | 55773000             |                          | SMR SW 53 SE 62; TA 405 Round Field   |
| Cro             | sses, Cross Sites?                          |                      |                          |   |
| 1               | Trebarvah                                   | 54302957             |                          | SMR SW 52 NW 16; TA 631 Park Grouse   |
| 2               | Rosudgeon<br>(Trevean)                      | 55552946             |                          | SMR SW 52 NE 40; TA 488 Chapel An<br>Grouse; Lake IV 47; Gilbert PH III 312;<br>(Parish boundary with St Hilary)  |
| 3               | Goldsithney                                 | 53853035             |                          | SMR SW 53 SW 89; TA 565 Park Grouse   |
| 4               | Colenso Cross                               | 55903050             |                          | SMR SW 53 SE 63; Crouse Mabell, 1321<br>Crucem Mabili, JRIC (NS) III 396; Hend.<br>Top I 81, 84; OC I No. 12, pp 9-10   |
| Cha             | apels                                       |                      |                          |   |
| 1               | Goldsithney                                 | 54533068             |                          | SMR SW 53 SW 75; St James' Chapel<br>(site of) OS; JRIC (NS) III 394; Borlase<br>Par Mem 27; Gilbert PH III 308; Pen HS<br>II 160; Lake IV 46; Hend. I 166-7; C.C.G.<br>159   |

| PL. | ACE                    | GRID REF.   | ANY<br>REMAINS<br>EXTANT | REFERENCES   |
|-----|------------------------|---|--------------------------|--|
| 2   | Goldsithney            | 54403074  |                          | SMR SW 53 SW 3; St Petry's Chapel (site<br>of) OS; JRIC (NS) III 395-6; Hend. I<br>166-7   |
| 3   | Rosudgeon<br>(Trevean) | 55552946  |                          | SMR SW 52 NE 27; TA 488 Chapel An<br>Grouse; St Anne Chapel; JRIC (NS) III<br>213, 396; OS Chapel (site of); Borlase Par<br>Mem 175; Lake IV 47; (parish boundary<br>with St Hilary) |
| Me  | dieval and Later       |   |                          |  |
| 1   | Goldsithney            | 54233018  |                          | SMR SW 53 SW 2; Lazar House, JRIC<br>(NS) V 99; TA 547-8 The Clogy   |
| 2   | Goldsithney            | 54393065  | ?                        | SMR SW 53 SW 90; TA 30 Manor Pound   |
| 3   | Perranuthnoe           | 53552944  |                          | SMR SW 52 NW 23; Perran's Stone,<br>Men-Perran, Hend. Top I 81; TA 805<br>Meer Perran  |
| Ind | lustrial               |   |                          |  |
| 1   | Trevean                | 54892901  |                          | SMR SW 52 NW 22; Whim, TA Map; TA 682a Whim Shaft  |
| 2   | Perran Downs           | 55353071  | 10010                    | SMR SW 53 SE 64; Whim, TA Map; TA<br>113 Whim Shaft  |
| 3   | Trebarvah Lane         | 54782991  | Yes                      | SMR SW 52 NW 20; TA 518 Blacksmiths;<br>(remains of walls)   |
| 4   | Goldsithney            | 53853036  |                          | SMR SW 53 SW 91; Whim, TA Map; TA<br>565a Whim Shaft   |
| 5   | Edno-Vean              | 54352969  | Yes                      | SMR SW 52 NW 21; Whim, TA Map; TA  |
| 6   | Perranuthnoe           | 53822944  | ?                        | SMR SW 52 NW 89; TA 798 Vineyard   |
|     |                        |   | PRESENT                  |  |
| PR  | OVENANCE               | OBJECT  | LOCALITY                 | REFERENCES   |
| Mi  | scellaneous Finds      |   |                          |  |
| 1   | Trebarvah              | 'Several<br>earthen pots<br>full of<br>black mould' |                          | SMR SW 52 NW 24; Lake IV 47; Hend. I<br>168  |

### Short Notes

#### THE GOLD CUPS FROM RILLATON, FRITZDORF AND ESCHENZ (Fig. 50)

Almost a century and a half has passed since the discovery of the renowned Rillaton golden beaker in a cist high up in the side of a great barrow on Bodmin Moor, where, possibly in a pottery vessel, and together with an ogival Camerton-Snowshill dagger, of which a good part has survived, and 'a few glass beads' perhaps of faience, it furnished a seemingly extended inhumation burial. Found in 1837, it was published thirty years later by Edward Smirke (1867). As it had originated in the Duchy of Cornwall it was sent to King William IV, and thereafter it was kept in Queen Victoria's Swiss Cottage at Osborne. Subsequently it passed into obscurity until, after the death of King George V, it was recognised by Queen Mary on her late husband's dressing table where it had been used to contain his collar-studs (Hawkes, 1951, 160). During the short reign of Edward VIII it was taken from Buckingham Palace and deposited in the British Museum.

For long the Rillaton cup, a clear copy of a ceramic bell beaker, seemed unique, although its general similarity to the wellknown Wessex shale and amber cups had been recognised (Newall, 1928). However, in 1954 at Fritzdorf, near Bonn, in the Rhineland, a similar, beaker-like, handled cup was found (von Uslar, 1955; 1956), also in a pottery vessel. The Rillaton and Fritzdorf golden beakers, 8.2 cm and 12.1 cm in height respectively, had both been beaten from single ingots and their handles attached by rivets passing through lozengiform washers. This cup from Fritzdorf (Ashbee, 1960, Pl. XXIV for a convenient illustration and comparison with the Rillaton cup) closely resembles those Early Bronze Age amber and shale cups mentioned above, and particularly those from Amesbury (Newall, 1928, 114) and Farway Down (Fox, 1964, 70, Pls. 25, 26). The design of its handle and the use of lozengiform washers for its attachment are so similar to those of the Rillaton cup that the two pieces might have been from the hands of the same craftsman.

Recently another golden beaker, found in 1916 during railway construction at Eschenz, Canton Thurgau, in northeastern Switzerland (Kinnes, 1975; Hardmeyer u. Bürgi, 1975), has emerged from a private collection. The Eschenz gold cup, 11.1 cm in height, has like the Rillaton cup, the proportions and appearance of a ceramic bell beaker, although it does not have an attached handle. Its Beaker affinities are evident in its decoration which is overall horizontal zoning and infilled panels. Below the rim there is rendered on the sheet gold the familiar Beaker comb-stamping, while, below this, shallow corrugations, and a prominent bossed central rib, heighten the resemblance to the Rillaton cup as does the bossed, circular-ribbed base.

The corrugations and bosses that characterise the Eschenz cup are similar to the dominant decoration of the little-known gold cup, 11.5 cm in height, from Gölenkamp, near Hanover (Hardmeyer u. Bürgi, 1975, 116, Abb. 11), which is in private hands. However, while its corrugations and concentric ribbed base are also closely comparable to those of the Rillaton cup, its shape, a flat-based bucket form, is quite different from the beaker form which characterises the three cups under discussion. Indeed, the execution of the



Fig. 50 The Gold Cup from Eschenz, Canton Thurgau, Switzerland 1:1. By permission of the Museum des Kantons Thurgau, Frauenfield.

Gölenkamp vessel is akin to that of such later developed pieces as the Mold *tippet* (Powell, 1953) and the golden *hats*, which could well have been post and stake covers, from Avanton, Vienne, in central France, and Schifferstadt, Landkreis Speyer, and Etzeldorf-Buch, Landkreis Nuremberg, in West Germany (Powell, 1966, 155, Pls. 148, 149).

Another copy of a beaker in sheet gold, of which only the upper part remains, was found in 1840 at Ploumilliau, Dept. Côtesdu-Nord, Brittany (Ashbee, 1960, 148; Briard, 1965, 319, fig. 21). This has small bosses on its rim, holes whereby a handle might have been attached and could have been secured by rivets to a bottom. The similarity of this upper part to the Fritzdorf cup is remarkable. The object which has hitherto been considered as a golden armlet, from Cuxwold, in Lincolnshire (Gerloff, 1975, 257, Pl. 57, N) may well also be the upper part of a corrugated gold cup. This was found in 1857, has subsequently been lost, and is known only from an early engraving: either possibility might therefore obtain.

It emerges from this note that the Rillaton golden beaker is the only vessel of its kind of which we have any knowledge of association or circumstances of interment. Recent work on Wessex goldwork (Coles & Taylor, 1971) has stressed, besides its slight, unworn, character, the general Beaker nature of much of the material. This is no new notion (Ashbee, 1960, 119) but it is, nonetheless, one that will readily accommodate the golden beakers and those of amber and shale. One might therefore envisage these cups, in a deliberate Beaker archaiform, as funerary pieces indicative, perhaps, of a particular social status.

#### **Paul Ashbee**

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#### **Bibliography**

- Ashbee, P., 1960. The Bronze Age Round Barrow in Britain
- Briard, J., 1965. Les Dépôts Bretons et l'Age du Bronze Atlantique
- Coles, J. & Taylor, J., 1971. 'The Wessex Culture: a minimal view', Antiquity, XLV, 6-14

Fox, A., 1964. South West England

- Gerloff, S., 1975. The Early Bronze Age Daggers of Great Britain and a reconsideration of the Wessex Culture
- Hardmeyer, B. & Bürgi, J., 1975. 'Der Goldbecher von Eschenz', Zeitschrift für

Schweitzerisches Archäeologie und Kunstgeschichte, XXXII, 109-20

- Hawkes, J.J., 1951. A Guide to the Prehistoric & Roman Monuments in England & Wales
- Kinnes, I., 1975. 'A gold beaker from Switzerland', Antiquity, XLIX, 132-3
- Newall, R.S., 1928. Two Shale Cups of the Early Bronze Age and other similar cups,' Wiltshire Archaeol. Mag. XLIV, 111-17
- Powell, T.G.E., 1953. 'The Gold Ornament from Mold, Flintshire, North Wales', Proc. Prehist. Soc., iXIX, 161-79

Powell, T.G.E., 1966. Prehistoric Art

- Smirke, E., 1867. 'Some account of the discovery of a gold cup in a barrow in Cornwall, A.D. 1837', Archaeol. J.; XXIV, 189-95
- von Uslar, R., 1955. 'Der Goldbecher von Fritzdorf, bei Bonn', Germania, XXXIII, 319-23
- von Uslar, R., 1956. 'Der vorgeschichtiliche Goldbecher von Fritzdorf, Landkreis Bonn', *Rheinisches Jahrbuch*, I, 71-9

#### SURFACE FLINT FINDS IN ST BURYAN PARISH

During fieldwork near Crean in the west of the parish, a thin scatter of flint waste was noticed over the whole area of a ploughed field centred on SW39492484. The field is surrounded on three sides by lower marsh, and three scrapers were found on the highest ground. The two larger items of poor brown-grey pebble flint with some cortex and faint patina, and the smallest of grey mottled flint. All three show the percussion bulb, and the two smaller items were edged by neat pressure flaking. On the north side of the field a blue slate spindle-

whorl was found; the hole was only very slightly waisted.

It is of interest that these finds come from very close to the Round (items 16/17 St Buryan Check-list in the West Penwith Survey, Russell, V., 1971), probably the Parc an Castell of Henderson's Topography of Penwith I.134.

#### **Philip Steele**

14 The Parade Truro

#### ARROWHEAD FROM CAERLOGGAS BARROW III

A barbed and tanged arrowhead (Fig. 51) was picked up by Philip Steele in 1977 from the spoil heap deriving from the excavation of this barrow (*Cornish Archaeol.* 14, 1975, 45-50). It must be presumed to have come from this barrow, from which all the flints found during the excavation were either of Mesolithic type or undiagnostic in form.



Fig. 51

#### **Henrietta Miles**

University of Exeter Arrowhead from Caerloggas Barrow III, 1:1.

### Review

#### Folklore of Prehistoric Sites in Britain by LESLIE V. GRINSELL. 320 pp., 31 plates, 14 figs., 1SBN 0 7153 7241 6. David & Charles, 1976: £7.95

Everyone has come across stories of immovable or wandering menhirs, crocks of gold hidden under barrows or fairies lurking within them. How many of these are comparatively recent romance or whimsey, how many the result of optimistic antiquarianism, how many based on genuine tradition? For the first time in this book an attempt has been made to assemble and analyse the mass of folklore attached to British archaeological sites. The greater part of the book consists of a county by county gazetteer covering several hundred sites, the folklore data for each of which has been traced back to its earliest referenced source. Cornwall and Scilly have 38 entries, Devon 26. Besides well known stories of Sabbathbreaking dancing maidens turned into stone circles, there are more unusual items: a flock of birds is reputed to drive away intruders from the barrows on Carburrow Tor and birds actually deterred an attempt to build a Home Guard post there during the last war!

The gazetteer is preceded by analysis of the different folklore motives. The sections on the Devil, Giants, Fairies, Arthurian traditions, Ossianic and Medieval traditions are accompanied by maps. These show some fascinating regional variations. Fairies are virtually absent from the South West and Arthurian connections sparse compared to a mass of sites in Wales. Giants and the Devil are much better represented! The impression gained is that the majority of this material is of considerable antiquity. The motifs discussed are cross referenced to the Stith Thompson Motif-Index of Folklore Literature.

This book should readily find a place in libraries — personal or institutional — of West Country archaeological literature and its use should add another fascinating dimension to the study of our field monuments in Cornwall.

Henrietta Miles

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